Tree Preservation and Compensation Policy

November 2025

GEORGINA

georgina.ca/**TreePolicy**

Subject: Tree Preservation and Compensation Policy

Authority, Reference and Section:

Date: November 5, 2025

Approved by Council:

Contact Position: Senior Landscape Architect

Policy statement

The purpose of the **Tree Preservation and Compensation Policy** is to establish standards and a process for the protection, preservation, compensation and maintenance of trees, through the Development Application process, as permitted through the Planning Act.

The intent of the policy is to educate and increase awareness on the importance of a healthy urban forest and associated tree canopy coverage on the health of the community, and to encourage and support the following:

- The preservation of the existing healthy tree canopy in the design of development plans and the submission of development applications;
- The preservation and enhancement of the Town of Georgina's environmental, economic, and social character of mature landscapes;
- The ongoing protection of trees during development-related activities to promote proper site planning and construction practices, to prevent the removal or destruction of trees and vegetation, and avoid unnecessary disturbance to the Town's natural vegetation;
- The vision and direction of the Town's Official Plan;
- The goals and objectives in the Town's Corporate Strategic Plan;
- Compliance with the York Region Forest Conservation Bylaw;
- To achieve a net zero loss of trees through the planting of replacement trees; and,
- The planting of additional trees to enhance developments and streetscapes beyond the requirements of boulevard trees.

1. Background

1.1 Regional Municipality of York

The York Region State of the Forest 2021, Reporting Progress on Canopy and Woodland Cover, identifies a 44.4 per cent canopy cover for Georgina (excluding the canopy cover for the Chippewas of Georgina Island First Nation), with a recommended target range of 46 per cent to 47 per cent by 2051. Of the total 44.4 per cent canopy cover, 9.6 per cent is located within urban settlement areas, the areas in which most development applications pertain to. Since settlement areas have ongoing development pressures, continued planting and protection efforts in these areas should be the focus of the replanting objectives.

1.2 Town of Georgina Official Plan

The Town of Georgina Official Plan identifies a Greenlands System, context and components. The purpose of the Greenlands System is to preserve, protect and enhance the natural environment, to encourage restoration of the quality and integrity of ecosystems and natural processes, and to improve the quality of life, maintain healthy communities, and promote an environmentally sustainable resource use.

The Official Plan requires the protection and enhancement of Natural Heritage features, and ecological offsetting through the development process where the loss of Natural Heritage features is unavoidable, an example being Woodlots.

1.3 Corporate Strategic Plan

The Tree Preservation and Compensation Policy is an initiative that responds to the Strategic Pillar of Advancing Environmental Sustainability and the following goals:

1. Review and update the Town's Tree Preservation and Compensation Policy.
2. Celebrate and respect Georgina's natural environment, including Lake Simcoe.
3. Support Georgina's resilience through environmental sustainability and climate mitigation and adaptation.

1.4 Climate Action Plan

The Town of Georgina Climate Action Plan identifies that tree planting provides cooling benefits and offsets greenhouse gas emissions. This highlights the importance of maintaining and enhancing tree cover for moderating temperature which are projected to increase under climate change.

2. General policy

1. No person, applicant or representative, indirectly or directly, shall remove, harm, destroy or prune any tree within the Town, without first providing an Arborist Report for review and approval by the Town, when undergoing a Development Application, unless otherwise exempted, in Section 2.3 Exemptions.
2. Notwithstanding 1 above, no tree identified as an endangered species under the Endangered Species Act, may be removed, injured, pruned or destroyed in any way without the permission of the Ministry of the Environment, Conservation and Parks.
3. Priority should be given to the preservation of significant woodlands and mature trees wherever possible, rather than relying on replacement and/or financial compensation measures.
4. Tree pruning or root cutting of any tree located on a municipal boulevard or municipal park may only be undertaken by Town of Georgina staff, an International Society of Arboriculture (ISA) certified Arborist with Tree Risk Assessment Qualification (TRAQ) or other qualified professional as approved by the Town of Georgina, authorized staff of the Regional Municipality of York, an authorized public utility including Hydro One, or the Lake Simcoe Region Conservation Authority, unless appropriate written authorization has been given by or a legal agreement has been executed with the Town.
5. Trees that are identified to be preserved on the lands subject to a development application must be protected by adequate fencing to the satisfaction of the Town. Fencing shall be installed as shown in the detail “Town of Georgina Temporary Tree Protection” located within the Development Design Criteria Manual, as amended.

Temporary tree protection must adhere to the requirements as noted in the Standard Detail. The Town of Georgina may require, in special circumstances, that a temporary chain link fence and/or other rigid or substantial fencing such as plywood hoarding be used and maintained during construction of the project.

