



Arborist Report

No.: TREE-04

Date: 2007-08-02

Revised: 2016-04-07

Purpose:

To explain the requirements of an acceptable arborist report submitted to the City of Richmond. A report is required:

- for Development Applications when trees are proposed to be removed as part of the development or the grade of the site is proposed to be raised;
- at the request of the manager (Tree Protection Bylaw No. 8057, Section 4.2.1.b)(x)).

Implementation:

Provide the following items in Arborist Reports submitted to the City of Richmond (two legible copies required):

- name of arborist and company;
- City of Richmond Business Licence number;
- proof of professional liability insurance;
- Arborist ISA certification number;
- Tree Risk Assessor certification number if required for hazard trees;
- name and contact information of client;
- address of property;
- Development Application number;
- date of site visit;
- date report was submitted;
- scope of work for the arborist;
- brief description of proposed works or development on the property, including proposed elevation changes;
- signature of arborist;
- colour photography of all bylaw-sized trees on site;
- a table of tree information;
- Tree Retention Plan with proposed building footprint(s) indicated.

The Arborist Report must provide the following items:

A. Tree Assessment and Identification for trees ≥ 20 cm DBH:

1. Number and identify the species and DBH (to the nearest 1 cm) of all the permit-sized trees located:
 - within the property lines;
 - on neighbouring properties, within 2 m of the property line or has a crown (dripline) encroaching on the property (note: include hedges and non-permit sized trees);
 - on City-owned property;
 - trees that will become attached to the property due to land acquisition.
2. Assess the overall condition of the trees. For hazardous trees, provide the Tree Risk Assessor's hazard rating (including all calculations) and a detailed description of potential targets (threats to life and/or property).

See over →

3. Provide a Tree Retention Plan (see sample attached) showing tree identification number, physical location of tree trunk and *actual* dripline diameter. An existing tree survey may be used but the actual dripline location is required.
4. Identify trees in the field to coincide with the Tree Retention Plan, using durable tags.

B. Impact Assessment and Mitigation:

1. Assess the potential impact on the trees by the proposed development.
Note: To make an adequate impact assessment, the applicant must provide the arborist with up-to-date drawings showing the proposed property lines and building envelopes, as well as the location of proposed driveways, roads and utility corridors. The applicant must inform the arborist of the details for any proposed retaining walls or changes to existing grade. Such details must be included on the Tree Retention Plan (sample attached).
2. Based on the impact assessment, determine which trees require removal or retention. Consider mitigation before removal. Recommendations for tree removal require the reason for removal and methods of removal clearly stated.
3. Provide detailed descriptions of mitigation measures for the retained trees. These measures must include the tree protection fencing detail (for City standards, see Bulletin TREE-03). The location and dimensions of the tree protection fencing must be detailed on the Tree Retention Plan. Include other site-specific measures as deemed necessary by the arborist. This may include, but not be limited to: relocation of retaining walls and perimeter drainage; hand-digging; root pruning; construction of tree wells; relocation of utility installation or connections; etc.
4. If recommending the moving and replanting of a tree, provide detailed descriptions of transplanting specifications. These measures should include methods of removal (including size of spade required); method of transport; storage and replanting.
5. A table of tree information is required (see sample attached). This table may be used to provide all specific tree information, or may summarize the data provided. The table must correlate to the Tree Retention Plan.

C. Tree Retention Plan:

1. Provide a Tree Retention Plan (sample attached) that identifies:
 - existing tree grades (tree base elevations);
 - trees to be retained;
 - trees to be removed;
 - proposed building footprint(s);
 - dimensions of tree protection fencing;
 - dimensions of proposed tree retaining walls, tree wells etc., including top and bottom of wall elevations;
 - existing and proposed grades at lot corners;
 - the highest elevation of the crown of any public road abutting the lot;
 - a table of tree information, including Tree No., Species, DBH, Crown Spread;
 - a list of suitable native and non-native replacement trees, ensuring a visually rich urban environment and diverse habitat for Urban Wildlife;
 - any other information requested by the City's Tree Protection staff.
2. The Tree Retention Plan may need to be revised and re-submitted to incorporate comments by City staff.
3. The final Tree Retention Plan will be the primary document of reference in identifying trees to be retained and removed at time of development.

