



TALBOT MACKENZIE & ASSOCIATES

CONSULTING ARBORISTS

**White Road Early Learning Center,
7420 Veyaness Road, Central Saanich**

**Construction Impact Assessment &
Tree Preservation Plan**

PREPARED FOR: School District No. 63
2125 Keating Cross Road
Saanichton, BC
V8M 2A5

PREPARED BY: Talbot, Mackenzie & Associates
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Tree Risk Assessment Qualified

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1. INTRODUCTION

Talbot Mackenzie & Associates was asked to complete a tree inventory and impact assessment for the trees at the following proposed project:

Site:	7420 Veyaness Road
Municipality	The Corporation of the District of Central Saanich
Client Name:	School District No. 63
Dates of Site Visit:	December 31, 2020, January 07, 2021, January 20, 2021
Site Conditions:	1 large rural lot. No ongoing construction activity. Relatively flat topography, a closed tree canopy covers the lot.
Weather During Site Visit:	Overcast and light rain

The purpose of this report is to address the tree inventory and arborist report components of the Corporation of the District of Central Saanich, Bylaw No. 2020. The impact assessment section of this report (section 8), is based on plans reviewed to date, including the Architectural site, floor and elevation plans (December 18, 2020) - Prepared by Bradley Shuya Architect Inc.. At this time we have not reviewed a civil servicing or grading plan, or a detailed landscape plan.

2. TREE INVENTORY METHODOLOGY

Prior to our site visit, we were provided with surveyed tree locations from the project surveyor (Wey Mayenburg Land Surveying Inc.). For the purpose of this report, the size, health, and structural condition of trees was documented. For ease of identification in the field, numerated metal tags were attached to the lower trunks of onsite bylaw protected trees. Non bylaw protected trees that were surveyed, were not tagged (we identified them as non 1 – non 71 in Table 1) Trees located on neighbouring properties or in areas where access was restricted, were not tagged. Each tree was visually examined on a limited visual assessment basis (level 1), in accordance with Tree Risk Assessment Qualification (TRAQ) methods (Dunster *et al.* 2017) and ISA Best Management Practices.

3. EXECUTIVE SUMMARY

Based on review of the architectural site plan provided, 5 bylaw protected size onsite trees, 15 City owned trees, and 26 non bylaw protected size onsite trees will require removal due to impacts associated with construction of the proposed onsite childcare studio buildings, or installations of underground servicing, stormwater management or hard surface areas (see section 8.0 and *Table 1* for removal rationale for these trees. The final retention or removal count may increase or decrease at the detailed design stage, once the frontage improvement requirements, underground utility locations and site grading requirements are finalized.

43 bylaw protected onsite trees, 104 City owned trees and 42 non bylaw protected onsite trees are possible for retention, provided that the final site grading requirements are such that significant grade changes are not required within their critical root zones. An additional 6 trees (4 bylaw protected and 2 non-bylaw protected) are recommended for removal or modification – due to pre-existing health or structural impairments – for risk mitigation (see [table 2](#)).

4. TREE INVENTORY DEFINITIONS

Tag: Tree identification number on a metal tag attached to tree with nail or wire, generally at eye level. Trees on municipal or neighboring properties are not tagged.

NT: No tag due to inaccessibility or ownership by municipality or neighbour.

DBH: Diameter at breast height – diameter of trunk, measured in centimetres at 1.4m above ground level. For trees on a slope, it is taken at the average point between the high and low side of the slope.

* Measured over ivy

~ Approximate due to inaccessibility or on neighbouring property

Dripline: Indicates the radius of the crown spread measured in metres to the dripline of the longest limbs.

Relative Tolerance Rating: Relative tolerance of the tree species to construction related impacts such as root pruning, crown pruning, soil compaction, hydrology changes, grade changes, and other soil disturbance. This rating does not take into account individual tree characteristics, such as health and vigour. Three ratings are assigned based on our knowledge and experience with the tree species: Poor (P), Moderate (M) or Good (G).

Critical Root Zone: A calculated radial measurement in metres from the trunk of the tree. It is the optimal size of tree protection zone and is calculated by multiplying the DBH of the tree by 10, 12 or 15 depending on the tree's Relative Tolerance Rating. This methodology is based on the methodology used by Nelda Matheny and James R. Clark in their book "Trees and Development: A Technical Guide to Preservation of Trees During Land Development."

- 15 x DBH = Poor Tolerance of Construction
- 12 x DBH = Moderate
- 10 x DBH = Good

To calculate the critical root zone, the DBH of multiple stems is considered the sum of 100% of the diameter of the largest stem and 60% of the diameter of the next two largest stems. It should be noted that these measures are solely mathematical calculations that do not consider factors such

as restricted root growth, limited soil volumes, age, crown spread, health, or structure (such as a lean).

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 very little pruning

Suitability ratings are described as follows:

Rating: Suitable.

- A tree with no visible or minor health or structural defects, is tolerant to changes to the growing environment and is a possible candidate for retention provided that the critical root zone can be adequately protected.

Rating: Conditional.

- A tree with good health but is a species with a poor tolerance to changes to its growing environment or has a structural defect(s) that would require that certain measures be implemented, in order to consider it suitable for retention (ie. retain with other codominant tree(s), structural pruning, mulching, supplementary watering, etc.)

Rating: Unsuitable.

- A tree with poor health, a major structural defect (that cannot be mitigated using ANSI A300 standards), or a species with a poor tolerance to construction impacts, and unlikely to survive long term (in the context of the proposed land use changes).

Retention Status:

- Remove - Not possible to retain given proposed construction plans
- Retain - It is possible to retain this tree in the long-term given the proposed plans and information available. This is assuming our recommended mitigation measures are followed
- Retain * - See report for more information regarding potential impacts

Table 1. Tree Inventory

Prev. Tag #	Tag or ID #	Surveyed ?	Location (On, Off, Shared, City)	Bylaw protected ?	Name		dbh (cm)	Ht (m)	Critical root zone radius (m)	Dripline radius (m)	Condition		Relative tolerance	Retention Suitability (onsite trees)	General field observations/remarks	Tree retention comments	Retention status
					Common	Botanical					Health	Structural					
886	851	No	City	Yes	Douglas-fir	<i>Pseudotsuga menziesii</i>	61	25	7.3	5	Fair/good	Fair	Moderate		Codominant crown with adjacent Douglas-firs, pitch flow on South side of lower trunk.	Will experience increased wind exposure by the proposed removal of Douglas-fir tag# 860 *Project arborist to supervise all excavation and fill placement required within the critical root zone.	Retain*
887	852	No	City	Yes	Douglas-fir	<i>Pseudotsuga menziesii</i>	77	25	9.2	7	Fair/good	Fair	Moderate		Codominant crown with adjacent Douglas-firs - moderate trunk taper.	Will experience increased wind exposure by the proposed removal of Douglas-fir tag# 860 *Project arborist to supervise all excavation and fill placement required within the critical root zone.	Retain*
888	853	No	City	Yes	Douglas-fir	<i>Pseudotsuga menziesii</i>	46	15	5.5	4	Fair	Poor	Moderate		Suppressed by adjacent firs - poor trunk taper, topped historically multiple times, codominant leader removed historically at 4m above grade - with associated decay and pitch flow, codominant leaders form at 8m above grade - included union.	Will experience increased wind exposure by the proposed removal of Douglas-fir tag# 860 *Project arborist to supervise all excavation and fill placement required within the critical root zone.	Retain*
	854	No	City	Yes	Western redcedar	<i>Thuja plicata</i>	16	6	2.4	2	Poor	Fair/poor	Poor		Suppressed by 888 - poor trunk taper, declining health - 60% lcr.	Will experience increased wind exposure by the proposed removal of Douglas-fir tag# 860 *Project arborist to supervise all excavation and fill placement required within the critical root zone.	Retain*
	855	Yes	City	Yes	Western redcedar	<i>Thuja plicata</i>	20	8	3.0	2	Poor	Fair/poor	Poor		Suppressed by 888 - poor trunk taper, declining health - 60% lcr.	Will experience increased wind exposure by the proposed removal of Douglas-fir tag# 860 *Project arborist to supervise all excavation and fill placement required within the critical root zone.	Retain*
	856	No	City	Yes	Western redcedar	<i>Thuja plicata</i>	15	8	2.3	2	Poor	Fair/poor	Poor		Suppressed by 888 - poor trunk taper, declining health - 60% lcr.	Will experience increased wind exposure by the proposed removal of Douglas-fir tag# 860 *Project arborist to supervise all excavation and fill placement required within the critical root zone.	Retain*
	857	Yes	City	Yes	Western redcedar	<i>Thuja plicata</i>	13,19	8	4.0	2	Poor	Poor	Poor		Suppressed by 888 - poor trunk taper, declining health - 60% lcr, 13cm dead stem forms at .3m above grade.	Will experience increased wind exposure by the proposed removal of Douglas-fir tag# 860 *Project arborist to supervise all excavation and fill placement required within the critical root zone.	Retain*