6. Tree protection fencing shall be installed at the outer edge of the Tree Protection Zone (TPZ) as identified in "Standard Detail, Temporary Tree Protection". Specifics can be found in Section 6 Tree Protection Requirements During Construction. This fencing must be in place before any construction work or site alteration work begins. Where temporary tree protection cannot be installed, a minimum Tree Protection Zone (TPZ) must be determined by an Arborist. Tree Protection Zone requirements and specifics in relation to determining the TPZ can be found in Section 6.1 Tree Protection Zone (TPZ).
7. Any tree to be protected must be identified in the Arborist Report and the Tree Inventory and Preservation Plan.
8. Anyone failing to adhere to the following policies and requirements will be financially responsible for any damage to, or destruction of, any trees prior to, during and after construction.
9. Written consent is required for the removal of any part of a tree, including its Tree Protection Zone (TPZ), if located within 6 metres of a development envelope on adjacent lands.

2.1 Applicability

The policy applies to lands subject to the following types of development application(s):

- Official Plan Amendment
- Zoning Bylaw Amendment
- Draft Plan of Subdivision
- Draft Plan of Condominium
- Site Plan Approval
- Consent

- Site Alteration and Entrance Permit Applications that are related to, or implement conditions outlined in Planning Act applications listed above.

No tree removal or injury shall occur prior to the Town's decision on development applications submitted with the aforementioned documents.

To support a smooth transition, any application that has been deemed complete prior to the date of Council's adoption of this Policy Update will remain subject to the Existing Policy dated 2016.

2.2 Arborist report criteria

An Arborist Report is required and applies to any tree defined as the following:

- The main stem size is at or over 10 cm Diameter at Breast Height (DBH) or has multiple stems which collectively meet or exceed 10 cm stem size (D30). For multi-stemmed trees, the DBH is calculated using the "sum of square roots" method, as follows: $\sqrt{}$ (StemA^2 +StemB^2 + StemC^2) = DBH.
- Located on or within 6 metres of the development envelope, including but not limited to the location of site disturbance on the lands subject to a development application. In the instance that the entire parcel is being developed, trees 6 metres from the property line must be included in the Arborist Report.
- Evaluated by an ISA certified Arborist with TRAQ as not presenting a medium to high hazard risk as per the tree risk rating system used and defined by the ISA standards for tree risk assessment.
- A tree of any size, tree condition or risk rating that belongs to a species that is protected by provincial or federal laws as 'Endangered'.
- A tree that has been designated as a heritage tree by Council under Ontario Heritage Act.

2.3 Exemptions

Exemptions to this policy include the following:

2.3.1 Commercial nurseries or tree farms

Trees that are being grown ornamentally (e.g. Christmas trees) or for landscaping stock**.**

2.3.2 Emergencies/hazards/infested

Trees recommended for removal in order to protect public safety or property from imminent danger, as defined by the ISA and/ or identified by the Town. Trees that are infested (i.e. Emerald Ash Borer) or otherwise defined by the ISA Exempt trees include Tree-of-Heaven (*Ailanthus altissima*), European/Black Alder (*Alnus glutinosa*), Russian Olive (*Elaeagnus angustifolia*), and any tree of the genus Buckthorn (*Rhamnus sp*.).

2.3.3 Municipal, regional, provincial and federal projects

Any project by or on behalf of the Town, Regional Municipality of York, Province of Ontario or Government of Canada does not require an Arborist Report. Although exempt, these projects are expected to uphold the intent of the policy.

2.3.4 Bylaws

Any tree that is required for removal as part of an Order under the Property Standards Bylaw of the Town.

3. Submission requirements

This following information will be required upon the submission of a Development Application.

3.1 Requirements for the Arborist Report

Any tree that meets the criteria listed in Section 2.2 Arborist Report Criteria, is required to be included in the Arborist Report. The following information is required for submission of the Arborist Report attached to the application:

1. Title including project name, site plan and date.
2. Contact information and professional qualification details.

3. A survey serving as a base plan signed and sealed by an Ontario Land Surveyor or aerial photos as defined for minor developments above to show where the study area is located.
4. A tree inventory comprised of a tree location plan based on the survey and/or aerial and inventory chart/table. Trees are to be reviewed inside the site and within 6 metres of the property line or outside edge of a development envelope. Trees can be located individually or in a grouping, woodlot or hedgerow. See Appendix A for sample table.

For individual trees:

- Tree number – corresponding to numbered tree location points on the Tree Protection Plan.
- Species – including both common name and botanical (scientific) binomial name. If known, cultivar or variety shall be identified.
- Diameter at Breast Height (DBH) or diameter at 10 cm (D30) for multi-stemmed trees.
- Crown diameter – estimated in metres at the widest point of the crown.
- Tree Condition Rating – described as Excellent, Good, Fair, Poor, Very Poor, or Dead. See Appendix B table for clarification on ratings.
- Tree Protection Zone (TPZ) – the minimum required Tree Protection Zone, in metres. The size of the TPZ shall be determined using the formula outlined in Section 6.1 TPZ.
- Ownership – The Town, York Region, private, boundary, etc.
- Proposed action – preserve, transplant, injury, remove.
- Notes – information regarding the tree, proposed site disturbance within the TPZ, boulevard, etc.
    - For all trees proposed for removal, the inventory table shall clearly state the reason for the proposed removal. The tree location should

dictate the development envelope, if known, and include the proposed change to existing grade.

