



CITY OF KIRKLAND

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MEMORANDUM

To: Planning Commission

From: Deb Powers, Urban Forester
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Date: September 21, 2018

Subject: Draft Code Amendments with Moderate/Major Policy Level Implications,
Kirkland Zoning Code Chapter 95, Tree Management and Required
Landscaping, File Number CAM18-00408

Staff Recommendation

The Planning Commission should review the issues associated with the more complex and controversial amendments to Kirkland Zoning Code Chapter 95 (KZC 95) in order to direct staff on the best approach to revising the City's tree code.

Background

Balancing growth and development while maintaining a [livable community](#) is a primary reason to establish codes for tree protection. Following the policy direction established in the Comprehensive Plan, the citywide tree code, KZC 95 (Attachment 1) establishes a permit process and standards for the protection and replacement of trees primarily on private property. The regulations address tree management in three basic categories: tree removal where no development is involved; tree retention associated with development activity; and required landscaping, typically associated with commercial and multifamily development. Attachment 2 summarizes Kirkland's tree code.

Regularly-occurring code updates allow an opportunity to review code effectiveness, ensure codes remain relevant, are consistent with best available science and align with the community's vision. Recognizing that KZC 95 was last updated in 2010 (with the exception of minor code amendments), an update to the city-wide tree code was included in the 2018-20 Planning Work Program, described as:

The City's tree canopy continues to be a primary place-making feature of Kirkland, but concern has been expressed that certain development processes do not allow for holistic consideration of tree protection at an early stage in the site/project review process. This task will evaluate whether an Integrated Review process (during which site subdivision, grading, infrastructure, and development are reviewed together) would be appropriate

for projects throughout the City in order to better protect the City's tree canopy while providing more certainty for the development community. Other amendments to the tree regulations will also be undertaken.

As a foundation to the code update project, a brief history and description of how the code works was outlined in the [June 28, 2018 memo](#) to the Planning Commission. While reviewing a preliminary scope of work at the July 12, 2018 Planning Commission meeting, staff was directed to present proposed code amendments in manageable segments over the course of multiple study sessions due to the complexity and volume of potential code amendments.

In response, staff presented draft tree code amendments with no/minor policy level changes at the [September 13, 2018](#) Planning Commission meeting. "Policy level" changes are designated according to the scope and impact of code modifications:

No/none - amendments that do not change the meaning of the code. They clarify/simplify or further define something already in the code, address redundancies, address typos or result in simple reformatting or removal of outdated references.

Minor - amendments resulting from updates to Best Available Science, Best Management Practices, industry standards, etc. that do not result in changes to code intent or an increase in requirements.

Moderate - relatively uncontroversial restructuring of code sections, and any of the above that result in new, increased or eliminated requirements.

Major - amendments that change the intent of the code, add a substantial prohibition/ban on something currently allowed or add substantial new requirements. This category includes amendments resulting in significant changes to existing procedures or significant additional cost to permit applicants.

The Planning Commission confirmed that the general direction and proposed text of the no/minor level code amendments outlined in the [September 13, 2018 memo](#) was appropriate, with the caveat that the minor code amendments may need to be adjusted based on feedback received later in the code amendment process.

There is also a likelihood that additional potential code amendments may be warranted as new information becomes known, such as the final canopy cover analysis and as public comments and stakeholder feedback are synthesized. A modest number of additional code amendments are expected to be identified at subsequent public meetings. If necessary, the Planning Commission may direct staff to adjust the project scope/schedule, allowing more time to study new information in greater detail or to consider related issues such as tree code enforcement.

Analysis

Attachment 3 is a consolidated list of potential code amendments comprising:

- Recommendations from Planning and Building Department staff
- Holmes Point Overlay code revisions for consideration on a city-wide basis
- Planning intern findings presented in the [August 9, 2018 Planning Commission memo](#) warranting potential code changes
- Changes to urban forestry Best Management Practices and industry standards
- Planning Commission/Houghton Community Council-suggested code changes or issues that were raised in recent meetings that may warrant code changes
- Other public feedback

The moderate-major level code amendments shown in Attachment 3 have been numbered and highlighted in yellow. To avoid page-flipping, a brief description of the issues, implications and any alternatives or options for each potential code change are outlined in the same numerical order below as in Attachment 3. Code issues with alternatives that have not been resolved or reviewed by staff are marked. Where a potential code update is shown as a strikeout, it has been addressed under a previous or separate code amendment. Staff realized that **2 potential code amendments (#50, 51)**, are incorrectly shown within the moderate/major code amendment list. They will remain in their current numerical order to avoid confusion until the next opportunity to revise Attachment 3 occurs.

Potential KZC 95 Moderate-Major Code Amendments

38. Consider adding code language to prevent tree girdling
Issue: The practice of tree trunk girdling causes trees to die and has been known to occur prior to development permit submittal to avoid meeting tree code requirements. When the girdled trees on site are assessed as part of the development review, they will be deemed hazardous and must be approved for removal regardless of their original retention value. By the time development permits are approved and issued, all trees that have been pre-selected for removal by the developer can be removed at once.
Implication: If the development is delayed, dead/declining trees are likely to fail, potentially causing injury or damage to property. Girdling trees eliminates any consideration of preserving the trees most worthy of retention on a development site.
Alternatives: Add definition, refer to industry standards that consider girdling as an unacceptable technique for tree removal, prohibit its practice and define as tree removal (similar to "topping") with same enforcement consequences. Update tree code enforcement in Kirkland Municipal Code Title 1.12.100 (see City Council June 19, 2018 memo). Disallow development permit submittal following girdled tree removal. Clarify code language for "development activity" that precludes tree removal. Update City documents/forms. Conduct public education.
39. Clarify IDP modification (previously addressed with Minor Code Amendment #34)
40. Should tree density credits or "points" for existing trees be limited to a lower threshold? [summary]
Issue: Kirkland's system for counting existing trees on a development site awards points, or credits, for trees up to and over 50" DBH. Under this point system, an applicant can achieve the minimum required credits by retaining a single large tree, regardless of its condition.

Implication: Meeting the current minimum tree density credits by retaining fewer trees results in reduced future canopy cover. The tree density credit system emphasizes a quantitative approach to tree retention rather than a qualitative approach.
Alternatives: Redefine, adjust and simplify the tree point system. See other cities' tree codes for guidance on thresholds for tree density credits. Address issues with tree removal replacements where no development is involved to further slow the loss of canopy.

41. Clarify intent of buffer
Issue: Unclear – 2013 email request not on file. Most likely was addressed by a previous code amendment.

42. Add authority to require a tree to be removed based on species (per Karen Story regarding invasive species)
Issue: Already addressed to the maximum extent possible by code update and with the Prohibited Plant List

43. Clarify section and update to reflect current green building standards [summary].
Issue: 95.25 rarely used to incentivize sustainable site development
Alternatives: Possibly combine with 95.35 for greater clarity. Add LEED, Green Building Design, etc. Reference LID (Low Impact Development) codes, features and processes.

44. Prevent required trees from being planted in locations that will eventually block sidewalks (per Public Works)
Issue: Trees/vegetation required to be planted with development grow to obstruct right-of-way sight-lines and clearances
Implication: May become a risk to public safety. Inappropriate locations for required trees on private property was an intern study finding.
Alternatives: Prevent issue with a code update to specify preferred tree locations. Add tree location check to final inspection procedures on development sites. Address with public outreach, being careful to avoid confusion with the message encouraging tree planting on private property. Address existing blocking issues with Public Works standard operating procedures.

45. Revise tree protection fence requirements
Issue: Tree protection fence is moved during construction
Implication: Results in damage to trees previously approved for retention, sometimes severely enough to warrant tree removal
Alternatives: Update code to reflect change in materials/installation so that fence is immovable (no pier block). Update tree protection signs for greater effectiveness, codify. Update Pre-Approved Standards for tree protection fence standards. Change on-site tree fence inspection procedures during development activities. Update tree code enforcement in Kirkland Municipal Code Title 1.12.100 (see City Council June 19, 2018 memo).

46. Codify revised tree protection signage (per proposed HPO code amendments)
Issue: see #45
47. Add International Society of Arboriculture (ISA) Municipal Specialist Certification (MSC) to "qualified professional" credentials
Issue: Add the MSC credential to "qualified professional" list as a requirement for individuals submitting arborist reports.
Implication: Code reflects current industry standards
Alternatives: Update code and revise tree removal forms
48. Define 'hazard' tree consistent with Tree Risk Assessor Qualification (TRAQ) standards/course of action
Issue: Industry standard update
Implication: TRAQ, or tree risk assessor training and certification (formerly known as TRACE) has been updated to clearly define a course of action for trees with varying levels of risk associated with failure. Other cities have incorporated the model into code. Code clarification will further limit subjectivity in assessing trees for removal or retention.
Alternatives: Codify (specific code formatting still under discussion) TRAQ standards. Revise tree removal forms.
49. Add 'including aftercare' language
Issue: Trees impacted from construction
Implication: Trees' chances of long-term survival can be increased with specific measures taken following construction activity.
Alternatives: Codify specific aftercare measures to allow the option to require aftercare as a condition of permit approval. Change final inspection procedures. Specify in 5-year Maintenance Agreement. Incentivize with free tools such as Gator Bags. Conduct public education.
50. On emergency tree removal: complete first sentence with "...without previously obtaining a permit."
Issue: Revise for clarity and to address prior code interpretation issues
Implication: none; this is a minor code update
51. Refer to KMC 1.12. Add "within reason" and "allows" language. Define "minor pruning." Add that it's acceptable for property owners to perform minor pruning of right-of-way trees adjacent to their property.
Issue: Revise for clarity, consult with Legal on appropriate public tree terminology
Implication: none; this is a minor code update

52. Replace “10 feet apart” with “20 feet” or use street tree list for small-medium trees
Issue: Landscaping and buffer requirements for commercial/multifamily properties may result in overly-dense tree plantings over time, sometimes affecting tree health and longevity. However, the screening function achieved by trees needs to be attained quickly.
Implication: No code change needed. Planners report the 2 issues usually are kept in balance with low levels of tree removal requests for these land use zones.
53. Revise the tree removal allowance so it’s equitable across varying lot sizes
Issue: The one standard for tree removal allowances is appropriate for average-sized lots but may not be equitable on larger and/or heavily-wooded properties.
Implication: Issue raised with the HPO code revisions, from public comments and by the Planning Commission.
Alternatives: Still under discussion/pending canopy data. A certain number of tree removals will likely be granted on a graduating basis depending on lot size as with other cities’ tree codes.
54. Address newly-planted tree mortality; require gator bags/irrigation?
Issue: See #49
55. Address overuse of arborvitae [tree species]
Issue: Planning intern findings revealed an excessive use of arborvitae on lots resulting from shortplats and subdivisions to meet tree density credits
Implication: Any plant material with high mortality and slow/limited growth rates, when used exclusively or in excess on developed properties, does not meet the intent of the code
Alternatives: Still under discussion. Limit the number of points/tree credits awarded for arborvitae?
56. Address tree removals prior to development permit submittal to intentionally avoid meeting tree retention requirements
Issue: Planning Intern findings revealed tree removal allowances were used fairly often immediately prior to development permit submittal
Implication: Eliminates consideration of preserving trees most worthy of retention on a development site. Raises equity issues with code application. Contradicts intent of the code.
Alternatives: Revise and clarify tree retention requirements to prevent the “unintended consequences” of applicants avoiding code compliance. Update tree code enforcement in Kirkland Municipal Code Title 1.12.100 (see City Council June 19, 2018 memo). Disallow development permit submittal for a designated period of time following tree removal, similar to other cities. Define “development activity” code language to include pre-submittal meetings. Update City documents/forms. Conduct public education.

