

CITY OF LAKE ELMO
COUNTY OF WASHINGTON
STATE OF MINNESOTA

ORDINANCE NO. 08-247

AN ORDINANCE AMENDING THE LAKE ELMO CITY CODE OF ORDINANCES BY
AMENDING CHAPTER 154, SECTION 154.257 RELATING TO TREE
PRESERVATION

SECTION 1. The City Council of the City of Lake Elmo hereby amends Title XV: Land Usage; Chapter 154: Environmental Performance Standards by amending various parts of Section 154.257 by adding the underlined language and deleting the ~~strikethrough~~ language as follows:

§ 154.257 TREE PRESERVATION.

- A. Purpose. Within the City of Lake Elmo, trees and woodlands are considered a valuable asset to the community. The City places a priority on protecting this asset and finds that it is in the best interest to regulate the development and alteration of wooded areas within the community. All ~~builders, developers and subdividers~~ applicants shall comply with all the provisions in the Zoning Code which address the preservation of existing significant trees, including this section. All ~~builders, developers and subdividers~~ applicants are encouraged to preserve all healthy trees of significant value even if the trees do not meet the size requirements to be considered significant trees.
- B. Definitions. The following words, terms and phrases, when used in this section, shall have the meanings ascribed to them in this subsection, except where the context clearly indicates a different meaning:

Applicant. Any person or entity submitting an application to the City for approval of a land use permit including preliminary plat, final plat, conditional use permit, interim use permit, planned unit development, variance or grading permit.

Common Tree. Includes Ash, Aspen, Basswood, Catalpa, Elm, Hackberry, Locust, Poplar, Silver Maple, Willow and any other tree not defined as a hardwood deciduous tree or a coniferous/evergreen tree.

Coniferous/Evergreen Tree. A wood plant, which, at maturity, having foliage on the outermost portion of the branches year-round. Tamaracks are included as a coniferous tree species.

Construction Area: Any area in which construction activity has or is occurring.

Construction Activity. Any disturbance to the land that results in the movement of earth, the alteration in the topography or existing soil cover (both vegetative and non-vegetative) that may result in accelerated stormwater runoff, leading to soil erosion and movement of sediment into surface water or drainage systems. Examples of construction

activity may include clearing, grading, filling, excavating, building construction and landscaping.

Construction Damage. Any action such as filling, scraping, trenching, or compacting the soil around trees or wounding trees in such a manner that it may result in the eventual death of the tree.

Critical Root Zone (CRZ). An imaginary circle surrounding the tree trunk with a radius distance of one (1) foot per one (1) inch of tree diameter. E.g. a twenty-inch diameter has a critical root zone with a radius of twenty (20) feet.

Deciduous Hardwood Tree. A tree that loses its foliage or leaves annually such as includes Birch, Cherry, Hickory, Ironwood, Hard Maples, Oak and Walnut.

Development. Any activity or proposal that requires City approval of a preliminary plat, final plat, building permit, demolition permit, conditional use permit, interim use permit, planned unit development, variance or grading permit.

Diameter Breast Height (DBH). The diameter of trees at breast height, measured 4 ½ feet (54 inches) above the ground.

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

Healthy Tree. A healthy tree has:

1. A live top (live crown) that is greater than one-third (1/3) the total tree height;
2. Dead branches that make up less than fifteen percent (15 %) of the total crown;
3. Less than fifteen percent (15%) of the tree crown with missing branches;
4. Consistent growth of foliage throughout the live portion of the crown; and
5. A tree trunk with no open wounds that are greater than one-third (1/3) the diameter of the tree, with no wounds in contact with the ground and no wounds that have soft, punky wood or other indication of decay.

New Development. All sites with construction activity or development that are not defined as redevelopment.

Nuisance Tree. (1) Any living or standing tree or part thereof infected to any degree with a shade tree disease (See Shade Tree Disease Below) or shade tree pest; (2) Any logs, stumps, branches, firewood or other part of dead or dying tree(s) infected with a shade tree disease or shade tree pest unless properly treated; and (3) Any standing dead trees or limbs which may threaten human health or property. Also included are noxious or invasive trees such as Amur Maple, Japanese Barberry, Russian Olive, Siberian Elm, buckthorn, box elder, and cottonwood.

Ornamental Tree. A small tree, usually less than thirty (30) feet in height at maturity, often planted for ornamental characteristics such as flowers or attractive bark.

Redevelopment. A site with construction activity that creates new or replaces existing impervious surface, buildings or structures on a parcel that is fully or partially occupied by buildings, structures, or other impervious surfaces.