Prev. Tag #	Tag or ID #	Surveyed ?	Location (On, Off, Shared, City)	Bylaw protected ?	Name		dbh (cm)	Ht (m)	Critical root zone radius (m)	Dripline radius (m)	Condition		Relative tolerance	Retention Suitability (onsite trees)	General field observations/remarks	Tree retention comments	Retention status
					Common	Botanical					Health	Structural					
	858	No	City	Yes	Western redcedar	<i>Thuja plicata</i>	13	4	2.0	2	Fair/poor	Fair/poor	Poor		Suppressed - poor trunk taper, asymmetric crown on West side due to shading.	Will experience increased wind exposure by the proposed removal of Douglas-fir tag# 860 *Project arborist to supervise all excavation and fill placement required within the critical root zone.	Retain*
	859	Yes	City	Yes	Western redcedar	<i>Thuja plicata</i>	35,52,25,37	20	14	5	Fair/poor	Fair/poor	Poor		Multiple stems form at base, narrow angles of attachment at stem unions, health stress - small dead tops, suppressed by Douglas-fir 860 - asymmetric crown on West side due to shading.	Located within the footprint of the proposed entrance/exit driveway.	Remove
	860	Yes	City	Yes	Douglas-fir	<i>Pseudotsuga menziesii</i>	125	25	15	12	Fair	Good	Moderate		Located at edge of grove - good trunk taper, deadwood in lower crown, early indicators of health stress - small foliage size in upper crown.	Located within the footprint of the proposed entrance/exit driveway.	Remove
	861	No	City	Yes	Pacific dogwood	<i>Cornus nuttallii</i>	3	3	0.4	1	Fair	Fair/poor	Moderate		Suppressed by Douglas-fir 860 - stunted growth form.	Located within the footprint of the proposed entrance/exit driveway.	Remove
	862	No	City	Yes	Pacific dogwood	<i>Cornus nuttallii</i>	6	4	0.7	2	Fair	Fair/poor	Moderate		Suppressed by Douglas-fir 860 - stunted growth form.	Located within the footprint of the proposed entrance/exit driveway.	Remove
	863	Yes	City	Yes	Douglas-fir	<i>Pseudotsuga menziesii</i>	37	15	4.4	6	Fair	Poor	Moderate		Suppressed by Douglas-for 865 - poor trunk taper, trunk deflected at 1m above grade, appears to have lost top historically at 10m above grade - new leader forms at failure location.	Will be impacted by excavation required to construct the proposed entrance/exit driveway.	Remove
	864	No	City	Yes	Western redcedar	<i>Thuja plicata</i>	22	10	3.3	4	Fair	Fair/poor	Poor		Suppressed by Douglas-fir 865 - poor trunk taper.	Will experience increased wind exposure by the proposed removal of Douglas-fir tag# 863 *Project arborist to supervise all excavation and fill placement required within the critical root zone.	Retain*
	865	Yes	City	Yes	Douglas-fir	<i>Pseudotsuga menziesii</i>	78	25	9.4	8	Fair/good	Fair/good	Moderate		Codominant crown with Douglas-fir 860 and Douglas-fir 867 - moderate trunk taper, deadwood in lower crown.	Will experience increased wind exposure by the proposed removal of Douglas-fir tag# 863 entrance/exit driveway proposed within the crz. *Project arborist to supervise all excavation and fill placement required within the critical root zone. Deadwood prune prior to project commencement.	Retain*
	866	Yes	City	Yes	Western redcedar	<i>Thuja plicata</i>	24	15	3.6	2	Poor	Fair/poor	Poor		Suppressed by Douglas-fir 867 - poor trunk taper, declining health - 50%lcr.	*Project arborist to supervise all excavation and fill placement required within the critical root zone. Monitor health condition.	Retain*

Prev. Tag #	Tag or ID #	Surveyed ?	Location (On, Off, Shared, City)	Bylaw protected ?	Name		dbh (cm)	Ht (m)	Critical root zone radius (m)	Dripline radius (m)	Condition		Relative tolerance	Retention Suitability (onsite trees)	General field observations/remarks	Tree retention comments	Retention status
					Common	Botanical					Health	Structural					
	867	Yes	City	Yes	Douglas-fir	<i>Pseudotsuga menziesii</i>	113	25	13.6	12	Good	Good	Moderate		Located at edge of grove - good trunk taper, crown raise pruned on West side to 10m height above grade - 3 dead limbs 1m above area that was pruned.	*Project arborist to supervise all excavation and fill placement required within the critical root zone. Deadwood prune prior to project commencement.	Retain*
	868	Yes	City	Yes	Western redcedar	<i>Thuja plicata</i>	42,29,12,13	20	10	4	Fair/poor	Fair/poor	Poor		Suppressed by Douglas- fir 867 - asymmetric crown on West side due to shading, multiple stems form at base with narrow angles of attachment, declining health - sparse foliage in upper crown.	Sidewalk proposed within the critical root zone. *Project arborist to supervise all excavation and fill placement required within the critical root zone. Monitor health condition.	Retain*
	869	No	City	Yes	Willow	<i>Salix sp.</i>	12,8	5	2.5	2	Fair/poor	Poor	Poor		Suppressed - asymmetric crown on West side due to shading - phototropic lean to East.	Sidewalk proposed within the critical root zone. *Project arborist to supervise all excavation and fill placement required within the critical root zone.	Retain*
	870	No	City	Yes	Western redcedar	<i>Thuja plicata</i>	15	5	2.3	2	Fair	Poor	Poor		Suppressed - stunted crown - deflected central leader - phototropic lean to East.	Sidewalk proposed within the critical root zone. *Project arborist to supervise all excavation and fill placement required within the critical root zone.	Retain*
	871	No	City	Yes	Western redcedar	<i>Thuja plicata</i>	21	10	3.2	2	Fair	Fair/poor	Poor		Suppressed - poor trunk taper.	Sidewalk proposed within the critical root zone. *Project arborist to supervise all excavation and fill placement required within the critical root zone.	Retain*
	872	Yes	City	Yes	Western redcedar	<i>Thuja plicata</i>	37	20	5.6	4	Poor	Fair/poor	Poor		Declining health - dead tops - 60% lcr, codominant stems from at 1m above grade - narrow angle of attachment.	Will be heavily impacted by excavation required to construct the proposed sidewalk.	Remove
	873	Yes	City	Yes	Douglas-fir	<i>Pseudotsuga menziesii</i>	41	10	4.9	4	Fair	Poor	Moderate		Lost top historically at 6m above grade - regrowth leaders emerge from failure location.	Will be heavily impacted by excavation required to construct the proposed sidewalk.	Remove
	874	Yes	City	Yes	Douglas-fir	<i>Pseudotsuga menziesii</i>	100	25	12	12	Fair/good	Fair/good	Moderate		Located at edge of grove - good trunk taper, crown raise pruned on West side to 15m height above grade., trunk deflection at 5m above grade - large pruning wound near deflection point.	*Project arborist to supervise all excavation and fill placement required within the critical root zone.	Retain*
	875	Yes	City	Yes	Western redcedar	<i>Thuja plicata</i>	45	20	6.8	3	Fair	Fair/poor	Poor		Suppressed by 874 - poor trunk taper, multiple stems form at 1 - 4m above grade - narrow angles of attachment.	*Project arborist to supervise all excavation and fill placement required within the critical root zone.	Retain*
	876	No	City	Yes	Western redcedar	<i>Thuja plicata</i>	15	10	2.3	2	Fair/good	Fair	Poor		Suppressed by 877 - poor trunk taper.	*Project arborist to supervise all excavation and fill placement required within the critical root zone.	Retain*
	877	Yes	City	Yes	Douglas-fir	<i>Pseudotsuga menziesii</i>	68,47	25	11.5	6	Fair/good	Fair/poor	Moderate		Codominant stems form at soil line - 47cm stem suppressed.	*Project arborist to supervise all excavation and fill placement required within the critical root zone.	Retain*

