

# **Capital Tree Service Inc.**

Arborist Report

515 and 519 Rithet Street

Victoria, BC V8V 1E4

May 17, 2024

Prepared for:

Casman Group of Companies

Prepared by:

Capital Tree Service Inc.

#### **Capital Tree Service Inc.**

310-777 Royal Oak Dr, PO Box 53512, Victoria BC, V8X 5K2

Ph: 250-217-8370, email: joelcreese@capitaltreeservice.ca

www.capitaltreeservice.ca

GST # 861289783RT0001

WSBC Account #713323

Liability and Professional E and O, HSM Insurance - \$5 Million

# **Summary/Scope of Work**

Capital Tree Service Inc. (CTS) was contacted by Casman Group of Companies (Client, a development group, regarding the demolition of two (2) single family homes and the construction of an apartment building at 515 and 519 Rithet Street (the Site) in the City of Victoria (CoV). The Client indicated he required an Arborist Report and Tree Protection Plan (TPP) to move forward with the permit application.

The Client has requested that CTS provide a Basic Visual Tree Assessment (BVTA) and TPP for the Site. CTS agreed to the complete the assessment and provide findings in an Arborist Report Form including a TPP.

Under the current proposal ten (10) trees are proposed for removal (Table 1), while nine (9) trees are proposed for retention and protection. A tree inventory is included as **Appendix 'A'** of this report. Photographs and a Site Plan are included as **Appendix 'B'** of this report.

	Protected	Trees to be	New and Replacement	Non-protected trees counted as
Tree Status	Trees	removed	trees	replacements
Onsite Trees	3	10	6	0
Offsite Trees	8	0	0	0
Municipal Trees	0	0	N/A	N/A
Total	11	10	6	0

# **Methodology**

The Site was entered on three (3) separate dates: August 17, 2021, April 28, 2022, and April 3, 2023, by CTS for the purpose of conducting tree assessments and collecting inventory. Ray Praud, Joel Creese, and Keegan Durovich, consulting arborists and representatives of CTS, provided the BVTA for the site. The weather August 17, 2021, was 19 degrees C, mix rain and sun, 5km/h SE breeze, on April 28, 2022, it was 10 degrees C, partly cloudy, 9km/h NNE breeze. April 3, 2023, was 7 degrees C, sunny with no wind.

The Site was assessed from grade. No form of diagnostic tools or invasive techniques were used during the assessment. Tree heights were measured using a Laser Technology TruPulse 200 Laser Range Finder, crowns were inspected using Ricoh Pentax 10x binoculars and diameters were measured using a Richter Diameter Tape. Diameter at Breast Height (DBH) was measured approximately 1.4m above grade. Measurements and observations were recorded with the intent to provide a static representation of the area. A tree inventory is included as **Appendix** 'A' of this report. Photographs and a Site Plan are included as **Appendix** 'B' of this report.

During the assessment, a total of nineteen (19) trees were observed – eleven (11) of which are protected under the current City of Victoria Tree Protection Bylaw. Trees referenced in **Appendix 'A'** have been tagged. Tags are located approximately 1.5-2m above grade on tree stems and were visible at the time of assessment. Offsite (OS) trees have been labeled. Please note that offsite OS one (1) to nine (9). Please note that OS trees have not been located by a BC Land Surveyor.

Protected Root Zone calculations are based on the ISA recommended one foot for each one inch of trunk diameter (0.3m for each 2.5cm). Matheny and Clark's 'Trees and Development' was used to assess relative tolerance to development impacts.

# **Observations/Discussion**

During the assessment, a well-established lot in a fully developed urban neighborhood was observed. The Site was observed to be partially treed with deciduous and coniferous trees. The Site appears to receive plenty of direct sun. Construction activities are expected to have a low to moderate impact on the nine (9) trees proposed for retention.

