are happy to invite City staff and take extra time to walk through some of the tree protection proposals and have you apply them onsite. If interested, Gina Clark can work with Chair Whitney to get a date on the calendar.

Lastly, this is complex policy, as you know. None of this can be covered in three minutes of public comment. We invite each of you to meet with us as a working group to talk about our experiences as developers, designers, engineers, architects, builders, applicants, citizens, homeowners, and landowners. Let us help educate you as you go through this process and hopefully arrive at a final ordinance that is balanced, predictable, fair, user-friendly, and speaks to diverse interests.

We want to once again thank staff for their tremendous efforts in this very heavy policy lift and to City leadership for giving all involved the time and space to work together. We look forward to seeing a draft and welcome broad community input.

Sincerely,

Gina Clark
Government Affairs
King County Manager

cc: Mayor Penny Sweet
   Kirkland City Council
   Kirkland Planning Commission
   Kurt Triplett, City Manager
   Adam Weinstein, Planning Director
   Jeremy McMahan, Deputy Planning Director
   Deb Powers, Urban Tree Forester
May 23, 2019

Honorable Sandeep Singhal, Chair
Kirkland Planning Commission
123 5th Avenue
Kirkland, WA 98033

RE: KZC Chapter 95

Dear Chair Singhal and Kirkland Planning Commissioners:

The Master Builders Association of King and Snohomish Counties (MBAKS) is pleased to provide comment regarding the Kirkland Zoning Code, Chapter 95, Tree Protection Ordinance (tree code) for the May 23, 2019, Planning Commission (Commission) meeting.

Thank you for the opportunity to submit comments regarding KZC Chapter 95, Tree Protection Ordinance.

As noted in our May 15 letter to Planning Commission, the Master Builders Association of King and Snohomish (MBAKS) and the Finn Hill Neighborhood Alliance (FHNA, collectively the working group) have been working collaboratively for the last 5 months to support the City in amending its tree protection ordinance. Over the last two and a half months, City staff has also dedicated their time to meet with our working group to develop a unified proposal for Planning Commission, the City Council, and the Houghton Community Council.

It has always been the working group’s intent to find commonality and balance within our top priorities. MBAKS’s priority is to construct a variety of housing at a range of price points for the residents of Kirkland. The FHNA’s priority is preserving large, grand trees that help define community character and enhance canopy.

With that in mind, we agreed to balance housing and trees. We did this by first defining what kind of tree the FHNA would want to give top priority in saving. We selected 30” dbh wide trees and larger, designating them as “Landmarks”, and clusters of five or more trees containing at least one 24” tree called “Groups,” priority protection. These trees were designated Tier 1 trees.
In exchange for preserving Tier 1 trees, the builders agreed to significant concessions as to where and how to construct a home that might be in competition for space with a Tier 1 tree. To balance those significant concessions, the FHNA agreed that other trees, Tier 2 trees, would be given less protection with less builder concessions.

The working group also significantly increased the credit system with 45 to 50 credits per acre, a significant increase from the current credit system, in hopes this would help meet the City’s stated goal of 40% citywide tree canopy. Once these onsite credits were achieved, remaining trees could be removed. Trees within the building footprint could be saved and granted credits, even outside setbacks. The FHNA accepted this proposal, balancing it with Tier 1 protection and an overall increase in tree credits.

Using the tree credit system, the working group also agreed that one “super” tree (Landmark) could not provide all the credits for a lot, so tree credits were capped at the number of credits that were granted to a Landmark tree.

The working group’s balance was carefully negotiated, intentional, and the product of true compromise – neither side came out whole, but both were able to preserve their top priority. And we did our best to reach this agreement in the absence of solid City statistical data or research on trees, without truly knowing, or perhaps understanding, the City’s vision or goals for prioritizing and retaining trees, and without a holistic and systemic plan that also considers retention and replanting efforts on public lands and in commercial zones, for example.

However, at our May 13 meeting with staff, they indicated a desire to change the MBAKS/FHNA framework. Staff stated that credits should not be used, and that all trees in rear, front and side setbacks shall be retained subject to undetermined use protections. Staff based their conclusion on small sample research that attempts to disprove the working group assumption that increased credits would preserve more trees without additional reductions in building areas.

In justifying the shift in Tier 2 treatment, staff created a series of exhibits showing how the working group’s concept would preserve fewer trees, but 1) the methodology used is unknown and 2) states that ‘more trees’ is the entire goal of the ordinance. This does not consider how preservation affects landowners or the variety of other interests that face the City and residents in developing and implementing this ordinance.

None of the documents reference balancing tree retention and property rights, nor that private homeowners will bear most of the burden of providing this public good. Landowner contribution and balance were expressly noted as the foundational basis of agreement in the working group’s product. Using an objective scoring system like credits which treats properties equally does not burden treed properties unnecessarily beyond their neighbors with fewer trees. Equal application of the law
and predictable and fair treatment of all properties and owners must be a drafting goal.

The new proposal was unexpected and needs further discussion and examination. On its face setback protection sounds perfect since building footprints aren’t allowed in setbacks. But, for example, a “setback tree” might only be 1” inside the setback, but its Critical Root Zone (CRZ) can be far outside, a non-disturbance zone that can have considerable impacts on building pad. Or consider that side yard setback requirements could significantly hamper or eliminate side yard use, even for maintenance. Does it also apply to utilities? This makes the proposal that these trees “shall” be preserved in setbacks a bit concerning and potentially challenging for preserving Tier 2 trees.

With that said, however, it is a potentially viable idea worth exploring, negotiating and defining, including massaging the draft language to make it predictable so individual planners are not determining if a tree, its CRZ, canopy, etc., is “in” the setback, as well as fine tuning retention requirements with property use protections under this new proposal.

As a working group we remain committed to working with the City throughout the entire process and continue to welcome and encourage additional public input. There remains a lot of work to complete, and we appreciate the effort and time staff is putting into the tree protection ordinance.

The working group would like to note what we believe are some top issues that still need to be resolved, and we look forward helping in any way we can. These items include:

1) Requirement for IDP: MBAKS would like to see it remain an option. If it is required, tighter ordinance language is necessary.

2) Homeowner provision to cut two trees per year: The working group proposed allowing borrowing against two additional years (6 total at one time) to cut trees. It’s been stated there is no available tracking system to do this, but there is a permit tracking system and staff currently tracks development permits that cannot be granted within a year of tree removal. Is there a way to integrate this new provision?