- For all trees proposed for injury, the inventory table shall clearly state the proposed form of encroachment into the TPZ.
- For all street trees within or adjacent to boulevards with enhanced streetscape elements, include a brief description of the location type (e.g., landscape bed, boulevard planter, centre median, tree grate planter, etc.).

For tree groups (i.e., trees less than 10 cm DBH and described as natural vegetation, hedgerows, or tree groups of 5 or more trees), the inventory shall include the following information:

- Tree group number – corresponding to numbered tree group polygons on the Tree Protection Plan.
- Species composition – the approximate distribution, by percentage, of the three most commonly-occurring tree species in the tree group. Any species other than the three most commonly occurring species can be listed in the 'notes' column.
- Tree Areal Extent – the total area of the tree group.
- Tree condition rating – the overall tree condition of the tree group, as described in tree condition rating in Appendix B.
- Tree Protection Zone (TPZ) – the minimum required Tree Protection Zone, in metres. The size of the TPZ shall be determined using the formula outlined in TPZ rating in Section 6.1 TPZ.
- Ownership – The Town, York Region, private, boundary, etc.
- Water features (if known).
- Proposed action – preserve, injury, remove.
- Notes – additional pertinent information regarding the tree group, proposed

site disturbance, etc.

- For all trees proposed for removal, the inventory table shall clearly state the reason for the proposed removal; if known, include the proposed change to existing grade if construction grading limits are the reason provided.
- For all tree groups proposed for injury, the inventory table shall clearly state the proposed form of encroachment into the TPZ.

5. A report is required to accompany the inventory to provide a general site description including:
    - Location.
    - Methodology.
    - Description of site.
    - Drainage.
    - Topography.
    - Land uses on site and adjacent.
    - Trees of special concern.
    - Specifications and recommendations.
    - Scheduled work plan for tree inspections during and post-construction.
    - Work plan for remediation of trees damaged during construction.
    - Photographs.
6. A Tree Preservation and Compensation Plan for all trees identified within the inventory to be preserved and removed/compensated shall include all information needed to assess potential impacts of the proposed development. This will also include the proposed tree protection to help mitigate impacts of disturbance and the following information and specifications:
    - Trees to be preserved and protected including the protecting fencing locations corresponding to the provided inventory;

- Trees to be removed;
- Proposed block and layout, servicing and utilities, roads (if site plan);
- Easements, right of ways, restrictions, floodplains, regulated areas, property lines;
- Water features;
- Building envelopes (if known);
- Location of vegetation group or tree groups and outer edges of the dripline (the development envelope to be 1 metre off the dripline in vegetation groups to be preserved);
- Proposed action (using different hatching patterns to represent tree removal and tree protection);
- Solid circle for minimum TPZ for every inventoried tree to be preserved, measured from the tree's centre line. TPZ for tree groups to be determined by the outer most trees within the group;
- Note proposed damage inside Critical Root Zone (CRZ) and percent of damage from branch pruning of the trees proposed for retention represented with a hatch;
- Standard drawing of the proposed method of tree protection; and,
- Not exceed 1:500 and all measurements in metric only.

3.2 Compensation

Tree compensation shall be required for all trees recommended for removal that are greater than 10 cm DBH. A Tree Compensation Table is required for the removal of trees. The compensation table will identify calculations for both options. This shall accompany the Tree Preservation and Compensation Plan noted above and reference the trees proposed to be removed.

Compensation may be provided in the form of replacement plantings (Town's preferred

approach), through payment of equivalent compensation value or a combination of both. See Appendix C for a sample of Compensation Table.

3.2.1 Individual trees planting ratio

Tree planting ratio

The number of replacement trees is calculated as follows:

$$\textbf{Number of Replacement Trees} = \left(\left(\frac{\textbf{DBH of Tree to be Removed}}{\textbf{Replacement Tree Caliper Size}}\right) * \textbf{Condition Rating}\right) *$$

* Replacement Tree Caliper size is 60 mm. DBH taken from Tree Inventory for trees to be removed. Please refer to the Inventory Table for Tree Condition ratings and their respective percentages.

3.2.2 Compensation value for individual trees

Compensation value is calculated as follows:

$$\underline{\text{Compensation Value (\$)} = \text{Number of Replacement Trees X Replacement Cost} *}$$

* The replacement cost for a given tree is based on the Town's cost for a new tree and maintaining it in good condition, under warranty for two years following the year of planting, which typically includes three growing seasons. The updated replacement value for deciduous trees is $900 and $850 for conifers. This replacement value will be re-evaluated as necessary over time should there be material changes in replacement. Certain tree species are exempt from compensation. Refer to Section 2.3 Exemptions The number of replacement trees will be taken from the Compensation Table provided by the applicant within the Arborist Report.