The proposed apartment building will require the removal of eight (8) trees, three (3) of which are bylaw protected, and two (2) non-protected hedges. All ten (10) of these trees or hedges are located within the footprint of the building or within ~2m of the proposed footprint. 2m is the expected horizontal distance of over excavation with a cutslope of 0.75:1 (H:V). This cutslope was calculated by using the shallowest safety slope anticipated within the October 6, 2023, report prepared by Ryzuk Geotechnical. With an anticipated footing depth of 2.6m, over excavation is anticipated to extend 1.95 or ~2m from the edge of the proposed building. Arborist supervision will be required within the PRZ (or CRZ, whichever is greater) of any retain

tree. Excavation will impact the rooting areas of a couple of offsite trees. All roots should be cut cleanly at the edge of excavation and during dry weather by covering them with regularly wetted fabric approved by the project arborist (typically burlap).

Daylighting was conducted along the edge of excavation on May 1, 2024 to verify the expected levels of impacts to trees OS1-OS5. The daylighting trench was dug ~2m off the edge of building along the expected edge of excavation wherever possible. A small space was left directly around tree 623 and once excavation reached the garage, the trench was dug directly adjacent to the slab of the building along its south side. Joel Creese, a consulting arborist and representative of CTS supervised the hydrovac excavation and has provided photos and notes (see Appendix C). No significant root were encountered, and impact from excavation is expected to have a low impact on OS1-5. Additional daylighting was conducted near the edge of excavation within the rooting area of OS6 to confirm a low impact as well. All damaged roots were pruned back to the edge of excavation.

Several offsite trees are expected to be impacted by the proposed building, six (6) of which are located at 540 Dallas Road. OS1 and OS2 are two Scots pines planted above a retaining wall, ~1.5 and ~3m away from the retaining wall (respectively). The retaining wall itself is located ~2.4m from the edge of excavation. If the retaining wall stays in place, impact to the trees' roots is expected to be minimal. Utilizing the information from daylighting, impact to these trees is expected to be low. OS3 is Mountain ash located ~3.5m from edge of excavation. Mountain ash tend to be tolerant of root pruning and the tree is young and in fair health, increasing its resistance to impacts. Impact to OS3 is expected to be low. OS4 and OS5 are two (2) Japanese katsura trees. Both trees are located ~3.3m from the edge of excavation. Katsuras are sensitive to impacts to their critical root zones, as such mitigating impact within the trees canopy areas is critical. Excavation is expected to stay ~0.2m outside of each tree's CRZ. As these trees are in fair health and because no significant roots were encountered during daylighting, impact to these trees expected to be low. Finally, OS9 is a cherry located in the amenity space at 540 Dallas Road. As it is located outside of the zone of construction impact (although its PRZ overlaps with the site), tree impact is expected to be low.

OS6 and OS8 are a cherry and an apple located at 37 Menzies Street. OS8 (the apple) is located outside of the zone of impact and therefore impact is expected to be low. OS6 (the cherry) is located ~3m from edge of excavation. The edge of excavation extends ~1.7m into the tree's CRZ and PRZ (which are both 5m in radius). Most of the area that will be impacted is the existing driveway, which is not likely to support much root growth due to soil compaction and lack of organic matter. As the canopy extends over the parkade ramp, pruning is not expected to be required. As cherries are typically moderately tolerant of root impact, that the majority of the PRZ proposed for removal under the current driveway, and the trees fair-poor health impact is expected to be low-moderate. OS8's PRZ is outside the zone of impact.

OS7 is a laurel located at 29 Menzies Street and is located outside of the zone of impact.

A total of six (6) replacement trees are shown on the landscape plan. Three (3) replacement trees are required as only three of the eight (8) trees and two (2) hedgerows proposed for removal are bylaw protected. Three (3) of the replacement trees are considered small trees, and will only worth one (1) "replacement tree credit" (see Table 2). Three (3) medium trees will also be planted, each worth one (1) replacement tree credit. With a site area of ~960m², the tree minimum of five (5) trees is not met with only four (4) proposed "replacement tree credits". A cash in lieu payment of \$2000 will be required. Additionally, a new boulevard tree is proposed in conjunction with a new rain garden at the front of the property.