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					Common	Botanical					Health	Structural					
	878	Yes	City	Yes	Douglas-fir	<i>Pseudotsuga menziesii</i>	95	25	11.4	9	Fair	Poor	Moderate		<i>Porodaedalea pini</i> fruiting bodies attached to lower trunk, trunk leans to South - corrected.	Modify to 10m height – for risk mitigation – prior to project commencement.	Modify
	879	No	City	Yes	Western redcedar	<i>Thuja plicata</i>	11	6	1.7	3	Fair/poor	Fair	Poor		Suppressed - poor trunk taper, declining health - sparse foliage in upper canopy.	Will be heavily impacted by excavation required to construct the proposed sidewalk.	Remove
	880	Yes	City	Yes	Western redcedar	<i>Thuja plicata</i>	27	10	4.1	3	Fair	Fair	Poor		Suppressed - poor trunk taper.	Will be heavily impacted by excavation required to construct the proposed sidewalk.	Remove
	881	Yes	City	Yes	Western redcedar	<i>Thuja plicata</i>	31,16,12,11	15	7.2	4	Fair/good	Fair	Poor		Suppressed - poor trunk taper, multiple stems form at base.	Sidewalk proposed within the critical root zone. *Project arborist to supervise all excavation and fill placement required within the critical root zone.	Retain*
	882	Yes	City	Yes	Douglas-fir	<i>Pseudotsuga menziesii</i>	57	25	6.8	6	Fair/good	Fair	Moderate		Codominant crown with adjacent firs - asymmetric crown on West side due to shading, phototropic lean to East.	Will be heavily impacted by excavation required to construct the proposed sidewalk.	Remove
	883	Yes	City	Yes	Douglas-fir	<i>Pseudotsuga menziesii</i>	53	25	6.4	6	Fair/good	Fair	Moderate		Codominant crown with adjacent firs - asymmetric crown on West side due to shading, phototropic lean to East.	Will be heavily impacted by excavation required to construct the proposed sidewalk.	Remove
	884	No	City	Yes	Douglas-fir	<i>Pseudotsuga menziesii</i>	23	15	2.8	3	Fair	Fair/poor	Moderate		Suppressed - poor trunk taper.	Sidewalk proposed within the critical root zone. *Project arborist to supervise all excavation and fill placement required within the critical root zone.	Retain*
	885	Yes	City	Yes	Douglas-fir	<i>Pseudotsuga menziesii</i>	69	25	8.3	7	Fair/good	Fair/good	Moderate		Codominant crown with adjacent firs, small deadwood in lower crown.	Sidewalk proposed within the critical root zone. *Project arborist to supervise all excavation and fill placement required within the critical root zone.	Retain*
	886	Yes	City	Yes	Douglas-fir	<i>Pseudotsuga menziesii</i>	24	10	2.9	3	Fair	Fair/poor	Moderate		Suppressed - poor trunk taper.	Sidewalk proposed within the critical root zone. *Project arborist to supervise all excavation and fill placement required within the critical root zone.	Retain*
	887	Yes	City	Yes	Western redcedar	<i>Thuja plicata</i>	25	10	3.8	3	Fair	Fair/poor	Poor		Suppressed - poor trunk taper.	Sidewalk proposed within the critical root zone. *Project arborist to supervise all excavation and fill placement required within the critical root zone.	Retain*
	888	No	City	Yes	Western redcedar	<i>Thuja plicata</i>	14	5	2.1	2	Fair	Fair/poor	Poor		Suppressed - poor trunk taper.	Sidewalk proposed within the critical root zone. *Project arborist to supervise all excavation and fill placement required within the critical root zone.	Retain*

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					Common	Botanical					Health	Structural					
	889	Yes	City	Yes	Western redcedar	<i>Thuja plicata</i>	20	10	3	2	Fair	Fair/poor	Poor		Suppressed - poor trunk taper.	Sidewalk proposed within the critical root zone. *Project arborist to supervise all excavation and fill placement required within the critical root zone.	Retain*
159	890	Yes	City	Yes	Douglas-fir	<i>Pseudotsuga menziesii</i>	67	25	8.0	7	Fair/good	Fair	Moderate		Codominant crown with adjacent firs - moderate trunk taper, trunk covered in dead ivy.	Sidewalk proposed within the critical root zone. *Project arborist to supervise all excavation and fill placement required within the critical root zone.	Retain*
	891	Yes	City	Yes	Western redcedar	<i>Thuja plicata</i>	23	10	3.5	3	Fair	Fair	Poor		Suppressed by Douglas-fir 890 - asymmetric crown on West side due to shading.	Sidewalk proposed within the critical root zone. *Project arborist to supervise all excavation and fill placement required within the critical root zone.	Retain*
480	892	Yes	City	Yes	Douglas-fir	<i>Pseudotsuga menziesii</i>	99	25	11.9	10	Fair/good	Fair/good	Moderate		Located at edge of grove - good trunk taper, elevation drops approximately 1m on East side of root collar.	Will be heavily impacted by excavation required to construct the proposed sidewalk.	Remove
481	893	Yes	City	Yes	Douglas-fir	<i>Pseudotsuga menziesii</i>	62,37	25	10	6	Fair	Fair	Moderate		Codominant crown with Douglas-fir 892 - asymmetric crown on East side due to shading, codominant stems form at base - 37cm stem suppressed.	Will be heavily impacted by excavation required to construct the proposed sidewalk.	Remove
	894	Yes	City	Yes	Douglas-fir	<i>Pseudotsuga menziesii</i>	109	25	13.1	8	Fair/good	Fair	Moderate		Codominant stems form at 1m above grade - narrow angle of attachment, 40cm diameter stem (approximately) suppressed, deadwood in lower crown.	Sidewalk proposed within the critical root zone. *Project arborist to supervise all excavation and fill placement required within the critical root zone. Deadwood prune prior to project commencement.	Retain*
	895	Yes	City	Yes	Douglas-fir	<i>Pseudotsuga menziesii</i>	36	20	4.3	6	Fair/good	Fair	Moderate		Suppressed by adjacent firs - poor trunk taper.		Retain*
	896	Yes	City	Yes	Douglas-fir	<i>Pseudotsuga menziesii</i>	35	20	4.2	6	Fair/good	Fair	Moderate		Suppressed by adjacent firs - poor trunk taper.	Sidewalk proposed within the critical root zone. *Project arborist to supervise all excavation and fill placement required within the critical root zone. Deadwood prune prior to project commencement.	Retain*
	897	Yes	City	Yes	Douglas-fir	<i>Pseudotsuga menziesii</i>	85	25	10.2	7	Fair/good	Fair	Moderate		Located at edge of grove - moderate trunk taper, deadwood in lower crown.	Sidewalk proposed within the critical root zone. *Project arborist to supervise all excavation and fill placement required within the critical root zone. Deadwood prune prior to project commencement.	Retain*
	898	No	City	Yes	Western redcedar	<i>Thuja plicata</i>	19	10	2.9	3	Fair/good	Fair	Poor		Suppressed by adjacent firs, elevation drops approximately 1m on East side of root collar.	Located within the footprint of the proposed sidewalk.	Remove

Prev. Tag #	Tag or ID #	Surveyed ?	Location (On, Off, Shared, City)	Bylaw protected ?	Name		dbh (cm)	Ht (m)	Critical root zone radius (m)	Dripline radius (m)	Condition		Relative tolerance	Retention Suitability (onsite trees)	General field observations/remarks	Tree retention comments	Retention status
					Common	Botanical					Health	Structural					
	899	Yes	City	Yes	Douglas-fir	<i>Pseudotsuga menziesii</i>	70	20	8.4	6	Fair	Fair/poor	Moderate		Suppressed by adjacent firs, codominant stems form at 2m above grade - narrow angle of attachment.	Sidewalk proposed within the critical root zone. *Project arborist to supervise all excavation and fill placement required within the critical root zone.	Retain*
	900	Yes	City	Yes	Douglas-fir	<i>Pseudotsuga menziesii</i>	22	10	2.6	3	Fair	Poor	Moderate		Suppressed - poor trunk taper, trunk decay in East side of root collar, elevation drops approximately 1m on East side of root collar.	Will be heavily impacted by excavation required to construct the proposed sidewalk.	Remove
	901	Yes	City	Yes	Douglas-fir	<i>Pseudotsuga menziesii</i>	98	25	11.8	10	Fair/good	Fair/good	Moderate		Located at edge of grove - good trunk taper, deadwood in lower crown.	Sidewalk proposed within the critical root zone. *Project arborist to supervise all excavation and fill placement required within the critical root zone. Deadwood prune prior to project commencement.	Retain*
	902	Yes	City	Yes	Douglas-fir	<i>Pseudotsuga menziesii</i>	72	25	8.6	7	Fair/good	Fair/good	Moderate		Codominant crown with Douglas-fir 901 - asymmetric crown on East side due to shading, surface rooted.	Sidewalk proposed within the critical root zone. *Project arborist to supervise all excavation and fill placement required within the critical root zone. Deadwood prune prior to project commencement.	Retain*
	903	Yes	City	Yes	Bigleaf maple	<i>Acer macrophyllum</i>	25	10	3	5	Fair	Poor	Moderate		Suppressed - asymmetric crown - entirely weighted to East.	Sidewalk proposed within the critical root zone. *Project arborist to supervise all excavation and fill placement required within the critical root zone.	Retain*
	904	Yes	City	Yes	Bigleaf maple	<i>Acer macrophyllum</i>	34	10	4.1	7	Fair	Poor	Moderate		Suppressed - asymmetric crown - entirely weighted to East.	Sidewalk proposed within the critical root zone. *Project arborist to supervise all excavation and fill placement required within the critical root zone.	Retain*
	905	Yes	City	Yes	Douglas-fir	<i>Pseudotsuga menziesii</i>	76	25	9.1	7	Fair/good	Fair/good	Moderate		Located at edge of grove - moderate trunk taper, small deadwood.	Sidewalk proposed within the critical root zone. *Project arborist to supervise all excavation and fill placement required within the critical root zone.	Retain*
	906	Yes	City	Yes	Bigleaf maple	<i>Acer macrophyllum</i>	23,25	20	4.7	6	Fair	Fair/poor	Moderate		Codominant stems form at base - small stem removed historically at base, suppressed - asymmetric crown on East side due to shading.	Sidewalk proposed within the critical root zone. *Project arborist to supervise all excavation and fill placement required within the critical root zone.	Retain*
	907	No	City	Yes	Western redcedar	<i>Thuja plicata</i>	44	20	6.6	4	Fair	Fair/poor	Poor		Suppressed - poor trunk taper, health stress - sparse crown.	Sidewalk proposed within the critical root zone. *Project arborist to supervise all excavation and fill placement required within the critical root zone.	Retain*