3.2.3 Tree group planting ratio

Compensation value is calculated as follows:

$$\underline{\text{Number of Replacement Trees} = [\text{Wooded Area Removed } (m^2) \div 40\ (m^2)] \text{ x } 3 *}$$

* The compensation is applied at a proposed 3:1 ratio. This means that three replacement trees will be required for every 40 m² of wooded canopy removed. This 3:1 ratio is under consideration as a working basis and may be adjusted pending further policy development, stakeholder input, site-specific factors, and forestry research.

3.2.4 Compensation value for tree groups

Compensation value is calculated as follows: 2:1 for Wooded Area Removed

$$\text{Compensation Value (\$)} = (\text{Wooded Area Removed x 2}) \text{ x \$ 50,013.00/ha *}$$

* Subject to adjustments by the Director of Development Services or their designate.

3.3 Maintenance

A maintenance plan for trees to be preserved, protected and replanted will include items that will mitigate any adverse effect of the proposed construction. These could include but are not limited to the following:

- Pruning
- Staking
- Fertilization
- Mulching
- Aeration
- Watering (water bags, or water trucks)
- Rodent control
- Timing of above

4. Review

4.1 Approvals

The Town will approve the Arborist Report, for the development proposal, if it adheres to the policy.

4.2 Refusals

The Town may reject/refuse a proposal for tree removal or injury including but not limited to the following situations where:

- Environmentally sensitive areas, ecological systems, natural heritage or contours will not be adequately protected and preserved;
- Erosion or flood control will be negatively impacted; and/or,
- Trees proposed for removal are in the following categories:
  a. Belongs to a species that is protected by Endangered Species Act as 'Endangered';
  b. Designated as a heritage tree by Council; and/or,
  c. A municipally-owned tree located within parklands or a Town's road allowance.

5. Post-acceptance

- The applicant shall retain the services of an ISA-certified Arborist to undertake the requirements for acceptance to the satisfaction of the Town.
- The requirements of the approved Arborist Report shall be incorporated into the appropriate Development Agreement. Where a Development Agreement is not applicable, Arborist Report requirements shall be implemented by a Letter of Undertaking or condition of permit to the satisfaction of the Town.
- Replacement trees shall be planted after all construction activities have been completed, unless otherwise approved by the Town.

- Replacement trees shall be subject to a two-year warranty period and a maintenance program which is equal to three growing seasons. Every replacement tree shall be cared for by the applicant/owner as recommended and/or approved by the Town's Qualified Tree Professional.
- The Town will require the posting of securities for the purposes of tree preservation based on the value of the trees. Securities shall be calculated from the Compensation Table provided. The amount of the security deposit shall be 100 per cent of the total value of compensation as per compensation table provided within the Arborist Report. The Town shall hold securities for tree protection up to final assumption of all the works, as contemplated by the subdivision/condominium agreement, or in the case of site plans, final inspection for the release of securities by the Town's Qualified Tree Professional. Payment can be made by cash, cheque, debit or letter of credit.
- Should there be any disagreement between the review and assessment made by the Town and/ or consultant of the plans submitted, the applicant may request a decision by Town of Georgina Council.
- The Town may require the submission of a Tree Enhancement Plan (which may be made in combination with a Tree Preservation and Compensation Plan) if the proposed tree removals are an encroachment to a buffer area.

5.1 Compliance

The owner/applicant shall provide financial compensation to the Town for damaged or destroyed trees that have been identified as trees to be protected or preserved in an Arborist Report submitted as part of a Development Application. Compensation shall be calculated based on the replacement methods identified in Section 3.2 Compensation.

5.2 Cash in lieu of tree replacement

Should appropriate locations not be available for replacement trees, the applicant can provide cash in lieu which is to be used towards the Town's replanting program in maintaining and growing the existing canopy. The Town will determine through the replanting

program, the locations in which trees shall be planted to enhance and achieve canopy targets. The cash in lieu amount is the compensation value equated in the Compensation Table (refer to Appendix C).

6. Tree protection requirements during construction

The following are requirements during construction for a list of potential construction impacts during construction (refer to Appendix D).

- Tree protection fencing will be installed along retained tree areas adjacent to areas where construction will encroach into the adjacent tree edge (refer to the detail in Section 6.1).
- Upon receiving the necessary approvals and prior to the commencement of tree removals, all areas designated for preservation must be flagged in the field. All designated preservation areas must be left standing and undamaged during the removal work. All removals must be felled into the development area. The removals are to be completed outside of the Migratory Bird Nesting Season. Removals may take place during this restricted time only if the requirements of the Migratory Birds Convention Act are met and nesting activity is routinely monitored by a qualified individual(s) to the satisfaction of the Town.
- Upon completion of tree removal, all felled trees are to be removed from the site, and all brush chipped and removed, unless otherwise directed. No lumber or brush from the clearing is to be stored on the site, and all brushes, roots and wood debris must be shredded.
- Areas within the dripline of the trees designated for preservation are not to be used for any type of storage (e.g., storage of debris, construction material, surplus soils, and construction equipment). No trenching or tunneling for underground services shall be located within the Tree Protection Zone or dripline of trees designated for preservation within or adjacent to the construction zone. Directional drilling may be permitted only where all launch and receiving pits, as well as associated machinery, are situated

entirely outside the TPZ and tree driplines.

