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Arborist Report for Development Purposes Re: Proposed Rezoning and Redevelopment "Kingston Residential"

Site Location:

205 Quebec St., 507 Montreal St., 210, 214, 218, and 224 Kingston St. Darryl Clark PN-6253A TRAQ Certified October 5, 2021

> Revised – December 7, 2022 Revised – March 1, 2023

#### March 1, 2023

For One Point Property Inc. 4520 West Saanich Rd, Saanich, BC V8Z 3G4 Attn. Greg Gillespie

Re. "Kingston Residential" - Proposed Rezoning and Redevelopment

#### Scope of Work

D. Clark Arboriculture has been retained by One Point Property Ltd. to provide comments on trees impacted by a potential Rezoning and Redevelopment described as Kingston Residential that encompasses a land assembly that includes 205 Quebec St, 507 Montreal St. and 210, 214, 218, and 224 Kingston St., as well as a Tree Protection Plan for the properties as per the requirements of the City of Victoria.

### **Introduction and Methodology**

I (Darryl Clark) visited the site on August 15, 2021, and September 10, 2021 to perform an assessment of trees on-property and off-property that could potentially be impacted by proposed rezoning and development. Additional photos were collected for the report on September 25, 2021. Site conditions surrounding affected trees were generally favorable. Access was not limited to the site. A design provided by our client indicated property changes including several new buildings, landscapes, etc. A site visit to review the conditions around tree #OP1 took place on November 8, 2022. Site conditions at that time were favorable. After a review of comments back from the city dated February 14, 2023 in response to submissions made by the client and received by the city on December 18, 2022, changes were made as directed by Parks to the Tree Replacement Table (p.7) and language around donated trees was removed as it is no longer applicable. This report was completed on March 1, 2023.

### Tasks performed include:

- An aerial site map was marked indicating subject property and impacted surrounding properties.
- visual inspection of (11) municipal street trees, (3) off-property trees, and (4) on property trees was performed, and notes were collected on health and structural condition.
- Tree height and canopy spread was estimated to the nearest metre.
- A scaled survey map provided by the landscape design team is included with tree protection overlaid for reference.
- Photos of the site and trees.

### **Summary**

Kingston Residential Tree Impact Summary									
TREE STATUS	# of Trees	# of Trees to be Removed	# of Replacement Trees	# of Existing Replacement Trees					
Onsite trees	4	-4	11	0					
Offsite Trees	3	0	0	0					
Municipal Trees	11	-5	N/A	N/A					
TOTAL	18	-9	11	0					

# Tree Inventory

	Kingston Residential Inventory of Trees											
#	Species	cm/DBH	Height/m	Spread	PRZ/m	Structure	Health	Bylaw protected	Retain/Remove	Reason for Removal	Additional Comments	Impact
9557	Betula pendula	39	11	10	5	Fair	Fair	Blvd	Retain		potentially impacted, requires supervision during excavations etc.	
24482	Prunus cerasifera	38	9	7	5	Fair	Fair	Blvd	Retain		potentially impacted by sidewalk upgrades and site servicing	
9556	Betula papyrifera	34	10	9	4	Good	Fair	Blvd	Retain		potentially impacted by sidewalk upgrades and site servicing	
24481	Prunus cerasifera	39	9	12	5	Fair	Fair	Blvd	Retain		potentially impacted by sidewalk upgrades and site servicing	
9555	Betula papyrifera	27	9	8	3	Good	Fair	Blvd	Retain		potentially impacted by sidewalk upgrades and site servicing	
24480	Prunus sargentii	3	3	1	0	Good	Good	Blvd	Remove	SW expansion and rehab	potentially impacted by sidewalk upgrades and site servicing	Severe
24479	Prunus cerasifera	53	8	11	6	Fair	Fair	Blvd	Remove	SW expansion and rehab	potentially impacted by sidewalk upgrades and site servicing	Severe
24478	Prunus cerasifera	44	8	10	5	Fair	Poor	Blvd	Remove	SW expansion and rehab	potentially impacted by sidewalk upgrades and site servicing	Severe
24477	Prunus cerasifera	50	8	9	6	Fair	Fair	Blvd	Remove	SW expansion and rehab	potentially impacted by sidewalk upgrades and site servicing	Severe
24460	Sorbus intermedia	35	9	9	4	Good	Good	Blvd	Remove	SW expansion and rehab	potentially impacted by sidewalk upgrades and site servicing	
9554	Aesculus carnea	42	9	12	5	Good	Good	Blvd	Retain		potentially impacted by sidewalk upgrades and site servicing	
OP1	Calitropsis nootkatensis	105	14	10	13	Fair	Fair	yes	Retain		requires supervision during preconstruction exploratory excavation	
OP2	Cedrus deodar	35	18	10	4	Fair	Good	yes	Retain		requires supervision during excavations	
OP3	Sequoiadendron giganteum	35	10	9	4	Good	Fair	yes	Retain		requires supervision during excavations	
1	Thuja plicata smaragd	35	6	3	4	Fair	Fair	yes	Remove	within bldg footprint		
2	Thuja plicata smaragd	14	6	2	2	Fair	Fair	yes	Remove	within bldg footprint		
3	Pyrus sp.	39	4	5	5	Poor	Fair	yes	Remove	within bldg footprint		Severe
4	Ilex aquifolium	44	6	4	5	Poor	Good	yes	Remove	within bldg footprint		Severe