Shade Tree Disease. Dutch elm disease (*Ophiostoma ulmi* or *Ophiostoma novo-ulmi*), oak wilt (*Ceratocystis fagacearum*), or any other tree disease of epidemic nature.

Shade Tree Pest. Emerald Ash Borer (*Agilus plannipenis*), European elm bark beetle (*Scolytus multistriatus*), Native elm bark beetle (*Hylurgopinus rufipes*) or any other **Shade tree pest with potential to cause widespread damage.**

Significant Tree. A healthy tree measuring a minimum of six (6) inches in diameter for hardwood deciduous trees, 19 ft. in height or eight (8) inches in diameter for coniferous/evergreen trees, or twelve (12) inches in diameter for common trees, as defined herein.

Site. A parcel or area of land within which construction activity, development, or redevelopment occurs or is to occur.

Specimen Tree. A healthy, deciduous hardwood tree measuring equal to or greater than thirty (30) inches in diameter breast height or a healthy coniferous/evergreen tree measuring equal to or greater than twenty-five (25) feet in height.

Tree Preservation Plan. A plan prepared by a certified landscape architect or forester indicating all of the significant trees in the proposed development or property. A Tree Preservation Plan must include a proposed site plan, a proposed grading plan including all custom graded lots, a tree inventory that includes the size, species, and location of all significant trees proposed to be saved and removed on the area of development, and the measures proposed to protect the significant and specimen trees that are to be saved. The applicant shall have the tree preservation plan superimposed on the proposed development grading plan.

Woodland Evaluation Report. A report prepared by a certified landscape architect, forester, or land surveyor indicating the general location, condition, and species of significant trees on a parcel planned for future development or grading activity. The report must demonstrate that there will be no impact to existing significant trees as part of the development or grading activity. Finally, the report must include the measures proposed to protect significant trees on the site.

C. Tree Preservation Standards for Developing Properties

1. Applicability.

- a. A Tree Preservation Plan, or suitable alternatives as determined by the City, shall be submitted and approved by the City for the following activities:
 - i. New Development or redevelopment in Any Zoning District. A Tree Preservation Plan shall be required as part of any new development, redevelopment, or subdivision application.
 - ii. Any grading or excavation project that result in the movement of greater than 400 cubic yards of material per acre of site per §151.017.
 - iii. If the applicant is able to demonstrate that the proposed development, redevelopment, construction activity or major grading activity includes no impact to the significant trees on the site, then the applicant may be exempt from the requirement to submit a Tree Preservation Plan. It is

the responsibility of the applicant to demonstrate that there are no impacts to significant trees through a Woodland Evaluation Report or some other form of tree survey or study.

The Tree Preservation Plan shall reflect the applicant's best effort to determine the most feasible and practical layout of lots, buildings, parking lots, driveways, streets, storage, storm water management facilities and other physical features, so the fewest significant and specimen trees are destroyed or damaged.

b. A Tree Preservation Plan is not required for the following activities:

- i. ~~This section does not apply to~~ The issuance of a development approval for the construction of a single-family residence on an existing platted lot of record.
- ii. ~~This section does not apply to~~ The harvesting of trees. For purposes of this section, "harvesting" means cutting or clearing trees for purposes relating to forestry operations, as defined in §154.012. "Harvesting" does not include the clearing of land for purposes of development, even where the trees are sold for purposes of creating lumber for related purposes.
- iii. Additions to single-family homes, general home improvements and the construction of accessory buildings (i.e., garages, sheds) on residential properties.
- iv. Home gardens or an individual's home landscaping, installation, repairs, or maintenance work.
- v. Tree removal related to public improvement projects and maintenance or repairs to existing streets, roadways, sewers, parks, storm water facilities and utility infrastructure.
- vi. Emergency removal of trees to protect the public health and safety or to alleviate immediate dangers to life, limb, property, or natural resources.
- vii. Tree removal related to public improvement projects to restore or enhance woodlands, savannas, or prairies.
- viii. Removal of dead or dying trees, unless those trees were planted as part of tree replacement in which case the property owner shall replace such trees based on the City-approved Tree Preservation Plan for the property.
- ix. Removal of nonnative trees that the City deems as nuisance or as an invasive species.

2. Tree Preservation Plan. All applicants shall submit a ~~Tree p~~Tree p~~Preservation p~~Preservation p~~Plan~~ prepared by a certified forester or landscape architect in accordance with the provisions of this section. During the review of an application for a building permit, grading permit, site plan approval, planned unit development, conditional use permit, interim use permit or P~~preliminary P~~plat, the City will review the project and the ~~Tree p~~Tree p~~Preservation p~~Plans will be reviewed according to the best available layout in order to preserve significant trees and to ensure that the

~~developer and/or the applicant~~ the efforts of the subdivider used the best possible design to mitigate and minimize construction damage to significant trees.