Murdoch deGreef Inc Landscape Planning and Design has selected tree species in part on their suitability to the selected planting locations including available soil volume and shade tolerance. High quality topsoil should be used within the proposed planting areas, including within over excavation. If excavation for tree planting is required outside of over excavation and within the PRZ of a retained tree, Arborist supervision will be required.

### **Tree Dynamics**

#### **Observed Tree Impacts**

- Seven (7) non-protected trees and hedges are proposed for removal.
- Three (3) bylaw protected trees are proposed for removal.
- Three (3) replacement trees are required.
- The tree minimum for the site is five (5) trees.
- Six (6) replacement trees, representing four (4) replacement tree credits, are proposed.
- Nine (9) offsite trees, including eight (8) protected trees are proposed for retention and retention.
- Construction impact to the retained trees is expected to be low to moderate.
- Assessment of the site may expose further tree issues or conditions. If this occurs the project arborist will contact City staff for further recommendations.

#### Common and Latin Names

Japanese katsura – Cercidiphyllum japonicum

Yellow Cedar – Cupressus nootkatensis

Laurel – *Laurus* sp.

Shore Pine - Pinus contorta

Scots pine – Pinus sylvestris

Cherry – *Prunus* sp.

Plum – Prunus sp.

Pear – *Pyrus* sp.

Mountain Ash – Sorbus aucuparia

**Table 2. Replacement Tree Summary Table** 

		Count	Multiplier	Total
nt	Protected trees removed	3	1	3
laceme	Replacement trees proposed per Schedule "E", Part 1	3	1	3
Onsite minimum replacement tree requirement	Replacement trees proposed per Schedule "E", Part 2	3	0.5	1
	Replacement trees proposed per Schedule "E", Part 3	0	1	0
	Total replacement trees proposed			4
ō	Onsite replacement tree deficiency			0
	Tree minimum on lot			5
Onsite tree	Protected trees retained (other than specimen trees)	1	1	1
Ons min	Specimen trees retained	0	3	0
	Tree per lot deficiency			1
	Protected trees removed	0	1	0
Offsite Tree Minimum	Replacement trees proposed per Schedule "E", part 1 or 3	0	1	0
Tree M	Replacement trees proposed per Schedule "E", part 2	0	0.5	0
Offsite	Total Replacement trees proposed			0
	Offsite replacement tree deficiency			0
-	Onsite trees proposed of cash-in-lieu			\$2000
Cash-in- lieu	Offsite trees proposed for cash-in-lieu			0
Ca	Proposed cash-in-lieu			\$2000

### <u>Species Relative Tolerance to Construction Impacts\*:</u>

- <u>Katsura</u> **Poor-moderate** sensitive to fill and root disturbance. Requires tree protection zone at drip line. Requires post construction care, particularly supplemental irrigation.
- <u>Yellow cedar</u> **Good** Relatively windfirm. Intolerant of changes in water table/soil moisture.

- Shore pine Generally Moderate-Good
- Scots pine **Good** Tolerant of root loss. Intolerant of saturated soils.
- <u>Cherry</u>- **Generally Moderate** Intolerant of mechanical injury (poor compartmentalization). Intolerant of saturated soils.
- <u>Plum</u> **Moderate** Intolerant of mechanical injury (poor compartmentalization).
   Response constrained by soil aeration and water availability.
- Pear- Moderate intolerant of root pruning.
- Mountain Ash- Moderate Tolerant of root loss. Intermediate in tolerance to saturated soils.