3) Critical Root Zone/Limits of Disturbance: It needs to be defined with impact allowance guidelines.

4) Replanting schedule: To ‘make up’ credits that couldn’t be retained, this is worth consideration as a viable alternative to focusing entirely on retention.

5) Protective fencing: What does ‘immovable’ look like? Fencing to the dripline means not only making room to save the tree but room for the fencing as well. Many times, if you fenced everything to the dripline, you can’t move equipment around on the property if you have trees in side yards.

6) Predictability model: Establish defined conditions that may be imposed to save trees.
7) Tree retention on SFR: What is the City’s affirmative obligation (tree account) to increase canopy? How will multi-family/commercial sites be reviewed?

8) Determine the current definition of grove: The working group believes the current definition should not be retained. The working group has a redefined Tier 1 ‘Group’ cluster, distinctive from current definition of “grove.” Consistent terminology matters. The working group proposed two types of tree groupings – a group of three trees that contained at least one landmark tree or a group of five trees that contained at least on tree with a minimum 24” diameter. The goal was to avoid required retention of a “grove” of not satisfactory trees just because their canopies touched. (Opportunity for application of right tree, right place planting) If it is, what is a reasonable method of protection? The builders are strongly opposed to easements.

9) Define ‘weed trees’: Alders, cottonwoods, anything invasive not deserving of protection. A complete list of unprotected trees is needed.

10) Until May 13, Tier 2 trees were to be required to have “good” health and structure. On May 13, that seemed to be downgraded to “fair” which has tremendous implications. This must be clarified.

We want to once again thank staff for their tremendous efforts in this very heavy policy lift, and for City leadership for giving all involved the time and space needed to work together to try to craft the most equitable, balanced, user-friendly and predictable ordinance we can for your consideration.

Sincerely,

Gina Clark
Government Affairs
King County Manager

cc: Mayor Penny Sweet
Kirkland City Council
Houghton Community Council
Kurt Triplett, City Manager
Adam Weinstein, Planning Director
Jeremy McMahan, Deputy Planning Director
Deb Powers, Urban Tree Forester
May 15, 2019

Honorable Sandeep Singhal, Chair
Kirkland Planning Commission
123 5th Avenue
Kirkland, WA 98033

RE: KZC 95: Proposed Staff Amendments to Tier 2 Trees

Dear Chair Singhal and Kirkland Planning Commissioners:

The Master Builders Association of King and Snohomish Counties (MBAKS) and the Finn Hill Neighborhood Alliance (FHNA) are pleased to provide our first round of comment regarding the Kirkland Zoning Code, Chapter 95, Tree Protection Ordinance (tree code) for the May 23, 2019, Planning Commission (Commission) meeting.

As you’re aware, the FHNA and MBAKS (workgroup) began meeting in October 2018 to discuss changes to the tree code. After a preliminary meeting, it was evident we shared common perspectives on key issues, and representatives of both groups presented this message at the November 8, 2018, Commission meeting. The Commission encouraged both sides to continue working together to help find potential solutions and code language for the City.

Our workgroup continued to meet on a regular basis, with eight in person meetings as well as via phone and email spanning October 2018 to January 2019. On January 15, we sent materials to staff addressing the most primary and contentious issues facing our two organizations and submitting what we’d hoped to be guidance to further assist the City with the difficult code draft and decision-making process.

Our two groups reached and drafted a significant baseline consensus through collaboration and compromise on the most-prickly issues, including predictability and feasibility, landmark trees, tree groupings, significant trees, retention versus replanting, tree canopy versus credits, and phased review/IDP.

Our workgroup continued meeting, sometimes twice a week, with the City’s staff whose initial draft ordinance was different from the one we proposed, affording us the unique
opportunity to bring together experts at the same table; planners, engineers, an
arborist, home builders, code drafters, lawyers, engaged and impacted citizens, to
create a new, more equitable tree ordinance that was easier to understand and apply.
We’ve made some meaningful progress with City staff on Tier 1/Landmark Trees
(“exceptional” trees, provisionally defined as having a trunk diameter of at least 30”).
This was an issue where our workgroup led the discussion and on which we placed a
significant amount of priority, choosing to protect these trees because of their sheer
size and community impact. They were the center of our negotiations and the basis for
which each side gave a little and took a little when it came to other parts of the draft
code.

The agreement on Tier 1/Landmark Trees also answered an immense concern raised by
many City staff and leadership, a concern we were also tasked with help solving: the
loss of these Landmark trees and the concerns of residents over their loss through
development.

Regarding non-Landmark trees (or Tier 2 trees), our approach was to focus on retention
up to a specific tree credit threshold regardless of the location of trees on a property
being developed. In recent meetings with City staff, we began to discuss how to define
standards for retaining Tier 2 trees, including tree groups, and potentially limiting site
design and/or owner use of property for such retention.

However, a change in direction was proposed by City staff at our latest meeting, on May
13th. Instead of continuing with the minimum credit system as we had proposed, City
staff has recommended that tree credits should not be used for retention purposes. The
staff’s recommendation is that tree retention rules should concentrate on:

1. Tier 1: Landmark trees and groups
2. Tier 2: Significant trees in setbacks (front, rear and side)

Under Tier 1, the applicant would receive certain negotiated guarantees and the City
could require site plan alterations with the authority to vary development standards to
accommodate those alterations to preserve landmark trees and groups. With respect
to Tier 2, staff appears to suggest that the City should continue to endeavor to preserve
all significant healthy trees in setbacks, like what it does today with High Retention
value trees. Based on its assessment of recent permit applications, staff believes that
its approach would result in the preservation of more trees on parcels undergoing
development than the framework we had proposed.

The builder concessions made within the workgroup on Tier 1/Landmark Trees were
largely tied to less restrictions on Tier 2 trees. It was a mutual agreement between
MBAKS and the FHNA that we believed achieved a balance to place priority preservation
on Tier 1/Landmarks and Groups, allowing for the building of housing with the retention of "lesser" trees capped at certain credits throughout the development site.

Unfortunately, because of the late notice and significant change in policy course, our City/workgroup did not get the time to thoroughly vet the Tier 2/tree setback option or what associated guarantees or requirements should or should not be included in this lesser Tier 2 tree standard.

The work group believes that the setback proposal requires more in-depth analysis and review, and continued discussion of the potential impact of any standards, requirements, and site plan alterations the City may propose.

