

## **ARBORIST REPORT REQUIREMENTS**

### **Tree Regulation and Protection Bylaw No. 7799, 2016**

The descriptions below are a summary of the key points in the Tree Bylaw and the requirements for obtaining a tree removal permit. It is the responsibility of the arborists and tree care companies to carefully read and familiarize themselves with the Tree Bylaw.

***No trees are to be removed until authorization for removal has been received from the City of New Westminster in the form of a Tree Removal Permit; payment of application fees does not constitute authorization. Failure to obtain authorization may result in fines and legal action pursuant to the Tree Protection Bylaw No. 7799. Each protected tree to be cut or removed shall be clearly identified with a mark of paint and a Tree Removal Placard must be posted on-site, a minimum of 24 hours before any cutting commences, and must remain in place throughout the duration of cutting.***

Prior to undertaking any works on the site:

- All fees and securities must be paid prior to permit issuance
- All reports must be submitted to and approved by the city arborist
- All retained trees must be protected in accordance with Schedule B of the Tree Protection Bylaw. City arborist must first approve TPB letter from project arborist prior to issuing permit. TPB signs will be given out when permit is issued
- Post a green removal placard or yellow Critical Root Zone Work Authorization (CRZWA) placard for a minimum 24hrs before work begins on site

### **THE FOLLOWING SITUATIONS REQUIRE THAT YOU SUBMIT AN ARBORIST REPORT:**

- All development applications (i.e. rezoning, subdivisions, development, development variances, building/demolition permits, fill permits)
- When there are 3 or more qualifying protected trees on-site, a specimen sized tree or any off-site trees which could be affected by the proposed development
- Laneway or Carriage House Applications
- A new Single Detached Dwelling
- The demolition of a Single Detached Dwelling
- When there substantial excavation or grade changes within the critical root zone of a protected tree
- At the request of the City due to the complexity of a project

### **TITLE PAGE AND INTRODUCTION:**

- Name of arborist and company, address, phone number and email address
- City of New Westminster Business Licence Number or IMBL number
- Proof of professional liability insurance
- ISA certification number and Tree Risk Assessor number
- Name and contact info for client
- Civic address
- Date and time of site visit
- Date report was written
- Weather at time of site visit
- Documents that were reviewed prior to writing report and date of those documents (ex. Building Plans, Civil Designs, Landscaping)
- Brief description of work and/or development on property
- All trees numbers listed numerically or by tag number
- Signature of Arborist

### **DESCRIPTION OF TREES TO INCLUDE:**

- Species (scientific and common)
- DBH measured by Arborist to nearest 1 cm
- All measurements must be in metric
- All City owned trees and/or shrubs
- Level 2 Assessment – Condition (crown/trunk/roots):

- Structural integrity – cracks/included bark/structural weakness
- Deadwood (%)
- Vigour
- Insect infestation (type)
- Pathological concerns (type)
- Fungal fruiting bodies evident
- Decay evident at unions, base or elsewhere (resistograph)
- Impacts to surrounding infrastructure
- Significant lean
- Live crown ratio
- Location based on survey and verified onsite
- Photos of all trees
- Photos of any features of significance to the health and/or structure of the trees
- Tag number
- Tree inventory in table format
- TRAQ form if relevant
- History
- Evidence of nesting birds
- Removal justification
- Protected trees as part of a stand – how stand would be impacted if one or more trees was removed
- Any other pertinent information

