

Arborist Report & TPP – 330 Irving Rd., City of Victoria – White Birch @ 332 Irving Rd

April 12, 2018



***SouthShore Forest Consultants***

## **Arborist Report**

For

**Motion Construction Ltd.**

Site:

330 Irving Road  
Victoria, BC V8S 4A2

April 12, 2018

Prepared for:

Alan Stewart

alan@motionconstruction.com

Prepared by:

***SouthShore Forest Consultants***

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Work Safe BC # 968408

Insurance/ Seafirst Brentwood (CFC Underwriting Ltd – 5 Million Dollar Liability- Policy PSG03515712)

Incorporation # BC1069996 Ltd.

**RE: Tree Assessment & Tree Protection Plan – (1) White Birch Species  
(*Betula* sp.)****Executive Summary**

ShoreShore Forest Consultants was retained by our client to provide a Basis Visual Tree Assessment (VTA) on a white birch (*Betula* sp.) sited on a neighbouring property. The tree is privately owned and scheduled to be retained. The tree is protected by a property line fence. Branching and roots are within the edge of the development zone. The tree is considered to be outside the primary development area of this site. The Tree is protected under the City of Victoria's tree preservation and protection policy. Our assessment has determined that the tree will require a Tree Protection Plan (TPP). Tree protection fencing will be required in this case. The existing fence is a suitable barrier, but additional protective fencing will be recommended to reduce the impacts of further soil compaction. Pruning to elevate low hanging limbs will be required. Assessment and direction by the Project Arborist is recommended. Root protection, pruning and removal must be performed by the Project Arborist. Under the current plan the client has indicated that a reduction in grade must occur to install the garage. A preliminary assessment has indicated that the impacts to the birch trees PRZ will be minor to insignificant. The birch tree is a magnificent tree and the clients are dedicated to the protection and preservation of this tree.

**Background/Scope of Work**

SouthShore Forest Consultants was contacted by Alan Stewart a Development Manager with Motion Construction. Alan had provided us with information concerning a residential lot in which they were planning on redeveloping. Alan Stewart and Daniel Boot, their Design Architect are concerned about a large white birch tree positioned on the neighbouring property at 332 Irving Road. Each have indicated that the tree is protected under the current Municipal Tree Preservation Bylaw and believes that a Tree Protection Plan will be required and put in place prior to development. Alan requested that representatives of SouthShore Forest Consultants meet on site and assess the tree. Michael Butcher, a consulting arborist agreed to meet on site and provide a preliminary assessment.

On April 10, 2018 the initial site assessment took place. Michael Butcher a Consulting Arborist with SouthShore Forest Consultants met with Alan and Daniel on site. Together each reviewed the site and proposed construction plans. Measurements and photographs were taken. The tree was considered to carry a “Risk Rating” of *LOW* during the assessment period. Post construction assessment should be considered following completion of the project.

## Tree Dynamics

Species:	White birch species
DSH:	114cm - Diameter Standard Height – Measured at 1.4 m above grade.
Tree Height:	23m
Crwn Sprd:	25m
Live Crwn RT:	95% - Live Crown Ratio: percent of live stem, leaf, bud vs. dead.
Condition Rating:	F/F - Extremely large “Specimen” tree. <i>Calendar Tree</i>
Health:	(Fair) – Minimal dead branching, normal bud and branch development.
Structure:	(Fair) – Scaffold branching exhibiting reactionary wood development.
Failure: Possible	- Scaffold limb weight – tension and torsion from high wind events.
Impact: Medium	- Existing house & proposed house are potential “Targets”.
Failure & Impact: Unlikely	- Unlikely over the next three (3) years when it was assessed.
Consequences: Significant	- Hitting Target, ie... the significant damage to house
Risk Rating: LOW	- Low probability that this could occur over three (3) years.

## Methodology

On April 10, 2018 the site was assessed by Bill Plant a representative of SouthShore Forest Consultants. The weather was overcast and dry with a high of 9+/- Celcius. The landscape was moist from recent precipitation.

The white birch was visually assessed only, and no forms of major diagnostic tools or invasive techniques were used. All measurements were made with the use of a standard metal forestry tape, mallet & probe. Measurements and observations were recorded with the intent to provide a static representation of the tree and its environment. The tree was not tagged for identification purposes.

