



**CITY OF KIRKLAND**  
**Planning and Community Development Department**  
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## **MEMORANDUM**

**To:** Planning Commission

**From:** Jon Regala, Senior Planner  
Deborah Powers, Urban Forester  
Paul Stewart, AICP, Deputy Planning Director

**Date:** May 14, 2009

**Subject:** TREE REGULATIONS UPDATE  
FILE ZON08-00016

### **RECOMMENDATION**

For the tree regulations update project, provide direction to staff on the following items:

- Schedule for the draft work program
- Structure of public involvement
- Identify any additional information needed for future study sessions

### **BACKGROUND DISCUSSION**

In November 2005, the City Council adopted Chapter 95 of the Zoning Code that established new regulations, standards and procedures for tree management and required landscaping (see Attachment 1). The code went into effect in 2006. At the time of the adoption of the tree amendments, the City Council requested that a two-year status report of the regulations be prepared and brought back for Council review. The Council was interested in understanding issues that may arise in the implementation and application of the tree regulations.

Staff has reviewed the tree regulations and their operation over the past two-and-a-half years and believes that some aspects of tree management in the City could be improved. Staff presented a report to the Council at the September 2, 2008 City Council study session. The City Council reviewed and discussed the proposed changes presented by staff. Based on the analysis, staff presented to the Council three "tiers" of amendments for Council's consideration: minor, moderate or major changes to the adopted regulations.

*"Minor amendments"* would improve the current system but would not change the basic approach. *"Moderate changes in policy direction"* would result in some fairly substantive changes to the regulations. The third tier *"major policy questions"* would fundamentally alter the regulations and implement new policy directions. At the conclusion of the study session, the Council directed staff to pursue studying changes identified as being in the 'minor' and 'moderate' categories. The general scope of the proposed changes is described following the background information below. Changes to the Zoning Code are required to go through a Process IV review.

### **HISTORY OF TREE REGULATIONS**

The Comprehensive Plan Natural Environment Policy NE-3.1 states that the City should strive to achieve an overall tree canopy coverage of 40% for the community. Benefits associated with the tree canopy (and described in Policies NE-3.2 and 3.3 and KZC Section 95.05) include:

- Minimizing the adverse impacts stormwater runoff, soil erosion, land instability, and sedimentation and pollution of waterways;
- Improving air quality;
- Reducing effects of excessive noise pollution;
- Moderating temperature;
- Providing visual relief and screening buffers;
- Providing recreational benefits;
- Providing habitat, cover, food supply and corridors for a diversity of fish and wildlife; and
- Providing economic benefit by enhancing local property values and contributing to the region's natural beauty, aesthetic character, and livability.

Prior to 2006, the Zoning Code regulated trees exclusively based on size and a percentage to be saved. Certain trees were determined to be "significant" by trunk diameter/circumference and those trees were targeted for retention, if possible, during development. Separately, the City's subdivision rules required that 25% of the healthy "significant" trees on a subdivided property be kept throughout construction of the new houses. Property-owners of developed property could remove up to 5 healthy trees per year. If the subject property was larger than one acre, 5 trees within each acre may be removed.

Concerned with ongoing tree removal during a time of significant land development, the City Council adopted a series of interim ordinances, beginning in 2002, that reduced tree removal on private property to two trees per year and required retention of all "perimeter" trees (within 10' of the property lines) unless removal was needed for locating structures, accessways, utilities, etc.

In 2003, the City's first Natural Resource Management Plan ([http://www.ci.kirkland.wa.us/depart/Planning/Code\\_Updates/Natural\\_Resources\\_Management.htm](http://www.ci.kirkland.wa.us/depart/Planning/Code_Updates/Natural_Resources_Management.htm)) was prepared and adopted by City Council. The plan included a section on guiding principles for managing Kirkland's urban forest. These principles were the foundation for new policies and regulations affecting trees.

The new tree regulations were developed through an extensive multi-year review process which involved focus groups, the general public, and the development community (see Attachment 2). The City hired its first Urban Forester to oversee this effort. The new amendments went into effect on January 1, 2006.

### **SUMMARY OF THE 2006 TREE REGULATIONS**

The goal of the 2006 tree amendments was to preserve and protect mature trees and tree canopy on private property as development density and intensity increased, given the 40% tree canopy coverage goal. While the goal is citywide, private property comprises approximately 70% of Kirkland's land area. The city also has a responsibility to retain and increase the tree canopy on public property.

The 2006 tree amendments contained a number of new approaches:

1. Tree "Typing"  
The regulations address trees by "type"—Type 1, Type 2 or Type 3--and provide a tiered framework for preserving trees most worthy of retention outside of a building footprint as Type 1 trees. (See Attachment 3 for the definitions of tree types.) The City's Urban Forester makes the tree typing determination for each project, based on information from the applicant's arborist report and review of the development plans.

Attachment 4 provides a graphic example of tree typing on a site. The site plan shows the Type 1, Type 2 and Type 3 trees as determined by the Urban Forester using the tree type definitions. Determining a tree type is based on a combination of factors including the condition of the tree and the location on the property in relation to development. For example, a tree could be in good condition but since it is located in an area of the property where development is anticipated, it would be a Type 3 which could then be removed.

2. Tree Removal on Developed Property

Under the new rules, an owner of developed property of any size may remove up to 2 significant trees from a property within a twelve-month period. Nuisance and hazardous trees don't count toward the two-tree per year allowance. For trees that are in critical areas, landscape buffers, easements dedicated to preserve vegetation, the last two significant trees on the property, or are required to be maintained by other Zoning Code requirements, a Tree Plan IV is submitted for review (see next section), and replacement planting is required.

3. Tree Plans

Prior to development activity or for certain types of tree removals, a "Tree Plan" must be submitted for review and approval by the Urban Forester. The five levels of Tree Plan are linked to the type of underlying development:

- *Tree Plan I* - Required for trees impacted on sites with new development, redevelopment, or remodeling for one or two attached, detached, or stacked dwelling units. There are two types of Tree Plan I—Major and Minor--depending on the extent of improvements.
- *Tree Plan II* - Required for development permits or land surface modification resulting in site disturbance and impact to trees in required yards or areas of required landscaping for three or more detached, attached, or stacked dwelling units; or any use other than residential.
- *Tree Plan III* - Required for new residential short plats or subdivisions and related land surface modification applications.
- *Tree Plan IV* - Required for tree removal on a property on which no development activity is proposed or in progress, for pruning/removal of trees in the public right-of-way, and for removal of the last two significant trees on a site.
- *Tree Plan V* - A Forest Management Plan is required for developed, significantly wooded sites of at least 35,000 square feet in size. To date, no Tree Plan Vs have been submitted to the City.

The objective in reviewing the tree plans, as described in the regulations, is to "retain as many viable trees as possible on a developing site while still allowing the development proposal to move forward in a timely manner." A basic review standard for tree plans is that tree retention is not to reduce the applicant's development potential (lot coverage, floor area ratio, and density). Although the Planning Official is authorized to require site plan alterations to retain Type 1 trees, only minor adjustments to the locations of building footprints, driveways, walkways and utilities can be requested. For Tree Plans I and II, the focus is on the retention of Type 1 trees in required setback yards or in areas for required landscaping only.

4. Minimum Tree Density

In conjunction with a tree plan review process, the 2006 tree regulations establish a minimum tree density for new and redeveloping single-family and duplex developments and new residential subdivisions and short plats, of 30 "tree credits" per acre. Existing trees over 6" trunk diameter are assigned tree credit values (see Attachment 5). Retaining 30 tree credits per acre equates to retaining two 38" diameter trees on one acre, or thirty 6-10" diameter trees on one acre. On a standard 7,200 square foot lot, the tree density requirement is 5 tree credits, the equivalent of retaining one existing 18" diameter tree, or five existing 6-10" diameter trees.

The required tree density can be met either by preserving existing trees (more credits for larger trees) or by planting new, "supplemental" trees. A 2"-diameter deciduous or 6' height conifer is worth 1 supplemental tree credit.

5. Tree Maintenance Agreements

The 2006 amendments placed "tree maintenance agreements" over properties with a Tree Plan I-Major, Tree Plan II or Tree Plan III to ensure that retained trees are protected for 5 years. Prior to issuing a certificate of occupancy for the individual lot or development, the owner agrees to maintain and replace all landscaping that is required by the City. The agreements are recorded with the County and a site plan showing the trees are retained by the City. When the 5-year maintenance agreement expires, property owners may remove up to two trees per year.

6. City Forestry Account

The authority to establish a City Forestry Account also was part of the 2006 changes. This account is funded by code enforcement penalties and fees-in-lieu of planting for cases where locations for supplemental trees are unavailable. The City Forestry Account is to be used for acquiring, maintaining, and preserving wooded areas within the City; to plant and maintain trees within the City; to identify and maintain landmark trees; to establish a holding public tree nursery; for urban forestry education; or other purposes related to trees as determined by the City Council. Funds from the account were expended in 2007 for additional code enforcement time relating to tree issues and to host a tree-planting event for Arbor Day.

7. Code Enforcement

The new rules increased code enforcement penalties to discourage unauthorized removal of trees (see Attachment 6). In addition, the regulations equate severe pruning (topping) to tree removal for enforcement purposes.

**DATA ON TREE PROTECTION EFFORTS**

Since the revised tree regulations went into effect January 2006, the Planning Department has processed 1,155 tree cases.

To better understand the effectiveness of the new regulations, tree protection data from several case studies has been researched. Seven randomly-chosen development plans were followed from the time of initial short plat application through completion of final building permits. The research effort pointed out that the City's tree tracking system needs improvement and that performance standards should be developed and incorporated into the system. This is identified as one of the moderate level changes asked to be studied by the City Council and described later in this memo. Still, the information provides an initial picture of tree retention throughout the development process. Data from some of the case studies is included in Attachment 7.

Reviewing the case studies, along with anecdotal information from planners and more specific data on Type 1 tree retention from building permits, some generalizations can be made:

- Tree retention is good at both the short plat and land surface modification (grading) stages. It is at the time of building permit approval that many trees are lost—primarily Type 2 trees which are required to be saved only “if feasible.”
- The retention of Type 1 trees is assessed as fair to good. Of the seven building permits studied, a total of 12 Type 1 trees were identified on-site prior to development. After building permit review, a total of 9 Type 1 trees (75%) were required to be protected during development. Very limited use has been made of the “incentives and variations to development standards” provided in the new regulations to save Type 1 trees (see Attachment 8). Staff is aware of only one case where a building footprint was “flipped” to save a Type 1 tree. Minor adjustments have been made to sidewalk, driveway and utility locations.
- The City processed 185 code enforcement cases related to trees between 2006 and May 2009. Code enforcement cases related to trees in 2005 comprised 10% of the total code enforcement cases for the year. In 2006, after adoption of the new rules, this percentage jumped to 19% and it has stayed relatively stable at that level (22% in 2007, 19% in 2008, and so far 16% in 2009).
- Although no data is available at this point to assess whether protected trees are retained *after* the five-year maintenance period has expired, there are current code enforcement cases for unauthorized removal of trees within the maintenance period.

### **WHAT'S WORKING WITH THE REGULATIONS**

It seems clear that tree typing—rather than using size alone to identify trees worthy of preservation—is working. The best, Type 1, trees (located in required setbacks) have been identified and, for the most part, preserved.

Better tree information is now available earlier in the permit review process. Short plat applicants submit detailed tree information, provided by a certified arborist, and the trees on-site are identified before grading or building permits are ever submitted.

The 5-year maintenance agreements are ensuring that the trees to be saved are preserved, at least for an initial period of time. If trees are lost, replanting is generally required.

Off-site trees on properties adjacent to development projects have been protected successfully with the 2006 regulations.

Better enforcement procedures result in more serious consequences if trees are removed without authorization.

The tree regulations have resulted in the City moving actively towards a team approach (Urban Forester and Public Works) in the review of development permits and the application of the tree regulations. In addition, the City now has a full time Urban Forester staff position. Efforts are underway to better coordinate city-wide tree preservation efforts and to develop a comprehensive urban forestry program.

### **SCOPE OF REQUESTED CHANGES - MINOR**

There are several changes to the 2006 tree regulations that the City Council asked staff to pursue. These changes do not involve major shifts in policy direction and are listed below.

1. Code Structure

Simplify/reformat the code sections in Chapter 95. Although the 2006 revisions were a vast improvement over previous code language, the chapter could be reorganized to make it more user-friendly. Some definitions could be improved and a table format could be utilized where appropriate. In addition, providing a template for tree inventories would result in an efficient review by staff.

2. Regulation Consolidation

Currently, trees on private property are regulated by the Zoning Code. Requirements for trees in the right-of-way are found in KZC Chapter 110 and Municipal Code Title 19, *Streets and Sidewalks*. Staff believes that it would be helpful to consolidate rules for most right-of-way trees into a single location in the Zoning Code. This is particularly important as the Urban Forester in the Planning Department is now reviewing requests for removal of right-of-way trees impacted by development, as well as tree removal requests on private property. The Public Works Department continues to review removal requests for other right-of-way trees.

3. Permit Process

Permit applicants have expressed concern that the tree-related requirements slow down the development review process. The City's consultant for efficient permit processing, Kurt Latimore, has concluded that an "integrated development plan" will address this concern. An "integrated development plan" will specify tree retention requirements very early in the permit review process so that trees to be retained are known up-front. Tree removal can occur all at once, rather than at various times throughout the grading and building permit process. Although the underlying principles of the integrated development plan may be found in the Tree Plan III requirements, policy changes will be necessary to fully implement this approach.

As most trees currently are saved through the short plat and land surface modification (grading) stages, and then are lost as individual building permits are approved, staff welcomes an approach that would allow a more comprehensive review at the beginning of the process when lot lines could be adjusted or other modifications to plans made to save the most valuable trees. In the meantime, staff has implemented minor changes to create efficient routing and tracking of the tree review so that it coincides with the review of the overall permit.

4. Tree Preservation

Since the September 2008 City Council study session, staff has required additional credentials for arborists making tree removal recommendations under the Fast-Track amendment process, effective in late May 2009 (see Attachment 9).

Standards for tree protection fencing could be updated for increased effectiveness during development projects. The current standard can be found in Attachment 10.

5. Tree Maintenance Agreements

The benefits of tree maintenance agreements are two-fold: they alert the homeowner that certain trees must be retained and they notify future property-owners (through appearance on the title report) that retention requirements apply. The City does not yet have data to know whether or not these agreements will work in the long-term. The first agreements under the 2006 regulations will reach the five-year mark in 2011.

Preparation of the tree maintenance agreements has proved to be a very time-intensive process for staff. Each permit requiring either tree retention or replanting must now have a final property inspection by the Planning Department. The actual agreements are drafted by the planner and then prepared by Multimedia Services. Recording fees must be collected, the cover sheets for recording must be completed, and the agreement sent to the City Clerk's office for preparation for recording with King County. A site plan showing the trees to be maintained must be entered into the permit-tracking system. When the five-year maintenance period ends, planners will again need to conduct a site inspection.

Staff believes that a simpler agreement that would notify landowners, but involve inspections only in the event of a complaint from a neighbor or the general public, is worth exploring.

6. Tree Tracking

Background research for this memo has confirmed that tracking tree cases could be improved. Consistency in tree typing between short plat, land surface modification, and building permits is important. Knowing what trees are to be saved at the beginning of a project would be useful both to staff and to applicants. Information entered into the City's permit tracking system needs to be more specific about trees saved and those planted.

**SCOPE OF REQUESTED CHANGES - MODERATE**

There are several policy changes that the City Council asked staff to pursue. The following are questions to be considered during the update process.

1. Should integrated development plans, as they apply to trees, be mandatory rather than optional?

The goal of an integrated development plan (proposed by Kurt Latimore, the City's consultant for permit process efficiency) is to identify the trees to be saved or removed on a site at the very beginning of a project. The tree plan would then remain constant throughout the grading and building permit review process. This idea is discussed earlier in this memo under minor amendments, and current administrative efforts are focused on making such a plan optional for developers who wish to avoid multiple rounds of tree assessment/plan revisions.

The integrated development plan as it relates to trees could be made mandatory. The disadvantage to this approach is that the developer would have to identify approximate building footprints very early in the process, and would have less flexibility later in the building process. This is difficult for developers who do not plan to build the final structures, or new owners/builders of partially-developed properties. The benefit of this approach, however, is that tree retention expectations are clear to all future developers and builders before lots are sold or plans prepared much like other protected natural resources, such as wetlands. This should ensure improved tree retention.

2. Should code enforcement fines be increased?

Although greatly increased from previous levels, code enforcement fines still may be too low. To ensure tree retention, the fines must be more than just the "cost of doing business". Currently, the \$1,000 fine for an unauthorized tree removal is not a deterrent for those intending to increase views or clear a site for development. If regulations for right-of-way trees and private property trees are consolidated as mentioned in a previous section, code enforcement fines should also be consistent with that approach. Staff would like to explore this issue further.

