

## **Chapter 16.14**

# **TREE CANOPY PRESERVATION AND ENHANCEMENT**

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### **16.14.010 Findings.**

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The city council makes the following findings:

A. The trees of Lake Forest Park, a reminder of the city’s namesake, offer historic, aesthetic, ecological, economic, health, safety and welfare values to the community. Trees in the city of Lake Forest Park:

1. Improve the value of properties;
2. Reduce runoff via canopy interception, uptake of water from the soil and evapotranspiration back into the atmosphere;
3. Reduce runoff which results in less soil erosion and stormwater which aids in protecting surface waters from sedimentation and pollution;
4. Reduce the risk of flooding and infrastructure costs;

5. Improve air quality by removing dust and particulates from the air, and remove carbon dioxide while creating oxygen;
6. Provide cooling shade for homes, buildings, and asphalt/concrete surfaces, reducing heating and cooling costs for residences and other buildings;
7. Provide screening between different land uses or other objectionable views while buffering traffic and other noise;
8. Provide food and habitat for a variety of wildlife;
9. Provide visual relief from hard lines of concrete structures and other buildings;
10. Increase consumer patronage for commercial properties and boost occupancy rates for well-treed shopping areas;
11. Store carbon;
12. Contribute to human health improvement by lowering levels of fear of residents, and less violent and aggressive behavior by its citizens;
13. Encourage better neighbor relations and better coping skills for its residents; and
14. Provide a valuable asset to the community as a whole.

B. Removal of trees from urban areas such as Lake Forest Park has resulted in the loss to the public of these and many more beneficial functions of trees. (Ord. 1015 § 2, 2010)

#### **16.14.020 Purpose and intent.**

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The purpose and intent of this chapter is to:

- A. Implement certain strategies for the management and protection of Lake Forest Park's urban forest resources described in those goals and policies of the Lake Forest Park community forest management plan that were accepted by the city council;
- B. Preserve and enhance the tree canopy of Lake Forest Park by encouraging the protection of existing trees and stands of trees, and the replanting of new trees to replace those lost to old age, storms, development and other maladies;

C. Mitigate the economic, environmental, and aesthetic consequences of tree loss through protection and tree planting on public and private lands;

D. Provide guidelines to protect trees from adverse impacts during construction;

E. Encourage project designs that utilize existing trees in the landscape, or allow replacement of select native tree species to maintain the forested feel of Lake Forest Park;

F. To protect private property rights and allow property owners to make reasonable use of their property while protecting suitable and appropriate trees for that site; and

G. Maintain and protect the public health, safety, and general welfare. (Ord. 1015 § 2, 2010)

### **16.14.030 Definitions.**

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For the purposes of this chapter, the following terms are defined as follows:

“Administrator” means the planning director or the planning director’s designee.

“Best management practices (BMPs)” means adherence to tree health care standards detailed in the current edition of the American National Standards Institute (ANSI) A300, the standards for proper tree care, including but not restricted to the following elements of tree protection and care:

1. Avoidance of physical damage to tree roots, stem, branches, and foliage;
2. Prevention of soil compaction from equipment operation and placement or storage of construction materials in the vicinity of the critical root zone (CRZ);
3. Protection of the critical root zone (CRZ) of saved trees from changes in drainage that impact soil moisture content;
4. Protection of existing trees from the impacts of exposure caused by removal of adjacent trees; and
5. Plant health care practices as published by the International Society of Arboriculture in their series of best management practices for the various aspects of tree care.

“Caliper” means the industry standard for measurement of nursery stock size. Caliper is measured six inches above the root collar for nursery stock four inches in diameter and smaller.

“Canopy” means the part of the tree crown composed of leaves and small twigs or the collective branches and foliage of a group of trees’ crowns.

“Canopy coverage” means a measure of the lot area that is covered by the canopies of existing trees and/or the canopy of the total of existing trees, immature trees, and newly planted trees. The canopy coverage of the immature trees and newly planted trees is determined using the projected canopy areas in the Lake Forest Park general tree list.

“Critical root zone (CRZ)” means the International Society of Arboriculture (ISA) definition of CRZ as an area equal to one-foot radius from the base of the tree’s trunk for each one inch of the tree’s diameter at 4.5 feet above grade (referred to as diameter at breast height). Example: A 24-inch diameter tree would have a critical root zone radius (CRZ) of 24 feet. The total protection zone, including trunk, would be 50 feet in diameter.

“Crown” means that portion of the trees stem that is occupied by branches with live foliage.

