



CITY OF WAYZATA
Tree Preservation Plan and
Implementation Requirements
Updated: January 2023

Per the City's Tree Preservation Ordinance, A Tree Permit and a Tree Preservation Plan are required for any properties pursuing permits for subdivision, public infrastructure, design review, construction of a single-family home, expansion of a single-family home, and land disturbance (grading). Applicants are encouraged to meet with City staff prior to submission of such permit applications to determine the placement of buildings, parking, driveways, streets, storage and other physical features to minimize impacts to existing trees within the City.

Tree Preservation Plans will be reviewed by the City Forester and any other relevant City staff to assess the best overall tree design for the project involved, accounting for the preservation, renewal, and health of Significant and Heritage Trees, and ways to enhance the efforts to mitigate damage to the trees on the property and the natural environment.

Tree Preservation Plans submitted to the City for review must adhere to the standards outlined in the City's Tree Preservation Ordinance. The following guidelines are not exhaustive, and are meant to act as a supplement to the TPO. Some of the details outlined here will be adjusted over time, as we combat the evolving stressors faced by our community's tree canopy.

The Tree Preservation Ordinance can be found in its entirety at:
<https://www.wayzata.org/DocumentCenter/View/4976/Final-Ordinance-818>

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I. TREE PRESERVATION PLAN

1) Applicability

A Tree Permit and a Tree Preservation Plan are required for any properties pursuing permits for subdivision, public infrastructure, construction of a single-family home, land disturbance (grading), design review, and expansions to single-family homes.

Thresholds for allowable tree removal and replacement requirements can be found in Section 936.06 of the Tree Preservation Ordinance (TPO, §936).

Any trees removed on a property in the two years preceding the issuance of a Tree Removal Permit for such property shall be included in the tree removal/replacement calculations of the current Tree Removal Permit.

2) Requirements

The Tree Preservation Plan must include the following items:

- a) The name(s) and address(es) of property owners and applicants.
- b) Delineation of the buildings, structures, impervious surfaces, utilities, and other site improvements situated thereon or contemplated to be constructed thereon.
- c) Delineation of all areas to be graded and limits of land disturbance, including the contouring of all areas to be graded.
- d) Size, species, location and condition of all Significant and Heritage Trees located on the property as well as on adjacent properties where the Critical Root Zones of the trees are within the proposed Construction Area. The size of Deciduous Trees must be recorded in DBH and the size of Coniferous Trees must be recorded both in DBH and approximate height.
- e) Identification of all Dead, Diseased, Dying and Hazard Trees.
- f) The Critical Root Zone of all Significant and Heritage Trees proposed to be preserved.
- g) Identification of all Significant and Heritage Trees proposed to be removed within the Construction Area.
- h) Identification of all Significant and Heritage Trees on all individual lots. The Developer must submit a list of all lot and block numbers identifying those lots.
- i) Measures to protect Heritage and Significant Trees as outlined in Section 936.086.
- j) Size, species, and location of all replacement trees to be planted on the property in accordance with the tree replacement requirements.
- k) Calculations of the total amount of tree inches proposed to be removed, the allowed removal percentage, and tree replacement inches required and proposed.
- l) Signature of the person preparing the plan and statement which includes acknowledgment of the fact the trees to be used as replacements are appropriate species with respect to survival of the replacement trees.

3) Inventory Methods

- a) Multi-stemmed and/or dwarf hedge species/cultivars including arborvitae, juniper, dogwood, lilac, privet, etc. should be excluded from the inventory process. If their inclusion is preferred, then trunks originating at ground level shall be measured according to the square root method (i.e. the square root of the sum of each diameter squared).
- b) Multi-stemmed shade trees such as basswood and birch shall be included in the inventory process using either the square root method or each trunk listed as a separate tree.
- c) The measurement method of multi-stemmed trees shall be listed in the inventory.
- d) The City Forester or assigned Certified Tree Inspector shall have the final determination in the DBH calculation if there is a question of how it is to be measured.
- e) All inventory methods shall be consistent throughout the Tree Preservation Plan.

4) Dead, Diseased, Dying, and Hazardous Trees

- a) Justification must be specified for every tree listed as exempt from mitigation.
- b) Any tree listed as exempt from mitigation may have its condition verified by the City Forester or assigned Certified Tree Inspector.
- c) Any tree listed as exempt from mitigation may be field tested for confirmation by the City Forester or assigned Certified Tree Inspector.
- d) If there is any dispute regarding the presence of a pest or pathogen, a sample may be submitted to the University of Minnesota's Plant Disease Clinic at the expense of the applicant – the result of which will be appropriately reflected in the inventory and mitigation process.
- e) If there is any dispute regarding the potential risk of a hazardous tree, a Tree Risk Assessment Qualified (TRAQ) opinion may be solicited for consideration.
- f) Dead, diseased, dying, and hazardous trees shall not be counted as DBH inches saved or DBH inches removed for mitigation purposes.

