Terms of Reference:
Tree Preservation

Purpose:

- To identify criteria for preparing vegetation inventories of existing site conditions, and proposals for how the assets in those inventories will be managed through the life cycle of the development process.
- To illustrate which vegetation is to be preserved, protected, and removed, as well as any compensation calculated as part of the land development process.
- To determine any potential effects or impacts of the proposed development on existing vegetation and to ensure that the proposed work conforms to regulatory standards.
- To retain and enhance existing tree cover wherever feasible and to minimize the risk of injury to trees and vegetation identified for protection and/or preservation during the development process.

Prepared By:

- Arborist Report and Letter: ISA Certified Arborist and currently certified in Ontario
- Detailed Vegetation Plan: Qualified Ecologist /Registered Professional Forester (RPF)
- Tree Preservation Plan: ISA Certified Arborist/ Registered Landscape Architect (OALA)
- Tree Management Plan: Registered Landscape Architect (OALA) with ISA Certified Arborist designation or Ontario registered Forester (RPF)

Required in Support of:

- Always required in support of:
  - Proposed Official Plan Amendment (POPA)
  - Zoning By-law Amendment (ZBA)
  - Draft Plans of Subdivision
  - Site Plan Application
- May be required in support of:
  - Consent Applications
  - Minor Variance Applications
  - Sensitive sites (such as heritage & natural heritage)
  - Site Specific Conditions

Types of Documents Covered:

- Arborist's Report (Tree Inventory), Detailed Vegetation Plan (DVP):
  - To illustrate and inventory what trees and other vegetation are currently on the site, where they are located on site, as well as their species, size, condition, structural viability, protection and/or preservation measures.

  - To identify any potential impacts of the proposed development on existing vegetation and to ensure that the proposed work conforms to Town and industry standards.
  - A DVP would typically only be required where development was proposed through areas with Natural Heritage System (NHS)

- Vegetation Analysis/Tree Preservation Plan: Identifies trees to be preserved and protected, as well as trees to be removed, the measures to protect retainable trees (standard notes and details) and proposes locations of replacement compensation trees for tree removals.
- Tree Management Plan: To propose what vegetation should be removed through the development, what vegetation should be protected and/or preserved as part of the development, and to ensure that the proposed work conforms to regulatory standards.
- Tree Compensation Planting Plan: Proposes locations of replacement compensation trees.

Arborist's Letter: To provide clearance that no trees will be impacted as part of the proposed development or for smaller sites that are minor in nature.

Content:

1.0 INTRODUCTION

1.1 Below is the framework and required formatting for the Arborist Report and Tree Preservation Plan with a brief description as to what should be outlined under each section.

1.2 Policy Framework

Describe how the application has met each of the urban design and landscape requirements and design guidelines outlined in the documents below, and if you are unable to meet these standards provide valid justification.

- Provincial Policy Statements
- Region of Peel Official Plan
- Town of Caledon Official Plan
- Secondary Plans (if applicable)
- Comprehensive Town-Wide Design Guidelines
- Industrial/Commercial Design Guidelines (if applicable)
- Any other documents Staff require during the Pre-consultation meeting

1.3 This document is to be read in conjunction with:

- Town of Caledon and Region of Peel Official Plan policies
- Town of Caledon Development Standards Manual
- Town of Caledon standard development details and notes
- Town of Caledon Comprehensive Town-Wide Design Guidelines
- Town of Caledon Site Plan Control Manual Information Package
- Town of Caledon Site Plan Control Manual Submission Package
- Town of Caledon Woodland Conservation By-law 2000-100

- Any applicable Conservation Authority standards and guidelines
- Niagara Escarpment Commission standards and guidelines
- Oak Ridge Moraine standards and guidelines
- Canadian Species at Risk Act
- The Ontario Endangered Species Act
- Ministry of Natural Resources and Forestry (MNRF) Butternut Tree Registration Guide
- Region of Peel standards and guidelines.

2.0 ARBORIST REPORT CONTENTS

The Arborist Report may be scoped from the requirements below at the discretion of the Town. Where the Arborist Report is to be scoped, Town staff will indicate this and describe the requirements at the Pre-Consultation Meeting. The Arborist Report must be prepared in digital format and shall contain at minimum, the following:

2.1 Title page including:

- Civic address of the subject property.
- Development application number.
- Applicant's name.
- Author name, title and company name.
- Date the report was prepared.
- Dates in which site visit(s) were conducted
- Author's arborist certification number

2.2 Scope of the Report including:

- A description of the project type such as subdivision, site plan, plan of condominium, rezoning, etc.
- A description or summary of the number of existing trees located on the private subject property, Town 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.
- A description of the approach and give site visit dates.
- Include a table of species, condition rating criteria, recommendation for preservation, justification for removals.
- Reference graphic plan portion of report and associated Tree Management Plan.

