

BILL 10997

ORDINANCE 10825

AN ORDINANCE AMENDING CHAPTER 24 "TREE CODE" BY DELETING IT IN ITS ENTIRETY AND INSERTING A NEW CHAPTER 24 "TREE CODE".

WHEREAS, the current Tree Code needs clarification of tree protection requirements for partial lot development and single family infill construction, and

WHEREAS, the proposed changes will simplify and clarify current regulations of tree protection, while adding a replanting fee for builders and homeowners, and

WHEREAS, staff recommends amending Chapter 24 "Tree Code" by deleting it in its entirety and inserting a new Chapter 24 "Tree Code".

NOW, THEREFORE, BE IT RESOLVED BY THE COUNCIL OF THE CITY OF KIRKWOOD, MISSOURI, AS FOLLOWS:

SECTION 1. Section 24 "Tree Code" is hereby amended by deleting it in its entirety and inserting a new Chapter 24 "Tree Code" as follows:

CHAPTER 24

TREE CODE

Article I.

GENERAL TREE REGULATIONS

Section 24-1. Purpose.

The purpose of this Code is to promote and protect the preservation, safety, and general welfare of the City's interests by providing for the regulation of the planting, protection, maintenance, survival and removal of the trees within the City of Kirkwood, Missouri. All regulations and fees are established to protect existing tree canopy and to increase the canopy goals through the City's established interests. All City Parks and Park Maintained spaces are exempt from this Ordinance.

Section 24-2. Definitions.

Adjusted Diameter. The DBH multiplied by the tree's Physical Deterioration rating, functional Obsolescence, and external Obsolescence. For example, if a tree has a DBH of 32 inches in diameter and is in relatively poor health with a physical deterioration of 40%, functional obsolescence of 80%, and external obsolescence of 80% its adjusted diameter is 8.2 inches.

Caliper. A unit measurement made of young trees for size classification. The caliper measurement is take at the base of the stem just above the root collar.

Canopy Coverage Map. A map required to meet tree protection guidelines that depicts the total canopy coverage on a lot, as well as impacted canopy and remaining canopy post disturbance.

Certified Arborist. An individual with a valid “Certified Arborist” designation from the International Society of Arboriculture.

DBH (Diameter at Breast Height). The diameter of a tree measured at four and one-half (4-½) feet above ground.

Heading cuts. A pruning cut made by reducing the trunk or branches of a tree to stubs or to lateral branches too small to assume the terminal role of the branch being cut.

Invasive. Any tree or shrub considered to be foreign or unnatural with the ability to overcome the natural vegetation and expand rapidly throughout the landscape.

Large Canopy Tree. Any tree with a mature height greater than 45 feet in height and not listed as an invasive or prohibited species.

Medium Canopy Tree. Any tree with a mature height greater than 30 feet in height and less than 45 feet in height not listed as an invasive or prohibited species.

Newly Planted Trees. Trees planted for the purpose of meeting the landscaping plan or Tree Study requirements for development on a site.

Public Trees. Trees located within the City’s paved right-of-ways, excluding trees within the Parks.

Removal. The complete removal from the site of all above ground material debris as well as the removal of the stump by either grinding or excavation.

Remove. The actual removal or causing the need to remove through damaging, poisoning, or other direct or indirect actions resulting in the death or serious decline of a tree.

Significant Tree. Any tree 6 inches in DBH or greater in fair or greater condition, excluding invasive species or “undesirable trees”.

Small Canopy Tree. Any tree with a mature height greater than 15 feet in and less than 30 feet in height that is not listed as an invasive or prohibited species.

Topping. The pruning practice of reducing the height or spread of a tree using heading cuts.

Tree. A woody plant typically growing as a single stem or a multiple stem in an upright form that will attain a mature height of at least ten feet and a diameter (DBH) of at least two inches.

Tree Manual. A document containing the technical requirements for tree planting, tree selection, tree maintenance, and tree protection as dictated by the City of Kirkwood. This document is the *City of Kirkwood Tree Manual*.

Tree Protection Plan (TPP). In reference to a plan written by a certified arborist, to protect the public and/or private trees impacted during activities regulated by Section 24-4.

Tree Study. In reference to documents as part of a Tree Protection Plan that details the full assessment of the public and private trees in relationship to development. These documents are completed by a Certified Arborist.

Undesirable Tree. Any tree classified as invasive or a nuisance by the City of Kirkwood.