- Rigging cables or hardware shall not be attached to protected trees, nor shall any contaminants be dumped within the protected areas. Further, no contaminants shall be dumped or flushed where they may encounter the feeder roots of the trees.
- If it is necessary to remove additional limbs or portions of trees, after construction has started, the Arborist or project administrator is to be informed and the removal is to be executed in accordance with arboricultural techniques, by a certified and licensed Arborist.
- Any roots greater than 2.5 cm in diameter that will be impacted by development outside the TPZ shall be cut cleanly across the perpendicular axis of the root. Pruned root ends shall point obliquely downwards. The exposed roots should not be allowed to dry out. The contractor shall discuss watering of the roots with the owner/applicant and contract administrator prior to pruning to ensure that optimum soil moisture is maintained during construction and backfilling operations. Backfilling should be completed with clean, uncontaminated native topsoil as a preference, and only an imported growing medium when native topsoil will not be achieved.
- Where required, silt barriers or other fencing shall conform to and be located outside all TPZ zones.

6.1 Tree Protection Zone (TPZ)

The intent of tree protection measures at the limit of the TPZ is to prevent adverse impacts. Unless otherwise approved by the Town the following activities are prohibited within the TPZ:

- Storage of equipment or machinery
- Stockpiles
- Placement of temporary structures
- Digging, trenching, excavating
- Changes in grading
- Changes of flow, surface or sub-surface, for existing water flow, storm water of

construction related flood or storm water control etc.

- Operating machinery or equipment
- Attachments of any kind to the tree

6.1.1 Size of Tree Protection Zone

The TPZ is measured from outside the base of the tree trunk. The size of the TPZ is calculated by the Trunk Diameter Method. For multi-stemmed trees, the D30 is used to determine TPZ radius. The tree protection fencing shall be installed in accordance with the Town of Georgina's Standard Temporary Tree Protection Detail.

a) Tree Protection Zones (TPZ) will include a 1.37 m high hoarding around the complete tree where possible;
b) Hoarding will be constructed with a minimum framing supported with corner ties and filled with high visibility manufactured fencing. The hoarding will be staked into the ground, to ensure that construction activities will not intrude into the TPZ;
c) If lateral branches are extended outside the TPZ, then construction activities shall not come into contact with those branches, any pruning is to be done by an Arborist and shall commence prior to any construction activities. Any roots greater then 2.5 cm in diameter that will be impacted by development outside the TPZ shall be cut cleanly; and,
d) Hoarding will surround the tree to a minimum radius of 2.0 m for the first 20 cm DBH. Hoarding radiuses increase 1 metre beyond the 3.0 metres for every 10 cm DBH increase.

   See the table below for examples of how to calculate the minimum Tree Protection Zone.

Tree Trunk Diametre (DBH)	Minimum Tree Protection Zone (TPZ)
Less than 20 cm	2.0 m
21 – 30 cm	2.5 m
31 – 40 cm	3.0 m
41 – 50 cm	4.0 m
51 – 60 cm	5.0 m
61 – 70 cm	6.0 m
71 – 80 cm	7.0 m
81 – 90 cm	8.0 m
91 – 100 cm	9.0 m
Greater than 100 cm	TPZ = DBH*10

The tree protection fencing shall bear signage that includes the following:

- Clear definition of the TPZ area.
- Contact information.
- Statement that the barrier shall not be damaged or removed.

The signage shall be constructed of durable material measuring no less than 400 mm x 600 mm.

7. Procedures

7.1 Replanting

- Street trees will not be counted towards replacement planting requirements.
- The compensation ratio shall be upheld regardless of tree species except for identified exceptions.
- The intent of the policy is for deciduous trees to be replaced by deciduous trees and conifers to be replaced by conifers if final habitats are conducive.
- Hedging cedars or other large shrubs are not considered adequate replacement value for the removal of trees. Species must be defined as trees under the Canadian Nursery Stock Standard and a list of suggested trees can be found in Appendix E.

- Tree replacement shall include native species; utilize insect and disease resistant trees unless determined by the Town.
- Adequate soil volume levels for new tree planting with a minimum of 30 cubic metres of planting soil per tree.
- Replacement trees are to be planted on the same property as the Arborist Report was prepared for, unless otherwise specified by the Town. Replacement trees shall be planted in accordance with the Town's standards and specifications for tree planting.
- Replacement trees are recommended to be planted a minimum of 4.5 metres from any building, fence, walkways, or permanent structure that may interfere with the new root system.
- All replanting plans must be approved by the Director of Development Services or delegate.

