

# **CITY OF WOODINVILLE**

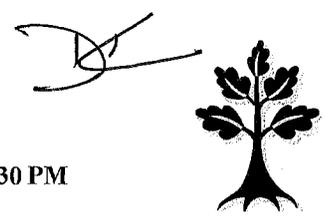
## **TREE BOARD PACKET**

**January 28, 2015**

*CITY HALL COUNCIL CHAMBERS  
17301 133<sup>RD</sup> AVENUE NE  
WOODINVILLE, WASHINGTON 98072*



**CITY OF WOODINVILLE  
TREE BOARD AGENDA  
REGULAR MEETING WEDNESDAY, JANUARY 28, 2015 5:30 PM**



• Thomas L Quigley • Michael Munniks • Ron Smith • Steve Yabroff • Stephanie Young

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- 5:30 **CALL TO ORDER**
- 5:31 **ROLL CALL**
- 5:32 **APPROVE AGENDA IN CONTENT & ORDER**
- 5:33 **PUBLIC COMMENTS**
- BUSINESS AND DISCUSSION ITEMS**
- 5:38 **1. Election of Chair and Vice Chair**
- 5:43 **2. Approval of Draft Minutes - December 10, 2014**
- 5:45 **3. Study Session – Review of Tree Code**
- 6:05 **4. Proposed Tree-ster Events for 2015**
- 6:20 **PUBLIC COMMENTS**
- 6:25 **DIRECTOR'S REPORT**
- 6:30 **ADJOURNMENT**

(Note: The agenda may be rearranged or changed at the beginning of the meeting, with a consensus of Tree Board members present.)

**Issue Date: January 22, 2015**  
**Staff Contact: Jenny Ngo, Sr. Planner**

**Faxed to:** News Media  
**E-mailed to:** Tree Board  
**Publish:** Not published  
**Post:** 1) In-House, 2) Post Office & 3) Website

**CITY OF WOODINVILLE, CITY COUNCIL CHAMBERS  
17301 133RD AVE. NE, WOODINVILLE, WA 98072**

**NEXT REGULAR MEETING FEBRUARY 25, 2015, 5:30 PM**

# **AGENDA ITEM 1**



CITY OF WOODINVILLE, WA  
**REPORT TO THE TREE BOARD**  
17301 133<sup>rd</sup> Avenue NE, Woodinville, WA 98072  
WWW.CI.WOODINVILLE.WA.US

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**To:** Tree Board **Date:** January 28, 2015  
**From:** Jenny Ngo, Sr. Planner *JL FOR JN*  
**By:** Sandy Guinn, Sr. Administrative Assistant *sg*  
**Subject:** Chair and Vice-Chair Elections

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**ISSUE:** Shall the Tree Board elect a new Chair and Vice-Chair for the term beginning January 2015?

**STAFF RECOMMENDATION:** To elect a new Chair and Vice-Chair.

**BACKGROUND/DISCUSSION:** According to the Tree Board Bylaws Article II, Section 1, a Chair and Vice-Chair shall be elected by the Board at the first regular meeting of the calendar year, or as soon thereafter as feasible. Elected officers serve for a term of one year, or until a successor is elected.

The Chair shall preside at all Board meetings and have the powers generally assigned such office in conducting the meetings. It shall be the Chair's duty to see that the transaction of Boards business is in accord with the law and Bylaws.

#### **ELECTION RULES**

1. Nominations may be offered from the chair, from the floor, by a committee, or by write-in ballot.
2. Nominations may be closed by the chair when it appears that no more nominations will be offered, or they may be closed by a two-thirds majority vote. A motion to close nominations is in order only after a reasonable opportunity to make nominations has been given.
3. Voting is usually done by voice, by roll call, by ballot, or by "acclamation" (when only one candidate has been nominated).

#### **ALTERNATIVES**

1. Elect a new Chair and Vice-Chair.
2. Postpone the election to a future meeting.

#### **RECOMMENDED MOTION:**

1. **I MOVE TO NOMINATE BOARDMEMBER \_\_\_\_\_ AS CHAIR.** (accept as many nominations as desired);
2. **I MOVE TO CLOSE NOMINATIONS FOR CHAIR.**
3. **ROLL CALL VOTE: PLEASE IDENTIFY YOUR PREFERENCE FOR CHAIR WHEN YOUR NAME IS CALLED.**

*REPEAT THE ABOVE MOTIONS FOR VICE-CHAIR*

**Attachment 1: Tree Board Bylaws**

**BYLAWS OF THE TREE BOARD  
OF THE  
CITY OF WOODINVILLE**

**ARTICLE I**

**DUTIES AND RESPONSIBILITIES**

The members of the Tree Board accept the responsibility of the office and shall perform such duties as defined under applicable State of Washington Statutes and City of Woodinville Ordinances. The Tree Board (hereinafter "the Board") serves in an advisory capacity to advise the City of Woodinville on specific tree-related matters as defined in WMC 2.24

**ARTICLE II**

**ORGANIZATION OF THE BOARD**

1. A Chair and Vice Chair shall be elected by the Board at the first regular meeting of the calendar year or as soon thereafter as feasible.
2. In the event that the Chair is absent, a Chair pro-tem shall be elected informally by the members present, and assume the duties of the Chair until the Chair's return.
3. In the event of the resignation or expiration of term of the Chair, the Board shall expeditiously elect a new officer to fill the vacancy.
4. The Chair shall preside at all Board meetings and have the powers generally assigned such office in conducting the meetings. It shall be the Chair's duty to see that the transaction of Board business is in accord with law and with these bylaws.
5. The Chair shall preside at all meetings of the Board. The Chair shall be a full voting member of the Board and shall be able to participate fully in its activities. The Chair shall sign all correspondence of the Board. The Chair shall supervise the preparation of the agenda for all meetings.
6. The Board shall be assigned a staff secretary. The staff secretary shall be the Development Services Director or his/her designee(s). It shall be the secretary's duties to act as staff to the board by preparing reports and agendas, providing notice, performing research, reporting to the Board on any relevant topics or occurrences, creating minutes of the Board meetings, and any other Board-related duties as necessary.

**ARTICLE III**  
**MEETINGS**

1. Regular meetings shall be held on the fourth Wednesday of each month. Meetings shall be held in the Council Chambers at City Hall, located at 17301 133rd Ave NE, Woodinville, WA, and shall begin at 5:30pm and end at 6:30pm.

When a regularly scheduled meeting falls on a holiday, the meeting shall be cancelled with appropriate notice to all parties and the public. At regular meetings, the Board may consider all matters that may be properly brought before the Board without prior notice being given to the members. However, a unanimous vote of the Board must be taken in order for action to be taken regarding a new agenda item.

2. Special meetings may be called by the Chair, as necessary. Special meetings shall be noticed to all parties and the public.
3. Any regular meeting may be recessed to a definite time and place by a majority vote of the Board members present at the meeting.
4. A quorum shall consist of three (3) or more voting members of the Board. No action can be taken in the absence of a quorum.

#### **ARTICLE IV** **VOTING AND ACTIONS OF THE BOARD**

1. At all meetings of the Board, each voting member shall have one (1) vote on each motion. The affirmative vote of the majority of members present shall be necessary for the adoption of any motion or voting matter, unless otherwise specified in these bylaws or applicable City ordinances. There shall be no voting by proxy.
2. Each formal action of the Board shall be embodied in a formal motion which will be entered verbatim in the Minutes. The Chair shall, at the Chair's discretion or at the request of any Board member, read the motion before being voted on.
3. Each Board member shall vote on all questions put to the Board unless a conflict of interest or an appearance of fairness question under state law is present. A yes, no, or abstention will be recorded as such.

#### **ARTICLE V** **ORDER OF BUSINESS**

The order of business of the Board meetings shall be:

1. Call to Order
2. Roll Call
3. Approve Agenda in Content and Order
4. Public Comments
5. Business and Discussion Items
  - a. Approval of Minutes
  - b. Business and Discussion Items
6. Public Comments
7. Director's Report
8. Adjournment

Upon approval of a majority of the Board Members present at a meeting, the above order of business may be changed to accommodate issues, speakers, etc.

**ARTICLE VI**  
**CONFLICTS OF INTEREST**

All members of the Board shall exercise every effort to avoid conflicts of interest, or the appearance thereof, in the actions of the Board. Any member who in his/her judgment has an interest in any matter before the Board that would tend to prejudice his/her actions shall so indicate publicly, shall step down and abstain from the deliberations and voting on that matter.

**ARTICLE VII**  
**ABSENCES**

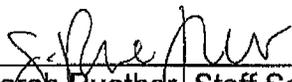
The accumulation by any member of two (2) consecutive or a total of three (3) unexcused absences from regular meetings during a calendar year constitutes grounds for recommendation by the Board to the City Council for removal of that member. An excused absence will be granted to any member who notifies the Development Services Director or Chair in advance of the meeting.

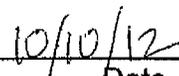
**ARTICLE VIII**  
**AMENDMENTS**

These bylaws may be amended from time to time, at any meeting of the Board, provided that notice of the proposed amendments, together with the precise wording of changes, shall be given each member in writing, at least five (5) days prior to the meeting. The affirmative vote of at least (3) members shall be required to adopt any changes to these bylaws. All amendments to the bylaws shall be submitted to the Mayor and the City Council for their information.

**CERTIFICATION**

The undersigned Secretary of the City of Woodinville the Tree Board does hereby certify that the above and foregoing bylaws having been duly adopted and amended October 10, 2012, by the members of said Tree Board as the bylaws of said Tree Board.

  
\_\_\_\_\_  
Sarah Ruether, Staff Secretary  
Woodinville Tree Board

  
\_\_\_\_\_  
Date

# **AGENDA ITEM 2**



City of Woodinville, Washington

**TREE BOARD SPECIAL MEETING MINUTES OF December 10, 2014**

Woodinville City Hall City Council Chambers, 17301 133rd Avenue NE, Woodinville, WA

<p><b><u>CALL TO ORDER</u></b></p>	<p>The regular meeting for the Woodinville Tree Board was called to order at 5:47 p.m. by Chair Quigley.</p>
<p><b><u>ROLL CALL</u></b></p>	<p><u>Tree Board Present:</u> Tom Quigley, Stephanie Young, and Ron Smith</p> <p><u>Absent:</u> Michael Munniks, Steve Yabroff</p> <p><u>City Staff Present:</u> Jenny Ngo, Senior Planner</p> <p><b>MAIN MOTION: to excuse Board Members</b> There was a motion to excuse Board members Munniks and Yabroff FROM the meeting.</p> <p><b>Motion by:</b> Board Member Young</p> <p><b>Second by:</b> Board Member Smith</p> <p><b>Action for the Main Motion: PASSED 3 - 0</b></p> <p><b>Vote: Ayes: 3.</b>  <b>Nays: 0.</b>  <b>Abstain: 0.</b></p>
<p><b><u>APPROVAL OF AGENDA ORDER AND CONTENT</u></b></p>	<p>Motion to approve agenda as presented.</p>
<p><b><u>PUBLIC COMMENTS</u></b></p>	<p>None.</p>
<p><b><u>BUSINESS AND DISCUSSION ITEMS</u></b></p> <p><i>Approval of 11/12/14 Special Tree Board Minutes as presented</i></p>	<p>1a. <u>Approval of November 12, 2014 Tree Board Meeting Minutes as presented.</u></p> <p><b>MAIN MOTION: to approve the special meeting minutes of November 12, 2014, as presented.</b></p> <p><b>Motion by:</b> Board Member Young</p> <p><b>Second by:</b> Board Member Smith</p> <p><b>Action for the Main Motion: PASSED 3 - 0</b></p> <p><b>Vote: Ayes: 3.</b>  <b>Nays: 0.</b>  <b>Abstain: 0.</b></p>