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					Common	Botanical					Health	Structural					
	908	Yes	City	Yes	Western redcedar	<i>Thuja plicata</i>	19	10	2.9	3	Fair	Fair/poor	Poor		Suppressed - poor trunk taper, health stress - sparse crown.	Sidewalk proposed within the critical root zone. *Project arborist to supervise all excavation and fill placement required within the critical root zone.	Retain*
	909	Yes	City	Yes	Bigleaf maple	<i>Acer macrophyllum</i>	33	20	4.0	8	Fair	Fair/poor	Moderate		Suppressed - asymmetric crown - entirely weighted to East.	Sidewalk proposed within the critical root zone. *Project arborist to supervise all excavation and fill placement required within the critical root zone.	Retain*
	910	No	City	Yes	Bigleaf maple	<i>Acer macrophyllum</i>	13	5	1.6	3	Poor	Poor	Moderate		Top failed at 2m above grade with associated decay -deflected leader forms below failure location.	Sidewalk proposed within the critical root zone. *Project arborist to supervise all excavation and fill placement required within the critical root zone.	Retain*
	911	No	City	Yes	Douglas-fir	<i>Pseudotsuga menziesii</i>	90	25	10.8	8	Good	Fair/good	Moderate		Located at edge of grove - good trunk taper, small deadwood in lower canopy.	Sidewalk proposed within the critical root zone. *Project arborist to supervise all excavation and fill placement required within the critical root zone.	Retain*
	912	Yes	City	Yes	Douglas-fir	<i>Pseudotsuga menziesii</i>	69	20	8.3	6	Fair/good	Fair/poor	Moderate		Suppressed by 913 and 911 - poor trunk taper - asymmetric crown on North side due to shading.	Sidewalk proposed within the critical root zone. *Project arborist to supervise all excavation and fill placement required within the critical root zone.	Retain*
	913	Yes	City	Yes	Douglas-fir	<i>Pseudotsuga menziesii</i>	100	25	12	9	Good	Fair/good	Moderate		Located at edge of grove - good trunk taper, small deadwood in lower canopy.	Sidewalk proposed within the critical root zone. *Project arborist to supervise all excavation and fill placement required within the critical root zone.	Retain*
1	914	Yes	City	Yes	Bigleaf maple	<i>Acer macrophyllum</i>	63,45,17,14	20	12	8	Fair/poor	Fair/poor	Moderate		Multiple stems form at 1m above grade - narrow angle of attachment, declining health - large deadwood and decayed stems in upper canopy.	*Project arborist to supervise all excavation and fill placement required within the critical root zone. Deadwood prune prior to project commencement. Monitor health condition	Retain*
	915	Yes	City	Yes	Western redcedar	<i>Thuja plicata</i>	46	20	6.9	5	Fair/poor	Fair	Poor		Suppressed - poor trunk taper, declining health - sparse foliage throughout crown.	*Project arborist to supervise all excavation and fill placement required within the critical root zone. Deadwood prune prior to project commencement. Monitor health condition	Retain*
	916	Yes	City	Yes	Western redcedar	<i>Thuja plicata</i>	31	15	4.7	4	Fair/poor	Fair/poor	Poor		Suppressed - poor trunk taper - asymmetric crown on North side due to shading, health stress - sparse foliage in upper crown.	*Project arborist to supervise all excavation and fill placement required within the critical root zone. Deadwood prune prior to project commencement. Monitor health condition	Retain*

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					Common	Botanical					Health	Structural					
	917	Yes	City	Yes	Bigleaf maple	<i>Acer macrophyllum</i>	28,35,20	15	7.7	4	Fair	Fair/poor	Moderate		Multiple stems form at base - narrow angles of attachment and included bark, suppressed - poor trunk taper.	*Project arborist to supervise all excavation and fill placement required within the critical root zone.	Retain*
	918	Yes	City	Yes	Douglas-fir	<i>Pseudotsuga menziesii</i>	45	25	5.4	5	Fair/poor	Fair/poor	Moderate		Suppressed - poor trunk taper, small deadwood in lower canopy.	*Project arborist to supervise all excavation and fill placement required within the critical root zone.	Retain*
	919	Yes	City	Yes	Douglas-fir	<i>Pseudotsuga menziesii</i>	22	15	2.6	3	Fair/poor	Fair/poor	Moderate		Suppressed - poor trunk taper, sparse crown - likely due to shading.	*Project arborist to supervise all excavation and fill placement required within the critical root zone.	Retain*
	920	Yes	City	Yes	Bigleaf maple	<i>Acer macrophyllum</i>	47,56	20	10	7	Fair/good	Fair	Moderate		Codominant stems form at 1.2m above grade - no major weaknesses visible at stem union.	*Project arborist to supervise all excavation and fill placement required within the critical root zone.	Retain*
	921	Yes	City	Yes	Douglas-fir	<i>Pseudotsuga menziesii</i>	27	15	3.2	3	Fair	Fair/poor	Moderate		Suppressed - poor trunk taper, sparse crown - likely due to shading.	*Project arborist to supervise all excavation and fill placement required within the critical root zone.	Retain*
	922	Yes	City	Yes	Douglas-fir	<i>Pseudotsuga menziesii</i>	46	25	5.5	5	Fair	Fair	Moderate		Codominant crown with adjacent trees - moderate trunk taper, small deadwood in lower canopy.	*Project arborist to supervise all excavation and fill placement required within the critical root zone.	Retain*
	923	No	City	Yes	Douglas-fir	<i>Pseudotsuga menziesii</i>	24	20	2.9	3	Fair	Fair	Moderate		Suppressed by maple 924 - poor trunk taper, sparse crown - likely due to shading.	*Project arborist to supervise all excavation and fill placement required within the critical root zone.	Retain*
2	924	Yes	City	Yes	Bigleaf maple	<i>Acer macrophyllum</i>	40,36,32,30,32,27,32,41,35,15,29,26,25,15,15	20	10.4	10	Fair	Fair/poor	Moderate		Multiple stems form at base - deadwood overhangs subject property.	*Project arborist to supervise all excavation and fill placement required within the critical root zone. Deadwood prune prior to project commencement.	Retain*
	925	No	City	Yes	Western redcedar	<i>Thuja plicata</i>	39	15	5.9	4	Fair	Fair/poor	Poor		Intertwined with and heavily suppressed by maple 926 - poor trunk taper a d asymmetric crown on North side due to shading.	*Project arborist to supervise all excavation and fill placement required within the critical root zone.	Retain*
	926	Yes	City	Yes	Bigleaf maple	<i>Acer macrophyllum</i>	53,58,43	25	13.9	8	Fair	Fair/poor	Moderate		Multiple stems form at base, health stress - branch and twig dieback throughout crown.	*Project arborist to supervise all excavation and fill placement required within the critical root zone.	Retain*
3	927	No	City	Yes	Pacific dogwood	<i>Cornus nuttallii</i>	14	10	1.7	3	Fair	Fair/poor	Moderate		Suppressed by fir 930 - poor trunk taper, lost small top.	*Project arborist to supervise all excavation and fill placement required within the critical root zone.	Retain*
	928	No	City	Yes	Bigleaf maple	<i>Acer macrophyllum</i>	13	10	1.6	2	Fair	Fair/poor	Moderate		Suppressed by fir 930 - poor trunk taper, lost small top.	*Project arborist to supervise all excavation and fill placement required within the critical root zone.	Retain*
	929	No	City	Yes	Bigleaf maple	<i>Acer macrophyllum</i>	13	15	1.6	2	Fair	Fair/poor	Moderate		Suppressed by 930 - poor trunk taper, stunted and deflected top.	*Project arborist to supervise all excavation and fill placement required within the critical root zone.	Retain*