3. Tree Preservation Plan Requirements. The Tree Preservation Plan shall be a separate plan sheet(s) that includes the following information:
 - a. The name(s), certification(s), telephone number(s) and address(es) of the person(s) responsible for tree preservation during the course of the development project.
 - b. Tree Inventory. The Tree Preservation Plan must include a Tree Inventory through one of the following methods:
 - i. Individual Tree Inventory ~~Individual~~. An individual tree inventory including an identification system linked to metal field tags located four and one-half (4.5) feet from grade on all significant trees must be identified on a plan sheet in both graphic and tabular form.
 - ii. Tree Inventory Sampling. In cases of sites with large tracts of significant trees, the City may approve the use of a sampling inventory for all or portions of a site as an alternative to an individual tree inventory. The sampling inventory must include the methodology for sampling, identification ribbon around the perimeter of the sampling areas, and metal field tags located four and one-half (4.5) feet from grade on all significant trees in the sampling area. Within the sampling area, the quantity, size, species, health and location of all significant trees must be identified on a plan sheet in both graphic and tabular form. Based on sampling, total estimates and locations of healthy significant trees shall be provided.
 - iii. Combination Tree Inventory ~~Combination~~. With the approval of the City, sites that include both large tracts of significant trees and areas of individual significant trees may utilize a combination of the individual and sampling inventory methods.
 - c. Trees that were planted as part of a commercial business such as a tree farm or nursery do not need to be inventoried on an individual tree basis. A general description of the trees and an outer boundary of the planted area must be provided. The burden of proof shall be on the applicant to provide evidence to support the finding that the trees were planted as part of a commercial business.
 - d. A listing of healthy significant trees inventoried in subsection (b) above. Dead, diseased, nuisance or dying trees do not need to be included in the totals.
 - e. A listing of the healthy significant trees removed, identified by the metal field tag or some other form of identification used in the tree inventory in subsection (b) above.

- f. A listing of the healthy significant trees to remain, identified by the metal field tag or some other form of identification used in the tree inventory in subsection (b) above.
 - g. Outer boundary of all contiguous wooded areas, with a general description of trees not meeting the significant tree size threshold.
 - h. Locations of the proposed buildings, structures, or impervious surfaces.
 - i. Delineation of all areas to be graded and the limits of land alteration and disturbance.
 - j. Identification of all significant trees proposed to be removed within the construction area. These significant trees should be identified in both graphic and tabular form.
 - k. Measures to protect significant and specimen trees and the City standard tree protection detail.
 - l. Size, species, number and location of all replacement trees proposed to be planted on the property in accordance with the Mitigation Pplan, if necessary.
 - m. Signature of the person(s) preparing the plan.
4. Implementation. All new construction areas, development sites, and redevelopment sites shall be staked, as depicted in the approved Tree Preservation Plan, and the required tree protection fencing shall be installed around the critical root zone before land disturbance is to commence. The City has the right to inspect the site at any time for compliance with the Tree Preservation pPlan. No encroachment, land disturbance, trenching, filling, compaction, or change in soil chemistry shall occur within the fenced areas protecting the critical root zone of the trees to be saved.
5. Allowable Tree Removal. Up to thirty (30) percent of the diameter inches of significant trees on any parcel of land being developed, redeveloped, graded, or proposed for construction activity may be removed without having to adhere to the tree replacement requirements. Replacement according to the Tree Replacement Schedule is required when removal exceeds more than thirty (30) percent of the total significant tree diameter inches. The following types of trees do not need to be included as part of the tally of tree removals:
- a. Dead, diseased, nuisance, or dying trees;
 - b. Trees that are transplanted from the site to another appropriate area within the eCity;
 - c. Trees that were planted as part of a commercial business, such as a tree farm or nursery (subject to verification by the City); or
 - d. Trees that were planted by the current property owner. In making such a determination, the City shall consider consistency of the age of the trees, any patterns in the location of trees, historical aerial photography and evidence of

intentional planting such as invoices, formal planting plans or cost sharing agreements.