<u>DBH</u>-Diameter at Breast Height. Measured at 1.4m from the point of germination. Where the tree is multi-stemmed at 1.4m, the DBH shall be considered 100% of the stems rounded to the nearest cm. <u>PRZ</u>-Protected Root Zone. The PRZ shall be considered 12x the DBH radially, rounded to the nearest whole meter. <u>TBD-</u>To Be Determined. There is insufficient information to determine the suitability of retention. <u>OP1 previously identified as</u> *Thuja plicata* 

- Rezoning of the assembly of lots and proposed development of the property will impact the Protected Root Zone of (18) trees.
- There are (4) bylaw protected trees and (5) unprotected trees on the subject properties.
- There are (11) trees identified in the city inventory within the scope of this project.
- There are (3) "off-property" trees within the scope of this project.
- (4) on property bylaw protected trees require removal.
- (5) on property unprotected trees require removal.
- (5) city owned trees require removal.
- (7) city owned trees can be retained with tree protection measures in place.
- (3) "off-property" trees can be retained with tree protection measures in place.
- (1) "off-property" tree is listed as "OP1" will require exploratory excavations to determine overall root ingress and additional impact mitigation options.
- Construction can proceed following the recommendations in this report.

## **Site Description**



The footprint of this proposed development is currently almost entirely asphalt paved parking lot with the exception of 224 Kingston which is currently a tenanted multi unit residence. It is bordered on 3 sides by municipal streets with sidewalk and tree features as well as grass boulevard on the Kingston (southerly) side. The north-easterly aspect shares a property line with a larger strata development. The south-easterly aspect shares a property line with a smaller condominium building. The subject properties collection of trees both private and city owned are in generally fair condition, most of which are due for some maintenance.

### **Project Summary**

Currently this project is in the rezoning phase. The rezoning aims to assemble several lots into a single multi-phase development. This development will infill the vacant land (currently the parking lot) and existing building (224 Kingston). Excavations to the property lines are expected and will accommodate underground parking, building foundations and a variety of underground services.

#### **Tree Protection Plan**

The Protected Root Zone (PRZ) of all protected trees recognized in this report shall be 12 times the diameter of the tree.<sup>1</sup>

### General

- A supervised pre-construction exploratory excavation will take place to determine overall root ingress and additional impact mitigation options for (1) "off-property" tree is listed as "OP1".
- Fencing will be erected for all trees to be retained.
- Equipment traffic in and out of the site is expected to utilize the existing driveways for construction.
- Foot and vehicle traffic on the property during excavation and construction may impact some protected trees to be retained where pavements are lifted, and underlying soil is exposed.
- Root armoring is recommended on all exposed root areas.

During construction protection fencing will be installed, the construction and location of which will be approved by the project arborist. Tree protection fencing must be anchored in the ground and made of 2x4 or similar material frame, paneled with securely affixed orange snow fence or plywood and clearly marked as TREE PROTECTION AREA- NO ENTRY (See appendix A for an example). The area inside the fence will be free of all traffic and storage of materials. Because the properties are expected to be fenced on all sides that border properties with off property trees contained in this report, and because the PRZ of those trees is impacted to the fence in a variety of situations, no additional fencing or root armouring is anticipated on the inside of the development area. Areas outside the tree protection fence but still within the protected root zone (PRZ) may be left open for access, as work areas and for storage of materials. These areas will be protected by existing concrete surfaces. If the existing surfaces are removed, an assessment of the base below is required to ascertain its suitability as root armouring. Tree protection measures will not be amended in any way without approval from the project arborist. Any additional tree protection measures will be documented in a memo to the municipality and the developer.