2.3 Comments including:

- Site condition and tree condition including canopy size, structural condition, DBH measurement, and any additional relevant commentary.
- Description and analysis must incorporate context mapping and photographs depicting the subject site and relationship to its surrounding context
- Mitigation and preservation procedures such as compaction alleviation techniques, root exploration or pruning methods, tree protection/hoarding measures, etc.

- Proposed tree work requirements.
- Species at risk observed, such as Juglans cinerea (Butternut), etc. These can be both flora and fauna species at risk.

2.4 Summary of Conclusions including:

- Number of trees proposed for injury or removal.
- A list of signed consent letter(s) that will be required by the adjacent property owner(s) for any trees of shared ownership that are proposed for injury or removal.
- Replacement tree requirements and recommendations at a compensation rate as determined by the Town.
- Diagrams, photographs, sections and sketches that accompany the arborist report to further contribute to understanding the overall intent of what is to be accomplished.

2.5 Photos including:

- Aerial photo of site and abutting properties.
- Overall site photos
- Inventoried trees - both proposed for removal and to be protected and / or preserved.
- Validation of DBH, that Diameter at Breast Height was used, and defined as 1.4m above adjacent existing grade at all inventoried trees.
- Documenting any hazardous / potentially hazardous trees or conditions on site along with any pre-existing damage or previously hazardous or fallen trees.
- Areas of interest.
- For all site photos, please indicate the area on the site and direction of view in a way that can be referenced back to the Tree Inventory Plan and Tree Preservation Plan.

2.6 General Notes to be added to the Report:

- During construction and prior to final approval by the Town, the consulting Arborist along with appropriate Town staff shall intermittently inspect the entire site. Any noted hazardous trees must be identified and removed prior to Assumption or earlier if deemed hazardous at the sole cost of the Owner/Applicant. Any records of maintenance or removals are to be submitted to the Town.
- Compensation will be required for all tree removals at a rate as determined by the Town's Tableland Tree Removal Compensation. Tree compensation planting will be in addition to the standard required planting. In the event tree compensation cannot be accommodated for in the planting design, financial compensation shall be collected at a rate (per tree) as determined by the Town. Based on the compensation ratio, (insert number) replacement trees are required to compensate for the removal of trees on the subject property.
- Removals should occur outside of the breeding bird season (late March – late August, as per the Canada Nesting Periods website). If this is not possible, clearance with an ecologist shall occur prior to construction to ensure no loss of bird nest, egg or unfledged young.

- Any trees located on the property line (boundary trees as defined by the Ontario Forestry Act) or on the adjacent property that are proposed to be removed, pruned or injured, will require written consent from the adjacent landowner. All correspondence is to be forwarded to the Town prior to any removals.
- Minor grading works may be permitted at the edge of the tree protection zone as required to correct localized grading issues adjacent to the proposed development at the discretion of the Town. This work is to be undertaken under the supervision of the consulting Arborist. The consulting Arborist is to verify in writing to the Town, confirming that the work has been completed as per the approved design using best arboricultural practices.
- Areas within the tree protection zone shall remain undisturbed for the duration of site construction and shall not be used for the storage of excavated fill, building/construction material, structures or equipment.
- The limit of tree protection hoarding shall be confirmed in the field by the consulting arborist, Town staff and conservation authority (if applicable). The Owner/Applicant shall be responsible for ongoing maintenance and repairs to tree protection fencing to the satisfaction of the Town, until final approval by the Town and conservation authority (if applicable). The Owner/Applicant shall not remove and not cause or permit any tree preservation fencing to be removed without the approval of the Town and conservation authority (if applicable)

3.0 Detailed Vegetation Plan / Tree Inventory / Survey:

The Detailed Vegetation Plan / Tree Inventory / Survey shall contain a summary chart prepared using a computer program such as Microsoft Excel or an equivalent and formatted as a PDF. The Tree Inventory shall be illustrated in chart form and is to be included in the Arborist Report and on the Tree Preservation Plan.

3.1 The Tree Inventory/Detailed Vegetation Plan shall contain (but is not limited to) the following:

- All trees on the subject property which are 10cm in diameter at breast height (DBH) and greater as well as smaller trees that have been planted, or as directed by the Town.
- For a Scoped Arborist Report: all trees within the proposed development area and limits of disturbance, or as directed by the Town. Trees smaller than 10cm in diameter at breast height (DBH) can be shown as a group if in a stand of trees.
- All trees outside of the subject property on adjacent private land, within 6m of the abutting property lines which are 10cm (DBH), in diameter and greater.
- All trees outside of the subject property which are on Town property, within 6m of the abutting property lines.
- Any groupings of trees that are under 10cm (DBH) may be included as one item in the chart showing the general size ranges and species.

- Tree identification number, corresponding with the Arborist Report and Tree Preservation Plan. Onsite tree tagging with numbered standard aluminum forestry tags is a requirement.
- Genus and Species Name in both common and botanical forms.
- 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.
- Elevation of the tree at the root flare (lowest undisturbed existing grade).
- Health, Structure, and Overall Condition - ratings to be used are good, fair, poor, and dead.
- Size (radius) of the canopy, measured in meters 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.
- Ownership of the tree - private, neighbour, Town or shared (boundary).
- Proposed action - preserve, protect, injure or remove.
- Site Comments - included bark, cavity, hanger, dead limb, etc.
- Preservation Recommendations and Comments - including root exploration, pruning, using air spade or hydro vac, etc.