57. Specify appropriate locations for trees required to be retained
Issue: Planning intern findings revealed a prevalence of new required trees planted in inappropriate locations such as against fences, at sidewalk edges and under eaves.
Implication: Likelihood that required trees become undesirable, a nuisance or hazard, or reduce normal life expectancy, which is not the intent of the tree code.
Alternatives: Specify preferred tree locations and distances from landscape features/hardscapes in code. If resources allow, add checking appropriate tree locations to final inspection procedures on development sites. Conduct public outreach.
58. Add language in 2nd paragraph to address girdling trees prior to development application submittal
Alternatives: Update code, see #38 and #56
59. Add 'intent to develop' language/timeline to prevent tree removal/damage prior to development permit submittal
Alternatives: Consult with Legal. May update code per #38 and #56
60. Streamline tree retention/replanting requirements for greater clarity, address intern findings and any changes in tree canopy cover
Issue: Confusion/misinterpretation of tree retention requirements
Implication: Unclear regulations result in code violations and avoidance of meeting requirements
Alternatives: Still under discussion. Approaches include developing separate credit requirements/thresholds for existing tree retention and supplemental trees. Another would be to simplify the code by clearly defining trees worthy of retention and requiring their preservation on development sites, without numerical thresholds, which would address intern findings of low percentages of mature tree preservation. Another is to show tree density credits by tree size ranges similar to other city's tree codes. Can further incentivize mature tree retention value by capping credits (#40).
61. Update and clarify the code section on payment in lieu of planting new trees
Issue: Clarify and revise the unit cost methodology to be consistent with the methodology used to determine penalty fines proposed in Kirkland Municipal Code Title 1.12.100 for tree code enforcement. Capitalize 'City Forestry Account'
Implication: Update code with approval of KMC 1.12.100 using industry standards and consistent methodology based on tree trunk size
62. Add language regarding tree retention and Low Impact Development (LID) features in parking lots. LID addresses stormwater runoff using natural features such as bio-retention swales rather than engineered systems (vaults)
Issue: Tree code may not be consistent with Public Works standards/Surface Water codes

Implication: none; would be updated according to stormwater Best Management Practices (BMPs)/industry standards

63. Update code language on tree grove maintenance and preservation if needed

Issue: Code interpretation issues with grove easement requirements as they apply to different development scenarios

Implication: Code clarification needed to ensure fair, equitable and consistent code protection of tree groves, including grove designation on sites undergoing a remodel/additions

Alternatives: Still under discussion

64. Add Heritage/Landmark tree definition

Issue: Relatively low percentage of mature trees/trees of merit are preserved on development sites compared to new trees required to be planted

Implication: Intern findings show approximately 10% of all trees required to be retained on 2008-2013 development project sites are large trees (over 22" trunk diameter), which maximize current and future benefits. The notably good condition of retained mature trees indicates that "typing" and requiring the preservation of High Retention Value Trees is an important contributor to a healthy, sustainable urban forest. Because the same findings show new tree planting requirements have been very effective, it may be important to revise the code to focus efforts on retaining mature trees/trees of merit.

Alternatives: Still under discussion. One approach is to simplify the code by eliminating the Low and Moderate Tree Retention Value definitions, and clearly define, prioritize and protect trees worthy of retention on development sites without numerical thresholds. Note: City Attorney Office firmly asserts that trees of merit/those worthy of retention should not be defined in a manner that limits the development potential of a property or risks the potential for constitutional takings challenges. The City can support tree preservation on private property by creating a template for Voluntary Tree Conservation Easements. The City can support a citizen-led Heritage Tree Program similar to the City of Seattle-PlantAmnesty model and conduct public education on the benefits of trees.

65. Include Landscape Architects in the design review process

Issue: Greater assurance that tree canopy cover goals are achieved over time and that new tree planting locations are appropriate

Implication: Would increase permit applicants' cost for development review significantly. There is no uniform standard for canopy cover or tree growth projections in the Landscape Architect industry; the requirement would be just as subjective as requiring the same information of consulting arborists. Appropriate tree planting locations are typically specified correctly on Tree Plans; unsuitable tree locations occur during landscape installation.

Alternatives: The City could continue to conduct canopy cover analyses on an 8-year cycle, adjusting tree code requirements to reflect changes in canopy cover. See #44 and #57 for alternatives that address poorly-located new trees.

66. Address poorly located required tree plantings

Issue: same as #44 and #57

67. Possibly regulate hedges

Issue: Planning intern findings revealed an excessive use of arborvitae on lots resulting from shortplats and subdivisions to meet tree density credits, and arborvitae continuously planted along property lines, creating hedges.

Implication: The City Council considered regulating hedges in May 2010, with the conclusion that defining hedges, the enforcement of potential hedge regulations, and the civil issues between adjacent property owners regarding hedges was too complicated and problematic.

Alternatives: Address overuse of arborvitae without regulating hedges per #55

68. Provide incentives for tree species diversity with new tree plantings

Issue: Ensure a healthy, resilient urban forest by developing tree planting requirements and programs that promote species diversity (age distribution and canopy status) objectives.

Implication: Climate change, the impact of pests and diseases, fragmentation of open spaces and the tendency towards planting trees in monocultures prevent species diversity, which lowers urban forest resiliency.

Alternatives: Tree species diversity with public trees can be achieved with City maintenance/management support (see [Kirkland Urban Forest Strategic Management Plan](#)). Requiring species diversity with new tree plantings on private property is problematic; discussions are still underway.

69. Is the Low Retention Value tree definition a loophole?

Issue: Perception that code allows an opportunity for unnecessary or unauthorized tree removal through the Low Retention Value Tree definition: "Low, a tree that is either (1) not viable or (2) *is in an area where removal is unavoidable due to the anticipated development activity.*"

Implication: The code defines and prioritizes High, Moderate and Low Retention Value trees. "Low" are trees in a condition that would not sustain the impacts of construction and/or are located within the building footprint of a proposed structure. These trees are not candidates for retention due to risk of legal takings challenges. See #64. The code loopholes identified in #38, 56, 58 and 59, previously suspected as loopholes on an anecdotal basis, are supported by the intern findings and will be addressed with the 2018 tree code revision.

Alternatives: Finding that mature High Retention Value trees have been successfully retained is justification for revising code requirements to focus retention efforts on those trees. See #60 and #64.

70. Should High Retention Value trees be protected only "to the maximum extent possible" or should the code be revised to require that they "shall be" retained?

Issue: provide greater authority for the City to require tree protection for those trees worthy of retention

Implication: this was a proposed HPO code revision which may be considered on a city-wide basis in combination with #60 and #64.
Alternatives: Still under discussion as a potential code amendment together with other code revisions

71. Address seemingly competing interests of tree canopy goals and alternative energy sources
Issue: Does tree shade present conflicts with solar energy enough to warrant code language?
Implication: Currently, solar energy regulations are addressed with the City's building code for safety issues and installation and operation standards.
Alternatives: Revise tree code in a preemptive measure to include rules that will address tree-solar energy conflicts. Minor code amendments can be made as solar energy issues arise if needed.

72. Consider how to increase mature tree retention
Issue: See #60, 64 and 70

73. Simplify the Tree Retention Plan design review process with shortplat and subdivision developments so that tree retention requirements are predictable and consistent; require Integrated Development Plans (IDPs) city-wide
Issue: shortplat and subdivision tree retention requirements are confusing and often lead to misinterpretation
Implication: Successful tree retention relies on decisions and protection measures determined early in the design stages of development. Unclear regulations result in code violations and avoidance of meeting requirements. The Integrated Development Plan review process is now required throughout the Holmes Point Overlay zone. The Houghton Community Council requests a simplified, predictable tree code with less subjective outcomes.
Alternatives: Rather than review tree removal and retention at separate development phases (clearing and grading, demolition, building permit, etc.) eliminate phased development review and require the Integrated Development Plan (IDP) review process city-wide.

74. Protect groves of trees in parking lots
Issue: by Houghton Community Councilmember request
Implication: Optimize benefits of trees in areas where the urban heat island effect and stormwater runoff are exacerbated by expanses of impervious surfaces
Alternatives: examine parking lot and buffer requirements for revision opportunities in the Required Landscaping for Multifamily/Commercial code section

75. Use a canopy cover-based methodology for retention/planting requirements instead of a point system (tree density credit) that's based on tree size

Issue: there is not a precise relationship between tree code requirements and tree canopy cover goals.
Implication: see the June 28, 2018 Planning Commission memo on canopy cover: what it is, how the data is collected, pros/cons of using canopy cover as a code requirement metric, etc. The City's IT-GIS staff explored creating a public-facing standardized map for more uniform canopy cover calculations but opted to devote any urban forestry mapping efforts towards citizen-science or heritage tree mapping (see #64).
Alternatives: although the Finn Hill Neighborhood Alliance (FHNA) strongly advocates for a canopy-based assessment of individual development sites, transition to a canopy-based approach would present significant challenges in terms of administration, cost to applicants, and other issues. See #60 and 64 for discussions on shifting focus to protecting trees of merit and eliminating the point system (tree density credits) for existing tree requirements. To assess progress towards canopy cover goals, the City will continue to conduct canopy cover analyses on an 8-year cycle, adjusting tree code requirements to reflect changes in canopy cover. Staff believes that assessing canopy on a City-wide scale is the best approach to ensuring a healthy urban forest, and that adjustments to the existing credit-focused system will ensure that the City-wide 40% canopy goal is achieved.

76. Address authorizing hazard/nuisance tree removal on private property where contagious pests/diseases may necessitate it for public safety
Issue: Potential infestation of pests such as Emerald Ash Borer can result in rapid catastrophic decline and death of trees, which may present a potential risk to public safety wherever dead trees target rights-of-way or high-frequency use parks.
Implication: City Legal suggests codifying the potential for authorization if needed
Alternatives: Still under discussion

77. Increase tree retention/replanting requirements city-wide
Issue: Suggested with HPO code revisions to ensure canopy cover goals are met
Implication: Consider changes to tree requirements as new data, such as the intern findings and canopy analysis data become known
Alternatives: May not be warranted if other code changes supersede (#40, 60 and 64)

Preliminary Kirkland Zoning Code Chapter 95 Draft Code

At this point in time, no draft code changes are provided. Staff will seek consensus from the Planning Commission and Houghton Community Council at the November 8 joint meeting on the general approach to the proposed moderate-major code amendments prior to drafting amendments to KZC 95.

Status on Public Outreach

Public outreach has been conducted per the project schedule (Attachment 4). The project [webpage](#) informs the public of the code update project, provides project updates through a listserv and describes options to submit comments. The City's Neighborhood Services Outreach Coordinator developed a workshop format for stakeholder meetings held during the week of September 17-21, 2018.

In early October, staff will be giving presentations at the City Hall for All event and the Kirkland Alliance of Neighborhoods (KAN) meeting to educate the public about the code update process and obtain additional public feedback. All public comments and feedback obtained through outreach meetings and events will be compiled, synthesized and presented in the November 8 joint Planning Commission-Houghton Community Council meeting with any potential draft code changes that were informed by public outreach.

Next Steps

The emphasis of this memo is to commence discussions on the more complex and controversial potential tree code amendments. As an efficiency measure, it was suggested by the Houghton Community Council at their August 27, 2018 meeting that a joint meeting with the Planning Commission take place so that both bodies could discuss and consider potential tree code amendments together. The intent of the joint meeting is to provide unified, clear direction to staff to draft moderate-major level tree code amendments. The joint Planning Commission-Houghton Community Council meeting is tentatively scheduled for November 8, 2018.

At the September 27 Planning Commission meeting, staff would appreciate feedback on the following:

- *Does the Planning Commission have additional KZC 95 or related issues that may warrant a code amendment, procedural change, incentive or public education?*
- *Is there any other information the Planning Commission needs to review future KZC 95 code amendments?*

The November 8 HCC-PC meeting will allow continued discussion of the code amendments, updates on public feedback and other factors influencing the code amendments, and another opportunity to provide direction on the code amendments prior to the Public Hearing scheduled for December 13, 2018.