3. How will the City monitor its tree canopy coverage?

The adopted tree regulation ordinance included a section directing the City to undertake an analysis estimating the City's tree canopy coverage by December 31, 2010. With current in-house data, the City cannot determine whether progress toward the Comprehensive Plan goal of 40% canopy coverage is being achieved.

Staff points to the need for accurately assessing and monitoring the City's biomass of trees and vegetation. Without this data, there is no performance measure for the City's canopy goal. Staff would work with the City's Information Technology-GIS Department (IT-GIS) to prepare a plan for how this level of tree monitoring might be implemented, and formulate a procedure for incorporating citywide tree canopy statistics.

In addition, tree monitoring should aim to establish and maintain an overview of citywide tree canopy coverage. The current inventory is a generalized digital map of forest canopy, first published in 2003 as part of the Natural Resource Management Plan. Staff hired a consultant to create this thematic map from satellite imagery. Although this process is considered be state-of-the-art and highly repeatable, area calculations are assumed to have an inherent error range of plus/minus a few percentage points. In order to measure progress toward the planned canopy goal, staff recommends that a recurring cycle of analysis be established. This may have budget considerations.

IT-GIS staff could research approximate costs and also consider whether this process can reasonably be accomplished in-house rather than outsourced. Tree canopy updates could be utilized to derive other comprehensive citywide statistics as well. Staff considers it possible that the cost of an outside vendor could be shared by neighboring jurisdictions that might also benefit from the data.

**WORK PROGRAM**

The proposed work program for the Tree Amendment project can be found in Attachment 11 and is subject to change. It includes 4 study sessions with the Planning Commission and 3 study sessions with the Houghton Community Council prior to a public hearing in October 2009.

Staff is proposing that the first study session to be held in June consist of a detailed discussion on the proposed changes described in this memo and indentifying key issues. Also in June, staff envisions meeting with stakeholder groups as well as seeking public input through the City's website. In July, staff will begin drafting amendments for consideration at two study sessions with the Planning Commission and the Houghton Community Council beginning in August. City Council action is projected to occur in December 2009.

**PUBLIC PARTICIPATION**

Since adoption of the new rules, the City has continued to hear from both the public and the development community about tree protection. As with the public input prior to adoption of the regulations, there are two basic positions expressed regarding tree management:

- Tree regulations, and their application, are a roadblock to efficient permit processing. Replanting rather than retention is preferred (even by single-family homeowners). The regulations should be incentive-based and tree retention requirements should be established at the beginning of the development process.
- There is the perception that the new regulations were supposed to save more trees when development occurs. The City needs to do more to retain large existing trees

rather than allow replanting of many small trees. Attachments 12 and 13 provide background on this perspective.

With the tree regulation update project, stakeholders will be informed on an ongoing basis utilizing the following methods:

- City Website
- Tree Regulation list-serv
- Neighborhood list-serv
- Cable TV Announcements
- Mailing list
- City Update Newsletter
- Kirkland Reporter
- Meetings with various stakeholders
- Online questionnaire

### **ATTACHMENTS**

1. Zoning Code Chapter 95
2. Review Process for 2006 Amendments
3. Tree Type Definitions
4. Site Plan Showing Tree Typing
5. Tree Credit Chart
6. Code Enforcement Penalties
7. 2006-2007 Case Studies
8. Incentives and Variations to Development Standards
9. O-4193 Tree Amendment
10. Tree Protection Detail
11. Draft Work Program
12. Memo from Kirkland Park Board, 2008
13. E-mail from Jill Keeney, Eastside Audubon, 2008





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## Chapter 95 – TREE MANAGEMENT AND REQUIRED LANDSCAPING

### Sections:

[95.05](#) Purpose and Intent

[95.10](#) Definitions

[95.15](#) Applicability – Permit Required

[95.20](#) Exemptions

1. Developed Property
2. Emergency Tree Removal
3. Utility Management 634
4. Commercial Nurseries or Tree Farms

[95.25](#) Alternative Compliance

[95.30](#) City Forestry Account

[95.35](#) Tree Retention, Protection and Density

1. Introduction
2. Tree Plan Required
  - b.1. Tree Plan I
  - b.2. Tree Plan II
  - b.3. Tree Plan III
  - b.4. Tree Plan IV
3. Tree Plan Review Procedure and Appeals
4. Tree Plan Review Standards
5. Tree Density Requirement
6. Tree Protection during Development Activity

[95.40](#) Required Landscaping

1. User Guide
2. Use of Significant Existing Vegetation
3. Landscape Plan Required
4. Minimum Land Use Buffer Requirements
5. Supplemental Plantings
6. Land Use Buffering Standards
7. Landscaping and Buffering Standards for Driving and Parking Areas
8. Nonconforming Landscaping and Buffers

[95.45](#) Installation Standards for Required Plantings

1. Street Trees
2. Compliance
3. Timing
4. Grading
5. Soil Specifications
6. Plant Selection
7. Fertilization
8. Irrigation
9. Drainage
10. Mulch
11. Protection
12. Mitigation and Restoration Plantings in Critical Areas and Critical Area Buffers

[95.50](#) Tree and Landscape Maintenance Requirements

1. Responsibility for Regular Maintenance
2. Maintenance Duration

## ATTACHMENT 1

3. Maintenance of Preserved Grove
4. Maintenance of Critical Area and Critical Area Buffers
5. Non-Native Invasive and Noxious Plants
6. Pesticides, Herbicides, and Fertilizer
7. Landscape Plans and Utility Plans
8. Tree Pruning

[95.52](#) Prohibited Vegetation 636.22

[95.55](#) Enforcement and Penalties

1. Intent
2. General Requirements
3. Authority
4. Cease and Desist
5. Stop Work Order
6. Civil Citation
7. Civil Penalty
8. Tree Restoration
9. Failure to Restore or Pay Fines
10. Appeal to Hearing Examiner
11. Hearing Examiner Decision

### 95.05 Purpose and Intent

1. Trees and other vegetation are important elements of the physical environment. They are integral to Kirkland's community character and protect public health, safety and general welfare. Protecting, enhancing, and maintaining healthy trees and vegetation are key community values. A goal is to achieve an overall tree canopy coverage of 40 percent for the community. The many benefits of healthy trees and vegetation contribute to Kirkland's quality of life by:
  - a. Minimizing the adverse impacts of land disturbing activities and impervious surfaces such as runoff, soil erosion, land instability, sedimentation and pollution of waterways, thus, reducing the public and private costs for storm water control/treatment and utility maintenance;
  - b. Improving the air quality by absorbing air pollutants, assimilating carbon dioxide and generating oxygen;
  - c. Reducing the effects of excessive noise pollution;
  - d. Providing cost-effective protection from severe weather conditions with cooling effects in the summer months and insulating effects in winter;
  - e. Providing visual relief and screening buffers;
  - f. Providing recreational benefits;
  - g. Providing habitat, cover, food supply and corridors for a diversity of fish and wildlife; and
  - h. Providing economic benefit by enhancing local property values and contributing to the region's natural beauty, aesthetic character, and livability of the community.
2. Tree and vegetation removal in urban areas has resulted in the loss to the public of these beneficial functions. The purpose of this chapter is to establish a process and standards to provide for the protection, preservation, replacement, proper maintenance, and use of significant trees, associated vegetation, and woodlands located in the City of Kirkland.

## ATTACHMENT 1

The intent of this chapter is to:

- a. Maintain and enhance canopy coverage provided by trees for their functions as identified in KZC [95.05\(1\)](#);
- b. Preserve and enhance the City of Kirkland's environmental, economic, and community character with mature landscapes;
- c. Promote site planning, building, and development practices that work to avoid removal or destruction of trees and vegetation, that avoid unnecessary disturbance to the City's natural vegetation, and that provide landscaping to buffer the effects of built and paved areas;
- d. Mitigate the consequences of required tree removal in land development through on- and off-site tree replacement with the goals of halting net loss and enhancing Kirkland's tree canopy to achieve an overall healthy tree canopy cover of 40 percent City-wide over time;
- e. Encourage tree retention efforts by providing flexibility with respect to certain other development requirements;
- f. Implement the goals and objectives of the City's Comprehensive Plan;
- g. Implement the goals and objectives of the State Environmental Policy Act (SEPA);  
and
- h. Manage trees and other vegetation in a manner consistent with the City's Natural Resource Management Plan.

## 95.10 Definitions

The following definitions shall apply throughout this chapter unless the context clearly indicates otherwise. Definitions that apply throughout this code are also located in Chapter [5](#) KZC.

**Caliper** – The American Association of Nurserymen standard for trunk measurement of nursery stock. Caliper of the trunk shall be the trunk diameter measured six inches above the ground for up to and including four-inch caliper size and 12 inches above the ground for larger sizes.

**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 professional.

**Crown** – The area of a tree containing leaf- or needle-bearing branches.

**Diameter at Breast Height (DBH)** – The diameter or thickness of a tree trunk measured at 4.5 feet from the ground.

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

**Impact** – A condition or activity that affects a part of a tree including the trunk, branches, and critical root zone.

**Grove** – A group of three or more significant trees with overlapping or touching crowns.

**Landmark Tree** – A tree or group of trees designated as such because of its exceptional value to the residents of the City.

**Limit of Disturbance** – The boundary between the area of minimum protection around a

## ATTACHMENT 1

tree and the allowable site disturbance as determined by a qualified professional.

Qualified Professional – An individual with relevant education and training in arboriculture or urban forestry. The individual must be an arborist certified by the International Society of Arboriculture or

a registered consulting arborist from the American Society of Consulting Arborists and for Forest Management Plans may be a certified forester by the Society of American Foresters. A qualified professional must possess the ability to perform tree risk assessments and prescribe appropriate measures necessary for the preservation of trees during land development. For Forest Management Plans, the qualified professional must have the ability to assess wooded sites and prescribe measures for forest health and safety.

Significant Tree – A tree that is at least six inches in diameter at breast height (DBH).

Significantly Wooded Site – A subject property that has a number of significant trees with crowns that cover at least 40 percent of the property.

Site Disturbance – Any development, construction, or related operation that could alter the subject property, including, but not limited to, tree or tree stump removal, road, driveway or building construction, installation of utilities, or grading.

Site Perimeter – The area of the subject property that is 10 feet from the property line.

Specimen Tree – A viable tree that is considered in very good to excellent health and free of major defects, as determined by the City's Urban Forester.

Target – Person or property that can be damaged by failure of a tree.

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

Viable Tree – A significant tree that a qualified professional has determined to be in good health, with a low risk of failure due to structural defects, is relatively windfirm if isolated or remains as part of a grove, and is a species that is suitable for its location.

Wildlife Snag – The remaining trunk of a dying, diseased, or dangerous tree that is reduced in height and stripped of all live branches.

Windfirm – A condition of a tree in which it can withstand moderate storm winds.

### 95.15 Applicability – Permit Required

No person, directly or indirectly, shall remove any significant tree on any property within the City, except City right-of-way, without first obtaining a tree removal permit as provided in this chapter, unless the activity is exempted in KZC [95.20](#). Trees in City right-of-way are regulated pursuant to Chapter 19.36 KMC.

### 95.20 Exemptions

The following activities are exempt from the provisions of this chapter:

1. Developed Property.
  - a. Any owner of developed property may remove up to two significant trees from their property within a 12-month period; provided, that there is no current application for development activity for the site; and provided further, that the tree(s) are not:
    - 1) In easements dedicated to ensure the protection of vegetation; or in critical areas, or critical area buffers;
    - 2) Required to be retained in a special regulation contained in Chapters [15](#)

## ATTACHMENT 1

through 60 KZC;

- 3) Designated on an approved tree plan to be retained pursuant to KZC [95.35](#) and [95.50](#); or
  - 4) The last two significant trees on their property. Trees that fit the criteria in KZC [95.35](#)(4)(b) and (4)(c) for nuisance or hazard trees do not count toward the removal allowance.
- b. The Department of Planning and Community Development shall establish and maintain a tree removal request form to allow property owners to request Department review of potentially exempt tree removal for compliance with applicable City regulations.
  - c. For every significant tree that is removed, the City encourages the planting of a tree that is appropriate to the site.
2. **Emergency Tree Removal.** Any tree on private property that poses an imminent threat to life or property may be removed without first obtaining a permit. The party removing the tree will contact the City within seven days of removal to provide evidence of threat for approval of exemption. If the Planning Official determines that the emergency tree removal was not warranted, he or she may require that the party obtain a permit and/or require that replacement trees and vegetation be replanted as mitigation.
  3. **Utility Management.** Trees may be removed by the City or utility provider in situations involving immediate danger to life or property, or interruption of services provided by a utility.
  4. **Commercial Nurseries or Tree Farms.** A nursery or tree farm owner may remove trees that are being grown to be sold as Christmas or landscape trees.

### 95.25 Alternative Compliance

All activities regulated by this chapter shall be performed in compliance with the applicable standards contained in this chapter, unless the applicant demonstrates that alternate measures or procedures will be equal or superior to the provisions of this chapter in accomplishing the purpose and intent of this chapter as described in KZC [95.05](#). Requests to use alternative measures and procedures shall be reviewed by the Planning Official, who may approve, approve with conditions, or deny the request. Examples include but are not limited to retention of specimen or landmark trees or low impact development techniques, including such programs as Green Building Design or Leadership in Energy and Environmental Design that demonstrate a significant reduction to stormwater runoff from the site.

### 95.30 City Forestry Account

1. **Funding Sources.** All civil penalties received under this chapter and all money received pursuant to KZC [95.35](#) shall be used for the purposes set forth in this section. In addition, the following sources may be used for the purposes set forth in this section:
  - a. Agreed upon restoration payments imposed under KZC [95.55](#) or settlements in lieu of penalties;
  - b. Sale of trees or wood from City property where the proceeds from such sale have not been dedicated to another purpose;
  - c. Donations and grants for tree purposes;

## ATTACHMENT 1

- d. Sale of seedlings by the City; and
  - e. Other monies allocated by the City Council.
2. Funding Purposes. The City shall use money received pursuant to this section for the following purposes:
- a. Acquiring, maintaining, and preserving wooded areas within the City;
  - b. Planting and maintaining trees within the City;
  - c. Identification and maintenance of landmark trees;
  - d. Establishment of a holding public tree nursery;
  - e. Urban forestry education; or
  - f. Other purposes relating to trees as determined by the City Council.

### 95.35 Tree Retention, Protection and Density

1. Introduction. The intent of this section is to successfully retain desirable trees on developing and re-developing sites and to maintain and enhance the tree canopy of Kirkland. To that end, the City requires a tree permit in conjunction with all development permits resulting in site disturbance and with any proposed tree removal on developed sites not exempted by KZC [95.20](#).

In order to make better decisions about tree retention, particularly during all stages of development, tree removal permits will require specific information about the existing trees before removal is allowed. Different levels of detail correspond to the scale of the project or activity. Specific tree plan review standards are provided in KZC [95.35\(4\)](#) and include tree retention priority and incentives and variations to development standards in order to facilitate preservation of healthy, significant trees.

The City's objective is to retain as many viable trees as possible on a developing site while still allowing the development proposal to move forward in a timely manner. This section includes provisions that allow development standards to be modified in order to retain viable significant trees.

The requirement to meet a minimum tree density applies to new single-family and duplex developments and major redevelopments, and new residential subdivisions and short subdivisions. If such a site falls below the minimum density with existing trees, supplemental planting is required. A tree density for existing trees to be retained is calculated to see if new trees are required in order to meet the minimum density for the site. Supplemental tree location priority is set as well as minimum size of supplemental trees to meet the density.

The importance of effective protection of retained trees during construction is emphasized with specific protection standards in the last part of this section. These standards must be adhered to and included on demolition, grading and building plans as necessary.

2. Tree Plan Required.
- a. Requirement Established. An applicant for a tree removal permit must submit a tree plan that complies with this section. A qualified professional may be required to prepare certain components of a tree plan at the applicant's

## ATTACHMENT 1

expense. If proposed development activities call for more than one tree plan level, the tree plan level with the more stringent requirements shall apply; provided, that the Planning Official may require a combination of tree plan components based on the nature of the proposed development activities. If proposed activity is not clearly identified in this chapter, the Planning Official shall determine the appropriate tree plan.

b. Tree Plan and Retention Requirements. The following sets forth the different tree plans required for development activities or removal requests requiring a tree removal permit. Applicants for development are encouraged to confer with City staff as early in the design process as possible so that the applicable tree planting and retention concepts can be incorporated into the design of the subject property. Each plan sets forth the required components and retention standards for each tree plan. The Planning Official may waive a component for a tree plan, if he or she determines that the information is not necessary.