#### **Tree Condition Ratings Summary**

#### **Health Condition:**

- Poor significant signs of visible stress and/or decline that threaten the long-term survival of the specimen
- Fair signs of stress
- Good no visible signs of significant stress and/or only minor aesthetic issues

#### **Structural Condition:**

- Poor Structural defects that have been in place for a long period of time to the point that mitigation measures are limited
- Fair Structural concerns that are possible to mitigate through pruning
- Good No visible or only minor structural flaws that require no to little pruning

# **Tree Protection Plan**

Utilize Tree Protection Fencing (TPF) to restrict access to Tree Protection Zones. Provide signage on fencing which states: Tree Protection Area – No Admittance. Signage must be in a visible location attached to the fence. Signage must be attached to the outside of each Tree Protection Fencing area.

Contact CTS to mark locations for the Tree Protection Fencing. All Tree Protection Fencing must be installed in the locations indicated by CTS. CTS must provide inspection and verification of the fencing detail for City approval.

Each Tree Protection Zone (TPZ) must be vacated of all construction materials and/or equipment. At no time may the fencing be removed or modified unless the Project Arborist is contacted and approval given. In such cases the Project Arborist must assist fence removal and assess combined impacts which are required for construction completion. CTS 250-217-8370 – Five business days notice required.

#### **Landing/Storage Area**

All construction materials shall be stored outside of the tree protection fencing.

#### Access

A single point of access shall be utilized. Contractors and workers shall be made aware of the Tree Protection Zones and Measures in place. **Tree Protection Zones and areas of the Site not under construction or within the Zone of Impact will be strictly off limits.** It is the responsibility of the Client to schedule a pre-job meeting with the Project Arborist to discuss Tree Protection Plans, Zones, and requirements.

\*Five business days notice required. CTS, Project Arborist. 250-217-8370\*

#### **Compaction Reduction**

Utilize 'hog-fuel' (or similar – wood chips, dura-deck mats, arbor-mats etc.) in and around the PRZ's of trees in locations where it is not practicable for TPF to protect the entire PRZ. This must be done prior to any construction activities. This will reduce the impact to the tree's protected root zone. Hog-fuel or similar to be placed at a depth of not less than 20cm.

#### **Root Assessment and Observation**

The Project Arborist must be on site for observation and assessment when working within the Protected Root Zone of any Protected Trees. This shall include the PRZs of OS1-9.

#### **Tree Pruning**

Tree pruning required for access and egress, tree health and safety shall be performed by an International Society of Arboriculture (ISA) Certified Arborist without the use of climbing spurs. All tree pruning shall be performed in accordance with ANSI A-300 Standards for Tree Care Operations.

#### **Blasting**

The use of blasting for removal of rock may cause serious damage or death to nearby trees if not managed appropriately. CTS recommends the use of an expanding foam (e.g., Geobreak) to break the rock, if powder must be used, a low nitrogen and low velocity explosive should be utilized. Furthermore, we recommend the use of foam to strategically fracture the rock before using an excavator to breakup (using a hoe ram) and remove the rock. It is critical that ¾" plywood is used to protect (armour) retained trees and that heavy matting is used to dampen shockwaves if explosives are utilized. A removal plan for the rock will be developed with the blasting contractor and the Project Arborist. It is recommended that this plan is created prior to the blasting contractor providing a cost estimate.