4.0 Tree Preservation Plan:

A separate Tree Preservation Plan may be required when a site contains a larger quantity of trees that may be affected by the proposed development and indicating them on the Site Plan would be too busy and confusing. The Tree Preservation Plan shall be prepared using AutoCAD or an equivalent computer aided design program and formatted as a PDF, marked up overlays on the Site Plan, or can be hand drawn for smaller applications as long as they are to the correct scale and accurately drawn. The Tree Preservation Plan is to be similar in size and scale to the Site Plan (24”x36” or ARCH D preferred) at a metric scale no smaller than 1:500. Aerial overlays on a high-resolution aerial photo where individual trees can be clearly seen are also acceptable when the application contains only a few trees.

The drawings shall contain at minimum the following:

4.1 The Tree Preservation Plan shall contain (but is not limited to) the following:

- Title block including North arrow, key plan, project name, owner, project address, application number, date, revision number (to match arborist report date), company name, author of drawing (prepared by).
- The entire plan shall be overlaid on current property survey developed by a certified Ontario Land Surveyor (OLS) with the existing buildings and site works plus the proposed development application illustrated for reference on a georeferenced CAD file

using the same benchmark as the Engineering set and include the same topographic survey data with contours as used for Engineering Grading.

- Surveys used for base information will be considered valid for a period of 2 years or when changes have been made to the site (whichever comes first).
- The locations of candidate trees shall be recorded in the field using (at minimum) GPS technology with a typical accuracy of 30cm. Where existing trees are located within the vicinity of the property boundary, any applicable property lines must be accurately surveyed on site by a certified Ontario Land Surveyor (OLS) so that tree location and ownership can be verified accordingly prior to final approval by the Town.
- All inventoried trees corresponding to the Tree Inventory & Arborist Report clearly noted and numbered on the plan.
- Stem locations to include elevation at root flare, diameter at 1.4m from grade
- Tree canopies and groupings illustrated graphically corresponding to actual canopy sizes identified in the Tree Inventory.
- All Tree Preservation Zones (TPZ) as per Town Standard 606.
- All trees to be protected and/or preserved to be shown in a solid line. Trees proposed for removal to be shown in a dashed line and/or clearly marked with a red “X” on the plan.
- All tree protection methods such as tree protection fencing, or root exploration trenches illustrated on the plan and corresponding graphics illustrated in the legend.
- A legend which clearly identifies all symbols, line types and line weights used on the plan.
- Town standard tree preservation detail 606 and tree preservation notes 710 & 711.

4.2 Drawing Submission Requirements:

- Legal description and Civic Address of the property
- North arrow and drawing scale. Ensure the scaled drawing includes site verifiable dimensioning.
- Illustrate the exact locations of all proposed and any existing individual trees (10cm caliper and greater) to be retained, relocated or removed. Groupings of trees smaller than 10cm can be shown in groupings.
- Exact location and type of tree protection measures for retained material
- Location of all existing features – such as walkways, curbs, interior roads, parking lots, fencing, garbage enclosures, steps, ramps, retaining walls, slopes, berms, exterior lighting, all portable or permanent signage, benches, play equipment, planters, edgers, and also including top of bank and watercourse features, etc.
- Layout of proposed site development
- Location of all above ground utilities (hydrants, manholes, water valves, etc.)
- Location of Storm Water Management features
- Proposed grades and the existing grades along the property lines and base of trees (root flare)

Terms of Reference:
Tree Preservation

5.0 Tableland Tree Removal Compensation

5.1 Introduction:

The information below is provided in relation to the removals of existing healthy trees within the Tableland areas for all Town of Caledon development applications. Tree removals and compensation will be determined by an Arborist Report.

5.2 Compensation

Compensation for tree removals shall be determined based on the diameter at breast height (dbh) as follows:

Diameter at Breast Height (cm)	***Compensation Ratio***
<10	*Not Applicable*
10-20	*1:1*
21-35	*2:1*
36-50	*3:1*
51-65	*4:1*
>65	*5:1*

- To be considered compensation, the proposed new trees shall meet or exceed the existing planting standards as currently outlined in the Section 2.3 of the Development Standards Manual Version 5.0, 2019. Compensation trees shall be identified on the landscape drawings and shall also be listed on a separate plant list accordingly, unless otherwise directed by Town staff.
- Table land compensation trees may be proposed within the conservation authority owned or regulated areas at the discretion of the jurisdictional conservation authority and the Town.
- Compensation trees shall be sized as per minimum planting size chart as currently outlined in Section 2.3 of the Development Standards Manual Version 5.0, 2019 and Town of Caledon Site Plan Control Manual.

Submission Requirements

- Digital report in PDF format
- File size not to exceed 4 GB