

APPENDIX H

ARBORIST REPORT



72 Victoria St. South, Suite 100
Kitchener, ON, N2G 4Y9

Telephone: (519) 741-8850
Fax: (519) 741-8884
Website: www.ecoplans.com
E-mail: abennewies@ecoplans.com

TREE REPORT

To: City of Toronto
Parks, Forestry and Recreation Division
Urban Forestry Branch

Date: Nov. 22, 2007
Project No.: 3061

Re: TTC West Don Lands Tree Preservation Plan

1.0 ARBORIST REPORT

Tree Service Company: Ecoplans Ltd. Phone No: 619-741-8850

Date of Inspection: November 9, 2007

2.0 INTRODUCTION

The following is a Tree Inventory and Preservation Plan for the road improvement and dedicated transit on east side for the TTC West Don Lands, located on Cherry Street from just south of Eastern Street to King Street, Toronto, Ontario. Please refer to the attached Tree Preservation Plan which is intended to be read in conjunction with this report. Amy Bennewies (Ecoplans Ltd.), Landscape Architect Intern, Registered Arborist (ISA member) conducted the tree inventory on November 9, 2007.

All the trees inventoried in this report lie within the property boundaries or are within 6 metres of the property line. The Tree Inventory and Preservation Plan includes both a written report and graphic plan that recommends preservation opportunities and maintenance to trees where the need exists. This inventory was conducted with the recommended procedures as described by the City of Toronto and incorporates City tree protection measures including details and preservation/protection notes.

3.0 METHODOLOGY

The Tree Preservation Chart itemizes the tree inventory, as regards to location, species, size and diameter at breast height (dbh), number of stems, condition, category, designation for preservation or removal and general comments. Following the inventory table are tree preservation measures and recommendations. Refer to Drawing L1, Tree Preservation Plan for locations of trees and tree protection fencing.

The following abbreviations and definitions have been used in the Tree Preservation Chart.

3.1 HEALTH INDICATORS

Tree condition and structural integrity are evaluated by the presence and/or severity of visible defect and decline indicators, as described below. These defects and indicators of decline are noted if they were deemed to pose a moderate to severe problem to the long-term growth and survival of a tree. In considering the long-term viability of a tree, an important consideration is its location relative to the proposed lot, development or construction activity and the potential for future property damage and/or human injury should part of the tree come down. However, minor blemishes, defects, insect problems and normal decay are not recorded in these evaluations.

3.2 HEALTH/RISK EVALUATION

This classification system evaluates the probability of tree survival and growth over the next ten (10) year period, or the risk of tree mortality barring major disturbance from human or environmental damage, agents, according to readily visible characteristics that provide a qualitative measure of tree vigour. Tree vigour classes are described below.

E - Excellent Condition – No Risk Trees

Sound, thrifty, full-crowned trees of natural shape with no dead limbs in the top of the crown and no significant evidence of decline. Condition is 84 to 100%.

G - Good Condition – Low Risk Trees

Full to medium crowned trees of natural shape with a live crown ratio $\geq 40\%$ that exhibit no more than minor dead wood (e.g., up to 10% secondary branches only and mainly in the lower crown) and no more than one moderate trunk defect or indicator of decline. Condition is 67 to 83%.

F - Fair Condition – Medium Risk Trees

Full to small crowned trees with a live crown ratio $\geq 25\%$ that exhibit no more than moderate dead wood (e.g., 11 to 35% secondary branches mostly) and no more than two moderate trunk defects or indicators of decline. Condition is 51 to 66%.

P - Poor Condition – High Risk Trees

Medium to very small crowned trees (e.g., live crown ratio $< 25\%$) that exhibit one or more of the following conditions:

- Trees with significant crown dieback (e.g., $> 35\%$ dead wood in primary limbs).
- Trees with major trunk defects (e.g., one extensive problem, or 3 or more distinct but moderate decline indicators).

Condition is 26 to 50%.

D – Dead/ Dying Tree

No live foliage/branches present. Condition is 0 to 25%.

M – Maintenance Recommended

Long-term survival of the tree is dependent upon a maintenance program. These trees should be monitored for continuous symptoms of decline.

3.3 PRESERVATION STATUS

P Preserve

R Remove

P/R Preserve/Remove: decision to be made on site by municipal staff regarding trees of borderline health and aesthetic value. Trees should be allowed to remain should they not interfere with construction, otherwise it will be more practical to replace.

3.4 TREE CATEGORIES

1. Trees with diameters of 30cm or more, situated on private property on the subject site.
2. Trees with diameters of 30 cm or more, situated on private property, within 6m of the subject site.
3. Trees of all diameters situated on City owned parkland within 6m of the subject site.
4. Trees of all diameters situated within lands designated under City of Toronto Municipal Code, Chapter 658, Ravine Protection.
5. Trees of all diameters situated within the City road allowance adjacent to the subject site.

4.0 Tree Inventory Chart

Tree No.	Species	DBH (cm)	Tree Condition	Recommendation	Tree Category
434	<i>Acer negundo</i> (Manitoba maple)	32	Trunk leans towards roadway, crosses through existing hydro lines. Structure is Poor, condition is Fair-Poor.	P/R	2
435	<i>Tilia cordata</i> (littleleaf linden)	27	Fair- structure and condition- crown is compromised- suppressed by neighbouring elm. Pruning has occurred to avoid hydro lines.	P	-

Tree No.	Species	DBH (cm)	Tree Condition	Recommendation	Tree Category
436	<i>Ulmus parvifolia</i> (Chinese elm)	MS (25,41)	Has been pruned to avoid hydro lines. Overhangs roof- not an existing hazard. 15% deadwood. Structurally, the tree has been compromised by pruning to promote growth away from the house and hydro- Fair-Poor. The condition is Fair.	P	2
437	<i>Catalpa speciosa</i> (northern catalpa)	28	Poor- heavily pruned, 'lollipop'/topped shape.	P/R	5
438	northern catalpa	27	Poor-healthier than #437, also 'lollipop'/topped form.	P/R	5
439	<i>Acer platanoides</i> - cultivar, Norway maple cultivar	17	Fair-Poor, restricted by building, pruning- some stub cuts.	R- sidewalk/ road	-
440	Norway maple cultivar	17	Poor condition. Frost crack with rot, retaining wall on back side. Some dieback- restricted by building and hydro lines.	R- sidewalk/ road	-
441	Manitoba maple	MS (16,14)	Poor- heavily pruned, leaning, growing at end of guard rail.	R- sidewalk	-
442	<i>Ailanthus altissima</i> (Tree of heaven)	MS (10,16)	Fair-Poor, intersected by guard rail- crown is at the height of Adelaide Street. Some pruned/broken branches	R	-
443	<i>Gleditsia triacanthos</i> (honeylocust)	37	Fair- 15% deadwood, mostly in lower canopy. Large pruned lower branch, restricted a bit by hydro.	R- sidewalk	5
444	Tree of heaven	MS (25,35, 33)	Fair- 20% deadwood, single large trunk wound- healed over but bulge- retaining wall below, has been pruned for hydro and cable lines.	R- sidewalk	2
445	Chinese elm (City tag #16111)	75	Fair- some drought stress/dieback upper crown, large canopy, old trunk wound- healing	P/R	5
446	Norway maple cultivar	26	Fair- bark wound, healed, structure- poor, pruning promotes 'ball' form, tree has lost some of its natural structure.	P/R	-
447	Littleleaf linden	31	Fair-good. Some lower branches pruned, structure good.	R- sidewalk/ road	2
448	<i>Fraxinus Americana</i> (white ash)	32	Fair- some damage from salt spray has promoted watersprouts, and some damage from pruning.	R	2
449	White ash	32	Fair- some damage from salt, pruning.	P	2
*450	Chinese elm	MS (avg. 27-30)	Fair- Tree has grown around a former chainlink fence. Pruned large lower branch. Upper canopy displays signs of drought/ urban stresses.	P	2