<p><i>Discussion and Review of Draft Tree Code</i></p>	<p><b>2. Discussion &amp; Review of Draft Tree Code</b>  The Tree Board continued discussion of the the draft tree code from WMC 21.15.090 through WMC 21.15.130.</p> <p>Board Members stated concerns with overplanting based on the tree density requirements and the difficulty for subdivisions to plant new trees. Board Members discussed the difficulty of preserving trees on subdivisions while facilitating minor removal on existing developed properties. There was discussion on how to protect significant trees and on requiring green space to preserve trees. Board Members stated that they liked some of the alternative compliance methods that were listed in WMC 21.15.100 as a way to encourage better tree retention and replanting practices.</p> <p>Revisions were suggested in the code allowing staff to impose additional conditions or require an arborist to recommend conditions where site constraints warranted additional tree protection. Staff was directed to simplify the tree protection requirements to remove repetitive or extraneous language.</p> <p>Board Members reviewed the diagrams showing examples of tree density and zoning requirements. Jenny Ngo provided an explanation of how the diagrams were broken into the minimum lot sizes per zone, tree credit requirements, and examples of how many trees would need to be planted. Board Members stated that the diagrams were informative in determining if the tree credit requirements were appropriate for each zone.</p>
<p><b><u>PUBLIC COMMENTS</u></b></p>	<p>None.</p>
<p><b><u>DIRECTOR'S REPORT</u></b></p>	<p>None</p>
<p><b><u>ADJOURNMENT</u></b></p>	<p>Chair Quigley called the meeting adjourned.</p> <p>The meeting was adjourned at 6:30 p.m.</p>

Respectfully Submitted,

Sandy Guinn  
Sr. Administrative Assistant

# **AGENDA ITEM 3**



CITY OF WOODINVILLE, WA  
**REPORT TO THE TREE BOARD**  
17301 133<sup>rd</sup> Avenue NE, Woodinville, WA 98072  
WWW.CI.WOODINVILLE.WA.US

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**To:** Tree Board **Date:** January 20, 2015  
**From:** Dave Kuhl, Development Services Director   
**By:** Jenny Ngo, AICP, Senior Planner  
**Subject:** Review of Tree Code

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**ISSUE:** Shall the Tree Board discuss proposed revisions to the Tree Code?

**STAFF RECOMMENDATION:** To review and provide feedback on the proposed changes.

**POLICY DECISION:** The Tree Board provides an advisory role to the City Council on matters of trees and urban forestry.

**BACKGROUND:**

During the November 12, 2014 and December 10, 2014 meetings, Board Members discussed the preliminary draft of the tree code, planting requirements, and tree canopy goals. During the meetings, Tree Board Members emphasized creating code language that would match the City's adopted canopy goals, loosen restrictions for minor tree removal, and create standards to protect trees in large developments or subdivisions.

**DISCUSSION:**

Staff has amended the preliminary tree code based on the Tree Board's discussions and recommendations (Attachment 1). The following is a summary of the changes that have been made:

- Further simplified code language and shortened code sections
- Removed language related to hazard, nuisance, or dead trees. Added definitions to the zoning code. During previous meetings, Board Members indicated that hazard, nuisance, or dead trees should require mitigation, which has been folded into the code.
- Removed the Tree Permit I-IV scheme
- Removed the permit submittal materials table and replaced with a list. Applicants will be required only to submit the materials that are relevant to the proposal, as determined by the City Tree Official.
- Changed the language so that the application submittal materials only need to address trees within 30 feet of the construction limits, unless a site-wide tree credit calculation is needed. The intent is to remove unnecessary inventorying and to avoid damage to existing vegetation.
- Simplified the tree density credit calculations. Credits for larger trees were increased to encourage retention. The different credit requirements for each zone were removed to reduce confusion, as difference in credits per zone was minimal.

In addition, staff created a new permit flow chart based on the revised code (Attachment 2), and assessed tree retention requirements for six nearby cities and developed four potential alternatives to the tree density credit standard (Attachment 3).

**RECOMMENDED ACTION:**  
**DISCUSS AND MAKE RECOMMENDATIONS**

- Attachment 1: January 2015 Draft Tree Code
- Attachment 2: Tree Permit Flow Chart
- Attachment 3: Tree Retention Alternatives

1 **Attachment 1 Proposed Code Changes to Chapter 21.15**  
 2 **DEVELOPMENT STANDARDS – TREE REQUIREMENTS**

3  
 4 Sections:

- 5 21.15.010 – Purpose and Intent  
 6 21.15.020 – Applicability  
 7 21.15.030 – Exemptions  
 8 21.15.040 – City Tree Fund Established  
 9 21.15.050 – Hazard, Nuisance and Dead Trees  
 10 21.15.060 – Tree ~~Removal~~ Permits  
 11 21.15.070 – ~~Tree Permit Submittal Requirements~~ Minimum Tree Density  
 12 21.15.080 – ~~Tree Replacement Requirements – Minimum Tree Density~~ Tree Removal in  
 13 Critical Areas  
 14 21.15.090 – Supplemental Tree Planting Requirements  
 15 21.15.100 – Alternative Compliance  
 16 21.15.110 – Tree Maintenance  
 17 21.15.120 – Tree Protection During Construction  
 18 21.15.130 – Enforcement and Penalties

19  
 20 **21.15.010 – Purpose and Intent**

- 21 (1) Trees are integral to Woodinville’s community character and protect public health, safety,  
 22 and general welfare. Protecting, enhancing, and maintaining healthy trees, groves of trees  
 23 and vegetation are key community values. The City’s goal is to achieve an overall tree  
 24 canopy coverage of 40 percent ~~for the community. The many benefits of h~~ Healthy trees and  
 25 vegetation contribute to Woodinville’s quality of life ~~by:~~ through reducing soil erosion and  
 26 land instability; improving air quality, providing protection from severe weather conditions;  
 27 providing habitat and food supply for fish and wildlife; enhancing property values and  
 28 contributing to Woodinville’s natural beauty, aesthetic character, and livability.  
 29 ~~(a) Minimizing the adverse impacts of land disturbing activities and impervious surfaces~~  
 30 ~~such as runoff, soil erosion, land instability, sedimentation, and pollution of waterways;~~  
 31 ~~(b) Improving the air quality by absorbing air pollutants and carbon dioxide, and generating~~  
 32 ~~oxygen;~~  
 33 ~~(c) Providing cost-effective protection from severe weather conditions with cooling effects~~  
 34 ~~in the summer months and insulating effects in winter;~~  
 35 ~~(d) Providing visual relief and screening buffers;~~  
 36 ~~(e) Providing habitat, cover, food supply, and corridors for a diversity of fish and wildlife;~~  
 37 ~~and~~  
 38 ~~(f) Providing economic benefit by enhancing local property values and contributing to the~~  
 39 ~~region’s natural beauty, aesthetic character, and livability of the communi~~  
 40 (2) The purpose of  
 41 this chapter is to establish processes and standards to provide for the retention, protection,  
 42 preservation, replacement, proper maintenance, and use of significant trees and woodlands  
 43 located in the City of Woodinville. The intent of this chapter is to:  
 44 (a) Maintain and enhance canopy coverage provided by native trees for their benefits;  
 45 (b) Preserve and enhance the City of Woodinville’s environmental, economic, and  
 46 community character with mature landscapes;  
 47 (c) Promote site development practices that work to avoid removal, destruction, or  
 48 disturbance of significant trees, groves of trees, and the City’s natural vegetation;  
 49 (d) Mitigate the consequences of required tree removal in land development through on-  
 50 and off-site native tree ~~replacement with the goals of halting loss and enhancing~~  
 51 ~~Woodinville’s tree canopy~~ to achieve an overall healthy tree canopy cover of 40  
 percent ~~City-wide~~ citywide over time;

- 1 (e) Implement the goals and objectives of the City's Comprehensive Plan;  
 2 (f) Implement the goals and objectives of the State Environmental Policy Act (SEPA).

### 3 4 **21.15.020 – Applicability**

- 5 (1) No ~~property owner or their representative~~ persons shall ~~remove, destroy, or disturb~~ conduct  
 6 tree removal, trimming, or vegetation clearing ~~trees located~~ within the jurisdictional  
 7 boundaries of the city except as provided in accordance with this chapter.  
 8 (2) Removal of trees not exempted by WMC 21.15.030 shall require a tree removal permit. Tree  
 9 permits shall be processed as a Type I project permit pursuant to Chapters 17.07 through  
 10 17.09 WMC. Appeals shall be processed consistent with Chapter 17.17 WMC.  
 11 ~~Tree removal permits shall be processed as described in WMC 21.15.060.~~

### 12 13 **21.15.030 – Exemptions**

- 14 (1) The following activities are exempt from the provisions of this chapter:  
 15 (a) Any tree on private, developed property that poses an imminent threat to life or  
 16 property, due to a storm event such as a windstorm or ice storm, may be removed  
 17 without first obtaining a permit. The party removing the tree will contact the City  
 18 within seven days of removal to provide documentation of threat for approval of  
 19 exemption.  
 20 (2) Trees may be removed by the City or utility provider in situations involving immediate  
 21 danger to life or property, or interruption of services provided by a utility.  
 22 (3) ~~Commercial Nurseries or Tree Farms~~. A nursery or tree farm owner may remove  
 23 trees that are ~~being grown to be sold as~~ for commercial Christmas or landscape tree  
 24 sales.  
 25 (4) Removal of trees with a diameter-at-breast-height of less than two inches.  
 26 (5) Removal of nonsignificant trees with a diameter-at-breast-height of less than six  
 27 inches within a 12-month period, and which have up to a combined diameter-at-  
 28 breast height of 40 inches or 10 tree credits.  
 29 (6) Trees within the public right-of-way and trees removed as part of a City construction  
 30 project that is subject to the requirements of Chapter 2.24 WMC.

