



Talbot Mackenzie & Associates

Consulting Arborists

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May 31, 2019

Jenny Farkas
1-1033 Queens Ave
Victoria BC V8T 1M7

Subject: 1029 Queens Ave – Lawson Cypress trees and Proposed Carriage House

The purpose of this letter is to summarize our opinion regarding the viability of retaining a row of 6 Lawson Cypress trees (*Chamaecyparis lawsoniana*) and a 14cm DBH Horse Chestnut tree (*Aesculus hippocastanum*) near the west property line at 1029 Queens Ave. The trees are located less than one metre from the proposed carriage house foundation. The plans we have assessed are attached to this report. None of the trees are bylaw protected. The Lawson Cypress trees are multi-stemmed trees with the largest stem diameter from each tree measuring between 15cm and 30cm at DBH.

At the time of our site visit, the trees appeared to be in fair to good health. There is a retaining wall along the west property line, which has likely caused a significant amount of roots to grow in the direction of the proposed carriage house.

This species of tree is highly susceptible to root rot caused by the micro-organism *Phytophthora lateralis*, which has led to the decline of Lawson Cypress trees in the Pacific Northwest and in the Victoria area. Root pruning and soil disturbance around the root systems of the trees increases the chances of infection.

A conventional continuous foundation would clearly result in the removal of the trees; with 1m of working room for forming and drain installation, it would result in excavation up to the trunks of the trees. If retention were to be attempted, extreme measures would be required to alter the foundation design to “bridge” over the root systems of the trees through cantilevering and/or installing beams between the foundation footings. The main floor elevation (21.1m) would also have to be raised up above the existing grade (21.08) in order to allow enough space for the beams or slabs.

In our professional opinion, considering the extreme measures that would have to be taken, the susceptibility of the tree species to infection and that any soil disturbance will leave the trees more susceptible to infection, a more suitable option would be to remove the trees and put the expenditure of resources into replanting with a large growing hedge or trees from high-quality nursery stock.

In regards to a suitable species for replacement, if a tall fast-growing hedge is desired, an English or Portuguese Laurel hedge could be planted. Another popular hedge choice that would give more horizontal space and less pruning maintenance is a columnar cedar hedge. If maximum light in the winter is desired, we would recommend a deciduous species of trees or hedge. If trees are desired, with the retaining wall to the west and the foundation of the carriage house to the east, this leaves a limited soil volume available for future root growth in a planting bed approximately 2.7m wide (with a pathway in the sideyard as well). Therefore, to avoid potential foundation or wall damage as well as for the long-term health of the tree and to allow enough room for a pathway, we would recommend a smaller growing species be planted. Some examples include:

- Oakleaf Mountain Ash (*Sorbus x hybrida* 'Fastigiata')
- Amur Maple (*Acer ginnala*)
- Persian Ironwood (*Parrotia persica*)
- Hawthorn species (*Crataegus*)





Please do not hesitate to call us at 250-479-8733 should you have any questions.

Thank you,

A handwritten signature in cursive script, appearing to read "Michael Marcucci".

Michael Marcucci
ISA Certified # ON-1943A
TRAQ – Qualified

Talbot Mackenzie & Associates
ISA Certified & Consulting Arborists

Disclosure Statement

Arborists are professionals who examine trees and use their training, knowledge and experience to recommend techniques and procedures that will improve the health and structure of individual trees or group of trees, or to mitigate associated risks. Trees are living organisms, whose health and structure change, and are influenced by age, continued growth, climate, weather conditions, and insect and disease pathogens. Indicators of structural weakness and disease are often hidden within the tree structure or beneath the ground. It is not possible for an arborist to identify every flaw or condition that could result in failure nor can he/she guarantee that the tree will remain healthy and free of risk. Remedial care and mitigation measures recommended are based on the visible and detectable indicators present at the time of the examination and cannot be guaranteed to alleviate all symptoms or to mitigate all risk posed.