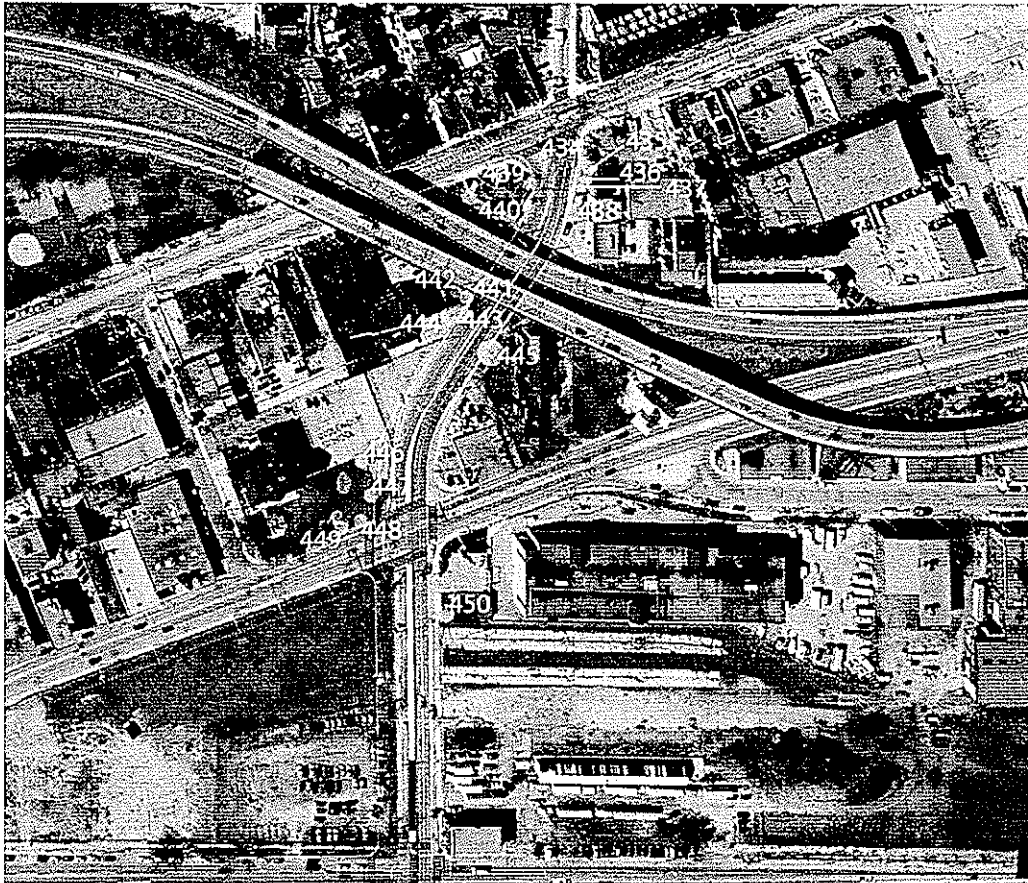
* Could not access to measure as tree is surrounded by metal private property perimeter fence

4.1 TREE PRESERVATION METHODOLOGY

Four trees over 30 cm dbh are proposed to be removed for the widening of the existing road. As the trees have not yet been surveyed, additional opportunities for preservation will be explored for those trees marked Preserve/Remove at the detailed design stage. Two trees over 30cm dbh have been marked as Preserve/Remove. Tree fence is not shown around tree no. 450 on plan, as an existing metal fence protects the tree. As an additional note, as shown in the Tree Chart, many of the trees have been intensively pruned as a result of existing hydro lines. The existing hydro lines, as well as urban conditions, have negatively affected many of the trees health and structure. Mitigation strategies will also be explored at the detailed design stage.

5.0 TREE PROTECTION MEASURES

5.1 GENERAL POLICY (CITY OF TORONTO)



Tree Protection Plan Notes

TREE PROTECTION ZONE:

Note: No construction activity including grade changes, surface treatments or excavations of any kind is permitted within the area identified on this plan as a Tree Protection Zone (TPZ). No root cutting is permitted. No storage of materials or fill is permitted within the TPZ. No movement or storage of vehicles or equipment is permitted within the TPZ. The area(s) identified as a TPZ must remain undisturbed at all times.

TREE PROTECTION BARRIERS:

Note: For trees on private property situated on or adjacent to construction sites: Tree protection barriers must be installed around trees to be protected using 2.4m (8ft.) high plywood clad hoardings or an equivalent approved by Urban Forestry Services. All supports and bracing to safely secure the barrier should be outside the Tree Protection Zone (TPZ). All such supports and bracing should minimize damage to roots outside the TPZ. Where the branches of a tree are lower than 2.4m (8ft.) the hoarding shall, within the vicinity, be a height to just below such branches.

Note: For City owned Trees:

Tree protection barriers for trees situated on the City road allowance where visibility must be maintained, can be 1.2 m (4ft.) high and consist of orange plastic web snow fencing on a 2" x 4" wood frame. All supports and bracing used to secure the barrier should be outside the TPZ. All supports and bracing should minimize damage to roots outside the TPZ. Where some fill or excavate has to be temporarily located near a tree protection barrier, plywood must be used to ensure no material enters the TPZ.

General Note:

Prior to the commencement of any site activity the tree protection barriers specified on this plan must be installed and written notice provided to City of Toronto, Urban Forestry Services. The tree protection barriers must remain in effective condition until all site activities including landscaping are complete. A sign as specified in Section 4 "Tree Protection Signage" of Tree Protection Policy & Specifications for Construction Near Trees must be attached to all sides of the barrier. Written notice must be provided to Urban Forestry Services prior to the removal of the tree protection barriers.

ARBORICULTURAL WORK:

Note:

Any roots or branches which extend beyond the tree protection zone(s) indicated on this plan which require pruning, must be pruned by a Qualified Arborist or other tree professional as approved by Urban Forestry Services. All pruning of tree roots and branches must be in accordance with good arboricultural standards. The Arborist/tree professional must contact Urban Forestry Services no less than 48 hours prior to conducting any specified work.

TREE PRESERVATION:

Note:

Protection of the trees indicated on this plan must be in accordance with the recommendations outlined in the report dated November 22, 2007 prepared by Ecoplans Ltd., Amy Bennewies (Landscape Architect Intern). Any questions should be directed to Urban Forestry at (416) 338-TREE (8733)

LEGEND



Tree Tag No.

Tree Protection Fence

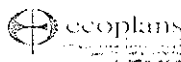
Drawing Notes:

Tree locations are approximate, if necessary, tagged trees will be surveyed at detailed design stage.

Additional opportunities for tree preservation will also be re-evaluated at that time, as well as mitigation strategies.