### 31 32 **21.15.040 – City Tree Fund Established**

- 33 (1) Fund established. A City Tree Fund is established for the collection of any funds used for the  
 34 purpose and intent set forth by this chapter.  
 35 (2) Funding sources. The following funding sources may be allocated to the City Tree Fund:  
 36 payments received in lieu supplemental plantings; civil penalties collected pursuant to this  
 37 chapter; agreed-upon restoration payments or settlements in lieu of penalties; sale of trees  
 38 or wood from City property; donations and grants for tree purposes; sale of seedlings by the  
 39 City; and other monies allocated by City Council.  
 40 (3) Funding purposes. The Tree Board shall provide recommendations to City Council for  
 41 approval on how the funds will be allocated. Prioritization will be based on the Urban  
 42 Forestry Plan. The City shall use money received pursuant to this section for the following  
 43 purposes:  
 44 (a) Acquiring, maintaining and preserving wooded areas within the City;  
 45 (b) Planting and maintain trees within the City;  
 46 (c) Identification and maintenance of heritage trees;  
 47 (d) Establishment of a holding public tree nursery;  
 48 (e) Urban forestry education; or  
 49 (f) Other purposes relating to trees and woodland protection and enhancement as  
 50 determined by City Council.  
 51

### 21.15.050— Hazard, Nuisance and Dead Trees

~~(1) General Requirements. A hazard, nuisance, or dead tree shall be designated through an arborist report prepared by a qualified tree professional consistent with WMC 21.15.070(2)(b). The arborist report shall provide information on how the tree meets the following criteria if tree removal is based on nuisance or hazard. If the condition is obvious as identified by a layperson through a cursory visual inspection, the City Tree Official may waive the requirements for an arborist report.~~

~~(2) Hazard trees. A tree may be designated as a hazard tree if all of the following criteria are met:~~

- ~~(a) The tree has a combination of structural defects and/or disease that makes it subject to a high probability of failure;~~
- ~~(b) Is in the proximity to moderate-high frequency of persons or property; and~~
- ~~(c) The hazard condition of the tree cannot be lessened with reasonable and proper arboricultural practices nor can the persons or property be removed.~~

~~=(3)~~

~~(3) Dead trees. The tree is determined to be diseased, dead, or dying, and may or may not pose a potential safety hazard.~~

### 21.15.050 – Tree Permits

The following materials are required to obtain a tree permit. The City Tree Official shall have the authority to waive certain application materials if the item is not necessary to evaluate a specific proposal for consistency with this chapter.

(1) Tree permit application, completed and signed by the property owner.

(2) Site plan prepared by an engineer, surveyor, arborist or other qualified professional, showing the following:

- (a) Location of all existing and proposed structures; construction limits, utility lines, and construction protection barriers consistent with WMC 21.16.110;
- (b) Location of all trees above 3 inches DBH within 30 feet of the construction limits, including size and species;
- (d) Identification of all trees to be removed and/or relocated;
- (e) Existing and proposed topography at 5-foot intervals; and
- (f) Location of any critical areas and buffers.

(3) Replanting plan, showing the following:

- (a) Location of proposed structures and retained trees;
- (b) Location of proposed replacement trees and/or vegetation, including species, size, and spacing;
- (c) Location and design of other landscape restoration measures; and
- (d) A planting schedule that indicates species, quantity, size, and tree density calculations for replanted trees.

(4) Arborist report or other professional recommendation, evaluating the following:

- (a) Inventory of all impacted trees, including size, species, dripline, and critical root zone. The inventory must include all trees proposed for removal and any trees within 30 feet of the construction limits. Written evaluation of anticipated impacts to tree health and viability resulting from construction, including any impacts to critical root zones;
- (b) Information on compliance with coverage requirements, including a calculation of tree canopy or replanting schedule;
- (c) Suggested location and species of supplemental trees, maintenance, and planting specifications consistent with WMC 21.15.120;
- (d) Recommendations on tree protection measures consistent with WMC 21.16.110 and correspond to the tree Protection Plan in subsection (f);

- 1 (e) Special instructions for working within the protection area (hand-digging, tunneling,  
 2 root pruning, maximum grade changes, etc.);  
 3 (f) Information on any required on-site supervision;  
 4 (g) Information on maintenance including duration, benchmarks for success, cost  
 5 estimates, and financial guarantees/bonding; and  
 6 (h) If applicable, assessment and designation of a hazard or nuisance tree

### 7 **21.15.060 – Minimum Tree Density**

- 9 (1) Any tree removal subject to a tree permit shall be required to meet minimum tree density of  
 10 60 tree credits per acre for residential zones (R-1 through R-8). All other zones are required  
 11 to meet the landscape standards pursuant to Chapter 21.16 WMC.  
 12 (2) For the purposes of calculating required minimum tree density, City right-of-way and areas to  
 13 be dedicated as City right-of-way shall be excluded from the lot area used for calculation of  
 14 minimum tree density.  
 15 (3) The minimum tree density credits are calculated through a tree credit calculation using Table  
 16 1. The tree credit calculation is the sum of all retained existing trees and any supplemental  
 17 tree plantings. If a site falls below the minimum tree density with existing trees, supplemental  
 18 planting shall be required pursuant to this section. The tree credit value that corresponds  
 19 with diameter-at-breast-height shall be found in the table below:  
 20  
 21

22 **WMC 21.15.070(3) Table 1 – Tree Credit Calculation**

<u>Tree Diameter Inches</u>		<u>Total Credit</u>
<u>Minimum</u>	<u>Maximum</u>	
<u>1.0</u>	<u>3.0</u>	<u>0.5</u>
<u>3.1</u>	<u>6.0</u>	<u>1.0</u>
<u>6.1</u>	<u>12.0</u>	<u>2.0</u>
<u>12.1</u>	<u>24.0</u>	<u>5.0</u>
<u>24.1</u>	<u>36.0</u>	<u>8.0</u>
<u>36.1</u>	<u>50.0</u>	<u>14.0</u>
<u>50.1 and above</u>		<u>18.0</u>

- 23 (a) Tree diameter inches shall be measured as diameter-at-breast-height 4.5 feet off the  
 24 ground for existing trees and six inches of the ground for new plantings. The  
 25 measured tree diameter shall be its size at the time of measurement.  
 26 (b) Existing trees transplanted to an area on the same site may count toward the  
 27 required density if approved by the City Tree Official based on transplant  
 28 specifications provided by a qualified tree professional that will ensure a good  
 29 probability for survival.  
 30 (c) Trees shall be planted in accordance with WMC 21.15.090. On sites where additional  
 31 plantings are not feasible due to spacing or other site constraints, an applicant may  
 32 satisfy the minimum tree density requirement through payment into the City Tree  
 33 Fund pursuant to WMC 21.15.090(4)(g).  
 34 (4) Tree removal without construction. This requirement applies to sites where no exterior  
 35 construction or demolition, grading, material storage, or other site activity is proposed, and  
 36 tree removal is located outside of all critical areas, NGPE or shared ownership tracts.  
 37 (a) Up to two trees may be removed per year with no replacement planting.  
 38 (b) Removal of additional trees shall require compliance with the minimum tree density  
 39 or replacement at a rate of three trees per each removed tree.  
 40

### 41 **21.15.070 – Tree Removal for Subdivisions or Short Subdivisions**

1 (c) No limit on re (1) Tree removal associated with a new subdivision or short subdivision shall  
2 meet the following:

- 3 (a) The property must achieve the minimum tree density.  
4 (b) Sites shall be required to maintain at least 10 percent of the tree diameter inches of  
5 all existing healthy, viable significant trees. This requirement may be reduced by for  
6 preservation of groves with five or more trees consistent with WMC 21.15.100.  
7 (c) The applicant shall submit a preservation and maintenance agreement for trees  
8 located in common areas, including streets, drainage features, parks, or other jointly  
9 maintained spaces. The document shall be approved and recorded prior to  
10 occupancy, recording, or final inspection.  
11 (d) When forest or critical areas are separate tract or Native Growth Protection  
12 Easements (NGPEs), any remaining tree credits within the NGPE above the required  
13 minimum tree density may be applied towards the entire subdivision. The remaining  
14 tree credits will be equally divided among the total number of lots. Where the tree  
15 credits in the NGPE have not been determined, the minimum tree density shall apply  
16 to each lot within the subdivision.  
17 (e) A final arborist report shall be submitted at the end of the project verifying the total  
18 trees removed, retained, and planted, prior to release of the performance bond.

19  
20 **21.15.080 – Tree Removal in Critical Areas**

21 (1) Within critical areas or critical area buffers, only hazard, nuisance, or dead trees may be  
22 removed or trimmed. If more than two trees are removed, the City Tree Official may require  
23 submittal of a critical areas alteration pursuant to Chapter 21.24 WMC.

- 24 (a) Tree removal proposed within a NGPE or an area under common ownership shall  
25 meet tree density requirements pursuant to WMC 21.15.060. The applicant shall  
26 obtain signatures from a majority of owners who hold interest in the land or approval  
27 from the homeowner's association.  
28 (b) The priority action for a tree proposed for removal is to create a "snag" or wildlife  
29 tree. If creating a snag or wildlife tree is not feasible, the felled tree shall be left in  
30 place.  
31 (c) Supplemental trees shall be planted consistent with WMC 21.15.060 and WMC  
32 21.15.090. The requirements may be modified if a qualified tree professional may  
33 determine to the satisfaction of the City Tree Official that equal or better habitat  
34 function and values can be achieved with following:  
35 (i) Native understory plantings are installed;  
36 (ii) Invasive species removal is conducted;  
37 (iii) A coverage analysis is submitted stating that the replanted trees will have  
38 equal or better coverage than the trees removed within five years; and  
39 (iii) A replanting plan is submitted.

40 **21.15.060— Tree Removal Permits**

41 ~~(1) Tree removal within properties zoned as single-family residential (R-1 through R-8) and not~~  
42 ~~exempted under WMC 21.15.030 shall be subject to a tree permit and required to meet~~  
43 ~~minimum tree density regulations in WMC 21.15.090. The following sets forth Tree Permit I~~  
44 ~~through IV required for development activities or removal requests. For tree removal in~~  
45 ~~critical areas, requirements are listed in subsection (3).~~

46 ~~(a) Tree Permit I— Tree Removal No Construction. Required for tree removal on a~~  
47 ~~property on which no development activity is proposed or in progress. Removal of~~  
48 ~~trees is limited to the following:~~

- 49 ~~(i) In the R-1 zone, five healthy trees per 12-month period~~  
50 ~~(ii) In the R-4 zone, three healthy trees per 12-month period~~  
51 ~~(iii) In the R-6 through R-8 zones, two healthy trees per 12-month period~~

- 1                   (iv) A property owner may remove twice the maximum number of healthy  
2                   significant trees if he/she agrees not to remove additional healthy trees for a  
3                   24-month period.
- 4                   (v) No limit on the number of hazardous, nuisance or dead trees
- 5                   (vi) Any tree removal in residential subdivisions, tracts or easements under  
6                   common ownership shall comply with WMC 21.15.050(4).
- 7                   - (b) Tree Permit II—Minor Construction. Required for any project where:
- 8                   (i) The total square footage of the proposed improvements is 25 percent or less  
9                   than the total square footage or assessed value of the existing structures on  
10                  the subject property, and the project includes site disturbance, impacts to the  
11                  dripline of existing trees, or tree removal; or
- 12                  (ii) Tree removal on a property on which no development activity is proposed or  
13                  in progress which does not qualify for Tree Permit I
- 14                  (c) Tree Permit III—Major Construction. Required for any project where:
- 15                  (i) Construction includes one to two dwelling units on an individual lot, or
- 16                  (ii) The total square footage of the proposed improvements exceeds 25 percent  
17                  of the total square footage of assessed value of the existing improvements on  
18                  the subject property, or
- 19                  (iii) A grading permit is required.
- 20                  (iv) Exceptions for previously approved development. Any subdivision or short  
21                  subdivision that is subject to tree permit approved prior to March 17, 2009  
22                  shall not be subject to tree retention and plan requirements in this section,  
23                  except that any modifications that results in removal of additional existing  
24                  trees shall be subject to the requirements of this chapter.
- 25                  (d) Tree Permit IV—Land Division. Required for any new residential subdivision or short  
26                  subdivision.
- 27                  (2) Tree removal within properties zoned as non-residential zones and not exempted under  
28                  WMC 21.15.030 shall be subject to the following requirements:
- 29                  (a) Tree Permit I—Tree Removal No Construction. Applies to tree removal on a property  
30                  on which no development activity is proposed or in progress. Removal of trees is  
31                  subject to the following requirements:
- 32                  —— (i) Removal of up to ten percent of tree credits per 12-month period
- 33                  (ii) No limit on the number of hazardous, nuisance or dead trees
- 34                  (b) All other development, redevelopment or additions shall meet the minimum  
35                  landscape requirements for replanting pursuant to Chapter 21.16 WMC.
- 36                  (3) Trees located in critical areas or critical area buffers. Any tree trimming or removal in areas  
37                  designated as critical areas and/or buffers as defined in Chapter 21.24 WMC shall submit a  
38                  Tree Permit I. If more than two trees are removed, the City Tree Official may require  
39                  submittal of a critical areas alteration pursuant to Chapter 21.24 WMC.
- 40                  (a) Priority action. If a tree is proposed for removal, the priority action for the tree is to  
41                  create a “snag” or wildlife tree. If creating a snag or wildlife tree is not feasible, then  
42                  the felled tree shall be left in place.
- 43                  (b) Supplemental planting requirements. When tree removal is proposed in critical areas  
44                  or its buffers, the following provisions shall be met:
- 45                  (i) If less than 10 trees are removed, supplemental trees shall be planted  
46                  consistent with WMC 21.15.070 and WMC 21.15.090; or a qualified tree  
47                  professional may determine to the satisfaction of the City Tree Official that  
48                  equal or better habitat function and values can be achieved with the priority  
49                  action and the following:
- 50                  - (A) A lesser number of tree credits are planted, using native species or the  
51                  same species as the removed trees;