“DBH” is an acronym for tree diameter at breast height which means the diameter of existing trees measured 4.5 feet above the ground line on the high side of the tree. Multiple stemmed tree diameters shall be determined by equating the canopy coverage of the tree to that of a single-stemmed tree. For example, three 12-inch DBH stems on a multi-stemmed bigleaf maple tree may have the same canopy coverage as a single-stemmed 20-inch DBH bigleaf maple. Refer to the general tree list maintained by the city. For the purposes of code enforcement, if a tree has been removed and only the stump remains, the size of the tree shall be the diameter of the top of the stump adjusted to DBH using published tables or regression curves.

“Development activity” means any activity that requires federal, state, or local approval for the use or modification of land or its resource. These activities include, but are not limited to, variances; shoreline substantial development; clearing activity; excavation; embankment; fill and grade work; converting fallow land or undeveloped land to agricultural purposes; activity conditionally allowed; building or construction; revocable encroachment permits; and septic approval.

“Dripline” for a tree is delineated by a vertical line extended from the outermost branch tips to the ground, or six-foot radius from the stem of the tree, whichever is greater.

“General tree list” means a list of trees species that is maintained by the city and approved by the city’s qualified tree professional for planting as replacement and mitigation trees. The general tree list also

establishes which tree species that are prohibited from being planted as replacement and mitigation trees. The general tree list may also contain additional information that is deemed by the city to be the basis for determining how many replacement trees may be required to meet the standards of this chapter.

“Hazard tree” means a tree that is dead, dying, diseased, damaged, structurally defective, or exposed by recent removal of adjacent trees which increases the risk of tree failure. The tree or tree parts have a target and the reasonable person would expect the tree to strike the target when failure occurs. A target is a person or property that may be injured or damaged by failure of the tree or its parts. Tree removal may be necessary if the tree cannot be made safe by pruning or moving of the target.

“Impact” means a condition or activity that affects a part of a tree including the trunk, branches, and roots within the dripline or critical root zone (CRZ).

“Landmark tree” means a tree that is at least 28 inches in diameter.

“Limits of disturbance” means the boundary between the area of minimum protection around a tree and the allowable site disturbance as determined by the city’s qualified tree professional.

“Live crown ratio” is the percentage of the total height of the tree that is occupied by the live green crown. For example, if the crown length, measured from the leader tip to the base of the live crown, is 55 feet and the total tree height is 100 feet, then the live crown ratio is 55 percent.

“Native” means trees and plants native to western Washington.

“New development” means construction associated with new subdivisions or short subdivisions as defined and applied in Chapter 58.17 RCW.

“Nuisance tree” means a tree that is causing obvious physical damage to structures, including but not limited to sidewalks, curbs, the surfaces of streets, parking lots, or driveways, or building foundations. The prescription to reduce the problem should include root or branch pruning, installation of root barriers, or other structures to eliminate or reduce potential for further damage. Tree removal should be considered as a last resort.

“Person” means an individual, corporation, municipal corporation, association, LLC (limited liability corporation), or any legal entity.

“Protected tree” means a tree and associated understory vegetation identified for retention and protection on an approved tree protection and replacement plan and/or permanently protected by easement, tract, or covenant restriction.

“Qualified tree professional” is an individual who is a certified professional with academic and field experience that makes them a recognized expert in urban forestry and tree protection during development. A qualified tree professional shall be a member of the International Society of Arboriculture (ISA) and/or the Association of Consulting Arborists and shall have specific experience with urban tree management in the state of Washington. Additionally the city’s qualified tree professional shall be a certified arborist or board certified master arborist, as certified by the International Society of Arboriculture, and have the necessary training and experience to use and apply the appraisal methodology prescribed in the current edition of the ISA Plant Appraisal Guide.

“Significant tree” means any healthy tree six inches or greater in diameter (DBH).

“Specimen tree” means a tree of exceptional size, form, or rarity.

“Street tree” means any planted tree on public rights-of-way.

“Tree” means a self-supporting woody plant characterized by one main trunk or, for certain species, multiple trunks, that is recognized as a tree in the nursery and arboricultural industries.

“Tree removal” means the direct or indirect removal of a tree(s) or vegetation through actions including, but not limited to: clearing, cutting, girdling, topping, or causing irreversible damage to roots or stems; destroying the structural integrity of trees through improper pruning; poisoning; filling, excavating, grading, or trenching within the dripline that results in the loss of more than 20 percent of the tree’s root system; or the removal through any of these processes of greater than 50 percent of the live crown of the significant tree.

“Understory vegetation” means small trees, shrubs, and groundcover plants, growing within the dripline or critical root zone (CRZ) of a significant tree.