7.2 Maintenance

Tree maintenance is important for ensuring the health of a tree. Adequate maintenance can reduce the stresses placed on newly planted trees. The greatest stress on trees is water stress. Watering is one of the most important parts of tree maintenance. Mulching trees acts to conserve water on site, to minimize the compaction of the soil and root systems, and keep machinery and equipment off TPZ zones of newly planted trees. Fertilizing and mulching of trees is a widespread practice to ensure that proper nutrients are available to the tree in nutrient-poor soils.

The recommendations included within the submitted maintenance plan must be upheld and reports showing the dates in which work(s) took place, as well as proof of the fulfilment of the recommendations will need to be provided to the Town at the time of the completion of the maintenance period.

7.3 Release of securities

Once the owner/applicant has finalized their replanting plan and completed the maintenance period, the Inspector, Landscape Architect, or other qualified tree professional will confirm

compliance with Arborist Report and provide associated maintenance reports to the Town. Once it has been determined that all required works have been completed to the satisfaction of the Town, all securities will be released. No interest will be accumulated. The security will come back as it was given.

8. Standards

The Town of Georgina has planting and tree protection standard drawing details in which all Tree Protection and Compensation Plans, reports and Replanting Plans must adhere to. All drawings must be clearly legible. The Town's most recent Design Standards Details are available at the following link: Design Standards Details and may be amended from time to time.

9. Enforcement

9.1 Authority as planning official

The Town shall have the authority to administer the details in this policy and impose any conditions and/or requirements, establish procedures, issue permits, enter into agreements, conduct inspections, and prepare any other necessary administration in order to implement this Policy.

9.2 Restoration

Any owner/applicant who is in violation of the policy shall be responsible to restore the unlawfully affected areas, in accordance with the approved Arborist Report.

9.3 Duration

The expiry date of the Arborist Report is five years.

9.4 Effective date

This policy shall come into effect after approval by the Town of Georgina Council.

Glossary of terms

Adjacent lands: means the area abutting the development envelope, as identified in the Arborist Report attached to the development application.

Adverse impacts: means any activities that result in decline in health, tree condition, stability of the tree or vegetation being protected.

Arborist: means a person who is a specialist or expert in the area of the care and maintenance of trees and includes an Arborist qualified by the Ontario College of Trades, an Arborist/BCMA certified by the International Society of Arboriculture, a consulting Arborist registered with the American Society of Consulting Arborists, a registered professional forester or a person with other similar qualifications as approved by the Commissioner with ISA Tree Risk Assessment Qualification (TRAQ).

Arborist Report: means the document submitted, attached to the Development Applications, described within this Policy that is required when 2.2 Arborist Report Criteria is met.

Critical Root Zone (CRZ): means the area of soil extending from trunk where roots required for the future health of the tree are located.

Crown: means the most top mass of the tree inclusive of the foliage and branches growing outwards.

D30: means the diameter of a multi-stemmed tree measured 30 cm above ground level.

Development application: means an application pursuant to the Planning Act requiring approval of the Town for which an Arborist Report is required, specifically to the applications outlined in Section 2.1.

Development envelope: means the geographic limits of the outer extent of the area and/or site to be altered or impacted by development, including but not limited to buildings, access roads/driveways, wells, and septic systems.

Diameter at Breast Height (DBH): means the diameter of a tree at breast height; the diameter of the tree measured 1.37 metre above ground level.

Dripline: means the outermost edge of the widest branches of the tree canopy.

Encroachments: means unavoidable disturbances within Tree Protection Zone (TPZ) resulting from new development activities.

Hedgerow: means a row of shrubs or trees growing closely together and forming a boundary.

Heritage tree: means a tree that has been designated as a Heritage Tree under the Ontario Heritage Act**.**

Migratory Bird Nesting Season: means the season in which birds are nesting and the legal protection of birds, nests, and eggs during this period which is zone C3 (April 8 - August 28).

Native topsoil: means the topsoil from the site/location it was excavated from also referred to as on-site topsoil. Topsoil for trees is a minimum of 900 mm for poorly draining clay soil.

Native tree: means a tree growing naturally in Ontario, being indigenous to the area.

Natural heritage: means all living organisms, natural areas, and ecological communities that we inherit and leave to future generations. (http://www.mnr.gov.on.ca/MNR/nhic/glossary.cfm#P).

Natural vegetation: means any tree or group of trees that have grown from natural process.

Qualified tree professional: means a person, including an ISA Arborist, a registered professional forester, a qualified ecological consultant, or a landscape architect, who through related training and on-the-job experience, is qualified to determine the size, species and health and tree condition, and having at least five years of practical tree care experience working as a practitioner.

Site disturbance: means any alteration to any physical aspects of the site from the conditions prior to the undertaking.

Survey: means a detailed map of an area of land, including its boundaries, area and elevation, using geometry and trigonometry to measure angles and distances prepared by an Ontario Land Surveyor.