We will defer specific comment on the staff’s suggestions until the Commission’s meeting packet is published for the May 23rd meeting. In the meantime, we appreciate the significant work City staff is doing to consider different approaches that ultimately protects canopy while providing predictable and fair outcomes for property owners and builders. We also wish to emphasize that our workgroup is committed to maintaining open, transparent dialogue throughout the remainder of this code adoption process, even if it means we ultimately disagree on portions of this ordinance.

MBAKS and FHNA may have differing views on the City’s proposals; FHNA is exceptionally keen to preserve as many trees as possible for a healthy canopy while MBAKS would like balanced and objective regulations that will not unduly impair the construction of a variety of housing choices for Kirkland residents at all price points. Despite our differing viewpoints, we have made encouraging progress in the past few months in aligning ourselves on key priorities. We want the opportunity to continue discussions so that we can find common ground on as many issues as possible. We’ve come too far in creating a trusted relationship and finding mutually beneficial ways to preserve trees and build homes.

We are committed to find the best possible solutions for a fairer, more balanced code that is easier to apply and understand, and that preserves tree canopy and landmark trees. To do this, we’d request to be included in the ordinance drafting process by the City, especially with a considerable, last-minute course change that requires continued discourse.

Thank you for your consideration. If you have any questions, please feel free to contact Gina Clark at gclark@mbaks.com or (425) 460-8224 or Scott Morris at scott@firmhillalliance.org or 206-972-9493.
Sincerely,

Gina Clark  
Government Affairs Manager  
King County  
MBAKS

cc: Mayor Penny Sweet  
Kirkland City Council  
Houghton Community Council  
Kurt Triplett, City Manager  
Adam Weinstein, Planning Director  
Jeremy McMahan, Deputy Planning Director  
Deb Powers, Urban Tree Forester

Sincerely,

Scott Morris  
President  
FHNA
January 15, 2019

**Memorandum Regarding Kirkland Zoning Code Chapter 95 Draft Tree Code Amendments**

In October of 2018, as the City of Kirkland was pursuing updates to Kirkland Zoning Code (KZC) Chapter 95 (tree ordinance), two groups with shared interest in the issue began meeting to find common ground to provide joint messaging to City decisionmakers. Those groups were the Finn Hill Neighborhood Alliance (FHNA), which was closely involved with similar rule changes in Holmes Point, and the Master Builders Association of King and Snohomish Counties (MBAKS), whose members actively apply and navigate the tree ordinance with the City in their work daily.

After a preliminary meeting between the two groups it was immediately evident some common ground could be found to agree to changes to the tree code, and representatives of both groups presented this message at the November 8, 2018, Planning Commission meeting. The Commission was enthusiastic about the possible partnership and encouraged both sides to continue working together.

Three additional meetings were held before the joint Planning Commission/Houghton Community Council (HCC) meeting December 13, where further messages of continued cooperation and agreement on the issues were reported. At that meeting, the Planning Commission and the HCC expressed additional support for continued collaboration by MBAKS and the FHNA, with Commissioners and Councilmembers urging a mutual message and ordinance language where possible to help guide City leadership to craft the most balanced amended ordinance possible.

The two groups have met an additional four times since the December 13, 2018, joint meeting, and are pleased to submit our proposed amendments to KZC Chapter 95 to the City for consideration. While our time was limited, and as much as we would have liked to have submitted additional, all-encompassing amendments to further assist the City with the difficult decision making process, we do believe we’ve addressed most of the primary and most contentious issues facing our two organizations and the City, and hope our work provides some meaningful guideposts as final amendments to the Code are adopted.
We would like to acknowledge these participants who were instrumental in the preparation of the draft code amendments to Chapter 95, and who share authorship of this memorandum as well:

**Participants**

*Representing Finn Hill Neighborhood Alliance*
Scott Morris, President - Finn Hill Neighborhood Alliance
Rick Smith, Finn Hill Neighborhood Alliance
Ken Goodwin, Finn Hill Neighborhood Alliance

*Representing Master Builders Association of King and Snohomish Counties*
Gina Clark, King County Manager - Master Builders Association
John Kappler, Vice Chair - Houghton Community Council/Kappler Home Plans
Joe Herr, Plans and Permits Manager – Terrene Homes
LaWana Quayle, Project Manager - DR Horton
Mike Smith, Development Manager - Merit Homes
Susan Prince, Arborist - Independent Consultant

Other interested parties also had voice in this process to the extent they were available and wished to participate:

**Additional Participants**

Rick Whitney, Chair - Houghton Community Council
Larry Toedtli, Chair - Central Houghton Neighborhood Association
Aaron Hollingbery, Vice President Land Entitlement – Toll Brothers
Todd Levitt, Senior Development Manager – Murray Franklyn

**Meetings:**

The participants met in person a total of eight times (including meetings of subsets of the participants), with various phone and email correspondence in-between:

- 11/8/18, 11/30/18, 12/6/18, 12/11/18, 12/17/18, 1/7/19, 1/9/19, 1/14/19
- Meetings were held in Kirkland at Merit Homes or DR Horton, as agreed upon by both groups

**Suggested Code Amendment Changes and Rationale**

The group started with statements of primary concern. Early on we agreed predictability was crucial. This framed every issue, agreement, and made the effort both possible and productive.
MBAKS top concerns were predictability and avoiding indefinite code language connected with ad hoc judgments about which trees would be “feasible” to retain on residential sites and what measures should be taken to save them. We based all downstream decisions to protect and enhance those priorities.

FHNA wanted to maximize the preservation of all trees, but was willing to prioritize saving exceptionally valuable trees, defined as Landmark trees, and certain tree groves, now defined as tree groupings, in exchange for meaningful planting requirements to restore canopy that is lost during development.

**Predictability**

Builders need predictability of process and assurances of time and cost. While this can be difficult, having some reasonable level of predictability of process, time and cost throughout development is invaluable. Often ordinances are drafted with language that is seemingly meant to offer adequate protections, safeguards and predictability, but in practice leads to fluid, open-ended interpretation between the City and application. It was the intent of our two groups to minimize reliance on words like “feasible,” “to the maximum extent possible” or “reasonable use” and replace them with more concrete language, simplified code structure and/or implementation of more well-defined standards that will hopefully be easier to apply, follow and interpret.

**Landmark Trees**

Our two groups have eliminated the hierarchy of trees found in the current code and opted for two categories of trees: Significant trees and Landmark trees. Significant trees are defined as any viable windfirm, single trunk coniferous or deciduous tree with a diameter of 6” or greater measured at 4.5” above grade. The group defines a Landmark tree as any Significant tree with a trunk diameter in excess of 30”. It is the Landmark tree we paid particular attention and gave extraordinary protection. In short, Landmark trees must be retained, and only after significant site and plan review and careful consideration of every alternative with the City, can they be removed and replaced with penalty.