Refer to Tree Preservation Plan Report for Tree Protection Signage and Details.

Detail TP-2a



TREE PRESERVATION PLAN
 TR WATERFRONT AV
 Dedicated Transit on East Side

TREE PROTECTION POLICY AND SPECIFICATIONS FOR CONSTRUCTION NEAR TREES

1. General Policy

- The tree protection policies and specifications outlined below reflect the policy of Toronto City Council. Anyone failing to adhere to the tree protection policies and specifications outlined below will be financially responsible for any resulting damage to trees.
- All trees situated on City property are protected under provisions of City by-laws. In certain areas of the City, trees situated on private property are also protected by City by-laws.
- Trees protected by City by-laws may not be removed, injured or destroyed in any way without written authorization from the City. Note that the term "tree" refers to all parts of the tree, including all roots.
- Tree pruning or root cutting of City owned trees may only be done by City of Toronto, Urban Forestry Services staff unless a legal agreement has been executed between the City and the adjacent property owner.
- No objects are permitted to be attached to trees protected by City by-laws without written authorization.
- Protected trees within or adjacent to a construction area must be protected by a barrier. An applicant for a construction project involving trees that require protection must prepare a tree protection plan using a qualified arborist or approved tree professional in consultation with Urban Forestry Services.

2. The Tree Protection Zone

The following is a chart showing minimum required distances for determining a Tree Protection Zone. Some trees and some site conditions may require a larger Tree Protection Zone (TPZ).

Table 1 – Tree Protection Zones:

Trunk Diameter (DBH)*	Minimum Protection Distances Required**
< 10 cm	1.8 m
11 – 40 cm	2.4 m
41 – 50 cm	3.0 m
51 – 60 cm	3.6 m
61 – 70 cm	4.2 m
71 – 80 cm	4.8 m
81 – 90 cm	5.4 m
91–100 cm	6.0 m

* Diameter at breast height (DBH) measurement of tree trunk taken at 1.4 metres above the ground.

** Tree Protection Zone distances are to be measured from the outside edge of the tree base.

Within a Tree Protection Zone (TPZ) there must be:

- no alteration or disturbance to existing grade of any kind;
- no changes to the grade by adding fill, excavating or scraping;
- no storage of construction materials or equipment;
- no storage of soil, construction waste or debris;
- no disposal of any liquids e.g. concrete slurry, gas, oil, paint; and
- no movement of vehicles, equipment or pedestrians.

The above mentioned requirements are for area(s) designated as a TPZ. These requirements should be used as guidelines for all other areas where tree roots are impacted. The roots of a tree can extend from the trunk to approximately 2-3 times the distance of the dripline.

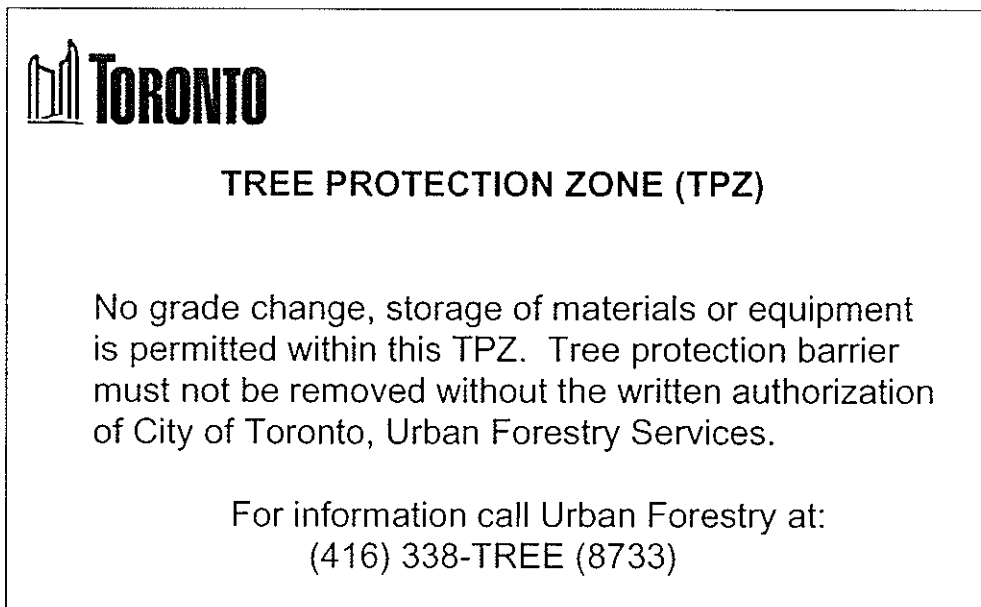
See **Detail TP- 2 and TP- 3** for further information.

3. Tree Protection Barriers

- A 2.4m (8ft) high plywood clad hoarding is the most preferred barrier. Other cladding can be considered subject to approval by Urban Forestry Services. The barrier can be lowered around branches lower than 2.4m (8ft). Within a City road allowance where visibility is a consideration, 1.2m (4ft) high orange plastic web snow fencing on a 2"x 4" frame should be used.
- All supports and bracing used to safely secure the barrier should be located outside the TPZ. All supports and bracing should minimize damage to roots.
- Where some fill or excavate must be temporarily located near a TPZ, a plywood barrier must be used to ensure no material enters the TPZ.
- See **Detail TP-1** for further information.

4. Tree Protection Signage

A sign that is similar to the illustration below must be mounted on all sides of a Tree Protection Barrier. The sign should be a minimum of 40cm x 60cm and made of white gator board or equivalent material.



5. Site and Landscape Plans – Tree Protection Notes and Graphics

An applicant for a construction project must provide a site plan and/or landscape plan that indicates the tree protection plan prepared by a qualified arborist or approved tree professional. See **Detail TP – 2** and **Detail TP – 2a** for further information.

6. Excavation, Trenching and Tunnelling

- No excavating or trenching is permitted within a TPZ .
- Directional micro tunnelling and boring is permitted within a TPZ.
- Open face cuts outside a TPZ that are consistent with an approved plan and that require root pruning, require the services of a qualified arborist or approved tree professional.

7. Tree Removal or Relocation

- Any requests for removal, cutting, pruning or relocating a tree protected by City by-laws must be made in writing to the Commissioner of Economic Development, Culture & Tourism with attention to Urban Forestry Services. Requests for tree removal may be forwarded to a Community Council and City Council for approval. If approval is granted for removal of City owned trees, applicants will assume all costs involved which include tree value, removal, and replacement costs. In most instances a tree replacement plan may be required. Where tree relocation is approved, applicants will assume all relocation costs.
- For additional information please call (416) 338–TREE (8733).

8. Letters of Credit/Letters of Acceptance of Responsibility

Protection of Trees: The Commissioner may request a Letter of Credit to secure the protection of trees and/or may require that a Letter of Acceptance of Responsibility be signed by an applicant. A Letter of Credit may be held by the City until determined by the Commissioner and shall be released by the City provided that the trees are healthy and in a state of vigorous growth after the stipulated time period.

Tree Planting: The Commissioner may request a Letter of Credit in an amount appropriate to secure the planting of trees. A Letter of Credit may be held by the City until after the planting of the trees for a period of time determined by the Commissioner and shall be released by the City provided that the trees are healthy and in a state of vigorous growth after the stipulated time period.