Section 24-3. Public Trees

A. Property Owner Obligations

Trees shall be maintained to meet the City of Kirkwood clearance requirements as outlined in Section 16-2, Nuisances enumerated, subsection (d) of the Kirkwood Code of Ordinances. Permits for satisfying clearance requirements are not required, but no person shall damage, destroy, apply chemicals, remove or prune outside of the obligations contained in Section 16-2 without first obtaining a permit from the City's Urban Forester.

B. Prohibited Acts

It shall be unlawful and an offense of this Code for any person to:

1. Attach any rope, wire, nails, posters, or other contrivance to any public tree.
2. Attach any permanent electrical conductor or apparatus to any public tree.
3. Use tree spurs or climbing spikes on public trees, unless the tree is to be removed.
4. Deposit, store, or maintain any equipment or material that reasonably may be expected to impede the free passage of water, air or fertilizer to the roots of any public tree.
5. Cause any gaseous, liquid, or solid substance which because of the nature or amount reasonably may be expected to be toxic or otherwise harmful to public trees to be located where such substances reasonably may be expected to affect public trees.
6. Cause any fire to burn if such fire, or the heat, smoke, or ash there from reasonably may be expected to injure any portion of any public tree.

C. Required Permits

Any maintenance of Public Trees, outside of the obligations of property owners set forth above, shall require one of the following permits. Permit fees shall be set forth in accordance with Chapter 5, Article VIII, Section 5-208, Schedule on file.

1. Permit to Maintain

Permit to Maintain shall be required for maintenance of Public Trees other than set forth above, including, but not limited to, the following:

- i. Injecting with chemical applications;
- ii. Applying chemical applications;
- iii. Pruning (beyond the owner obligations of Section 24-3(A) Property owner obligations);
- iv. Cable and bracing; or
- v. Adding lightning protection

A Permit to Maintain shall only be valid for 30 days after the date of issuance. Tree maintenance shall be performed with care as outlined in the Tree Manual to prevent destruction of structural integrity, health and vigor, and irreversible damage.

2. Permit to Remove

If a property owner desires to remove a Public Tree located in the right-of-way adjacent to their property, the property owner shall apply for a Permit to Remove. The Urban Forester, or appointed representative, shall review the application and inspect the tree. The review shall result in one of the following:

- i. If the tree requested for Removal is determined to be a hazard, the City will manage the removal.
- ii. If the tree is determined not to be a hazard, the application will be presented to the Kirkwood Urban Forestry Commission for review.
 - 1) If approved, the Kirkwood Urban Forestry Commission may recommend to the Urban Forester that the adjoining property owner may remove the tree at his/her sole expense. Such recommendations shall be made in writing to the Urban Forester and property owner applying for the permit, and the Urban Forester shall make the final determination.
 - 2) As a condition for Removal, the Kirkwood Urban Forestry Commission may recommend to the Urban Forester that the permit applicant plant a tree of at least 2 inches Caliper of an approved species to be found in the Tree Manual, or pay a Replanting Fee in the same manner as allowed in Section 24-4(F)(1).
 - 3) The Urban Forester shall determine if the property owner may remove the tree.
 - 4) If denied, the tree shall not be removed.

3. Permit to Plant

If a property owner desires to plant a tree in the City right-of-way adjacent to their property, the property owner shall file a Permit to Plant Application. If approved, the following applies:

- i. Upon approval, the applicant shall follow all laws and regulations pertaining to excavation by the state of Missouri;
- ii. By obtaining a Permit to Plant, the permittee shall be exempt from obtaining an excavation permit from the City of Kirkwood on the basis of tree planting; and
- iii. All trees planted shall be selected and planted in accordance with the Tree Manual.

D. Permit Conditions

1. The Urban Forester may deny the issuance of any permit authorized under this Section if, in the sole discretion of the Urban Forester, the issuing of the permit is not in the best interest of the City in maintaining the sustainability and health of the urban forest.
2. All maintenance performed on Public Trees shall be completed by a Certified Arborist, other than maintenance to comply with clearance requirements as set forth above, unless the requirement of a Certified Arborist is waived by the Urban Forester.
3. Closure of any street or public right-of-way for performance of work shall be completed in accordance with Chapter 20 of this Code.
4. In the event of severe storms or other emergency situations resulting in extraordinary situations, the Director of Public Services with the coordination of the Urban Forester, may waive any or all parts of this Chapter as deemed necessary.