Attachments:

1. Kirkland Zoning Code Chapter 95, Tree Management and Required Landscaping
2. Kirkland Tree Code Summary
3. Consolidated List of Tree Code Amendments
4. Project Schedule/Public Outreach

cc: File Number CAM18-00408

Chapter 95 – TREE MANAGEMENT AND REQUIRED LANDSCAPING

Sections:

95.05 Purpose and Intent

95.10 Definitions

95.20 Exemptions

1. Emergency Tree Removal
2. Utility Maintenance
3. Commercial Nurseries or Tree Farms

95.21 Tree Pruning

1. Tree Pruning of Street Trees
2. Tree Pruning on Private Property

95.23 Tree Removal – Not Associated with Development Activity

1. Introduction
2. Permit Required for Removal of Trees on Private Property or City Right-of-Way
3. Tree Removal Permit Application Form
4. Tree Removal Permit Application Procedures and Appeals
5. Tree Removal Allowances

95.25 Sustainable Site Development

95.30 Tree Retention Associated with Development Activity

1. Introduction
2. Tree Retention Plan Required
3. Tree Retention Plan Review
4. Tree Retention Plan Components
5. Tree Retention Plan
6. Additional Tree Retention Plan Standards for Short Plats and Subdivisions
 - a. Phased Review
 - b. Modifications to Tree Retention Plan for Short Plats and Subdivisions

95.32 Incentives and Variations to Development Standards

1. Common Recreational Open Space
2. Parking Areas and Access
3. Required Yards
4. Storm Water

5. Additional Variations

95.33 Tree Density Requirement

1. Tree Density Calculation
2. Supplemental Trees Planted to Meet Minimum Density Requirement
3. Tree Location
4. Minimum Size and Tree Density Value for Supplemental Trees

95.34 Tree and Soil Protection during Development Activity

1. Placing Materials near Trees
2. Protective Barrier
3. Grade
4. Directional Felling

5. Additional Requirements

95.40 Required Landscaping

1. User Guide
2. Use of Significant Existing Vegetation
3. Landscape Plan Required

95.41 Supplemental Plantings

1. General
2. Standards

95.42 Minimum Land Use Buffer Requirements

95.43 Outdoor Use, Activity, and Storage

95.44 Internal Parking Lot Landscaping Requirements

95.45 Perimeter Landscape Buffering for Driving and Parking Areas

1. Perimeter Buffering – General
2. Exception
3. Design Districts
4. Overlapping Requirements

95.46 Modifications to Landscaping Standards

1. Modification to Land Use Buffer Requirements
2. Modifications to General Landscaping Requirements

95.47 Nonconforming Landscaping and Buffers

95.50 Installation Standards for Required Plantings

1. Compliance
2. Timing

3. Grading
4. Soil Specifications
5. Plant Selection
6. Fertilization
7. Irrigation
8. Drainage
9. Mulch
10. Protection

95.51 Tree and Landscape Maintenance Requirements

1. Responsibility for Regular Maintenance
2. Maintenance Duration
3. Maintenance of Preserved Grove
4. Maintenance in Holmes Point Overlay Zone
5. Nonnative Invasive and Noxious Plants
6. Landscape Plans and Utility Plans

95.52 Prohibited Vegetation

95.55 Enforcement and Penalties

95.57 City Forestry Account

1. Funding Sources
2. Funding Purposes

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. Comprehensive Plan Policy NE-3.1 describes working towards achieving a City-wide tree canopy coverage of 40 percent. 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, mitigating the urban heat island effect, assimilating carbon dioxide and generating oxygen, and decreasing the impacts of climate change;
- 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.

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.
- i. Preserve and protect street trees, trees in public parks and trees on other City property.

(Ord. 4238 § 2, 2010; Ord. 4010 § 2, 2005)

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.

- 1. Caliper – The American Association of Nurserymen standard for trunk measurement of nursery stock. Caliper of the trunk shall be the trunk diameter measured six (6) inches above the ground for up to and including 4-inch caliper size and 12 inches above the ground for larger sizes.
- 2. Critical Root Zone – The area surrounding a tree at a distance from the trunk, which is equal to one (1) foot for every inch of trunk diameter measured at 4.5 feet from grade or otherwise determined by a qualified professional (example: one (1) foot radius per one (1) inch DBH).
- 3. Crown – The area of a tree containing leaf- or needle-bearing branches.

4. Diameter at Breast Height (DBH) – The diameter or thickness of a tree trunk measured at 4.5 feet from the ground. DBH is also known as Diameter at Standard Height (DSH).
5. Dripline – The distance from the tree trunk, that is equal to the furthest extent of the tree's crown.
6. Grove – A group of three (3) or more significant trees with overlapping or touching crowns.
7. Hazard Tree – A tree that meets all the following criteria:
 - a. A tree with a combination of structural defects and/or disease which makes it subject to a high probability of failure;
 - b. Is in proximity to moderate to high frequency targets (persons or property that can be damaged by tree failure); and
 - c. The hazard condition of the tree cannot be lessened with reasonable and proper arboricultural practices nor can the target be removed.
8. Impact – A condition or activity that affects a part of a tree including the trunk, branches, and critical root zone.
9. Limit of Disturbance – The boundary between the protected area around a tree and the allowable site disturbance as determined by a qualified professional measured in feet from the trunk.
10. Nuisance Tree – A tree that meets either of the following criteria:
 - a. Is causing obvious physical damage to private or public structures, including but not limited to: sidewalk, curb, road, driveway, parking lot, building foundation, or roof; or
 - b. Has sustained damage from past maintenance practices.

The problems associated with the tree must be such that they cannot be corrected by reasonable practices including but not limited to: pruning of the crown or roots of the tree, bracing, and/or cabling to reconstruct a healthy crown.
11. Public Works Official – Designee of the Public Works Director.
12. Qualified Professional – An individual with relevant education and training in arboriculture or urban forestry, having two (2) or more of the following credentials:
 - International Society of Arboriculture (ISA) Certified Arborist;
 - Tree Risk Assessor Certification (TRACE) as established by the Pacific Northwest Chapter of ISA (or equivalent);
 - American Society of Consulting Arborists (ASCA) registered Consulting Arborist;
 - Society of American Foresters (SAF) Certified Forester for Forest Management Plans;

For tree retention associated with a development permit, a qualified professional must have, in addition to the above credentials, a minimum of three (3) years' experience working directly with the protection of trees during construction and have experience with the likelihood of tree survival after construction. A qualified professional must also be able to prescribe appropriate measures for the preservation of trees during land development.
13. Retention Value – The Planning Official's designation of a tree based on information provided by a qualified professional that is one (1) of the following:

a. High, a viable tree, located within required yards and/or required landscape areas. 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 pursuant to KZC 95.32:

- 1) Specimen trees;
- 2) Tree groves and associated vegetation that are to be set aside as preserved groves pursuant to KZC 95.51(3);
- 3) Trees on slopes of at least 10 percent; or
- 4) Trees that are a part of a grove that extends into adjacent property, such as in a public park, open space, critical 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;

b. Moderate, a viable tree that is to be retained if feasible; or

c. Low, a tree that is either (1) not viable or (2) is in an area where removal is unavoidable due to the anticipated development activity.

14. Significant Tree – A tree that is at least six (6) inches in diameter at breast height (DBH) as measured at 4.5 feet from the ground.

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

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

17. 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.

18. Street Tree – A tree located within the public right-of-way; provided, that if the trunk of the tree straddles the boundary line of the public right-of-way and the abutting property, it shall be considered to be on the abutting property and subject to the provisions of this chapter.

19. 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.

20. 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 windfirm if isolated or remains as part of a grove, and is a species that is suitable for its location.

21. Wildlife Snag – The remaining trunk of a tree that is intentionally reduced in height and usually stripped of its live branches.

22. Windfirm – A condition of a tree in which it withstands average peak local wind speeds and gusts.

(Ord. 4551 § 4, 2017; Ord. 4238 § 2, 2010; Ord. 4193 § 1, 2009; Ord. 4010 § 2, 2005)

95.20 Exemptions

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

1. **Emergency Tree Removal.** Any tree that poses an imminent threat to life or property may be removed. The City must be notified within seven (7) days of the emergency tree removal with evidence of the threat for removing the tree to be considered exempt from this chapter. If the Planning Official determines that the emergency tree removal was not warranted or if the removed tree was required by a development permit, the Planning Official may require that the party obtain a permit and/or require that replacement trees and vegetation be replanted as mitigation.
2. **Utility Maintenance.** Trees may be removed by the City or utility provider in situations involving interruption of services provided by a utility only if pruning cannot solve utility service problems. Utility maintenance shall conform to a City-approved Utility Vegetation Management Plan.
3. **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.

(Ord. 4238 § 2, 2010; Ord. 4010 § 2, 2005)

95.21 Tree Pruning

1. **Tree Pruning of Street Trees.** It is the responsibility of the abutting property owner to maintain street trees abutting their property, which may include pruning, watering, and mulching. In order to prune, trim, modify, or alter a street tree, the abutting property owner shall apply for a permit by filing a written application with the City. Pruning shall conform to the most recent version of the American National Standards Institute (ANSI) A300 Part 1 – 2001 pruning standards or as outlined in an approved Utility Vegetation Management Plan. The City reserves the right to have City or utility crews perform routine pruning and maintenance of street trees.
2. **Tree Pruning on Private Property.** A permit is not required to prune trees on private property. Pruning which results in the removal of at least half of the live crown will be considered tree removal and subject to the provisions in KZC 95.23.

Tree topping is not allowed. If a tree required by this chapter is smaller than six (6) inches in diameter and is topped, it must be replaced pursuant to the standards in Chapter 1.12 KMC. If a tree six (6) inches or larger in diameter is topped, the owner must have a qualified professional develop and implement a 5-year restoration pruning program.

(Ord. 4281 § 1, 2011; Ord. 4238 § 2, 2010)

95.23 Tree Removal – Not Associated with Development Activity

1. **Introduction.** Tree and vegetation removal in urban areas has resulted in the loss of beneficial functions provided by trees to the public. The majority of tree canopy within the City of Kirkland is on private property. The purpose of this section is to establish a process and standards to slow the loss of tree canopy on private property, contributing towards the City's canopy goals and a more sustainable urban forest.
2. **Permit Required for Removal of Trees on Private Property or City Right-of-Way.** It is unlawful for any person (other than City crews) to remove, prune, trim, modify, alter or damage a tree in a public park or on any other City property.

No person, directly or indirectly, shall remove any significant tree on any property within the City, or any tree in the public right-of-way, without first obtaining a tree removal permit as provided in this chapter, unless the activity is exempted in KZC 95.20 and subsection (5) of this section.
3. **Tree Removal Permit Application Form.** The Planning and Building Department and Public Works Department shall establish and maintain a tree removal permit application form to allow property owners to request City review of tree removal for compliance with applicable City regulations. The tree removal application form shall include at a minimum the following:
 - a. 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.

b. For required replacement trees, a planting plan showing location, size and species of the new trees in accordance to standards set forth in KZC 95.33(3).

4. Tree Removal Permit Application Procedure and Appeals.

a. Applicants requesting to remove trees must submit a completed permit application on a form provided by the City. The City shall review the application within 21 calendar days 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.

b. The decision of the Planning Official is appealable using the applicable appeal provisions of Chapter 145 KZC.

c. Time Limit. The removal shall be completed within one (1) year from the date of permit approval.

5. Tree Removal Allowances.

a. Except in the Holmes Point Overlay zone, any private property owner of developed property may remove up to two (2) significant trees from their property within a 12-month period without having to apply for a tree removal permit; provided, that:

- 1) There is no active application for development activity for the site;
- 2) The trees were not required to be retained or planted as a condition of previous development activity; and
- 3) All of the additional standards for tree removal and tree removal permits as described in subsections (5)(b) through (e) of this section are met.

The Planning and Building Department shall establish and maintain a tree removal request form. The form may be used by property owners to request Department review of tree removal for compliance with applicable City regulations.

b. Tree Retention and Replacement Requirements.

1) Tree Retention. For single-family homes, cottages, carriage units, two/three-unit homes, two (2) trees shall be required to remain on the subject property.

2) Tree Replacement.

a) For every significant tree that is removed and is not required to remain based on subsection (5)(b)(1) of this section, the City encourages the planting of a tree that is appropriate to the site.

b) If a tree removal request is for one (1) or both of the trees required to remain, a tree removal permit and one-for-one replacement is required. the replacement tree shall be six (6) feet tall for a conifer and 2-inch caliper for deciduous or broad-leaf evergreen tree.

c) For all other uses not listed in subsection (5)(b)(1) of this section, a tree removal permit is required and the required tree replacement will be based on the required landscaping standards in KZC 95.40 through 95.45.

c. Shoreline Jurisdiction. Properties located within the City's shoreline jurisdiction are subject to additional tree removal and replacement standards if the tree(s) to be removed are located within the required shoreline setback. See Chapter 83 KZC for additional standards.

d. **Removal of Hazard or Nuisance Trees.** Any private property owner seeking to remove any number of significant trees which are a hazard or nuisance from developed or undeveloped property or the public right-of-way shall first obtain approval of a tree removal permit and meet the requirements of this subsection.

1) **Tree Risk Assessment.** If the nuisance or hazard condition is not obvious, a tree risk assessment prepared by a qualified professional explaining how the tree(s) meet the definition of a nuisance or hazard tree is required. Removal of nuisance or hazard trees does not count toward the tree removal limit if the nuisance or hazard is supported by a report prepared by a qualified professional and approved by the City.

2) **Trees in Critical Areas or Critical Areas Buffers.** See Chapter 90 KZC.

3) **The removal of any tree in the Holmes Point Overlay Zone** requires the planting of a native tree of a minimum of six (6) feet in height in close proximity to where the removed tree was located. Selection of native species and timing of installation shall be approved by the Planning Official.