9. City of Toronto Urban Forestry Services - District Contacts

Urban Forestry Services is organised into North, South, East and West districts. Each district has a supervisor. For clarification on how these specifications apply to a project, please contact the appropriate Supervisor of Urban Forestry Planning & Protection. Please specify if an emergency response is required. If a site meeting is requested, please provide 48 hours prior notice.

To contact a district Supervisor call (416) 338-TREE (8733). See attached map for District boundaries.

10. Emergencies

Emergency repairs to underground utilities are permitted to commence immediately. The utility company concerned is responsible for notifying Urban Forestry Services at 338-TREE (8733) as soon as possible when trees are involved, so that an inspector can be dispatched. Urban Forestry Services staff may be contacted after hours by calling the City of Toronto, Works & Emergency Services dispatch number at 392-7737 and requesting the assistance of an on-call Urban Forestry Services inspector.

Economic Development, Culture & Tourism
Parks and Recreation Division

Urban Forestry Services

The following information is provided to assist consulting arborists, tree care specialists, foresters, etc., in the completion of Arborist Reports that are required to be submitted in support of development applications (including construction and demolition permits) and/or tree removal and injury applications. The submission of Arborist Reports that are adequately detailed will enable a more efficient and effective review of proposals by city staff. This will ultimately result in fewer delays in responding to requests and processing of applications.

Please note that the following are guidelines and that all listed information need not be included on every report as each individual situation warrants an individual level of detail.

1. REQUIRED INFORMATION:

Contact Information: Be sure to provide your company name, address, telephone and fax number, and e-mail if applicable so that we may correspond to you in a timely manner.

Location: Provide the municipal address of the site, and the location of trees in relation to existing and any proposed structures, lot boundaries, or relative proximity to other trees, e.g. Southeast corner of rear lot, between fence and shed.

Species: Identify the tree(s) in question by common English name (Digital camera images are often handy if you have access to such a device, as these images can easily be e-mailed, and provide a good perspective on the specific situation).

Size: Diameter of the tree must be provided in centimetres (measured 1.4 m from ground). Measurements must be accurate.

Nature of Work: Explain what arboricultural work is to be undertaken on the tree(s), e.g. pruning, tree removal, root pruning, tree protection measures required for construction, etc.

Condition: Always provide detailed information about the condition of the tree(s) especially in instances where it is determined that the tree(s) is not in good condition. The determination of the condition rating will be based on some of the following factors:

1. Structural Integrity (Have there been recent limb failures? Is there evidence of structural weaknesses, noticeable stress cracks, frost cracks, weak unions, and included bark unions?)
2. Deadwood (%)
3. Vigour (Is the tree healthy and in leaf, or in decline and struggling?)
4. Are there any insects infecting? (What?)
5. Are there any pathological concerns? (What?)
6. Are fungal fruiting bodies evident? (Where?)
7. Is decay evident at unions, base, or elsewhere? A bore test, ultrasound or resistograph may be required to determine extent of decay.
8. Is the tree causing damage to structures? (Which structures? How? Has an engineer determined that the tree is responsible for the damage? If so, attach the report.)
9. Does the tree have a significant lean?

Client's Reason For Removal: If applicable, provide client's reason for wishing to remove the tree. For example:

1. For construction purposes, e.g., new house, addition, landscaping, etc.
2. Safety (Is the tree hazardous? If yes, identify the concern)
3. Damage to structure (If damage to a structure is the reason, an engineers report may be required).
4. The tree is in decline and is no longer viable to maintain.

Tree Replacement Information: The planting of large growing shade trees using a variety of species is encouraged in order to ensure achievement of a diverse, sustainable urban forest. Please provide pertinent information regarding any replacement planting to take place after the completion of work to be done, or construction project completion. Size, species, quantity and location on property (shown on a landscape plan) should be included in the description of replacement trees.

Arborist Recommendation: Provide arborist's recommendation for treatment of the tree(s), i.e., recommend removal and replacement, recommend preservation, etc. For trees that are to be protected and retained, see Section #2: Tree Retention and Protection.

2. TREE RETENTION AND PROTECTION:

Where trees are to be retained and protected, a tree preservation plan must be provided which identifies and details tree protection methodology to be implemented prior to construction and maintained for the full duration of construction. Please refer to Urban Forestry Services "Tree Protection Policy and Specification for Construction Near Trees" document for additional information regarding tree protection measures. This document may be obtained from Urban Forestry Services. Please note that all tree protection measures must be in place prior to the commencement of any construction activity and they must be approved by Urban Forestry Services.

The following are two examples of Arborist Reports. The first is a report detailing the removal of a tree in poor condition. The second is a report regarding the removal of one tree in poor condition, and the retention of several other trees during the construction of a house addition.

*For Further Information or to Request Documentation please contact
Urban Forestry Services at: (416) 392-0972*

XYZ TREE CARE

425 SYCAMORE AVENUE
TREEVILLE, ON P2P 5G6
TEL: (624) 725-2569 FAX: (624) 725-2568
E-MAIL: xyztree@idirect.ca

LOCATION: 45 Pine Tree Court at the southeast Corner of rear lot, beside fence, and shed.

SPECIES: Sugar Maple, 76 cm DBH

NATURE OF WORK: Request permission for an exemption from protection in order to remove a Sugar maple in poor condition.

CONDITION: The first major branch union 10 feet above ground level has an included bark union that is showing evidence of decay. There are fungal fruiting bodies present at both this union, and at the base of the tree. These fungi appear to be of the shelf fungi family. In the last week during a storm, a large secondary portion of the northern most leader (24 cm diameter) has failed and fallen. The crown is in evident decline, as the branches have begun to die back from the tip. There is approximately 25-30% deadwood in the tree and it is obviously experiencing a last gasp growth. Much of the remaining growth is water sprout growth, and leaves are dwarfed. The tree is also leaning and there are numerous targets in it's path.

REASONS FOR REMOVAL: The property owner, Mrs. Grimsby, wishes to remove this tree, as she is fearful that the tree may collapse, and harm her children who play in the rear yard.

ARBORIST RECOMMENDATION: I believe this tree qualifies for an exemption from protection under the private tree bylaw. This tree is, in my opinion, structurally unsound, as demonstrated by the included bark union, rot at union and base, and recent limb failure. The Grimsby's are also willing to plant a substantial replacement tree (70 mm Sugar maple) in the place of this tree as they value the shade it will provide to their play area and garden.

Fred Buchanan
A.S.C.A. Registered Consulting Arborist
No. 1253847

XYZ TREE CARE

425 SYCAMORE AVE
 TREEVILLE, ON P2P 5G6
 TEL: (624) 725-2569 FAX: (624) 725-2568
 E-MAIL: xyztree@idirect.ca

LOCATION: 22 Maple Key Place, removal of 1 poor Siberian Elm located at west side of the property beside driveway, and preservation of three remaining trees.