ARTICLE II.
TREE PRESERVATION AND PROTECTION

Section 24-4. Tree Preservation and Protection

- A. Tree Preservation and Protection for the City of Kirkwood is required to provide three primary functions:
1. To keep the foliage canopy and branching structure clear from contact by equipment, materials, and activities.
 2. To preserve roots and soil conditions in an intact and non-compacted state.
 3. To identify the Tree Protection Zone (TPZ) in which no disturbance to soil or any and all parts of the tree both above ground and below shall be permitted.
- B. A Tree Protection Plan, including a Tree Study, approved by the Urban Forester, or designee, shall be required for all permits from the Building and/or Engineering Divisions that include:
1. All New Construction, Demolition, Excavation, Grading, and Complete Site Redevelopment, or
 2. All partial site development including additions or exterior alterations that impact 33% or more of the lot area.
 3. If a project with partial site development does not meet the requirements for providing a Tree Protection Plan listed above, but will include grading or other construction activity/impact within 10 ft. of a Significant Tree and/or City tree, tree protection measures will be required to be installed and maintained throughout the project, but no Tree Study is required.
- C. All Tree Protection Plans shall be completed by a Certified Arborist and must follow the protocols outlined here within. Approval shall be determined upon reasonable efforts to preserve trees on the site as determined by the guidelines set forth below.
1. Tree Protection Plans will contain the following:
 - i. A site map clearly marking:
 - 1) Proposed improvements;
 - 2) Trees proposed for Removal;
 - 3) Trees proposed for Tree Protection including locations of any and all tree protection methods to be used; and,
 - 4) Trees shall be numbered.
 - ii. A Tree Study, if applicable, that contains the following:

- 1) An appraisal and assessment of all public trees, trees on the site greater than 6 inches in diameter, and all trees on neighboring and adjacent property within 10 feet of the property line.

This shall include:

- (a) Tree Number
 - (b) Species name (Botanical)
 - (c) Diameter taken at breast height (DBH) and recorded in inches
 - (d) Physical Deterioration:
 - (i) Represented as a percentage value of 0-100
 - (e) Functional Obsolescence:
 - (i) Represented as a percentage value of 0-100
 - (f) External Obsolescence:
 - (i) Represented as a percentage value of 0-100
 - (g) Comments
 - (h) Total appraised value represented in U.S. Dollars:
 - (i) The Appraisal shall be completed by using the *Trunk Formula Technique (TFT)* from the *"Guide for Plant Appraisal, 10th Edition"*
- 2) Canopy Coverage Map
 - (a) A site map clearly marking:
 - (i) Existing canopy coverage of the complete lot
 - (ii) Proposed canopy for Removal
 - (iii) Proposed canopy preserved after project completion
 - (iv) Proposed site plan
 - (v) All trees marked and numbered
 - (b) A table showing canopy coverage percentages
 - (i) Existing canopy coverage of lot
 - (ii) Post project completion canopy coverage of lot
 - (iii) All trees with corresponding numbers and species

D. Canopy Coverage Requirements

1. All single family lots shall have minimum tree canopy coverage of 350 square feet per 1000 square feet of lot area (35% coverage).
2. Canopy coverage for existing trees shall be measured as represented in the field. Canopy for newly planted trees shall be estimated using the following rates for species provided in the City of Kirkwood's Recommended Species List.

- i. Large Canopy Trees: 1,000 square feet
 - ii. Medium Canopy Trees: 700 square feet
 - iii. Small Canopy Trees: 350 square feet
3. All trees designated to be protected or included in the canopy requirements shall be of a species not listed as a Prohibited Species in the Tree Manual. Existing trees shall be live, healthy trees over 6 inches in diameter and in good or fair condition of health. New deciduous trees shall be a minimum of 2 inches Caliper and evergreen trees shall be a minimum of 8 feet in height.

Any deciduous or evergreen tree planted for the purpose of screening shall receive 25 square feet of canopy per tree, with a limit of 350 square feet to be included in canopy coverage calculations.

E. Tree Replacement Requirements

The following tree replacement requirements shall apply to projects described in Section 24-4(B) unless otherwise noted.