4) **Street Trees.** Street trees may only be removed if determined to be a hazard or nuisance. If the removal request is for street trees, the Public Works Official may consider whether the tree(s) are now, or may be in the future, part of the City's plans for the right-of-way. The City shall require a one-for-one tree replacement in a suitable location.

e. **Forest Management Plan.**

1) A Forest Management Plan must be submitted for developed, significantly wooded sites (over 40 percent canopy coverage) of at least 35,000 square feet in size in which removal of more than two (2) trees is requested and is not exempt under KZC 95.20. A Forest Management Plan must be developed by a qualified professional and shall include the following:

a) A site plan depicting the location of all significant trees (a survey identifying tree locations is not required) with a numbering system of the trees (with corresponding tags on trees in the field). The site 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 (5)(e)(2) of this section;

c) A reforestation plan that includes location, size, species, and timing of installation;

2) The following Forest Management Plan standards shall apply:

a) Trees to remain should be dominant or co-dominant in the stand, healthy and windfirm.

b) No removal of trees from critical areas and their buffers, unless otherwise permitted by this chapter.

c) No removal of specimen trees, unless otherwise permitted by this chapter.

d) No removal of healthy trees that would cause trees on adjacent properties to become hazardous.

e) The reforestation plan ensures perpetuity of the wooded areas. The size of planted trees for reforestation shall be a minimum of three (3) feet tall.

f) 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.

g) Removal of tree debris shall be done pursuant to Kirkland Fire Department standards.

- h) Recommended maintenance prescription for retained trees with a specific timeline for such management.

(Ord. 4551 § 4, 2017; Ord. 4491 § 3, 2015; Ord. 4437 § 1, 2014; Ord. 4408 § 1, 2013; Ord. 4372 § 1, 2012; Ord. 4238 § 2, 2010)

95.25 Sustainable Site Development

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.

Applicants requesting alternative compliance shall submit a site assessment report prepared by a qualified professional detailing how the proposed alternative measures will be equal or superior to the benefits provided by the established trees to be removed. Qualifying projects shall implement sustainable site development strategies throughout the construction process as well as contain measurable performance standards for the techniques used. Examples of sustainable site development include building placement with minimal site impact, habitat protection, water conservation, heat island reduction, storm water flow runoff control and water quality, and utilization of the site's natural services such as solar and wind. Requests to use alternative measures and procedures shall be reviewed by the Planning Official, who may approve, approve with conditions, or deny the request.

(Ord. 4238 § 2, 2010; Ord. 4010 § 2, 2005)

95.30 Tree Retention Associated with Development Activity

1. Introduction. 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. To that end, the City requires approval of a tree retention plan in conjunction with all development permits resulting in site disturbance and for any tree removal on developed sites not exempted by KZC 95.20. This section includes provisions that allow development standards to be modified in order to retain viable significant trees.

In order to make better decisions about tree retention, particularly during all stages of development, tree retention plans will require specific information about the existing trees before removal is allowed. Specific tree retention plan review standards provided in this section establish tree retention priorities, incentives, and variations to development standards in order to facilitate preservation of viable trees.

A minimum tree density approach is being used to retain as many viable trees as possible with new development activity. The requirement to meet a minimum tree density applies to new single-family homes, cottages, carriage units, two/three-unit homes, 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 entire site. Supplemental tree location priority is set as well as minimum size of supplemental trees to meet the required tree 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.

Properties within jurisdiction of the Shoreline Management Act are subject to additional tree retention and protection regulations as set forth in Chapter 83 KZC.

Properties within the Holmes Point Overlay zone are subject to additional tree retention and protection regulations as set forth in Chapter 70 KZC.

2. Tree Retention Plan Required. An applicant for a development permit must submit a tree retention plan that complies with this section. A qualified professional may be required to prepare certain components of a tree retention plan at the applicant's expense. If proposed development activities call for more than one (1) tree retention plan component, the more stringent tree retention plan component 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 the proposed activity is not clearly identified in this chapter, the Planning Official shall determine the appropriate tree retention plan requirements.

The chart in subsection (5) of this section sets forth the tree retention plan requirements for development activities and associated tree removal. 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. The Planning Official may waive a component of the tree retention plan if the Planning Official determines that the information is not necessary.

3. Tree Retention Plan Review. Any proposed development of the subject property requiring approval through a building permit, land surface modification permit, and/or demolition permit, or Design Review, Process I, IIA or IIB, described in Chapters 142, 145, 150 and 152 KZC respectively, shall include a tree retention plan to be considered as part of that process.

Based on the tree retention plan information submitted by the applicant and the Planning Official's evaluation of the trees relative to the proposed development on the subject property, the Planning Official shall designate each tree as having a high, moderate, or low retention value as defined in KZC 95.10, Definitions, for application towards the regulations in this chapter.

4. Tree Retention Plan Components. The tree retention plan shall contain the following information as specified in the chart in subsection (5) of this section, unless waived by the Planning Official:

a. A tree inventory containing the following:

- 1) A numbering system of all existing significant trees on the subject property (with corresponding tags on trees); the inventory must also include significant trees on adjacent property with driplines extending over the subject property line;
- 2) Limits of disturbance (LOD) of all existing significant trees (including approximate LOD of off-site trees with overhanging driplines);
- 3) Size (DBH);
- 4) Proposed tree status (trees to be removed or retained);
- 5) Brief general health or condition rating of these trees (i.e.: poor, fair, good, excellent, etc.);
- 6) Tree type or species.

b. A site plan depicting the following:

- 1) Location of all proposed improvements, including building footprint, access, utilities, applicable setbacks, buffers, and required landscaped areas clearly identified. If a short plat or subdivision is being proposed and the location of all proposed improvements cannot be established, a phased tree retention plan review is required as described in subsection (6)(a) of this section;
- 2) Accurate location of significant trees on the subject property (surveyed locations may be required). The site plan must also include the approximate trunk location and critical root zone of significant trees that are on adjacent property with driplines extending over the subject property line;
- 3) Trees labeled corresponding to the tree inventory numbering system;
- 4) Location of tree protection measures;

- 5) Indicate limits of disturbance drawn to scale around all trees potentially impacted by site disturbances resulting from grading, demolition, or construction activities (including approximate LOD of off-site trees with overhanging driplines);
- 6) Proposed tree status (trees to be removed or retained) noted by an 'X' or by ghosting out;
- 7) Proposed locations of any supplemental trees and any required trees in order to meet tree density or minimum number of trees as outlined in KZC 95.33.

c. An arborist report containing the following:

- 1) A complete description of each tree's health, condition, and viability;
- 2) A description of the method(s) used to determine the limits of disturbance (i.e., critical root zone, root plate diameter, or a case-by-case basis description for individual trees);
- 3) Any special instructions specifically outlining any work proposed within the limits of the disturbance protection area (i.e., hand-digging, tunneling, root pruning, any grade changes, clearing, monitoring, and aftercare);
- 4) For trees not viable for retention, a description of the reason(s) for removal based on poor health, high risk of failure due to structure, defects, unavoidable isolation (windfirmness), or unsuitability of species, etc., and for which no reasonable alternative action is possible must be given (pruning, cabling, etc.);
- 5) Describe the impact of necessary tree removal to the remaining trees, including those in a grove or on adjacent properties;
- 6) 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 KZC 95.34; and
- 7) The suggested location and species of supplemental trees to be used when required. The report shall include planting and maintenance specifications pursuant to KZC 95.50 and 95.51.

5. Tree Retention Plan. The applicant shall submit a Tree Retention Plan that includes the components identified in the following chart based on the proposed development activity.

TREE RETENTION PLAN

Development Activity	Minor ⁽¹⁾⁽³⁾ – Single-Family, or two attached, detached, or stacked dwelling units, and related demolition and land surface modification applications	Major ⁽²⁾⁽³⁾ Single-Family, or two attached, detached, or stacked dwelling units, and related demolition and land surface modification applications	Multifamily, Commercial, any other use other than residential, and related demolition and land surface modification applications	Short Plat, Subdivisions, cottages, carriage units, two/three-unit homes, and related demolition and land surface modification applications (see KZC 95.30(6)(a), Phased Review, for additional standards)
Required Components				
TREE INVENTORY AS DESCRIBED IN KZC 95.30(4)(a) FOR:				
All significant trees on the subject property		X	X	X
Significant trees potentially impacted by proposed development activity	X			
SITE PLAN AS DESCRIBED IN KZC 95.30(4)(b) TO INCLUDE:				
Surveyed tree locations if required by the Planning Official		X	X	

Development Activity	Minor ⁽¹⁾⁽³⁾ – Single-Family, or two attached, detached, or stacked dwelling units, and related demolition and land surface modification applications	Major ⁽²⁾⁽³⁾ Single-Family, or two attached, detached, or stacked dwelling units, and related demolition and land surface modification applications	Multifamily, Commercial, any other use other than residential, and related demolition and land surface modification applications	Short Plat, Subdivisions, cottages, carriage units, two/three-unit homes, and related demolition and land surface modification applications (see KZC 95.30(6)(a), Phased Review, for additional standards)
Required Components				
Surveyed tree locations				X
A final landscape plan showing retained trees			X	
REQUIREMENTS IN KZC 95.30(4)(c) SHALL BE PREPARED BY A QUALIFIED PROFESSIONAL AND APPLY TO:				
Significant trees within required yards or within 10 feet of any side property line		X		
Significant trees potentially impacted by proposed development activity as determined by the Planning Official			X	
Proposed removal of trees with a high retention value in required landscaping areas			X	
All significant trees				X
TREE RETENTION STANDARDS				
Applicant is encouraged to retain viable trees	X ⁽⁴⁾			
Retain and protect trees with a high retention value to the maximum extent possible		X ⁽⁴⁾	X ⁽⁴⁾	X ⁽⁴⁾
Retain and protect trees with a moderate retention value if feasible		X	X	X
Preservation and maintenance agreements pursuant to KZC 95.51 are required for all remaining trees on the subject property	X	X	X	X ⁽⁵⁾
TREE DENSITY				
Tree density requirements shall apply as required in KZC 95.33		X		X
A minimum of two trees must be on the lot following the requirement set forth in KZC 95.33(4)	X			
LANDSCAPING				
Preserved trees in required landscaping areas shall apply toward required landscaping requirements			X	

(1) Applicable when new development, redevelopment, or development in which the total square footage of the proposed improvements is less than 50 percent of the total square footage of the existing improvements on the subject property.

(2) Applicable when 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.

(3) For lots created through a short subdivision, subdivision, or planned unit development with an approved Tree Retention Plan, the applicant must comply with the Tree Retention

Plan approved with the short subdivision, subdivision, or planned unit development unless subsection (6)(a) of this section, Phased Review, applies.

(4) To retain trees with a high retention value, the applicant shall pursue, where feasible, applicable variations in the development standards of this code as outlined in KZC 95.32.

(5) Prior to short plat or subdivision recording.

6. Additional Tree Retention Plan Standards for Short Plats and Subdivisions.

a. Phased Review.

1) If during the short plat or subdivision review process the location of all proposed improvements, including the building footprint, utilities, and access, was not able to be established, the applicant may submit a Tree Retention Plan that addresses trees only affected by the known improvements at the time of application. Tree removal shall be limited to those affected areas.

2) A new Tree Retention Plan shall be required at each subsequent phase of the project as more information about the location of the proposed improvements is known subject to all of the requirements in this section.

3) Phased review of Tree Retention Plans is not permitted in the Holmes Point Overlay zone. In the HPO zone, subdivision or short plat applications shall provide a comprehensive review of Tree Retention Plans as outlined in subsections (2) through (5) of this section.

b. Modifications to Tree Retention Plan for Short Plats and Subdivisions. A Tree Retention Plan modification request shall contain information as determined by the Planning Official based on the requirements in subsection (5) of this section, Tree Retention Plan. The fee for processing a modification request shall be established by City ordinance.

For Tree Retention Plans approved during the short plat or subdivision review process that established the location of all proposed improvements, including the building footprint, utilities, and access, a modification to the Tree Retention Plan may be approved as follows:

1) Modification – General. The Planning Official may approve minor modifications to the approved Tree Retention Plan in which the minimum tree density credits associated with trees identified for retention are not decreased.

2) Modification Prior to Tree Removal. The Planning Official may approve a modification request to decrease the minimum number of tree density credits associated with trees previously identified for retention if:

a) Trees inventoried in the original Tree Retention Plan have not yet been removed; and

b) The Planning Official shall not approve or deny a modification pursuant to this section without first providing notice of the modification request consistent with the noticing requirements for the short plat.