1029 QUEENS AVENUE VICTORIA, B.C.

1002 Quadra St, West Victoria, B.C. Canada
V8M 1G7
250.683.1127
info@adaptdesign.ca

Property Information

Project Type: New Carriage House
Owner: Fencos
Address: 1029 Queens Avenue
Legal Description: Lot 17, Block 6, Section 3,
Victoria District, Plan 62

Zoning: Site Specific

Setbacks:

Carriage House:	15.6m
Rear	2.5m
Side	6.7m
Height	5.7m
Front	0.0m
Existing SFD	8.16
Rear	6.5m
Side	1.05m
Front	16.7m
Existing Garage	5.8m
Rear	1.65m
Side	5.8m

Floor Area

Carriage House	516 SF
Main Floor	255 SF
Garage Floor	557 SF
Upper Floor	1130 SF
Total	1120 SF
Existing SFD	1120 SF
Lower Floor	492 SF
Main Floor	492 SF
Upper Floor	371 SF
Existing Garage	7219 SF
Lot Area	2143 SF
Combined Building Footprint	29.7%
Lot Coverage	29.7%
Main Floor Elevation	21.10m
Average Grade	21.1m

Applicable Codes

-BC Building Code Current Edition (2018)

Energy

Compliance with BCBC Step Code
Requirements applicable to this project: Level 1

Ventilation

See compliance report

BCBC 9.32

ISSUED

SITE PLAN

A-002

Proposed residence

GRADE POINTS

A = 20.47m
B = 20.54m
C = 21.10m
D = 21.09m

AVERAGE OF POINTS

(20.47+20.54) / 2 = 20.505
(20.54+21.10) / 2 = 20.82
(21.10+21.09) / 2 = 21.095

DISTANCE BETWEEN GRADE POINTS

Points A&B = 4.18m
Points B&C = 14.19m
Points C&D = 14.19m
Points D&A = 14.19m

TOTALS

= 85.71
= 295.44
= 88.16
= 294.80
= 764.11

GRADE CALCULATION

764.11 / 36.74 = 20.80

Existing building No. 1029

GRADE POINTS

E1 = 20.67m
B1 = 20.18m
G1 = 20.22m
D1 = 20.15m

AVERAGE OF POINTS

(20.20+20.19) / 2 = 20.195
(20.18+20.22) / 2 = 20.20
(20.22+20.15) / 2 = 20.185
(20.15+20.67) / 2 = 20.41
(20.67+20.67) / 2 = 20.67
(20.57+20.45) / 2 = 20.51
(20.45+20.41) / 2 = 20.43
(20.41+20.20) / 2 = 20.305

DISTANCE BETWEEN GRADE POINTS

Points A1&B1 = 4.97m
Points B1&C1 = 0.50m
Points C1&D1 = 3.04m
Points D1&E1 = 13.36m
Points E1&F1 = 272.68m
Points F1&G1 = 51.76m
Points G1&H1 = 24.82m
Points H1&A1 = 1.21m
Points A1&H1 = 5.50m
Points H1&A1 = 11.69m

TOTALS

= 100.37
= 10.10
= 51.36
= 272.68
= 51.76
= 24.82
= 12.37
= 237.37
= 870.83

GRADE CALCULATION

870.83 / 42.78 = 20.37

Existing Garage

GRADE POINTS

A2 = 20.70m
B2 = 20.64m
C2 = 20.53m
D2 = 20.84m

AVERAGE OF POINTS

(20.76+20.64) / 2 = 20.70
(20.64+20.53) / 2 = 20.585
(20.53+20.84) / 2 = 20.685
(20.84+20.76) / 2 = 20.80

DISTANCE BETWEEN GRADE POINTS

Points A2&B2 = 6.20m
Points B2&C2 = 5.59m
Points C2&D2 = 6.20m
Points D2&A2 = 5.59m

TOTALS

= 128.34
= 116.19
= 128.49
= 116.27
= 490.29

GRADE CALCULATION

490.29 / 25.58 = 20.73

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