5) Condition Rating

- a) TPO standards require that each tree's condition be listed in the inventory. The condition rating (good/fair/poor) is used to gauge a tree's response to construction activity. Observable stressors do not necessarily exempt a tree from mitigation.
 - i) Conditions that the city views as treatable include, but are not limited to:
 - (1) Deicing salt damage
 - (2) Rust
 - (3) Leaf scab
 - (4) Chlorosis
 - (5) Leaf gall
 - (6) Drought stress
 - ii) Conditions that the city views as untreatable or unmitigable include, but are not limited to:
 - (1) Emerald ash borer
 - (2) Dutch elm disease
 - (3) Oak wilt (red oaks)

- (4) Fire blight
- (5) Armillaria root rot

6) Species-specific Considerations

- a) Special procedures may be in place for species that currently face a heightened threat from pest and/or pathogen. These precautions will be adjusted in response to pest and pathogen trends and projections in our region.
- b) Currently, all ash (*Fraxinus*), American elm (*Ulmus americana*), and red oak (*Quercus palustris*, *Quercus rubra*) receive species-specific considerations during review of Tree Preservation Plans.
 - i) *Fraxinus*
 - (1) Given the widespread infestation of Emerald Ash Borer (EAB), no ash tree should be considered for long-term viability in the City of Wayzata without indefinite injection treatment.
 - (2) All untreated green ash listed in the inventory should be reassessed prior to preservation or removal. Trees that are infested with EAB will not be subjected to removal mitigation. They will also not count as trees preserved, and must be removed if not already slated for removal.
 - (3) Any trimming of ash should be conducted during winter dormancy.
 - ii) *Ulmus americana*
 - (1) Given the ongoing presence and transmissibility of Dutch Elm Disease (DED), American elm species selected for planting must have a demonstrated resistance to the fungus.
 - (2) All American elm listed in the inventory should be reassessed prior to preservation or removal. Trees that are infected with DED will not be subjected to removal mitigation. They will also not count as trees preserved, and must be removed if not already slated for removal.
 - (3) Any trimming of American elm should be conducted during winter dormancy.
 - iii) *Quercus palustris*, *Quercus rubra*
 - (1) Given the ongoing presence and transmissibility of oak wilt, red oaks will receive special attention during the inventory process.
 - (2) All red oaks listed in the inventory should be reassessed prior to preservation or removal. Trees that are infected with oak wilt will not be subjected to removal mitigation. They will also not count as trees preserved, and must be removed if not already slated for removal.
 - (3) No oak will be considered infected unless verified by the University of Minnesota Plant Disease Clinic.
 - (4) Any viable red oak that potentially shares a root zone with a confirmed infected red oak cannot be considered for mitigation purposes unless treated for oak wilt indefinitely. Acceptable treatment methods include fungicide injection and trenching via vibratory plow.
 - (5) Any trimming of oaks should be conducted during winter dormancy. If pruning during the growing season is necessary, a non-petroleum based pruning sealer shall be applied to the wounds.

II. PROTECTION STANDARDS

- 7) A detailed overview of protection methods can be found here:
https://stormwater.pca.state.mn.us/index.php/Protection_of_existing_trees_on_construction_sites
- 8) Erosion Control as Tree Protection
 - a) Bio logs alone cannot protect trees, but they are a good choice when erosion control is needed within a tree preservation zone.
 - b) Silt fence may serve as both erosion control and tree protection if the following criteria are met:
 - i) All other tree protection standards are adhered to
 - ii) No trenching or machine slicing inside the Critical Root Zone (CRZ, radius equal to 1.5 feet for each inch of DBH)
- 9) Specialized Protection
 - a) In certain situations, the standards described in the TPO may not be sufficient in protecting a tree from construction damage. Additional protections may include:
 - i) Heavy mulching of the CRZ before, during, and after construction activity
 - ii) Air spading of CRZ after construction activity
 - iii) Hand pruning of roots damaged by construction activity
 - iv) Supplemental watering of affected trees after construction activity
- 10) Heightened Risk of Construction Damage
 - a) Trees facing a heightened risk of construction damage include, but are not limited to:
 - i) Trees that will not have adequate protection encompassing their entire CRZ
 - ii) Tree species that are especially susceptible to root decay (e.g. hackberry)
 - iii) Trees which are exhibiting signs of stress, and are in close proximity to the construction area
 - b) These trees may be subject to a financial guarantee and/or specialized protection regiment. Consult City Forester if needed.
- 11) Trees on Adjacent Property
 - a) Although trees on adjacent property will not count as trees preserved for mitigation purposes, protection measures must be utilized in order to minimize the risk of construction damage.
 - b) This includes trees on private and public property, including right-of-way.
 - c) These trees may be subject to a financial guarantee and/or specialized protection regiment. Consult City Forester if needed.
 - d) Unauthorized removal of trees on adjacent property is illegal.
- 12) Types of Construction Damage
 - a) Soil Compaction
 - i) Soil compaction limits a tree's roots' access to oxygen.
 - ii) The effects of soil compaction likely will not be realized until years after the damage has been done.
 - iii) Treatment: §9.a.i / §9.a.ii / §9.a.iv