Sustainable: means the ability to maintain an ecological balance in our planet's natural environment and conserve natural resources to support the wellbeing of current and future generations.

Tree: means any part of the tree, including soil and root system and TPZ.

Tree canopy: means the above ground portion of a plant cropping or crop, formed by the collection of individual plant crowns. In forest ecology, canopy refers to the upper layer or habitat zone, formed by mature tree crowns and including other biological organisms.

Tree condition: means factors identified in the ISA methodology for determining condition. For the purposes of this policy, the condition of a tree shall be described as Excellent, Good, Fair, Poor, Very Poor, Dead, or maintenance recommended.

Tree enhancement plan: means the long-term strategy, recommending phased tree plantings and woodlot management practices in addition to the minimum requirements of the tree preservation, protection, and replacement plan.

Tree group: means a group of five or more trees including but not limited to hedgerows.

Tree inventory: means a list of trees on the property and within 6 metres outside of the boundary of the property, including information regarding location, species, tree condition and size.

Tree Maintenance Program: means a program to ensure the health, safety and vigour of the trees identified to be maintained, either original plantings or existing trees to be cared for, replaced if necessary, pruned, pest and fungus control, removed, storm damage repaired, staked for a period as recommended by the applicant’s consulting Arborist and approved by the Town.

Tree Protection Zone (TPZ): means a zone created around a tree to protect the tree trunk, branches, soil and roots from machines and equipment, and other construction-related disturbances.

Urban forest: means a forest, or a collection of trees, that grow within a city, town or a suburb. In a wider sense, it may include any kind of woody plant vegetation growing in and around human settlements.

Woodland: means land at least 1 hectare in area with at least: 1000 trees, of any size, per hectare; 750 trees, measuring over five (5) centimetres DBH, per hectare; 500 trees, measuring over twelve (12) centimetres DBH, per hectare; or 250 trees, measuring over twenty (20) centimetres DBH, per hectare.

Woodlot: means land at least 0.2 hectare in area and no greater than 1 hectare in area, with at least: 200 trees, of any size, per 0.2 hectare; 150 trees, measuring over five (5) centimetres DBH, per 0.2 hectare; 100 trees, measuring over twelve (12) centimetres DBH, per 0.2 hectare; or 50 trees, measuring over twenty (20) centimetres DBH, per 0.2 hectare.

Appendices

Appendix A – Tree inventory template

Tree #	Botanical name	Common name	DBH (CM)	Crown diameter (m)	Tree condition rating	TPZ (m)	Ownership	Proposed action	Notes/ Injury mitigation measures

Appendix B – Tree condition ratings

Tree condition rating	Percentage	Criteria
Excellent	100%	Growth is primarily as extensions from terminal bud with little branching, shoot growth exceeds 10 cm. Full, symmetrical crown. No sign of decay, open wounds, die back, leaning, falling, chronic or acute disease or insect infestation and not going to be uprooted.
Good	80%	Growth is primarily as extensions from terminal bud. Branching indicates that the growth is healthy. May have disfigured crown or be partial leaved (>74 per cent crown density). Combined with a few dead branches or limbs. Small open wounds or truck damage. Health of this tree will not decline in the next five years' time.
Fair	60%	Growth is mostly branching and sprouts. No growth from terminal buds, new growth thin with small buds and lack of hardiness, may be partially leaved or disfigured (50-74 per cent crown density). Several health problems such as poor form, acute insect attack could improve or decline over the next five years.
Poor	40%	Declining in health with significant twig die back and branches. Heavy truck scars, crown, and top dieback (<50 per cent crown density, insect infestation is present or fungal infection disease, trees may need corrective pruning.
Very Poor	20%	Same symptoms as above in declining but more severe. Will require removal or replacement as it will die within the next five years.
Dead	0%	No leaves, brittle twigs, no buds.

Appendix C – Sample tree removal compensation table

Notes: Replacement tree size is 60 mm. The cost of deciduous is $900 and coniferous is $850. This replacement value will be re-evaluated as necessary over time to depict current market value.

Tree #	Botanical name	Common name	DBH (CM)	Tree condition rating %	Number of replacement trees (Calculated)	Number of replacement trees (Rounded)	Compensation value ($)
1	Acer rubrum	Red Maple	20	Fair 0.6	2	2	$1,800
2	Syringa reticulata	Ivory Silk	18	Excellent 1.0	3	3	$2,700
3	Acer saccharinum	Silver Maple	30	Good 0.8	4	4	$3,600
4	Acer saccharinum	Silver Maple	0	Dead 0	0	0	$0.00
5	Picea glauca	White Spruce	40	Poor 0.4	2.7	3	$2,550
					Required replacement trees	12	$10,650
					Proposed Deciduous	7	(-$6300)
					Proposed Conifers	1	(-$850)
					Required compensation after proposed replanting		$3,500

Appendix D – Potential construction impacts to trees

Trees can be damaged during construction without showing signs of damage until some years later. Many of the problems relate to the roots and result in slow death of the tree through its inability to absorb sufficient water and nutrients.