#### **Tree Protection Plan**

- i. Provide a detailed sign specifying that tree protection measures are in place and will be followed during the project. Fines will be posted for malicious acts and can be placed on individuals who disregard the tree protection plan and its guidelines. Signs will be placed at each entrance of the project detailing what is expected when working in potentially high impact tree protection zones.
- ii. Provide tree protection fencing for all trees identified with protection requirement in this report. This fencing shall be four (4ft) feet in height and made of orange plastic. If required, header and footer boards will be used to secure the protective fencing.
- iii. Tree protection and root protection signs will be placed on the fencing. No entry will be allowed, unless specified by the Project Arborist and in their presence while on site.
- iv. Restrict vehicle traffic to designated access routes and travel lanes to avoid soil compaction and vegetation disturbances.
- v. Make all necessary precautions to prevent the storage of material, equipment, stockpiling of aggregate or excavated soils within tree protection areas. No dumping of fuels, oils or washing of concrete fluids will be allowed in tree protection zones.
- vi. Provide an onsite arborist when a risk of root damage, root cutting, or limb removal is required within the tree protection zone.
- vii. Avoid alterations to existing hydrological patterns to minimize vegetation impacts to the site.
- viii. The use of a Project Arborist is required to provide layout of tree protection zones. The Project Arborist(s) will provide pre-construction information to all parties involved with the project. The Project Arborist must be notified three (3) business days prior to construction activities in sensitive areas. The Project Arborist should be used to provide root and branch pruning when diameters are greater than 6cm.
- ix. At no time will tree protection zones be removed from the project unless approved by the Project Arborist

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

As well as creating the Tree Preservation Plan, the Project Arborist must be on site to supervise work within or immediately adjacent to the tree protection areas identified on the attached tree plan. This will include sidewalk, driveway and any improvements proposed for the municipal boulevard.

The Project Arborist will be present to supervise landscaping operations and activity within the tree protection areas.

At completion of the project, the Project Arborist will confirm that any tree protection or remediation related deficiencies have been addressed by the owner and building contractor. Once all deficiencies (if any) have been remedied, the Project Arborist shall prepare a letter to the City of Victoria confirming completion of the project.

#### **Excavation Process Plan**

- 1. Provide and schedule Project Arborist to assess site prior to construction.
- 2. Inventory and identify trees and hazards which could complicate excavation process.
- 3. Utilize hand tools and cutting equipment when large tree roots are anticipated.
- 4. Provide small, rubberized track excavation equipment which will reduce soil compaction.
- 5. Excavator operator must be well informed about dig site and goal to complete project.
- 6. Use shallow excavation sweeps across the site to establish a depth which roots can be easily identified. (3cm to 5cm in depth of soil for each sweep across the soil face)
- 7. Roots greater than 6cm in diameter shall be preserved and inspected by the Project Arborist. The project arborist will determine if roots should be pruned or cut.
- 8. All roots greater than 6cm in diameter should be identified and documented for project records.
- 9. Photos are highly recommended for documentation purposes.

Assessment of the site may expose further tree issues or conditions. If this occurs the project arborist will contact City Staff for further recommendations.

#### The following is a summary of key roles of the Project Arborist.

- Participation in a site meeting prior to the commencement of works adjacent to Tree Protection Zones to discuss the preservation plan and tree protection measures in place. It is the responsibility of the Client to schedule a pre-work site meeting. Five business day notice required, CTS 250-217-8370.
- The meeting will review the Tree Protection Plan, Tree Protection Zones and the specific measures required to protect the trees during the site preparation, construction and landscape phases of construction.
- The Project Arborist will inspect the Tree Protection Fencing and any other tree
  protection measures prior to a tree permit being issued by the City and prior to work
  commencing on site.
- The Project Arborist will be on site during the following work within or immediately adjacent to the Tree Protection Areas as indicated on the attached Site Plan:
  - demolition
  - grading
  - excavation
  - rock removal or blasting
  - trenching for underground services and utilities
  - preparation of grade for the proposed driveways and parking areas
  - site inspections to insure adherence to Tree Protection Measures

Although this site has been assessed trees in the landscape are dynamic and changes could occur. This report is a static representation of the site during our assessment.

Keegan Durovich 17/05/2024

Capital Tree Service Inc.

ISA Certified Arborist TRAQ PN-9272A

B.A.Sc.

Joel Creese (PN-8800AU) and Ray Praud (PN-9461A) have contributed to the preparation of this report as arboricultural consultant employees of CTS. This includes observations made during site visits and coauthored of this report.