- (B) Understory plantings are installed;
- (C) A coverage analysis is submitted stating that the replanted trees will have equal or better coverage than the trees removed within five years; and
- (D) A replanting plan is submitted.

(ii) If more than 10 trees are removed, supplemental trees shall be planted consistent with WMC 21.15.070 and WMC 21.15.090.

(4) Tree permit requirements. Tree permits I through IV shall comply with the submittal requirements listed in WMC 21.15.070. Tree permits shall be processed as a Type I project permit pursuant to Chapters 17.07 through 17.09 WMC. Appeals shall be processed consistent with Chapter 17.17 WMC.

(5) If proposed development activities qualify for more than one tree permit, the tree permit with the most stringent requirements shall comply. The City Tree Official shall have the authority to determine which permit requirements apply and may require a combination of requirements based on the nature of the proposed development.

(6) Trees located in residential subdivisions or tracts under common ownership. Removal of any tree under common ownership shall require a Tree Plan I and shall meet tree density requirements pursuant to WMC 21.15.070. The applicant shall obtain signatures from a majority of owners who hold ownership or interest in the tree, or approval from the subdivision homeowner's association after notification is made to all affected owners and no objections are received.

**WMC 21.15.070—Tree Permit Submittal Requirements**

(1) Tree removal permits required by WMC 21.15.050 and WMC 21.15.060 shall be submitted with the following materials outlined in Table 1.

**WMC 21.15.070(1) Table 1—Tree Permit Submittal Requirements.**

Requirements	Tree Permit I	Tree Permit II	Tree Permit III	Tree Permit IV
Tree Permit Application	X	X	X	X
Arborist Report, prepared by a qualified tree professional		X	X	X
Tree Inventory	For affected trees only: 1) Size in DBH 2) Species	1) Size in DBH; 2) Species; 3) General Health; 4) Retention Status	1) Size in DBH; 2) Measured Driplines; 3) Critical Root Zone 4) Species; 5) General Health; 6) Retention Status	1) Size in DBH; 2) Measured Driplines; 3) Critical Root Zone; 4) Species; 5) General Health; 6) Retention Status
Tree Retention Plan	1) Location of structures 2) Size, location and species for impacted trees only 3) Identify trees for removal	1) Location of structures 2) Size, location and species for impacted trees only 3) Identify trees for removal	(i) Location of property lines, disturbance activities, and all existing and proposed structures (ii) Size, location, driplines, and species of all trees (iii) Limits of disturbance (iv) Identification of trees to be retained	(i) Location of property lines, disturbance activities, and all existing and proposed structures (ii) Size, location, driplines, and species of all trees (iii) Limits of disturbance (iv) Identification of trees to be retained

			(v) Location of protection measures consistent with WMC 21.16.110, including standard details, and any protection instructions	(v) Location of protection measures consistent with WMC 21.16.110, including standard details, and any protection instructions
Replanting Plan	X	X	X	X
Tree Density Requirements (WMC 21.15.090)	Property must meet the lesser of: 1) 2 trees planted per each tree removal, or 2) minimum tree density in WMC 21.15.090(1)	Property must meet the lesser of: 1) minimum tree density in WMC 21.15.090(1); 2) 50 percent greater than tree credits currently on site, or 3) 10 credits per acre if the site has zero credits	Property must meet minimum tree density in WMC 21.15.090(1)	Property must meet minimum tree density in WMC 21.15.090(1)
Preservation and Maintenance Agreement				X

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- (2) Submittal Materials.
- (a) Tree permit application. A city-designated tree permit application shall be completed and signed.
  - (b) Arborist report. Arborist reports prepared by a qualified tree professional shall contain the following information, unless waived by the City Tree Official. In cases where the City Tree Official does not agree with the arborist report, the Official may seek a third party review, to be reimbursed by the applicant according to the City's current fee schedule.
    - (i) Description of each tree's health and viability. If a tree is not viable for retention, justification for removal based on health, risk of failure or suitability of species shall be provided. The impact of tree removal on nearby remaining trees shall be included.
    - (ii) Location of the limits of disturbance around all trees potentially impacted by site disturbance and special instructions for working within the protection area (hand-digging, tunneling, root pruning, maximum grade changes, etc.)
    - (iii) Existing and proposed tree credits on site, including a calculation of tree density credit requirements.
    - (iv) Suggested location and species of supplemental trees, maintenance, and planting specifications consistent with WMC 21.15.120.
    - (v) Recommendations on tree protection measures consistent with WMC 21.16.110 and correspond to the tree Protection Plan in subsection (f).
  - (c) Tree inventory. A tree inventory shall be submitted as a part of the Arborist Report, when required. The tree inventory shall include the information listed in Table 1 above and shall correspond to the required site plan. The report shall include an indication for each tree, of whether it is proposed to be retained or removed, based on health, risk of failure and suitability of species; (b) limits of disturbance around viable trees;

- (d) ~~Tree retention plan. The tree retention plan must show the approximate trunk location and measured driplines tree retention plan shall include the information listed in Table 1 above and any additional information from arborist report. The plan may be combined with demolition, grading, or drainage plans.~~
- (e) ~~Replanting plan. A replanting plan shall be submitted if new trees are required pursuant to WMC 21.15.090. A replanting plan shall include the location of all trees and include a planting schedule that indicates species, quantity, size, and tree density calculations.~~
- (e) ~~Preservation and Maintenance Agreement. The applicant shall submit a preservation and maintenance agreement pursuant to WMC 21.15.100, for approval prior to occupancy, recording, or final inspection.~~

**21.15.080—Tree Replacement Requirements – Minimum Tree Density**

- (1) ~~Any tree removal subject to a tree permit shall be required to meet minimum tree density pursuant to WMC 21.15.070(2). The minimum tree density is calculated as the credits required per acre multiplied by the lot size in acres. For the purposes of calculating required minimum tree density, City right of way and areas to be dedicated as City right of way shall be excluded from the lot area used for calculation of minimum tree density. The following minimum tree credits are required based on zones:~~
  - (a) ~~R-1 zone: 60 tree credits per acre~~
  - (b) ~~R-4 zone: 40 tree credits per acre~~
  - (c) ~~R-6 through R-8 zone: 30 tree credits per acre~~
  - (d) ~~All other zones: 20 tree credits per acre or applicable landscape requirements pursuant to WMC 21.15.060.~~
- (2) ~~For Tree Permit I, the property owner may select the lesser of: 1) plant two trees per each tree removed; or 2) the minimum tree density.~~
- (3) ~~For Tree Permit II, the property owner may select the lesser of: 1) the minimum tree density; 2) 50 percent greater of the tree credits currently on-site; or 3) 10 tree credits per acre if the site has zero credits.~~
- (4) ~~The applicant shall demonstrate compliance with the minimum tree density through a tree credit calculation. The tree credit calculation is the sum of all retained existing trees and any supplemental tree plantings pursuant to this section. If a site falls below the minimum tree density with existing trees, supplemental planting shall be required. The tree credit value that corresponds with diameter-at-breast-height shall be found in the table below:~~

**WMC 21.15.090(3) Table 1—Tree Credit Calculation**

Diameter-at-Breast-Height		Total Credit
Minimum	Maximum	
1.0	3.0	0.5
3.1	6.0	0.75
6.1	10	1.0
10.1	15.0	2.0
15.1	23.0	4.0
23.1	36.0	6.0
36.1	50.0	11.0
50.1 and above		20.0

- (a) ~~Diameter-at-breast-height of the tree shall be measured in inches. Existing trees are measured four-and-a-half feet off the ground; new plantings are measured six inches~~

1 off the ground. The measured diameter at breast height shall be its size at the time of  
2 measurement.

3 (b) Existing trees transplanted to an area on the same site may count toward the required  
4 density if approved by the City Tree Official based on transplant specifications  
5 provided by a qualified tree professional that will ensure a good probability for survival.

6 ~~(5) For residential subdivisions with Native Growth Protection Easements (NGPEs), the tree  
7 credits within the NGPE may be counted where the homeowner's association or owner of  
8 the NGPE has determined the number of tree credits that exist within the NGPE. The  
9 remaining tree credits required for the entire subdivision to meet the minimum tree density  
10 will be equally divided among the total number of lots. Where the tree credits in the NGPE  
11 have not been determined, the minimum tree density shall apply to each lot within the  
12 subdivision.~~

### 13 21.15.090 – Supplemental Tree Planting Requirements

14  
15 (1) ~~For s~~ Sites and activities requiring ~~a minimum tree density and where the existing retained~~  
16 ~~trees do not meet the minimum requirement,~~ supplemental trees shall be planted to achieve  
17 the required minimum tree density. Tree density credits for supplemental trees shall be  
18 calculated pursuant to WMC 21.15.0690.

19 (2) Tree species. The tree species chosen for the supplemental plantings shall either be trees of  
20 the same mix of species as the removed trees or mix of species listed in the Woodinville  
21 Plant Species List. ~~Trees shall conform to American Association of Nurserymen (AAN)~~  
22 ~~grades and standards as published in the American Standard for Nursery Stock Manual.~~  
23 Trees should be selected and sited to produce a hardy and drought-resistant landscape  
24 area.

25 (3) Tree size. The required minimum size for any supplemental tree is a diameter-breast-height  
26 of two-inches or greater. ~~Multiple stemmed trees may be permitted as an option to single-~~  
27 ~~stemmed trees, provided that such multiple stemmed trees are at least 10 feet in height and~~  
28 ~~that they are approved by the City Tree Official prior to installation.~~

29 (4) Tree location. In designing a development and in meeting the required minimum tree  
30 density, the trees shall be planted in the following order of priority:

31 (a) In preserved groves, critical areas or its buffers.

32 (b) Adjacent to stormwater facilities, as approved by the Public Works Director pursuant  
33 to Chapter 14.09 WMC.