1) Tree Plan I. Tree Plan I is required for a development permit or land surface modification resulting in site disturbance for one or two attached, detached, or stacked dwelling units.

a) Tree Plan I – Major and Minor.

i. Tree Plan I – Major shall be required for new development, redevelopment, or development in which the total square footage of the proposed improvements is more than 50 percent of the total square footage of the existing improvements on the subject property.

ii. Tree Plan I – Minor shall be required for all proposed development activities and site disturbance for which Tree Plan I – Major does not apply.

b) Tree Plan Requirements. The tree plan shall include the following:

i. Accurate location of significant trees and their driplines measured relative to visible site features (surveyed locations may be required);

ii. Size (DBH) and type or species of these trees; and

iii. General health of these trees.

iv. Approximate trunk location and measure dripline of significant trees that are on adjacent property with driplines extending over the subject property line.

v. For Tree Plan I – Minor, the above tree information shall be required only for trees potentially impacted by proposed development activity, and surveyed tree locations shall not be required.

vi. For Tree Plan I – Major, assessment by a qualified professional shall be required if any significant trees are in required yards or within 10 feet of any side property line on the subject property.

c) Additional Applicant Requirements.

i. If existing trees impacted by site disturbance are being retained, tree protection shall be shown on the grading or demolition plan and may require assistance of a qualified professional.

## ATTACHMENT 1

- ii. The applicant shall provide a final plan showing retained trees and any required trees in order to meet tree density or minimum number of trees as outlined in subsections (2)(b)(1)(d) and (2)(b)(1)(e) of this section.
  - iii. The applicant shall enter into all required tree preservation and maintenance agreements pursuant to KZC [95.50](#).
  - iv. For lots from a short subdivision, subdivision or planned unit development with an approved Tree Plan III, the tree information shall be transferred over and the applicant must comply with the applicable Tree Plan III requirements.
- d) Site Design and Retention Requirements.
- i. For Tree Plan I – Major, the applicant shall retain and protect Type 1 trees, as defined in subsection (4)(a)(1) of this section, in all required yards to the maximum extent possible. To retain Type 1 trees in required yards, the applicant shall pursue, where feasible, applicable variations in the development standards of this code as outlined in subsections (4)(a)(2) and (4)(a)(3) of this section. The applicant shall be encouraged to retain viable trees in other areas on-site.
  - ii. For Tree Plan I – Minor, the applicant is encouraged to retain viable trees and pursue applicable variations to development.
- e) Tree Density Requirements.
- i. For Tree Plan I – Major, the minimum tree density applies and shall comply with the process set forth in subsection (5) of this section.
  - ii. For Tree Plan I – Minor, a minimum of two trees must be on the lot following the requirement set forth in subsection (2)(b)(4)(b)(iv) of this section.
- 2) Tree Plan II. A Tree Plan II is required for a development permit or land surface modification resulting in site disturbance and impact to a significant tree in required yards and areas for required landscaping for three or more detached, attached, or stacked dwelling units; or any use other than residential.
- a) Tree Plan Requirements. The tree plan shall include the following:
- i. A site map depicting accurate location of significant trees and their driplines measured relative to visible site features (a survey may be required) and approximate location of significant trees on adjacent property with driplines extending over the subject property; and
  - ii. A report by a qualified professional stating the size (DBH), species, and assessment of health and determination of viable trees in the areas of required landscaping;
  - iii. The above tree information shall be required only for trees potentially impacted by proposed development activity as determined by the Planning Official.

## ATTACHMENT 1

- b) Additional Applicant Requirements.
- i. Demolition and grading plans shall depict tree protection measures, as recommended by a qualified professional, if existing trees are to be retained and their dripline is within the area of disturbance.
  - ii. Landscape plans shall show all retained trees.
  - iii. The applicant shall enter into all required tree preservation and maintenance agreements pursuant to KZC [95.50](#).
- c) Site Design and Retention Requirements. The applicant shall pursue applicable variations to development, as outlined in subsections (4)(a)(2) and (4)(a)(3) of this section, for the retention of Type 1 trees, as defined in subsection (4)(a)(1) of this section, where feasible in the required yards and landscaping areas. If removal of a Type 1 tree in required landscaping areas is proposed, the applicant shall provide reasons for the proposed removal that may require assistance from a qualified professional.
- d) Tree Plan II sites shall not have a minimum tree density requirement but shall comply with the required landscaping pursuant to KZC [95.40](#). Preserved trees in required landscaping areas shall apply toward required landscaping requirements.
- 3) Tree Plan III. A Tree Plan III is required for new residential short plats or subdivisions and related land surface modification applications.
- a) Tree Plan Requirements. The tree plan shall include the following:
- i. Surveyed location of all significant trees.
  - ii. A tree inventory prepared by a qualified professional including a numbering system of existing significant trees (with corresponding tags on trees), measured driplines, size (DBH), species and tree status (removed or retained) based on criteria in subsection (2)(c) of this section for all significant trees. The inventory shall include approximate trunk location and measured dripline of significant trees that are on adjacent property with driplines extending over the subject property line.
  - iii. A report from a qualified professional detailing:
    - (A) 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;
    - (C) Special instruction for work within their critical root zone; and
    - (D) Location and type of protection measures for these trees.
  - iv. A site plan utilizing the information from the tree survey, inventory and report, showing:
    - (A) The proposed development activity;

## ATTACHMENT 1

- (B) Location and limits of disturbance of viable trees to be retained according to the tree inventory and report; and
  - (C) Trees being removed for proposed development or trees being removed that are not viable.
- b) Additional Applicant Requirements.
- i. A description and location of tree protection measures during construction for trees to be retained must be shown on demolition and grading plans. Protection measures must be in accordance with subsection (6) of this section.
  - ii. Prior to permit approval, the applicant shall provide a plan showing tree density calculations pursuant to subsection (5) of this section, retained trees, trees to be removed, and any required supplemental trees to meet the minimum density. The plan must describe the details of site preparation, the installation of new trees and the maintenance measures necessary for the long-term survival and health of all trees on-site pursuant to KZC [95.45](#) and [95.50](#).
  - iii. The applicant shall submit a preservation and maintenance agreement pursuant to KZC [95.50](#), for approval prior to final plat.
- c) Site Design and Retention Requirements. The Planning Official will determine tree types as outlined in subsection (4)(a)(1) of this section, and the applicant shall pursue applicable variations to development, as outlined in subsections (4)(a)(2) and (4)(a)(3) of this section for the retention of Type 1 trees throughout the life of the project.
- d) Tree Density Requirements. The minimum tree density shall apply to the site and shall comply with the process set forth in subsection (5) of this section.
- 4) Tree Plan IV. Tree Plan IV is for tree removal on a property on which no development activity is proposed or in progress. Activity requiring a Tree Plan IV includes but is not limited to: hazard or nuisance tree removal not exempt under KZC [95.20\(1\)](#); tree removal in areas dedicated to ensure protection of vegetation, critical areas and their buffers; removal of one or both of the last two significant trees on a developed site; and requests to remove hazard or nuisance trees on undeveloped property. The plan can be developed by the applicant but may require assistance of a qualified professional.
- a) Tree Plan Requirements. The tree plan shall include the following:
- i. A site plan showing the approximate location of significant trees, their size (DBH) and their species, along with the location of structures, driveways, access ways and easements.
  - ii. For required replacement trees, a planting plan showing location, size and species of the new trees in accordance to standards set forth in subsection (5)(c) of this section.
- b) Additional Applicant Requirements.
- i. An arborist report explaining how the tree(s) fit the criteria in

## ATTACHMENT 1

- subsection (4)(b) or (4)(c) of this section if removal is based on nuisance or hazard and the nuisance or hazard condition is not obvious.
- ii. For nuisance or hazard trees in critical areas or their buffers, the planting plan must propose action to mitigate the hazard or nuisance in accordance to standards set forth in subsection (4) of this section.
  - iii. Tree removal on undeveloped property shall be approved only for hazard or nuisance trees pursuant to the criteria in subsections (4) (c) and (4)(d) of this section. The tree removal exemptions in KZC [95.20](#) are not applicable to undeveloped property.
  - iv. If the removal request is for one or both of the last two trees, even if nuisance or hazard, a one-for-one replacement is required as set forth in subsection (5)(c)(2) of this section.
- 5) Tree Plan V. Tree Plan V is a Forest Management Plan for developed, significantly wooded sites of at least 35,000 square feet in size in which tree removal is requested that is not exempt under Section [95.20](#) of this Chapter. A Forest Management Plan must be developed by a qualified professional. The Tree Plan shall include the following:
- a) A plan depicting the location of all significant trees (a tree survey is not required) with a numbering system of the trees (with corresponding tags on trees in the field). The plan shall include size (DBH), species, and condition of each tree;
  - b) Identification of trees to be removed, including reasons for their removal and a description of low impact removal techniques pursuant to subsection (4)(e) of this section;
  - c) A reforestation plan that includes location, size, species, and timing of installation;
  - d) A narrative report of prescribed, long-term maintenance activity for the site as outlined in subsection (4)(e)(8) of this section.
- c. Qualified Professional Reports. Reports prepared by a qualified professional shall contain the following, unless waived by the Planning Official:
- 1) A complete description of each tree's health and viability. If a tree is not viable for retention, the reason(s) must be soundly based on health, high risk of failure due to structure, defects, unavoidable isolation (windfirmness), or suitability of species and for which no reasonable alternative action is possible (pruning, cabling, etc.). The impact of necessary tree removal to remaining trees, including those in a grove or on adjacent properties, must also be discussed.
  - 2) The location of limits of disturbance around all trees potentially impacted by site disturbances and any special instructions for work within that protection area (hand-digging, tunneling, root pruning, maximum grade change).
  - 3) For development applications, a discussion of timing and installation of tree protection measures that must include fencing and be in accordance with the tree protection standards as outlined in subsection (6) of this section.

## ATTACHMENT 1

- 4) The suggested location and species of supplemental trees to be used when required. The report shall include planting and maintenance specifications pursuant to KZC [95.45](#) and [95.50](#).
3. Tree Plan Review Procedure and Appeals.
    - a. When an applicant proposes a development activity or project that requires a Tree Plan Level I, II or III, the tree plan shall be reviewed as part of the applicable permit application or process.
    - b. Applicants for a Level IV or V tree plan must submit a completed permit application on a form provided by the City. Within 21 calendar days, the Planning Official shall review the application and either approve, approve with conditions or modifications, deny the application or request additional information. Any decision to deny the application shall be in writing along with the reasons for the denial and the appeal process.
    - c. With respect to Level IV and Level V Tree Plans, an applicant may appeal an adverse determination to the Hearing Examiner. A written notice of appeal shall be filed with the Planning Department within 14 calendar days following the postmark date of distribution of a Planning Official's decision. The office of the Hearing Examiner shall give notice of the hearing to the applicant at least 17 calendar days prior to the hearing. The applicant shall have the burden of proving that the Planning Official made an incorrect decision. Based on the Hearing Examiner's findings and conclusions, he or she may affirm, reverse or modify the decision being appealed.
  4. Tree Plan Review Standards.
    - a. Site Design for Development. Tree retention shall be pursuant to this chapter; provided, that such tree retention will not reduce the applicant's development potential (lot coverage, floor area ratio, and density) allowed by the Kirkland Zoning Code. Tree plans shall comply with all tree retention requirements in the KZC, including but not limited to those in Chapter [85](#) KZC, Geologically Hazardous Areas, and Chapter [90](#) KZC, Drainage Basins.
      - 1) Tree Retention Standards.
        - a) Based on the tree plan information submitted by the applicant and the Planning Official's evaluation of the trees and proposed development on subject property, the Planning Official will designate each tree as:
          - i. Type 1, a viable tree that meets at least one of the criteria set forth in subsection (4)(a)(1)(b) of this section;
          - ii. Type 2, a viable tree that is to be retained if feasible; or
          - iii. Type 3, a tree that is either (1) not viable or (2) is in an area where removal is unavoidable due to the anticipated development activity.
        - b) Tree retention efforts shall be directed to the following trees if they are determined to be healthy and windfirm by a qualified professional, and provided the trees can be safely retained when pursuing alternatives to development standards in subsections (4)(a)(2) and (4)(a)(3) of this section:
          - i. Landmark trees;

## ATTACHMENT 1

- ii. Specimen trees;
  - iii. Tree groves and associated vegetation that are to be set aside as preserved groves pursuant to KZC [95.50](#)(3);
  - iv. Trees on slopes of at least 10 percent; or
  - v. Trees that are a part of a grove that extends into adjacent property, such as in a public park, open space, sensitive area buffer or otherwise preserved group of trees on adjacent private property. If significant trees must be removed in these situations, an adequate buffer of trees may be required to be retained or planted on the edge of the remaining grove to help stabilize.
- 2) Incentives and Variations to Development Standards. In order to retain trees, the applicant should pursue provisions in Kirkland's codes that allow development standards to be modified. Examples include but are not limited to number of parking stalls, right-of-way improvements, lot size reduction under Chapter 22.28 KMC, lot line placement when subdividing property under KMC Title 22, Planned Unit Developments, and required landscaping, including buffers for lands use and parking/driving areas.
- Requirements of the Kirkland Zoning Code may be modified by the Planning Official as outlined below when such modifications would further the purpose and intent of this chapter as set forth in KZC [95.05](#) and would involve Type 1 trees.
- a) Common Recreational Open Space. Reductions or variations of the area, width, or composition of required common recreational open space, may be granted.
  - b) Parking Areas and Access. Variations in parking lot design and/or access driveway requirements may be granted when the Public Works and Planning Officials both determine the variations to be consistent with the intent of City policies and codes.
  - c) Required Yards. Initially, the applicant shall pursue options for placement of required yards as permitted by other sections of this code, such as selecting one front required yard in the RSX zone and adjusting side yards in any zone to meet the 15-foot total as needed for each structure on the site. The Planning Official may also reduce the front or side required yards provided that:
    - i. No required side yard shall be less than five feet; and
    - ii. The required front yard shall not be reduced by more than five feet in residential zones. There shall not be an additional five feet of reduction beyond the allowance provided for covered entry porches.
  - d) Stormwater. Requirements pertaining to stormwater may be varied if approved by the Public Works Official under KMC 15.52.060.
- 3) Additional Variations. In addition to the variations described above, the Planning Official is authorized to require site plan alterations to retain Type 1 trees. Such alterations include minor adjustments to the location of building footprints, adjustments to the location of driveways and access ways, or adjustment to the location of walkways, easements or utilities. The Planning

## ATTACHMENT 1

Official and the applicant shall work in good faith to find reasonable solutions.

b. Nuisance Tree Criteria. A nuisance tree must meet the following criteria:

- 1) Tree is causing obvious, physical damage to private or public structures, including but not limited to: sidewalk, curb, road, driveway, parking lot, building foundation, roof;
- 2) Tree has been damaged by past maintenance practices, that cannot be corrected with proper arboricultural practices; or
- 3) The problems associated with the tree must be such that they cannot be corrected by any other reasonable practice. Including but not limited to the following:
  - a) Pruning of the crown or roots of the tree and/or small modifications to the site including but not limited to a driveway, parking lot, patio or sidewalk to alleviate the problem.
  - b) Pruning, bracing, or cabling to reconstruct a healthy crown.

c. Hazard Tree Criteria. A hazard tree must meet the following criteria:

- 1) The tree must have a combination of structural defects and/or disease which makes it subject to a high probability of failure and is in proximity to moderate-high frequency of persons or property; and
- 2) The hazard condition of the tree cannot be lessened with reasonable and proper arboricultural practices nor can the target be removed.

d. Trees in Critical Areas or Critical Area Buffers. The intent of preserving vegetation in and near streams and wetlands and in geologically hazardous areas is to support the functions of healthy sensitive areas and sensitive area buffers (see Chapter 90 KZC) and/or avoid disturbance of geologically hazardous areas (see Chapter 85 KZC). The property owner must submit a Level IV Tree Plan to City Planning and Community Development Department to trim or remove any tree from a critical area or critical area buffer. If a tree is considered a nuisance or hazard in a critical area or its buffer, the priority action is to create a “snag” or wildlife tree with the subject tree. If creation of a snag is not feasible, then the felled tree shall be left in place unless the Planning Official permits its removal in writing. The removal of any tree will require the planting of a native tree of a minimum of six feet in height in close proximity to where the removed tree was located. Selection of native species and timing of installation shall be coordinated with the Planning Official.

e. Forest Management Plan. For properties proposing tree removal requiring a forest management plan, the following standards shall apply:

- 1) Trees to remain should be dominant or co-dominant in the stand, healthy and wind-firm.
- 2) No removal of trees from critical areas and their buffers, unless otherwise permitted by this chapter.
- 3) No removal of landmark or specimen trees, unless otherwise permitted by this chapter.

## ATTACHMENT 1

- 4) No removal of healthy trees that would cause trees on adjacent properties to become hazardous.
  - 5) The reforestation plan ensures perpetuity of the wooded areas. The size of planted trees for reforestation shall be a minimum of three feet tall.
  - 6) Logging operations shall be conducted so as to expose the smallest practical area of soil to erosion for the least possible time. To control erosion, native shrubs, ground cover and stumps shall be retained where feasible. Where not feasible, appropriate erosion control measures to be approved by the City shall be implemented.
  - 7) Removal of tree debris shall be done pursuant to Kirkland Fire Department standards.
  - 8) Recommended maintenance prescription for retained trees with a specific timeline for such management.
5. Tree Density Requirement.