#### **Capital Tree Service Inc. (CTS)**

#### CONDITIONS OF ASSESSMENT AGREEMENT

This Conditions of Assessment Agreement is made pursuant to and as a provision of CTS, providing tree assessment services as agreed to between the parties, the terms and substance of which are incorporated in and made a part of this Agreement (collectively the "Services").

Trees are living organisms that are subject to stress and conditions and which inherently impose some degree or level of risk. Unless a tree is removed, the risk cannot be eliminated entirely. Tree conditions may also change over time even if there is no external evidence or manifestation. In that CTS provides the Services at a point in time utilizing applicable standard industry practices, any conclusions and recommendations provided are relevant only to the facts and conditions at the time the Services are performed. Given that CTS cannot predict or otherwise determine subsequent developments, CTS will not be liable for any such developments, acts, or conditions that occur including, but not limited to, decay, deterioration, or damage from any cause, insect infestation, acts of god or nature or otherwise. Unless otherwise stated in writing, assessments are performed visually from the ground on the aboveground portions of the tree(s). However, the outward appearance of trees may conceal defects. Therefore, to the extent permitted by law, CTS does not make and expressly disclaims any warranties or representations of any kind, express or implied, with respect to completeness or accuracy of the information contained in the reports or findings resulting from the Services beyond that expressly contracted for by CTS in writing, including, but not limited to, performing diagnosis or identifying hazards or conditions not within the scope of the Services or not readily discoverable using the methods applied pursuant to applicable standard industry practices. Further, CTS' liability for any claim, damage or loss caused by or related to the Services shall be limited to the work expressly contracted for. In performing the Services, CTS may have reviewed publicly available or other third- party records or conducted interviews and has assumed the genuineness of such documents and statements. CTS disclaims any liability for errors, omissions, or inaccuracies resulting from or contained in any information obtained from any third- party or publicly available source.

Except as agreed to between the parties prior to the Services being performed, the reports and recommendations resulting from the Services may not be used by any other party or for any other purpose. The undersigned also agrees, to the extent permitted by law, to protect, indemnify, defend and hold CTS harmless from and against any and all claims, demands, actions, rights and causes of action of every kind and nature, including actions for contribution or indemnity, that may hereafter at any time be asserted against CTS or another party, including, but not limited to, bodily injury or death or property damage arising in any manner from or in any way related to any disclaimers or limitations in this Agreement.

By accepting or using the Services, the customer will be deemed to have agreed to the terms of this Agreement, even if it is not signed.

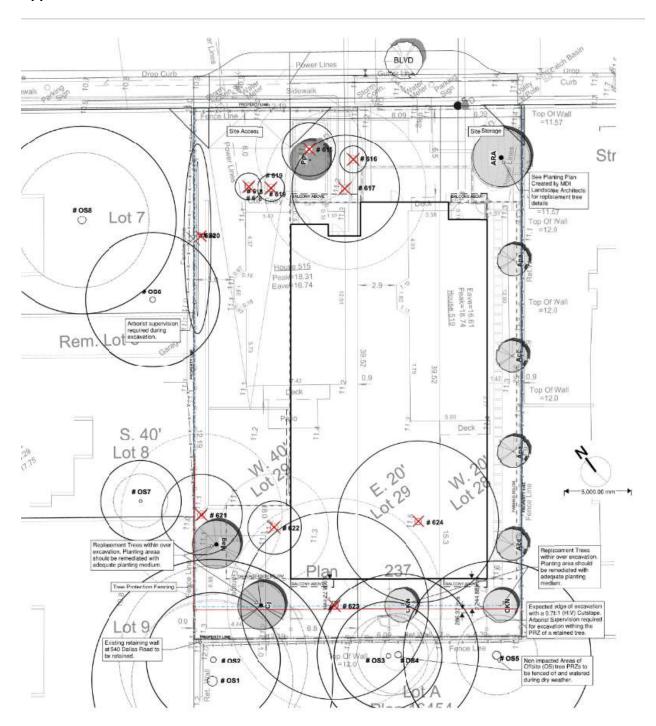
Acknowledged by:
Name of Customer: Casman Group of Companies, 515 and 519 Rithet Street, Victoria, BC V8V 1E4
Authorized Signature:
Date: 2024-05-17