Soil compaction

The leading cause of construction damage to trees is compaction of the soil around the roots. Equipment entering a preservation zone compresses the air pockets around the roots, inhibiting the tree from absorbing nutrients and water. This damage reduces the health of the tree. Accordingly, during the removal stage, equipment used within the preservation zones should be restricted to ensure that the tree roots are not disturbed, assisting in maintaining their continued health.

Mechanical damage

Equipment can also physically damage the trees through striking the trunk, limbs and/or roots. Felled trees can also cause damage during the tree removal stage of development. Some damage may be unavoidable due to the tree density, but through proper equipment and best management practices the damage can be minimized. The contractor will be held responsible for all avoidable damage to the trees during all stages of development.

Root damage

Tree preservation is dependent not only on protecting the root zone from compaction and damage, but it is also critical to ensure that the structural roots within the root plate are not disturbed. Impacts to this area may result in the failure of the trees. During construction, there are situations where work must be completed within a protection zone that will have an impact on the root of the preservation trees. The most common root injury is cutting typically caused by trenching for utilities. The feeder roots of a tree are typically situated within the upper 30 cm of the soil profile. Any trenching or excavation within this zone will damage roots. Roots play a critical role in anchoring a tree. If major support roots are severed, the tree is more susceptible to wind throw damage and could pose a hazard.

Smothering roots within the Tree Protection Zone

Tree roots require space and air to absorb water and minerals. When grades are increased the feeder roots are no longer able to effectively function. Grade changes of only 10 cm can kill the fine roots of some trees.

Appendix E – Sample tree list

Below is a suggested plant list within the Town of Georgina. In the past, the overuse of any one species has resulted in a devastating loss to the tree canopy example (Dutch Elm Disease). When selecting trees for replacement, ensure adequate diversity and proper species selection for site-specific conditions for a better survival rate and a healthy tree canopy in the Town of Georgina.

Common Name	Scientific Name	Native	Classification
Ohio Buckeye	Aesculus glabra		Gold
Horse Chestnut	Aesculus hippocastanum		Gold
Ruby Red Horsechestnut	Aesculus x Carnea ‘Briotii’		Silver
Autumn Blaze Maple	Acer Freemanii		Gold
Armstrong Maple	Acer x Freemanii ‘Armstrong’		Silver
Japanese Zelkova	Zelcova Serrata		Silver
Black Maple	Acer nigrum		Silver
Sycamore Maple	Acer pseudoplatanus		Silver
Red Maple	Acer rubrum		Gold
Silver Maple	Acer saccharinum		Gold
Sugar Maple	Acer saccharum		Gold
Pacific Sunset Maple	Acer trun. X Plat. ‘Warrenred’		Silver
Turkish Hazel	Corylus colurna		Silver
Ginko ‘Maidenhair’	Ginkgo biloba		Gold
Honey Locust	Gleditsis triacanthos		Gold
Shademaster Honey Locust	Gleditia t.‘Shademaster’		Gold

Kentucky Coffeetree	Gymnocladus dioicus	🍁	Gold
Tulip Tree	Liriodendron tulipifera		Silver
Saucer Magnolia	Magnolia x soulangiana		Silver
London Plane Tree	Platanus x acerifolia		Silver
Serviceberry	Amelanchier Canadensis		Gold
Ironwood	Ostrya virginiana	🍁	Silver
Bur Oak	Quercus macrocarpa	🍁	Gold
White Oak	Quercus alba	🍁	Gold
Swamp White Oak	Quercus bicolor	🍁	Silver
Pin Oak	Quercus palustris	🍁	Gold
English Oak	Quercus robur		Silver
Red Oak	Quercus rubra	🍁	Gold
Littleleaf Linden	Tilia cordata		Gold
Glenleven Linden	Tila cordata 'Glenleven'		Gold
Hackberry	Celtis Occidentalis		Gold
Basswood, American Linden	Tilia americana	🍁	Gold
Balsam Fir	Abies balsamea	🍁	Coniferous
Silver Fir	Abies concolor		Coniferous
White Pine	Pinus Strobus		Coniferous
Tamarack	Larix laricina	🍁	Coniferous
Norway Spruce	Picea abies		Coniferous
White Spruce	Picea glauca	🍁	Coniferous

Colorado Blue Spruce	Picea pungens		Coniferous
Austrian Pine	Pinus nigra		Coniferous
Red Pine	Pinus resinosa		Coniferous

Notes:

This list is not exhaustive and serves the purpose of providing examples of recommended replacement trees. You may consult with the Town staff for consideration of additional tree species.

Cross-references

- Georgina Official Plan
- Draft Plan of Subdivision Submission Requirements
- Site Plan Approval Submission Requirements
- Regional Municipality of York, Forest Conservation Bylaw #2013-68