In giving special protection to Landmark trees and eliminating the hierarchy of low, medium and high trees, builders have an added layer of easier predictability of knowing which trees to protect and save (and at what potential cost), the code is further simplified, and staff can more easily interpret standards and code requirements. In addition, the community is preserving those trees that are remarkable, and have a unique feel, status or presence in a neighborhood.

**Tree Groupings**

Similarly, we agreed on a precise and limited definition of Tree Groupings that warrant special protection and eliminated the definition in the current code of groves. (Grove has a specific definition by arborists ISA, so we tried to use only terms that didn’t have a specific definition by a professional organization.) Tree groupings is now defined as a group of three (3) or more trees with connecting canopies that includes at least one (1) Landmark tree, or a group of five (5) trees with connecting canopies and at least one 22” tree.

**Significant Trees: Retention vs Replanting**
Our two groups also agreed on an approach that defines, in an objective fashion, a builder’s obligation to preserve Significant trees and to plant new trees, if necessary, to restore canopy. Notably, the group proposes the tree density credit threshold be raised to approximate the City’s canopy goals but that credits for newly planted trees be adjusted to recognize that small new plantings will mature into large trees in the future. The group proposed a new 45-50 per acre credit requirement, capped credits for retention of existing trees at a 30” diameter and paid particular attention to retention of Significant trees in required yards/setbacks.

In retaining Significant trees, a developer needs to demonstrate the property can meet or exceed a tree density of 45-50 credits per acre after development activity. If the property can meet that prior to development activity, then replanting is unnecessary and the requirements of the code have been met. The developer is under no further obligations to replant and no further obligations to meet additional credits.

If the developer cannot demonstrate the property meets or exceeds a tree density of 45-50 trees per acre, then replanting is required in order to meet the tree density requirements. The proposed amendments provide a chart for replanting credits to guide City staff and developers in meeting replanting requirements, interpreting the code and establishing when obligations have met. Both the existing tree credit chart and the new replanting credit chart should be a useful tool to help educate staff and developers and give both the guardrails they need to meet the intent and conditions of the code.

In addition, MBAKS is willing to work with the City to help develop a companion manual for stakeholders to help new planners, reviewers, builders, developers, and homeowners navigate and implement the tree code requirements to help reduce the number of reviews and cost for both the City and applicant, help minimize code interpretation errors, and make the process smoother for all involved.

**Tree Replanting Location and Tree Forestry Account**

The preferred location for replanting remains on-site or within the neighborhood, where feasible. When onsite, consideration should be given to replanting in preserved groupings, critical areas, habitats and natural buffers, adjacent to stormwater and drainage areas, and site perimeters. If lot size or other site constraints make on-site replanting infeasible or impossible, and off-site replanting is the alternative, the applicant may choose to replant off-site or deposit funds equal to the market value of the plantings into the City’s Tree Forestry Account.

**Phased Review and IDP**

The FHNA would eliminate phased review. MBAKS supports eliminating phased reviews for large subdivisions and may support elimination of phased review for major development projects and short plats if certain improvements and language changes are made to the IDP process. Our two groups did not talk in great depth about particular changes to the IDP process. Many MBAKS members are split as to make IDP a requirement citywide; many prefer to keep it as an option as mass grading and large, upfront site prep works for larger developers like Toll Brothers but does not necessarily work for smaller developers like Terrene Ventures.
MBAKS would like to request additional meetings with City staff to talk about suggested revised language for IDP that could work for the majority of our builders and developers. It is especially critical to continue to massage this language as the City and our members work with more constrained and environmentally sensitive land, and simply less land that is available at mass scale. MBAKS felt it was important to take this issue “offline” from this group discussion and focus it with the City to have a more productive outcome on IDP language and potential code revision on this issue.

**Additional Amendments and Continued Involvement in the Process**

As our meetings have progressed, we agreed to spend most of our time on the issues we felt could help City staff and leadership the most in drafting a balanced code; tree credits and canopy, retention and replanting, predictability and preservation of large trees. Yet we realize there’s much more to the code that we did not address and would like to, including landscaping requirements, buffering, private homeowners, and the balancing of tree canopy with other considerations such as increasing the City’s supply of “missing middle” housing through the provision ADUs or duplexes/triplexes.

Our two groups will continue meeting another one to two times, and each will stay engaged in the tree ordinance as it moves through the City’s public input process. We found common ground on several key points and believe we can, like many other stakeholders in the city, be a valuable resource to city staff and leadership as the process continues, whether speaking as a united voice or through our individual organizations.

**Conclusion**

Every member of the group has approached this exercise with honesty, respect for each other and the process, and a genuine interest in creating responsible tree policy in Kirkland. We’re proud of the work we’ve done. It has been a lot of hard work, but we feel these changes, if ultimately refined and adopted, would improve practice considerably. Desire for predictability has been expressed by everyone involved, this draft accomplishes that. Protections for exemplary trees (Landmarks) and deserving Groups has been increased, while assuring landowners that their burden in furthering public goals will not rise to an unreasonable level.

We appreciate the great effort of so many passionate people toward making Kirkland’s tree program better and look forward to continuing discussions as dedicated staff and elected officials guide this through the process.

Respectfully submitted,

Gina Clark  
King County Manager  
Master Builders Association of King and Snohomish Counties

Scott Morris  
President  
Finn Hill Neighborhood Alliance
October 16, 2019

Dear Planning Commissioners, Kirkland City Councilmembers, and Houghton Community Councilmembers,

I have some major concerns over the upcoming public hearing on November 5th on KZC Chapter 95, tree protection ordinance. I am very concerned the draft ordinance will only continue to make dealing with trees on my private property as well my my development sites difficult, at best.

I have developed many properties in the City of Kirkland, and it has been increasingly difficult to do so. There is no reliability in the code as it exists and no consistency during the permitting process either. Except for it has been consistently difficult and expensive and time consuming. Don’t misinterpret me in that I want to remove every tree for development. Quite the contrary as I see trees as an added value not just to the environment but also to new development sites and projects. I am a Built Green member of over 12 years and have won BG awards along the way. Built Green starts with site planning. However, there has to be give and there are many trees that ultimately have to be removed in City to allow for the homes so desperately needed. Replacement is such an easy task and done responsibly can be something that will contribute to the city for decades to come.