### Material staging

In any case where materials need to be stored temporarily or permanently inside the PRZ of a protected tree, root armouring must be used. Root protection will be ¾" plywood. Any material that is "cribbed" underneath (e.g., stacked lumber or pipe) must still rest on plywood.

<sup>&</sup>lt;sup>1</sup>Best Management Practices (BMP) - Managing Trees During Construction, Second Edition by Kelby Fite and E. Thomas Smiley

#### Cranes

Throughout the project t is anticipated that cranes will be utilized in a variety of locations and positions. Where cranes are required in proximity to trees with the potential to damage the trees, the work should be supervised by the project arborist or, in situations where crane staging is longer term alternative measures such as vertical flagging may be employed.

#### **Lot Clearing and Grading**

All clearing and stump removals that take place inside the PRZ of protected trees will be supervised by the project arborist. All significant root impacts to retained trees will be documented in a memo with accompanying photos.

### **Blasting and Excavations**

Excavation inside the Protected Root Zone of any tree identified in this plan for any reason will take place under the supervision of the project arborist or their designate. Working radially inward toward the tree, the excavator will remove the soil incrementally with a non-toothed shovel allowing any exposed roots to be pruned to acceptable standard by the project arborist. Roots that have been pruned are to be covered with a layer of burlap and kept damp for the duration of the project. Any excavation of the stump of a tree inside a PRZ must be supervised by the project arborist. As well, any excavation for underground services inside a PRZ will be supervised by the project arborist. Where applicable, a hydro-vac or Airspade® may be employed to expose critical roots and services. It is anticipated that some excavations will creep beyond the foundation excavations for lot servicing, grading and landscaping.

### **Lot Servicing**

Lot servicing is anticipated to come from several locations. There is ample opportunity at this stage to locate services away from protected root zones. A set of civil drawings will be provided prior to development approval that will inform the expectations around protected trees.

### **Driveways/Sidewalks**

Trees will need supervision for all activities inside the PRZ. Excavations are expected to be undertaken using a hydrovac. Heavy soil/base material compaction is anticipated during excavation. Below grade during construction, opportunities may exist to increase the volume of beneficial soils. Construction techniques should include the use of structural cells, geogrid materials and loadbearing fabrics where they best apply.

#### **Pruning**

There are currently no expected conflicts that will require tree pruning.

Any pruning of protected trees will be performed by an ISA (International Society of Arboriculture) certified arborist, to internationally recognised best management practices.

### Landscaping

Expectations for landscaping shall be the same as all other expectations.

### **Replacement Trees**

The City of Victoria requires replacement trees be planted for every bylaw protected tree removed. Tree locations have been determined and a landscape plan has been finalized and submitted. Locations of the trees have been added to the existing landscape plan.

		count	Multiplier	TOTAL						
	onsite min.replacement req.									
Α	protected trees removed	x1	4							
В	replacement trees proposed part 1	15	X1	15						
С	replacement trees proposed part 2	X0.5	12							
D	total replacement trees proposed (B+C)	27								
Е	onsite replacement tree deficit (A-D)	0								
	onsite tree min. req.									
F	tree minimum on lot	20								
G	protected trees retained	X1	0							
Н	specemin trees retained	X3	0							
- 1	trees per lot deficit (F-(B+C+K+L))	0								
	offsite min. replacement req.									
J	protected trees removed	0								
K	replacement trees proposed (part 1 or 3)	0	X1	0						
L	replacement trees proposed (part 2)	0								
M	total replacement trees proposed (L+M)	0								
N	offsite replacement tree deficit (K-N)	0								
	cash-in-lieu req.									
0	onsite trees proposed for cash-in-lieu (greater of F or J	0								
Р	offsite trees proposed for cash-in-lieu (O)	0								
Q	cash-in-lieu proposed ((P+Q)x \$2000.00)	\$ -								

### **Role of the Project Arborist**

No aspect of this Tree Protection Plan will be amended in whole or in part without the permission of the project arborist. Any amendments to the plan must be documented in memorandums to the municipality and the developer.

The project arborist must approve all tree protection measures before demolition and/or construction is to begin.

A site meeting including the project arborist, developer, project supervisor and any other related parties to review the tree protection plan will be held at the beginning of the project. Site meetings will occur at every stage of development to review plans and mitigate impacts of unanticipated changes.

The developer may keep a copy of the tree protection plan on site to be reviewed and/or initialed by everyone working inside or around the PRZ of trees.

The project arborist is responsible for ensuring that all aspects of this plan, including violations, are documented in memorandums to the municipality and the developer.