- a. Minimum Tree Density Requirement Established. The required minimum tree density is 30 tree credits per acre for development requiring a Tree Plan I – Major and Tree Plan III. For individual lots in a short subdivision or subdivision with an approved Tree Plan III, the tree density shall be calculated based on the entire short plat or subdivision. The tree density may consist of existing trees pursuant to the priority established in subsection (4)(a)(1) of this section, or supplemental trees or a combination of existing and supplemental trees pursuant to subsection (5)(c) of this section. Existing trees transplanted to an area on the same site shall not count toward the required density unless approved by the Urban Forester based on transplant specifications provided by a qualified professional that will ensure a good probability for survival.
- b. Tree Density Calculation. For the purpose 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 area used for calculation of tree density.

Tree density calculation for existing individual trees:

- 1) Diameter breast height (DBH) of the tree shall be measured in inches.
- 2) The tree credit value that corresponds with DBH shall be found in Table 95.35.1.

**Table 95.35.1**

**Tree Density for Existing Significant Trees**

**(Credits per minimum diameter – DBH)**

DBH	Tree Credits	DBH	Tree Credits	DBH	Tree Credits
3 – 5"	0.5				
6 – 10"	1	24"	8	38"	15
12"	2	26"	9	40"	16
14"	3	28"	10	42"	17

## ATTACHMENT 1

16"	4	30"	11	44"	18
18"	5	32"	12	46"	19
20"	6	34"	13	48"	20
22"	7	36"	14	50"	21

Example: a 7,200-square-foot lot would need five tree credits ( $7,200/43,560 = 0.165 \times 30 = (4.9)$  or five). The density for the lot could be met with a 16-inch tree and one six-inch tree existing on-site.

- c. Supplemental Trees Planted to Meet Minimum Density Requirement. For sites and activities requiring a minimum tree density and where the existing trees to be retained do not meet the minimum tree density requirement, supplemental trees shall be planted to achieve the required minimum tree density.
- 1) Tree Location. In designing a development and in meeting the required minimum tree density the trees shall be planted in the following order of priority:
- a) On-Site. The preferred locations for new trees are:
    - i. In preserved groves, critical areas or their buffers.
    - ii. Adjacent to stormwater facilities as approved by Public Works under KMC 15.52.060.
    - iii. Entrance landscaping, traffic islands and other common areas in residential subdivisions.
    - iv. Site perimeter.
    - v. On individual residential building lots.
  - b) Off-Site. When room is unavailable for planting the required trees on-site, then they may be planted at another approved location in the City.
  - c) City Forestry Account. When the Planning Official determines on-site and off-site locations are unavailable, then the applicant shall pay an amount of money approximating the current market value of the supplemental trees into the City forestry account.
- 2) Minimum Size and Tree Density Value for Supplemental Trees. The required minimum size of the supplemental tree worth one tree credit shall be six feet tall for a conifer and two-inch caliper for deciduous or broad-leaf evergreen tree. Additional credits may be awarded for larger supplemental trees. The installation and maintenance shall be pursuant to KZC [95.45](#) and [95.50](#) respectively.
6. Tree Protection during Development Activity. Prior to development activity or initiating tree removal on the site, vegetated areas and individual trees to be preserved shall be protected from potentially damaging activities pursuant to the following standards:
- a. Placing Materials near Trees. No person may conduct any activity within the protected area of any tree designated to remain, including, but not limited to, operating or parking equipment, placing solvents, storing building material or soil deposits, or dumping concrete washout or other chemicals. During construction, no person shall attach any object to any tree designated for protection.

## ATTACHMENT 1

b. Protective Barrier. Before development, land clearing, filling or any land alteration, the applicant shall:

- 1) Erect and maintain a readily visible temporary protective tree fencing along the limits of disturbance which completely surrounds the protected area of all retained trees or groups of trees. Fences shall be constructed of chain link and be at least four feet high, unless other type of fencing is authorized by the Planning Official.
- 2) Install highly visible signs spaced no further than 15 feet along the entirety of the protective tree fence. Said sign must be approved by the Planning Official and shall state at a minimum "Tree Protection Area, Entrance Prohibited" and provide the City phone number for code enforcement to report violations.
- 3) Prohibit excavation or compaction of earth or other potentially damaging activities within the barriers; provided, that the Planning Official may allow such activities approved by a qualified professional and under the supervision of a qualified professional retained and paid for by the applicant.
- 4) Maintain the protective barriers in place until the Planning Official authorizes their removal.
- 5) Ensure that any approved landscaping done in the protected zone subsequent to the removal of the barriers shall be accomplished with light machinery or hand labor.
- 6) In addition to the above, the Planning Official may require the following:
  - a) If equipment is authorized to operate within the critical root zone, cover the areas adjoining the critical root zone of a tree with mulch to a depth of at least six inches or with plywood or similar material in order to protect roots from damage caused by heavy equipment.
  - b) Minimize root damage by excavating a two-foot-deep trench, at edge of critical root zone, to cleanly sever the roots of trees to be retained.
  - c) Corrective pruning performed on protected trees in order to avoid damage from machinery or building activity.
  - d) Maintenance of trees throughout construction period by watering and fertilizing.

c. Grade.

- 1) The grade shall not be elevated or reduced within the critical root zone of trees to be preserved without the Planning Official's authorization based on recommendations from a qualified professional. The Planning Official may allow coverage of up to one half of the area of the tree's critical root zone with light soils (no clay) to the minimum depth necessary to carry out grading or landscaping plans, if it will not imperil the survival of the tree. Aeration devices may be required to ensure the tree's survival.
- 2) If the grade adjacent to a preserved tree is raised such that it could slough or erode into the tree's critical root zone, it shall be permanently stabilized to

## ATTACHMENT 1

prevent suffocation of the roots.

3) The applicant shall not install an impervious surface within the critical root zone of any tree to be retained without the authorization of the Planning Official. The Planning Official may require specific construction methods and/or use of aeration devices to ensure the tree's survival and to minimize the potential for root-induced damage to the impervious surface.

4) To the greatest extent practical, utility trenches shall be located outside of the critical root zone of trees to be retained. The Planning Official may require that utilities be tunneled under the roots of trees to be retained if the Planning Official determines that trenching would significantly reduce the chances of the tree's survival.

5) Trees and other vegetation to be retained shall be protected from erosion and sedimentation. Clearing operations shall be conducted so as to expose the smallest practical area of soil to erosion for the least possible time. To control erosion, it is encouraged that shrubs, ground cover and stumps be maintained on the individual lots, where feasible.

d. Directional Felling. Directional felling of trees shall be used to avoid damage to trees designated for retention.

e. Additional Requirements. The Planning Official may require additional tree protection measures that are consistent with accepted urban forestry industry practices.

## 95.40 Required Landscaping

1. User Guide. Chapters [15](#) through 60 KZC containing the use zone charts assign a landscaping category to each use in each zone. This category is either "A," "B," "C," "D," or "E." If you do not know which landscaping category applies to the subject property, you should consult the appropriate use zone chart.

Requirements pertaining to each landscaping category are located throughout this chapter, except that Landscaping Category E is not subject to this section.

Landscape Categories A, B, C, D, and E may be subject to additional related requirements in the following other chapters:

- a. Various use zone charts, in Chapters [15](#) through 60 KZC, establish additional or special buffering requirements for some uses in some zones.
- b. Chapter [85](#) KZC, Geologically Hazardous Areas, addresses the retention of vegetation on steep slopes.
- c. Chapter [90](#) KZC, Drainage Basins, addresses vegetation within sensitive areas and sensitive area buffers.
- d. Chapter [110](#) KZC and Chapter 19.36 KMC address vegetation within rights-of-way, except for the I-405, SR-520, and Burlington Northern rights-of-way.
- e. KZC [115.135](#), Sight Distance at Intersections, which may limit the placement of landscaping in some areas.
- f. Chapter 22 KMC addresses trees in subdivisions.

## ATTACHMENT 1

## 2. Use of Significant Existing Vegetation.

- a. General. The applicant shall apply subsection KZC [95.35\(4\)](#) to retain existing trees and vegetation in areas subject to the landscaping standards of this section. The Planning Official shall give substantial weight to the retained trees and vegetation when determining the applicant's compliance with this section.
- b. Supplement. The City may require the applicant to plant trees, shrubs, and groundcover according to the requirements of this section to supplement the existing vegetation in order to provide a buffer at least as effective as the required buffer.
- c. Protection Techniques. The applicant shall use the protection techniques described in KZC [95.35\(6\)](#) to ensure the protection of significant existing vegetation.

3. Landscape Plan Required. In addition to the tree plan required pursuant to KZC [95.35\(2\)](#), application materials shall clearly depict the quantity, location, species, and size of plant materials proposed to comply with the requirements of this section, and shall address the plant installation and maintenance requirements set forth in KZC [95.45](#) and [95.50](#). Plant materials shall be identified with both their scientific and common names. Any required irrigation system must also be shown.

4. Minimum Land Use Buffer Requirements. The applicant shall comply with the provisions specified in the following chart and with all other applicable provisions of this chapter. Land use buffer requirements may apply to the subject property, depending on what permitted use exists on the adjoining property or, if no permitted use exists, depending on the zone that the adjoining property is in.

LANDSCAPING CATEGORY ↓	ADJOINING PROPERTY	*Public park or low density residential use or if no permitted use exists on the adjoining property then a low density zone.	Medium or high density residential use or if no permitted use exists on the adjoining property then a medium density or high density zone.	Institutional or office use or if no permitted use exists on the adjoining property then an institutional or office zone.	A commercial use or an industrial use or if no permitted use exists on the adjoining property then a commercial or industrial zone.
	↓				
A		Must comply with KZC <a href="#">95.40</a> (6)(a) (Buffering Standard 1)	Must comply with KZC <a href="#">95.40</a> (6)(a) (Buffering Standard 1)	Must comply with KZC <a href="#">95.40</a> (6)(b) (Buffering Standard 2)	
B		Must comply with KZC <a href="#">95.40</a> (6)(a) (Buffering Standard 1)	Must comply with KZC <a href="#">95.40</a> (5), (6)(a) (Buffering Standard 1)		
C		Must comply with KZC <a href="#">95.40</a> (6)(a) (Buffering Standard 1)	Must comply with KZC <a href="#">95.40</a> (6)(b) (Buffering Standard 2)		
		Must comply			

## ATTACHMENT 1

D	with KZC <a href="#">95.40</a> (6)(b) (Buffering Standard 2)		
E			
<b>Footnotes:</b>	*If the adjoining property is zoned Central Business District, Juanita Business District, North Rose Hill Business District, Rose Hill Business District, Totem Center or is located in TL 5, KZC <a href="#">95.40</a> (6) does not apply.		

## 5. Supplemental Plantings.

a. General. The applicant shall provide the supplemental landscaping specified in subsection (5)(b) of this section in any area of the subject property that:

- 1) Is not covered with a building, vehicle circulation area or other improvement; and
- 2) Is not a critical area, critical area buffer, or in an area to be planted with required landscaping; and
- 3) Is not committed to and being used for some specific purpose.

b. Standards. The applicant shall provide the following at a minimum:

- 1) Living plant material which will cover 80 percent of the area to be landscaped within two years. If the material to be used does not spread over time, the applicant shall re-plant the entire area involved immediately. Any area that will not be covered with living plant material must be covered with nonliving groundcover.
- 2) One tree for each 1,000 square feet of area to be landscaped. At the time of planting, deciduous trees must be at least two inches in caliper and coniferous trees must be at least five feet in height.
- 3) If a development requires approval through Process I, IIA, IIB or III as described in Chapters [145](#), [150](#), [152](#) and [155](#) KZC, respectively, the City may require additional vegetation to be planted along a building facade if:
  - a) The building facade is more than 25 feet high or more than 50 feet long; or
  - b) Additional landscaping is necessary to provide a visual break in the facade.
- 4) In RHBD varieties of rose shrubs or ground cover along with other plant materials shall be included in the on-site landscaping.
- 5) If development is subject to Design Review as described in Chapter [142](#), the City will review plant choice and specific plant location as part of the Design Review approval. The City may also require or permit modification to the required plant size as part of Design Review approval.

6. Land Use Buffering Standards. The chart in subsection (4) of this section establishes which buffering standard applies in a particular case. The following subsections establish the specific requirement for each standard:

## ATTACHMENT 1

- a. For standard 1, the applicant shall provide a 15-foot-wide landscaped strip with a six-foot-high solid screening fence or wall. Except for public utilities, the fence or wall must be placed on the outside edge of the land use buffer or on the property line when adjacent to private property. For public utilities, the fence or wall may be placed either on the outside or inside edge of the landscaping strip. A fence or wall is not required when the land use buffer is adjacent and parallel to a public right-of-way that is improved for vehicular use. See KZC [115.40](#) for additional fence standards. The land use buffer must be planted as follows:
- 1) Trees planted at the rate of one tree per 20 linear feet of land use buffer, with deciduous trees of two and one-half inch caliper, minimum, and/or coniferous trees eight feet in height, minimum. At least 70 percent of trees shall be evergreen. The trees shall be distributed evenly throughout the buffer, spaced no more than 20 feet apart on center.
  - 2) Large shrubs or a mix of shrubs planted to attain coverage of at least 60 percent of the land use buffer area within two years, planted at the following sizes and spacing, depending on type:
    - a) Low shrub – (mature size under three feet tall), one- or two-gallon pot or balled and burlapped equivalent);
    - b) Medium shrub – (mature size from three to six feet tall), two- or three-gallon pot or balled and burlapped equivalent);
    - c) Large shrub – (mature size over six feet tall), five-gallon pot or balled and burlapped equivalent).
  - 3) Living ground covers planted from either four-inch pot with 12-inch spacing or one-gallon pot with 18-inch spacing to cover within two years 60 percent of the land use buffer not needed for viability of the shrubs or trees.
- b. For standard 2, the applicant shall provide a five-foot-wide landscaped strip with a six-foot-high solid screening fence or wall. Except for public utilities, the fence or wall must be placed on the outside edge of the land use buffer or on the property line when adjacent to private property. For public utilities, the fence or wall may be placed either on the outside or inside edge of the landscaping strip. A fence or wall is not required when the land use buffer is adjacent and parallel to a public right-of-way that is improved for vehicular use. See KZC [115.40](#) for additional fence standards. The landscaped strip must be planted as follows:
- 1) One row of trees planted no more than 10 feet apart on center along the entire length of the buffer, with deciduous trees of two inch caliper, minimum, and/or coniferous trees at least six feet in height, minimum. At least 50 percent of the required trees shall be evergreen.
  - 2) Living ground covers planted from either four-inch pot with 12-inch spacing or one-gallon pot with 18-inch spacing to cover within two years 60 percent of the land use buffer not needed for viability of the trees.
- c. Plant Standards. All plant materials used shall meet the most recent American Association of Nurserymen Standards for nursery stock: ANSI Z60.1.
- d. Location of the Land Use Buffer. The applicant shall provide the required buffer along the entire common border between the subject property and the adjoining

## ATTACHMENT 1

property.

