

Terms of Reference

Arborist Reports, Tree Inventory/Survey & Tree Preservation Plans



City of Mississauga

February 2020

www.mississauga.ca

Purpose

An Arborist Report, Tree Inventory and Tree Preservation Plan is required to determine the potential effects of proposed development on existing trees and vegetation and to ensure the proposal conforms to the relevant Official Plan policies, Urban Design Guidelines, standards and details of the City of Mississauga. In order to understand the extent of the potential impacts of a development proposal, the existing trees must be identified to evaluate the extent of tree preservation, injury or removal.

This document is to be read in conjunction with the Official Plan policies, Tree Preservation & Protection Standards 2017 as amended, Site Plan Application Process Guidelines 2017 as amended, Subdivision Requirements Manual 2003 as amended, and Private Tree Protection By-law 254-12 as amended.

When is it required?

In reference to the City of Mississauga's Official Plan (*Chapter 19 "Implementation" - Section 19.4, sub-section 19.4.5 at <http://www.mississauga.ca/portal/residents/mississaugaofficialplan>*) an Arborist Report including Tree Survey*/Tree Preservation Plan may be required as part of a complete application submission for an official plan amendment, rezoning, draft plan of subdivision, condominium, consent application or site plan application to supplement the development proposal.

*Note: A Tree Survey consists of a tree inventory chart identifying all trees and locations. Please see details below.

Who should prepare these documents?

Tree Inventories and Tree Preservation Plans will be prepared by a Certified Arborist in good standing with the International Society of Arboriculture (ISA), a Certified Professional Forester (RPF) registered in the province of Ontario, or a Landscape Architect certified by the Ontario Association of Landscape Architects (OALA). In all cases noted above, the Tree Preservation Plan submitted as part of a development application will require the credentials/designation of the person(s) who prepared the plan.

Arborist reports must be prepared by a Certified Arborist in good standing with the International Society of Arboriculture (ISA), a Registered Professional Forester (RPF) certified in the province of Ontario, or a Consulting Arborist registered with the American Society of Consulting Arborists (ASCA).

Arborist Report

The Arborist Report **must be prepared in digital format** and shall contain (but is not limited to) the following:

1) Title page including:

- Address of the subject property.
- Applicants name.
- Application Number.
- Author name, title, company name.
- Dates in which site visit(s) were conducted and date the report was prepared.

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2) Scope of the Report including:

- A description of the project type such as new build, renovation, re-build or addition, etc.
- A description or summary of the number of existing trees located on the private subject property, City property, adjacent properties affected by any portion of the proposed development or lands associated with the development, and any tree(s) along shared lot lines.

3) Comments including:

- Site condition and tree condition including canopy size.
- Mitigation and preservation procedures such as compaction alleviation techniques, root exploration or pruning methods, hoarding provisions, etc.
- Proposed tree work requirements.
- Species at risk observed such as *Juglans cinerea* (Butternut), etc.

4) Summary of Conclusions including:

- Number of trees proposed for injury or removal.
- Replacement tree requirements & recommendations.
- Tree Appraisal Value using the Trunk Formula Method for City-owned trees.
- Signed letter of consent by the adjacent property owner(s) for any trees of shared ownership that are proposed for injury or removal.

5) Photos including:

- Aerial photo of site and abutting properties
- Overall site photos.
- Inventoried trees (both proposed for removal and to be preserved).
- Validation of DBH (Diameter at Breast Height 1.4m above ground) of all inventoried trees.
- Any hazardous trees or conditions on site along with any pre-existing damage or previously hazardous trees.

Tree Inventory/Survey

The Tree Inventory shall contain a summary chart prepared using a computer program such as Microsoft Excel or an equivalent and formatted as a PDF. The resolution shall be based on ePLANS submission requirements. The Tree Inventory shall be illustrated in chart form and is to be included on the Tree Preservation Plan.