3) Modification after Tree Removal. A modification request is required to decrease the minimum number of tree density credits associated with trees previously identified for retention after which trees inventoried in the original Tree Retention Plan have already been removed. Such a request may be approved by the Hearing Examiner only if the following are met:

a) The need for the modification was not known and could not reasonably have been known before the tree retention plan was approved;

- b) The modification is necessary because of special circumstances which are not the result of actions by the applicant regarding the size, shape, topography, or other physical limitations of the subject property relative to the location of proposed and/or existing improvements on or adjacent to the subject property;
- c) There is no practicable or feasible alternative development proposal that results in fewer additional tree removals;
- d) The Hearing Examiner shall not approve or deny a modification pursuant to this section without the Planning Official first providing notice of the modification request consistent with the noticing requirements for the short plat and providing opportunity for comments for consideration by the Hearing Examiner; and
- e) Said comment period shall not be less than 14 calendar days.

(Ord. 4619 § 1, 2017; Ord. 4437 § 1, 2014; Ord. 4252 § 1, 2010; Ord. 4238 § 2, 2010; Ord. 4010 § 2, 2005)

95.32 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 trees with a high or moderate retention value.

1. Common Recreational Open Space. Reductions or variations of the area, width, or composition of required common recreational open space may be granted.
2. 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.
3. 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 (1) 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, side or rear required yards; provided, that:
 - a. No required side yard shall be less than five (5) feet; and
 - b. The required front yard shall not be reduced by more than five (5) feet in residential zones. There shall not be an additional five (5) feet of reduction beyond the allowance provided for covered entry porches;
 - c. Rear yards that are not directly adjacent to another parcel's rear yard but that are adjacent to an access easement or tract may be reduced by five (5) feet;
 - d. No required yard shall be reduced by more than five (5) feet in residential zones.
4. Storm Water. Requirements pertaining to stormwater may be varied if approved by the Public Works Official under KMC 15.52.060.
5. Additional Variations. In addition to the variations described above, the Planning Official is authorized to require site plan alterations to retain trees with a high retention value. 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.

(Ord. 4547 § 1, 2016; Ord. 4350 § 1, 2012; Ord. 4238 § 2, 2010)

95.33 Tree Density Requirement

The required minimum tree density is 30 tree credits per acre for single-family homes, cottages, carriage units, two/three-unit homes, short plats, and/or subdivisions and associated demolition and land surface modification. For individual lots in a short subdivision or subdivision with an approved Tree Retention Plan, the tree density shall be calculated for each lot within the short plat or subdivision. The tree density may consist of existing trees pursuant to the tree's retention value, supplemental trees or a combination of existing and supplemental trees pursuant to subsection (2) 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.

1. **Tree Density Calculation.** In calculating tree density credits, tree credits may be rounded up to the next whole number from a 0.5 or greater value. For the purpose of calculating required minimum tree density, public right-of-way, areas to be dedicated as public right-of-way, and vehicular access easements not included as lot area with the approved short plat shall be excluded from the area used for calculation of tree density.

Tree density calculation for existing individual trees:

- a. Diameter breast height (DBH) of the tree shall be measured in inches.
- b. The tree credit value that corresponds with DBH shall be found in Table 95.33.1. Existing native conifers (or other conifer species as approved by the Urban Forester) shall count 1.5 times credits for retention.

Table 95.33.1

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 (5) tree credits ($7,200/43,560 = 0.165 \times 30 = (4.9)$ or five (5)). The tree density for the lot could be met by retaining one (1) existing 16-inch deciduous tree and one (1) existing 6-inch deciduous tree on site. The same 7,200-square-foot lot would meet the required five (5) tree credits by retaining one (1) existing 14-inch conifer.

2. **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.
3. **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:
 - 1) In preserved groves, critical areas or their buffers.
 - 2) Adjacent to storm water facilities as approved by Public Works under KMC 15.52.060.
 - 3) Entrance landscaping, traffic islands and other common areas in residential subdivisions.
 - 4) Site perimeter – The area of the subject property that is within 10 feet from the property line.
 - 5) 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.
4. **Minimum Size and Tree Density Value for Supplemental Trees.** The required minimum size of the supplemental tree worth one (1) tree credit shall be six (6) feet tall for Thuja/Arborvitae or four (4) feet tall for native or other conifers and 2-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 95.50 and 95.51 respectively.

(Ord. 4547 § 1, 2016; Ord. 4238 § 2, 2010)

95.34 Tree and Soil Protection during Development Activity

Prior to development activity or initiating tree removal on the site, vegetated areas, individual trees and soil to be preserved shall be protected from potentially damaging activities pursuant to the following standards:

1. **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 stockpiling any materials, or dumping concrete washout or other chemicals. During construction, no person shall attach any object to any tree designated for protection.
2. **Protective Barrier.** Before development, land clearing, filling or any land alteration, the applicant shall:
 - a. Erect and maintain readily visible temporary protective tree fencing along the limits of disturbance which completely surrounds the protected area of all retained trees, groups of trees, vegetation and native soil. Fences shall be constructed of chain link and be at least six (6) feet high, unless other type of fencing is authorized by the Planning Official.
 - b. 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 and Soil Protection Area, Entrance Prohibited” and provide the City phone number for code enforcement to report violations.
 - c. Prohibit excavation or compaction of soil 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.

- d. Maintain the protective barriers in place for the duration of the project until the Planning Official authorizes their removal.
 - e. Ensure that any approved landscaping done in the protected zone subsequent to the removal of the barriers shall be accomplished with machinery from outside the protected zone or by hand.
 - f. In addition to the above, the Planning Official may require the following:
 - 1) If equipment is authorized to operate within the protected zone, the soil and critical root zone of a tree must be covered with mulch to a depth of at least six (6) inches or with plywood, steel plates or similar material in order to protect roots and soil from damage caused by heavy equipment.
 - 2) Minimize root damage by hand-excavating a 2-foot-deep trench, at edge of critical root zone, to cleanly sever the roots of trees to be retained. Never rip or shred roots with heavy equipment.
 - 3) Corrective pruning performed on protected trees in order to avoid damage from machinery or building activity.
 - 4) Maintenance of trees throughout construction period by watering and fertilizing.
3. Grade.
- a. 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 (1/2) 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.
 - b. 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 prevent soil erosion and suffocation of the roots.
 - c. 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.
 - d. 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.
 - e. 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.
4. Directional Felling. Directional felling of trees shall be used to avoid damage to trees designated for retention.
5. Additional Requirements. The Planning Official may require additional tree protection measures that are consistent with accepted urban forestry industry practices.

(Ord. 4547 § 1, 2016; Ord. 4238 § 2, 2010)

95.40 Required Landscaping

1. User Guide. Chapters 15 through 56 KZC containing the use zone or development standards tables 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 or development standards tables.

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 or development standards tables, in Chapters 15 through 56 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, Critical Areas, addresses vegetation within critical areas and critical area buffers.
- d. Chapter 110 KZC and Chapter 19.36 KMC address vegetation within rights-of-way, except for the I-405 and SR-520 rights-of-way, and the Cross Kirkland Corridor railbanked rail corridor or the Eastside Rail Corridor.
- 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.

2. Use of Significant Existing Vegetation.

- a. General. The applicant shall apply subsection KZC 95.30(3), Tree Retention Plan Procedure, and KZC 95.32, Incentives and Variations to Development Standards, to retain existing native trees, vegetation and soil in areas subject to the landscaping standards of this section. The Planning Official shall give substantial weight to the retained native 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 95.34 to ensure the protection of significant existing vegetation and soil.

3. Landscape Plan Required. In addition to the Tree Retention Plan required pursuant to KZC 95.30, 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 95.50 and 95.51. Plant materials shall be identified with both their scientific and common names. Any required irrigation system must also be shown.

(Ord. 4551 § 4, 2017; Ord. 4547 § 1, 2016; Ord. 4476 § 3, 2015; Ord. 4408 § 1, 2013; Ord. 4238 § 2, 2010; Ord. 4121 § 1, 2008; Ord. 4097 § 1, 2007; Ord. 4037 § 1, 2006; Ord. 4030 § 1, 2006; Ord. 4010 § 2, 2005)

95.41 Supplemental Plantings

1. General. The applicant shall provide the supplemental landscaping specified in subsection (2) of this section in any area of the subject property that:

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

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

- a. Living plant material which will cover 80 percent of the area to be landscaped within two (2) 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. Preference is given to using native plant species. See Kirkland Native Tree/Plant Lists.
- b. One (1) tree for each 1,000 square feet of area to be landscaped. At the time of planting, deciduous trees must be at least two (2) inches in caliper and coniferous trees must be at least five (5) feet in height.
- c. If a development requires approval through Process I, IIA or IIB as described in Chapters 145, 150 and 152 KZC, respectively, the City may require additional vegetation to be planted along a building facade if:
 - 1) The building facade is more than 25 feet high or more than 50 feet long; or
 - 2) Additional landscaping is necessary to provide a visual break in the facade.
- d. In RHBD varieties of rose shrubs or ground cover along with other plant materials shall be included in the on-site landscaping.
- 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.

(Ord. 4547 § 1, 2016; Ord. 4238 § 2, 2010)

95.42 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 subsection (1) (Buffering Standard 1)	Must comply with subsection (1) (Buffering Standard 1)	Must comply with subsection (2) (Buffering Standard 2)	
B		Must comply with subsection (1) (Buffering Standard 1)	Must comply with subsection (1) (Buffering Standard 1)		
C		Must comply with subsection (1) (Buffering Standard 1)	Must comply with subsection (2) (Buffering Standard 2)		
D		Must comply with subsection (2) (Buffering Standard 2)			
E					
Footnotes:		*If the adjoining property is zoned Central Business District, Juanita Business District, North Rose Hill Business District, Rose Hill Business District, Finn Hill Neighborhood Center, Houghton/Everest Neighborhood Center, Business District Core or is located in TL 5, this section KZC 95.42 does not apply.			

This chart establishes which buffering standard applies in a particular case. The following subsections establish the specific requirement for each standard:

1. For standard 1, the applicant shall provide a 15-foot-wide landscaped strip with a 6-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:
 - a. Trees planted at the rate of one (1) tree per 20 linear feet of land use buffer, with deciduous trees of two and one-half (2-1/2) inch caliper, minimum, and/or coniferous trees eight (8) 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.
 - b. Large shrubs or a mix of shrubs planted to attain coverage of at least 60 percent of the land use buffer area within two (2) years, planted at the following sizes and spacing, depending on type:
 - 1) Low shrub – (mature size under three (3) feet tall), 1- or 2-gallon pot or balled and burlapped equivalent;
 - 2) Medium shrub – (mature size from three (3) to six (6) feet tall), 2- or 3-gallon pot or balled and burlapped equivalent;
 - 3) Large shrub – (mature size over six (6) feet tall), 5-gallon pot or balled and burlapped equivalent.
 - c. Living ground covers planted from either 4-inch pot with 12-inch spacing or 1-gallon pot with 18-inch spacing to cover within two (2) years 60 percent of the land use buffer not needed for viability of the shrubs or trees.
2. For standard 2, the applicant shall provide a 5-foot-wide landscaped strip with a 6-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:
 - a. One (1) row of trees planted no more than 10 feet apart on center along the entire length of the buffer, with deciduous trees of 2-inch caliper, minimum, and/or coniferous trees at least six (6) feet in height, minimum. At least 50 percent of the required trees shall be evergreen.
 - b. Living ground covers planted from either 4-inch pot with 12-inch spacing or 1-gallon pot with 18-inch spacing to cover within two (2) years 60 percent of the land use buffer not needed for viability of the trees.
3. Plant Standards. All plant materials used shall meet the most recent American Association of Nurserymen Standards for nursery stock: ANSI Z60.1.
4. 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 property.
5. Multiple Buffering Requirement. If the subject property borders more than one (1) 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.
6. 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.

7. Subject Property Containing Several Uses. If the subject property contains more than one (1) 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.

8. 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.

9. 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:

- a. Buffer planting standards are met; and
- b. Required plantings will be able to attain full size and form typical to their species.

(Ord. 4637 § 3, 2018; Ord. 4636 § 3, 2018; Ord. 4495 § 2, 2015; Ord. 4238 § 2, 2010)

95.43 Outdoor Use, Activity, and Storage

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:

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 (6) feet above finished grade, and do not extend outward from the fence or structure more than five (5) 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 (5) feet if a clearly defined walking path at least three (3) 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 KZC 95.45(1); and provided further, that the exemptions of KZC 95.45(2) 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 (1) 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 (7) days.

(Ord. 4547 § 1, 2016; Ord. 4238 § 2, 2010)

95.44 Internal Parking Lot Landscaping Requirements

The following internal parking lot landscape standards apply to each parking lot or portion thereof containing more than eight (8) parking stalls.