I would like to see the proposed draft ordinance changed before it’s approved so it’s easier to understand is applied more fairly to properties and projects and ends the endless cycles of review by City staff.

I would also like to see measurable limits to how many trees I need to retain on my property with the flexibility to plant the right trees in the right place. Long term planning must take into account the removal of trees that at one point may have been appropriately placed but decades later are not. Replacement to appropriate locations should be a simple process.

A tree ordinance should not negatively impact property owners in such a way that properties with more trees are treated differently than properties without any trees. Currently there is a gross discrepancy here.

I support the growth of the Kirkland canopy and value trees in the urban environment. I hope Kirkland will continue to develop their urban canopy plan and find appropriate places to plant additional trees Citywide that will grow and thrive for future generations.

Thank you for working towards a greener Kirkland with easy to understand ordinance language that is equitably applied.

I have lived in Kirkland for 23 years and have seen many changes along the way. Please take the time to make sure that this change is for the greater good of the City. If you have questions or want more information about my experiences, please contact me at darin@dcgrangerhomes.com

Sincerely,

Darin C Granger

President DC Granger Homes
Deb,

Thanks for the citation 95.33, Deb. The key sentence, I assume, is:

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.

This is an interesting sentence: it appears to say that any home site must have a tree density of at least 30 credits per acre, regardless of whether the site is undergoing development activity. But I assume the sentence means that the minimum tree density requirement applies only in connection with the development of a short plat, subdivision or with a land surface modification. (I’m not sure whether the tree density requirement also applies to the construction of a single home. The sentence is worded so that it would apply, but the tree plan table at 95.33.5 for “minor” development activity suggests otherwise.)

If tree density requirements apply only in the context of development activity, as appears to be the case, I cannot understand what arguments favor using a tree credit system over a canopy measurement system, given that the City’s stated goal is to achieve a specific tree canopy percentage.

I’ve heard City staff say that credits are much easier to administer than canopy calculations. But how can that be so? And for whom? No one is asking individual homeowners either to count credits or to estimate tree canopy in regard to the removal of their trees in non-development contexts. The tree density requirement doesn’t apply in those situations. The only time when tree density is an issue is when development is contemplated. And when development is contemplated, a tree plan is required by 95.30. And an arborist must prepare it. See 95.30.4. Is it difficult for an arborist to calculate existing tree canopy and to forecast predicted canopy that newly planted trees will provide? And is it hard for the City’s staff to analyze an arborist report that includes canopy calculations?

I’ve heard comments that canopy calculations can be inaccurate, particularly if satellite imagery is used. But why would satellite imagery be used if an arborist is required to map each significant tree and describe that tree’s health? Given the tree-by-tree detail that a tree report already requires, the arborist should have seen each existing tree with his or her own eyes and should be able to calculate each tree’s canopy visually.

Admittedly, an arborist’s estimates of existing canopy coverage might be somewhat inaccurate and predictions of future canopy coverage may be subject to debate – but those inaccuracies are insignificant when compared to the irrelevant or misleading data provided by tree credits. We know that credits have no direct relation to canopy. And we also know that each species of tree has a different canopy potential: a mature red maple has a crown that is much bigger than that of a mature cedar, etc. So how can we make any conclusion about the tree canopy over a property if all we know is that it has a tree density of 30 credits per acre? The only way that credits can be used to predict canopy is by
adjusting minimum required credits on a species by species basis. That would be extremely cumbersome to administer. And even then, a credit system would be highly inaccurate because canopies of newly planted trees will be affected by how closely the new trees are sited adjacent to each other. The current credit systems doesn’t regulate that. However, a canopy-based tree plan would clearly have to account for how canopy will be affected by the spacing between newly planted trees.

I suppose someone might argue that if Kirkland’s tree canopy is 40% or better today, we should thank the tree credit system for that happy result and that we shouldn’t tinker with the system. But that’s superstitious thinking. It’s like saying I make the sun rise every day because I rub a rabbit’s foot. The fact that two things are happening at the same time does not mean that they are causally connected.

In fact, simple arithmetic tells us that the current density requirement of 30 credits per acre does not equate to a 40% canopy cover even when one applies credits to broad-crowned deciduous trees. If Kirkland actually does have a 40% tree canopy that’s because it picked up a lot of parkland when it annexed Finn Hill and because it has done a good job planting trees in public rights of way (and those trees have grown in the past decade). But Kirkland can’t create any new wooded parkland and it will only lose canopy as vacant land is developed. The existing tree credit system will not be adequate to preserve Kirkland’s tree canopy.

In short, I can think of no merit to the tree credit system. By contrast, switching to tree density policy that is based on canopy percentages is (a) aligned with the City’s tree canopy objectives, while credits are not, (b) is no more burdensome to administer than a tree credit system, and (c) is more accurate than a credit system.

If I am missing a key point, please set me straight.

Regards,

Scott Morris
Finn Hill Neighborhood Alliance - President
www.finnhillalliance.org | 206-972-9493
PO Box 682, Kirkland WA 98083

www.facebook.com/finnhillalliance

Scott Morris
Trilogy International Partners LLC
155 108th Ave NE, Suite 400
Bellevue WA 98004

Email: scott.morris@trilogy-international.com
Desk: 425-458-5955
October 13, 2017

Kirkland City Council
123 – 5th Ave.
Kirkland, WA 98033

Re: Tree Code and History
SHORT FORM 1/2

Honorable Councilmembers,

Although we do not see it posted on the Council website, Merit Homes understands a Council study session is planned for Tuesday, October 17 regarding trees. As a top homebuilder in the City, we have tremendous interest in this issue. Late last year, we conducted a detailed review of the City’s code history on trees. Upon finding out it was to be studied by the full Council soon, we decided to refresh the memo created then, in hopes that a clearer path can be found.

This letter is introductory, and companion to a longer analysis provided concurrently.

Over 12 years of operation and update with the 2005 tree code, City Council has repeatedly emphasized the use of credits in assessing development project compliance, and the relationship to broader goals of Citywide canopy coverage. The code itself is well-organized and clear.

Merit Homes is one of the most active builders in Kirkland. We have over 15 active projects right now and interact with the tree code daily. Nobody in our office can explain how tree reviews are done now, nor can we predict how any given site will be treated. As a result, every job involves tremendous guesswork on how to navigate what we see as arbitrary application of the rules.

Certainty is a top priority for us and out of every regulation we deal with, trees are - by far - the most difficult issue we deal with.

