ATTACHMENT E



Capital Tree Service Inc.

Arborist Report

737 Belton Ave, Victoria, BC

April 21, 2021

Prepared for:

Joanne & Quinn Martin

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 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 Denise Kors of Kors Development Services Inc. on behalf of Joanne & Quinn Martin (Client), regarding the construction of a Single Family Dwelling (SFD) at 737 Belton Ave (the Site) in the City of Victoria. The Client indicated they 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 the findings in an Arborist Report Form including a TPP.

Under the current proposal no trees will require removal. A tree inventory is included as **'Table 1'** of this report. Photographs and a Site Plan are included as **Appendix 'A'** of this report.

Methodology

The Site was entered on March 5th, 2021 by CTS for the purpose of conducting tree assessments and collecting inventory. Joel Creese, consulting arborist and representative of CTS, provided the BVTA for the site. The weather that day was sunny, 11 degrees with a 14 km/hr WSW breeze.

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 **'Table 1'** of this report. Photographs and a Site Plan are included as **Appendix 'A'** of this report.

During the assessment, a total of three (3) trees were observed – two (2) of which are City owned and located on the boulevard and one (1) is located on a neighboring property. Trees referenced in **'Table 1'** have not been tagged.

Protected Root Zone calculations are based on the ISA recommended one foot for each one inch of trunk diameter (0.3m for each 2.5 cm). 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 and dwelling in a fully developed urban neighborhood was observed. The current dwelling will be demolished to allow for construction of the new SFD.

Viable rooting area for the two (2) City owned Red maples has been significantly restricted by the paved roadway, sidewalk and hardscape. Construction activities will have a **'Low'** impact on these and the Spruce located in the neighboring yard.

Tree Dynamics

Capital Tree Service Inc. Appendix A - Tree Inventory/Hazard ratings summary

Date: 2021-03-05

Location: 737 Belton Ave, Victoria, BC

<u>1 of 1</u>

Conditions: Sunny, 11 degrees, 14 km/hr WSW breeze

| TAG | Spec. | DBH | Ht | PRZ | Cond. | Reta | Rem | Comments/Recommendations |
|-------|----------|---------|-----|-----|-------|------|-----|---|
| # | | (cm) | (m) | (m) | G,F,P | in | ove | |
| N/T 1 | R. maple | 51 | 14 | 6 | F/F | x | | Utility pruned. Heavy sucker growth. City tree. Retain and protect. |
| N/T 2 | R. maple | 51 | 15 | 6 | F/F | x | | Minor deadwood. City tree. Retain and protect. |
| N/T 3 | Spruce | 27 est. | 8 | 3 | F/F | x | | Full canopy. Good colour. Private tree. Retain and protect. |

Observed Tree Impacts

- Three (3) trees exist within the Zone of Impact all of which will be retained and protected
- N/T 1 & N/T 2 are located on the city owned boulevard
- **N/T 3** is located on the neighboring property to the North
- CTS has reviewed the civil servicing plan supplied by Islander Engineering.
- Construction impact to the retained trees will be 'Low'
- Project Arborist **must** be on site for waterline excavation
- Assessment of the site may expose further tree issues or conditions. If this occurs the project arborist will contact City staff for further recommendations.
- Red maple relative tolerance to construction moderate-good*
- Spruce relative tolerance to construction generally moderate-good*
- N/T = No Tag

*Trees and Development, Matheny and Clark

Common and Latin Names

Red maple – Acer rubrum

Spruce – Picea spp.

Tree Condition Ratings Summary

Good - A tree specimen which is exempt defects, branch dieback, moderate insect and fungal identification. This tree has evenly distributed branching, trunk development and flare. The root zone is undisturbed, leaf, bud and flower production and elongation are normal for its distribution.

Fair - A tree specimen which has minor defects, branch dieback, previous limb failure, identification of cavities and insect, or fungal identification. This tree has multiple (2-3) primary stem attachments, previous utility pruning, callus growth and poor wound wood development. Minor root girdling, soil heave and identifiable mechanical damage to the root flare or root zone.

Poor- A tree specimen where 30-40% of the canopy is identifiably dead, large dead primary branching, limited leaf production, bud development and stem elongation. Limb loss or failure, and heavy storm damage leading to uneven weight distribution. Large pockets of decay, multiple cavities, heavy insect and fungal infection. Root crown damage or mechanical severing of roots. Root plate shifting, heavy lean and movement of soil.

Dead- Tree has been observed to be dead with no leaf, foliar and bud development. No stump sprouts and root suckers are present.

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 District 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. Joel Creese 250-217-8370 – Three business days notice required.

Landing/Storage Area

All construction materials will be stored in areas identified as 'Landing\Storage' in site plans. These locations are indicated on the Site Plan.

<u>Access</u>

A single point of access shall be utilized. This shall be in the location marked 'Access' on the Site Plan. 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 prejob meeting with the Project Arborist to discuss Tree Protection Plans, Zones and requirements.

Three business days notice required. Joel Creese, Project Arborist. 250-217-8370

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 trees:

- N/T 1 51cm DBH City owned Red maple
- N/T 2 51cm DBH City owned Red maple
- N/T 3 27cm DBH Spruce on neighboring property to the North

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. Should blasting become necessary the Project Arborist must be notified. 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 72hrs 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

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.

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.

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. *72 hrs 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 District 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.

Joel Creese

Joel Creese, 2021-04-21

Capital Tree Service Inc.

ISA Certified Arborist, TRAQ and Utility Specialist PN-8800AU BC Danger Tree Risk Assessor P-2498 CUA-00010-TT-14

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.

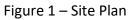
Acknowledged by:

Name of Customer: Joanne & Quinn Martin, 737 Belton Ave, Victoria, BC

Authorized Signature: _____

Date: 2021-04-21

Appendix 'A' Photos and Site Plan



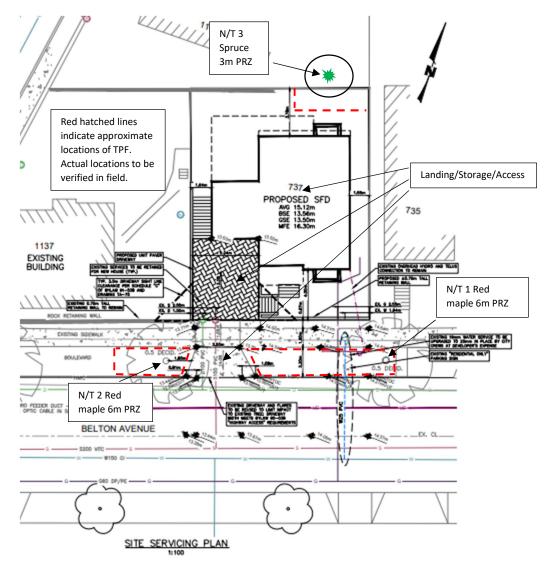


Figure 2a – Belton Ave Frontage



Figure 2b – Belton Ave Frontage



Figure 3 – N/T 3 Privately owned Spruce