### **Appendix 'A' Tree Inventory**

**Table 1. Tree Inventory for 515 and 519 Rithet Street.** Diameter at breast height (DBH) is measured in centimeters. Protected root zones (PRZ) are calculated using a 0.12 multiplier and represent the protected radius area around the tree in meters. Canopy spread is the radius of the dripline measured in meters.

	Capital Tree Service Inc.										
	Appendix A - Tree Inventory/Hazard Ratings Summary										
Locatio	Location: 515/519 Rithet Street, Victoria, BC V8V 1E4										
Dates and Conditions: August 17, 2021: 19C, Mix, 5km/h SE Breeze. April 28, 2022: 10C, Cloudy, 9km/h NE Breeze. April 3, 2023: 7C, Sunny, No Wind.											
Tag #	Species	DBH (cm)	PRZ (m)	Height (m)	Canopy (r) (m)	Health/ Structure	Impact Tolerance	Bylaw Protected	Action	Observations	Comments
615	Apple	12	2	3	4	F/F	Moderate	No	Remove	Non-protected.	Located within hardscaping footprint and over excavation.
616	Pyramid Cedar	<10	1	3	1	F/F	Good	No	Remove	15x stem. Hedgerow. Non- protected.	Located within over excavation.
617	Shore Pine	30	4	7	6	FP/F	Generally moderate- good	Yes	Remove		Located within hardscaping footprint and over excavation.
618	Yellow Cedar	10	1	3	1	FP/F	Good	No	Remove	Non-protected.	Located within parkade ramp footprint
619	Yellow Cedar	10	1	3	1	FP/F	Good	No	Remove	Non-protected.	Located within parkade ramp footprint
620	Cedar Mix	<15	2	3	2	FP/F	1	No	Remove	22xstem. Hedgerow. Non- protected.	Located within over excavation
621	Laurel	23	3	6	6	F/F	Generally Poor-Good	No	Remove	Non-protected.	Located within over excavation
622	Pear	13	2	3	4	F/F	Generally Moderate	No	Remove	Non-protected.	Located within over excavation
623	Plum	62	7	6	8	FP/F	Generally Poor-Good	Yes	Remove	5xstem 15,18,29,10,10cm. Stressed. Poor attachments.	Located within footprint.
624	Plum	51	6	3	6	FP/FP	Generally Poor-Good	Yes	Remove	4xstem 19,17,15.14cm	Located ~2.2m from edge building. With a 1.5:1 cut slope, this tree will be within over excavation.
OS1	Scots pine	73	9	13	6	F/P	Good	Yes	Retain	2x stem. 44,29cm. Growing above site grade behind retaining wall.	As long as the retaining wall is retained, impact to this tree is expected to be low. The retaining wall is positioned "0.6m from the edge of excavation (with a 1.5:1 cut slope). The tree is located "1.5m from the wall and "3.7m from the expected edge of excavation.
OS2	Scots pine	42	5	12	7	F/FP	Good	Yes	Retain	Growing above site grade behind retaining wall.	As long as the retaining wall is retained, impact to this tree is expected to be low. The retaining wall is positioned "0.6m from the edge of excavation (with a 1.5:1 cut slope). The tree is located "3m from the wall and "5m from the expected edge of excavation.
OS3	Mountain ash	35	4	10	3	F/FP	Moderate	Yes	Retain		Located ~1.8m from edge of excavation (with a 1.5:1 cut slope). Tree species is tolerant of root pruning and the tree is young and in fair health, increasing its resistance to impacts.
OS4	Katsura	48	6	11	3	F/FP	Poor- moderate	Yes	Retain		Located ~1.8m from edge of excavation (with a 1.5:1 cut slope). Tree species is sensitive to root disturbance. ~10% of CRZ impacted. Water regularly during dry weather.
OS5	Katsura	60	7	10	3	F/FP	Poor- moderate	Yes	Retain		Located ~1.8m from edge of excavation (with a 1.5:1 cut slope). Tree species is sensitive to root disturbance. ~10% of CRZ impacted. Water regularly during dry weather.
OS6	Cherry	est 42	5	4	5	FP/FP	Generally Poor-Good	Yes	Retain	Private tree.	Located ~3m from edge of excavation. Some impacts to PRZ and CRZ. Subgenus is typically tolerant to some degree. Area of impact is the existing driveway, which does not provide the best growing medium.
OS7	Laurel	est 21	3	5	2	F/F	Generally Poor-Good	No	Retain	Private tree.	Outside the zone of impact
OS8	Apple	est 60	7	6	5	F/F	Moderate	Yes	Retain	3x stem estimated 20cm each.	Outside the zone of impact
OS9	Cherry	33	4	-	6	F/F-P	Generally Poor-Good	Yes	Retain		Outside the zone of impact