The Tree Inventory shall contain (but is not limited to) the following:

- a. All trees on the subject property which are **10cm** in diameter at breast height (DBH) and greater.
- b. All trees outside of the subject property on adjacent lands that are not City property, within 6m of the abutting property lines and are **10cm** (DBH), in diameter and greater.

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- c. All trees outside of the subject property which are located on the municipal boulevard, within 6m of the abutting property lines and are **6cm** (DBH), in diameter and greater.
- d. All trees outside of the subject property which are located on municipally owned Greenbelt Lands / Hazard Lands, within 6m of the abutting property lines that are 10cm (DBH), in diameter and greater.
- e. Tree identification number, corresponding with the Arborist Report and Tree Preservation Plan.
- f. Species Variety/Cultivar Name in both common and botanical forms.
- g. Size - Diameter at Breast Height (DBH) as measured 1.4m from undisturbed existing grade directly beside the base of the tree trunk. If the tree is located on a slope, the distance shall be measured from the lowest undisturbed existing grade.
- h. The DBH of multi-stem trees is calculated by multiplying each stem diameter by itself (the square), adding up all stem amounts and calculating the square root of the total.
- i. Health, Structure, and Overall Condition (ratings to be used are Good, Fair, Poor, and Dead).
- j. Size of the canopy, measured in metres from the trunk of the tree. If the canopy is an irregular shape the minimum and maximum distances from the base of the tree shall be included.
- k. Size of the Tree Protection Zone (TPZ), measured in metres from the base of the tree.
- l. Ownership (private, neighbour, City, shared).
- m. Proposed action (Preserve, Injure or Remove).
- n. Site Comments (cavity, hanger, dead limb, etc).
- o. Preservation Comments (root exploration, pruning using Air Spade or Hydro vac, etc).

Tree Preservation Plan

The Tree Preservation Plan shall be prepared using AutoCAD or an equivalent computer aided design program and formatted as a PDF. The resolution shall be based on ePLANS submission requirements. Drawings are to be in 24"x36" or ARCH D minimum sizing layout and shall be prepared to a metric scale no smaller than 1:200. The drawings shall contain (but are not limited to) the following:

- a. Title block including: North arrow, key plan, project name, owner, project address, application number, date, revision number, author of drawing (prepared by).
- b. The entire plan shall be overlaid on a current property survey developed by a certified Ontario Land Surveyor (OLS) with the existing buildings and site features, proposed development application illustrated for reference, **and existing grades at the base of each tree**. Surveys used for base information will be considered valid for a period of 1 year or when changes have been made to the site (whichever comes first).
- c. All inventoried trees corresponding to the Tree Inventory & Arborist Report clearly noted and numbered on the plan.
- d. Tree canopies illustrated graphically corresponding to canopy sizes identified in the Tree Inventory.
- e. All Tree Preservation Zones (TPZ) must include minimum distances measured from the outside edge of the trunk.
- f. All trees to be preserved to be shown in a solid line. Trees proposed for removal to be shown in a dashed line and clearly marked with an "X" on the plan.

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- g. All tree protection methods such as tree protection fencing or root exploration trenches illustrated on the plan and corresponding graphics illustrated in the legend.
 - h. A legend which clearly identifies all symbols, line types and line weights used on the plan.
 - i. All applicable notes and details including current City of Mississauga Tree Preservation Hoarding standard details.

***All information in the Arborist Report, Tree Inventory and Tree Preservation Plan is to be coordinated.**

***No activity shall proceed on site until full evaluation of the existing vegetation and recommendations are determined and an approved plan for development has been processed or reached a satisfactory stage.**

*** All landowners are required as a condition of the tree removal permit process, to replace each healthy tree removed from private property with a new tree. Removal of trees under 50 cm in diameter requires a replacement of 1:1. Removal of trees 50 cm in diameter or greater requires a replacement of 2:1. Replacement trees are to be 60cm DBH minimum for deciduous species and 1.8m high minimum for coniferous species.**

***Boundary trees shall be evaluated on a site by site basis and may require additional written permissions from each land owner.**