Primary goal of the site assessment was to provide the client with a tree protection protocol utilized in reducing soil and root compaction.

## Observations/Discussion

The first observation of note regarding the birch tree is its size and crown spread. The tree is a magnificent specimen. A rather large tree, the birch tree is located in the neighbouring property addresses as 332 Irving Road. The trees appeared to be in “Fair” condition. The branch positioning, size and spread appeared to be normal for a tree of this size.

The birch tree was observed to have a wide crown spread which supported large extended scaffold branching. The upper canopy of the tree appeared to be multi-forked and stable. No signs of excessive bark inclusions, decay formations or cavities in the tree were observed. The bud expansion and seed set appeared to be normal. The root crown and surface area above the root plate appeared to be normal on either side of the property line.

During the assessment no form of insect or pathogen attack could be identified. The tree appeared to be stable in the environment during the assessment.

An existing footprint from a structural foundation was observed on the client’s side of the property. The foundation was observed to be flat with no indication of root expansion or heave. We believe that small, secondary feeder root types will be found below grade in this region of the site.

## Tree Protection Plan (TTP)

- Provide approve fencing detail approved by the City of Victoria.
- Install Tree Protection Fencing at a minimum of 3m from the outside of the existing fence along the eastern property line. Keep this fence in place and provide the required improvements to this section of the site in the final stages of the project.
- Confirm that fencing is installed to Municipal specifications with Project Arborist.
- Fencing can be constructed to form a square right angle or radius. The radius will tend to follow the extension of the trees canopy (drip-line).
- Provide pruning to remove 3 to 4 limbs from the tree which hang in and over the proposed project area. Utilize a qualified arborist who is familiar with ANSI A300 pruning standards for the Tree Care Industry. Limb reduction pruning and standard elevation pruning can be utilized to achieve clearances of 4 to metres above grade.
- Utilize small rubberized track type excavators while within the tree protected root zone.
- Provide Project arborist to provide assessment and direction when excavation occurs within the birch trees Protected Root Zone.

## Conclusions

- The white birch tree must be protected during the project.
- Tree Protection Mitigation should be utilized to minimize soil and root compaction.
- The white birch tree is considered to be of “Specimen Size”.
- Tree protection fencing shall be installed to reduce soil and root compaction. The tree protection fencing shall remain in place until the Project Arborist approves its removal to complete final stages of project.
- The Project Arborist shall be utilized to assess the excavation event for the proposed garage. A one (1) metre reduction in grade has been proposed. This may require pruning, removal and preservation techniques utilized to reduce impacts to tree root loss. Please call the Project arborist 72 hours prior to excavation (250.893.9056).
- The white birch tree has been assessed to have a “Low” hazard rating in the current landscape.

## Recommendations

- ✚ Provide Tree Protection Plan (TPP) for the neighbouring white birch.
- ✚ Provide pre and post construction inspection of protection fencing construction.
- ✚ Provide post development tree assessment for the white birch.
- ✚ Utilize the Project Arborist for assessment and technical advice/services.

Michael Butcher  
SouthShore Forest Consultants  
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## ATTACHMENTS

- Appendix A – Tree Protection Construction Photo

### Arborist Disclosure Statement:

Arborist are tree specialists who use their education, training and experience to examine trees, recommend measures to enhance the beauty and health of trees, and attempt to reduce the risks.

Arborist cannot detect every condition that could possibly lead to structural failure of a tree.

Trees are living organisms that fail in ways we do not fully understand. Conditions are often hidden within trees and below the ground.

Arborist cannot guarantee that the tree will be healthy and safe under all circumstances, or for a specific period of time. Trees are dynamic specimens, not static. Changes in conditions including the environment are unknown.

Remedial treatments cannot be guaranteed.

Trees can be managed, but they cannot be controlled. The only way to eliminate all risk is to eliminate all trees.

## Tree Assessment Condition Rating

- 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.