34 (c) Entrance landscaping, traffic islands, and other common areas in residential  
35 subdivisions that have enough area to support mature trees of the planted species

36 (d) Site perimeter and/or required landscaped setbacks.

37 (e) Individual building lots.

38 (f) Off-site, when room is not available on-site to ensure long-term health and viability for  
39 the trees. Trees shall be planted at another location within the same City-designated  
40 neighborhood and as approved by the City Tree Official.

41 (g) Payment to the City Tree Fund. If trees cannot be planted in accordance with (a)  
42 through (f), the applicant may satisfy the requirements by paying into the City Tree  
43 Fund ~~the current market value of the supplemental trees plus an additional 50~~  
44 ~~percent for maintenance~~ 150 dollars per tree credit.

45 (5) Installation. All required trees shall be installed according to sound horticultural practices in  
46 a manner designed to encourage quick establishment and healthy plant growth.

47 (a) Timing. All trees shall be installed prior to the issuance of a certificate of occupancy  
48 or plat recording, ~~except in the following instances where~~ The time limit for  
49 compliance may be extended to allow installation during the next planting season or  
50 deferred due to diseased soil or pest infestation. A determination shall be made at  
51 the discretion of the City Tree Official. ~~d~~ Deferred installation shall ~~is~~ be secured with

1 a performance bond pursuant to Chapters 15.42 or 20.06 WMC ~~prior to issuance of~~  
 2 ~~certificate of occupancy or plat recording;~~

3 ~~(i) Installation is deferred during the summer months up to six months at the next~~  
 4 ~~planting season to increase survival rates of planted trees; or~~

5 ~~(ii) Installation is deferred due to diseased soil or other pest infestation that will~~  
 6 ~~result in a low likelihood of survival, as determined by a qualified tree~~  
 7 ~~professional who is ISA certified in risk assessment. Installations may be~~  
 8 ~~delayed and not planted for a period of time at the discretion of the City Tree~~  
 9 ~~Official. Alternative compliance may be required and replacement trees~~  
 10 ~~planted at another site.~~

11 (b) Placement. All ~~required~~ supplemental trees shall be installed in the ground and not in  
 12 aboveground containers. ~~When an applicant proposes to place trees above a~~  
 13 ~~subterranean structure, the applicant shall: (a) provide site-specific documentation~~  
 14 ~~prepared by a qualified expert establishing that the design will adequately support~~  
 15 ~~the long-term viability of the trees; and (b) enter into an agreement with the City~~  
 16 ~~indemnifying the City from any damage resulting from development activity on the~~  
 17 ~~subject property which is related to the physical condition of the property. The~~  
 18 ~~applicant shall record this agreement with the County Recorder's Office.~~

19 (c) Grading. Berms shall not exceed a slope of two horizontal feet to one vertical foot  
 20 (2:1).

21 (d) Soil specification. Soils in planting areas shall have adequate porosity to allow root  
 22 growth and adequate drainage. ~~Soils which have been compacted to a density~~  
 23 ~~greater than one and three-tenths grams per cubic centimeters~~ Compacted soils  
 24 ~~shall be loosened to increase aeration to a minimum depth of 24 inches or to the~~  
 25 ~~depth of the largest plant root ball, whichever is greater. Imported topsoils shall be~~  
 26 ~~tilled into existing soils to prevent a distinct soil interface from forming. All planted~~  
 27 ~~areas shall have adequate drainage, either through natural percolation or through an~~  
 28 ~~installed drainage system. A percolation rate of one-half inch of water per hour is~~  
 29 ~~acceptable. After soil preparation is completed, motorized vehicles shall be kept off to~~  
 30 ~~prevent excessive compaction and underground pipe damage. The organic content~~  
 31 ~~of soils in any planting area shall be as necessary to provide adequate nutrient and~~  
 32 ~~moisture retention levels for the establishment of plantings.~~

33 (e) Fertilization. The organic content of soils in any planting area shall be as necessary  
 34 to provide adequate nutrient and moisture-retention levels for the establishment of  
 35 plantings. Additional Fertilization shall be the minimum necessary of trees planted  
 36 ~~shall be by special approval of the City Tree Official only.~~

37 (f) Irrigation. ~~For any required tree planting, irrigation shall be in place.~~ Irrigation system  
 38 shall be designed to ensure plant establishment. Irrigation shall be designed to  
 39 conserve water by using best management techniques available, including, but not  
 40 be limited to: drip irrigation; moisture sensors; automatic controllers; spacing  
 41 designed to minimize overspray; and separate zones for different planting areas.

42 (i) Within right-of-ways and common areas, permanent irrigation with an  
 43 automatic controller shall be installed for tree plantings. Temporary irrigation,  
 44 providing sufficient water to ensure plant survival and establishment, may be  
 45 approved at the discretion of the City Tree Official.

46 (ii) For individual residential lots, the applicant may choose permanent irrigation,  
 47 temporary irrigation, or irrigation by hand.

48 ~~(i) A permanent built-in irrigation system with an automatic controller designed~~  
 49 ~~and certified by a licensed landscape architect. This option is required for Tree~~  
 50 ~~Permit IV.~~

1 ~~(ii) An temporary irrigation system designed and certified by a licensed landscape~~  
 2 ~~architect, which provides sufficient water to ensure that the plants will become~~  
 3 ~~established.~~

4 ~~(iii) Irrigation by hand, applicable only for Tree Permits I or II. An inspection shall~~  
 5 ~~be completed by City staff one year after the certificate of occupancy to~~  
 6 ~~ensure that the trees have become established.~~

7 (iii) ~~Exceptions~~ Modifications to the irrigation requirement may be approved by  
 8 the City Tree Official for less water-intensive strategies such planting native  
 9 vegetation that does not require supplemental irrigation, low impact  
 10 development, established ~~indigenous~~ native plant material, or where natural  
 11 appearance is acceptable or desirable to the City. ~~However, these exceptions~~  
 12 ~~will require temporary irrigation until established.~~

13 ~~(g) Drainage. All planted areas shall have adequate drainage, either through natural~~  
 14 ~~percolation or through an installed drainage system. A percolation rate of one half~~  
 15 ~~inch of water per hour is acceptable.~~

16 (h) Mulch. Required plantings shall be covered with two inches or more of organic mulch  
 17 to minimize evaporation and runoff. Mulch shall consist of materials such as yard  
 18 waste, sawdust, bark or wood chips, and/or organic compost. All mulches shall be  
 19 kept at least six inches away from the trunks of shrubs and trees.

20 (i) Protection. All required trees must be protected from potential damage by adjacent  
 21 uses and development, including parking and storage areas. Protective devices such  
 22 as bollards, wheel stops, trunk guards, and root guards, ~~, etc.~~, shall be required as  
 23 needed to protect required trees.  
 24

#### 25 **WMC 21.15.100 – Alternative Compliance**

26 (1) Additional density credits. The applicant may earn additional tree density credits through  
 27 alternate measures or procedures that will be equal to or better to the provisions in this  
 28 chapter. If the City Tree Official determines that the proposal meets the purpose and intent  
 29 of the code through alternative compliance, the Official may modify the tree density  
 30 requirements.

31 (2) Criteria. The City Tree Official shall review each alternative compliance request based on the  
 32 following criteria:

33 (a) The alternative is designed to ensure the long-term health and maturity of the tree;

34 (b) The alternative will provide increased environmental benefits including natural  
 35 function and values beyond the standard requirements;

36 (c) If applicable, the alternative will enhance or improve critical areas or NGPE areas.

37 (d) The alternative will not increase soil erosion, slope instability, nor create drainage  
 38 issues; and

39 (e) The alternative provides equivalent or greater compliance with the tree code.

40 (3) The following activities or strategies may qualify for alternative compliance:

41 (a) Retention of specimen or heritage trees and groves of at least five trees may earn up  
 42 to an additional 10 percent of the tree credits ~~for~~ of the subject tree or grove.

43 (b) Use of low impact development (LID) designed to the satisfaction of the City Tree  
 44 Official and Public Works Director may earn up to an additional one tree credit per  
 45 1,000 square feet of designated LID area.

46 ~~(3c)~~ Infrastructure installation or modifications such installation of root protection  
 47 barriers, planter strips wider than eight feet, and other similar measures to ensure  
 48 long-term tree health may earn up to 25 percent per affected tree.

49 ~~(4d)~~ Planting 15 square feet of understory landscaping within the canopy area of each  
 50 supplemental tree may earn up to ~~25~~ 15 percent of the tree credits for the subject

tree. Understory landscaping must include shrubs planted at least 24 inches on center and groundcovers planted 18 inches in center.

**21.15.110 – Tree Maintenance**

(1) The following maintenance requirements apply to all trees planted consistent with this chapter:

(a) Responsibility for Regular Maintenance. The applicant, landowner, or successors in interest shall be responsible for the regular maintenance of required trees. Trees that are dead and removed shall be replaced in-kind by the property owner. ~~The timing of the replacement planting shall be determined by the City Tree Official and a qualified tree professional.~~

(b) Maintenance Duration. Maintenance shall be ensured in the following manner except as set forth in subsections (1)(c) and (d) of this section:

(i) All required trees shall be maintained throughout the life of the development.

(ii) Any existing tree, ~~tree designated for preservation,~~ or planted tree shall be maintained for a period of five years following issuance of the certificate of occupancy or plat recording for the individual lot or development. A maintenance guarantee pursuant to Chapter 15.42 or 20.06 WMC shall be secured to ensure the maintenance.

(c) Non-native Invasive and Noxious Plants. It is the responsibility of the property owner to remove non-native invasive plants and noxious plants from the vicinity of any tree or other vegetation. Removal must be performed in a manner that will not harm the tree or other vegetation that the City has required to be planted or protected.

(d) Pesticides, Herbicides, and Fertilizer. The use of pesticides, herbicides, or fertilizer shall be by special approval of the City Tree Official only.

(2) Tree Permits and Utility Plans. Tree permits and utility plans shall be coordinated. In general, the placement of trees should be adjusted based on the plant's mature size and ~~to the location of~~ of required utility routes both above and below ground. ~~Location of trees shall be based on the plant's mature size both above and below ground.~~

(3) Tree Pruning. Topping or pruning to the extent that would constitute tree removal as defined in Chapter 21.06 WMC is not allowed. If a required tree smaller than six inches in diameter-at-breast-height is topped, it must be replaced pursuant to the standards in WMC 21.15.120. If a tree six inches or larger in diameter-at-breast-height is topped, the property owner may be subject to enforcement actions pursuant to WMC 21.15.130. Trees may be windowed or limbed up using best management practices. This method of tree pruning shall maintain the health of the tree.

(4) Table 21.15.110 – Pruning Techniques. The following techniques for healthy pruning shall be used. No permit is required for pruning; however, all pruning should be done under the direction of a qualified tree professional.

**Table 21.15.110(4) Table 1 – Pruning Techniques**

Healthy Pruning Techniques	Improper Pruning Techniques
<b>Crown Cleaning</b> – removing dead, dying, diseased, crowded, weakly attached, or low-vigor branches, in a manner that should not reduce the canopy.	<b>Topping</b> – the cutting of a trunk or main branch to the point where there is no branch large enough and vigorous enough to become the new leader.
<b>Crown Thinning</b> – selective removal of branches throughout the crown of the tree to improve interior light and air.	<b>Stripping</b> – removing the branches from the inner section of the trunk or branch.