Tree Inventory: Tree locations shown on attached Site Plan entitled "Site Plan and Tree Protection Zones for 22 Maple Key Place"

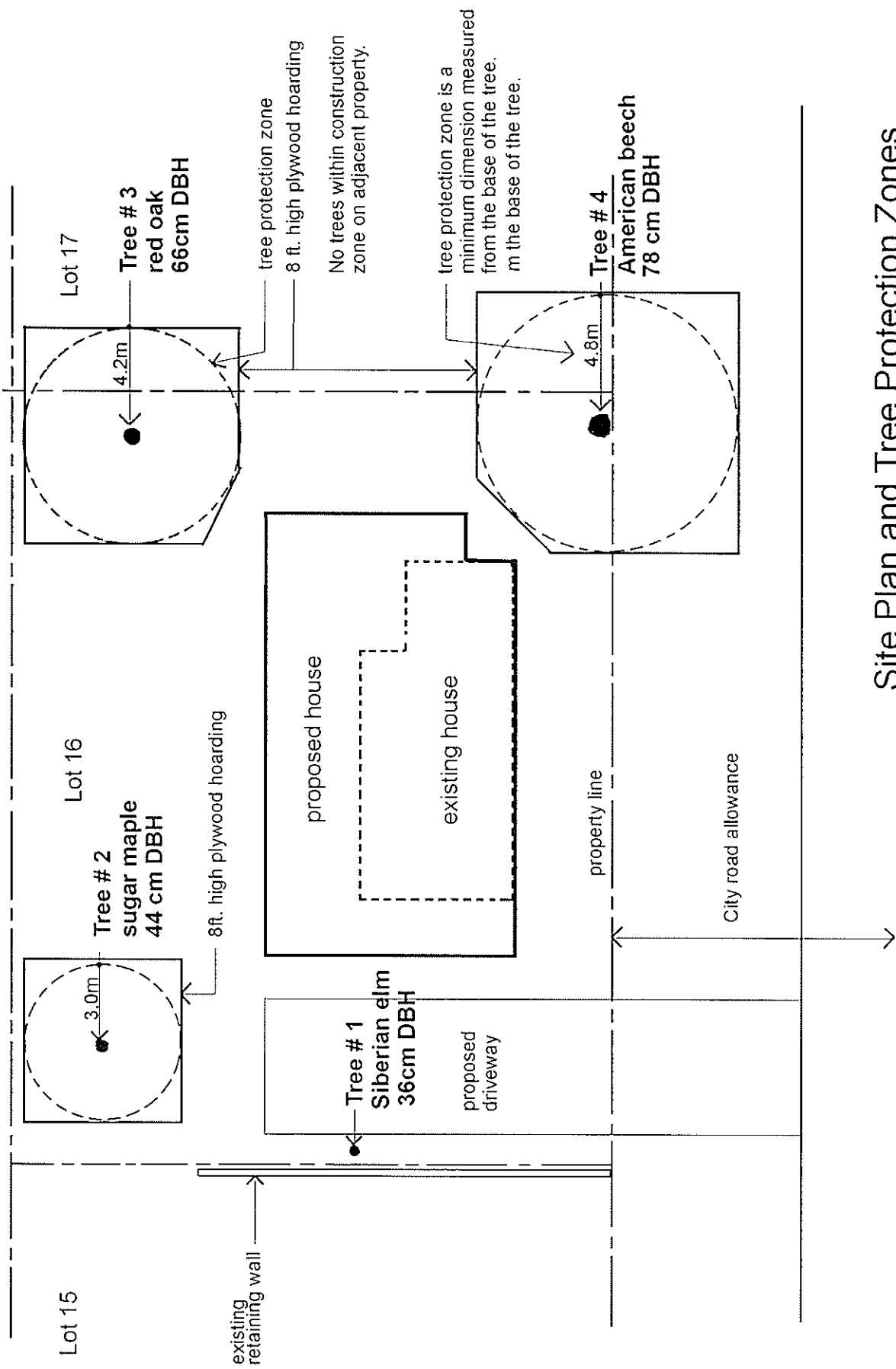
Tree No.	Species	DBH (cm)	Condition
1	Siberian Elm	36	This tree has lost the majority of its leaves, and is leaning on a 40 degree angle out over the garage. Two years ago, the neighbours had excavated for a retaining wall 1 foot from base, and in the process they may have severed roots. This tree is structurally unsound, and is in obvious decline. This tree is in poor condition. Course of Action: Request to remove
2	Sugar Maple	44	This tree has a full crown, and is in good form. There is little deadwood, and there are no significant structural weaknesses. This tree is in fair – good condition. Course of Action: We wish to preserve
3	Red Oak	66	This tree has minor deadwood, and a somewhat sparse crown. There are few structural issues. In the past this tree was heavily pruned to bring light to the garden, however, homeowners wish to preserve, and bring this tree back to good health. This tree is in fair condition. Course of Action: We wish to preserve
4	American Beech	78	This tree has some significant deadwood, but healthy vigorous crown, and good structural integrity. This tree is leaning very slightly, but still maintainable. This tree is in fair condition. Course of Action: We wish to preserve

Tree Preservation Methodology:

Tree No.	Tree Preservation Methodology
1	Siberian Elm: We request permission for an exemption from protection under the private tree bylaw for reasons provided above.
2	Sugar Maple: Deep root fertilization will occur prior to construction. Prior to construction, an eight-foot tall plywood hoarding will be installed around the tree located a minimum of 3 m measured from the base of the tree. No materials will be stored inside or up against hoarding, and a sign will be hung on the most visible side designating the Tree Protection Zone (TPZ). Also, wood mulch will be put down in the area between the hoarding and the driveway to ensure the movement of machinery will not impact the percolation of water into the soil.
3	Red Oak: Fertilization will be done on the same schedule as noted for tree #2. Eight-foot high plywood hoarding will be put in place on the same schedule as noted above 4.2 m out from the base of the tree. Again, no material storage will be permitted in the TPZ, and a tight pruning will be done at the end of the construction period.
4	American Beech: Fertilization will occur on the same schedule as noted above, and the Eight foot high hoarding will also be installed on the same schedule as above. The hoarding will extend 4.8 m from the base of the tree. This tree will also be pruned following the construction period.

Provided the tree protective measures outlined above are installed as described, it is my opinion that the trees will suffer no damage. Also, with the landscaping to take place in the rear yard, the trees will not endure any excessive grade change, as sod will be laid, and only one flower bed will be dug in the North east corner of the rear lot.

Betty Menzies
 I.S.A Certified Arborist # ON-125646



Site Plan and Tree Protection Zones
for
22 Maple Key Place

Chapter 813

TREES

ARTICLE I

Inspection; Removal of Infested Trees

§ 813-1. Inspection for presence of Asian Long-Horned Beetles and other pests; removal of infested trees.

§ 813-2. Right to enter private property.

ARTICLE II

Trees on City Streets

§ 813-3. Definitions.

§ 813-4. Authority for planting, care and maintenance and removal of trees.

§ 813-5. Powers and duties of Commissioner.

§ 813-6. Protection, injury and removal of trees; prohibited activities.

§ 813-7. Tree planting and removal.

§ 813-8. Offences.

ARTICLE III

Tree Protection

§ 813-9. Definitions.

§ 813-10. Permit required.

§ 813-11. Exceptions.

§ 813-12. Applications; form and content.

§ 813-13. Powers and duties of Commissioner.

§ 813-14. Review of applications; criteria.

§ 813-15. Permit refusal.

§ 813-16. Issuance of permits.

§ 813-17. Notice.

§ 813-18. Permits to destroy; conditions.

§ 813-19. Permits to injure; conditions.

§ 813-20. Appeals.

§ 813-21. Order to correct violation.

§ 813-22. Remedial action.

