



Replacement Tree Specifications

Note: Proposed tree locations are suggestions only and should be finalized only once construction is complete and should adhere to City of Ottawa Tree Planting Guidelines.

Tree 1 and 2 should be large trees at maturity. Site conditions are expected to be full light exposure and moderate to minimal moisture availability. Species suggestions include:

- White oak - *Quercus alba**
- Freeman maple - *Acer x freemanii*
- Silver maple - *Acer saccharinum**
- Tulip tree - *Liriodendron tulipifera*
- Ginkgo - *Ginkgo biloba*
- Liberty elm - *Ulmus americana* 'Libertas'
- Red oak - *Quercus rubra**
- Norway spruce - *Picea abies*
- Northern catalpa - *Catalpa speciosa*

Tree 2 could also be a coniferous tree. Species suggestions include:

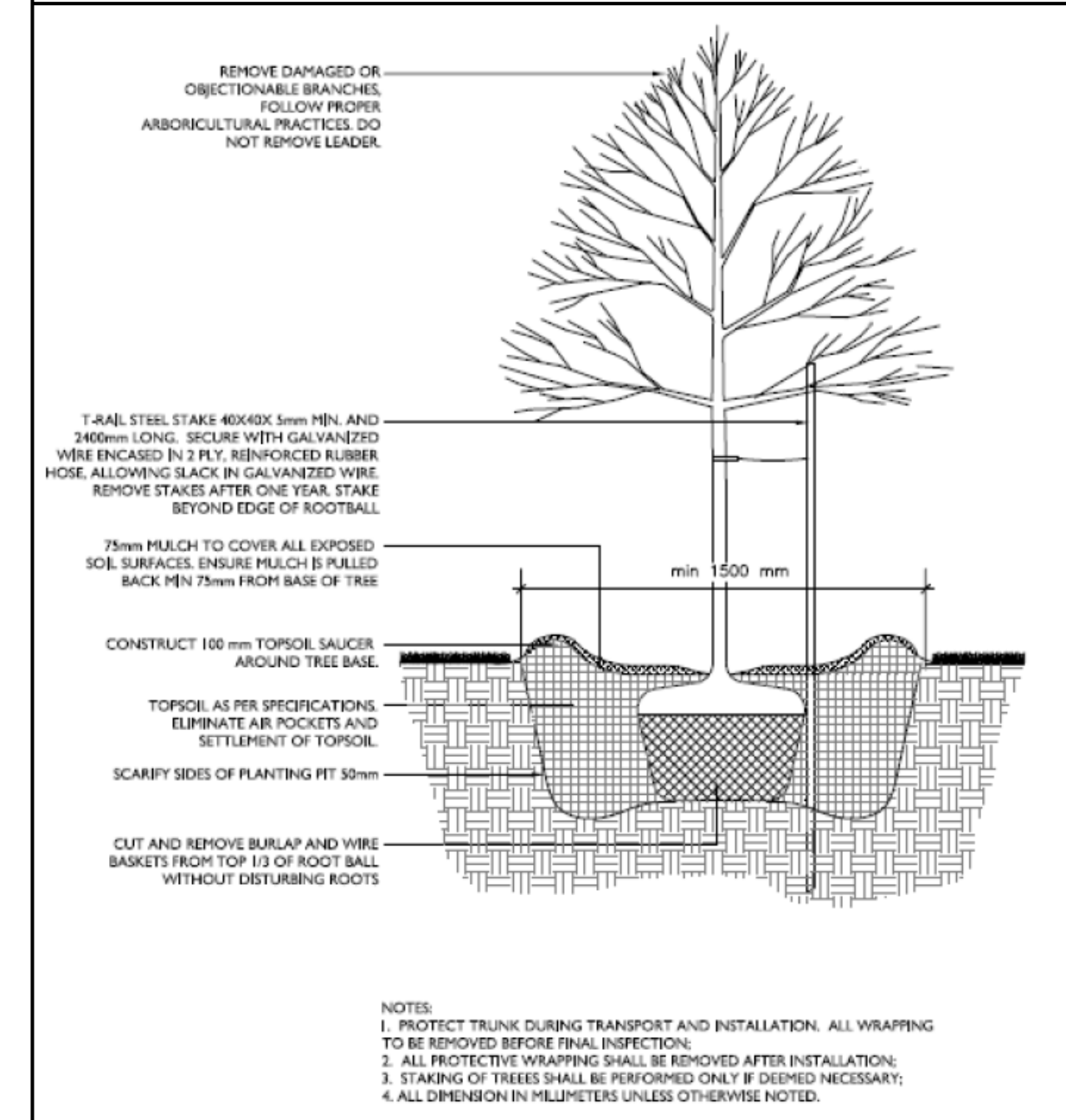
- Jack pine - *Pinus banksiana**
 - Red pine - *Pinus resinosa**
 - Colorado spruce - *Picea pungens*
 - White spruce - *Picea glauca**
 - Austrian pine - *Pinus nigra*
 - Norway spruce - *Picea abies*
- *Native to Ottawa region: Planting species native to a region can help maintain and enhance biodiversity.