### **Recommended Actions Summary**

- Site fencing will be constructed prior to any work on the property as per the site plan, will be approved by the Project Arborist, and will remain for the duration of all construction activities with removal or amendment only being approved by the Project Arborist.
- Trees to be removed will be flagged by the project arborist prior to the commencement of tree removal.
- The Project Arborist will be notified at least five (5) business days prior to any expected site supervision on the project.
- The Project Arborist will supervise excavation for all foundations and services in the areas adjacent to trees impacted.
- The Project Manager and the Project Arborist will be in contact prior to the beginning of every site servicing to review expectations and navigate any changes.
- Site inspections by the project arborist will occur on a regular basis to ensure the conditions of this report are being adhered to.
- Wherever required, memos from the Project Arborist will be provided regarding the impacts to trees from construction.

Thank you for the opportunity to comment on these trees. Should any issues arise from this report, I am available to discuss them by phone, email or in person.

Regards,

Darryl Clark

Certified Arborist PN-6523A

TRAQ Qualified

### **Disclosure Statement**

An arborist uses their education, training and experience to assess trees and provide prescriptions that promote the health and wellbeing, and reduce the risk of trees.

The prescriptions set forth in this report are based on the documented indicators of risk and health noted at the time of the assessment and are not a guarantee against all potential symptoms and risks.

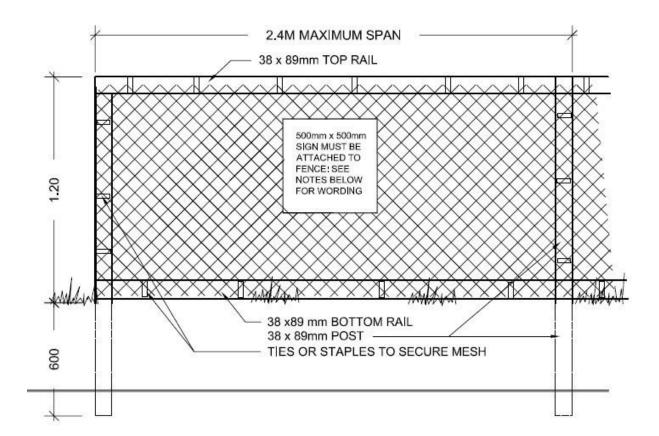
Trees are living organisms and subject to continual change from a variety of factors including but not limited to disease, weather and climate, and age. Disease and structural defects may be concealed in the tree or underground. It is impossible for an arborist to detect every flaw or condition that may result in failure, and an arborist cannot guarantee that a tree will remain healthy and free of risk.

To live near trees is to accept some degree of risk. The only way to eliminate the risks associated with trees is to eliminate all trees.

### **Assumptions and Limiting Conditions**

- Altering this report in any way invalidates the entire report.
- The use of this report is intended solely for the addressed client and may not be used or reproduced for any reason without the consent of the author.
- The information in this report is limited to only the items that were examined and reported on and reflect only the visual conditions at the time of the assessment.
- The inspection is limited to a visual examination of the accessible components without dissection, excavation or probing, unless otherwise reported. There is no guarantee that problems or deficiencies may not arise in the future, or that they may have been present at the time of the assessment.
- Sketches, notes, diagrams, etc. included in this report are intended as visual aids, are not considered to scale except where noted and should not be considered surveys or architectural drawings.
- All information provided by owners and or managers of the property in question, or by agents acting on behalf of the aforementioned is assumed to be correct and submitted in good faith. The consultant cannot be responsible or guarantee the accuracy of information provided by others.
- It is assumed that the property is not in violation of any codes, covenants, ordinances or any other governmental regulations.
- The consultant shall not be required to attend court or give testimony unless subsequent contractual arrangements are made.
- The report and any values within are the opinion of the consultant, and fees collected are in no way contingent on the reporting of a specified value, a stipulated result, the occurrence of a subsequent event, or any finding to be reported.

# **Appendix A**



### TREE PROTECTION FENCING

# **Tree Protection Fencing Specifications:**

- 1. The fence will be constructed using 38 x 89 mm (2" x 4") wood frame:
  - Top, Bottom and Posts. In rocky areas, metal posts (t-bar or rebar) drilled into rock will be accepted.
  - Use orange snow fencing mesh and secure to the wood frame with "zip" ties or galvanized staples. Painted plywood or galvanized fencing may be used in place of snow fence mesh.

Attach a roughly 500 mm x 500 mm sign with the following wording: **TREE PROTECTION AREA- NO ENTRY**. This sign must be affixed on every fence face or at least every 10 linear metres.