§ 813-23. Offences; additional remedies.

§ 813-24. Repeal.

§ 813-25. Conflict.

§ 813-26. (Reserved)

[HISTORY: Adopted by the Council of the City of Toronto as indicated in article histories. Amendments noted where applicable.]

GENERAL REFERENCES

Tree permit fees — See Ch. 441.
Tree care in parks — See Ch. 608.

Ravine protection — See Ch. 658.

TORONTO MUNICIPAL CODE
TREES

§ 813-1

ARTICLE I

Inspection; Removal of Infested Trees
[Adopted 2000-05-11 by By-law No. 310-2000]

§ 813-1. Inspection for presence of Asian Long-Horned Beetles and other pests; removal of infested trees.

The City Forestry staff is authorized to inspect for the presence of Asian Long-Horned Beetles and other alien forest pests and to remove infested trees, on all public and private property, with the consent of the property owner.

§ 813-2. Right to enter private property.¹

The City Forestry staff is authorized to enter upon private property to inspect for the presence of Asian Long-Horned Beetles and other alien pests and to remove infested trees.

ARTICLE II

Trees on City Streets
[Adopted 2000-06-08 by By-law No. 388-2000²]

§ 813-3. Definitions.

As used in this article, the following terms shall have the meanings indicated:

CARE AND MAINTENANCE — The care and maintenance of trees in accordance with good arboricultural standards and includes inspection, pruning, cabling and bracing, treatments for insect and disease problems, watering and fertilization.

CITY STREET — A common or public highway, road, street, lane or any road allowance or portion thereof under the jurisdiction of the City of Toronto.

COMMISSIONER — The Commissioner of Economic Development, Culture and Tourism or his or her delegate. [Amended 2000-10-05 by By-law No. 869-2000]

DESTROY/DESTRUCTION — To remove, cut down or in any other way injure a tree to such an extent that it is deemed necessary to remove or cut down the tree.

¹ Editor's Note: This section shall come into effect upon City Forestry staff being designated as inspectors by the President of the Canadian Food Inspection Agency in accordance with section 21 of the *Plant Protection Act*, S.C. 1990, c. 22, and section 13 of the *Canadian Food Inspection Act*, S.C. 1997, c.6.

² Editor's Note: This by-law was passed under the authority of section 312 of the *Municipal Act*, R.S.O. 1990, c. M.45. This by-law also repealed the following: Article I, Chapter 331, Trees, of the former City of Toronto Municipal Code; Article I, Chapter 243, Trees, of the former City of Etobicoke Municipal Code; By-law No. 118-97 of the former Borough of East York; Section 10 of By-law No. 211-74 of the former Metropolitan Toronto; By-law No. 31729 of the former City of North York; By-law Nos. 20975 and 21682 of the former City of Scarborough; and By-law No. 2507-92 of the former City of York. This listing of repealed by-laws was amended 2000-7-6 by By-law No. 484-2000.

EMERGENCY WORK — Includes work associated with drain repairs, utility repairs and structural repairs to a building or any other work of an emergency nature.

INJURE/INJURY — Not protecting a tree in accordance with the City of Toronto's Specifications for Construction Near Trees and/or other standards set out by the Commissioner, entirely or in part, and/or any acts which will harm a tree's health in any manner.

PERSON — Includes a company, a corporation, a partnership or an individual person.

SPECIFICATIONS FOR CONSTRUCTION NEAR TREES — The most recent version of the City of Toronto's Specifications for Construction Near City Trees.

STANDARDS — Minimum requirements or guidelines established by the Commissioner pertaining to the protection and preservation of trees.

TREE PLANTING DETAIL — The most recent version of illustrated details with notes pertaining to the planting of trees on any City street; as found in the City of Toronto Streetscape Manual.

TREES — Any shade or ornamental tree, all or part of which is located on, above or below a City street. Ownership and maintenance of trees which have 50 percent or more of their main stem situated on a City road allowance will be the responsibility of the City.

TREE VALUE/APPRAISED VALUE — The monetary value of a tree as determined through calculations using the City of Toronto's Tree Appraisal and Evaluation form.

§ 813-4. Authority for planting, care and maintenance and removal of trees.

The planting, care and maintenance, protection, preservation and removal of all trees located on any City street shall be under the supervision of the Commissioner.

§ 813-5. Powers and duties of Commissioner.

The Commissioner is authorized to:

- A. Plant, or cause to be planted, trees on City streets.
- B. Care for and maintain, or cause to be cared for and maintained, any tree located on any City street.
- C. Transplant, remove or cause to be transplanted or removed any tree planted or located on any City street where deemed necessary in the public interest.

TORONTO MUNICIPAL CODE
TREES

§ 813-6

- D. Remove or cause to be removed without notice or compensation to any person any object or thing that adversely affects a tree or part of a tree on a City street.
- E. Prune or cause to be pruned all trees located on private property, the branches of which extend over a City street, including the pruning of branches which are hazardous or create an unsafe condition.
- F. Implement or cause to be implemented necessary treatments for insect and disease problems associated with trees located on a City street.
- G. Remove or cause to be removed trees which are dead, hazardous or no longer viable to maintain, certified as such by the Commissioner.
- H. Remove, injure or cause the removal or injury of trees as may be required to facilitate emergency work, certified as such by the Commissioner.
- I. Remove or cause to be removed healthy trees located on a City street, where a written request for tree removal has been received from an adjacent property owner, that includes a landscape plan satisfactory to the Commissioner and the Ward Councillor(s). Such requests for removals may be subject to conditions which include payment of tree value, removal and replacement costs and the replanting of a replacement tree or trees by the applicant. [Amended 2000-10-05 by By-law No. 869-2000]
- J. Refuse the removal of trees located on a City street and refer the matter to the appropriate Community Council.
- K. Permit the pruning of tree roots in accordance with good arboricultural practices causing minimal damage to the tree. Such requests for injury may be subject to conditions which include the payment of tree value, removal and replacement costs, the posting of a letter of credit and the planting of a tree or trees by the applicant.
- L. Stop any work causing injury or destruction to a tree located on a City street that is taking place without permission from the Commissioner and/or contrary to the City of Toronto's Specifications for Construction Near Trees and/or other standards set out and imposed by the Commissioner for the protection of a tree or trees.

§ 813-6. Protection, injury and removal of trees; prohibited activities.

A. Protection.

Every person doing any work on City streets shall carry out such work in accordance with the City's Specifications for Construction Near Trees and any other standards set out by the Commissioner.

B. Injury and removal.

No person shall injure, destroy or remove a tree without the prior written approval of the Commissioner. Approval may be subject to such conditions as the Commissioner may impose, including payment of tree value, removal and replacement costs, replanting, posting a letter of credit in a form and content acceptable to the City in an amount sufficient to cover the appraised value of the subject tree as well as removal and replacement costs, provision of a detailed tree protection plan and provision of a qualified arborist's or forester's report detailing specific arboricultural procedures to be undertaken.