“Viable tree” means a significant tree that a qualified tree professional has determined to be in good health with a low risk of failure, is relatively windfirm if isolated or exposed, and is a species that is suitable for its location.

“Wildlife snag” means the remaining trunk of a dead, dying, diseased, or hazard tree that is reduced in height and stripped of all live branches. To be considered as a wildlife snag, the tree must be at least 12 inches DBH and 20 feet tall. The actual snag height must consider the surrounding targets.

“Windfirm” means a tree that is healthy and well-rooted and the city’s qualified tree professional has evaluated and determined that it can withstand normal winter storms in Lake Forest Park. (Ord. 1015 § 2, 2010)

**16.14.040 Tree removal – Application for permits and posting required.**

A. Permit Required. No person or their representative, directly or indirectly, shall remove or destroy any significant tree located within the city without first obtaining a tree permit in accordance with this chapter and Table 1, unless exempted in LFPMC16.14.050.

**Table 1**

<b>Lot Size and Use Category</b>	<b>Canopy Coverage Goal</b>	<b>Maximum Tree Removal with Arborist Consult Permit a 36-Month Period(1)</b>	<b>Maximum Tree Removal with Administrative Permit a 36-Month Period(2)</b>
Single-family lots greater than 15,000 square feet	58%	2 Significant or Landmark Trees	2 Significant Trees
Single-family lots 10,000 – 15,000 square feet	39%	2 Significant or Landmark Trees	2 Significant Trees
Single-family lots less than 10,000 square feet	28%	2 Significant or Landmark Trees	2 Significant Trees
Multifamily lots	15%	1 Significant or Landmark Tree	1 Significant Tree
Commercial lots	15%	1 Significant or Landmark Tree	1 Significant Tree
<p>(1) Required to remove any landmark tree (28 inches diameter or greater) or when proposed development activity will occur within the dripline or critical root zone (CRZ) of no more than two significant trees.            (2) Mandatory replacement plan including one replacement tree for each significant tree removed or equivalent payment into tree fund.</p>			

B. Permit Types. Tree removal must be authorized by one of the following types of permits, as applicable:

1. Administrative Review Permit. Tree removal may be authorized by an administrative review permit for removal of no more than two significant trees within any 36-month period, unless otherwise authorized by an arborist consult permit. The administrator may require that the proposed tree removal be reviewed as an arborist consult permit if the administrator determines that the removal could result in a threat to persons or damage of property.

2. Arborist Consult Permit. Tree removal may be authorized by an arborist consult permit when proposed development activity will occur within the dripline or critical root zone of no more than two significant or two landmark trees.

3. Arborist Review Permit. Tree removal may be authorized by an arborist review permit for removal of three or more trees in a 36-month period on a single-family lot or more than one tree on a multifamily or commercial lot, except when the administrator determines that the proposed removal may be approved under an arborist consult permit. All new development, both residential and commercial, shall require an arborist review permit.

C. Administrative review, arborist consult and arborist review permits expire 180 days after the date the permit is issued.

D. Permit Denial. If the administrator or the city's qualified tree professional determines that a proposed tree removal is substantially likely to result in injury or damage to persons or property, or will reduce the tree canopy on the subject property below the applicable canopy coverage goal, the city may deny the permit, or require tree replacement to achieve canopy coverage for that lot in accordance with LFPMC 16.14.080.

E. Permit Application and Posting Requirements.

1. For administrative and arborist consult permits, the notice of application shall be posted for two days prior to permit approval. In order for the notice of application to be posted for an administrative review permit, the applicant must sign and attest that no landmark trees (over 28 inches in diameter) are being removed.

2. For arborist review permits, the notice of application shall be posted for at least 14 days as required by Chapter 16.26LFPMC prior to permit approval.

3. Tree removal may commence immediately upon posting of an approved tree permit on the subject site at a conspicuous location. The tree permit shall remain posted at least one week after the approved activity has been completed.

F. Appeals. Appeals of administrative determination shall follow Chapter 2.39 LFPMC. (Ord. 1015 § 2, 2010)

### **16.14.050 Exemptions.**

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The following are exempt from the requirements of this chapter:

A. Emergency actions necessary to remedy an immediate threat to people or property, or public health, safety or welfare by a hazard tree. Any person undertaking such action shall notify the planning director within one working day following commencement of the emergency action and shall apply to the planning director for review of the work performed.

B. Trees may be removed by the city, or electric or other utilities for the normal course of maintenance of the utilities, street lights, sidewalks, signage or public rights-of-way, or for situations involving immediate danger to life or property, including impeding safe traffic vision or flow, or interruption of services provided by the utility. To be exempt for maintenance-related tree removal, a utility must have an approved right-of-way permit.