Our hope is a meaningful dialog can be opened and that some measure of predictability can be restored.

Thanks very much for your consideration,

S. Michael Smith,
Development Manager
October 13, 2017

Kirkland City Council
123 – 5th Ave.
Kirkland, WA 98033

Re: Tree Code and History
   LONG FORM 2/2

Honorable Councilmembers,

Although we do not see it posted on the Council website, Merit Homes understands a Council study session is planned for Tuesday, October 17 regarding trees. As a top homebuilder in the City, we have tremendous interest in this issue. Late last year, we conducted a review of the City’s code history on trees. Upon finding out it was to be studied by the full Council soon, we decided to refresh the memo created then, in hopes that a clearer path can be found.

This letter is the full version of a shorter statement provided concurrently.

**Early interest in trees leads to Code update**
Kirkland has a history of preserving tree canopy within its borders. Starting in the new millennium, expansion was studied in a constructive, bottom-up fashion:

- 2001 – City completes first Tree Management Review, with recommendations to improve tree canopy
- 2003 – 40% canopy goal adopted in Natural Resources Management Plan
- 2005 – 40% canopy goal incorporated with GMA Comprehensive Plan update

The Growth Management Act requires agencies to synchronize their comprehensive plans and land use codes. That alignment is evident with the 2005 Comprehensive Plan and code update efforts the same year. Early code work identified tree density and tree credits as desirable measurement tools.

Planning Commission discussion of the update was held on at least five occasions under File IV-03-101:

- **5-26-17 planning commission minutes** – Commission agrees with density concept
- **7-14-05 planning commission minutes** – Continued discussion of density approaches, consensus that a tree credit/density requirement should apply in the case of redevelopment or new development
- **7-28-05 planning commission minutes** – Further discussion of credit/density approaches
- **8-11-05 Planning Commission minutes** – Public hearing; Short plats to apply minimum tree density; particulars of credit/density methods discussed; regarding 40% canopy requirement, noted roughly 32% canopy cover - goal to retain and enhance canopy; recommendation to Council to adopt code
- **8-25-05 Planning Commission minutes** – Minor adjustments to recommendation
Audio recordings are available online, some of which are intelligible. From the 5-26 transcript, it appears at least one earlier meeting was held, though online archives don’t go back far enough to affirm. These meetings carefully reviewed credits as the regulatory basis to achieve compliance with 30 credits per acre tied to 40% canopy coverage (according to Purpose section of original adoption - Ordinance 4010). Of three options, Planning Commission forwarded ‘Alternative 2’, with credit provisions, later considered by Council:

11-05 Council minutes adopting Ord 4010
12-13-05 Council minutes adopting Ord 4026

New Chapter 95 became effective 1-1-06.

**Early practice**
A public release bulletin dated effective 1-1-06 was released - titled “Notice to Our Customers – New Tree Regulations – Short Plats and Subdivisions” (attached). This document included a detailed explanation of the new credit/density provisions, including an example of application.

It appears first application of the new code was produced by Brian Gilles in a report for the Dawson Short Plat, SPL06-0001 and dated 1-18-06. Mr. Gilles had been active in the Planning Commission process. This report included analysis of tree credits, citing Ordinance 4010. Merit does not have staff review nor decision, but the initial report is clear in its use of credits in appraising compliance with the newly minted tree code.

We do have other decisions showing how the new tree code was applied soon after passage: The “Arr Short Plat” – file number SPL06-00024, decision 11/13/06, was a Merit short plat of 3 lots on .69 acres:

**B. Recommendations**
3.e. “Pursuant to Kirkland Zoning Code Section 95.35.5, the applicant shall provide a minimum of 21 tree credits for the short plat site. If after selecting the trees to be retained at each phase in the development, the site falls below the minimum required tree density, replanting of trees will be required to meet the minimum density”

**E. Development Regulations – analysis**
2.a.7. “Kirkland Zoning Code Section 95.35.5 establishes minimum tree density requirements. For a short plat or subdivision, with an approved Tree Plan III, the tree density shall be calculated based on the entire site area excluding existing City right-of-way, or areas to be dedicated as City right-of-way. The minimum tree density is 30 tree credits per acre. The gross site area is 30,031 square feet or .69 acres. Based on the requirement of 30 tree credits per acre, the proposed short plat site must provide a minimum of 21 tree credits.

2. b.1. “The applicant has provided a Tree Plan III with the short plat application that has been reviewed by the City’s Arborist. There are 37 viable trees on the site, 21 Type 1 trees and 16 Type 2 trees. The minimum of 21 tree credits is met for the short plat.”

We also have the full Casady Short Plat decision and appeal, SPL06-00014/APL06-00015, dated 10/23/06 and 12/28/06 respectively. That project was reviewed consistently with Gilles’ initial report and Arr.

These three illustrations show, at the time when logic, approach, and hearings were fresh in the minds of all - that tree density and credits were paramount – as presented to, and decided by Planning Commission and Council.
Code Revisions

Minor revisions were made to the tree code nearly every year of its existence, through Ordinances 4010, 4026, 4030, 4037, 4097, 4121, 4226, 4238, 4252, 4281, 4286, 4350, 4372, 4408, 4437, 4476, 4491, 4495, 4547, and 4551. Nearly all were minor updates and none meaningfully revised original compliance strategy.

There are a couple of highlights out of 12 years of revisions. Ordinance 4238, adopted 3-2-10, resulted from a concerted update effort and numerous Planning Commission and Council hearings, beginning in 2008 and mostly occurring in 2009. That history is all available in the City archives. Mostly, it was an organizational effort, with some minor amendments. The most complete narrative of the focus I could find is in a Study Session memo to HCC 8-10-09.

This document went to the Houghton Community Council, explaining overall City goals and process. Neither this document nor strikeout/underline version of Ordinance 4238 meaningfully changed compliance principles. However, this revision marks the first appearance of a table under KZC 95.30 outlining which types of projects carry certain reporting and documentation requirements. In this table appears language surrounding ‘maximum extent possible or feasible’.

This language was not new with Ordinance 4238, in fact near-identical language appeared in Ordinance 4010 – in the same section as discussion of credits (Original KZC 95.35.1). This table did not meaningfully change spirit, intent, purpose, nor execution – however it is important because this is the verbiage relied upon by staff when questioned why credits are no longer used in review.