C. Prohibited activities.

- (1) No person shall remove, cut down, destroy or injure any tree or part of a tree located on a City street except with the prior written approval of the Commissioner.
- (2) No person shall mark, cut, break, peel, deface or bury the roots of any tree or any part of a tree located on a City street.
- (3) No person shall undertake or cause to undertake any activities which are contrary to the City of Toronto's Specifications for Construction Near Trees and/or any other standards or conditions imposed and set out by the Commissioner pertaining to the protection of a tree located on a City street except with the prior written approval of the Commissioner.
- (4) No person shall attach in any manner any object or thing to a tree or part of a tree located on a City street except with the prior written approval of the Commissioner.
- (5) Despite Subsection C(4), no person shall attach decorative lights to a tree located on a City street except with the prior written approval of the Commissioner and upon production of satisfactory evidence that all other requisite approvals have been obtained. Such requests may be subject to conditions imposed by the Commissioner.

§ 813-7. Tree planting and removal.

A. Planting of trees.

- (1) Any tree planted on a City street must be approved by the Commissioner and planted in accordance with the appropriate City of Toronto Tree Planting Detail. Approval by the Commissioner will include the planting location, species, size and condition.
- (2) The Commissioner may request a monetary deposit in an amount appropriate to secure the planting of trees. These funds may be held by the City until after the planting of the trees for a period of time determined by the Commissioner

TORONTO MUNICIPAL CODE
TREES

§ 813-8

and shall be released by the City, provided that the trees are healthy and in a state of vigorous growth after the stipulated time period.

B. Removal of trees.

- (1) When a tree is removed, a replacement tree must be planted unless otherwise determined by the Commissioner. The planting location, species, size, condition and planting date must be approved by the Commissioner.
- (2) Where the Commissioner or City Council has approved the removal of a tree, such approval may be subject to conditions which include the applicant providing payment of tree value, removal and replacement costs and a minimum of one replacement tree being planted for each tree approved for removal.

§ 813-8. Offences.

Any person who contravenes any provision of this article is guilty of an offence.³

ARTICLE III
Tree Protection
[Adopted 2004-09-30 by By-law No. 780-2004⁴]

§ 813-9. Definitions.

As used in this article, the following terms shall have the meanings indicated:

APPLICATION — A permit application to injure or destroy trees.

ARBORIST — An expert in the care and maintenance of trees and includes an arborist qualified by the Ontario Training and Adjustment Board Apprenticeship and Client Services Branch, a certified arborist qualified 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.

ARBORIST REPORT — A technical report that identifies the species, size and condition of trees and describes tree protection measures to be implemented.

COMMISSIONER — The Commissioner of Economic Development, Culture and Tourism or his or her delegate.

³ Editor's Note: This section was passed under the authority of sections 320 and 331 of the *Municipal Act*, R.S.O. 1990, c. M.45, and, under section 61 of the *Provincial Offences Act*, R.S.O. 1990, c. P.33, a person convicted of an offence under this section is liable to a fine of not more than \$5,000.

⁴ Editor's Note: This by-law was passed under the authority of sections 135, 391 and 427 of the *Municipal Act*, 2001, S.O. 2001, c. 25.

DESTROY — To remove, cut down or injure a tree to such an extent that it is deemed necessary to remove or cut down the tree.

EMERGENCY WORK — Work required to be done immediately in order to prevent imminent damage, including soil erosion, drain repairs, utility repairs and structural repairs to a building.

ENVIRONMENTALLY SENSITIVE AREA — Includes an environmentally significant area, natural area or ravine as defined and designated in the City of Toronto official plan.

GRADE — A defined elevation of land established as a result of natural processes or by human alteration.

HAZARDOUS TREE — A destabilized or structurally compromised tree that is in imminent danger of causing damage or injury to life or property.

HERITAGE TREE — A tree designated under Part IV of the *Ontario Heritage Act*.⁵

INJURE — Any act that will harm a tree including failure to protect in accordance with the City of Toronto's Tree Protection Policy and Specifications for Construction Near Trees or other standards set out by the Commissioner.

LANDSCAPING AND REPLANTING PLAN — A plan which identifies the location, species and size of existing trees, trees to be planted and other landscape elements on a property and provides details regarding planting methodology.

OFFICER — Those persons holding the positions of City Forester, Urban Forestry Supervisor, Urban Forestry Co-ordinator, Urban Forestry Planner, Urban Forestry Planning Assistant, Urban Forestry Manager, Arborist Inspector and Arborist Foreperson.

OWNER — For purposes of making an application under this article, shall include the owner of either property where the base of a tree straddles a property line or whose property is physically impacted by the roots or crown of a tree on adjacent property.

ROOFTOP GARDEN — Does not include the rooftops of parking garages or other structures at grade.

TREE PROTECTION PLAN — A plan that identifies the location, species and size of trees on a property and provides tree protection measures, including but not limited to protective barriers and hoarding.

TREE PROTECTION POLICY AND SPECIFICATIONS FOR CONSTRUCTION NEAR TREES — The most recent version of the City of Toronto's Tree Protection

⁵ Editor's Note: See R.S.O. 1990, c. O.18.

TORONTO MUNICIPAL CODE
TREES

§ 813-10

Policy and Specifications for Construction Near Trees as established by the Commissioner.

§ 813-10. Permit required.

No person shall, within the City's boundaries, injure or destroy any tree having a diameter of 30 centimetres or more measured at 1.4 metres above ground level unless authorized by permit to do so.

§ 813-11. Exceptions.

Despite § 813-10, a permit is not required under this article for the following activities:

- A. Removal of a diseased, dead or hazardous tree certified as such by the Commissioner.
- B. Pruning of a tree in accordance with good arboricultural practice to maintain tree health.
- C. Pruning of tree branches that interfere with utility conductors.
- D. Emergency work.
- E. Injury or destruction of trees on rooftop gardens, in interior courtyards having a soil depth of less than 1.5 metres above a built substructure, in solariums or on elevated podiums.
- F. Injury or destruction of trees in ravine protection areas designated under Municipal Code, Chapter 658, Ravine Protection.

§ 813-12. Applications; form and content.

- A. An owner who wishes to injure or destroy a tree shall submit to the Commissioner an application on the prescribed form and shall provide the following:
 - (1) The name, address and telephone number of the applicant.
 - (2) The non-refundable application fee set out in § 441-19.
 - (3) The purpose for which the permit is required.
 - (4) A tree survey showing the location of trees on the property.
 - (5) An arborist report identifying the location, species, size and condition of trees on the property and describing protection measures to be implemented.
 - (6) A tree protection plan identifying the location, species and size of trees on the property and illustrating details of protection measures including protective

barriers and hoarding to be implemented to protect trees that are to be retained.

- (7) Landscaping and replanting plans.

§ 813-13. Powers and duties of Commissioner.

The Commissioner is authorized to:

- A. Issue permits for the destruction of trees in accordance with the criteria and subject to the conditions set out in this article.
- B. Issue permits for the injury of trees in accordance with the criteria and subject to the conditions set out in this article.
- C. Refuse to issue permits for the injury or destruction of trees and refer the matter to the appropriate community council.
- D. Stop any work causing injury or destruction to trees having a diameter of 30 centimetres or more measured at 1.4 metres above ground level that is taking place without a permit or contrary to the conditions of a permit or other standards established by the Commissioner.
- E. To waive the requirement for an arborist report in non-commercial applications.
- F. To waive the permit application fee for owners living below the low-income cut off as determined by Statistics Canada. [Added 2004-12-02 by By-law No. 1071-2004]

§ 813-14. Review of applications; criteria.