No trees are to be removed until authorization for removal has been received from the City of Richmond. Failure to obtain authorization may result in legal action pursuant to the Tree Protection Bylaw No. 8057.

Prior to undertaking any works on the site:

- all trees proposed for retention must be properly protected; and
- protection measures must be inspected and approved by the City's Tree Protection Staff.

See attached →

Example of an Acceptable Table Format:

Tree No.	Species	DBH ¹ (cm)	Crown Spread (radius)	Condition Rating	Observations & Recommendations
1	Cypress	25	3.0 m	Moderate	<ul style="list-style-type: none"> Relatively small tree 75% live-crown-ratio (LCR) Codominant trunks, attachment at base Tree worthy of preservation <p>Recommend:</p> <ul style="list-style-type: none"> <i>Retain, install tree protection barrier</i>
2	Cypress	20	--	Poor	<ul style="list-style-type: none"> Dead tree <p>Recommend:</p> <ul style="list-style-type: none"> <i>Remove tree to enable the proposed development</i>
3	Western Red Cedar hedgerow	27	3.5 m	Moderate	<ul style="list-style-type: none"> Located along Blundell Road frontage; trees within proposed 2 m land dedication for road widening 25 trees on 3' centres Hedgerow topped in past Not good candidates for preservation <p>Recommend:</p> <ul style="list-style-type: none"> <i>Remove trees to enable the proposed development</i>
4	Western Red Cedar	30	3.0 m	Moderate	<ul style="list-style-type: none"> Located in hedgerow on east boundary Other trees not permit-sized Previously topped Not a good candidate for preservation <p>Recommend:</p> <ul style="list-style-type: none"> <i>Remove tree to enable the proposed development</i>
5	Plum	40	4.1 m	very poor	<ul style="list-style-type: none"> Bacterial blight and black knot canker. Decay and cavities at old pruning wounds. Multiple stems, included bark, show failure potential but low damage risk due to size. Limited site contribution and life span. <p>Recommend:</p> <ul style="list-style-type: none"> <i>Remove tree to enable the proposed development</i>
6	Austrian Pine	50	4.5 m	fair	<ul style="list-style-type: none"> Codominant stem with full, healthy crown. Location near property line requires arborist monitoring of any construction activity required within dripline. <p>Recommend:</p> <ul style="list-style-type: none"> <i>Retain, hand dig within dripline for installation of retaining wall and perimeter drainage</i>

¹ DBH = Diameter-breast-height size (cm) measured 1.4 metres above base.