C. The removal of dead trees.

D. Sensitive Areas and Sensitive Area Buffers. A tree located within a sensitive area or a sensitive area buffer shall only be removed in accordance with Chapter 16.16 LFPMC. (Ord. 1015 § 2, 2010)

### **16.14.060 Qualified tree professional.**

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A. The city shall contract with one or more professionals that qualify as a qualified tree professional under the definition of this chapter. Said professional or professionals shall be responsible for providing the information and services required of the city's qualified tree professional described herein.

B. Individual applicants will be responsible for payment of the costs and fees of the city's qualified tree professional for projects necessitating work to be performed by the city's qualified tree professional with the exception of administrative review permits and in cases where a project is determined to be exempt. (Ord. 1015 § 2, 2010)

## **16.14.070 Tree plan required.**

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An applicant for a tree removal permit must submit a tree plan that complies with this section. This tree plan (and replacement plan if required by the provisions below or by LFPMC 16.14.080) shall be reviewed and approved by the city's qualified tree professional. The city's qualified tree professional may consider previous tree removal activity in the vicinity of the proposed tree removal in determining if the proposed action could result in a threat to persons or potential damage to property.

A. Administrative Review Permit. An administrative review permit shall be approved based on the following:

1. The completed permit application supplemented by a general site plan showing:
  - a. The locations of tree(s) to be removed;
  - b. Nearby structures;
  - c. Locations of other significant trees surrounding the tree(s) to be removed;
  - d. A description of proposed activity within the dripline of surrounding significant trees to remain.
2. A tree replacement tree plan showing the location(s) and species of the new tree(s) shall be submitted with the permit application. The applicant shall be required to replace the removed significant tree(s) on a one-for-one basis according to the standards set in LFPMC 16.14.080(G)(1) through (5).

B. Arborist Consult Permit. An arborist consult permit shall be approved based on the following:

1. The completed permit application supplemented by a general site plan showing:
  - a. The locations of tree(s) to be removed;
  - b. Nearby structures;
  - c. Locations of other significant trees surrounding the tree(s) to be removed;
  - d. A description of proposed activity within the dripline of surrounding significant trees to remain.

2. If the canopy coverage is below the minimum threshold established for the size of lot, the applicant shall be required to replace the removed significant tree(s) according to the standards set forth in LFPMC 16.14.080.

3. If tree replacement is necessary, then a tree replacement plan showing the location(s) and species of the new tree(s) shall be submitted with the permit application.

C. Arborist Review Permit. The tree assessment for the tree protection plan should be prepared as early in the project design process as possible to improve the applicant's ability to incorporate existing trees into the project and to provide adequate protection. An arborist review permit shall at a minimum include the following information:

1. The name, address, and phone number of the applicant and owner of the property.

2. Legal description of the property including parcel number.

3. A site map (to scale) with a north arrow depicting accurate location of site features including buildings, driveways, forest stands or open-grown single or clusters of significant trees, the dripline of the stand, cluster, or individual tree, along with any other off-site trees that may be impacted by tree removal, excavation, or grading during this project.

4. A tree inventory and assessment report prepared by a qualified tree professional. Individual trees to be removed or that are in the vicinity of construction and potentially could be impacted should be numbered (with corresponding numbers placed on trees). Information on tree species, diameter at breast height (DBH), condition (health), and the minimum required critical root zone (CRZ) should be collected.

5. A tree list showing which trees are to be protected and removed, along with any other necessary cultural care. Include the minimum critical root zone (CRZ) distances in the list.

6. Graphic detail of tree protection fence locations and any other special instructions for work that may or may not occur within critical root zone (CRZ).

7. A timeline for tree protection activity should be provided describing:

a. Attendance of the city's qualified tree professional at the pre-job conference to discuss tree protection activity.

- b. Installation, inspection and maintenance of the tree protection fences.
- c. Measures taken to ensure health of the tree(s) during construction.
- d. Removal of fences at end of construction.
- e. Final inspection of protected trees by city's qualified tree professional.

8. A description and location of tree protection measures during construction for trees to be retained must be shown on demolition and grading plans. Protection measures must be in accordance with LFPMC 16.14.090.

9. The above tree information shall be required only for trees potentially impacted on developing or developed lots.

10. The administrator may specify conditions for work, at any stage of the application or project, as is deemed necessary to ensure the proposal's compliance with requirements of this section, as well as the sensitive areas regulations, clearing, grading, and stormwater management regulations, or to protect public or private property. These conditions may include, but are not limited to, recommendation of specific work methods.