- b) Root Damage
 - i) Any amount of root damage – typically by excavation or trenching – can lead to root decay.
 - ii) Certain species are especially sensitive to root damage (e.g. hackberry).
 - iii) Root damage in excess of 40% can lead to irreversible nutrient deficiency.
 - iv) Damage to the structural root zone (SRZ) may lead to catastrophic tree failure.
 - v) If the SRZ cannot be protected, the tree must be removed prior to construction activity.
 - (1) SRZ is defined as: $DBH \text{ (inches)} \times 0.5 = \text{radius CRZ (feet)}$
 - vi) Treatment: §9.a.iii / §9.a.iv
- c) Trunk Damage
 - i) Trunk damage can typically be avoided if the CRZ is being protected.
 - ii) Any inadvertent trunk damage must be reported to the city.
 - iii) Treatment: §9.a.iv
- d) Canopy Damage
 - i) Tree branches which will likely interfere with construction traffic/activity should be pruned in accordance with ANSI standards.
 - ii) Any inadvertent canopy damage must be reported to the city.

13) Post-Construction Guidelines

- a) Trees that have experienced construction damage should NOT be fed nitrogen.
- b) Only phosphorus-based or growth-regulating fertilizers (such as paclobutrazol) benefit trees experiencing root stresses.
- c) Trees that have experienced construction damage should NOT have their canopies pruned in an attempt to mirror root loss.
- d) Regular watering (~1"/week) is often the best treatment for stressed trees.

III. LANDSCAPE PLAN / REPLACEMENT PLAN

14) Prohibited Species

- a) Species listed by the Minnesota Department of Agriculture (MDA) as prohibited or restricted (noxious) shall not be included in any landscape plan. See: www.mda.state.mn.us/noxiousweedlist
 - i) 2023 additions include:
 - (1) *Thladiantha dubia* (red hailstone / goldencreeper)
 - (2) *Euonymus alatus* (winged burning bush)
 - (3) *Tamarix ramosissima* (saltcedar / tamarisk)
- b) Species listed by the MDA as regulated may only be utilized according to their species-specific regulations.

15) Zone Hardiness

- a) Species that are not rated as hardy in USDA Zone 4b are subject to the same inspection standards as species rated as zone hardy.

16) Species Diversification

- a) The Tree Preservation Ordinance requires tree replacement plans to consist of no more than 20% of any one genus.
- b) Any trees that exceed the 20% threshold will not be counted as replacements.
- c) Adjacent tree populations should be considered when making diversification decisions.

17) Financial Guarantee

- a) Financial Guarantee. The City may, at its option, withhold a certificate of occupancy or require cash escrow or a letter of credit satisfactory to the City in the amount of 110 percent of the value of the tree removal and/or replacement, securing the full performance of Tree Preservation Plan and the tree replacement plan. The amount of such security shall be calculated by the fee-in-lieu of tree replacement schedules. The financial security shall be sufficient to cover the costs of the tree removal and/or replacement trees planted, including any needed replacement of the trees over a three-year period.
- b) Use of Financial Guarantee. If the property owner does not implement the approved Tree Preservation Plan or Site Plan, including the tree replacement plan, in accordance with the City Council or City Forester approval, the City may use the financial guarantee to correct or complete the work.
- c) Release of Financial Guarantee. At least once annually, the City Forester shall review the financial securities, inspect the applicable trees, and release the financial securities as necessary. The financial security shall be released based on the following schedule:
 - i) Upon installation of a healthy tree: 50 percent of the financial guarantee for that tree shall be released. Contractor shall notify the City when installation is complete, and an installation inspection will be scheduled.
 - ii) First year inspection determining the installed tree is still healthy: 15 percent of the financial guarantee for that tree shall be released.

- iii) Second year inspection determining the installed tree is still healthy: 15 percent of the financial guarantee for that tree shall be released.
- iv) Third year inspection determining the installed tree is still healthy: 20 percent of the financial guarantee for that tree shall be released.