- e. Multiple Buffering Requirement. If the subject property borders more than one adjoining property along the same property line, the applicant shall provide a gradual transition between different land use buffers. This transition must occur totally within the area which has the less stringent buffering requirement. The specific design of the transition must be approved by the City.
- f. Adjoining Property Containing Several Uses. If the adjoining property contains several permitted uses, the applicant may provide the least stringent land use buffer required for any of these uses.
- g. Subject Property Containing Several Uses. If the subject property contains more than one use, the applicant shall comply with the land use buffering requirement that pertains to the use within the most stringent landscaping category that abuts the property to be buffered.
- h. Subject Property Containing School. If the subject property is occupied by a school, land use buffers are not required along property lines adjacent to a street.
- i. Encroachment into Land Use Buffer. Typical incidental extensions of structures such as chimneys, bay windows, greenhouse windows, cornices, eaves, awnings, and canopies may be permitted in land use buffers as set forth in KZC [115.115\(3\)\(d\)](#); provided, that:
  - 1) Buffer planting standards are met; and
  - 2) Required plantings will be able to attain full size and form typical to their species.
- j. Modification. The applicant may request a modification of the requirements of the buffering standards of subsection (6) of this section. The Planning Official may approve a modification if:
  - 1) The owner of the adjoining property agrees to this in writing; and
  - 2) The existing topography or other characteristics of the subject property or the adjoining property, or the distance of development from the neighboring property decreases or eliminates the need for buffering; or
  - 3) The modification will be more beneficial to the adjoining property than the required buffer by causing less impairment of view or sunlight; or
  - 4) The Planning Official determines that it is reasonable to anticipate that the adjoining property will be redeveloped in the foreseeable future to a use that would require no, or a less intensive, buffer; or
  - 5) The location of pre-existing improvements on the adjoining site eliminates the need or benefit of the required landscape buffer.
- k. Outdoor use, activity, and storage (KZC [115.105\(2\)](#)) must comply with required land use buffers for the primary use, except that the following outdoor uses and activities, when located in commercial or industrial zones, are exempt from KZC [115.105\(2\)\(c\)\(1\)](#) and [\(2\)\(c\)\(2\)](#) as stated below:

## ATTACHMENT 1

- 1) That portion of an outdoor use, activity, or storage area which abuts another outdoor use, activity, or storage area which is located on property zoned for commercial or industrial use.
  - 2) Outdoor use, activity, and storage areas which are located adjacent to a fence or structure which is a minimum of six feet above finished grade; and do not extend outward from the fence or structure more than five feet; provided, that the total horizontal dimensions of these areas shall not exceed 50 percent of the length of the facade or fence (see Plate 11).
  - 3) If there is an improved path or sidewalk in front of the outdoor storage area, the outdoor use, activity or storage area may extend beyond five feet if a clearly defined walking path at least three feet in width is maintained and there is adequate pedestrian access to and from the primary use. The total horizontal dimension of these areas shall not exceed 50 percent of the length of the facade of the structure or fence (see Plate 11).
  - 4) Outdoor dining areas.
  - 5) That portion of an outdoor display of vehicles for sale or lease which is adjacent to a public right-of-way that is improved for vehicular use; provided, that it meets the buffering standards for driving and parking areas in subsections (7)(b)(1)(a) and (7)(b)(1)(b) of this section; and provided further, that the exemptions of subsection (7)(b)(2) of this section do not apply unless it is fully enclosed within or under a building, or is on top of a building and is at least one story above finished grade.
  - 6) Outdoor Christmas tree lots and fireworks stands if these uses will not exceed 30 days, and outdoor amusement rides, carnivals and circuses, and parking lot sales which are ancillary to the indoor sale of the same goods and services, if these uses will not exceed seven days.
7. Landscaping and Buffering Standards for Driving and Parking Areas.
- a. Landscaping – General.
    - 1) The following internal parking lot landscape standards apply to each parking lot or portion thereof containing more than eight parking stalls.
      - a) The parking lot must contain 25 square feet of landscaped area per parking stall planted pursuant to subsections (7)(a)(1)(b) and (c) of this section;
      - b) The applicant shall arrange the landscaping required in subsection (7)(a)(1)(a) of this section throughout the parking lot to provide landscape islands or peninsulas to separate groups of parking spaces (generally every eight stalls) from one another and each row of spaces from any adjacent driveway that runs perpendicular to the row. This island or peninsula must be surrounded by a six-inch-high vertical curb, be of similar dimensions as the adjacent parking stalls and planted pursuant to the standards in subsection (7)(a)(1)(c) of this section:
    - c) Landscaping shall be installed pursuant to the following standards:
      - 1) At least one deciduous tree, two inches in caliper or a coniferous tree five feet in height.

## ATTACHMENT 1

- 2) Groundcover shall be selected and planted to achieve 60 percent coverage within two years.
  - d) Exception. The requirements of this subsection do not apply to any area that is fully enclosed within or under a building.
  - 2) Rooftop Parking Landscaping. For a driving or parking area on the top level of a structure that is not within the CBD zone or within any zone that requires design regulation compliance, one planter that is 30 inches deep and five feet square must be provided for every eight stalls on the top level of the structure. Each planter must contain a small tree or large shrub suited to the size of the container and the specific site conditions, including desiccating winds, and is clustered with other planters near driving ramps or stairways to maximize visual effect.
  - 3) If development is subject to Design Review as described in Chapter 142 KZC, the City will review the parking area design, plant choice and specific plant location as part of the Design Review approval. The City may also require or permit modification to the required landscaping and design of the parking area as part of Design Review approval.
- b. Buffering for Driving and Parking Areas.
- 1) Perimeter Buffering – General. Except as specified in subsection (7)(b)(2) of this section, the applicant shall buffer all parking areas and driveways from abutting rights-of-way and from adjacent property with a five-foot-wide strip along the perimeter of the parking areas and driveways planted as follows (see Figure 95.40.A):
    - a) One row of trees, two inches in caliper and planted 30 feet on center along the entire length of the strip.
    - b) Living groundcover planted to attain coverage of at least 60 percent of the strip area within two years.
  - 2) Exception. The requirements of subsection (7)(b)(1) of this section do not apply to any parking area that:
    - a) Is fully enclosed within or under a building; or
    - b) Is on top of a building and is at least one story above finished grade; or
    - c) Serves detached dwelling units exclusively; or
    - d) Is within any zone that requires design regulation compliance. See below for Design District requirements.
  - 3) Design Districts. If subject to design review, each side of a parking lot that abuts a street, through-block pathway or public park must be screened from that street, through-block pathway or public park by using one or a combination of the following methods (see Figures 95.40.A, B, and C):
    - a) By providing a landscape strip at least five feet wide planted consistent with subsection (7)(b)(1) of this section, or in combination with the following. In the RHBD Regional Center a 10-foot perimeter landscape strip along NE 85th Street is required planted consistent with subsection

## ATTACHMENT 1

- (7)(b)(1) of this section.
- b) The hedge or wall must extend at least two feet, six inches, and not more than three feet above the ground directly below it.
  - c) The wall may be constructed of masonry or concrete, if consistent with the provisions of KZC [92.35\(1\)\(g\)](#), in building material, color and detail, or of wood if the design and materials match the building on the subject property.
  - d) In JBD zones:
    - 1) If the street is a pedestrian-oriented street, the wall may also include a continuous trellis or grillwork, at least five feet in height above the ground, placed on top of or in front of the wall and planted with climbing vines. The trellis or grillwork may be constructed of masonry, steel, cast iron and/or wood.
    - 2) If the wall abuts a pedestrian-oriented street, the requirements of this subsection may be fulfilled by providing pedestrian weather protection along at least 80 percent of the frontage of the subject property.
  - e) If development is subject to Design Review as described in Chapter [142](#) KZC, the City will review plant choice and specific plant location as part of the Design Review approval. The City may also require or permit modification to the required plant size as part of Design Review approval.
- 4) Overlapping Requirements. If buffering is required under subsection (6) of this section, Land Use Buffering Standards, and by this subsection, the applicant shall utilize the more stringent buffering requirement.

### **Perimeter Parking Lot Landscaping**

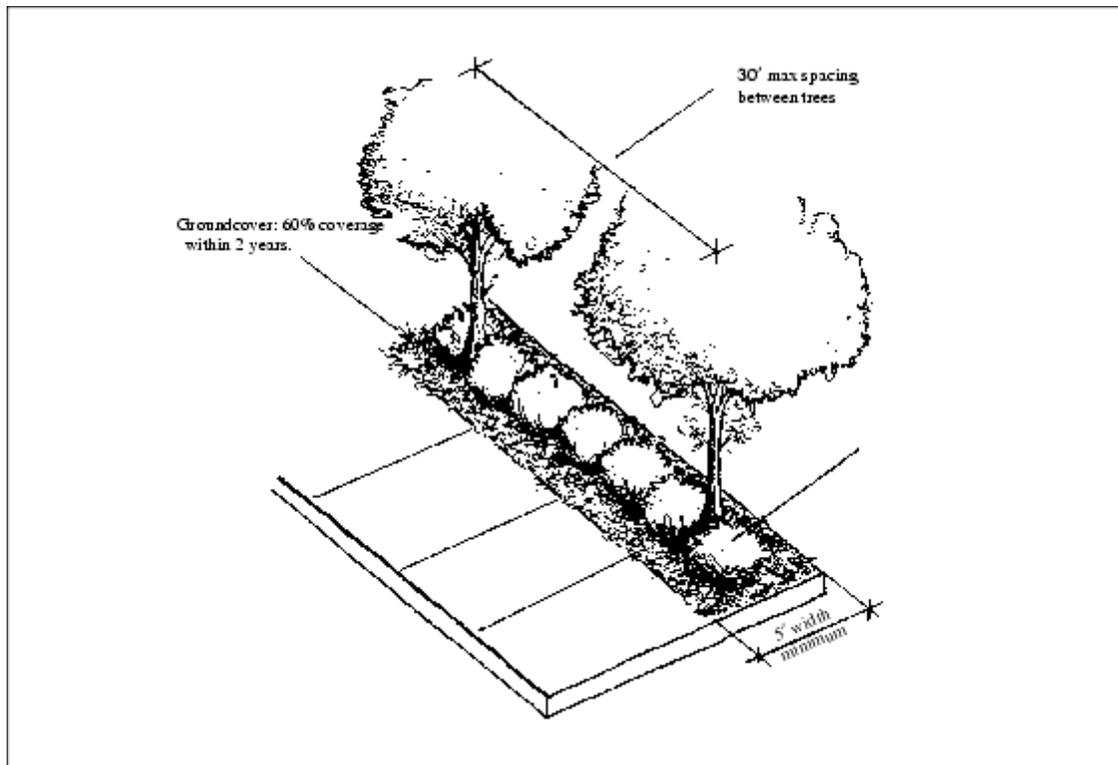


FIGURE 95.40.A

Perimeter Parking – Examples of Various Screen Wall Designs

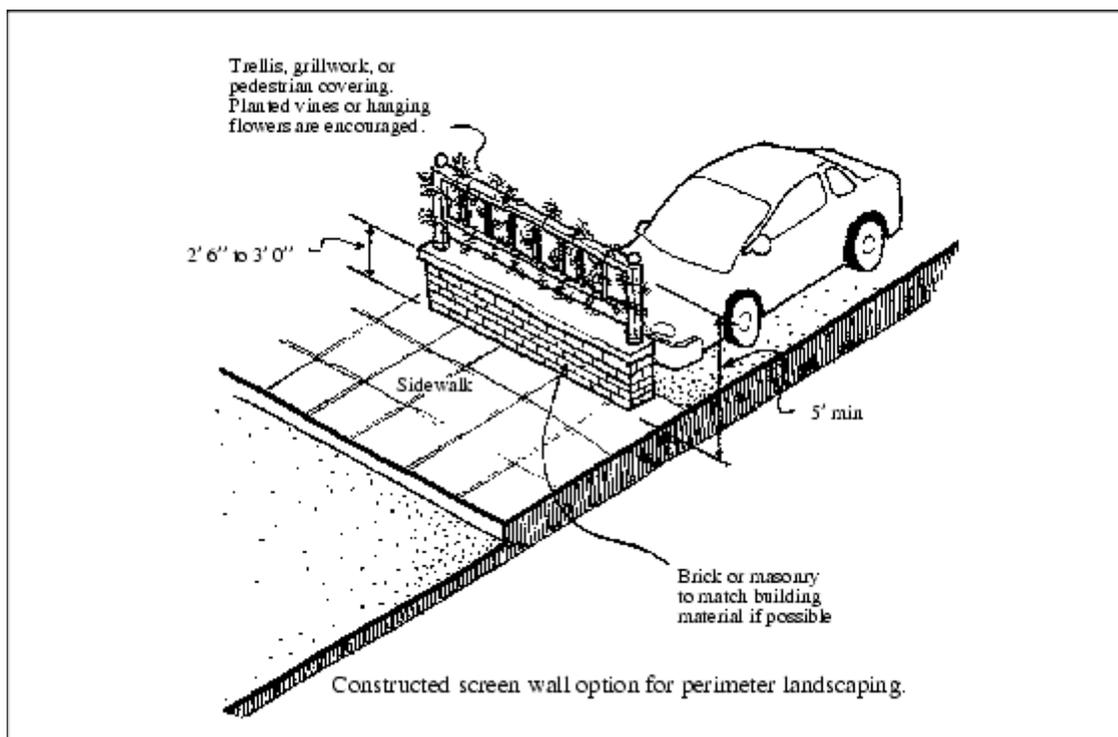


FIGURE 95.40.B

## ATTACHMENT 1

## Perimeter Parking – Examples of Various Screen Wall Designs

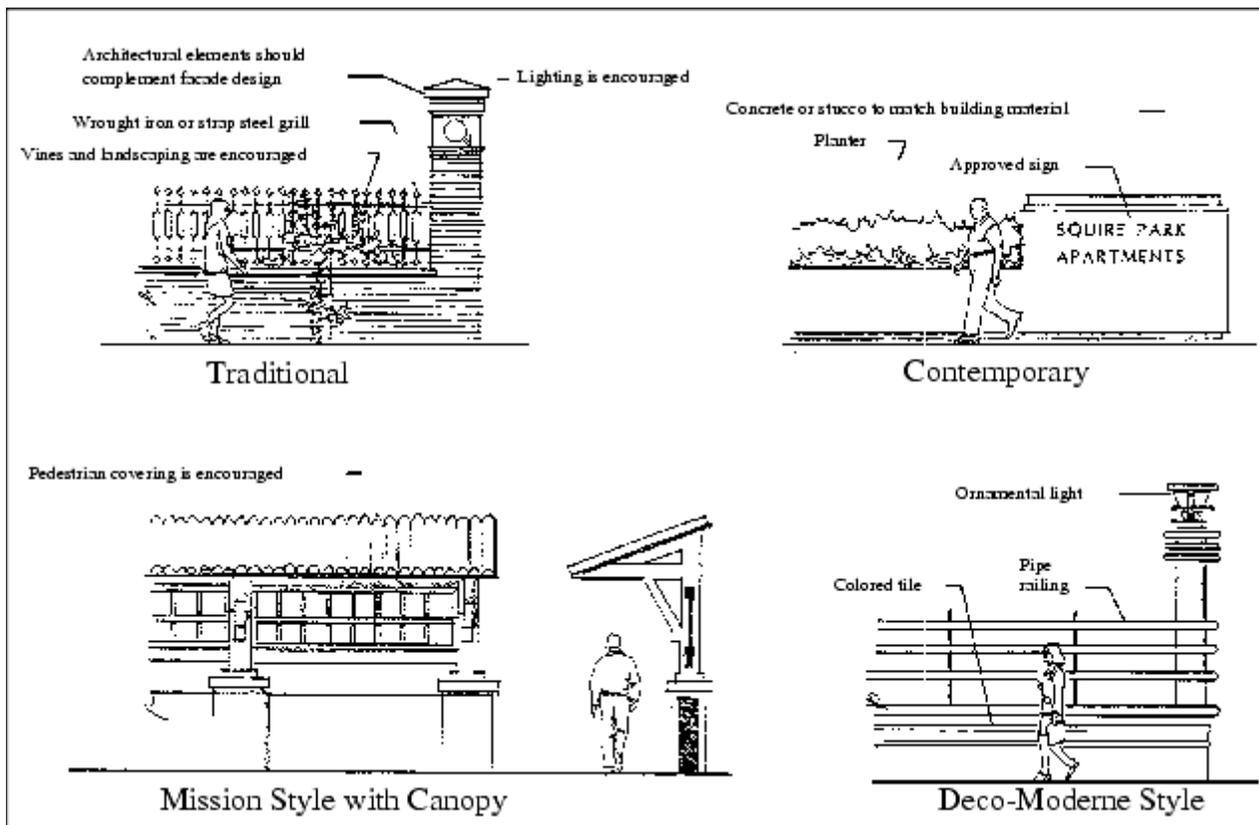


FIGURE 95.40.C

## c. Modifications of Landscaping and Buffering Standards for Driving and Parking Areas.

## 1) Authority to Grant and Duration.

a) If the proposed development of the subject property requires approval through Design Review or Process I, IIA, IIB, or III, described in Chapters 142, 145, 150, 152, and 155 KZC, respectively, a request for a modification will be considered as part of that process under the provisions of this section. The City must find that the applicant meets the criteria listed in subsection (7)(c)(2) of this section. If granted under Design Review or Process I, IIA, IIB, or III, the modification is binding on the City for all development permits issued for that development under the building code within five years of the granting of the modification.

b) If subsection (7)(1)(a) of this section does not apply, the Planning Official may grant a modification in writing under the provisions of this section.

## 2) Modifications.

a) For a modification of subsection (7)(a) of this section, the landscape requirements may be modified if:

i. The modification will produce a landscaping design in the parking

## ATTACHMENT 1

- area comparable or superior to that which would result from adherence to the adopted standard; or
  - ii. The modification will result in increased retention of significant existing vegetation; or
  - iii. The purpose of the modification is to accommodate low impact development techniques as approved by the Planning Official.
- b) For a modification to subsection (7)(b) of this section, the buffering requirements for parking areas and driveways may be modified if:
- i. The existing topography of or adjacent to the subject property decreases or eliminates the need for visual screening; or
  - ii. The modification will be of more benefit to the adjoining property by causing less impairment of view or sunlight; or
  - iii. The modification will provide a visual screen that is comparable or superior to the buffer required by subsection (7)(b) of this section; or
  - iv. The modification eliminates the portion of the buffer that would divide a shared parking area serving two or more adjacent uses, but provides the buffer around the perimeter of the shared parking area.
8. Nonconforming Landscaping and Buffers.
- a. The landscaping requirements of subsections (5) and (7) of this section must be brought into conformance as much as is feasible, based on available land area, in either of the following situations:
    - 1) An increase of at least 10 percent in gross floor area of any structure; or
    - 2) An alteration to any structure, the cost of which exceeds 50 percent of the replacement cost of the structure.
  - b. Land use buffers must be brought into conformance with subsection (6) of this section in either of the following situations:
    - 1) An increase in gross floor area of any structure (the requirement to provide conforming buffers applies only where new gross floor area impacts adjoining property); or
    - 2) A change in use on the subject property and the new use requires larger buffers than the former use.