6. Mitigation Plan.

- a. In any new development, redevelopment, new construction area, or grading project where the allowable tree removal is exceeded, the applicant shall mitigate the tree loss by planting replacement trees in appropriate areas within the development in accordance with the Tree Replacement Schedule.
- b. The form of mitigation to be provided by the applicant shall be determined by the City.
- c. The planting of trees for mitigation on residential projects shall be in addition to any other landscape requirements of the City.
- d. All trees, with the exception of ornamental trees, planted as landscaping on commercial or mixed-use projects may be counted towards tree replacement requirements.

7. Tree Replacement Calculations. Thirty (30) percent of the total diameter inches of significant trees on the site of new construction, new development, or redevelopment may be removed without replacement. ~~Any percentage over 30~~ The applicant shall plant all required replacement trees shall be replaced on the site of the proposed new construction, new development, or redevelopment. The following calculation procedure must be used to determine tree replacement requirements:

- a. Tally the total number of diameter inches of all significant trees on the site.
- b. A calculation must be provided which breaks out the number of inches removed for hardwood, evergreen/deciduous, and common trees. The 30% removal figure applies to each category individually and trees are replaced according to the Tree Replacement Schedule in subsection 8.

8. Tree Replacement Schedule. Tree removals over the allowable tree removal limit on the parcel or site of new construction, new development, or redevelopment shall be replaced according to the following schedule:

- a. Common tree species shall be replaced with new trees at a rate of one-fourth (1/4) the diameter inches removed.
- b. Coniferous/evergreen tree species shall be replaced with new coniferous or evergreen trees at a rate of one-half (1/2) the diameter inches removed. Since coniferous species are often sold by height rather than diameter inch, the following conversion formula can be used:

$$\text{Height of Replacement Coniferous Tree}/2 = \text{Diameter Inches of Credit}$$

- c. Hardwood deciduous tree species shall be replaced with new hardwood deciduous trees at a rate of (1/2) the diameter inches removed.

- d. Replacement Tree Size. Replacement trees must meet the minimum sizes listed in Section 154.258 B (Table 6-1). ~~be a minimum of one (1) inch in diameter.~~
9. Species Requirement. The City must approve all species used for tree replacement. Ornamental trees are not acceptable for use as replacement trees. Where ten (10) or more replacement trees are required, not more than thirty (30) percent of the replacement trees shall be of the same species of tree. The planting of Nnative species are is encouraged, and hardiness and salt tolerance of the plants should be considered where applicable.
10. 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 two (2) years after the date of the initial landscape inspection and acceptance by the City or the of project closure, whichever occurs later shall be removed by the applicant and replaced with a new healthy tree meeting the same minimum size requirement within eight (8) months of removal.
11. Protective Measures. The Tree Preservation Plan shall identify and require the following measures to be utilized to protect significant trees planned for preservation:
- a. Before any grading or construction activity, the applicant shall install ~~Installation of~~ snow fencing or polyethylene laminate safety netting placed at the drip line or at the perimeter of the critical root zone, whichever is greater, of significant trees, specimen trees and significant woodlands to be preserved. No grade change, construction activity, parking, or storage of materials shall occur within this fenced in area.
 - ~~b. 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 nontoxic tree wound sealant.~~
 - b. Measures to be taken so that oak trees are not wounded, trimmed, pruned, or damaged in any way (roots, bark, branches, etc.) between the dates of March 15 and October 31. Measures to be taken to ensure that any oak trees pruned or trimmed have any cut areas sealed with an appropriate nontoxic tree wound sealant.
 - c. Prevention of change in soil chemistry due to concrete washout and leakage or spillage of toxic materials, such as fuels or paints.
 - d. Removal of any nuisance or dead trees located in areas to be preserved.
 - e. Installation of erosion control methods.
12. Additional protective measures. The City encourages applicants to use the following tree protection measures to protect the root zones and to prevent damage to significant and specimen trees that the applicant intends to preserve:
- a. Installation of retaining walls or tree wells to preserve trees.

- b. Placement of utilities in common trenches outside of the drip line of significant and specimen trees or use of tunneled utility installation.
- c. Use of tree root aeration, fertilization, or irrigation systems.

13. Compliance with the Tree Preservation Plan. The applicant ~~and/or developer~~ shall implement the Tree Preservation Plan prior to and during any grading or construction activities. The tree protection measures shall remain in place until all grading, land disturbance and construction activity is terminated or until a request to remove the tree protection measures is made to, and approved by, the City.

- a. No significant trees shall be removed until a ~~the tTree pPreservation pPlan~~ is approved by the City and except in accordance with the approved Tree Preservation Plan.

- b. If an applicant damages or removes a significant tree that is intended to be preserved to the point that City staff believes the tree will not survive, the applicant must remit to the City a cash mitigation, calculated per diameter inch of the removed or damaged tree in the amount set forth in the City fee schedule.