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					Common	Botanical					Health	Structural					
	930	Yes	City	Yes	Douglas-fir	<i>Pseudotsuga menziesii</i>	79	25	9.5	8	Good	Fair/good	Moderate		Located at edge of grove - good trunk taper endweighted limbs extend over road.	*Project arborist to supervise all excavation and fill placement required within the critical root zone.	Retain*
	931	No	City	Yes	Bigleaf maple	<i>Acer macrophyllum</i>	39	20	4.7	5	Fair/good	Fair/poor	Moderate		Suppressed - poor trunk taper - asymmetric crown on North side due to shading.	*Project arborist to supervise all excavation and fill placement required within the critical root zone.	Retain*
	932	No	City	Yes	Grand fir	<i>Abies grandis</i>	13	5	2.0	2	Fair/poor	Fair/poor	Poor		Suppressed - poor trunk taper, sparse crown - likely due to shading.	*Project arborist to supervise all excavation and fill placement required within the critical root zone.	Retain*
	933	No	City	Yes	Bigleaf maple	<i>Acer macrophyllum</i>	46,29,37,32,23,53	25	12.3	8	Fair	Fair/poor	Moderate		Multiple stems form at .3m above grade - deadwood throughout crown.	*Project arborist to supervise all excavation and fill placement required within the critical root zone. Deadwood prune prior to project commencement.	Retain*
4	934	No	City	Yes	Douglas-fir	<i>Pseudotsuga menziesii</i>	65	20	7.8	6	Fair	Fair/poor	Moderate		Competing secondary stem forms at 2m above grade - included bark and narrow angle of attachment.	*Project arborist to supervise all excavation and fill placement required within the critical root zone.	Retain*
	935	No	City	Yes	Douglas-fir	<i>Pseudotsuga menziesii</i>	40	20	4.8	4	Fair	Fair/poor	Moderate		Codominant crown with adjacent trees - poor trunk taper, small deadwood.	*Project arborist to supervise all excavation and fill placement required within the critical root zone.	Retain*
	936	Yes	City	Yes	Douglas-fir	<i>Pseudotsuga menziesii</i>	58	25	7.0	6	Fair	Fair/poor	Moderate		Codominant crown with adjacent trees - poor trunk taper, small deadwood.	*Project arborist to supervise all excavation and fill placement required within the critical root zone.	Retain*
	937	Yes	City	Yes	Bigleaf maple	<i>Acer macrophyllum</i>	35,38,58,35,39	25	12.5	10	Fair	Fair	Moderate		Multiple stems form at.3m above grade, deadwood throughout crown.	*Project arborist to supervise all excavation and fill placement required within the critical root zone. Deadwood prune prior to project commencement.	Retain*
	938	Yes	City	Yes	Western redcedar	<i>Thuja plicata</i>	20	10	3	4	Fair	Fair/poor	Poor		Suppressed by maple 937 - poor trunk taper, asymmetric crown on East side due to shading.	*Project arborist to supervise all excavation and fill placement required within the critical root zone.	Retain*
	939	Yes	City	Yes	Western redcedar	<i>Thuja plicata</i>	77	25	11.6	7	Poor	Fair	Poor		Declining health - sparse crown - branch and twig dieback.	*Project arborist to supervise all excavation and fill placement required within the critical root zone.	Retain*
	940	Yes	City	Yes	Pacific dogwood	<i>Cornus nuttallii</i>	21,26	15	4.6	3	Fair	Fair/poor	Moderate		Codominant stems form at .3m above grade - no major weaknesses visible at stem union, phototropic lean to North.	*Project arborist to supervise all excavation and fill placement required within the critical root zone.	Retain*
	941	No	City	Yes	Pacific dogwood	<i>Cornus nuttallii</i>	14	10	1.7	2	Fair	Fair/poor	Moderate		Suppressed - poor trunk taper, phototropic lean to South, rubbing injury to bark on South side of lower trunk.	*Project arborist to supervise all excavation and fill placement required within the critical root zone.	Retain*
	942	Yes	City	Yes	Pacific dogwood	<i>Cornus nuttallii</i>	18	10	2.2	2	Fair	Fair/poor	Moderate		Suppressed - poor trunk taper.	*Project arborist to supervise all excavation and fill placement required within the critical root zone.	Retain*

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					Common	Botanical					Health	Structural					
	943	No	City	Yes	Western redcedar	<i>Thuja plicata</i>	16	5	2.4	3	Fair	Fair	Poor		Suppressed - poor trunk taper.	*Project arborist to supervise all excavation and fill placement required within the critical root zone.	Retain*
5	944	Yes	City	Yes	Bigleaf maple	<i>Acer macrophyllum</i>	21	10	2.5	3	Fair	Fair/poor	Moderate		Suppressed - poor trunk taper - asymmetric crown on North side due to shading.	*Project arborist to supervise all excavation and fill placement required within the critical root zone.	Retain*
7	945	No	City	Yes	Bigleaf maple	<i>Acer macrophyllum</i>	42	20	5.04	6	Fair	Fair/poor	Moderate		Intertwined with and heavily suppressed by cedar 946 - poor trunk taper.	*Project arborist to supervise all excavation and fill placement required within the critical root zone.	Retain*
	946	Yes	City	Yes	Western redcedar	<i>Thuja plicata</i>	71	25	10.7	5	Fair	Fair/poor	Poor		Suppressed by 947 - asymmetric crown and sparse crown due to shading.	*Project arborist to supervise all excavation and fill placement required within the critical root zone.	Retain*
	947	Yes	City	Yes	Douglas-fir	<i>Pseudotsuga menziesii</i>	77	25	9.2	8	Fair/good	Fair/good	Moderate		Located at edge of grove - good trunk taper, deadwood in lower crown.	*Project arborist to supervise all excavation and fill placement required within the critical root zone. Deadwood prune prior to project commencement.	Retain*
	948	Yes	City	Yes	Bigleaf maple	<i>Acer macrophyllum</i>	94	25	11.3	10	Fair/good	Fair	Moderate		Codominant stems form at 2m above grade - included bark - not active, girdling surface root on East side of root collar, deadwood throughout crown, existing sanitary sewer manhole within 2m of root collar on South side.	*Project arborist to supervise all excavation and fill placement required within the critical root zone. Deadwood prune prior to project commencement.	Retain*
	949	Yes	City	Yes	Western redcedar	<i>Thuja plicata</i>	34	15	5.1	4	Fair	Fair/poor	Poor		Suppressed by maple 948 - poor trunk taper - asymmetric crown on South side due to shading.	*Project arborist to supervise all excavation and fill placement required within the critical root zone. Deadwood prune prior to project commencement.	Retain*
8	950	Yes	City	Yes	Bigleaf maple	<i>Acer macrophyllum</i>	51	20	6.1	6	Fair	Fair/poor	Moderate		Suppressed by fir 953 - poor trunk taper - asymmetric crown on North side due to shading, codominant stem failed historically at 5m above grade - with associated decay, trunk wound on South side 1-2m above grade - calloused over.	*Project arborist to supervise all excavation and fill placement required within the critical root zone.	Retain*
	951	Yes	City	Yes	Western redcedar	<i>Thuja plicata</i>	35	15	5.3	4	Fair	Fair/poor	Poor		Suppressed by fir 953 - poor trunk taper - dogleg form with extensive surface rooting on South side.	*Project arborist to supervise all excavation and fill placement required within the critical root zone.	Retain*
	952	Yes	City	Yes	Western redcedar	<i>Thuja plicata</i>	29	15	4.4	4	Fair	Fair/poor	Poor		Suppressed by fir 953 - poor trunk taper.	*Project arborist to supervise all excavation and fill placement required within the critical root zone.	Retain*
	953	Yes	City	Yes	Douglas-fir	<i>Pseudotsuga menziesii</i>	102	25	12.2	10	Good	Fair/good	Moderate		Located at edge of grove - good trunk taper, asymmetric crown on West side due to shading, small deadwood and small hanger in lower crown.	*Project arborist to supervise all excavation and fill placement required within the critical root zone. Deadwood prune prior to project commencement.	Retain*