The Commissioner shall consider the following criteria:

- A. The application form is complete.
- B. The applicant has paid all required fees.
- C. The condition of the tree.
- D. The location of the tree
- E. The protection of environmentally sensitive areas.
- F. The protection of natural landforms or contours.
- G. The protection of ecological systems.
- H. Erosion and flood control.
- I. The protection of significant vistas.
- J. Whether or not a tree is a heritage tree or should be protected as a heritage tree.

TORONTO MUNICIPAL CODE
TREES

§ 813-15

§ 813-15. Permit refusal.

The Commissioner shall not issue a permit for the injury or destruction of trees where:

- A. The application form is not complete.
- B. The information required by § 813-12A has not been provided to the satisfaction of the Commissioner.
- C. Trees are healthy.
- D. Environmentally sensitive areas, ecological systems, natural landforms or contours will not be adequately protected and preserved.
- E. Erosion or flood control will be negatively impacted.
- F. Significant vistas will not be adequately protected and preserved.
- G. The tree is a heritage tree, or should in the opinion of the Commissioner be recommended for designation as a heritage tree.

§ 813-16. Issuance of permits.

The Commissioner is authorized to issue permits where:

- A. Trees are causing or are likely to cause structural damage to load-bearing structures or roof structures.
- B. Trees are in poor condition and cannot be maintained in a healthy and safe condition.
- C. Trees are growing in inappropriate locations, as certified by the Commissioner, and cannot be maintained on a routine basis due to restrictive site conditions.
- D. Trees are located on property where site plan, subdivision, consent or committee of adjustment approval has been obtained, provided that the trees must be injured or destroyed to facilitate construction in accordance with plans approved by the City.
- E. Trees are located on property where a building permit, front yard or boulevard parking permit or permission for driveway widening has been obtained, provided that the trees must be injured or destroyed to facilitate construction in accordance with plans approved by the City.
- F. Despite § 813-15C the Commissioner may issue permits to injure or destroy healthy trees where:
 - (1) The trees are causing or are likely to cause structural damage to load-bearing structures or roof structures.

- (2) The trees are growing in inappropriate locations as certified by the Commissioner, and cannot be maintained on a routine basis due to restrictive site conditions.
- (3) Injury or destruction is required in order to remediate contaminated soil.
- (4) The trees are appropriately sited, and not causing or likely to cause structural damage to load-bearing structures or roof structures, provided that:
 - (a) Notice has been posted in accordance with § 813-17; and
 - (b) The Commissioner and the ward councillor are satisfied that the applicant has undertaken to implement a satisfactory landscaping and replanting plan.

§ 813-17. Notice.

Notice of an application to injure or destroy healthy trees in accordance with § 813-16F(4) shall be posted on the property:

- A. In a manner and form satisfactory to the Commissioner.
- B. For a period of not less than 14 days.

§ 813-18. Permits to destroy; conditions.

A permit to destroy trees shall be subject to the following terms and conditions:

- A. Replacement trees shall be planted and maintained to the satisfaction of the Commissioner in accordance with landscaping and replanting plans submitted by the applicant and approved by the Commissioner.
- B. Where replacement planting is not physically possible on site, the Commissioner may:
 - (1) Require replacement planting at another suitable location; or
 - (2) Accept a cash in lieu payment in an amount equal to 120 percent of the cost of replanting and maintaining the trees for a period of two years.
- C. Where a property is not subject to site plan approval, the applicant shall provide a written undertaking and release to ensure that replacement planting is carried out and maintained in accordance with landscaping and replanting plans approved by the Commissioner.
- D. The destruction shall only be carried out by or under the supervision of an Arborist.

TORONTO MUNICIPAL CODE
TREES

§ 813-19

§ 813-19. Permits to injure; conditions.

A permit to injure trees shall be subject to the following terms and conditions:

- A. Trees shall be protected in accordance with good arboricultural practices.
- B. Where a property is not subject to site plan approval, the applicant shall provide a written undertaking and release to ensure that tree protection is carried out and maintained in accordance with landscaping and replanting plans submitted by the applicant and approved by the Commissioner.
- C. The injury shall be carried out by or under the supervision of an Arborist.

§ 813-20. Appeals.

- A. Where the Commissioner refuses to issue a permit, an applicant may within 14 days of the date of refusal appeal to the appropriate community council by submitting a written request to the Commissioner that the permit application be heard by the appropriate community council.
- B. Where an applicant has filed an appeal, the Commissioner shall prepare and forward a report on the application to the next appropriate community council meeting, setting out the grounds for refusal of the application.
- C. Prior to the Commissioner reporting to community council, the City Clerk shall notify the Ward Councillor, abutting property owners and any other persons who have expressed written interest in the application of the date the application will be considered by community council.
- D. Upon consideration of the application, the appropriate community council shall make a recommendation to Council.
- E. Upon consideration of the application, Council may direct the Commissioner to issue a permit, subject to conditions satisfactory to Council.

§ 813-21. Order to correct violation.

If an officer is satisfied that there is a contravention of this article or a permit issued under this article, the officer may make an order setting out particulars of the contravention and requiring the person to stop the injuring or destruction of trees.

§ 813-22. Remedial action.

Wherever this article or a permit issued under this article directs or requires any matter or thing to be done by an applicant, in default of its being done by the person directed or required to do it, the matter or thing may be done under the direction of the

Commissioner, and the City may recover the costs incurred by action or by adding the costs to the tax roll and collecting them in the same manner as taxes.

§ 813-23. Offences; additional remedies.

- A. Any person who contravenes any provision of this article is guilty of an offence.⁶
- B. A person convicted of an offence under this article is liable:
 - (1) On a first conviction, to a fine of not more than \$10,000 or \$1,000 per tree, whichever is greater; and
 - (2) On any subsequent conviction, to a fine of not more than \$20,000 or \$2,500 per tree, whichever is greater.
- C. Where a corporation is convicted of an offence under this article, the corporation is liable:
 - (1) On a first conviction, to a maximum fine of \$50,000 or \$5,000 per tree, whichever is greater; and
 - (2) On any subsequent conviction, to a maximum fine of \$100,000 or \$10,000 per tree, whichever is greater.
- D. In addition to any other remedy or any penalty provided by law, the court in which the conviction has been entered, or any other court of competent jurisdiction, may make an order prohibiting the continuation or repetition of the offence by any person.
- E. The court in which the conviction has been entered, and any other court of competent jurisdiction, may order the person to replant or have replanted such trees in such manner and within such time period as the court considers appropriate, including any silvicultural treatment necessary to re-establish the trees.

§ 813-24. Repeal.

The following are repealed:

- A. Article III, Chapter 331, Trees, of the former City of Toronto Municipal Code.
- B. By-law No. 25150 of the former City of Scarborough.

⁶ Editor's Note: This section was passed under the authority of section 425 of the *Municipal Act, 2001*, S.O. 2001, c. 25, and, under section 61 of the *Provincial Offences Act*, R.S.O. 1990, c. P.33, a person convicted of an offence under this section is liable to a fine of not more than \$5,000.

TORONTO MUNICIPAL CODE
TREES

§ 813-25

§ 813-25. Conflict.

In the event of any conflict between this article and any other by-law of a former municipality respecting trees on private property, this article shall prevail.

§ 813-26. (Reserved)⁷

⁷ Editor's Note: Former § 813-26, Fees, was repealed 2004-12-02 by By-law No. 1071-2004.