- ~~b c.~~ 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 the Tree Preservation Plan has been met.

- e d. Instances where ~~(a)~~ a significant tree(s) is ~~(are)~~ removed due to new development, redevelopment, new construction activity or were disturbed, and the removal which was not noted on the landscaping or tree removal plan will result in a one-to-one replacement penalty regardless of if it the removal is over the thirty percent (30%) allowance.

D. Tree Protection Standards for Non-Developing Properties.

(1) Existing Developed Commercial, Industrial, and Mixed-Use Properties.

- (a) Trees that are removed in an existing commercial, industrial, or mixed-use development must be replaced in accordance with the original landscaping plan, unless the property owner has obtained City approval for an alternative landscaping plan. If the original landscaping plan is not able to be found, trees identified by the most recent aerial photo of the property will be assumed to be part of the original landscape plan.
- (b) Trees that are removed that were part of a designated tree preservation area must be replaced in accordance with the tree replacement requirements outlined in Sections 154.257 (C)(7) and (C)(8). The thirty percent (30%) allowable tree removal limit does not apply in these situations.

~~D E.~~ Financial Security. In cases where mitigation or tree replacement is required, the City may require that a financial security, in a form acceptable to the City, be provided as part of a development agreement, site improvement agreement or applicable permit to ensure compliance and performance of the ~~M~~mitigation Pplan. The financial security will

be released to the applicant upon verification by the City that the ~~M~~mitigation ~~P~~plan was followed, and that all replacement trees are planted and are healthy. ~~in a reasonable state of health~~. The financial security may be used to replace any replacement trees that have become damaged, are not healthy, or are diseased after planting.

~~E-F.~~ Exceptions

1. *Exception Standards.* Notwithstanding the City's desire to accomplish tree preservation and protection goals, there may be instances where these goals are in conflict with other City objectives. These conflicts will most likely occur on small, heavily-wooded parcels. The City recognizes there may be instances where it is not practical or reasonable to have an applicant plant the total required replacement trees on the site. The City encourages applicants to have the required number of replacement trees plant on the site of as much as possible. The City will only approve the use of fee-in-lieu of tree replacement or other mitigation methods when all the required tree replacement cannot practically or reasonably occur on the site in the judgment of the City.

Applicants ~~Developers~~ may ask the City to approve for exceptions to the City's tree preservation and replacement standards through the variance process as indicated in 154.109. The City Council may grant exceptions ~~may be granted~~ if all of the following conditions exist:


- a. It is not feasible to combine the subject parcel with adjacent parcels that could use the parcel as required green space;
 - b. Strict adherence to the ~~Tree Preservation Ordinance~~ City's tree preservation and replacement standards would prevent reasonable development that is consistent with the Comprehensive Plan and desirable to the City on the parcel; and
 - c. The exception requested is the minimum needed to accomplish the desired development or redevelopment.
2. *Reduced Mitigation for Exceptions.* If the City Council approves an exception to the tree preservation standards is granted, relief from the requirements of the ~~ordinance standards~~ may take the form of reduced mitigation requirements, greater allowable tree removal, higher thresholds for determining significant trees, or any combination of the above. The City Council will determine which form of relief best balances the objectives of the City and tree preservation.

The City Council may require payment to the City of a fee-in-lieu of tree replacement, payment of additional park dedication fees; the implementation of woodland management practices by the applicant; or the planting of replacement trees on City property by the applicant under direction of the City Public Works Director; or a combination of these methods as a condition of the City approving relief or an exception from the City tree preservation and replacement standards. variance approval. The amount of the fee-in-lieu of tree replacement is set forth in the City's fee schedule.

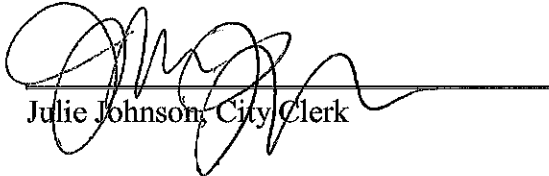
SECTION 2. Effective Date. This ordinance shall become effective immediately upon adoption and publication in the official newspaper of the City of Lake Elmo.

SECTION 3. Adoption Date. This Ordinance 08-247 was adopted on this 20th day of July 2021, by a vote of 5 Ayes and 0 Nays.

LAKE ELMO CITY COUNCIL


Charles Cadenhead, Mayor

ATTEST:


Julie Johnson, City Clerk

This Ordinance 08-247 was published on the ____ day of _____, 2021