### 95.45 Installation Standards for Required Plantings

All required trees and landscaping shall be installed according to sound horticultural practices in a manner designed to encourage quick establishment and healthy plant growth. All required landscaping shall be installed in the ground and not in above-ground containers, except for landscaping required on the top floor of a structure. When an applicant proposes to locate a subterranean structure under required landscaping that appears to be at grade, the applicant will: (1) provide site-specific documentation prepared by a qualified expert to establish that the design will adequately support the long-term viability of the required landscaping; and (2) enter into an agreement with the City, in a form acceptable to the City Attorney, indemnifying the City from any damage resulting from development activity on the subject property which is related to the physical condition of the property. The applicant shall record this agreement with the King County Department of Elections and Records.

## ATTACHMENT 1

1. Street Trees. Street trees are not subject to the regulations of this chapter and are not counted toward any landscaping required by this chapter. Street trees are regulated by Chapter [110](#) KZC and Chapter 19.36 KMC.
2. Compliance. It is the applicant's responsibility to show that the proposed landscaping complies with the regulations of this chapter.
3. Timing. All landscaping shall be installed prior to the issuance of a certificate of occupancy, except that the installation of any required tree or landscaping may be deferred during the summer months to the next planting season, but never for more than six months. Deferred installation shall be secured with a performance bond pursuant to Chapter [175](#) KZC prior to the issuance of a certificate of occupancy.
4. Grading. Berms shall not exceed a slope of two horizontal feet to one vertical foot (2:1).
5. Soil Specifications. Soils in planting areas shall have adequate porosity to allow root growth. Soils which have been compacted to a density greater than one and three-tenths grams per cubic centimeters shall be loosened to increase aeration to a minimum depth of 24 inches or to the depth of the largest plant root ball, whichever is greater. Imported topsoils shall be tilled into existing soils to prevent a distinct soil interface from forming. After soil preparation is completed, motorized vehicles shall be kept off to prevent excessive compaction and underground pipe damage. The organic content of soils in any landscape area shall be as necessary to provide adequate nutrient and moisture-retention levels for the establishment of plantings. See subsection (8) of this section for mulch requirements.
6. Plant Selection.
  - a. Plant selection shall be consistent with the Kirkland Plant List, which is produced by the City's Natural Resource Management Team and available in the Department of Planning and Community Development.
  - b. Plants shall be selected and sited to produce a hardy and drought-resistant landscape area. Selection shall consider soil type and depth, the amount of maintenance required, spacing, exposure to sun and wind, the slope and contours of the site, and compatibility with existing native vegetation preserved on the site. Preservation of existing vegetation is strongly encouraged.
  - c. Prohibited Materials. Plants listed as prohibited in the Kirkland Plant List are prohibited in required landscape areas. Additionally, there are other plants that may not be used if identified in the Kirkland Plant List as potentially damaging to sidewalks, roads, underground utilities, drainage improvements, foundations, or when not provided with enough growing space.
  - d. All plants shall conform to American Association of Nurserymen (AAN) grades and standards as published in the "American Standard for Nursery Stock" manual.
  - e. Plants shall meet the minimum size standards established in other sections of the KZC.
  - f. Multiple-stemmed trees may be permitted as an option to single-stemmed trees for required landscaping provided that such multiple-stemmed trees are at least 10 feet in height and that they are approved by the Planning Official prior to installation.

## ATTACHMENT 1

7. Fertilization. All fertilizer applications to turf or trees and shrubs shall follow Washington State University, National Arborist Association or other accepted agronomic or horticultural standards.
8. Irrigation. The intent of this standard is to ensure that plants will survive the critical establishment period when they are most vulnerable due to lack of watering. All required plantings must provide an irrigation system, using either Option 1, 2, or 3 or a combination of those options. For each option irrigation shall be designed to conserve water by using the best practical management techniques available. These techniques may include, but not be limited to: drip irrigation to minimize evaporation loss, moisture sensors to prevent irrigation during rainy periods, automatic controllers to insure proper duration of watering, sprinkler head selection and spacing designed to minimize overspray, and separate zones for turf and shrubs and for full sun exposure and shady areas to meet watering needs of different sections of the landscape. Exceptions, as approved by the Planning Official, to the irrigation requirement may be approved xeriscape (i.e., low water usage plantings), plantings approved for low impact development techniques, established indigenous plant material, or landscapes where natural appearance is acceptable or desirable to the City. However, those exceptions will require temporary irrigation (Option 2 and/or 3) until established.
  - a. Option 1. A permanent built-in irrigation system with an automatic controller designed and certified by a licensed landscape architect as part of the landscape plan.
  - b. Option 2. An irrigation system designed and certified by a licensed landscape architect as part of the landscape plan, which provides sufficient water to ensure that the plants will become established. The system does not have to be permanent if the plants chosen can survive adequately on their own, once established.
  - c. Option 3. Irrigation by hand. If the applicant chooses this option, an inspection will be required one year after final inspection to ensure that the landscaping has become established.
9. Drainage. All landscapes shall have adequate drainage, either through natural percolation or through an installed drainage system. A percolation rate of one-half inch of water per hour is acceptable.
10. Mulch.
  - a. Required plantings, except turf or areas of established ground cover, shall be covered with two inches or more of organic mulch to minimize evaporation and runoff. Mulch shall consist of materials such as yard waste, sawdust, and/or manure that are fully composted.
  - b. All mulches used in planter beds shall be kept at least six inches away from the trunks of shrubs and trees.
11. Protection. All required landscaped areas, particularly trees and shrubs, must be protected from potential damage by adjacent uses and development, including parking and storage areas. Protective devices such as bollards, wheel stops, trunk guards, root guards, etc., may be required in some situations.
12. Mitigation and Restoration Plantings in Critical Areas and Critical Area Buffers. Plants intended to mitigate for the loss of natural resource values are subject to the following requirements in addition to the other requirements of KZC [95.45](#). Where

## ATTACHMENT 1

these requirements conflict with other requirements of this chapter, these requirements take precedence. Refer to Chapters [85](#) and [90](#) KZC for additional requirements for these areas.

- a. Plant Source. Plant materials must be native and selected from the Kirkland Plant List. Seed source must be as local as possible, and plants must be nursery propagated unless transplanted from on-site areas approved for disturbance. These requirements must be included in the Mitigation Plan specifications.
- b. Installation. Plant materials must be supported only when necessary due to extreme winds at the planting site. Where support is necessary, stakes, guy wires, or other measures must be removed as soon as the plant can support itself, usually after the first growing season. All fertilizer applications to turf or trees and shrubs shall follow Washington State University, National Arborist Association or other accepted agronomic or horticultural standards.
- c. Fertilizer Applications. Fertilizers shall be applied in such a manner as to prevent its entry into waterways and wetlands and minimize its entry into storm drains. No applications shall be made within 50 feet of a waterway or wetland, or a required buffer as established by the City codes (such as Chapter [90](#) KZC) or Kirkland Shoreline Master Program (SMP, KMC Title 24), whichever is greater, unless specifically authorized in an approved mitigation plan or otherwise authorized in writing by the Planning Official.

### 95.50 Tree and Landscape Maintenance Requirements

The following maintenance requirements apply to all trees and other vegetation required to be planted or preserved by the City:

1. Responsibility for Regular Maintenance. Required trees and vegetation, fences, walls, and other landscape elements shall be considered as elements of the project in the same manner as parking, building materials, and other site details. The applicant, landowner, or successors in interest shall be responsible for the regular maintenance of required landscaping elements. Plants that die must be replaced in kind.
2. Maintenance Duration. Maintenance shall be ensured in the following manner except as set forth in subsections (3) and (4) of this section:
  - a. All required landscaping shall be maintained throughout the life of the development. Prior to issuance of a certificate of occupancy, the proponent shall provide a final as-built landscape plan and an agreement to maintain and replace all landscaping that is required by the City.
  - b. Any existing tree or other existing vegetation designated for preservation on a Tree Plan I – Major, a Tree Plan II, or a Tree Plan III shall be maintained for a period of five years following issuance of the certificate of occupancy for the individual lot or development. After five years, all trees on the property are subject to KZC [95.20](#) unless:
    - 1) The tree and associated vegetation are in a grove that is protected pursuant to subsection (3) of this section; or
    - 2) The tree or vegetation is considered to be a public benefit related to approval of a planned unit development; or
    - 3) The tree or vegetation was retained to partially or fully meet requirements of

## ATTACHMENT 1

KZC [95.40](#), Required Landscaping.

3. Maintenance of Preserved Grove. Any applicant who has a grove of trees identified for preservation on an approved tree plan pursuant to KZC [95.35](#)(4)(a)(1)(b) shall provide prior to occupancy the legal instrument acceptable to the City to ensure preservation of the grove and associated vegetation in perpetuity, except that the agreement may be extinguished if the Planning Official determines that preservation is no longer appropriate.
4. Maintenance of Critical Area and Critical Area Buffers. In critical areas and their buffers, native vegetation is not to be removed without City approval pursuant to KZC [95.35](#)(4)(e). However, it is the responsibility of the property owner to maintain critical areas and their buffers by removing non-native, invasive, and noxious plants in a manner that will not harm critical areas or their buffers. See also subsection (6) of this section and Chapters [85](#) and [90](#) KZC for additional requirements for trees and other vegetation within critical areas and critical area buffers.
5. 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 that the City has required to be planted or protected. 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.
6. Pesticides, Herbicides, and Fertilizer. The use of plant material requiring excessive pesticide or herbicide applications to be kept healthy and attractive is discouraged. Pesticide, herbicide, and fertilizer applications shall be made in a manner that will prevent their unintended entry into waterways, wetlands, and storm drains. No application shall be made within 50 feet of a waterway or wetland or a required buffer as established by City codes, whichever is greater, unless done so by a state certified applicator with approval of the Planning Official, and is specifically authorized in an approved mitigation plan or otherwise authorized in writing by the Planning Official.
7. Landscape Plans and Utility Plans. Landscape plans and utility plans shall be coordinated. In general, the placement of trees and large shrubs should adjust to the location of required utility routes both above and below ground. Location of plants shall be based on the plant's mature size both above and below ground. See the Kirkland Plant List for additional standards.
8. Tree Pruning. Topping or pruning to the extent defined by tree removal in KZC [95.10](#), is not allowed. If a required tree smaller than six inches in diameter is topped, it must be replaced pursuant to the standards in KZC [95.55](#)(8). If a tree six inches or larger in diameter is topped, the owner must have a qualified professional develop and carry out a five-year pruning schedule.

## 95.52 Prohibited Vegetation

Plants listed as prohibited in the Kirkland Plant List shall not be planted in the City.

For landscaping not required under this chapter, this prohibition shall become effective on February 14, 2008. The City may require removal of prohibited vegetation if installed after this date. Residents and property-owners are encouraged to remove pre-existing prohibited vegetation whenever practicable.

## 95.55 Enforcement and Penalties

1. Intent. These enforcement and penalty provisions have several purposes. First, they are intended to discourage damage or removal of significant trees above and beyond what is permitted under this chapter. Second, these enforcement and

## ATTACHMENT 1

penalty provisions are intended to provide complete and effective restoration of areas in which violations of this chapter occur. Finally, these regulations are intended to provide a clear and efficient process for addressing violations of this chapter.

The City may utilize one or more of several remedies when responding to violations of this chapter. In almost all cases where a violation has occurred, the City will issue a civil citation that describes the nature of the violation, the actions necessary to remedy the violation, and the amount of any civil penalty, among other things. If the acts that constitute a violation appear to be ongoing, the City may also issue a notice of cease and desist. Failure to adhere to a notice to cease and desist will result in imposition of additional civil penalties. If there is a pending development or building permit, the City may also issue a stop work order or withhold issuance of permit approval or a certificate of occupancy. Finally, additional fines may be imposed if a violator does not follow through in a timely manner with restoration work or other compliance issues.

2. **General Requirements.** Enforcement shall be conducted in accordance with procedures set forth in Chapter [170 KZC](#). Special enforcement provisions related to tree conservation are set forth below. To the extent there is a conflict between the provisions of this section and Chapter [170 KZC](#), this section shall control.
3. **Authority.** It shall be the duty of the Planning Official to administer the provisions of this chapter. The Planning Official shall have authority to enforce and carry out the provisions of this chapter.
4. **Cease and Desist.** The Planning Official may issue a notice to cease and desist using the procedure set forth in [KZC 170.30](#) if the Planning Official finds that a violation of this code has occurred. Continued illegal tree activity following issuance of a cease and desist from the City for the tree activity shall result in fines of \$1,000 per day of continued activity.
5. **Stop Work Order.** If a violation of this chapter or an approved tree plan occurs on property on which work is taking place pursuant to a City of Kirkland development or building permit, the Building Official may suspend some or all of the work as appropriate through issuance of a stop work order. The Building Official shall remove the stop work order when the City determines that the violation has been corrected or when the City has reached an agreement with the violator regarding rectification of the violation. Any stop work order issued under this section may be appealed using the procedures set forth in Chapter 21.06 KMC.
6. **Civil Citation.** The City's Code Enforcement Officer shall notify a person who violates this chapter by issuance of a civil citation. The civil citation shall be in writing, and issued by certified mail with return receipt requested, or by personal service. The civil citation shall contain the following:
  - a. The name and address of the property owner or other person to whom the civil citation is directed;
  - b. The street address or description sufficient for identification of the land upon which the violation has occurred or is occurring;
  - c. A description of the violation and a reference to the provisions of this chapter that have been violated;
  - d. A statement of the restoration action required to be taken to correct the violation as determined by the Planning Official;
  - e. A statement of the civil penalty incurred for each violation;

## ATTACHMENT 1

- f. A statement that the person to whom the civil citation is issued must correct the violation through restoration described in subsection (8) of this section and may pay the civil penalty or may appeal the civil citation as provided in this section.

Note: Section [95.55](#) continues on page 636.23.

7. Civil Penalty.

- a. A person who fails to comply with the requirements of this chapter or the terms of a permit issued hereunder, who undertakes an activity regulated by this chapter without obtaining a permit, or fails to comply with a cease and desist or stop work order issued under this chapter shall also be subject to a civil penalty as set forth in Table 95.55.1. Each unlawfully removed or damaged tree shall constitute a separate violation.
- b. Any person who aids or abets in the violation shall be considered to have committed a violation for purposes of the civil penalty.
- c. The amount of the penalty shall be assessed in accordance with Table 95.55.1. The Planning Official may elect not to seek penalties if he or she determines that the circumstances do not warrant imposition of civil penalties in addition to restoration.

**Table 95.55.1 – Penalties**

Types of Violations	Allowable Fines per Violation
1. Removal of tree(s) approved to be removed, but prior to final tree plan approval or issuance of a City tree removal permit	\$100.00 per tree
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	\$1,000 per tree
3. Removal of tree(s) without applying for or obtaining a required City permit	\$1,000 per tree

8. Tree Restoration.

- a. Violators of this chapter or of a permit issued thereunder shall be responsible for restoring unlawfully damaged areas in conformance with a plan, approved by the Planning Official, which provides for repair of any environmental and property damage, and restoration of the site; and which results in a site condition that, to the greatest extent practical, equals the site condition that would have existed in the absence of the violation(s). In cases where the violator intentionally or knowingly violated this chapter or has committed previous violations of this chapter, restoration costs may be based on the City-appraised tree value of the subject trees in which the violation occurred, utilizing the industry standard trunk formula method in the current edition of Guide for Plant Appraisal. If diameter of removed tree is unknown, determination of the diameter size shall be made by the Planning Official by comparing size of stump and species to similar trees in similar growing conditions. The amount of costs above the approved restoration plan will be paid into the City forestry account.
- b. Restoration Plan Standards. The restoration plan shall be in accordance to the following standards:
- 1) The number of trees required to be planted is equal to the number of tree credits of illegally removed trees according to Table 95.35.1.

## ATTACHMENT 1

- 2) The minimum size for a tree planted for restoration is 12-foot-tall conifer and three-inch caliper deciduous or broadleaf evergreen tree. The City may approve smaller restoration tree sizes at a higher restoration ratio, provided the site has capacity for the additional trees and the results of restoration at a higher restoration ratio is as good or better than at the normal ratio. The smallest allowable alternatives to the normal restoration requirements shall be two eight-foot conifers for one 12-foot conifer or two two-inch caliper deciduous for one three-inch caliper deciduous tree.
  - 3) In the event the violators cannot restore the unlawfully removed or damaged trees, the violators shall make payment to the City forestry account. 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. The City's unit cost is based on the current market cost of purchase, installation and three-year maintenance for a minimum-sized tree for restoration.
  - 4) 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.
9. Failure to Restore or Pay Fines.