Note: Norway maple (*Acer platanoides*) is not recommended as it is highly invasive and not a suitable tree for urban planting.

The species recommended herein are the most suitable species based on the existing plans. For best success, tree species should be matched to site conditions.

All deciduous trees must be a minimum of 50 mm in diameter measured no less than 15 cm above ground level. Coniferous trees must be no less than 200 cm in height.

Note: the tree layer has been added to the original site plan supplied by the client in pdf format. This layer refers to the trees only, and the original site plan has not been altered in the process. Refer to the original plan for details as quality is lost when importing the plan into the mapping software used to create the tree layer.



KEY SPACING GUIDELINES

- For Deciduous Trees:**
- Minimum 50mm caliper stock
 - 1.5m from sidewalks, driveways, walkways, fences, sound walls, and old stumps.
 - 2.5m from curbs, hydro transformers, or behind fire hydrants
 - 4-7m from any part of an existing tree, depending on canopy width
 - 10m from bus shelters and community mailboxes
- For Coniferous Trees:**
- Follow same setbacks as deciduous, but due to the widest branching being at the base of the tree, conifers need greater setbacks for ground-level obstacles.
 - Minimum 200cm height stock
 - 4.5m setbacks from sidewalks, walkways, driveways, and curbs.
 - Do not plant on corners where sight lines will be compromised.

TREES MUST BE WATERED REGULARLY FOLLOWING PLANTING TO ENSURE PROPER ESTABLISHMENT.
 On average, a young tree needs 6 gallons (24 liters) of water twice per week. (Do not water using a sprinkler as water on the foliage can lead to fungal infection)
 Placing a ring of mulch around the planting hole will help reduce water loss.
 Ensure no mulch is touching the base of the tree.

Legend

- New Private Tree
- New Tree either fully or partly on city property
- Existing Tree to be retained



Dendron Forestry Services

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Tree Information Report Version 3.0

Submitted as part of Building Permit Application for the City of Ottawa

Address: 844 Connaught

Date: December 21, 2023

Prepared by: Astrid Nielsen, RPF, ISA Certified Arborist ®
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Prepared for: Rick Wilson, 844 Connaught Ave Holdings Inc., rick@rickwilsonmortgages.com

Site Visit: June 3, 2021

Update for version 3.0: This report includes the site plan received from the client on December 21, 2023. No recommendations for specific trees have been changed.

Tree Information:

The following is an inventory of all trees that are protected under City of Ottawa Tree Protection (By-law No. 2020-340) on the site and adjacent City property. This includes Distinctive Trees (private trees with a diameter at breast height (dbh) of 30 cm or greater) and city-owned trees of all sizes. It also includes Distinctive Trees on adjacent properties whose Critical Root Zone (CRZ) extend into the subject area. The CRZ is an area around the trunk with a radius equivalent to 10 times the diameter of the trunk. This does not take into account infrastructure such as buildings and asphalt and it assumed the tree has no restrictions on root growth.