D. Replacement tree species shall be selected from the Lake Forest Park general tree list, which is maintained by the city. Only trees on the list can be used as replacement trees unless other tree types are approved by the city's qualified tree professional. A list of invasive species and nuisance species of trees shall be maintained by the city. Invasive and nuisance trees shall not be planted as replacement trees.

E. All removal tree permits issued as part of a subdivision or short subdivision shall have a condition on the face of the subdivision or short subdivision plat stating that minimum canopy must be achieved and maintained on each lot. For tree permits associated with any other new development proposals, including new residential or commercial development, variance requests, conditional use permits and reasonable use exceptions, a notice on title in the form required by LFPMC 16.16.190 shall be recorded by the permittee disclosing the tree permit and associated tree retention conditions required by this subsection. (Ord. 1015 § 2, 2010)

## **16.14.080 Tree retention and replacement standards.**

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This section provides standards for determining when and how trees must be retained or replaced. The city will apply these standards when considering an application for a tree permit under LFPMC 16.14.040.

A. The minimum standard for tree retention is determined by tree canopy coverage goal for the lot sizes and land use types set forth in Table 2 below. Tree canopy coverage is measured by the percentage of canopy provided by existing trees or the projected canopy coverage to be provided by newly planted or immature trees (when such trees reach 30 years of age).

**Table 2**

	<b>Canopy Coverage Goal</b>
Single-family lots greater than 15,000 square feet	58%
Single-family lots 10,000 – 15,000 square feet	39%
Single-family lots less than 10,000 square feet	28%
Multifamily	15%
Commercial	15%

1. A person whose tree removal causes a lot's canopy coverage to fall below the canopy coverage goal shown in Table 2 above shall obtain administrator approval of and implement a tree replacement plan that brings canopy coverage to the applicable percentage specified in Table 2 above (when the replacement trees reach 30 years of age).

2. Where the lot on which tree removal occurs is below the canopy coverage goal shown in Table 2 prior to tree removal, the person removing the tree shall obtain administrator approval of and implement a tree replacement plan that brings canopy coverage to the percentage that existed prior to the proposed tree removal (when the replacement trees reach 30 years of age).

3. A person obtaining an arborist review permit associated with new development shall obtain administrator approval of and implement a tree replacement plan that achieves the applicable minimum canopy coverage specified in Table 2 above (when the replacement trees reach 30 years of age).

B. New subdivisions, short plats, and new multifamily or commercial developments are required to create a tree tract equal to five percent of the gross project area. This tract shall be selected to save existing high quality, windfirm, long-term existing trees on the site. If suitable trees are not present, then the tree tract should abut other existing stands of off-site trees, or sensitive, or other undevelopable areas such as steep slopes. If all or portions of the tree tract are not treed, then the tract shall be replanted to achieve canopy coverage when the newly planted trees reach 15 years of age.

C. The priority for protection of healthy trees in developing, redeveloping, or existing lots that are being modified is:

1. Landmark trees;
2. Specimen trees or other high quality open-grown, windfirm trees;
3. Trees in critical area buffers, or adjacent to critical area buffers:
  - a. Trees that are interdependent with and therefore critical to the integrity of stands of other protected trees;
  - b. Existing healthy trees in groups or stands;
  - c. Other individual trees that will be windfirm, high quality trees if retained;
  - d. Other trees that provide wildlife or riparian habitat, screening, buffering or other amenities;
  - e. Trees that help to protect neighbors' trees from windthrow, or other trees within required yard setbacks or on the perimeter;
  - f. Trees next to parks or other open space areas.

D. The administrator may require an applicant to implement other measures designed to mitigate the loss of trees, such as requiring the restoration of all or parts of the forest landscape and its associated benefits, including but not limited to:

1. Creation of wildlife snags from trees which would otherwise be removed;
2. Replacement of ornamental trees with native shrubs and groundcover;
3. Replacement of hazardous or short-lived trees with healthy new trees more likely to survive;
4. Restoration of stream corridors with native vegetation; or
5. Protection of nonsignificant trees to provide for the successional stages of forest development.

E. Measurement of Canopy Coverage.

1. Existing Open-Grown Trees.

a. Measure the radius of the tree's canopy at its widest and narrowest points and calculate the average canopy radius for the tree.

b. Calculate the tree's canopy coverage (ft<sup>2</sup>) using the average canopy radius and the formula:  $\pi r^2$  where  $\pi = 3.1416$  and  $r =$  the canopy radius in feet.

c. Add up the calculated canopy coverage for all trees on the parcel in square feet and divide by the total lot area to determine the percentage canopy cover.