Attachment “A”

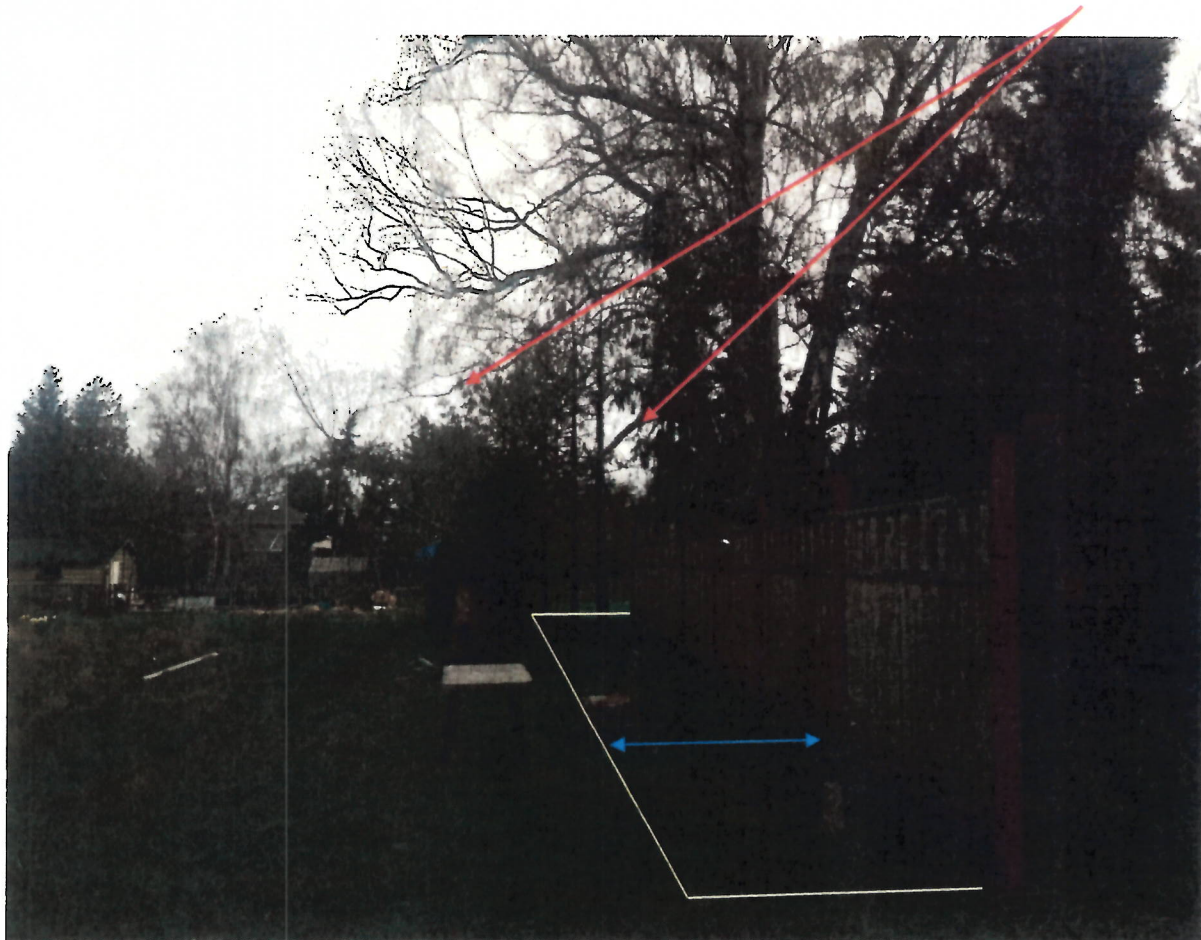
Photo #1 – Fencing Construction



In this photo you can observed a typical Tree Protection Fence. This type of construction is considered to be square with right angles.

Photo # 2 – Property Line Fence  
White Birch

You can see the birch trees position on the neighbouring property. A few of the limbs are excessively long and overhang the client property. Pruning must occur to remove low limbs which may be damaged during the project.



In this photo you can see the blue arrow line which indicates the three (3) metre protection distance required from the existing fence. This fencing shall be installed and kept in place until the final stages of the project. Graphics are not to scale.



### **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. Use the City of Victoria tree protection specifications.**
- 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 presents 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 arborist must be notified 24hrs 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.**