Tree ¹	Species	Diameter at breast height (cm)	Ownership ^{2,3}	Condition	Action	Recommendations
1	Norway maple (<i>Acer platanoides</i>)	41 cm	City	Fair/poor; large canker (35X50) at base of tree, leaning in opposite direction, pruned by hydro	Retain and protect	Retain and protect with fencing as per specifications in report, City should monitor regularly for stability
2	Norway maple (<i>Acer platanoides</i>)	36 cm	City	Fair/good; 2 from hydro lines, significant hydro pruning but has adapted well	Retain and protect	Retain and protect with fencing as per specifications in report
3	White spruce (<i>Picea</i>)	35 cm	City	Good/fair; sweep at base, some hydro pruning, possible	Retain and protect	Retain and protect with fencing as per specifications in report



	<i>glauca</i>)			root girdling on underside of lean		
4	Viburnum (<i>Viburnum lentago</i>)	5 cm	City	Good	Retain	Retain and protect with fencing as per specifications in report
5	White spruce (<i>Picea glauca</i>)	39 cm	City	Poor; topped by hydro	Retain and protect OR City should consider removing this tree based on poor health	Remove based on health and potential impact of construction; better option is to replace with a new tree post construction
6	Norway maple (<i>Acer platanoides</i>)	25, 35 cm (rough estimate)	Adjacent property at 839 Tavistock; possibly on the property line	Good (tree not very visible through fence)	Retain and protect	Avoid exposing any roots during construction of new driveway and garage

¹ Please refer to the attached Tree Information map for tree numbers. Note that this includes a tree layer added to the grading plan (in pdf format) provided by the client. This layer includes only information about the trees and the original grading plan is not altered in this process.

²Ownership of the tree in this report is based on the information provided and should not be used as a determination of ownership. For ownership disputes, a survey should be relied on. For boundary trees, consent from the adjacent property owner is required for removal as part of the application.

³Trees on adjacent properties do not include a full assessment. The diameters are estimated, and the health is estimated based on what is visible from the subject property. Trees along the property line may also have limited health assessments if part of the tree is not visible.

Trees 1,2, and especially 5, are city trees in fair to poor health. It is recommended that the forestry inspector visit the site and assess these trees for potential removal by the city. The proposed driveway on Sackville Street is well within the critical root zone of tree 6, but it will be in the same location as the existing garage and driveway, so there should be limited root damage to this tree, if any.

Prior to any site works, protective fencing should be installed around the trees 1-4 as indicated in the attached Tree Information Map and maintained until all construction on site has been completed as per the **City of Ottawa Tree Protection Specifications (April 2019)**. Within the fenced area, the following tree protection guidelines should be applied:

- Do not change the grade
- Do not place store construction material of site “furniture” such as outhouses
- Do not operate machinery
- Do not convert to hard surface or change the landscaping
- Do not excavate unless it is a method that has been pre-approved by the City
- Do not place signs, notices or posters to any tree
- Do not damage the root system, trunk, or branches of any tree
- Direct the exhaust away from the tree



The tree protection fencing must be 1.2 m in height and constructed of a rigid or framed material (e.g. modulus – steel, plywood hoarding, or snow fence on a 2”X4” wood frame) with posts 2.4 m apart such that the fence location cannot be altered.

The undersigned personally inspected the property and issues associated with this report on June 3, 2021. On Behalf of Dendron Forestry Services,



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Figure 1: Tree 1, city owned Norway maple to be retained



Figure 2: Canker at base of tree 1



Figure 3: Tree 2, city owned Norway maple to be retained



Figure 4: Tree 3, city owned white spruce to be retained



Figure 5: Tree 4, city owned Viburnum



Figure 6: Tree 5, city owned white spruce in poor condition



Figure 7: Tree 6, Norway maple on adjacent property at 836 Tavistock



Intended Use of the Report

This Information Report was carried out by Dendron Forestry Services (hereafter Dendron) at the request of the Client. The information, interpretation and analysis contained within this Report is to be used solely for the purposes outlined within this Report. This Report is for the exclusive use of the Client.

Limitations of this Report

This Report is based on the circumstances and observations as they existed at the time of the site inspection of the Client's Property and the trees situated thereon by Dendron and upon information provided by the Client to Dendron. The opinions in this Report are given based on observations made and using generally accepted professional judgment, however, because trees and plants are living organisms and subject to change, damage and disease, the results, observations, recommendations, and analysis as set out in this Report are valid only as at the date any such testing, observations and analysis took place and no guarantee, warranty, representation or opinion is offered or made by Dendron as to the length of the validity of the results, observations, recommendations and analysis contained within this Report. As a result the Client shall not rely upon this Report, save and except for representing the circumstances and observations, analysis and recommendations that were made as at the date of such inspections. It is recommended that the trees discussed in this Report should be re-assessed periodically.