2. For contiguous stands of trees, traverse the perimeter of the stand within the parcel to calculate the area under the tree canopy and the resulting canopy percentage. In some cases, use of high-resolution aerial photography may be used for larger stands.

3. For newly planted or immature trees less than 30 years old, calculate the projected canopy coverage at age 30 using the information provided in the approved general tree list for the city of Lake Forest Park. Sum these canopy coverage areas to project the lot canopy coverage as trees reach an age of 30 years.

F. Incentives for Higher Levels of Tree Retention for New Development. The administrator may grant reductions or adjustments to other site development standards if doing so will allow retention of a sufficient number of existing, healthy significant trees and tree canopy coverage in excess of the goal required by Table 2 above. On a case-by-case review, the administrator shall determine the balance between tree protection that exceeds the established minimum percentage and variations to site development requirements. Authorized adjustments include:

1. Reductions or variations of the area or width of required open space, tree tract requirement, and/or landscaping;
2. Variations in parking lot design and/or access requirements; or
3. Reduction in the width of certain easements.

G. Tree Replacement Requirements. For lots under the canopy coverage goal that propose tree removal activity requiring an arborist review permit, native conifers shall comprise at least 30 percent of the replacement trees. The number of required replacement trees is determined by the number of trees that will, at age 30, achieve tree canopy coverage equal to or greater than the minimum canopy coverage required by Table 2 above for the type of lot. The replacement tree species shall be selected from the approved general tree list for the city of Lake Forest Park which is maintained by the city. Trees listed as prohibited in the general tree list are not acceptable for replacement or mitigation trees. Any substitutions of trees that are not on the list or alternative methods of replacement must be approved by the city's qualified tree professional.

1. The minimum size of replacement trees should be:
  - a. Deciduous trees, two inches caliper.
  - b. Conifers, a minimum of six feet tall.
2. All trees must be containerized or balled and burlap stock and be planted according to industry standards.
3. All trees shall meet the minimum standards for size and quality according to the current edition of the ANSI Z60.1 standard for nursery stock.

4. A maintenance bond of 125 percent of the projected cost of tree replacement is required for required tree replacement on all new development projects. This bond will be maintained for 60 months after planting of the new trees.

5. The applicant is required to provide watering until replacement trees are independently viable. Replacement trees that die prior to meeting the definition of significant tree must be replaced by a replacement tree meeting the criteria of this section and any canopy coverage goal requirements that the expired tree was intended to provide.

H. On-Site Replacement. Replacement trees shall be planted on the site from which significant trees are removed. The administrator may waive the on-site tree replacement requirement; provided, that the applicant pays an amount determined by a qualified tree professional into the city tree account that is equivalent to the total cost for purchase and installation of each replacement tree and three years of maintenance for each replacement tree. (Ord. 1015 § 2, 2010)

#### **16.14.090 Tree protection and design measures.**

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A. Tree Protection Measures. To ensure long-term viability of trees identified for protection:

1. All required tree protection measures shall be shown on the demolition, grading, and tree protection plan along with a timeline for tree protection activity.
2. All construction activities, including staging and traffic areas, shall be prohibited within five feet of the dripline of protected trees.
3. Tree protective fencing shall be installed at the limits of disturbance and completely around trees to be protected prior to any land disturbance unless otherwise delineated by the qualified tree professional.
4. Tree protective fencing shall be a minimum of four feet high, constructed of chain link or polyethylene laminar safety fencing or similar material, subject to approval by the city. The fence must be constructed on steel posts with a minimum spacing of eight feet on center. “Tree Protection Area – Keep Out” signs shall be posted visibly on all sides of the fenced areas.
5. Where tree protection areas are remote from areas of land disturbance, and where approved by the city, alternative forms of tree protection may be used in lieu of tree protective fencing; provided,

that the critical root zones of protected trees or stands of trees are clearly delineated with continuous rope or flagging and accompanied by “Tree Protection Area – Keep Out” signs.

B. Tree Health. In addition, the applicant shall support tree protection efforts by employing, as appropriate, the following preventative measures, consistent with best management practices (BMPs) for maintaining the health of the tree:

1. Pruning of visible deadwood on trees to be protected;
2. Application of fertilizer to enhance the vigor of stressed trees;
3. Use of soil amendments and soil aeration in tree protection and/or replanting areas;
4. Mulching over tree dripline areas; and
5. Providing watering during and immediately after construction.