1. The parking lot must contain 25 square feet of landscaped area per parking stall planted as follows:
 - a. The applicant shall arrange the required landscaping throughout the parking lot to provide landscape islands or peninsulas to separate groups of parking spaces (generally every eight (8) 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 6-inch-high vertical curb and be of similar dimensions as the adjacent parking stalls. Gaps in curbs are allowed for stormwater runoff to enter landscape island.

b. Landscaping shall be installed pursuant to the following standards:

- 1) At least one (1) deciduous tree, two (2) inches in caliper, or a coniferous tree five (5) feet in height.
- 2) Groundcover shall be selected and planted to achieve 60 percent coverage within two (2) years.
- 3) Natural drainage landscapes (such as rain gardens, bio-infiltration swales and bioretention planters) are allowed when designed in compliance with the stormwater design manual adopted in KMC 15.52.060. Internal parking lot landscaping requirements for trees still apply. Refer to Public Works Pre-Approved Plans.

c. 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 (1) planter that is 30 inches deep and five (5) feet square must be provided for every eight (8) 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.

(Ord. 4547 § 1, 2016; Ord. 4350 § 1, 2012; Ord. 4238 § 2, 2010)

95.45 Perimeter Landscape Buffering for Driving and Parking Areas

1. Perimeter Buffering – General. Except as specified in subsection (2) of this section, the applicant shall buffer all parking areas and driveways from abutting rights-of-way and from adjacent property with a 5-foot-wide strip along the perimeter of the parking areas and driveways planted as follows (see Figure 95.45.A):

- a. One (1) row of trees, two (2) 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 (2) years.
- c. Natural drainage landscapes (such as rain gardens, bio-infiltration swales and bioretention planters) are allowed when designed in compliance with the stormwater design manual adopted in KMC 15.52.060. Perimeter landscape buffering requirements for trees in driving and parking areas still apply. Refer to Public Works Pre-Approved Plans.

2. Exception. The requirements 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 (1) 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 (1) or a combination of the following methods (see Figures 95.45.A, B, and C):
- a. By providing a landscape strip at least five (5) feet wide planted consistent with subsection (1) of this section, or in combination with the following. In the RHBD Regional Center (see KZC Figure 92.05.A) a 10-foot perimeter landscape strip along NE 85th Street is required planted consistent with subsection (1) of this section.
 - b. The hedge or wall must extend at least two (2) feet, six (6) inches, and not more than three (3) 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 (5) 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 in KZC 95.42, Land Use Buffering Standards, and by this subsection, the applicant shall utilize the more stringent buffering requirement.

Perimeter Parking Lot Landscaping

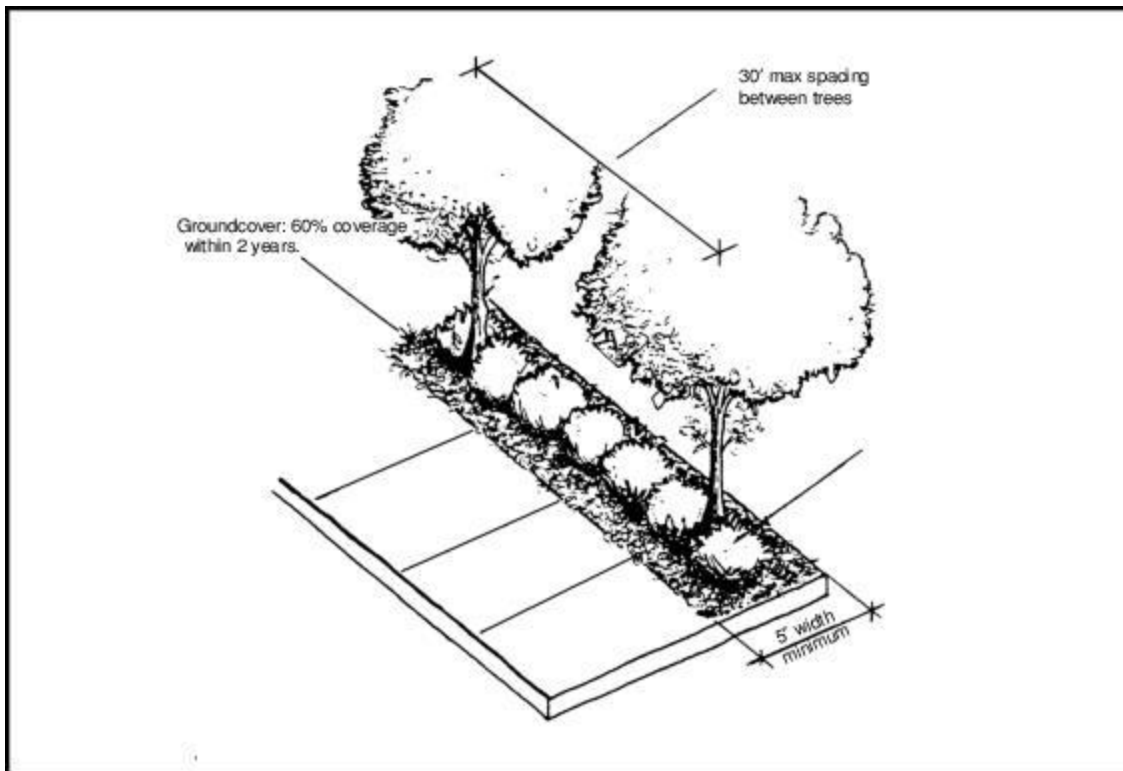


FIGURE 95.45.A

Perimeter Parking – Examples of Various Screen Wall Designs

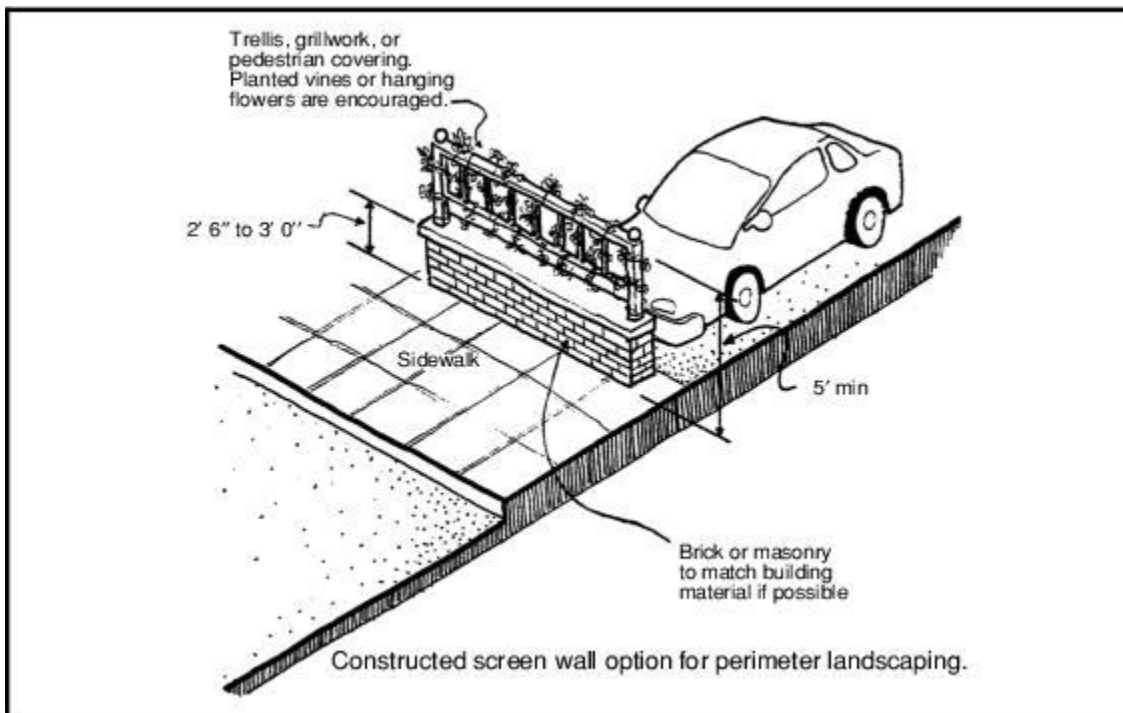


FIGURE 95.45.B

Perimeter Parking – Examples of Various Screen Wall Designs

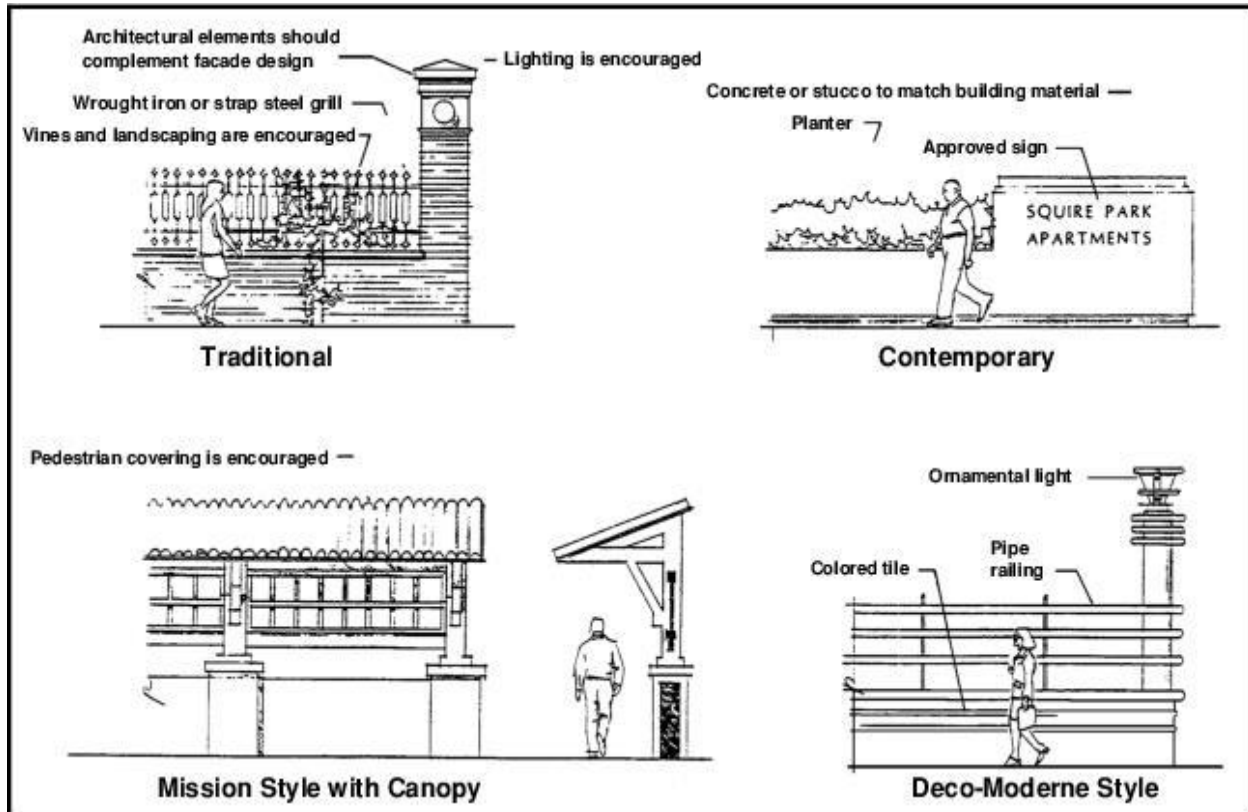


FIGURE 95.45.C

(Ord. 4547 § 1, 2016; Ord. 4238 § 2, 2010; Ord. 4010 § 2, 2005)

95.46 Modifications to Landscaping Standards

1. Modification to Land Use Buffer Requirements. The applicant may request a modification of the requirements of the buffering standards in KZC 95.42. The Planning Official may approve a modification if:

- a. The owner of the adjoining property agrees to this in writing; and
- b. 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
- c. The modification will be more beneficial to the adjoining property than the required buffer by causing less impairment of view or sunlight; or
- d. 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
- e. The location of pre-existing improvements on the adjoining site eliminates the need or benefit of the required landscape buffer.

2. Modifications to General Landscaping Requirements.

a. Authority to Grant and Duration. If the proposed development of the subject property requires approval through Design Review or Process I, IIA, or IIB, described in Chapters 142, 145, 150, and 152 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 applicable criteria listed in subsections (2)(b) and (2)(c) of this section. If granted under Design Review or Process I, IIA, or IIB, the modification is binding on the City for all development permits issued for that development under the building code within five (5) years of the granting of the modification.