Legend

- Existing grade elevation
- Proposed finished grade elevation

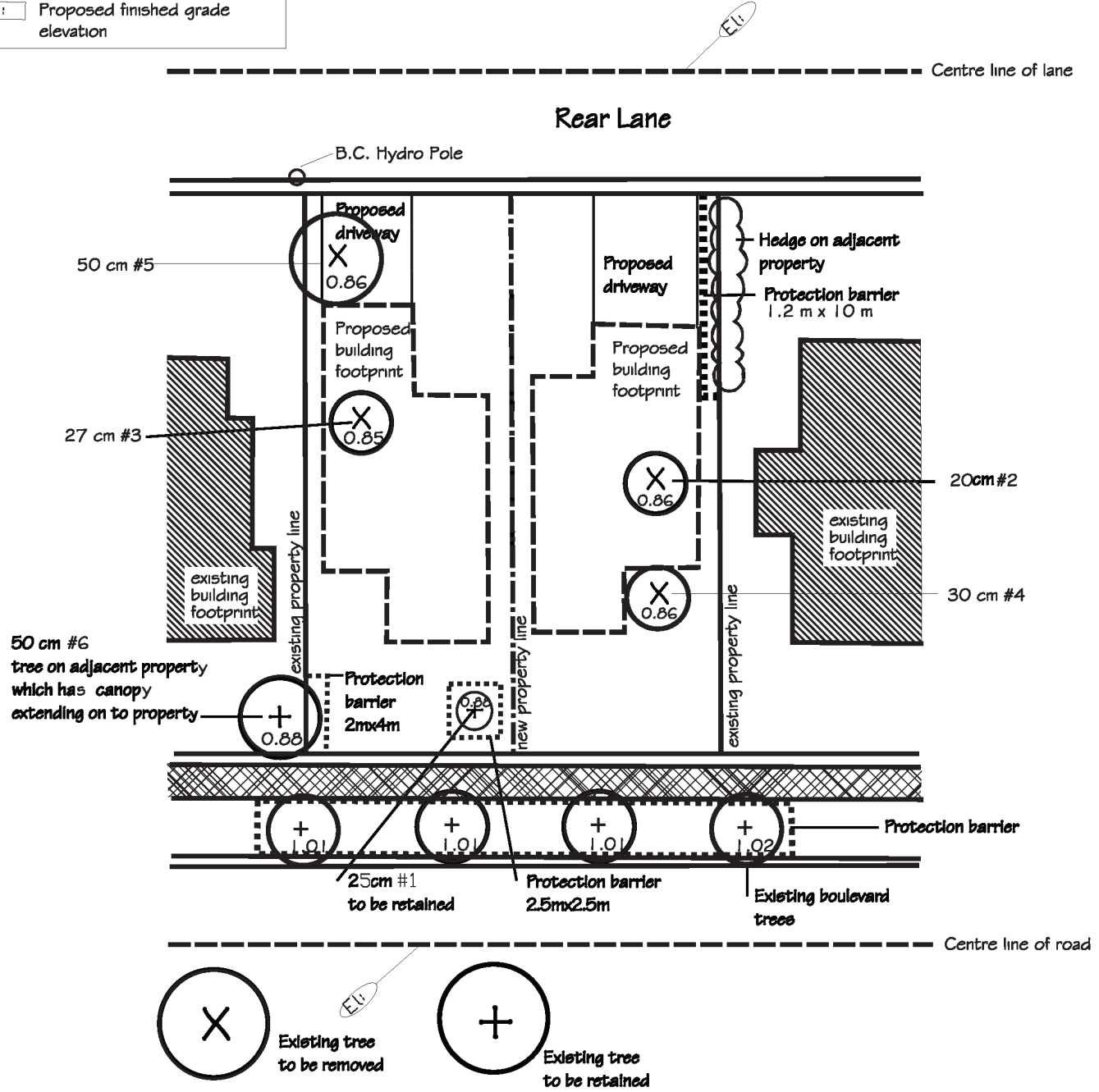


Table of Trees				
Tree No.	Species		DBH (cm)	Crown Spread (radius)
	Common Name	Botanical Name		
1	Cypress	<i>Chamaecyparis</i>	25	3.0 m
2	Cypress	<i>Chamaecyparis</i>	20	--
3	Western Red Cedar	<i>Thuja plicata 'Excelsior'</i>	27	3.5 m
4	Western Red Cedar	<i>Thuja plicata 'Excelsior'</i>	30	3.0 m
5	Plum	<i>Prunus</i>	40	4.1 m
6	Austrian Pine	<i>Pinus nigra</i>	50	4.5 m

Suitable Replacement Trees	
Species	
Common Name	Botanical Name
Japanese Snowbell	<i>Styrax japonica</i>
Paperbark Maple	<i>Acer griseum</i>
Saware False Cypress	<i>Chamaecyparis pisifera</i>
Armstrong Maple	<i>Acer rubrum 'Armstrong'</i>
Paper Birch	<i>Betula papyrifera</i>
Pacific Dogwood	<i>Cornus nuttallii</i>



Sample Tree Retention Plan

Original Date: 01/27/09

Amended Date: 09/17/13

Note: Dimensions are in METRES