- a. Prohibition of Further Approvals. The City shall not approve any application for a subdivision or any other 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 Planning Official and by payment of any penalty imposed for the violation.
- b. Fines. A property owner or occupant who fails to restore or otherwise cure property on which a violation of this chapter has occurred shall be assessed a fine of \$100.00 per day for each day that restoration is incomplete. Prior to assessing fines under this subsection, the City shall issue a written notice to the property owner or that restoration has not been completed. The notice shall include the following information: (1) a description of the nature of the violation; (2) a description of what actions are required to bring the property into compliance; and (3) a date by which compliance shall be required (the "compliance date"). The compliance date shall be no less than 30 days from the date the notice is served on the property owner or occupant. If the property owner or occupant does not, in the determination of the City, bring the property into compliance by the compliance date, then the City may issue an order imposing \$100.00 per day fines at any time after the compliance date. The fines shall continue to accrue until the violation has been certified to be corrected by the Planning Department. The property owner or occupant may appeal the order imposing fines to the hearing examiner using the procedures set forth in subsection 10 of this section.

10. Appeal to Hearing Examiner.

- a. A person to whom a civil citation or order imposing fines is directed may appeal the civil citation, including the determination that a violation exists or the amount of any monetary penalty imposed, to the Hearing Examiner.
- b. A person may appeal the civil citation or order imposing fines by filing a written notice of appeal with the Department of Planning and Community Development

## ATTACHMENT 1

within 14 calendar days of the date of service of the civil citation or order imposing fines.

- c. Fines that accrue on a daily basis shall not be imposed while an appeal is pending unless the Hearing Examiner determines that the appeal is frivolous or imposed solely for the purpose of delay.
- d. If both a civil citation and an order to cease and desist have been issued in the same case, and both the civil citation and the order to cease and desist have been appealed, the appeals shall be consolidated for hearing.
- e. The office of the Hearing Examiner shall give notice of the hearing to the appellants at least 17 calendar days prior to the hearing.
- f. The Hearing Examiner shall conduct a hearing on the appeal pursuant to the rules of procedure provided for in the Administrative Procedures Act (Chapter 34.05 RCW) and in accordance with any rules for hearings promulgated by the Hearing Examiner. The City and the appellant may participate as parties in the hearing and each may call witnesses. The City shall have the burden of proof by a preponderance of the evidence that a violation has occurred.

11. Hearing Examiner Decision.

- a. The Hearing Examiner shall determine whether the City has proven by a preponderance of the evidence that a violation has occurred and shall affirm, vacate, suspend, or modify the amount of any monetary penalty imposed by the civil citation, with or without written conditions.
- b. In the event that the Hearing Examiner determines that a violation has occurred, the Hearing Examiner shall also consider the following in making his or her decision: (1) whether the appeal is frivolous or intended to delay compliance; (2) whether the appellant exercised reasonable and timely effort to comply with applicable development regulations; and (3) any other relevant factors.
- c. The Hearing Examiner shall mail a copy of his or her decision to the appellant, by certified mail, postage prepaid, return receipt requested.
- d. The decision of the Hearing Examiner may be reviewed in King County Superior Court using the standards set forth in RCW 36.70C.130. The land use petition must be filed within 21 calendar days of the issuance of the final land use decision by the Hearing Examiner (see Chapter 36.70C RCW for more information).

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## TREE MANAGEMENT AND REQUIRED LANDSCAPING AMENDMENTS

### Process And Timing

*Revised 8/3/05*

1. Focus Group (Mar. – May 2004)  
To select preferred options for addressing each of the regulation topics. Include members to represent every stakeholder interest. Also, widely publicize meetings and devote a part of each meeting to allow nonmembers present to contribute opinions as well. Goal: to capture stakeholders' opinions (not striving for consensus).
2. Planning Commission Check-in (July 8, 2004)  
To review and provide comments about Focus Group outcomes.
3. City Council Check-in (Sept. 7, 2004)  
An opportunity for the Council to adjust staff's direction at a conceptual level.
4. Organize Key Amendment Concepts into Outline (Oct. 1-15, 2004)  
Staff will do this, taking into consideration stakeholder comments and following conceptual Council direction.
5. Stakeholder Check-in on Outline (Oct. 18 - Nov. 22, 2004)
  - Kirkland Chamber of Commerce Policy Committee (Nov. 23)
  - Planning Commission (Oct. 28)
  - Open House for Tree Focus Group, Master Builders, Neighborhoods and public at large (Nov. 9, 5 – 7:30 p.m.)
  - Houghton Community Council (Nov. 22)
  - Forward substantive comments to the City Council's reading file
6. Develop Draft Amendments (Jan. 2004 – Mar. 2005)
  - Staff will do this, based on direction received.
  - Brief the City Council on the status and key issues (in packet for Mar. 1 joint meeting with Planning Commission)
7. Planning Commission Study Sessions on Draft Ordinance (April/May 2005)
  - (April 21)
  - (May 26)
8. Stakeholder Comments on Draft Amendments (June 2005)
  - Kirkland Chamber of Commerce Policy Committee (May 24)
  - Kirkland Chamber of Commerce Policy Committee (June 16)
  - Tree Focus Group (June 15))
  - Houghton Community Council (June 20)
9. State Environmental Policy Act (SEPA) Review and Determination (July 2005)
10. Planning Commission Study Session on Draft Amendments (July 14, 2005)  
Edit draft ordinance in preparation for public hearing

**TREE MANAGEMENT AND REQUIRED LANDSCAPING  
AMENDMENTS  
Process And Timing**

11. Notice to WA State Department of Community Trade and Economic Development (Sept. 1)  
Due 60 days prior to City action on the amendments
12. Houghton Community Council Public Hearing (Aug 1, 2005)  
After hearing, receive direction from HCC regarding finalization of their recommended regulations
13. Planning Commission Public Hearing (Aug. 11, 2005)
  - Public Hearing on the amendments
  - Direction from Planning Commission for edits in response to public input that night, or return on August 18.
14. City Council Study Session (Sept. 20, 2005)  
City Council study recommended amendments and edit, if necessary, in preparation for action.
15. City Council Regular Meeting (Nov. 1, 2005)  
For City Council action on the ordinance to adopt the new regulations
16. Houghton Community Council Action (November or December, 2005)  
To present ordinance and get HCC action within their jurisdiction

Throughout the process, staff would keep stakeholders informed on an on-going basis through:

- City website;
- Tree Regulation Update using E-Bulletins (sign-up required)
- Neighborhood hot sheet and E-Bulletins;
- *Kirkland Courier* articles (Fall 2004);
- Mailing list;
- Cable TV announcements;
- Post in kiosks in neighborhoods, parks, downtown, City buildings, library, Sr. Center, Teen Center; and
- Give updates at regular meetings of neighborhood associations, Kirkland Chamber of Commerce Policy Committee, E. Lake WA Audubon, interdepartmental staff tree service team, natural resource management team, etc.
- Meetings and conversations with individuals

VegRegsprocessandtiming092004

### TREE TYPE DEFINITIONS

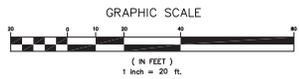
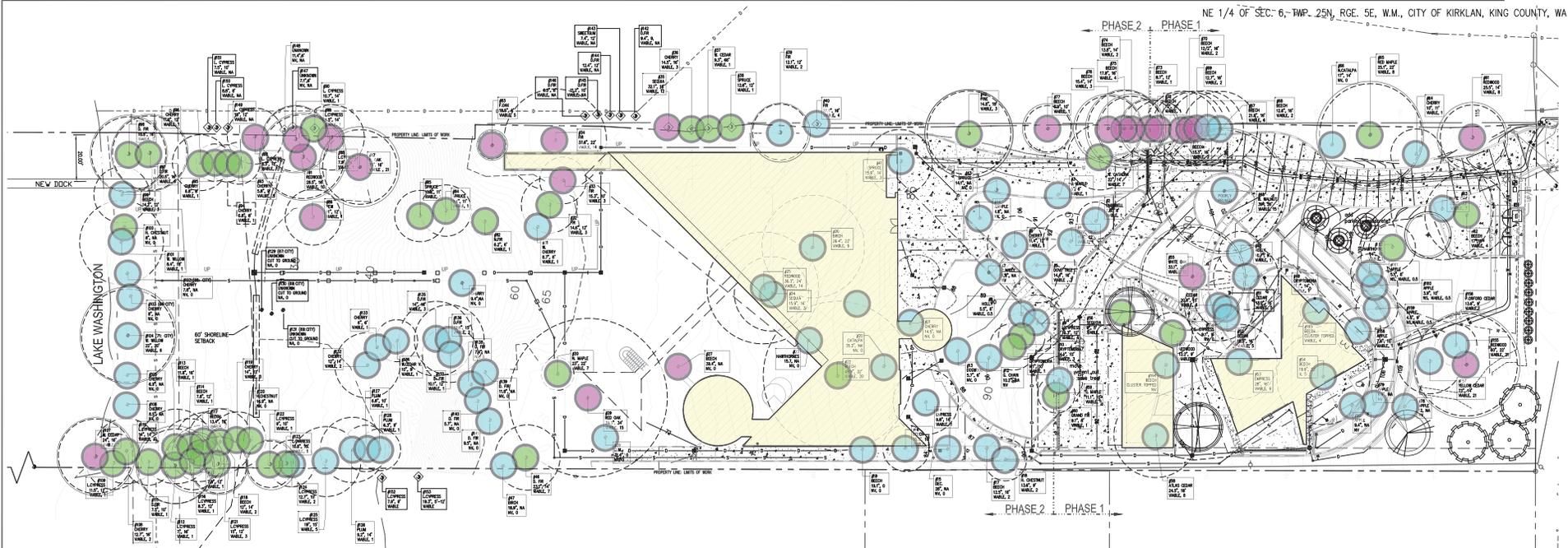
- a) Based on the tree plan information submitted by the applicant and the Planning Official's evaluation of the trees and proposed development on subject property, the Planning Official will designate each tree as:
- i. Type 1, a viable tree that meets at least one of the criteria set forth in subsection (4)(a)(1)(b) of this section;
  - ii. Type 2, a viable tree that is to be retained if feasible; or
  - iii. Type 3, a tree that is either (1) not viable or (2) is in an area where removal is unavoidable due to the anticipated development activity.

#### Section (4)(a)(1)(b):

Tree retention efforts shall be directed to the following trees if they are determined to be healthy and windfirm by a qualified professional, and provided the trees can be safely retained when pursuing alternatives to development standards in subsections (4)(a)(2) and (4)(a)(3) of this section:

- i. Landmark trees;
- ii. Specimen trees;
- iii. Tree groves and associated vegetation that are to be set aside as preserved groves pursuant to KZC [95.50\(3\)](#);
- iv. Trees on slopes of at least 10 percent; or
- v. Trees that are a part of a grove that extends into adjacent property, such as in a public park, open space, sensitive area buffer or otherwise preserved group of trees on adjacent private property. If significant trees must be removed in these situations, an adequate buffer of trees may be required to be retained or planted on the edge of the remaining grove to help stabilize.





### TREE DEMOLITION & DEVELOPMENT PLAN

## Tree Types

- Type I
- Type II
- Type III

#### CALCULATIONS

1. TREE DENSITY REQUIREMENT PER CITY: 30 TREE CREDITS PER ACRE.
2. THE PROPERTY IS 1.97 ACRES REQUIRES 591 TREES PER CITY CODE.
3. TREE VIOLATION REQUIRES 14 ADDITIONAL TREE CREDITS.
4. TREES REQUIRED = 60 + 14 = 74 TREE CREDITS REQUIRED.
5. THE PROPERTY CURRENTLY CONTAINS 4025 TREE CREDITS. PLEASE REFER TO PLAN AND ARBORIST REPORT.
6. THE TREE DEVELOPMENT PLAN PROPOSES TO INCLUDE 148 TREE CREDITS FROM EXISTING TREES TO REMAIN (EXCEEDS THE 40 TREE CREDITS REQUIRED) AND ANOTHER 9 TREE CREDITS FOR THE VIOLATION (EXCEEDS THE 14 TREE CREDITS REQUIRED). ADDITIONAL TREES WILL MOST LIKELY BE PLANTED AND SHOWN IN AN OVERALL LANDSCAPE PLAN.

#### GENERAL TREE NOTES

1. ADDITIONAL TREES WILL BE ADDED DURING THE PHASE TWO PROJECT.
2. THE TREE CREDITS (TA) REQUIRED FOR THE TREE VIOLATION WILL BE PROVIDED IN PHASE ONE AND BE MAINTAINED PER CITY REQUIREMENTS.
3. THE SITE EXCEEDS THE AMOUNT OF TREE CREDITS REQUIRED BY THE CITY. ADDITIONAL TREES NEED TO BE REMOVED, A REQUEST OR REVISED PLANS WILL BE SUBMITTED TO THE CITY.
4. REVIEW ARBORIST REPORT FOR FURTHER INFORMATION ON THE TREES, INCLUDING THEIR HEALTH AND AESTHETICS. ARBORIST REPORT COMPLETED BY GILES CONSULTING (GIRAN GILLES).
5. TREES SHOWN OUTSIDE THE PROPERTY LINE ARE SHOWN FOR REFERENCE ONLY. USE PROTECTION MEASURES AS NECESSARY.
6. CONTRACTOR TO COORDINATE WITH URBAN HARBORERS FOR TREE SALVAGE (STEPHEN BARNEY: 206-550-2688). SEATTLE TREE PRESERVATION (LANN ALMON: 206-510-6867) IS ONE OF THE PREFERRED TREE SERVICES FOR REMOVAL.
7. VERIFY TREES TO BE REMOVED PRIOR TO ACTUAL REMOVAL WITH OWNER'S REPRESENTATIVE. IF CONFLICTS OCCUR WITH TREES DURING CONSTRUCTION OR CONSTRUCTION, IT IS THE RESPONSIBILITY OF THE CONTRACTOR CONTACT OWNER'S REPRESENTATIVE.

#### PLANT SCHEDULE

##### TREES

SYMBOL	SCIENTIFIC NAME COMMON NAME	QUANTITY	SIZE (INCH)	SPACING (MAX.)	NOTES	TREE CREDITS
	EXISTING TREES OFFSITE WITH OVERHANGING DRIFLINE ONTO SITE TO REMAIN			AS EXISTING	TREES ARE NOT TO BE IMPACTED FROM CONSTRUCTION CONSULT WITH OWNER'S REPRESENTATIVE AND ARBORIST AS NECESSARY	NOT APPLICABLE
	EXISTING TREES TO BE REMOVED WITHIN PROPERTY			AS EXISTING	TREE REMOVAL CONSULT WITH OWNER'S REPRESENTATIVE FOR VERIFICATION	NOT APPLICABLE
	EXISTING TREES TO REMAIN WITHIN PROPERTY			AS EXISTING	76 TREE CREDITS TO REMAIN IN PHASE 2 71 TREE CREDITS TO REMAIN IN PHASE 1	148
	CHAMAECYPARIS OBTUSA GRACILIS SLIMMER GINKGO CYPRESS	3	6'-7" TALL	AS SHOWN	GOOD BRANCHING PATTERN WATCHING FORM	3
	CORNUS KOUSA CHINENSIS CHINESE DOGWOOD	1	2" CAL. (DBH)	AS SHOWN	SPECIMEN QUALITY, LOWER BRANCHING ACCEPTABLE	1
	MAGNOLIA OBOVATA LITTLE OBOV. MAGNOLIA	1	2" CAL. (DBH)	AS SHOWN	SINGLE TRUNK, MIN. BRANCH HEIGHT 4'	1
	STEWARTIA PSEUDOCAMELLIA JAPANESE STEWARTIA	2	2" CAL. (DBH)	AS SHOWN	SPECIMEN QUALITY	2
	TAXUS MEDIA 'BROWNII' BROWN'S YEW	9	6'-7" TALL	AS SHOWN	FULL AND BUSHY, TOUGH FOLIAGE	9
	THUJA PLICATA 'FASTIGIATA' HOOP CEDAR	3	6'-7" TALL	AS SHOWN	FULL, STRONGLY UPRIGHT	3

- NOTES:
1. PLANT LEGEND IS CURRENTLY FOR TREES OF PHASE ONE. ADDITIONAL TREES WILL BE SPECIFIED FOR PHASE TWO.
  2. THIS PLAN IS FOR THE TREE CREDIT COUNT ONLY. A PLANTING PLAN WITH SHRUBS AND GROUNDCOVERS, WILL BE PROVIDED. ADDITIONAL TREES MAY BE PROPOSED.

NO.	REVISION	DATE
-	PERMIT SUBMITTAL	04-03-08



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PROJECT NO. 0804

DRAWN BY: ARS / CHECKED BY: ARS

**NICHOLSON FAMILY RESIDENCE**  
**PHASE 1**  
for Brent Nicholson

701,705,725 13th AVENUE WEST

KIRKLAND, WA 98033

SHEET TITLE

TREE PLAN

SHEET NO.  
L1.1



**Table 95.35.1****Tree Density for Existing Significant Trees****(Credits per minimum diameter – DBH)**

DBH	Tree Credits	DBH	Tree Credits	DBH	Tree Credits
3 – 5"	0.5				
6 – 10"	1	24"	8	38"	15
12"	2	26"	9	40"	16
14"	3	28"	10	42"	17
16"	4	30"	11	44"	18
18"	5	32"	12	46"	19
20"	6	34"	13	48"	20
22"	7	36"	14	50"	21

Example: a 7,200-square-foot lot would need five tree credits ( $7,200/43,560 = 0.165 \times 30 = (4.9)$  or five). The density for the lot could be met with a 16-inch tree and one six-inch tree existing on-site.