If the above does not apply, the Planning Official may grant a modification in writing under the provisions of this section.

b. Internal Parking Lot Landscaping Modifications. For a modification to the internal parking lot landscaping requirements in KZC 95.44, the landscape requirements may be modified if:

- 1) The modification will produce a landscaping design in the parking area comparable or superior to that which would result from adherence to the adopted standard; or
- 2) The modification will result in increased retention of significant existing vegetation; or
- 3) The purpose of the modification is to accommodate low impact development techniques as approved by the Planning Official.

c. Perimeter parking lot and driveway landscaping. For a modification to the perimeter landscaping for parking lots and driveways, the buffering requirements for parking areas and driveways may be modified if:

- 1) The existing topography of or adjacent to the subject property decreases or eliminates the need for visual screening; or
- 2) The modification will be of more benefit to the adjoining property by causing less impairment of view or sunlight; or
- 3) The modification will provide a visual screen that is comparable or superior to the buffer required by KZC 95.45; or
- 4) The modification eliminates the portion of the buffer that would divide a shared parking area serving two (2) or more adjacent uses, but provides the buffer around the perimeter of the shared parking area.

(Ord. 4547 § 1, 2016; Ord. 4238 § 2, 2010)

95.47 Nonconforming Landscaping and Buffers

1. The landscaping requirements of KZC 95.41, Supplemental Plantings, KZC 95.43 Outdoor Use, Activity and Storage, KZC 95.44, Internal Parking Lot Landscaping, and KZC 95.45, Perimeter Landscape Buffering for Driving and Parking Areas, must be brought into conformance as much as is feasible, based on available land area, in either of the following situations:

- a. An increase of at least 10 percent in gross floor area of any structure; or
 - b. An alteration to any structure, the cost of which exceeds 50 percent of the replacement cost of the structure.
2. Land use buffers must be brought into conformance with KZC 95.42 in either of the following situations:
- a. 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
 - b. A change in use on the subject property and the new use requires larger buffers than the former use.

(Ord. 4547 § 1, 2016; Ord. 4238 § 2, 2010)

95.50 Installation Standards for Required Plantings

All required trees, landscaping and soil 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 Recorder's Office.

1. Compliance. It is the applicant's responsibility to show that the proposed landscaping complies with the regulations of this chapter.
2. 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 (6) months. Deferred installation shall be secured with a performance bond pursuant to Chapter 175 KZC prior to the issuance of a certificate of occupancy.
3. Grading. Berms shall not exceed a slope of two (2) horizontal feet to one (1) vertical foot (2:1).
4. Soil Specifications. Soils in planting areas shall have soil quality equivalent to Washington State Department of Ecology BMP T5.13. The soil quality in any landscape area shall comply with the soil quality requirements of the Public Works Pre-Approved Plans. See subsection (9) of this section for mulch requirements.
5. 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 Planning and Building Department.
 - 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.
6. 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.
7. 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 ensure 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 (1) year after final inspection to ensure that the landscaping has become established.

8. Drainage. All landscapes shall have adequate drainage, either through natural percolation or through an installed drainage system. A percolation rate of one-half (1/2) inch of water per hour is acceptable.

9. Mulch.

- a. Required plantings, except turf or areas of established ground cover, shall be covered with two (2) 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 (6) inches away from the trunks of shrubs and trees.

10. 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.

(Ord. 4551 § 4, 2017; Ord. 4547 § 1, 2016; Ord. 4491 §§ 3, 11, 2015; Ord. 4350 § 1, 2012; Ord. 4238 § 2, 2010; Ord. 4010 § 2, 2005)

95.51 Tree and Landscape Maintenance Requirements

The following maintenance requirements apply to all trees, including street 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. It is also the responsibility of the property owner to maintain street trees abutting their property pursuant to KZC 95.21.
2. Maintenance Duration. Maintenance shall be ensured in the following manner except as set forth in subsections (3), (4) and (5) 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 in a tree retention plan shall be maintained for a period of five (5) years following issuance of the certificate of occupancy for the individual lot or development. After five (5) years, all trees on the property are subject to KZC 95.23 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 KZC 95.40 through 95.45, required landscaping.

3. Maintenance of Preserved Grove. Any applicant who has a grove of trees identified for preservation on an approved Tree Retention Plan pursuant to KZC 95.30(2) 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 in Holmes Point Overlay Zone. Vegetation in designated Protected Natural Areas in the Holmes Point Overlay Zone is to be protected in perpetuity pursuant to KZC 70.15(8)(a). Significant trees in the remainder of the lot shall be protected in perpetuity pursuant to KZC 70.15(8)(b).

5. Nonnative Invasive and Noxious Plants. It is the responsibility of the property owner to remove nonnative 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. 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.

(Ord. 4551 § 4, 2017; Ord. 4437 § 1, 2014; Ord. 4238 § 2, 2010)

95.52 Prohibited Vegetation

Plants listed as prohibited in the Kirkland Plant List shall not be planted in the City or required to be retained.

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.

(Ord. 4450 § 1, 2014; Ord. 4238 § 2, 2010; Ord. 4121 § 1, 2008)

95.55 Enforcement and Penalties

Upon determination that there has been a violation of any provision of this chapter, the City may pursue code enforcement and penalties in accordance with the provisions of Chapter 1.12 KMC, Code Enforcement.

(Ord. 4286 § 1, 2011; Ord. 4281 § 1, 2011; Ord. 4238 § 2, 2010; Ord. 4010 § 2, 2005)

95.57 City Forestry Account

1. Funding Sources. All civil penalties received under this chapter and all money received pursuant to KZC 95.33(3)(c) 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;
 - 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. Establishment of a holding public tree nursery;
 - d. Urban forestry education;
 - e. Implementation of a tree canopy monitoring program; or
 - f. Other purposes relating to trees as determined by the City Council.

(Ord. 4238 § 2, 2010)

KIRKLAND TREE CODE SUMMARY

REMOVAL SCENARIO		REVIEW OR PERMIT REQUIRED?	MISC.
PRIVATE PROPERTY	Remove 2 trees (regardless of condition)	No review, no permit Tree removal request recommended	Notification appreciated to avoid unnecessary Code Enforcement response
	Remove 3+ trees Considered hazard or nuisance	No review, no permit if...	Hazard or nuisance is obvious in a photo or other documentation
	Remove hazard or nuisance trees in critical areas	Yes, review and permit required	Arborist report, replacements may be required
	Emergency/urgent tree removal	No review, no permit	Contact Planning Dept.
	Prune or trim trees	No review, no permit	-Property owners are responsible for tree care -No topping allowed (>50% live crown removal is same as tree removal)
	Tree removal with development	Yes, included with land use or development permit	-Arborist report required for trees potentially impacted by development -Protection measures required on site
PUBLIC PROPERTY	ROW median, CKC, CBD trees maintained by the City. ROW trees maintained by adjacent property owner unless hazard conditions exist.	Yes, review and permit required	-Public Works staff may prune street trees by property owner request -Public Works staff may remove street trees at their discretion
	Prune or remove park trees	No permit required; review/service performed by request	-Staff may prune park trees by property owner request -Most hazard tree removal is contracted out

Chap	Sect	Sub	KZC CHAPTER 95 CONSOLIDATED LIST OF POTENTIAL CODE AMENDMENTS	Policy Level	Updated?
95	21	2	Add 'per ANSI standard...' added 'topping' definition per ANSI standard to 95.10	None	yes
95	23	2	Add to end of sentence '...without permission.'	None	yes
95	23	3	Clarify "notification" in 3, 5 rather than repeating 2x	None	yes
95	30	4	Delete 'tree type' replace with 'Identify by tree species and/or common name.' Confusing - applicants think they need to type tree by retention value	None	yes
95	30	4	Clarify req'ments between 2, 4 and 5 for LOD, CRZ, fence location, tree protection zone, etc.	None	yes
95	30	4	Clarify req'ments between 2, 3, for LOD, CRZ, fence location, tree protection zone, etc.	None	yes
95	30	4	Add language on project sequencing, IDPs. Include landscaping/other activity within CRZ	None	yes
95	50	5	Typo - revise 1st sentence to read: 'plants listed in the Kirkland Prohibited Plant list shall not be planted in required landscaping areas.'	None	yes
95	51	1	Revise last sentence for consistency with 95.21 (ROW tree maint responsibilities, adjacent property owners)	None	n/a
95	51	2	Distinguish between a and b3 (both pertain to multifamily and commercial). Add to b 'part of an IDP'	None	yes
95	23		Typo in 2nd sentence, "and" should be "or". See Susan's email of 10/31/14	Minor	n/a
95	10	14	Multiple trunk tree measurement - codify?	Minor	yes
95	5	2	Add 'manage trees and other vegetation consistent with industry standards' (ISA, ANSI, etc.)	Minor	yes
95	10	9	Clarify tree protection definitions per ISA/ANSI standards	Minor	yes
95	10	12	Replace 'TRACE' with 'TRAQ' for qualified professional standards	Minor	yes
95	10		Add topping definition per ISA/ANSI standards	Minor	yes
95	23	5	Add 'Holmes Point Overlay Zone' after shoreline jurisdiction and critical areas	Minor	n/a
95	23	5	Revise 'is not obvious' to 'is evident in a photograph'	Minor	yes
95	23	5	Delete 'street,' replace with 'public' trees, add '..including streets, Parks...'	Minor	yes
95	30	1	3rd paragraph - clarify minimum tree density is in addition to High Retention Value trees	Minor	yes
95	30	3	Include lot line adjustments and applicable rezone process	Minor	yes
95	30	4	Clarify Limits of Disturbance, tree protection fence location, CRZ, dripline, etc	Minor	yes
95	30	5	Under "Req'ments in KZC..." 1st row inconsistent with 95.30.4a(1) - address in either section	Minor	yes
95	30	5	Clarify IDP vs. phased review modifications if not addressed by Sean's code revision	Minor	yes
95	32		Revise 1st paragraph, 1st sentence to incentivize applicants	Minor	yes
95	33	4	Remove Arborvitae as a tree allowed to be counted for tree credits. O-4547 specifically added Thuja/Arborvitae to code, but that was not departmental practice. See e-mail "Arborvitae - Code Amendment".	Minor	yes

Chap	Sect	Sub	KZC CHAPTER 95 CONSOLIDATED LIST OF POTENTIAL CODE AMENDMENTS	Policy Level	Updated?
95	34		1st paragraph - reference ISA/ANSI standards for tree protection during development activity	Minor	yes
95	34	2	Revise LOD/critical root zone for consistency in 1 and 2	Minor	yes
95	34	3	Revise LOD/critical root zone for consistency in a-d	Minor	yes
95	40	2	Add at end of last sentence '...with preference to native vegetation species'.	Minor	yes
95	41	2	Add '...with preference to native vegetation species.' Add to last sentence 'ie mulch'	Minor	yes
95	51	5	Reference Prohibited Plant List, King County and WA Weed Agencies. Per GKP, add 'remove ivy'	Minor	yes
95	52		Revise 1st sentence to '...listed on the Kirkland Prohibited Plant List shall not be...'	Minor	yes
95			Simplify or rename 'tree density credits'/point system so it's not as confusing	Minor	not yet
95	50	5	Delete 'Natural Resource Management Team', replace with 'on the PBD webpage'. Add language to encourage species diversity by planting other than listed with Planning Official approval.	Minor	yes
95	30	6	Clearly specify IDP areas for tree retention (ie: "building envelope") MB 8/23/18	Minor	not yet
95	23	3	Clarify public and street tree removal requirements HCC 8/27/18	Minor	not yet
95	30		Update to reflect current types of housing HCC 8/27/18	Minor	not yet
95	50	5	Add language to avoid planting large trees under/within proximity to overhead utilities	Minor	yes
95	30		Consider adding language to prevent tree girdling. See e-mail "Re: Code to Prevent Tree Girdling"	Moderate	
95	30	6	IDP modifications explanation (see Outlook email folder on Ch 95) Some code clarification needed.	Moderate	
95	33	1	Limit tree density credits for trees over 18 inches in diameter? See "FW: tree density credits and tree code update 2018 code amendment list"	Moderate	
95	42		Clarify intent of buffer - see email from Teresa 12/30/13	Moderate	
95			Add authority to require a tree to be moved based on species (email from Karen Story)	Moderate	
95	25		Add LEED, Green Building Design under 'reviewed by PBD.' Add 'LID features and processes (Low Impact Development)' under reviewed by Public Works Official	Moderate	
95	33	3	per PW, add language regarding location of trees not to block sidewalks	Moderate	
95	34	2	Insert in 1st sentence '...along the approved limits of disturbance'...Revise LOD to tree protection fence location, CRZ, etc. Revise fence requirements from chainlink and pier block to fencing per HPO code revisions?	Moderate	
95	34	2	Codify revised signage per HPO code revisions?	Moderate	
95	10	12	Add ISA Municipal Specialist Certification to credentials	Moderate	