The other revision highlight is much newer, having been adopted 12-13-16. Ordinance 4547 isn’t notable for its changes, rather for its reinforcement of credit-based review of tree compliance. In that version, KZC 95.33.1 states: “In calculating tree density credits, tree credits may be rounded up to the next whole number from a .5 or greater value. Further, KZC 95.33.1.b. provides that “Existing native conifers (or other conifer species as approved by the Urban Forester) shall count 1.5 times credits for retention.” And finally, 95.33.1 table guidance added clarification on credit calculation methodology. This revision is less than a year old.

Canopy

Throughout the years, City has made best efforts to track progress toward the 40% canopy coverage goal. In 2003, coverage estimate was 32%. Comprehensive Plan estimate in the 2010 “Performance Measures” report under the “Environment” section, a finding of 36% coverage was found. The same figure was published in June, 2011 - “Urban Tree Canopy Assessment Report”. However, the July, 2013 “Urban Forestry Strategic Management Plan” found the goal to have been exceeded at 40.7%.

2013 Urban Forest Management Plan, adopted by Resolution R-4986, 7/2/13. A few excerpts:

**Growth and Community Vision** – Page 6: “The link between growth, environmental degradation and an alarming loss of tree canopy cover in the Puget Sound region prompted many jurisdictions to act on a local level (American Forests, 1998). Kirkland responded with changes to its Comprehensive Plan, including the community’s vision of the natural environment with a specific goal to “work toward increasing Kirkland’s tree cover to 40 percent” (V-8 Policy NE-3.1). “Recognizing that the highest percentage of tree canopy was on private property, the Kirkland City Council adopted a comprehensive tree protection ordinance in late 2005 with the intent to slow the loss of tree canopy city-wide. To restore the declining native forests in City parks, the Cascade Land Conservancy partnered with the City (now Forterra) to prepare a 20-Year Forest Restoration Plan that was adopted by the City Council in 2008.”
City of Kirkland Comprehensive Plan – page 17 – “The Comprehensive Plan reflects Kirkland’s intent to meet the requirements of the GMA and attain the community’s vision of the future. When Kirkland’s Comprehensive Plan was updated in 2005, it included direction to meet a citywide 40 percent tree canopy cover goal (Policy NE-3.1). This goal has played a key role in increasing tree canopy cover over the previous decade.”

Tree Protection Codes - page 17- “In late 2005, the City established a tree protection ordinance by adopting Chapter 95 of the Kirkland Zoning Code (KZC). The purpose of this ordinance is to support the Comprehensive Plan’s city-wide 40 percent canopy goal. The code establishes a permit process and standards for the protection and replacement of trees on private and public property.”

5. Current Performance Assessment – “Criteria: Existing Canopy Cover Status; Page 45

Performance - Optimal

Current Status - 40.7% canopy cover following the 2011 annexation; consequently the City has met its 40% canopy goal. The City can shift towards maintaining its canopy cover and achieve acceptable levels of urban forest health and sustainability. (emphasis added)

Benefit - Optimized ecosystem services and equality between zoning, land use, watersheds or business district canopy cover % goals.”

In brief summary, the 2013 study found that City had surpassed its 40% coverage goal and that ongoing regulatory measures could shift to a focus on maintenance of that canopy rather than expansion.

Transition to now

In 2005, the Comprehensive Plan aspired to achieve a canopy-coverage goal of 40% and a companion ordinance was passed using tree credits as a measure to aspirationally increase performance toward that goal. 30 credits per acre was the tool, and accomplished that goal.

Current Practice

Current guidance still expresses canopy coverage intent in now-retrospective terms:

KZC 95.05 Purpose and Intent (current code)

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.” (emphasis added)

2016 Comprehensive Plan Environment Element - Policy E-2.1: “Strive to achieve a healthy, resilient urban forest with a citywide 40 percent tree canopy coverage.”

As they have throughout the current regime, code and comprehensive plan align on the goal. There was one requirement for retention in 2005, unchanged to today – preservation of 30 tree credits per acre to attain a 40% tree canopy coverage, City-wide.

Where official, Council-adopted guidance finds the primary goal (canopy) to have been met, and recommends decreasing the intensity of tree preservation requirements, current practice is quite the opposite. Two elements conspire – 1) credits have been largely abandoned, resulting in 2) total number of mandated ‘save’ trees often far exceeding actual code requirement.
A few examples:
- Petra short plat SUB15-01226 decision 10/21/15 - Detailed review by City Arborist - No credit analysis
- Eos E. short plat SUB15-01218 decision 11/24/15 - Detailed review by City Arborist - No credit analysis
- Opus short plat SUB15-01570, decision 1/28/16 – Detailed review by City Arborist - No credit analysis
- Koi short plat SUB16-00171 decision 9/28/16 - Detailed review by City Arborist - No credit analysis
- NoKi short plat SUB16-0140 decision 10/11/16 - Detailed review by City Arborist - No credit analysis

Summary
Planning Commission and Council provided clear direction regarding tree policy in 2005, which was faithfully interpreted and implemented for some time after original adoption. Since, there has been sufficient regulatory ‘drift’ as to be unrecognizable from its outset.

General logic would indicate that a goal achieved would beg new ambition. That could be a mere reframing of the 40% in new voicing to clarify its having been reached and desiring not slipping below. Or now maybe a 45% goal is appropriate. It cannot be said there is an official goal now.

Purpose and intent is a frequently misused concept, tossed around to fill in spaces between clear language of the law. As the courts would express it, that concept is valid where language is lacking. In such case, they would find legislative history elemental to any finding. That is what I've tried to do here – refresh where we've been to inform those decisionmakers empowered to correct course. I can find no council-directed guidance away from credit-based review and in fact recent reinforcement of same.

I'm not an attorney but have read the law. Kirkland’s code is quite clear and specific in its use of credits and density in decisions. We are told a phrase as amorphous and open-ended as ‘maximum extent feasible’ is intended to replace clear requirements. The specific overrules the general. KZC 95.33.1 spends 435 words explaining usage of credits. Are we to overrule that with ‘maximum extent feasible’?

The code is also to be read to harmonize its various parts. Council’s adopted position accomplishes that neatly. Finally, it is a strain to imagine a standard effectively expressed as ‘whatever we ask of you’ upheld.

Trees are Merit’s most challenging legal issue. There is no effective, consistent way to describe current practice. None. Every single project, we guess and do our best to skirt the worst of what might bite us. Predictability is our best friend and this issue presents less of it than anything else we do. We've been looking for an opportunity to have this discussion for well over a year.

We appreciate the City’s consideration of this issue. If this review has missed important aspects of the code evolution or practice we look forward to being further enlightened. The proper approach is to get back to Council's intent with clear-minded reviews. This would make life much easier on City and applicants.

