

**ORDINANCE NO. 560**  
**2<sup>ND</sup> SERIES**

**AN ORDINANCE AMENDING ALEXANDRIA CITY CODE CHAPTER 10, FOR THE  
PURPOSES OF AUTHORIZING AND REGULATING TREE PRESERVATION  
WITHIN THE CITY OF ALEXANDRIA**

The City Council of the City of Alexandria does **ORDAIN**:

**SECTION I.** That Chapter 10 of the Alexandria City Code is hereby amended by the addition of Section 10.03 Subd. 2.J, which shall read as follows:

**J. Tree Preservation**

1. **Findings and purpose statement.** The Council finds it is in the best interest of the city to protect, preserve and enhance the natural environment of the community and to encourage a resourceful and prudent approach to the development and alteration of wooded areas. In the interest of achieving these objectives, the city has established the comprehensive tree preservation regulations herein to promote the furtherance of the following:

- a. Protection and preservation of the environment and natural beauty of the city;
- b. Assurance of orderly development within wooded areas to minimize tree and habitat loss;
- c. Evaluation of the impacts to trees and wooded areas resulting from development;
- d. Establishment of minimal standards for tree preservation and the mitigation of environmental impacts resulting from tree removal;
- e. Provision of incentives for creative land use and environmentally compatible site design which preserves trees and minimizes tree removal and clear cutting during development; and
- f. Enforcement of tree preservation standards to promote and protect the public health, safety and welfare of the community.

2. **Definitions.** For the purpose of this section, the following definitions shall apply unless the context clearly indicates or requires a different meaning.

- a. **Applicant.** Any person or entity who is required to submit and implement an approved tree preservation plan under this section.
- b. **Builder.** Any person or entity to whom a building permit is issued for the construction of a single-family residence.
- c. **Caliper Inch.** The diameter of replacement trees measured at a height of one foot above the ground level.
- d. **Construction Area.** Any area in which movement of earth, alteration in topography, soil compaction, disruption of vegetation, change in soil chemistry or any other change in the natural character of the land occurs as a result of the site preparation, grading, building construction or any other construction activity.
- e. **Critical Root Zone or CRZ.** An imaginary circle surrounding the tree trunk with a radius distance of one foot per one inch of tree diameter, such as a 20-inch diameter tree has a CRZ with a radius of 20 feet.
- f. **Developer.** Any person or entity other than a builder, as defined herein, who undertakes to improve a parcel of land, by platting, grading, installing utilities or constructing or improving any building thereon.

g. Development. Individual lot single-family residence development, single-phase development and two-phase development as those terms are defined herein.

h. Diameter. The length of a straight line measured through the trunk of a tree at 54 inches above the ground.

i. Diameter Inch. The diameter, in inches, of a tree measured at diameter breast height (4.5 feet from the uphill side of the existing ground level).

j. Drip Line. The farthest distance away from the trunk that rain or dew will fall directly to the ground from the leaves or branches of the tree.

k. Individual Lot Single-Family Residence Development. The process where the construction of a new single-family residence occurs on a single lot.

l. Significant Woodland. A grouping or cluster of coniferous and/or deciduous trees with contiguous crown cover, occupying 500 or more square feet of property, which are comprised of deciduous trees between four inches and 12 inches in diameter or coniferous trees between four feet and 12 feet in height.

m. Single-Phase Development. The process where improvement of the entire site occurs in one continuing process. Activities which can occur during single-phase development include initial site grading; installation of utilities; construction of public streets; construction and grading of drainage ways; filling of any areas; grading of the pad area; utility hookups; construction of buildings, parking lots, driveways, storage areas, recreation areas, private streets; and any other activity within the construction area.

n. Tree. Any of the following type of trees, as each is defined herein:

(1) Coniferous/Evergreen Tree. A woody plant which, at maturity, is at least 12 feet or more in height, having foliage on the outermost portion of the branches year-round.

(2) Deciduous Tree. A woody plant which, at maturity, is at least 15 feet or more in height, having a defined crown and which sheds leaves annually.

(3) Significant Tree. A healthy tree measuring a minimum of six inches in diameter for hardwood deciduous trees, as defined herein; or a minimum of 12 inches in diameter for softwood deciduous trees, as defined herein; or a minimum of 12 feet in height for coniferous/evergreen trees.

(4) Hardwood Deciduous Tree. Includes: Ironwood, Catalpa, Oak, Maple hard, Walnut, Ash, Hickory, Birch, Black Cherry, Hackberry, Locust and Basswood.

(5) Softwood Deciduous Tree. Includes: Cottonwood, Poplars/Aspen. Box Elder, Willow, Silver Maple and Elm.

(6) Speciman Tree. A healthy hardwood deciduous tree measuring equal to or greater than 30 inches diameter and/or a coniferous tree measuring 50 feet or greater in height.

o. Two-Phase Development. The process where improvement of the entire site occurs in at least two distinct phases. Generally, the first phase includes initial site grading; installation of utilities; construction of public streets; construction, grading of drainage ways; and filling of any areas.