Healthy Pruning Techniques	Improper Pruning Techniques
Remaining branches should be well-distributed and balanced.	Can cause structural imbalances and potential failure.
<b>Crown Raising</b> – removal of the lower branches of the tree to provide height clearance, typically 8 feet for pedestrians and 16 feet for vehicles.	<b>Imbalance</b> – removing portions of the tree and creating an imbalance in the structure of the tree. Can cause cracking damage from the wind through twisting; or weak new growth.
<b>Windowing</b> – removing several branches symmetrically within an area of the tree’s crown to enhance views.	<b>Excessive Pruning</b> – removing portions of the tree to a point where it can kill the tree. Can invite decay and disease.

1  
2 **21.15.120 – Tree Protection During Construction**

- 3 (1) Tree protection measures shall be installed prior to development activity or initiating tree  
4 removal on the site. These standards must be adhered to through the duration of site work  
5 and included on ~~demolition,~~ grading, and building plans as necessary. ~~Prior to development~~  
6 ~~activity or initiating tree removal on the site, vegetated areas, groves and individual trees to~~  
7 ~~be preserved shall be protected from potentially damaging activities.~~ A pre-construction  
8 ~~meeting on-site~~ between the City Tree Official ~~or designee~~ and the contractor shall be held  
9 ~~to determine that these standards have been met,~~ prior to site disturbance.
- 10 (2) Tree protection measures shall include, but are not limited to, the following:
- 11 (a) Protective Barrier. ~~Prior to any site disturbance, a~~ temporary protective barrier ~~shall~~  
12 ~~be erected to establish the limits of disturbance that~~ extends five feet beyond the  
13 dripline of all retained trees shall be installed prior to site disturbance and maintained  
14 until removal is authorized by the City Tree Official. ~~No construction activities,~~  
15 ~~storage, parking, or construction vehicle access is allowed in this area.~~
- 16 (i) The protective barrier shall be clearly visible and constructed of chainlink and at least ~~four~~  
17 ~~three~~ feet in height. Signage shall be installed no further than ~~15-25~~ feet apart on the protective  
18 barrier. The protection barrier shall follow the fencing standard detail established by the City.
- 19 (ii) ~~The protective barrier shall be maintained until completion of the project and is~~  
20 ~~authorized by City Tree Official.~~
- 21 (b) ~~Toxic Materials~~ Construction Activities. No excavation, storage, parking, construction  
22 vehicle access, dumping of toxic or polluted materials, or other potentially damaging  
23 activity is allowed in within the protective barrier. ~~Measures shall be in place for the~~  
24 ~~proper disposal of toxic materials such as polluted runoff, concrete washout or other~~  
25 ~~chemicals.~~
- 26 (c) ~~Excavation near trees. Excavation or compaction of earth or other potentially~~  
27 ~~damaging activities is prohibited within the protective barrier. The~~ If construction  
28 activity within the protective barrier is unavoidable, the City Tree Official may allow  
29 ~~such activities approved by and~~ the following activities under the supervision of a  
30 qualified tree professional ~~retained by the applicant.~~
- 31 (i) ~~If~~ Equipment is authorized to operate ~~may operate~~ within the critical root zone  
32 if no other alternative is feasible. ~~‡~~ The areas adjoining the critical root zone  
33 of a tree shall be covered with mulch to a depth of at least six inches, or with  
34 plywood, metal or similar material in order to protect roots from damage  
35 caused by heavy equipment.
- 36 (ii) Utility trenches should be located outside of the critical root zone of trees. If  
37 utilities must be placed within the critical root zone, a qualified tree  
38 professional shall review the proposal to ensure the long-term viability of the

1 trees. The work shall Mminimize root damage by excavating a two-foot-deep  
2 trench, at edge of critical root zone, to cleanly sever ~~the roots of trees to be~~  
3 ~~retained.~~the tree roots.

4 (iii) Corrective pruning may be performed on protected trees in order to avoid  
5 damage from machinery or building activity.

6 (iv) Site grading within the critical root zone shall be the minimum necessary. The  
7 applicant's qualified tree professional shall establish the maximum amount of  
8 earthwork allowable in the critical root zone that will not imperil the survival of  
9 the tree. Suitability of activities shall be based on construction techniques,  
10 erosion potential, damage to the critical root zone, stabilization techniques,  
11 and other similar factors.

12 ~~(iv) Maintenance of trees throughout construction period by watering.~~

13 ~~(d) Grade. The grade shall not be elevated or reduced within the critical root zone of~~  
14 ~~trees to be preserved without the City Tree Official's authorization based on~~  
15 ~~recommendations from a qualified tree professional. The following activities may occur:~~

16 ~~(i) Coverage of up to one-half of the area of the tree's critical root zone with light~~  
17 ~~soils (no clay) to the minimum depth necessary to carry out grading or~~  
18 ~~landscaping plans, if it will not imperil the survival of the tree. Aeration devices~~  
19 ~~may be required to ensure the tree's survival.~~

20 ~~(ii) If the grade adjacent to a preserved tree is raised such that it could slough or~~  
21 ~~erode into the tree's critical root zone, it shall be permanently stabilized to~~  
22 ~~prevent suffocation of the roots.~~

23 ~~(iii) The applicant shall not install an impervious surface within the critical root~~  
24 ~~zone of any tree to be retained without the authorization of the City Tree~~  
25 ~~Official. Alternatives to installing impervious surface within the critical root~~  
26 ~~zone shall be considered.~~

27 ~~(iv) Utility trenches should be located outside of the critical root zone of trees. If~~  
28 ~~utilities must be placed within the critical root zone, the applicant's qualified~~  
29 ~~tree professional shall establish to the satisfaction of the City Tree Official that~~  
30 ~~the design will adequately support the long-term viability of the trees.~~

31 ~~(v)~~ (vc) Exposed soils. Trees and other vegetation to be retained shall be protected from  
32 erosion and sedimentation. Clearing operations shall be expose the smallest practical  
33 area of soil to erosion for the least possible time. To control erosion, it is encouraged  
34 that shrubs, groundcover, and stumps be maintained on the individual lots, where  
35 feasible.

36 ~~(e)~~ (ed) Directional Felling. Directional felling of trees shall be used to avoid damage to trees  
37 designated for retention. Any trees designated for preservation, per the approved  
38 tree plan, that are significantly damaged or destroyed during felling of trees approved  
39 for removal shall be replaced per WMC 21.15.070.

40 ~~(f)~~ (fe) Additional Requirements. The City Tree Official may require additional tree  
41 protection measures that are consistent with accepted urban forestry industry  
42 practices.

### 43 **21.15.130 – Enforcement and Penalties**

44 (1) Authority. It shall be the duty of the City Tree Official, or designee, to administer the  
45 provisions of this chapter. ~~The City Tree Official shall have authority to enforce and carry out~~  
46 ~~the provisions of this chapter.~~ Enforcement shall be conducted in accordance with the  
47 ~~administrative code enforcement~~ procedures set forth in Chapter 1.06 WMC and special  
48 enforcement provisions related to tree conservation set forth below. ~~To the extent there is a~~  
49 ~~there is a~~ conflict between the provisions of this section and Chapter 1.06 WMC, this section  
50 shall control.  
51

- 1 (2) Voluntary Compliance. Voluntary compliance is the preferred method of enforcement. The  
 2 following remedies should only be pursued ~~when a violator is not voluntarily complying with~~  
 3 ~~the restoration requirements, when other requirements are stipulated by the Code~~  
 4 ~~Enforcement Officer or City Tree Official, or when the violator did knowingly act in a manner~~  
 5 ~~contrary to the requirements of this code~~ when voluntary compliance is not effective or when  
 6 other requirements are stipulated elsewhere in the code.
- 7 (3) Cease and Desist. The City Tree Official may issue a notice to cease and desist ~~using the~~  
 8 ~~procedure set forth in WMC if the City Tree Official if he/she~~ finds that a violation of this code  
 9 has occurred. Continued illegal tree activity following issuance of a cease and desist from  
 10 the City for the tree activity shall result in fines of \$1,000 per day of continued activity.
- 11 (4) Stop Work Order. If a violation of this chapter ~~or an approved tree plan~~ occurs on property  
 12 on which work-development activity is taking place ~~pursuant to a City of Woodinville~~  
 13 ~~development or building permit~~, the City Tree Official may suspend work ~~as appropriate~~  
 14 through issuance of a stop work order. The City Tree Official shall remove the stop work  
 15 order when ~~the City Tree Official he/she~~ determines that the violation has been corrected or  
 16 when an agreement has been reached with the violator ~~regarding rectification of the to~~  
 17 remedy the violation. ~~Any stop work order issued under this section may be appealed using~~  
 18 ~~the procedures set forth in Chapter 2.30 WMC.~~
- 19 (5) Notification of Violation/Infraction. ~~The City's Code Enforcement Officer shall notify a person~~  
 20 ~~who violates this chapter; A Notice of Infraction may be issued pursuant to WMC 1.06.060.~~  
 21 such ~~The~~ notification shall ~~also~~ include a statement of the restoration action required ~~to be~~  
 22 ~~taken~~ to correct the violation as determined by the City Tree Official.
- 23 (6) Civil Penalty. A person who fails to comply with the requirements of this chapter or the terms  
 24 of a permit issued hereunder, ~~who undertakes an activity regulated by this chapter without~~  
 25 ~~obtaining a permit, or fails to comply with a cease and desist or stop work order issued~~  
 26 ~~under this chapter~~ shall ~~also~~ be subject to a civil penalty of \$1,000 per tree for unlawful  
 27 removal of trees, including removal without obtaining permits, removal prior to issuance of  
 28 tree removal permit, or other acts violating an approved tree protection plan. ~~as set forth in~~  
 29 Table 21.15.130. Each unlawfully removed or damaged tree shall constitute a separate  
 30 violation.
- 31 (a) Any person who aids or abets in the violation shall be considered to have committed  
 32 a violation for purposes of the civil penalty.
- 33 (b) ~~The amount of the penalty shall be assessed in accordance with Table 21.15.130.~~  
 34 The City Tree Official may elect not to seek penalties if he or she determines that the  
 35 circumstances do not warrant imposition of civil penalties in addition to restoration.
- 36 (c) ~~Table 21.15.130—Penalties.~~

37 **Table 21.15.130(6) Table 1—Penalties**

<del>Types of Violations</del>	<del>Allowable Fines per Violation</del>
<del>1. Removal of tree(s) approved to be removed, but prior to final tree plan approval or issuance of a City tree removal permit</del>	<del>\$1,000 per tree</del>
<del>2. Removal or damage of tree(s) that are or would be shown to be retained on an approved tree plan or any other violation of approved tree protection plan</del>	<del>\$1,000 per tree</del>
<del>3. Removal of tree(s) without applying for or obtaining a required City permit</del>	<del>\$1,000 per tree</del>

1  
2 (87) Tree Restoration.

3 (a) A restoration plan and arborist report shall be submitted that, to the greatest extent  
4 practical, equals the site condition that would have existed in the absence of the  
5 violation(s). The restoration plan shall be prepared in accordance with WMC  
6 21.15.070 and include supplemental trees equal to the number of tree credits illegally  
7 removed.

8 (i) In the event the violators cannot restore the unlawfully removed or damaged  
9 trees due to site conditions as determined by the City Tree Official, the  
10 violators shall make payment to the City tree fund. Unless otherwise  
11 determined to base the restoration costs on appraised value, the amount paid  
12 will be the City's unit cost for a restoration tree as calculated in WMC  
13 21.15.090(4)(g).