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					Common	Botanical					Health	Structural					
	954	No	City	Yes	Western redcedar	<i>Thuja plicata</i>	18,36	15	7	4	Fair	Poor	Poor		Suppressed by fir 953 - root system wrapped around trunk, asymmetric crown on East side due to shading.	*Project arborist to supervise all excavation and fill placement required within the critical root zone.	Retain*
	955	Yes	City	Yes	Pacific dogwood	<i>Cornus nuttallii</i>	16,20	15	3.6	3	Fair	Fair/poor	Moderate		Suppressed - poor trunk taper, codominant stems form at .3m above grade - no major weaknesses visible at stem union, basal wound on East side.	*Project arborist to supervise all excavation and fill placement required within the critical root zone.	Retain*
	956	Yes	City	Yes	Western redcedar	<i>Thuja plicata</i>	42	15	6.3	4	Fair	Fair/poor	Poor		Suppressed - poor trunk taper - asymmetric crown due to shading.	*Project arborist to supervise all excavation and fill placement required within the critical root zone.	Retain*
	957	Yes	City	Yes	Douglas-fir	<i>Pseudotsuga menziesii</i>	64	25	7.7	6	Fair/good	Fair	Moderate		Codominant crown with adjacent fir, small deadwood in lower canopy.	*Project arborist to supervise all excavation and fill placement required within the critical root zone.	Retain*
	958	Yes	Shared with city	Yes	Douglas-fir	<i>Pseudotsuga menziesii</i>	47	20	5.6	2	Fair	Fair/poor	Moderate		Suppressed - poor trunk taper - low live crown ratio.	*Project arborist to supervise all excavation and fill placement required within the critical root zone.	Retain*
	959	Yes	City	Yes	Douglas-fir	<i>Pseudotsuga menziesii</i>	55	20	6.6	3	Fair	Fair/poor	Moderate		Suppressed - poor trunk taper,	*Project arborist to supervise all excavation and fill placement required within the critical root zone.	Retain*
	960	Yes	City	Yes	Western redcedar	<i>Thuja plicata</i>	45	15	6.8	5	Fair	Fair/poor	Poor		Suppressed - poor trunk taper - stunted top.	*Project arborist to supervise all excavation and fill placement required within the critical root zone.	Retain*
	961	No	City	Yes	Western redcedar	<i>Thuja plicata</i>	11	4	1.7	1	Fair	Poor	Poor		Heavily suppressed by 963 - phototropic lean to South.	*Project arborist to supervise all excavation and fill placement required within the critical root zone.	Retain*
	962	No	City	yes	Pacific dogwood	<i>Cornus nuttallii</i>	4,6	4	1	1	Fair	Fair/poor	Moderate		Heavily suppressed by 963 - phototropic lean to South.	*Project arborist to supervise all excavation and fill placement required within the critical root zone.	Retain*
	963	Yes	City	Yes	Western redcedar	<i>Thuja plicata</i>	65	20	9.8	6	Fair	Fair/poor	Poor		Suppressed - poor trunk taper - asymmetric crown on North side due to shading.	*Project arborist to supervise all excavation and fill placement required within the critical root zone.	Retain*
	964	Yes	City	Yes	Western redcedar	<i>Thuja plicata</i>	24	15	3.6	3	Fair	Fair/poor	Poor		Suppressed by firs 965 and 966 - poor trunk taper - asymmetric crown due to shading.	*Project arborist to supervise all excavation and fill placement required within the critical root zone.	Retain*
	965	Yes	City	Yes	Douglas-fir	<i>Pseudotsuga menziesii</i>	95	25	11.4	10	Good	Fair/good	Moderate		Located at edge of grove - good trunk taper, existing compacted gravel driveway over Western portion of crz, deadwood in lower crown, trunk deflection at 15m above grade.	*Project arborist to supervise all excavation and fill placement required within the critical root zone.	Retain*
	966	Yes	City	Yes	Douglas-fir	<i>Pseudotsuga menziesii</i>	94	25	11.3	9	Good	Fair/good	Moderate		Located at edge of grove - good trunk taper, heavily surface rooted.	*Project arborist to supervise all excavation and fill placement required within the critical root zone.	Retain*

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					Common	Botanical					Health	Structural					
	967	Yes	City	Yes	Douglas-fir	<i>Pseudotsuga menziesii</i>	57	20	6.8	6	Fair	Fair/poor	Moderate		Suppressed - poor trunk taper-asymmetric crown due to shading.	*Project arborist to supervise all excavation and fill placement required within the critical root zone.	Retain*
	968	Yes	City	Yes	Douglas-fir	<i>Pseudotsuga menziesii</i>	69	25	8.3	7	Fair	Fair/poor	Moderate		Suppressed - poor trunk taper - asymmetric crown due to shading.	*Project arborist to supervise all excavation and fill placement required within the critical root zone.	Retain*
	969	Yes	City	Yes	Douglas-fir	<i>Pseudotsuga menziesii</i>	35	20	4.2	3	Fair	Fair/poor	Moderate		Suppressed - poor trunk taper.	*Project arborist to supervise all excavation and fill placement required within the critical root zone.	Retain*
	970	Yes	Shared with city	Yes	Western redcedar	<i>Thuja plicata</i>	12,14,29	15	6.7	3	Poor	Poor	Poor		In advanced stage of health decline - 10% lcr.	*Project arborist to supervise all excavation and fill placement required within the critical root zone.	Retain*
	Non1	Yes	On	No	Douglas-fir	<i>Pseudotsuga menziesii</i>	44	20	5.3	4	Fair	Fair/poor	Moderate	Conditional	Located at edge of grove, deflected leader at 10m above grade.	Pathway proposed within the critical root zone. *Project arborist to supervise all excavation and fill placement required within the critical root zone.	Retain*
	971	Yes	On	Yes	Western redcedar	<i>Thuja plicata</i>	62	22	9.3	5	Fair	Fair/poor	Poor	Conditional	Located at edge of grove - moderate trunk taper, health stress - sparse crown.	Pathway proposed within the critical root zone. *Project arborist to supervise all excavation and fill placement required within the critical root zone.	Retain*
	Non 2	Yes	On	No	Douglas-fir	<i>Pseudotsuga menziesii</i>	23	15	2.8	3	Fair	Fair/poor	Moderate	Conditional	Suppressed - poor trunk taper.	Pathway proposed within the critical root zone. *Project arborist to supervise all excavation and fill placement required within the critical root zone.	Retain*
	Non 3	Yes	On	No	Douglas-fir	<i>Pseudotsuga menziesii</i>	21	15	2.5	3	Fair	Fair/poor	Moderate	Conditional	Suppressed - poor trunk taper.	Pathway proposed within the critical root zone. *Project arborist to supervise all excavation and fill placement required within the critical root zone.	Retain*
	Non 4	Yes	On	No	Douglas-fir	<i>Pseudotsuga menziesii</i>	38	20	4.6	4	Fair	Fair	Moderate	Conditional	Suppressed - poor trunk taper, health stress - sparse foliage in upper canopy.	Pathway proposed within the critical root zone. *Project arborist to supervise all excavation and fill placement required within the critical root zone.	Retain*
	Non 5	Yes	On	No	Bigleaf maple	<i>Acer macrophyllum</i>	31	15	3.7	3	Fair	Fair/poor	Moderate	Conditional	Suppressed - poor trunk taper.	Pathway proposed within the critical root zone. *Project arborist to supervise all excavation and fill placement required within the critical root zone.	Retain*

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					Common	Botanical					Health	Structural					
	Non 6	Yes	On	No	Bigleaf maple	<i>Acer macrophyllum</i>	24	15	2.9	3	Fair	Fair/poor	Moderate	Conditional	Suppressed - poor trunk taper.	Pathway proposed within the critical root zone. *Project arborist to supervise all excavation and fill placement required within the critical root zone.	Retain*
	972	Yes	On	No	Douglas-fir	<i>Pseudotsuga menziesii</i>	60	25	7.2	5	Fair/good	Fair/good	Moderate	Conditional	Located at edge of grove - moderate trunk taper.	Pathway proposed within the critical root zone. *Project arborist to supervise all excavation and fill placement required within the critical root zone.	Retain
	Non 7	Yes	On	No	Douglas-fir	<i>Pseudotsuga menziesii</i>	29	20	3.5	4	Fair	Fair/poor	Moderate	Conditional	Suppressed - poor trunk taper.	Pathway proposed within the critical root zone. *Project arborist to supervise all excavation and fill placement required within the critical root zone.	Retain*
	Non 8	Yes	On	No	Bigleaf maple	<i>Acer macrophyllum</i>	29	20	3.5	4	Fair	Fair/poor	Moderate	Conditional	Suppressed - poor trunk taper.	Pathway proposed within the critical root zone. *Project arborist to supervise all excavation and fill placement required within the critical root zone.	Retain*
	Non 9	Yes	On	No	Bigleaf maple	<i>Acer macrophyllum</i>	27	15	3.2	4	Fair	Fair/poor	Moderate	Conditional	Suppressed - poor trunk taper.	Located within the footprint of the proposed pathway.	Remove
	Non 10	Yes	On	No	Douglas-fir	<i>Pseudotsuga menziesii</i>	37	20	4.4	3	Fair	Fair	Moderate	Conditional	Suppressed - poor trunk taper.	Pathway proposed within the critical root zone. *Project arborist to supervise all excavation and fill placement required within the critical root zone.	Retain*
	Non 11	Yes	On	No	Douglas-fir	<i>Pseudotsuga menziesii</i>	21	10	2.5	2	Fair	Fair/poor	Moderate	Conditional	Suppressed - poor trunk taper.	Pathway proposed within the critical root zone. *Project arborist to supervise all excavation and fill placement required within the critical root zone.	Retain*
	Non 12	Yes	On	No	Western redcedar	<i>Thuja plicata</i>	37	10	5.6	4	Fair	Fair/poor	Poor	Conditional	Suppressed - poor trunk taper.	Project arborist to supervise all excavation and fill placement required within the critical root zone.	Retain
	973	Yes	On	Yes	Douglas-fir	<i>Pseudotsuga menziesii</i>	86	25	10.3	8	Good	Good	Moderate	Suitable	Located at edge of grove - good trunk taper, small deadwood in lower canopy	Project arborist to supervise all excavation and fill placement required within the critical root zone.	Retain
	974	Yes	On	Yes	Douglas-fir	<i>Pseudotsuga menziesii</i>	63	25	7.6	6	Good	Fair/good	Moderate	Suitable	Located at edge of grove - moderate trunk taper, small deadwood.	Project arborist to supervise all excavation and fill placement required within the critical root zone.	Retain
	893	No	Off	No	Western redcedar	<i>Thuja plicata</i>	55	20	8.3	4	Fair/poor	Fair	Poor		Declining health - sparse crown - branch and twig dieback.	Project arborist to supervise all excavation and fill placement required within the critical root zone.	Retain