### EXAMPLE INVENTORY TABLE

Tree #	Species	DBH <sup>1</sup> (cm)	Condition Rating	Observations and Recommendations	Barrier Dimensions (m)
103	Japanese maple <i>Acer palmatum</i>	10/12/9/7 10+12=22 Sum of Squares (SS) = 19	Fair	<ul style="list-style-type: none"> <li>● 75% live crown ratio (LCR);</li> <li>● Co-dominants attach at base</li> <li>● <b>Retain</b></li> <li>● Location near new driveway requires crown-raising by arborist post-construction; suppress prune smaller trunk</li> </ul>	1.5m
104	Hemlock <i>Tsuga heterophylla</i>	25	Dead	<ul style="list-style-type: none"> <li>● <b>Remove</b></li> </ul>	N/A
H1	Cedar hedge <i>Thuja occidentalis</i>	Length=7m Height= 6m	Good	<ul style="list-style-type: none"> <li>● Well maintained shared hedge</li> <li>● <b>Retain</b></li> </ul>	1.5
C1	Ornamental cherry <i>Prunus serrulata</i>	62	Good	<ul style="list-style-type: none"> <li>● 80% LCR</li> <li>● Small mechanical wound on surface roots</li> <li>● <b>Retain</b></li> <li>● Arborist supervision required for installation of water service upgrades. Notify City Arborist and Project Arborist 3-5 days prior to beginning work.</li> </ul>	3.72

<sup>1</sup>DBH = “DBH” means the diameter of the trunk of a tree at 1.3 metres above the base of a tree. For **multi-stemmed trees**, each trunk shall be measured 1.3 metres above the highest point of the natural grade of the ground measured from grade and the DBH of the tree shall be calculated as the square root of the sum of all squared stem DBHs rounded to the nearest centimetre (e.g.  $\sqrt{[(12\text{cm})^2 + (14\text{ cm})^2 + (17\text{ cm})^2 ]} = \sqrt{629} = 25\text{ cm}$ )

### SITE PLAN:

- Location of all trees – privately owned, city owned and neighbouring trees within 4m of property lines or any excavation work
- Critical Root Zone of each tree
- TPB dimensions and outline
- Barrier layout – if changes over course of project, show the altered change
- Readable font size

- North arrow
- Existing and proposed buildings
- Hardscaping such as driveways, sidewalks and pathways, retaining walls, fences
- Property lines
- Watercourses
- Patios
- Overhead or underground utilities:
  - Storm, sanitary, water, sewer, gas, telecommunications, electrical, fibre
- Excavation lines for main house and any detached accessory buildings (shed, garage, laneway house)
- Easements
- Restrictive covenant trees
- Significant grade changes
- Identify proposed extents of excavation for structures

#### **TREE PROTECTION PLAN AND REPLACEMENT PLAN:**

- Protection Plan:
  - TPB dimensions and geometry
  - Site access
  - Mitigation options to lessen construction impact. This should be in the body of report as well as identified as a trigger point on tree protection plan
- Replacement Plan:
  - Hazard tree 1:1
  - General removal 2:1
  - Hedge 1:1 per every 4m hedge length ex. 5m two hedge lengths and is two trees, 3m is one hedge length therefore one tree
  - Replacement species and/or varieties/cultivars of replacements (from recommended list or approved substitutions) Follow 30-20-10 rule. **Japanese maples (*Acer palmatum*) will not be accepted** as replacement trees. Dogwoods and magnolias will required City Arborist approval due to over planting.
  - Overhead location of replacement trees in relation to property lines, structures, hardscaping, existing trees and utilities
  - Must be 1m off property lines, a minimum 3m from dwellings, and not to conflict with existing trees.
  - Replacement trees must be a minimum 3-5cm caliper

#### **MITIGATION OPTIONS:**

- Pruning
- Cabling and bracing
- Watering
- Organic mulch
- Aeration techniques
- Fertilization
- Suspended slabs
- L shaped footings
- Relocation of structure and/or hardscaping
- Geocells, permeable pavers, etc
- Air spading, hydrovac, root radar, etc
- Drainage
- Cantilever construction
- Piles
- Raised driveways or slabs on granular material (with plans)
- Root mapping
- Other

#### **PHOTOGRAPHS:**

- Labelled with tree ID and species
- Colour
- Entire tree
- Close up of problem areas
- Entire site showing trees in reference to property