14 (iv) The restoration plan shall include a maintenance plan and an agreement or  
15 security to ensure survival and maintenance of restoration trees for a five-  
16 year period. ~~Violators of this chapter or of a permit issued thereunder shall be~~  
17 ~~responsible for restoring unlawfully damaged areas in conformance with the~~  
18 ~~requirements of this chapter. Information shall be submitted on repair of any~~  
19 ~~environmental and property damage and restoration of the site results in a~~  
20 ~~site condition that, to the greatest extent practical, equals the site condition~~  
21 ~~that would have existed in the absence of the violation(s).~~

22 (b) Violators of this chapter or of a permit issued thereunder shall be responsible for  
23 restoring unlawfully damaged areas in conformance with this chapter. ~~In cases~~  
24 ~~where the violator intentionally or knowingly violated this chapter or committed~~  
25 ~~previous violations of this chapter, restoration costs shall be paid at the discretion of~~  
26 ~~the City Tree Official. Restoration costs may be based on the City appraised tree~~  
27 ~~value of the subject trees, utilizing the industry standard trunk formula method in the~~  
28 ~~current edition of "Guide for Plant Appraisal." If diameter of removed tree is unknown,~~  
29 ~~determination of the diameter size shall be made by the City Tree Official by~~  
30 ~~comparing size of stump and species to similar trees in similar growing conditions.~~  
31 ~~The amount of costs above the approved restoration plan will be paid into the City~~  
32 ~~tree fund.~~

33 (c) In cases where the violator intentionally or knowingly violated this chapter or  
34 committed previous violations of this chapter, restoration costs shall be paid at the  
35 discretion of the City Tree Official. Restoration costs may be based on the City-  
36 appraised tree value of the subject trees, utilizing the industry standard trunk formula  
37 method in the current edition of "Guide for Plant Appraisal." If diameter of removed  
38 tree is unknown, determination of the diameter size shall be made by the City Tree  
39 Official by comparing size of stump and species to similar trees in similar growing  
40 conditions. ~~Restoration Plan Standards. Information shall be submitted on repair of~~  
41 ~~any environmental and property damage and restoration of the site results in a site~~  
42 ~~condition that, to the greatest extent practical, equals the site condition that would~~  
43 ~~have existed in the absence of the violation(s). The restoration plan shall be in~~  
44 ~~accordance to the following standards:~~

45 (i) ~~The number of trees required to be planted is equal to the number of tree credits of~~  
46 ~~illegally removed trees according to Table 21.15.070.~~

47 (ii) ~~The minimum size for a tree planted for restoration shall be as required under WMC~~  
48 ~~21.15.070(2).~~

49 (iii) ~~In the event the violators cannot restore the unlawfully removed or damaged trees~~  
50 ~~due to current or future development activity or other site conditions as determined~~  
51 ~~by the City Tree Official, the violators shall make payment to the City tree fund.~~

~~Unless otherwise determined to base the restoration costs on appraised value, the amount paid will be the City's unit cost for a restoration tree multiplied by the number of outstanding tree credits plus 50 percent for maintenance. The City's unit cost is based on the current market cost of purchase, installation and five-year maintenance for a minimum-sized tree for restoration.~~

~~(iv) The restoration plan shall include a maintenance plan and an agreement or security to ensure survival and maintenance of restoration trees for a three-year period unless the violation was on a site with an approved tree plan, in which case the maintenance period is five years.~~

(98) Failure to Restore or Pay Fines.

~~(a) Prohibition of Further Approvals.~~ The City shall not approve any application for ~~a subdivision, short subdivision, or any other~~ any development permit ~~or approval~~ or issue a certificate of occupancy for property on which a violation of this chapter has occurred until the violation is cured by restoration ~~or other means accepted by the City Tree Official~~ and by payment of any penalty imposed for the violation.

## DEFINITIONS

### WMC 21.06.063 Broadleaf tree

Broadleaf tree: a tree characterized by leaves that are broad in width and may include both deciduous and evergreen species.

### WMC 21.06.101 City Tree Official

City Tree Official: the Development Services Director or his/her designees responsible for implementing the Community Urban Forestry Plan and Regulations. The City Tree Official shall use the expertise of a certified arborist, under contract by the City, for technical advice on decisions related to the community urban forest.

### 21.06.139 Critical root zone.

Critical root zone: the area surrounding a tree at a distance from the trunk, which is equal to one foot for every inch of tree diameter-at-breast-height or otherwise determined by a qualified tree professional.

### 21.06.140 Crown.

Crown: the area of a tree containing leaf- or needle-bearing branches.

### 21.06.143 Deciduous.

Deciduous: a plant species with foliage that is shed annually

### 21.06.168 Diameter-at-breast-height.

Diameter-at-breast-height: the diameter measurement in inches of the outside bark of a tree trunk, measured at four-and-a-half feet above the ground line. New plantings are to be measured at six inches above the ground level.

### 21.06.174 Dripline.

Dripline: the distance from the tree trunk, that is equal to the furthest extent of the tree's crown.

### 21.06.220 Evergreen.

1 Evergreen: a plant species with foliage that persists and remains green year-round.  
2

3 **21.06.xxx Hazard Tree.**

4 Hazard tree: A tree meeting all of the following criteria: (a) The tree has a with a combination of  
5 structural defects and/or disease that makes it subject to a high probability of failure; (b) Is in the  
6 proximity to moderate-high frequency of persons or property; and- (c) The the -hazard condition  
7 of the tree cannot be lessened with reasonable and proper arboricultural practices nor can the  
8 persons or property be removed.

9  
10  
11 **21.06.309 Heritage tree**

12 Heritage tree: a tree or stand of trees that is particularly desirable because it has valued, unique  
13 characteristics that set them apart from other similar trees. Valued, unique characteristics  
14 include uncommon genus, species, form, size, location, historic significance or other desirable  
15 feature(s).  
16

17 **21.06.359 Limit of disturbance, tree.**

18 Limit of disturbance, tree: the boundary between the area of minimum protection around a tree  
19 and the allowable site disturbance as determined by a qualified tree professional.  
20

21 **21.06.406 Native growth protection area (NGPA).**

22 Native growth protection area (NGPA): an area where native vegetation is preserved for the  
23 purpose of preventing harm to property and the environment, including, but not limited to,  
24 controlling surface water runoff and erosion, maintaining slope stability, buffering and protecting  
25 plants and animal habitat.  
26

27 **21.06.408 Naturalized species.**

28 Naturalized species: nonnative species of vegetation that are adaptable to the climatic  
29 conditions of the coastal region of the Pacific Northwest.  
30

31 **21.06.xxx Nuisance Tree.**

32 Nuisance tree: A tree that causes physical damage to private or public structures; has been  
33 damaged by past maintenance practices that cannot be corrected; is chronically diseased or  
34 infested; overplanted or overcrowded; part of a dense grove creating safety concerns or  
35 excessively obstructing sunlight.  
36

37 **21.06.486 Qualified tree professional.**

38 Qualified tree professional: an individual with relevant education and training in arboriculture or  
39 urban forestry. The individual must be an arborist certified by the International Society of  
40 Arboriculture or a registered consulting arborist from the American Society of Consulting  
41 Arborists. For Forest Management Plans, the qualified tree professional must have the ability to  
42 assess wooded sites and prescribe measures for forest health and safety. A qualified tree  
43 professional that makes determinations on hazard or nuisance trees is required to have  
44 certification as a tree risk assessor.  
45

46 **21.06.599 Significant tree**

47 Significant tree: an existing healthy tree which has a minimum diameter-at-breast-height of six  
48 inches, as measured according to the most current published edition of the International Society  
49 of Arboriculture's "Guide for Plant Appraisal."  
50

51 **21.06.xxx Snag or wildlife tree.**

1 Snag or wildlife tree. The remaining trunk of a tree that intentionally reduced in height and  
2 usually tripped of its live branches.

3  
4 **21.06.617 Specimen tree.**

5 Specimen tree: a viable tree that is considered in very good to excellent health and free of major  
6 defects, as determined by the City's Tree Official

7  
8 **21.06.680 Tree removal**

9 Tree removal: the removal of a tree, through either direct or indirect actions, including but not  
10 limited to: (1) clearing, damaging or poisoning resulting in an unhealthy or dead tree; (2)  
11 removal of at least half of the live crown; or (3) damage to roots or trunk that is likely to destroy  
12 the tree's structural integrity

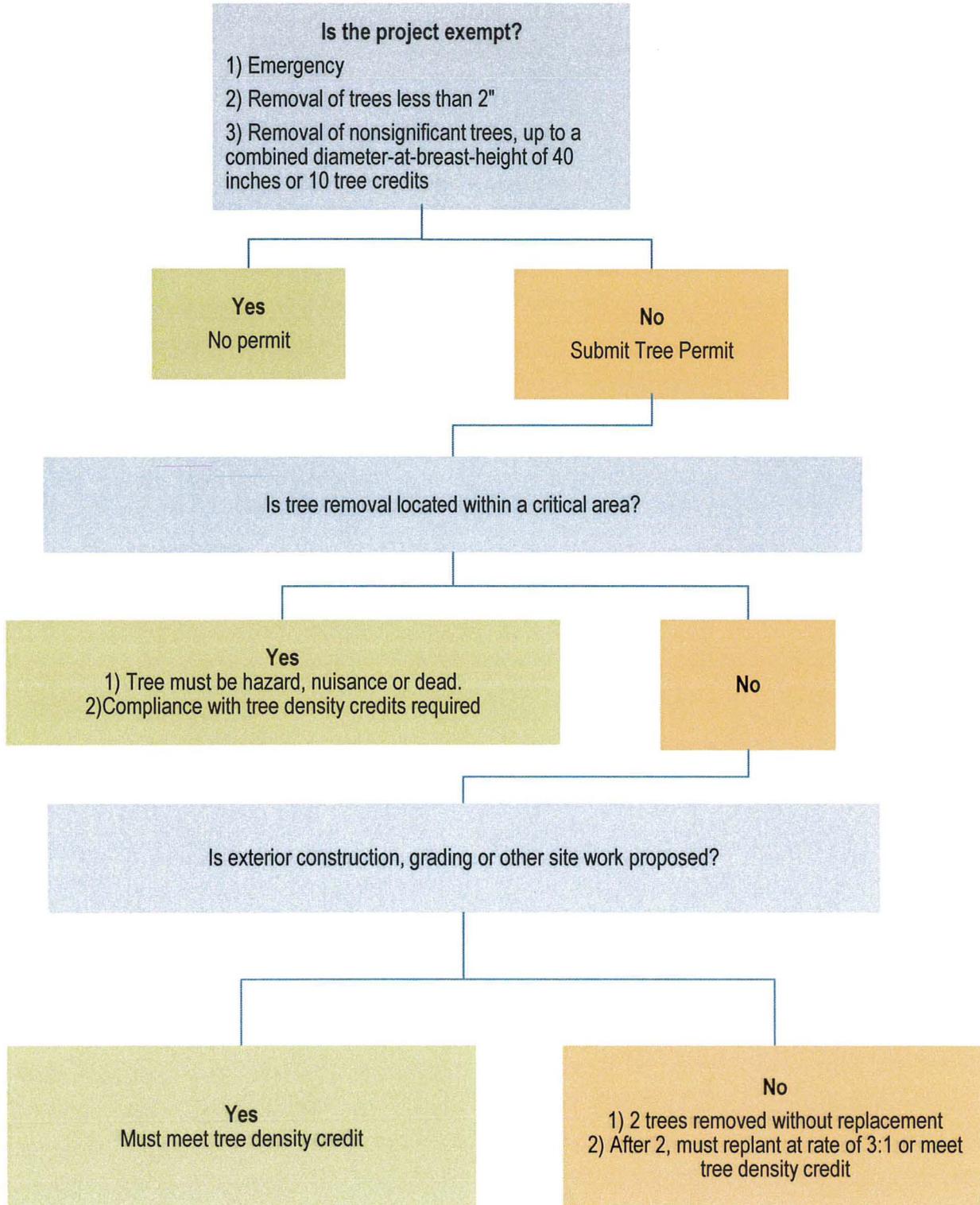
13  
14 **21.06.xxx Tree grove**

15 Tree grove: a cluster or stand of at least five trees, generally lacking undergrowth.

16  
17 **21.06.695 Viable tree.**

18 Viable tree: a significant tree that a qualified tree professional has determined to be in good  
19 health, not classified as a hazard or nuisance tree, and haswith a low risk of failure due to  
20 structural defectss, is relatively windfirm if isolated or remains as part of a grove, and is a  
21 ~~species that is suitable for its location~~