Chap	Sect	Sub	KZC CHAPTER 95 CONSOLIDATED LIST OF POTENTIAL CODE AMENDMENTS	Policy Level	Updated?
95	10	7	Define 'Hazard' consistent with TRAQ standards/course of action	Moderate	
95	34	5	Add 'including aftercare' language	Moderate	
95	20	1	First sentence add "...without previously obtaining a permit." Revise section for clarity/simplicity	Moderate	
95	21	1	Address inconsistency with KMC 1.12. Add "within reason" and "allows" language. (Define) minor pruning OK for adjacent property owners	Moderate	
95	42	2	Replace '10 feet apart' with 20 feet or use street tree list for small-medium trees	Moderate	
			Is 2-per 12 months tree removal allowance equitable across different size lots PC 7/12/18	Moderate	
			Address newly-planted tree mortality: require gator bags/irrigation? PC 8/9/18	Moderate	
			Allow only a certain number of tree credits for arborvitae to address its overuse PC 8/9/18	Moderate	
			Address if 2-per 12 month removal allowance prior to development permit is a loophole PC 8/9/18	Moderate	
			Require that new tree planting locations are specified PC 8/9/18	Moderate	
95	23	2	2nd paragraph - add language to address girdling trees prior to development appl submittal	Major	
95	23	5	Add 'intent to develop' language, reference tree removal timeline to prevent tree removal/damage prior to development permit submittal	Major	
95	33	1	Separate tables for retention credits and supplemental tree credits. Group retention credits by range of DBH per Woodinville tree code. Add fees in lieu. Incentivize mature tree retention value by capping credits.	Major	
95	33	3	Process and monetary amount (unit cost?) consistent with KMC 1.12. Cap letters for CFA	Major	
95	44		Coordinate with PW on LID features in parking lots	Major	
95	51	3	Should a Grove Easement be required for a single-family addition that requires a tree plan major? Current Planning discussed and concluded that a strict reading of the code requires this, although not sure how many have been required. Should there be a different threshold for requiring a Grove Easement, such as construction of a new home or short plat or subdivision? What is the nexus between a 50% addition to a home (which may be adding a second story on an existing footprint) and preserving a group of trees in perpetuity?	Major	
			Add Heritage/Landmark tree definition HPO, PC 7/12/18	Major	
			Include Landscape Architects in the design review process HPO, PC 7/12/18	Major	
			Address poorly located required tree plantings PC 8/9/18	Major	
			Possibly regulate hedges (arborvitae)? PC 8/9/18	Major	
			Provide incentives for tree species diversity with new tree plantings PC 8/9/18	n/a	
95	10	13	Is Low Retention Value tree definition "where removal is unavoidable" a loophole? PC 8/9/18	Major	

Chap	Sect	Sub	KZC CHAPTER 95 CONSOLIDATED LIST OF POTENTIAL CODE AMENDMENTS	Policy Level	Updated?
95	30	5(3)	High Retention Value trees "shall be" retained vs. "to the maximum extent possible" HPO, PC 8/9/18	Major	
			Does tree shade present conflicts with solar energy warranted code language? PC 8/9/18, MB 8/23	?	
			Consider how to increase mature tree retention PC 8/9/18	Major	
			Eliminate phased development review, use IDP review process city-wide PC 8/9/18	Major	
			Protect groves of trees in parking lots HCC 8/27/18	Major	
			Use a canopy-based methodology (vs tree credits) for retention/planting requirements HPO	Major	
			Address hazard/nuisance tree removal resulting from contagious pests/diseases CAO	Major	
			Increase tree retention/replanting requirements city-wide HPO	Major	

IDP – Integrated Development Plan (review process)

ISA – International Society of Arboriculture

ANSI - American National Standards Institute Standards

LOD – Limits of Disturbance around a tree, where protection fencing is located

TRACE/TRAQ – Tree Risk Assessor Exam and Qualification

LEED – Leadership in Energy and Environmental Design

PBD – Planning and Building Department

LID – Low Impact Development

DBH – (Tree Trunk) Diameter at Breast Height

CRZ - Critical Root Zone, a standard for tree protection (1" DBH = 1' radius from trunk)

CFA – City Forestry Account

PW – Public Works Department

GKP – Green Kirkland Partnership



Citywide Tree Code Update Project Schedule

Kirkland Zoning Code Chapter 95 Code Amendments

Attachment 4



Meeting	Packet Due Date	Group/Event	Topic
June 28 Thurs	June 19	Planning Commission #1	Intro: - Canopy 101 - How the current tree regs work
July 9 Mon	-	PED Council Committee 15 min presentation	Intro (short version): - Canopy 101 - How the current tree regs work
July 12 Thurs	July 3	Planning Commission #2	- Known code updates by policy level - Prelim scope, timeline, outreach OK? - New issues? Request for info? - Direction on scope
Aug 1 Wed	-	Current Planners meeting	General PBD input. Stakeholder contact info? Check-in points? Volunteers? (SL, CG)
Aug 9 Thurs (KW/AZ)	Aug 2	Planning Commission #3	Intern findings -New issues? Request for info?
Aug 23 Thurs	-	Master Builders Quarterly mtg.	Potential code amendments/issues thus far. Poll: one thing that works/you'd change re: tree code? Need separate stakeholder meeting?
Aug 27 Mon (KW)	Aug 14	Houghton Community Council #1	Intro as above with PC direction, potential code revisions/issues, intern findings, revised project schedule. Project approach OK? Questions re: how code works? Requests for info? New issues?
Aug 31 Fri (KW, AW)	-	Juanita Farmer's Market Pop-up tent/table	Handouts w/ webpage/listserv. "If you were in charge of trees..." feedback. Gauge need for focus group meetings, survey
Sept 8 Sat	-	Crossing Kirkland event 11-4pm City-wide block party	Same as above
Sept 12 Wed		Current Planners meeting	Staff check-in
Sept 12 Wed	-	Sept KAN meeting	Project announcement (DW), handouts with project webpage and listserv info
Sept 13 Thurs	Sept 4	Planning Commission #4	Address prior issues, HCC direction. Review revised schedule/outreach plan, draft code with no/low policy changes. Any new code issues?
Sept 17 Mon	-	PED Council Committee	Project scope. Review intern findings, minor code changes. Issues - potential major code updates. PC/HCC direction. Fold KMC 1.12.100 into KZC 95? Oct 16 th CC meeting preview.



Citywide Tree Code Update Project Schedule

Kirkland Zoning Code Chapter 95 Code Amendments

Attachment 4



Sept 17-21	-	Facilitated stakeholder mtgs: Master Builders, Finn Hill N'hood Alliance	Intern findings, code issues. Potential draft code changes, Q&A, discussion. Poll: one thing that works/you'd change re: tree code?
Sept 21 Fri	-	PK-PW Council Committee 15 min presentation	Intro. Questions re: how code works? Project scope OK? Refer to prior PC meeting topics/dates - Canopy 101, intern findings, code issues - Oct 16 CC meeting preview - Fold KMC 1.12.100 into KZC 95?
Sept 27 Thurs	Sept 18	Planning Commission #5	-Preliminary draft code with moderate-high policy level changes, with issues/pros/cons, staff recommendations -Prelim canopy analysis data? -Preliminary outreach efforts (new code issues?)
Oct 6 Sat	-	City Hall for All event	How the Tree Code Works presentation, Q&A "If you were in charge of trees..." feedback
Oct 10 Wed	-	October KAN meeting	How the Tree Code Works presentation, Q&A "If you were in charge of trees..." feedback
Oct 16 Tues (SS?)	Sept 27 (out of office 10/1-3)	City Council #1	Scope, schedule, outreach OK? Prelim public feedback, canopy analysis, intern data. HCC/PC issues. Draft code. Fold KMC 1.12 into KZC 95 (address CE questions)? Any changes, new issues, requests for info?
Oct 22 Mon	Oct 17	Houghton Community Council #2	Prior HCC issues resolved. Include PC/CC feedback. Report public outreach and canopy data results. Draft code amendments. Any changes?
Late Aug through early Oct – public outreach efforts and stakeholder meetings Project webpage online, listserv for project updates External Stakeholders: facilitated workshops (Master Builders, Finn Hill Neighborhood Alliance) <i>Stakeholder poll: What's 1 good thing about Kirkland's tree code? The 1 thing you'd change about it?</i> General public: Juanita Farmer's Market, Crossing Kirkland event, City Hall for All, Oct KAN meeting, etc. <i>General public poll: If you were in charge of trees in Kirkland, what kind of rules would you make?</i> Internal Stakeholders: Current Planners, Dev. Review Arborist, Code Enforcement, Legal City Council Committees (PED, PW/PARKS): project updates, answer ?s, discuss, get input See Outreach Checklist (This Week in Kirkland, At the Council, City Quarterly, social media, etc.)			
Nov 8 Thurs	Oct 30	Planning Commission (#6) and Houghton Community Council (#3) Joint Meeting?	Draft code review (continued). HCC recommendation to PC? Agree on any changes?
PUBLIC NOTICE DEADLINE NOV 21, SEPA DETERMINATION SUBMITTAL DEADLINE (DATE?)			
Dec 13 Thurs	Dec 4	Planning Commission #7	PUBLIC HEARING. Any changes to draft code?



Citywide Tree Code Update Project Schedule

Kirkland Zoning Code Chapter 95 Code Amendments

Attachment 4



			No	Yes
			PC make recommendation to CC	Provide staff direction, schedule additional PC meeting (1/24/19)
Jan 15 2019 Tues	Dec 21 2018 (DP out thru 1/13)	City Council #2 FINAL	CC adopt draft code	-
Jan 28	Jan 16	Houghton CC #4 FINAL	HCC approve adopted code	-
Jan 24 2019 Thurs	Dec 21 2018 (DP out thru 1/13)	Planning Commission #8 FINAL	-	Return with changes to draft code. PC make recommendation to CC
Feb 19 2019	Feb 5	City Council #2 FINAL	-	Adopt draft code
Mar 25 2019	Mar 12	Houghton CC #4 FINAL	-	Approve adopted code
Post-approval implementation – see below				

General Tasks/Timeline

- ☒ Develop preliminary timeline, scope, outreach strategy, and stakeholder lists. Late May/early June 2018. Guides for potential code changes:
 - Planning Dept ongoing list of KZC 95 amendments
 - Minor, moderate or major policy level categories
 - Related regs/policy - Comp Plan, Urban Forest Management Plan, HPO-related
 - Consistent with other tree codes in region?
 - Do canopy data findings warrant code changes? Internship findings?
 - IT-GIS input on using canopy requirement methodology (vs. credits)
 - Update/include current BMPs and industry standards
 - Overall purpose or final outcome, ie: simplify and clarify? Refine?
- ☒ Compile and clarify potential code amendments. Early-Mid June 2018.
- ☒ Define preliminary scope and timeline (may change after public outreach). Introduce 'Canopy 101,' background of tree regs and how they work. Mid-June 2018.
- ☒ Meet w/ David Wolbrecht re: public outreach plan – August-October 2018
 - Project awareness/get feedback – Juanita Farmer's Market, Crossing Kirkland, City Hall for All, October KAN meeting. Educational opportunity for how code works.
 - Public comments based on "If you were in charge of trees in Kirkland..."
 - Primary Focus Group meetings: FHNA and Master Builders, others as needed



Citywide Tree Code Update Project Schedule

Kirkland Zoning Code Chapter 95 Code Amendments



- Stakeholder's poll: 1 thing that works with K's tree code? 1 thing you'd change?
- ☒ PC direction per 7/12/18 meeting:
 - Add 2nd PC meeting after 9/13/18 for additional draft code review
 - Boost public outreach
 - Allow time to deliberate prior to making CC recommendation
- ☒ Internal input/draft code review: Planners, DRA, Code Enforcement, Legal, Parks/PW
- ☐ SEPA determination and public noticing – note deadlines for filing/mailling
- ☐ City Council adoption, HCC approval (early 2019)
- ☐ Code revisions effective (spring 2019)
- ☐ Post-approval implementation
 - Changes to procedures*
 - Develop incentives*
 - Notify staff in affected departments through staff meetings*
 - Conduct training if necessary*
 - Update related forms, OCDs, and City web content*
 - Public education/outreach*