It is less our goal to reduce standards than it is to clarify them. If Council decided to double the code requirement, it would be far easier to deal with than our daily experience.

Thanks very much for your consideration,

S. Michael Smith,
Development Manager
*****Notice to Our Customers*****

New Tree Regulations – Short Plats & Subdivisions

Effective January 1, 2006

Purpose of the new tree regulations

Trees and other vegetation are important elements of the physical environment which protect public health, safety and general welfare in a variety of ways. These regulations 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. For Short Plats and Subdivisions, the regulations require retention of viable trees within the required setbacks and in potential preserved groves. The site is required to meet a minimum density of tree coverage on the subject property following construction of the project. These requirements are discussed in Section 95.35.2.B.3 of the Kirkland Zoning Code (KZC) and are summarized below.

Helpful definitions to complete the tree plans described below:

1. **Significant Tree:** A tree that is at least 6" in diameter at breast height (DBH) (The diameter or thickness of a tree trunk measured at 4.5 feet from the ground).
2. **Dripline:** The distance from the tree trunk that is equal to the furthest extent of the tree’s crown.
3. **Impact:** A condition or activity that affects a part of a tree, including the trunk, branches, and critical root zone.
4. **Qualified Professional:** An individual that possesses and demonstrates the ability to perform tree risk assessments and prescribe appropriate measures necessary for the preservation of trees during development; must at a minimum be certified by the International Society of Arboriculture (ISA).
5. **A Type 1 Tree** is a viable tree that meets at least one of the following criteria:
   i. Landmark tree (pre-designated);
   ii. Specimen tree (very good to excellent condition and free of major defects);
   iii. Tree groves and associated vegetation to be set aside as preserved groves;
   iv. Trees on slopes of at least 10%; or
   v. Trees that are a part of a grove that extends into adjacent property.

Permit Submittal Requirements – Short Plats and Subdivisions

The following information is required for all permits in order for the application to be deemed complete. Incomplete applications will not be accepted.

Tree Plan III shall be submitted with short plat and preliminary subdivision permit applications and subsequent Land Surface Modification permit applications. The approved Tree Plan III will later be used to comply with the Tree Plan I requirement for the single-family building permit application of each lot.

A. The following information must be incorporated on the site plan:
   1. Surveyed location of all significant trees;
   2. A tree inventory prepared by a qualified professional including a numbering system of existing significant trees (with corresponding tags on trees), measured driplines, size (DBH), species and tree status (removed or retained) based on health, risk of failure and suitability of species (see criteria in KZC 95.35.2.C) for all significant trees; and
   3. Approximate trunk location and dripline of significant trees that are on adjacent property with driplines extending over the subject property line.

B. Tree Plan III shall include a report from a qualified professional detailing:
   1. An indication and discussion, for each tree, of whether it is proposed to be retained of failure and suitability of species;
2. Limits of disturbance around viable trees; and
3. Special instruction for work within the critical root zone of viable trees;
4. Location and type of protection measures for viable trees.

C. Utilizing the information from the tree survey, inventory and report, the applicant must submit a site plan showing:
1. The proposed development activity - including location of lot lines, easements and roads
2. Location and limits of disturbance of viable trees to be retained according to the tree inventory, report, and City’s determination of tree types
3. Trees being removed for proposed development or trees being removed that are not viable
4. Tree density calculations of retained trees compared to the minimum tree density for the site; The required minimum tree density is 30 tree credits per acre. Use the following formula to determine the required tree density:
   \[(\text{Project size in square feet}/43,560) \times 30 = \text{Required minimum tree density}\]
   * excluding existing public right-of-way, areas to be dedicated as public right-of-way and access easements or tracts not counted in lot area

For example, the minimum tree density for a 15,000 square foot parcel is 10 tree credits and for 30,000 square feet, it is 21 tree credits.

Use the following chart to calculate the tree density for existing trees that are going to be retained.

<table>
<thead>
<tr>
<th>DBH</th>
<th>Tree Credits</th>
<th>DBH</th>
<th>Tree Credits</th>
<th>DBH</th>
<th>Tree Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>3-5&quot;</td>
<td>0.5</td>
<td>6-10&quot;</td>
<td>1</td>
<td>24&quot;</td>
<td>8</td>
</tr>
<tr>
<td>12&quot;</td>
<td>2</td>
<td>14&quot;</td>
<td>3</td>
<td>26&quot;</td>
<td>9</td>
</tr>
<tr>
<td>16&quot;</td>
<td>4</td>
<td>16&quot;</td>
<td>4</td>
<td>30&quot;</td>
<td>11</td>
</tr>
<tr>
<td>18&quot;</td>
<td>5</td>
<td>18&quot;</td>
<td>5</td>
<td>32&quot;</td>
<td>12</td>
</tr>
<tr>
<td>20&quot;</td>
<td>6</td>
<td>20&quot;</td>
<td>6</td>
<td>34&quot;</td>
<td>13</td>
</tr>
<tr>
<td>22&quot;</td>
<td>7</td>
<td>22&quot;</td>
<td>7</td>
<td>36&quot;</td>
<td>14</td>
</tr>
</tbody>
</table>

5. If the calculated tree density is below the minimum, indicate the type, size and location of the supplemental trees needed to meet the density requirement. Supplemental trees must be at least 6 feet tall if they are conifers or 2-inch caliper if they are deciduous or broad-leaf evergreens. They are worth one tree credit each. Larger supplemental trees may be awarded additional credits.

D. Additional Requirements:
1. The applicant shall pursue applicable variations to development as outlined in KZC 95.35.4.A.2 and 3 for the retention of Type 1 trees in required yards.
2. Prior to permit approval, the applicant shall provide a final plan showing tree density calculations, retained trees, trees to be removed, and any required supplemental trees to meet the minimum tree density. The plan must describe the details of site preparation, the installation of new trees, and the maintenance measures necessary for the long-term survival and health of all trees on site pursuant to KZC 95.45 and KZC 95.50.
3. A description and location of tree protection measures during construction for trees to be retained must be shown on demolition and grading plans, and protections measures must be in accordance with KZC 95.35.6.
4. Prior to plat recording, the applicant shall submit a five year preservation and maintenance agreement pursuant to KZC 95.50.

Note: This is an overview of tree requirements, for more details and information visit our website at http://www.ci.kirkland.wa.us/depart/planning/trees.htm or request a copy of Ordinance 4010.