Attachment 2. Flow Chart Outlining Tree Removal Process



	TREE CREDITS	TREE INCHES	REPLACEMENT RATIO	CANOPY COVERAGE	RETENTION STANDARD																																																																											
<b>Summary</b>	Replacement trees are required if the lot does not meet the minimum tree density credits.	Replacement trees are required if the lot does not meet the minimum tree inches.	Replacement trees must be planted at a ratio based on the size of the removed tree	Replacement trees are required if the lot does not meet the minimum tree canopy, evaluated through aerial imagery	Lots must maintain a certain percentage of DBH of healthy significant trees.																																																																											
<b>Description and alternatives</b>	<p>60 tree credits per acre</p> <p><b>Option 1:</b></p> <table border="1"> <thead> <tr> <th colspan="2">Tree Diameter Inches</th> <th>Total Credit</th> </tr> <tr> <th>Min</th> <th>Max</th> <th></th> </tr> </thead> <tbody> <tr> <td>1.0</td> <td>3.0</td> <td>0.5</td> </tr> <tr> <td>3.1</td> <td>6.0</td> <td>1.0</td> </tr> <tr> <td>6.1</td> <td>12.0</td> <td>2.0</td> </tr> <tr> <td>12.1</td> <td>24.0</td> <td>5.0</td> </tr> <tr> <td>24.1</td> <td>36.0</td> <td>8.0</td> </tr> <tr> <td>36.1</td> <td>50.0</td> <td>14.0</td> </tr> <tr> <td>50.1 and above</td> <td></td> <td>18.0</td> </tr> </tbody> </table> <p><b>Option 2:</b> Tree credits can be calculated as 25% of the tree diameter inches (DBH), with a minimum of 0.5 credits per tree and a maximum of 15 tree credits per acre</p>	Tree Diameter Inches		Total Credit	Min	Max		1.0	3.0	0.5	3.1	6.0	1.0	6.1	12.0	2.0	12.1	24.0	5.0	24.1	36.0	8.0	36.1	50.0	14.0	50.1 and above		18.0	<p><b>Option 1:</b></p> <ul style="list-style-type: none"> <li>- Required tree inches per acre                             <ul style="list-style-type: none"> <li>- 120 inches/acre</li> </ul> </li> </ul> <p><b>Option 2:</b></p> <ul style="list-style-type: none"> <li>- Required tree inches per acre depend on zone                             <ul style="list-style-type: none"> <li>- R-1 zone: 140 inches/acre</li> <li>- R-4 zone: 80 inches/acre</li> <li>- R-6 - R-8 zone: 60 inches/acre</li> <li>- All other zones: 50 inches/acre</li> </ul> </li> </ul> <p><b>Option 3:</b></p> <ul style="list-style-type: none"> <li>- Required tree inches per acre depend on lot size                             <ul style="list-style-type: none"> <li>- 20,000+ sf: 140 inches/acre</li> <li>- 9,000 sf – 20,000 sf: 80 inches/acre</li> <li>- 5,000 sf – 9,000 sf: 60 inches/acre</li> <li>- All other zones: 50 inches/acre</li> </ul> </li> </ul>	<p><b>Option 1:</b> Replacement is based on size</p> <table border="1"> <thead> <tr> <th>Diameter of Existing Tree Removed</th> <th>No. of Replacement Trees Required</th> </tr> </thead> <tbody> <tr> <td>4-8 inches</td> <td>1</td> </tr> <tr> <td>8-12 inches</td> <td>2</td> </tr> <tr> <td>12-18 inches</td> <td>4</td> </tr> <tr> <td>&gt;18 inches</td> <td>6</td> </tr> </tbody> </table> <p><b>Option 2:</b> Replacement is based on total number of trees</p> <table border="1"> <thead> <tr> <th>Number of Removed Trees</th> <th>No. of Replacement Trees Required</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>2</td> </tr> <tr> <td>2</td> <td>4</td> </tr> <tr> <td>X</td> <td>2X</td> </tr> </tbody> </table>	Diameter of Existing Tree Removed	No. of Replacement Trees Required	4-8 inches	1	8-12 inches	2	12-18 inches	4	>18 inches	6	Number of Removed Trees	No. of Replacement Trees Required	1	2	2	4	X	2X	<p><b>Option 1:</b> Replacement is based on size</p> <table border="1"> <thead> <tr> <th></th> <th>Coverage Goal</th> </tr> </thead> <tbody> <tr> <td>R-1</td> <td>55%</td> </tr> <tr> <td>R-4</td> <td>40%</td> </tr> <tr> <td>R-6 to R-8</td> <td>30%</td> </tr> <tr> <td>All other zones</td> <td>20%</td> </tr> </tbody> </table> <p><b>Option 2:</b> Lots must meet a canopy percentage based on lot size</p> <table border="1"> <thead> <tr> <th>R-1 through R-8</th> <th>Coverage Goal</th> </tr> </thead> <tbody> <tr> <td>20,000+ sf</td> <td>55%</td> </tr> <tr> <td>9,000 – 20,000 sf</td> <td>40%</td> </tr> <tr> <td>5,000 sf – 9,000 sf</td> <td>30%</td> </tr> <tr> <td>All other zones</td> <td>20%</td> </tr> </tbody> </table>		Coverage Goal	R-1	55%	R-4	40%	R-6 to R-8	30%	All other zones	20%	R-1 through R-8	Coverage Goal	20,000+ sf	55%	9,000 – 20,000 sf	40%	5,000 sf – 9,000 sf	30%	All other zones	20%	<p><b>Option 1:</b> Lots must maintain 20 percentage of tree inches of healthy significant trees</p> <p><b>Option 2:</b> Lots must maintain a certain percentage of tree inches based on zone</p> <table border="1"> <thead> <tr> <th></th> <th>Retained tree inches</th> </tr> </thead> <tbody> <tr> <td>R-1</td> <td>35%</td> </tr> <tr> <td>R-4</td> <td>25%</td> </tr> <tr> <td>R-6 to R-8</td> <td>20%</td> </tr> <tr> <td>All other zones</td> <td>10%</td> </tr> </tbody> </table>		Retained tree inches	R-1	35%	R-4	25%	R-6 to R-8	20%	All other zones	10%
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R-4	40%																																																																															
R-6 to R-8	30%																																																																															
All other zones	20%																																																																															
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9,000 – 20,000 sf	40%																																																																															
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R-1	35%																																																																															
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All other zones	10%																																																																															
<b>City Example</b>	<ul style="list-style-type: none"> <li>- City of Woodinville</li> <li>- City of Kirkland</li> </ul>	<ul style="list-style-type: none"> <li>- None</li> </ul>	<ul style="list-style-type: none"> <li>- City of Tukwila</li> <li>- City of Renton</li> <li>- City of Shoreline</li> </ul>	<ul style="list-style-type: none"> <li>- City of Lake Forest Park</li> <li>- Snohomish County</li> </ul>	<ul style="list-style-type: none"> <li>- City of Renton</li> </ul>																																																																											
<b>Staff comments</b>	<p>Woodinville uses this system for the Tree Code.</p> <p>Can be difficult to determine if the policies match the goal, as trunk size is often independent of canopy size.</p> <p>Relatively easy for applicants to calculate and a process that residents are familiar with. Options 1 and 2 provide close to a similar result, but require different calculations.</p>	<ul style="list-style-type: none"> <li>- Difficult for some redeveloped properties to meet requirement</li> <li>- Similar approach to the City's current tree credit approach, where properties must maintain a certain amount of credits</li> <li>- Simplifies process by removing the tree credits, and instead measures by DBH of all trees</li> <li>- Increases the value of larger trees (e.g., a 6" tree is worth 3 times as much as a 2" tree in this scenario. In the previous tree credit ratio, a 6" tree is worth 1.5 times as much as a 2" tree.</li> </ul>	<ul style="list-style-type: none"> <li>- Simplest method for calculation, and easiest for applicants</li> <li>- May lead to overplanting</li> <li>- Not flexible for property owners that may have a large number of trees existing on their property</li> </ul>	<ul style="list-style-type: none"> <li>- Relies on aerial imagery (King County, Google Earth or other products)</li> <li>- Easy for residents to evaluate if they meet coverage</li> <li>- Most accurately captures the City's canopy goal</li> <li>- Difficult for residents to determine how much replanting is sufficient</li> <li>- Requires the City to maintain a database of trees with canopy square footages</li> <li>- Requires a canopy projection of 20 or 30 years</li> </ul>	<ul style="list-style-type: none"> <li>- Similar calculation to Option 1 or 2</li> <li>- May lead to excessive tree removal</li> <li>- Reliance on landscaping standards</li> </ul>																																																																											

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# **AGENDA ITEM 4**



CITY OF WOODINVILLE, WA  
**REPORT TO THE TREE BOARD**  
17301 133<sup>rd</sup> Avenue NE, Woodinville, WA 98072  
WWW.CI.WOODINVILLE.WA.US

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**To:** Tree Board **Date:** January 28, 2015  
**From:** Dave Kuhl, Development Services Director   
**By:** Jenny Ngo, AICP, Senior Planner  
**Subject:** Proposed Tree-ster Events for 2015 

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**ISSUE:** Shall the Tree Board review proposed events for Arbor Day/Tree-ster 2015?

**STAFF RECOMMENDATION:** To review and consider potential events for the annual spring Arbor Day/Tree-ster event.

**POLICY DECISION:** The Tree Board provides an advisory role to the City Council on matters of trees and urban forestry.

**BACKGROUND:**

As part of participation in the Tree City USA program, the City must recognize Arbor Day. In the past, the City has hosted celebration events that included educational outreach and Easter egg hunts. Event ideas include:

- Tree trimming/pruning demonstration
- Earth Day event at 21 Acres or other locations
- Walking tour
- Tree identification game
- Easter Egg hunt
- Park beautification or habitat restoration
- Tree plantings
- Block party

**DISCUSSION:**

1. What events would the Tree Board want to see as part of the 2015 celebration?
2. What was the experience from last year's events and what should change as a part of this year's events?

**RECOMMENDED ACTION:**  
**DISCUSS AND MAKE RECOMMENDATIONS**

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