Further Services

Neither Dendron nor any assessor employed or retained by Dendron for the purpose of preparing or assisting in the preparation of this Report shall be required to provide any further consultation or services to the Client, save and except as already carried out in the preparation of this Report and including, without limitation, to act as an expert witness or witness in any court in any jurisdiction unless the Client has first made specific arrangements with respect to such further services, including, without limitation, providing the payment of the Report's regular hourly billing fees.

Dendron accepts no responsibility for the implementation of all or any part of the Report, unless specifically request to examine the implementation of such activities recommended herein. In the event that inspection or supervision of all or part of the implementation is request, that request shall be in writing and the details agreed to in writing by both parties.

Assumptions

The Client is hereby notified and does hereby acknowledge and agree that where any of the facts and information set out and referenced in this Report are based on assumptions, facts or information provided to Dendron by the Client and/or third parties and unless otherwise set out within this Report, Dendron will in no way be responsible for the veracity or accuracy of any such information. Further, the Client acknowledges and agrees that Dendron has, for the purposes of preparing their Report, assumed that the Property, which is the subject of this Report is in full compliance with all applicable federal, provincial, municipal and local statutes, regulations, by-laws, guidelines and other related laws. Dendron explicitly denies any legal liability for any and all issues with respect to non-compliance with any of the above-referenced statutes, regulations, bylaws, guidelines and laws as it may pertain to or affect the Property to which this Report applies.

Professional Responsibility

In carrying out this Report, Dendron and any Assessor appointed for and on behalf of Dendron to perform and carry out the Report has exercised a reasonable standard of care, skill and diligence as would be customarily and normally provided in carrying out this Report. While reasonable efforts have been made to ensure that the trees recommended for retention are healthy, no guarantees are offered, or implied, that these trees, or all parts of them will remain standing. It is professionally impossible to predict with absolute certainty the behaviour of any single tree or group of trees, or all their component parts, in all given circumstances. Inevitably, a standing tree will always pose some risk. Most trees have the potential to fall, lean, or otherwise pose a danger to property and persons in the event of adverse weather conditions, and this risk can only be eliminated if the tree is removed.

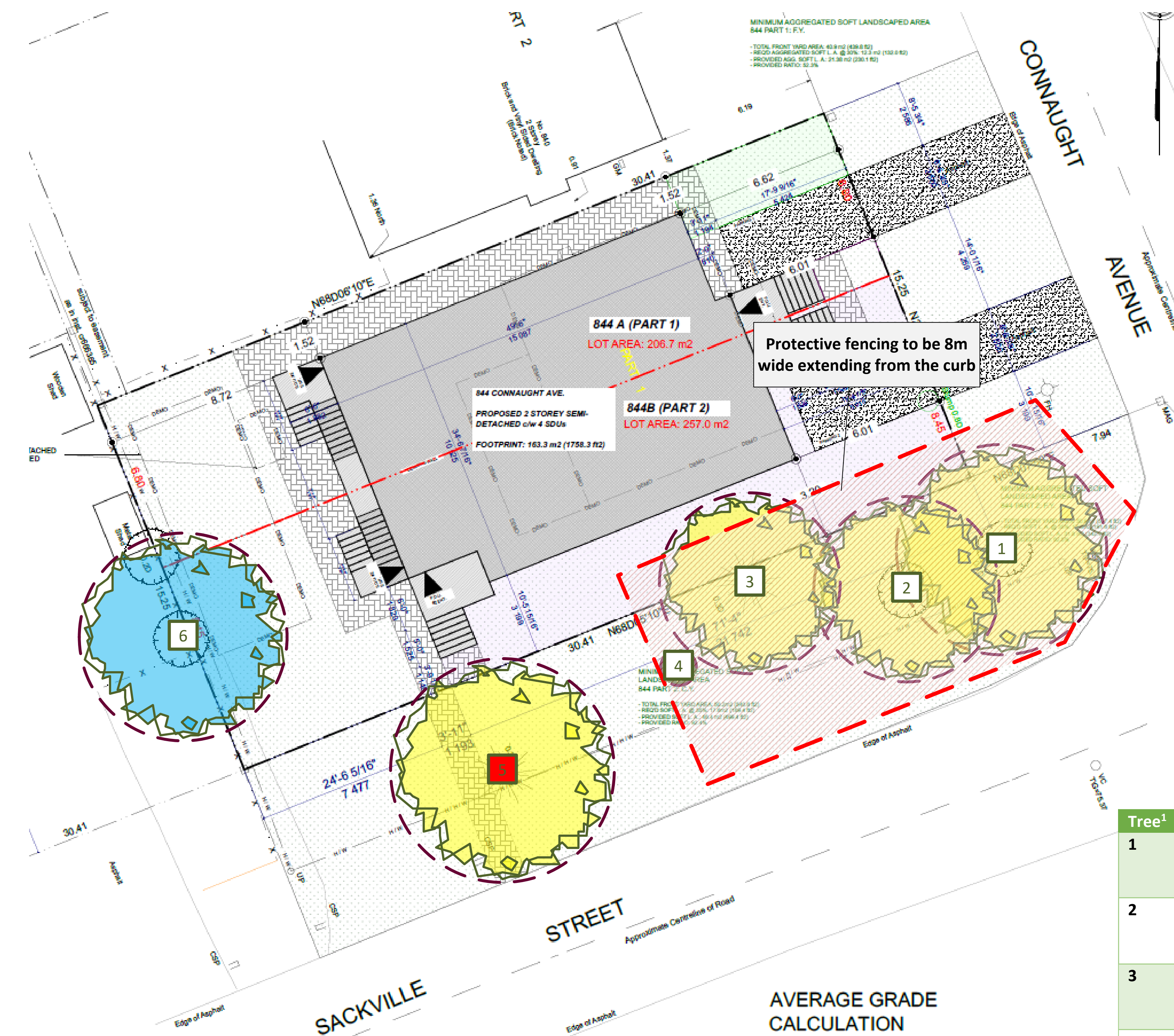
Without limiting the foregoing, no liability is assumed by Dendron for:

- a) any legal description provided with respect to the Property;
- b) issues of title and or ownership respect to the Property;
- c) the accuracy of the Property line locations or boundaries with respect to the Property; and
- d) the accuracy of any other information provided to Dendron by the Client or third parties;
- e) any consequential loss, injury or damages suffered by the Client or any third parties, including but not limited to replacement costs, loss of use, earnings and business interruption; and
- f) the unauthorized distribution of the Report.

Further, under no circumstance may any claims be initiated or commenced by the Client against Dendron or any of its directors, officers, employees, contractors, agents or Assessors, in contract or in tort, more than 12 months after the date of this Report.

General

Any plans and/or illustrations in this Report are included only to help the Client visualize the issues in this Report and shall not be relied upon for any other purpose. This report is best viewed in colour. Any copies printed in black and white may make some details difficult to properly understand. Dendron accepts no liability for misunderstandings due to a black and white copy of the report.



Tree Protection Area (TPA)

Prior to any site works, fencing should be installed around the TPA as indicated in this Map and maintained until all construction on site has been completed as per the **City of Ottawa Tree Protection Specifications (March 2021)**. Within the fenced area, the following tree protection guidelines should be applied:

- Do not change the grade
- Do not store construction material
- Do not operate machinery
- Do not convert to hard surface or change the landscaping
- Do not excavate unless it is a method that has been pre-approved by the City
- Do not place signs, notices or posters to any tree
- Do not damage the root system, trunk, or branches of any tree
- Direct the exhaust away from the tree

The tree protection fencing must be 1.2 m in height and constructed of a rigid or framed material (e.g. modulus – steel, plywood hoarding, or snow fence on a 2”X4” wood frame) with posts 2.4 m apart such that the fence location cannot be altered. All supports must be placed outside of the CRZ and installation must minimize damage to existing roots.

If the fenced tree protection area must be reduced to facilitate construction, *one* of the following mitigation measures should be applied:

- Place a layer of 6-12 inches (15 to 30 cm) of woodchip mulch to the area
- Apply ¾ (2 cm) inch plywood, or road mats over a 4+ inch (10 cm) thick layer of the wood chip mulch
- Apply 4-6 inches (10 to 15 cm) of gravel over a taut, staked, geotextile fabric

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- Critical Root Zone
- Tree either fully or partly on adjacent property
- Tree Protection Area
- City Tree
- Tree to be removed

Note that the tree layer has been added to the original site plan supplied by the client in pdf format. This layer refers to the trees only, and the original plan has not been altered in the process. Refer to the original plan for details as quality is lost when importing the file into the mapping software.



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 For more information, please contact info@dendronforestry.ca