1. Frontage Trees: The developer, builder, or home owner shall be required to plant trees in front of the building line but not within the public right of way approximately five to 10 feet from the public right away along all streets for single family lot development. The trees shall be provided in a ratio of not less than one tree for every fifty (50) feet of frontage. At street corners, the nearest tree shall be planted a minimum 25 feet from the intersection of the street right of way lines. These trees shall be included in calculating Tree Canopy Coverage requirements in 24-4(D).
2. Tree Density and Canopy Coverage: If the canopy coverage requirements in Section 24-4(D) cannot be met through preservation of existing trees, trees shall be provided to meet said requirement. The tree canopy area shall be shown on the final Tree Protection Plan. Canopy coverage estimates for planted trees shall be drawn in accordance with the canopy sizes for trees shown on the City of Kirkwood's Recommended Species list.

If the site does not allow sufficient space for replanting the required number of trees to meet these canopy coverage requirements, it shall be considered a failure to comply with Chapter 24, Article II; and the developer, builder, or property owner must fulfill these requirements through a Replanting Fee as described below in Section 24-4(F)(2).

3. All trees planted as part of tree replacement or canopy coverage requirements are subject to the following specifications:
 - i. Tree set-back:
 - 1) Trees shall not be planted within 5 linear feet of the property line.
 - 2) If there is a utility easement, no tree shall be planted within 10 linear feet of the center of the easement unless approved by the City of Kirkwood Forestry Division.

ii. Overhead Utilities

1) Only small trees are to be permitted within the utility easement with approval of the City of Kirkwood Forestry Division.

iii. Restricted Trees for use of Canopy Coverage

1) Trees planted within the City Rights of Way are not to be included in Canopy Coverage Calculations.

iv. Planting Specifications

1) All trees must be planted following the *International Society of Arboriculture's Best Management Practices – Tree Planting*.

2) All non-biodegradable material shall be removed from the tree.

This includes but is not limited to:

a. All rope and twine wrapped around the root ball and/or trunk.

b. The top 1/3 of burlap shall be cut and removed from the root ball.

c. The top 1/3 of any wire basket shall be cut and removed from the root ball.

F. Failure to Comply with Tree Protection Plans

1. Any failure to comply with an approved Tree Protection Plan or Tree Replacement Requirements shall be deemed as an offense, and the owner and developer shall be subject to the penalties set forth herein. The failure to protect multiple trees on one site shall constitute a separate and distinct offense for each affected tree.

i. Failure to Protect Trees Designated for Protection within the approved Tree Protection Plan. If during development or site disturbance, trees designated to be protected are damaged:

1) If the tree is determined that it will need to be removed:

a. The builder, developer, or owner shall be required to provide an updated Tree Study and Canopy Coverage Map.

b. Replant trees based on the adjusted diameter inch; or,

c. Pay a replanting fee to the City of Kirkwood of \$250.00 per adjusted diameter inch will be issued for the replacement of the removed trees..

2. Replanting Fee: When canopy coverage requirements are not met; developers, builders, or homeowners shall pay a replanting fee to the City of Kirkwood of \$500.00 per 1000 square feet of canopy.

3. All Replanting Fees shall be placed in a designated bank account solely used for the costs associated with tree maintenance and protection.

ARTICLE III.
PENALTIES AND DAMAGES

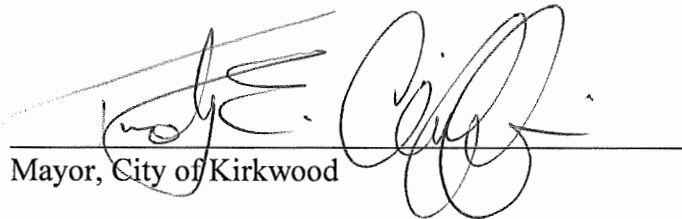
Section 24-5. Penalties

Failure to comply with the provisions of this Chapter shall be considered a municipal offense, and the City may take actions in accordance with Chapter 1, Article I, Section 1-8 "Violations and Penalties." of the Code of Ordinances of the City.

Appraised value for damages and violations of any provision of this Chapter shall be determined by the Urban Forester using the latest revision of the "Guide for Plant Appraisal" as published by the International Society of Arboriculture.


SECTION 2. This ordinance shall be in full force and effect after its passage and approval, as provided by law.

PASSED AND APPROVED THIS 21ST DAY OF SEPTEMBER 2023



Mayor, City of Kirkwood

ATTEST:



City Clerk

1st Reading: September 7, 2023

2nd Reading: September 21, 2023