**CODE ENFORCEMENT PENALTIES****Table 95.55.1 – Penalties**

Types of Violations	Allowable Fines per Violation
1. Removal of tree(s) approved to be removed, but prior to final tree plan approval or issuance of a City tree removal permit	\$100.00 per tree
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	\$1,000 per tree
3. Removal of tree(s) without applying for or obtaining a required City permit	\$1,000 per tree







## INCENTIVES AND VARIATIONS TO DEVELOPMENT STANDARDS

- 2) Incentives and Variations to Development Standards. In order to retain trees, the applicant should pursue provisions in Kirkland's codes that allow development standards to be modified. Examples include but are not limited to number of parking stalls, right-of-way improvements, lot size reduction under Chapter 22.28 KMC, lot line placement when subdividing property under KMC Title 22, Planned Unit Developments, and required landscaping, including buffers for lands use and parking/driving areas.

Requirements of the Kirkland Zoning Code may be modified by the Planning Official as outlined below when such modifications would further the purpose and intent of this chapter as set forth in KZC [95.05](#) and would involve Type 1 trees.

- a) Common Recreational Open Space. Reductions or variations of the area, width, or composition of required common recreational open space, may be granted.
  - b) Parking Areas and Access. Variations in parking lot design and/or access driveway requirements may be granted when the Public Works and Planning Officials both determine the variations to be consistent with the intent of City policies and codes.
  - c) Required Yards. Initially, the applicant shall pursue options for placement of required yards as permitted by other sections of this code, such as selecting one front required yard in the RSX zone and adjusting side yards in any zone to meet the 15-foot total as needed for each structure on the site. The Planning Official may also reduce the front or side required yards provided that:
    - i. No required side yard shall be less than five feet; and
    - ii. The required front yard shall not be reduced by more than five feet in residential zones. There shall not be an additional five feet of reduction beyond the allowance provided for covered entry porches.
  - d) Stormwater. Requirements pertaining to stormwater may be varied if approved by the Public Works Official under KMC 15.52.060.
- 3) Additional Variations. In addition to the variations described above, the Planning Official is authorized to require site plan alterations to retain Type 1 trees. Such alterations include minor adjustments to the location of building footprints, adjustments to the location of driveways and access ways, or adjustment to the location of walkways, easements or utilities. The Planning Official and the applicant shall work in good faith to find reasonable solutions.



If it is determined that the electronic readerboard constitutes a traffic hazard for any reason, the Planning Director may impose additional conditions.

## Chapter 95 – Tree Management and Required Landscaping

95.10

### Definitions

The following definitions shall apply throughout this chapter unless the context clearly indicates otherwise. Definitions that apply throughout this code are also located in Chapter 5 KZC.

Caliper – Limit of Disturbance (no change)

Qualified Professional – An individual with relevant education and training in arboriculture or urban forestry. The individual must be an arborist certified by the International Society of Arboriculture (ISA) or a registered consulting arborist from the American Society of Consulting Arborists and for Forest Management Plans may be a certified forester by the Society of American Foresters. A qualified professional must possess the ability to perform tree risk assessments and prescribe appropriate measures necessary for the preservation of trees during land development. In addition, arborists making recommendations for tree removals within critical areas must have Tree Risk Assessor certification as established by the Pacific Northwest Chapter of the ISA or equivalent qualifications. For Forest Management Plans, the qualified professional must have the ability to assess wooded sites and prescribe measures for forest health and safety.

Significant Tree – Windfirm (no change)

95.35.2.b Tree Plan and Retention Requirements. (no change)

1) Tree Plan I. Tree Plan I is required for a development permit or land surface modification resulting in site disturbance for one or two attached, detached, or stacked dwelling units.

a) (no change)

b) Tree Plan Requirements. The tree plan shall include the following:  
i.-v. (no change)

vi. For Tree Plan I – Major, assessment a report by a qualified professional that contains findings, conclusions and recommendations shall be required if any significant trees are in required yards or within 10 feet of any side property line on the subject property.

c), d), e) (no change)

2)-5) (no change)

95.35.3.c With respect to Level IV and Level V Tree Plans, an applicant may appeal an adverse determination to the Hearing Examiner. A written notice of appeal shall be filed with the Planning Department within 14 calendar days following the ~~postmark~~ date of distribution of a Planning Official's decision. The office

of the Hearing Examiner shall give notice of the hearing to the applicant at least 17 calendar days prior to the hearing. The applicant shall have the burden of proving that the Planning Official made an incorrect decision. Based on the Hearing Examiner's findings and conclusions, he or she may affirm, reverse or modify the decision being appealed.

## **Chapter 100 – Signs**

### 100.55

#### Development Containing Uses in More Than One Sign Category

If the subject property contains a mix of commercial and residential uses, the residential uses must comply with Sign Category A and the commercial uses must comply with the sign category assigned to the commercial uses that predominate on the subject property. Within mixed use projects, residential uses may have electrical signs (except on designated corridors) only if the electrical signs are attached to areas of the building associated with the commercial uses.

In all other cases, if the subject property contains uses assigned to different sign categories, the signs for the entire development must comply with the sign category assigned to the uses that predominate on the subject property.

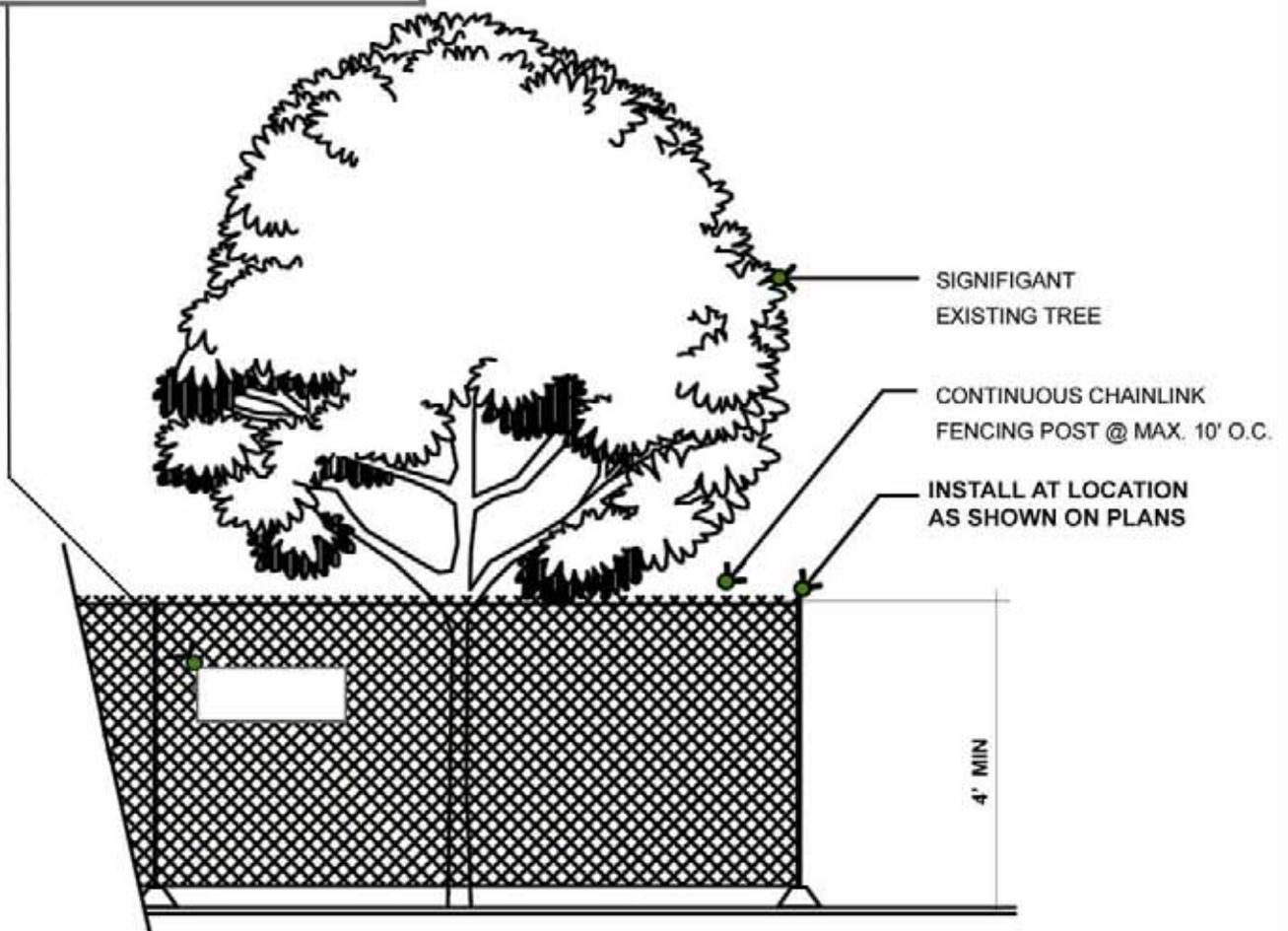
## **Chapter 115 – Miscellaneous Use Development and Performance Standards**

### Sections:

- 115.05 User Guide
- 115.07 Accessory Dwelling Units
- 115.08 Accessory Structure (Detached Dwelling Unit Uses Only)
- 115.10 Accessory Uses, Facilities and Activities
- 115.15 Air Quality Regulations
- 115.20 Animals in Residential Zones
- 115.23 Common Recreational Space Requirements for Certain Residential Uses
- 115.25 Development Activities and Heavy Equipment Operation – Limitations On
- 115.30 Distance Between Structures/Adjacency to Institutional Use
- 115.35 Erosion and Sedimentation Regulation
- 115.40 Fences
- 115.42 Floor Area Ratio (F.A.R.) Calculation for Detached Dwelling Units in Low Density Residential Zones
- 115.43 Garage Requirements for Detached Dwelling Units in Low Density Zones
- 115.45 Garbage and Recycling Receptacles and Enclosures – Storage space, Placement and Screening
- 115.47 Loading and Service Areas Placement and Screening
- 115.50 Glare Regulation
- 115.55 Heat Regulation
- 115.59 Height Regulations – Calculating Average Building Elevation (ABE)
- 115.60 Height Regulations – Exceptions
- 115.65 Home Occupations
- 115.70 Junk and Junk Yards Prohibited

## FENCING SIGN DETAIL

Tree Protection Area, Entrance Prohibited  
To report violations contact  
City Code Enforcement  
at (425)587-3225



1. MINIMUM FOUR (4) FOOT HIGH TEMPORARY CHAINLINK FENCE SHALL BE PLACED AT THE CRITICAL ROOT ZONE OR DESIGNATED LIMIT OF DISTURBANCE OF THE TREE TO BE SAVED. FENCE SHALL COMPLETELY ENCIRCLE TREE (S). INSTALL FENCE POSTS USING PIER BLOCK ONLY. AVOID POST OR STAKES INTO MAJOR ROOTS. MODIFICATIONS TO FENCING MATERIAL AND LOCATION MUST BE APPROVED BY PLANNING OFFICIAL.
2. TREATMENT OF ROOTS EXPOSED DURING CONSTRUCTION: FOR ROOTS OVER ONE (1) INCH DIAMETER DAMAGED DURING CONSTRUCTION, MAKE A CLEAN STRAIGHT CUT TO REMOVE DAMAGED PORTION OF ROOT. ALL EXPOSED ROOTS SHALL BE TEMPORARILY COVERED WITH DAMP BURLAP TO PREVENT DRYING, AND COVERED WITH SOIL AS SOON AS POSSIBLE.
3. NO STOCKPILING OF MATERIALS, VEHICULAR TRAFFIC, OR STORAGE OF EQUIPMENT OR MACHINERY SHALL BE ALLOWED WITHIN THE LIMIT OF THE FENCING. FENCING SHALL NOT BE MOVED OR REMOVED UNLESS APPROVED BY THE CITY PLANNING OFFICIAL. WORK WITHIN PROTECTION FENCE SHALL BE DONE MANUALLY UNDER THE SUPERVISION OF THE ON-SITE ARBORIST AND WITH PRIOR APPROVAL BY THE CITY PLANNING OFFICIAL.
4. FENCING SIGNAGE AS DETAILED ABOVE MUST BE POSTED EVERY FIFTEEN (15) FEET ALONG THE FENCE.



## TREE PROTECTION FENCING DETAIL

# **TREE PROTECTION AREA**

**Entrance Prohibited**

**To report violations contact**

**City Code Enforcement**

**At (425) 587-3225**

**TREE REGULATION UPDATE  
DRAFT WORK PROGRAM  
MAY 14, 2009**

<b>DATE</b>	<b>ITEM</b>
May 14, 2009	Planning Commission Study Session - Scope and Work Program
June 11, 2009	Planning Commission Study Session – Key Issues
June 22, 2009	Houghton Community Council Study Session – Key Issues
June 23 – 30, 2009	Meetings with Stakeholders & Internet based Questionnaire
August 13, 2009	Planning Commission Study Session – Draft Amendments
August 24, 2009	Houghton Community Council Study Session – Draft Amendments
September 2009	SEPA Review and Determination
September 24, 2009	Planning Commission Study Session – Draft Amendments
September 28, 2009	Houghton Community Council Study Session – Draft Amendments
October 2009	Notice to CTED (at least 60 days prior to City action)
October 2009	Houghton Community Public Hearing
October 2009	Planning Commission Public Hearing
November 2009	City Council Study Session
December 2009	City Council Action





**CITY OF KIRKLAND**  
**Department of Parks & Community Services**  
**505 Market Street, Suite A, Kirkland, WA 98033 425.561.1111**  
**www.ci.kirkland.wa.us**

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## MEMORANDUM

**To:** City Council

**From:** Park Board

**Date:** May 19, 2008

**Subject:** Tree Regulations on Private Lands

The purpose of this memorandum is to respond to the City Council's request for the Park Board to submit written comments regarding the Park Board's concerns with the City's Tree Regulations.

### BACKGROUND:

At the February 19, 2008 City Council meeting, staff presented the 20-Year Forest Restoration Plan for approval. As you know, the goal of the Green Kirkland Partnership is to restore the 372 acres of natural areas to a sustainable condition and to create an aware and energized community in which individuals, neighborhoods, nonprofit organizations, businesses and City government are working together to protect and maintain Kirkland's natural areas.

There are three main goals that summarize the program:

- Restore Kirkland's natural areas by the removal of invasive plants and the planting of native species for the sustainability of the urban forests, wetlands and their associated habitats.
- Build the community's capacity for long-term stewardship of the natural areas through increased public awareness of and engagement in protecting, restoring and helping to maintain healthy urban forests and wetlands.
- Establish resources to sustain the forest restoration program long-term.

As part of the staff presentation Colleen Cullen, Chair of the Park Board, expressed the Board's appreciation for the plan's aggressive goals to restore the publicly- owned natural forested areas. Ms. Cullen also expressed the Board's concern that Kirkland as a community needs to do more on private land to ensure tree retention and to increase the overall tree canopy. It should be noted that over 90% of the City's net acreage is in private ownership.

The City's stated goal is to achieve an overall tree canopy coverage of 40 percent for the community. However, there are areas within the tree regulations that allows for the removal of trees without requiring a tree planting plan to replace a percentage of the total canopy lost from the trees removed. The Park Board recommends that the tree ordinance be improved to include attractive incentives for property owners to retain and, where appropriate, add trees to their property. For example, a credit applied toward assessed surface water fees could be provided to property owners who plant a certain number of new trees, in recognition of the value trees provide in reducing the need for expensive infrastructure to manage surface water runoff. The Board also would like to emphasize the need for better City enforcement of tree regulations so that the trees which the community works so hard to protect are, in fact, protected long after new development projects have been completed.

Tree Regulations on Private Lands  
May 19, 2008  
Page 2 of 2

The City is setting a good example with its commitment to Tree City USA and its funding of programs to restore our urban forests and to plant trees within the public rights-of-way. The combined efforts of planting on public land and improving the tree regulations to retain and increase the planting of trees on private property will significantly support the City's goal to achieve an overall tree canopy coverage of 40 percent for the community.

From: j.keeney@comcast.net [<mailto:j.keeney@comcast.net>]  
Sent: Saturday, June 14, 2008 9:03 PM  
To: City Council  
Subject: item of concern

Dear Council Members,

Have you seen the Green's Funeral Home property in the last two weeks? What a sad and shocking site. I was stunned to see the number of mature evergreens that were cut down there just two and a half weeks ago. Since I'm a member of the Eastside Audubon Society and we have our office and meetings at the Unitarian Church, I've been well aware of the changes and plans for the Green property. However, since Kirkland is a Tree City, concerned with its tree canopy, I was horrified to see the extent of the tree demolition on the site. Some of those trees must have been one hundred years old judging by their diameters. Surely some guidelines had to have been overlooked to have wrecked such devastation on what had been a beautiful piece of property. Who is responsible and what reparations can ever be made to make up for this monumental mistake? And what can I do as a caring citizen of Kirkland to make sure my voice is heard BEFORE such acts occur in the future?

Most sincerely,

Jill M. Keeney