C. Alternative Methods. The city may approve the use of alternative tree protection techniques if a protected tree will be protected to an equal or greater degree than through the techniques listed above, as determined by the city’s qualified tree professional.

D. Grading and Proximity to Structures, Utilities, and Roadways.

1. Structures, utilities, and roadways shall be set back at least five feet from the dripline or critical root zone (CRZ), whichever is greater of a protected tree, except where such structure is a raised deck, bay window, or other structure cantilevered or otherwise raised above the ground’s surface so as not to disrupt the tree’s roots.
2. Sidewalks, driveways, structures and utilities may be located within the dripline or critical root zone (CRZ) of a protected tree; provided, that construction methods and materials used will result in minimal disruption of the tree’s roots, and that tree protection measures are proposed and approved by the city’s qualified tree professional.
3. The administrator may allow activities such as trenching, construction or an alteration of grades inside the five-foot setback from the dripline or critical root zone of a protected tree; provided, that the tree protection plan prepared by the qualified tree professional which demonstrates that the proposed activity will not adversely affect the long-term viability of the tree. Generally, no more than 20 percent of the root system of a tree should be impacted by this activity.

E. Site Development and Modification Guidelines. Site improvements shall be designed and constructed to:

1. Incorporate trees as a site amenity and to reflect a strong emphasis on tree protection.
2. Retain a forested look, value, and function after development or modification. Trees should be protected within vegetated islands and stands rather than as individual, isolated trees scattered throughout the site.
3. Building footprints, parking areas, roadways, utility corridors and other structures shall be designed and located taking into consideration tree protection opportunities.
4. The project grading plans shall accommodate existing trees and avoid alteration to grades around existing significant trees. (Ord. 1015 § 2, 2010)

#### **16.14.100 Tree maintenance.**

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A. All protected trees, required replacement trees, and/or relocated trees so designated on an approved permit and replanting plan, shall be maintained in healthy condition by the property owner unless otherwise approved by the city in a subsequent permit. If the canopy coverage falls below the approved coverage granted by latest permit, the property owner will be required to plant replacement trees to achieve the approved canopy requirements.

B. Pruning.

1. Significant and other protected trees, as defined in this chapter, shall not be topped.
2. Street trees shall be pruned only under the supervision of the Lake Forest Park public works department.
3. Pruning and maintenance of protected trees shall be consistent with the ANSI A300 standards for proper pruning. Hazard trees should be pruned or removed as necessary to protect people and property. (Ord. 1015 § 2, 2010)

#### **16.14.110 City tree account.**

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A. The city council shall establish in the budget ordinance a city tree account in the general fund.

B. The city shall credit to the city tree account:

1. All money paid to the city under LFPMC 16.14.080 and 16.14.120(A); and
2. Other monies allocated by the city council.

C. The city shall use the city tree account funds for the following purposes:

1. Acquiring, maintaining, and preserving forested areas within the city;
2. Planting and maintaining trees within the city; or
3. Other purposes relating to trees as determined by the city council. (Ord. 1015 § 2, 2010)

### **16.14.120 Enforcement.**

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A. Violations. Violations of this chapter may be addressed by the administrator pursuant to the provisions set forth below. As an additional or alternative remedy and/or penalty, the administrator may also enforce the provisions of this chapter using the procedures set forth in Chapter 18.71 LFPMC.

1. Removal of existing trees in violation of this chapter will require an appraisal of the tree value by the qualified tree professional using the current edition of the International Society of Arboriculture's Guide for Plant Appraisal. The cost of the appraisal shall be paid by the person(s) who removed existing trees in violation of this chapter.
2. Tree replacement to the value of the appraised value of removed trees is required.
3. Trees can be planted on the lot where trees were removed or the monetary value of the unplanted trees can be paid into the city tree account.

B. Increased Permit Fees. In addition to or in place of any other remedy or penalty authorized by this code, the administrator may charge a fee equivalent to triple the fee associated with an arborist consult permit to any person who conducts unpermitted activity requiring an administrative, arborist consult or arborist review permit, or who fails to provide sufficient evidence that such activity met the requirements of LFPMC 16.14.050, Exemptions.

C. Stop Work Order. If a violation of this chapter or an approved tree permit occurs on property on which work is taking place pursuant to a city of Lake Forest Park development or building permit, the building official may suspend some or all of the work as appropriate through issuance of a stop work order. The

building official shall remove the stop work order when the city determines that the violation has been corrected or when the city has reached an agreement with the violator regarding rectification of the violation.

