

SCHEDULE 'A'

Tree Protection Standards

1. DESIGN STANDARD FOR TREE RETENTION AREAS

- (a) An Arborist shall be obtained to assess Tree Retention Areas and to determine the viability of the lands proposed for Tree retention.
- (b) In cases where the land area to be protected is large enough to maintain its ecological viability, existing Trees will be retained where it is feasible to do so. In smaller areas, the primary consideration is to protect the land base from encroachment so that it is available to support the growth of Trees and replanting within these areas.
- (c) Trees on slopes having a grade greater than three (3) horizontal to one (1) vertical (3H:1V) shall be evaluated for Tree retention and proposed removal may first require a geotechnical review of the site.
- (d) Wildlife Trees shall be identified and retained in accordance with provincial guidelines and will be recommended as a mitigation option as part of the Tree removal process.
- (e) If Tree removal is sought during March 1st through to July 31st of any given year, any Tree Removal Plan, Tree Replanting Plan, or Tree Retention Plan, as applicable, in addition to any other information and requirements, must include:
 - (i) a biological survey prepared by a Qualified Environmental Professional identifying any active nests located upon or in the vicinity of the subject land, and
 - (ii) measures to be undertaken for protection of such nests in accordance with any requirements under the *Wildlife Act* and other applicable legislation.
- (f) Tree Retention Areas capable of retaining the existing environment should be designed at a minimum width of two (2) Tree heights based on a typical average height of the predominant species within the area at the time of the development.
- (g) For areas smaller than two (2) Tree heights in width, an Arborist shall assess the site to determine which Trees require removal and prepare a replanting scheme specific to that area.
- (h) In areas where large stands or clusters of Trees are desirable for retention, the area should be roughly circular in shape to minimize the amount of forest edge. Long narrow strips of retained Trees are not recommended and considered inferior to circular clumps of Trees.

- (i) All Tree Retention Areas require an edge management program prepared by an Arborist. Trees identified for removal must then be replaced in accordance with this Bylaw and as per Section 3 of these Guidelines.
- (j) Replanting within Tree Retention Areas includes the replacement of Trees removed along the edges of Tree Retention Area. These Trees shall be replanted with similar species of stock and be planted at an appropriate time of the year to ensure survivability. The Owner must ensure that Replacement Trees will survive in the newly created environment, and must take into consideration any adjacent development. Replanting must be carried out in accordance with the City's Naturescape Policy, or as otherwise authorized by the General Manager.

2. GUIDELINES FOR TREE PROTECTION

- (a) After submitting an application to the satisfaction of the City, as outlined in Section 6 of this Bylaw, the Applicant must have the Tree Retention Area and Buffer Area surveyed and the boundaries staked.
- (b) Once the Tree Retention Area has been surveyed, and approval from the General Manager has been authorized, the area will be inspected by the City's Arborist to determine which Trees, if any, require removal from the Tree Retention Area. Trees that are recommended for removal shall be clearly marked with paint or Tree tags.
- (c) After the assessment of potential Tree removal is conducted, the outer edge of the Tree Retention Area and Buffer Area must be marked with a temporary continuous barrier tape or rope clearly delineating the area.
- (d) The Trees marked for removal are to be hand fallen under the on-site supervision of the City's Arborist and must be away from and outside of the Tree Retention Area to minimize the disturbance to other existing vegetation.
- (e) The fallen Trees are to be removed from the Tree Retention Area under the onsite supervision of the City's Arborist. Machinery must be located outside of the Tree Retention Area and Buffer Area and must be able to reach in and either lift up the entire Tree and extract it, or by attaching a cable or chain to the log or Tree and then extracting it with one end lifted clear of the ground. Under no circumstances are motorized vehicles to enter the Tree Retention Area or Buffer Area.
- (f) Immediately after the removal of fallen Trees and prior to any other works and services taking place on the site, other than work required to access to complete these works, the Tree Protection Fence is to be erected and then Replacement Trees are to be planted for each fallen Tree in accordance with Section 3 of this Schedule. The Tree Protection Fence must remain in place until all development on the site is complete. Following erection and approval of the Tree Protection Fence the Buffer Area may then be cleared.

- (g) After any clearing, stripping, and grading of adjacent lands has taken place, the City's Arborist shall assess the Tree Retention Area and mark for removal any additional Trees that are considered necessary for removal. The Owner must ensure these Trees are removed in accordance with Sections 2 (d) and (e) above. Immediately following the removal of any Trees marked, the Tree Protection Fence must be inspected by the City's Arborist and repaired as required.
- (h) For permanent Tree Protection Fences, signs must be mounted and marked in accordance with the design guidelines as provided in Schedule 'C' of this Bylaw.
- (i) For temporary Tree Protection Fences, signs must be mounted and marked in accordance with the design guidelines as provided in Schedule 'D' of this Bylaw.

3. STANDARD FOR TREE REPLACEMENT

Where Replacement Trees are required to be provided pursuant to this Bylaw such Trees shall be provided and planted as follows:

- (a) for each Tree removed, two (2) Replacement Trees shall be planted;
- (b) each Replacement Tree shall be of the same species as the Tree cut down or removed, unless otherwise authorized by the General Manager;
- (c) each Replacement Tree shall be planted within one (1) month of the cutting down or removal of a Retained Tree, except as otherwise authorized by the General Manager; and
- (d) notwithstanding the definition of Tree, each Replacement Tree shall be a minimum height of 1.5 metres if coniferous and a minimum diameter of seven (7) centimetres, measured at the base of the Tree if deciduous, unless otherwise authorized by the General Manager.

Any Replacement Tree that dies or becomes diseased prior to the final repayment of any security deposit, in accordance with Section 9 of this Bylaw, shall be replaced by a new Replacement Tree.

The current *Guide for Plant Appraisal*, prepared by the Council of Tree and Landscape Appraisers, shall be used as a reference when calculating and assessing costs related to Replacement Trees and Trees that have been cut, removed, damaged or otherwise.