



Tree Plan III– Residential Short Plats & Subdivisions

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 residential 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 public trees (i.e. street trees) and private 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 or removed based on health, risk 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:

(Project size in square feet*/43,560) X 30 = 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.

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

NOTE: Tree density calculations do not apply to public trees.

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.