D. Any person who removes a tree in violation of the conditions of a tree removal permit or in violation of this chapter may be required to perform remedial measures ordered by the administrator. The following provisions shall apply in instances where such remedial measures are required:

1. All work shall be performed in accordance with permits obtained pursuant to this chapter.
2. Remedial measures must conform to the purposes and intent of this chapter and meet all requirements and standards of this chapter.
3. Remedial measures must be completed within the time frame specified by the administrator.
4. The cost of any remedial measures necessary to correct violation(s) of this chapter shall be borne by the property owner and/or applicant.

E. Penalties. The administrator may, in addition to the replacement tree requirement, impose a penalty of up to \$5,000 per tree for removal of or damage to significant trees in violation of this chapter. This penalty may be imposed in addition to or in lieu of any penalty imposed pursuant to the procedures of Chapter 18.71 LFPMC. A person may obtain administrative review of a penalty imposed under this subsection in accordance with the provisions of LFPMC 18.71.070. (Ord. 1015 § 2, 2010)

### **16.14.130 Requirements for tree services and others doing land clearing and tree removal.**

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A. In order to assure compliance with the standards and requirements of this chapter, private foresters, arborists, and logging and land clearing contractors or others and heavy equipment operators involved in land clearing operations in the city of Lake Forest Park shall be required to sign and submit a statement of tree canopy preservation and enhancement acknowledgment to the city of Lake Forest Park. This statement shall attest such arborist, forester, or contractor's knowledge of the city of Lake Forest Park's tree protection requirements. This statement shall be required in addition to the city business licensing requirements set forth in Chapter 5.02 LFPMC and applicable to persons performing work in the city of Lake Forest Park. The required statement shall be in substantially the following form:

1. I, \_\_\_\_\_, a duly licensed professional contractor in the State of Washington, or professional forester, hereby attest that I have read and am knowledgeable of Chapter 16.14, Tree Canopy Preservation and Enhancement, of the City of Lake Forest Park Municipal Code.

2. I further attest that, as a professional doing land clearing work in the City of Lake Forest Park, I am accountable for following the City's Tree Canopy Preservation and Enhancement requirements, including obtaining a tree removal permit or exemption prior to performing tree removal or clearing work, as defined by Chapter 16.14 of the Lake Forest Park Municipal Code, as well as following all conditions and requirements of said permit or exemption.

3. I attest that if I fail to follow tree protection requirements, I will be held jointly responsible with the landowner for any restitution required as a result of environmental damage determined by the City Qualified Tree Professional to be the result of improper tree removal or land clearing activities at the site. This may result in claims against my bond pursuant to Section 18.27.040 of the Revised Code of Washington and other monetary penalties as allowed by this Chapter or State law.

B. Private professionals involved in land clearing operations who do not provide the above statement shall be prohibited from performing tree removal and land clearing services in the city of Lake Forest Park. Said professionals who do not provide this statement and perform land clearing services in the city of Lake Forest Park shall be considered in violation of this chapter and may be prosecuted under this chapter, the city's civil penalties ordinance, or as otherwise provided by law. All professional arborists, foresters, loggers, or other land clearing contractors or heavy equipment operators involved in land clearing operations shall be jointly responsible with the landowner for any land clearing violation and restitution required at a site as a result of improper land clearing activity. (Ord. 1015 § 2, 2010)

### **16.14.140 Liability.**

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A. Liability for any adverse impacts, damages or injury resulting from work performed in accordance with any permit issued by the city under LFPMC 16.14.040(B) shall be the sole responsibility of the permit applicant and/or owner of the property or site for which the permit was issued, and shall not be the responsibility of the city of Lake Forest Park. Issuance by the city of any permit under this chapter shall not be construed as an assumption of any risk or liability by the city of Lake Forest Park, nor as a warranty or guarantee that the work authorized by the permit will have no adverse impact or will cause no damages or injury to any person or property.

B. Issuance by the city of a permit under LFPMC 16.14.040(B) and/or compliance by the applicant and/or property owner with any permit conditions therein shall not relieve an applicant and/or property owner from any responsibility otherwise imposed by law for any adverse impacts, injury or damage to persons or property resulting from the work authorized by any permit issued under this chapter.

C. Nothing contained in this chapter shall be deemed to relieve any property owner within the city limits from the duties imposed under Chapter 8.12 LFPMC to keep any tree or vegetation upon his property or under his control in such condition as to prevent it from constituting a hazard or a nuisance.

D. The amount of any security required as part of any land development permit with which tree removal is associated shall not serve as a gauge or limit to the compensation that may be owed by a property owner as a result of injury or damages to persons or property resulting from any tree removal authorized under this chapter. (Ord. 1015 § 2, 2010)