The second phase generally includes grading of specific pad areas; utility hookups; construction of buildings, parking lots, driveways, storage areas, recreation areas, private streets; and any other activity within the specific construction zone.

3. **Tree preservation plan.**

a. Scope of application. The tree preservation plan shall be submitted to and approved by the city and implemented in accordance therewith in connection with any of the following:

- (1) New development in any zoning district;
- (2) New building construction in any zoning district; and
- (3) Expansion of any existing commercial, industrial or institutional building or impervious surface by 10% or greater square feet, where an approved tree preservation plan is not on file with the city.

b. Plan requirements. All applicants shall submit a tree preservation plan prepared in accordance with the provisions of this subdivision. The tree preservation plan shall include the following information:

- (1) The name(s), telephone number(s) and address(es) of applicants, property owners, developers and/or builders;
- (2) Delineation of the buildings, structures or impervious surfaces situated thereon or contemplated to be built thereon;
- (3) Delineation of all areas to be graded and limits of land disturbance;
- (4) Size, species and location of all existing significant trees, specimen trees and significant woodlands located within the area to be platted or within the parcel of record; (These significant trees, specimen trees and significant woodlands should be identified in both graphic and tabular form.)
- (5) Identification of all significant trees, specimen trees and significant woodlands proposed to be removed within the construction area; (These significant trees, specimen trees and significant woodlands should be identified in both graphic and tabular form.)
- (6) Measures to protect significant trees, specimen trees and significant woodlands;
- (7) Size, species and location of all replacement trees proposed to be planted on the property in accordance with the tree replacement schedule;
- (8) Signature of the person(s) preparing the plan; and
- (9) Location of utility services and easements.

c. Mitigation. In any development that the tree/woodland allowable removal limits are exceeded, the applicant shall mitigate the tree loss by either reforestation of (tree replacement) appropriate areas within the development area, in accordance with the tree replacement schedule, or payment to the city of the sum per diameter inch calculated from the total amount of diameter inches of the required replacement trees in accordance with the tree replacement schedule. The fee per diameter inch shall be set forth in the city fee schedule and the payment thereon shall be deposited into an account designated specifically for tree mitigation.

The form of mitigation to be provided by the applicant shall be determined by the city.

The planting of trees for mitigation shall be in addition to any other landscape requirements of the city.

Significant tree replacement will be calculated by replacing the largest diameter tree first, proceeding down to the smallest diameter significant tree.

d. Required protective measures. The tree preservation plan shall identify and require the following measures to be utilized to protect significant trees, specimen trees and significant woodlands:

(1) Installation of snow fencing or polyethylene laminate safety netting or silt fencing placed at the drip line or at the perimeter of the critical root zone (CRZ), whichever is greater, of significant trees, specimen trees and significant woodlands to be preserved. No grade change, construction activity or storage of materials shall occur within this fenced area.

(2) Identification of any oak trees requiring pruning between April 15 and July 1. Any oak trees so pruned shall be required to have any cut areas sealed with an appropriate non-toxic tree wound sealant.

(3) Prevention of change in soil chemistry due to concrete washout and leakage or spillage of toxic materials, such as fuels or paints.

e. Additional protective measures. The following tree protection measures are suggested to protect significant trees, specimen trees and significant woodlands that are intended to be preserved according to the submitted tree preservation plan and may be required by the city:

(1) Installation of retaining walls or tree wells to preserve trees.

(2) Placement of utilities in common trenches outside of the drip line of significant trees or use of tunneled installation.

(3) Use of tree root aeration, fertilization and/or irrigation systems.

(4) Transplanting of significant trees into a protected area for later moving into permanent sites within the construction area.

(5) Therapeutic pruning.

f. Review process. The tree preservation plan shall be reviewed by the city to assess the best possible layout to preserve significant trees, specimen trees and significant woodlands and to enhance the efforts to minimize damage to specimen trees, significant trees and significant woodlands. The applicant shall meet with city staff prior to submission of the development application or prior to application for the grading permit, whichever is sooner, to determine the most feasible and practical placement of buildings, parking, driveways, streets, storage and other physical features, in order that the fewest significant trees, specimen trees and significant woodlands are destroyed or damaged.

g. Performance guarantee. Any applicant of a new development shall provide the required performance guarantee following preliminary approval of the tree preservation plan and prior to any construction and/or grading. The amount of the performance guarantee to be submitted, specific to the tree preservation fulfillments, shall be calculated as follows:

(1) Unless the applicant provides tree mitigation in the form of cash dedication, 100% of the cost of completing tree replacement mitigation as determined by the city.