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					Common	Botanical					Health	Structural					
	894	No	Off	Yes	Western redcedar	<i>Thuja plicata</i>	71	20	10.7	4	Fair/poor	Fair	Poor		Declining health - sparse crown - branch and twig dieback.	Project arborist to supervise all excavation and fill placement required within the critical root zone.	Retain
	Non 13	Yes	On	No	Bigleaf maple	<i>Acer macrophyllum</i>	22,24	15	4.5	5	Fair	Fair/poor	Moderate	Conditional	Suppressed by adjacent maple - asymmetric crown on South side due to shading.	Project arborist to supervise all excavation and fill placement required within the critical root zone.	Retain
	Non 14	Yes	On	No	Bigleaf maple	<i>Acer macrophyllum</i>	30,26	15	5.5	5	Fair	Fair/poor	Moderate	Conditional	Codominant stems form at base - no major weaknesses visible at stem union.	Project arborist to supervise all excavation and fill placement required within the critical root zone.	Retain
	975	Yes	On	Yes	Bigleaf maple	<i>Acer macrophyllum</i>	61	15	7.3	5	Poor	Poor	Moderate	Unsuitable	2 stems recently failed and still attached at .5m above grade, extensive trunk decay, remaining portions of tree likely compromised. No targets within striking distance at time of inventory.	Modify to 10m height – for risk mitigation – prior to project commencement.	Modify*
	Non 15	Yes	On	No	Bigleaf maple	<i>Acer macrophyllum</i>	23	15	2.8	2	Fair	Poor	Moderate	Conditional	Suppressed - poor trunk taper.	Project arborist to supervise all excavation and fill placement required within the critical root zone.	Retain
	Non 16	Yes	On	No	Bigleaf maple	<i>Acer macrophyllum</i>	21	15	2.5	2	Fair	Fair/poor	Moderate	Conditional	Suppressed - poor trunk taper	Project arborist to supervise all excavation and fill placement required within the critical root zone.	Retain
	Non 17	Yes	On	No	Bigleaf maple	<i>Acer macrophyllum</i>	18	15	2.2	2	Fair	Fair/poor	Moderate	Conditional	Suppressed - poor trunk taper	Project arborist to supervise all excavation and fill placement required within the critical root zone.	Retain
	Non 18	Yes	On	No	Bigleaf maple	<i>Acer macrophyllum</i>	19	15	2.3	2	Fair	Fair/poor	Moderate	Conditional	Suppressed - poor trunk taper	Project arborist to supervise all excavation and fill placement required within the critical root zone.	Retain
	976	Yes	On	Yes	Douglas-fir	<i>Pseudotsuga menziesii</i>	82	25	9.8	8	Good	Good	Moderate	Suitable	Located on edge of grove - good trunk taper, small deadwood in lower canopy.	Project arborist to supervise all excavation and fill placement required within the critical root zone.	Retain
	977	Yes	On	Yes	Douglas-fir	<i>Pseudotsuga menziesii</i>	98	25	11.8	10	Good	Good	Moderate	Suitable	Located at edge of grove - good trunk taper, large deadwood and small hanger in lower crown.	Project arborist to supervise all excavation and fill placement required within the critical root zone. Deadwood prune prior to project commencement.	Retain
	978	Yes	On	Yes	Bigleaf maple	<i>Acer macrophyllum</i>	86	25	10.3	9	Good	Fair	Moderate	Suitable	Codominant stems form at 2m above grade - no major weaknesses visible at stem union.	Project arborist to supervise all excavation and fill placement required within the critical root zone.	Retain
	979	Yes	On	Yes	Bigleaf maple	<i>Acer macrophyllum</i>	69	25	8.3	9	Fair	Fair/poor	Moderate	Conditional	Suppressed by fir 980 - asymmetric crown on South side due to shading.	Project arborist to supervise all excavation and fill placement required within the critical root zone.	Retain

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					Common	Botanical					Health	Structural					
	980	Yes	On	Yes	Douglas-fir	<i>Pseudotsuga menziesii</i>	86	25	10.3	9	Fair/good	Fair/good	Moderate	Conditional	Codominant crown with adjacent firs - moderate trunk taper, small deadwood.	Project arborist to supervise all excavation and fill placement required within the critical root zone. Deadwood prune prior to project commencement.	Retain
	Non 19	Yes	On	No	Western redcedar	<i>Thuja plicata</i>	21	10	3.2	2	Fair	Fair/poor	Poor	Conditional	Suppressed - poor trunk taper	Project arborist to supervise all excavation and fill placement required within the critical root zone.	Retain
	Non 20	Yes	On	No	Western redcedar	<i>Thuja plicata</i>	20	10	3	2	Fair	Fair/poor	Poor	Conditional	Suppressed - poor trunk taper	Project arborist to supervise all excavation and fill placement required within the critical root zone.	Retain
	981	Yes	On	Yes	Douglas-fir	<i>Pseudotsuga menziesii</i>	89	25	10.7	8	Fair/good	Fair/good	Moderate	Conditional	Codominant crown with adjacent fir, small deadwood in lower canopy.	*Pathway proposed within the critical root zone. Project arborist to supervise all excavation and fill placement required within the critical root zone. Deadwood prune prior to project commencement.	Retain*
	Non 21	Yes	On	No	Western redcedar	<i>Thuja plicata</i>	17	10	2.6	2	Poor	Fair/poor	Poor	Conditional	Suppressed - poor trunk taper.	Project arborist to supervise all excavation and fill placement required within the critical root zone.	Retain
	982	Yes	On	Yes	Douglas-fir	<i>Pseudotsuga menziesii</i>	70	25	8.4	7	Fair	Fair/good	Moderate	Conditional	Codominant crown with adjacent firs - moderate trunk taper.	Project arborist to supervise all excavation and fill placement required within the critical root zone.	Retain
	983	Yes	On	Yes	Douglas-fir	<i>Pseudotsuga menziesii</i>	91	25	10.9	8	Fair	Fair/good	Moderate	Conditional	Codominant crown with adjacent firs - moderate trunk taper, trunk deflection at 2m above grade.	Project arborist to supervise all excavation and fill placement required within the critical root zone.	Retain
	984	No	On	Yes	Pacific yew	<i>Taxus brevifolia</i>	12	8	1.8	2	Fair	Fair/poor	Poor	Conditional	Suppressed by adjacent firs - poor trunk taper, sparse crown due to shading.	Project arborist to supervise all excavation and fill placement required within the critical root zone.	Retain
	Non 22	Yes	On	No	Western redcedar	<i>Thuja plicata</i>	28	15	4.2	3	Fair	Fair/poor	Poor	Conditional	Suppressed - poor trunk taper.	Project arborist to supervise all excavation and fill placement required within the critical root zone.	Retain
	985	Yes	On	Yes	Douglas-fir	<i>Pseudotsuga menziesii</i>	60	25	7.2	5	Fair	Fair/poor	Moderate	Conditional	Trunk deflection at 4m above grade, codominant crown with adjacent trees - moderate trunk taper.	Project arborist to supervise all excavation and fill placement required within the critical root zone.	Retain
	986	No	On	Yes	Pacific yew	<i>Taxus brevifolia</i>	8	5	1.2	2	Fair	Fair	Poor	Conditional	Suppressed by adjacent firs - poor trunk taper, sparse crown due to shading.	Project arborist to supervise all excavation and fill placement required within the critical root zone.	Retain
	Non 23	Yes	On	No	Western redcedar	<i>Thuja plicata</i>	23	8	3.5	2	Fair	Fair	Poor	Conditional	Suppressed - poor trunk taper.	Project arborist to supervise all excavation and fill placement required within the critical root zone.	Retain
	Non 24	Yes	On	No	Western redcedar	<i>Thuja plicata</i>	20	8	3	2	Fair	Fair	Poor	Conditional	Suppressed - poor trunk taper	Project arborist to supervise all excavation and fill placement required within the critical root zone.	Retain