# Appendix 'B' Photos and Site Plan



**Figure 1. Site Plan.** Red lines indicate Tree Protection Fencing. See Tree Management Plan for more detailed view. See Appendix D for Tree Protection Fencing specifications. Please note that offsite trees have not been located by a BC Land Surveyor.



Figure 2 Site Photo. 519 Rithet St. Frontage. NE corner.



Figure 3 Site Photo. 515 Rithet St. frontage. NW corner.



Figure 4 Site Photo. 515 Rithet St. back yard SE view.



Figure 5 Site Photo. 515 Rithet St. back yard SE view. Showing N.T 7 private Laurel.



Figure 6 Site Photo. 515 Rithet St. back yard S view.



Figure 7 Site Photo. 519 Rithet St. back yard N view.



Figure 8 Site Photo. 515 Rithet St. E view. Showing N.T 6 private Cherry behind the hedgerow.



Figure 9 Site Photo. 519 Rithet St. back yard S view.

# Appendix 'C' – Exploratory Excavation

Exploratory excavation was conducted May  $1^{st}$ , 2024 with the use of a Daylighting vehicle to determine the extent of root systems of trees OS1 – OS6. No significant roots were encountered during the excavation. Excavation depth was to clay or ~0.9m.



Figure 1 Excavation within PRZ of OS1 & OS2.

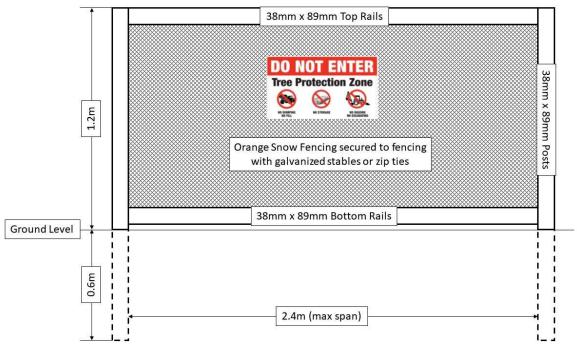


Figure 2 Excavation within PRZ of Trees OS3 - OS5



Figure 3 – Excavation within PRZ of Tree OS6

### **Appendix 'D' Tree Protection Fencing**



**Figure 1. Tree Protection Fencing.** In rocky areas, metal (t-posts or rebar) drilled into rick will be accepted instead of wooden posts.

Attach a sign with a minimum size of 407mm x 610mm (16"x24") with the following wording:

- a) DO NOT ENTER Tree Protection Zone (for retained trees) or;
- b) DO NOT ENTER Future Tree Planting Zone (for tree planting sites).

These signs must be affixed on every fence face or at least every 10 linear meters.