(2) An amount to guarantee preservation of all trees identified by the approved tree preservation plan to be preserved. Within 15 feet of the construction zone (measured from the construction limit to the nearest side of the tree): The amount shall be calculated by multiplying the total diameter inches of significant trees and specimen trees to be preserved within this 15 feet zone by the rate of payment of \$25 per diameter inch and the total square feet of significant woodlands to be preserved within the 15-foot zone by the rate of \$1.20 per square foot.

No performance guarantee shall be required for applicants of building permits of single-family residential units.

Following written request by the applicant for acceptance, the performance guarantee will be released upon verification by the city that the tree preservation plan was followed and that the tree replacement schedule was complied with, where necessary, but in no event shall the performance guarantee be released earlier than one year after the date of the project closure.

h. Removal of diseased trees required. Prior to any grading, all diseased, hazard and nuisance trees on the subject property shall be identified by the Park Department in accordance with the tree disease control and prevention regulations of the City Code. Any and all diseased and nuisance trees so identified shall be removed from the property, at the time of grading, if so directed.

i. Compliance with plan. The applicant shall implement the tree preservation plan prior to and during any construction. The tree protection measures shall remain in place until all grading and construction activity is terminated or until a request is made to and approved by the city.

No significant trees, specimen trees or significant woodlands shall be removed until a tree preservation plan is approved and except in accordance with the approved tree preservation plan as approved by the city. If a significant tree(s), specimen tree(s) or any significant woodlands that were intended to be preserved is removed without permission of the City Park Department or damaged so that it is in a state of decline within one year from date of project closure, a cash mitigation, calculated per diameter inch of the removed/destroyed tree or per total square foot of significant woodlands, in the amount set forth in the city fee schedule, shall be remitted to the city.

The City shall have the right to inspect the development and/or building site in order to determine compliance with the approved tree preservation plan. The city shall determine whether compliance with the tree preservation plan has been met.

#### 4. **Allowable tree removal.**

a. Tree removal allowance. Specimen tree, significant tree and significant woodland removal shall be in accordance with the city-approved tree preservation plan and in no case shall the amount of removal exceed the following percentages:

(1) Single lot development.  
(a) Single-unit residential: 20%.  
(b) Commercial and multi-unit residential: 30%.

(2) Multi-lot development.  
(a) Single-phase development process:  
(1) Single unit residential: 40%.

- (2) Commercial and multi-unit residential: 47.5%.
- (b) Two-phase development:
  - (1) Initial site development: 25%.
  - (2) Individual lot development:
    - (a) Single unit residential: 20%.
    - (b) Commercial or multi-unit residential: 30%.

b. Exception.

- (1) When practical difficulties or practical hardships result from strict compliance with the provisions of this subdivision, the city may permit significant tree, specimen tree and significant woodland removal in excess of the allowable limits. In the event the exception is granted, a reforestation plan or a cash mitigation will be implemented.
- (2) The city shall determine which form of mitigation shall be utilized.

5. **Tree replacement schedule.**

<i>Size or Tree Damaged or Destroyed</i>	<i>Number of Replacement Trees</i>		
	<i>Category A</i>	<i>Category B</i>	<i>Category C</i>
Coniferous - 12 to 24 feet high	1	2	4
Coniferous – 24 feet or higher	2	4	8
Hardwood deciduous – 6 to 20 inches diameter	1	2	4
Hardwood deciduous - 21 to 30 inches diameter	2	4	8
Softwood deciduous – 12 to 24 inches diameter	1	2	4
Softwood deciduous – 24 inches diameter	2	4	8
Specimen tree	3	6	12

a. Size of replacement trees.

Category A trees shall be no less than the following sizes:

- (1) Deciduous trees: not less than four inches in diameter.
- (2) Coniferous trees: not less than 12 feet in height.

Category B trees shall be no less than the following sizes:

- (1) Deciduous trees: not less than two and one-half inches in diameter.
- (2) Coniferous trees: not less than six feet in height.

Category C trees shall be no less than the following sizes:

- (1) Deciduous trees: not less than one and one-half inches in diameter.
- (2) Coniferous trees: not less than four feet in height.

b. Species requirement. Where ten or more replacement trees are required, not more than 50% of the replacement trees shall be of same species of tree without the approval of the city.

c. Warranty requirement. Any replacement tree which is not alive or healthy, as determined by the city, or which subsequently dies due to construction activity within one year after the date of project closure, shall be removed by the applicant and replaced with a new healthy tree

meeting the same minimum size requirements within eight months of removal.

**SECTION II.** This Ordinance shall be in full force and effect from and after its passage and publication.

**ADOPTED** by the City Council of the City of Alexandria this 11<sup>th</sup> day of July, 2005, by the following vote:

YES: KALPIN, CARLSON, WEISEL, BENSON, FRANK

NO: NONE

ABSENT: NONE

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/S/ H. Dan Ness, Mayor

ATTEST: \_\_\_\_\_  
/S/ Jim Taddei, City Administrator