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					Common	Botanical					Health	Structural					
	Non 25	Yes	On	No	Western redcedar	<i>Thuja plicata</i>	16	8	2.4	2	Fair	Fair	Poor	Conditional	Suppressed - poor trunk taper	Project arborist to supervise all excavation and fill placement required within the critical root zone.	Retain
	987	Yes	On	Yes	Douglas-fir	<i>Pseudotsuga menziesii</i>	101	25	12.1	9	Fair/good	Fair/good	Moderate	Suitable	Dominant in grove - good trunk taper, deadwood throughout crown.	*Project arborist to supervise all excavation and fill placement required within the critical root zone. Deadwood prune prior to project commencement.	Retain
	988	Yes	On	Yes	Douglas-fir	<i>Pseudotsuga menziesii</i>	60	20	7.2	6	Fair/good	Fair	Moderate	Conditional	Suppressed by fir 987 - moderate trunk taper, small deadwood in lower canopy	*Project arborist to supervise all excavation and fill placement required within the critical root zone. Deadwood prune prior to project commencement.	Retain
	989	Yes	On	Yes	Douglas-fir	<i>Pseudotsuga menziesii</i>	76	25	9.1	8	Fair/good	Fair/good	Moderate	Conditional	Codominant crown with adjacent firs - moderate trunk taper, small deadwood in lower crown.	*Project arborist to supervise all excavation and fill placement required within the critical root zone. Deadwood prune prior to project commencement.	Retain
	990	Yes	On	Yes	Douglas-fir	<i>Pseudotsuga menziesii</i>	73	25	8.8	8	Fair/good	Fair/good	Moderate	Conditional	Codominant crown with adjacent firs - moderate trunk taper, small deadwood in lower canopy.	*Project arborist to supervise all excavation and fill placement required within the critical root zone. Deadwood prune prior to project commencement.	Retain
	Non 26	Yes	On	No	Douglas-fir	<i>Pseudotsuga menziesii</i>	56	20	6.7	4	Fair	Fair	Moderate	Conditional	Suppressed your fir 987 - poor trunk taper.	Project arborist to supervise all excavation and fill placement required within the critical root zone.	Retain
	Non 27	Yes	On	No	Douglas-fir	<i>Pseudotsuga menziesii</i>	40	20	4.8	4	Fair	Fair	Moderate	Conditional	Suppressed - poor trunk taper	Project arborist to supervise all excavation and fill placement required within the critical root zone.	Retain
	Non 28	Yes	On	No	Western redcedar	<i>Thuja plicata</i>	26	10	3.9	3	Fair	Fair	Poor	Conditional	Suppressed - poor trunk taper	Project arborist to supervise all excavation and fill placement required within the critical root zone.	Retain
	991	No	On	Yes	Douglas-fir	<i>Pseudotsuga menziesii</i>	60	20	7.2	3	Fair/poor	Fair/poor	Moderate	Conditional	Suppressed - poor trunk taper, sparse crown with epicormic growth up stem.	Project arborist to supervise all excavation and fill placement required within the critical root zone.	Retain
	992	Yes	On	Yes	Douglas-fir	<i>Pseudotsuga menziesii</i>	72	25	8.6	5	Fair	Fair	Moderate	Conditional	Codominant crown with adjacent firs - moderate trunk taper, deadwood in lower canopy.	Project arborist to supervise all excavation and fill placement required within the critical root zone. Deadwood prune prior to project commencement.	Retain
	Non 29	Yes	On	No	Douglas-fir	<i>Pseudotsuga menziesii</i>	56	25	6.7	5	Poor	Fair/poor	Moderate	Unsuitable	<i>Porodaedalea pini</i> fruiting bodies up main stem, kinked trunk at 4m above grade.	Modify to 10m height – for risk mitigation – prior to project commencement.	Modify
	Non 30	Yes	On	No	Douglas-fir	<i>Pseudotsuga menziesii</i>	30	12	3.6	4	Fair/poor	Fair/poor	Moderate	Conditional	Suppressed - poor trunk taper, stunted growth form.	Project arborist to supervise all excavation and fill placement required within the critical root zone.	Retain
	993	Yes	On	Yes	Douglas-fir	<i>Pseudotsuga menziesii</i>	80	25	9.6	8	Fair/good	Fair/good	Moderate	Suitable	Located at edge of grove - good trunk taper, asymmetric crown on North side due to shading.	Project arborist to supervise all excavation and fill placement required within the critical root zone.	Retain

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					Common	Botanical					Health	Structural					
	994	Yes	On	Yes	Douglas-fir	<i>Pseudotsuga menziesii</i>	85	25	10.2	8	Fair/good	Fair/good	Moderate	Suitable	Located at edge of grove - good trunk taper, asymmetric crown due to shading, heavily surface rooted on North side.	Southwest corner of the childcare studio is located within the critical root zone. *Project arborist to supervise all excavation and fill placement required within the critical root zone.	Retain*
	Non 31	No	On	Yes	Western redcedar	<i>Thuja plicata</i>	23	10	3.5	3	Fair	Fair/poor	Poor	Conditional	Suppressed - poor trunk taper.	Project arborist to supervise all excavation and fill placement required within the critical root zone.	Retain
	Non 32	No	On	Yes	Western redcedar	<i>Thuja plicata</i>	15	8	2.3	3	Fair	Fair/poor	Poor	Conditional	Suppressed - poor trunk taper.	Project arborist to supervise all excavation and fill placement required within the critical root zone.	Retain
	Non 33	No	On	Yes	Western redcedar	<i>Thuja plicata</i>	18	10	2.7	3	Fair	Fair/poor	Poor	Conditional	Suppressed - poor trunk taper.	Project arborist to supervise all excavation and fill placement required within the critical root zone.	Retain
	995	Yes	On	Yes	Douglas-fir	<i>Pseudotsuga menziesii</i>	60	25	7.2	6	Fair	Fair/poor	Moderate	Conditional	Codominant crown with adjacent firs - secondary stem removed historically at 1m above grade, pitch flow at 1.5m above grade, health stress - twig dieback - likely due to soil compaction within the crz.	Located within the footprint of the proposed childcare studio.	Remove
	Non 34	No	On	Yes	Western redcedar	<i>Thuja plicata</i>	34	15	5.1	4	Good	Fair	Poor	Conditional	Suppressed - poor trunk taper, bark damage at 1.5m above grade.	Will be impacted by excavation required to construct foundation of proposed studio building and increased wind exposure (will not be windfirm as a stand-alone tree).	Remove
	Non 35	No	On	Yes	Western redcedar	<i>Thuja plicata</i>	45	15	6.8	5	Fair	Fair	Poor	Conditional	Suppressed - poor trunk taper.	Will be impacted by increased wind exposure (will not be windfirm as a stand-alone tree).	Remove
	996	Yes	On	Yes	Western redcedar	<i>Thuja plicata</i>	76	20	11.4	5	Fair	Fair/poor	Poor	Unsuitable	Internal decay - open cavity on North side of lower trunk - from base to 2m above grade, multiple leaders form at 10m above grade.	Modify to 10m height – for risk mitigation – prior to project commencement.	Modify
	Non 36	No	On	Yes	Western redcedar	<i>Thuja plicata</i>	15	5	2.3	3	Fair	Fair/poor	Poor	Conditional	Suppressed - poor trunk taper.	Will be impacted by increased wind exposure (will not be windfirm as a stand-alone tree).	Remove
	Non 37	No	On	Yes	Western redcedar	<i>Thuja plicata</i>	15	5	2.3	3	Fair	Fair/poor	Poor	Conditional	Suppressed - poor trunk taper.	Will be impacted by increased wind exposure (will not be windfirm as a stand-alone tree).	Remove
	Non 38	No	On	Yes	Western redcedar	<i>Thuja plicata</i>	19	10	2.9	3	Fair	Fair/poor	Poor	Conditional	Suppressed - poor trunk taper.	Will be impacted by increased wind exposure (will not be windfirm as a stand-alone tree).	Remove
	Non 39	No	On	Yes	Western redcedar	<i>Thuja plicata</i>	49	15	7.4	4	Poor	Fair/poor	Poor	Unsuitable	Suppressed - poor trunk taper, declining health - dead top - 60% live crown ratio.	Modify to 10m height – for risk mitigation – prior to project commencement.	Modify
	Non 40	No	On	Yes	Bigleaf maple	<i>Acer macrophyllum</i>	30	20	3.6	4	Fair	Fair/poor	Moderate	Conditional	Suppressed - poor trunk taper.	Project arborist to supervise all excavation and fill placement required within the critical root zone.	Retain

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					Common	Botanical					Health	Structural					
	Non 41	No	On	Yes	Bigleaf maple	<i>Acer macrophyllum</i>	54~	20	6.5	5	Fair	Fair/poor	Moderate	Conditional	Codominant stems form at base - narrow angle of attachment - too narrow to measure.	Project arborist to supervise all excavation and fill placement required within the critical root zone.	Retain
	Non 42	No	On	Yes	Bigleaf maple	<i>Acer macrophyllum</i>	38	15	4.6	5	Fair	Fair/poor	Moderate	Conditional	Suppressed - poor trunk taper, leans to North - corrected, top failed previously - hung up at 10m above grade.	Project arborist to supervise all excavation and fill placement required within the critical root zone. Crown clean prior to project commencement	Retain
	Non 43	No	On	Yes	Bigleaf maple	<i>Acer macrophyllum</i>	25	10	3	3	Fair	Poor	Moderate	Conditional	Heavy lean to the North - not corrected.	Project arborist to supervise all excavation and fill placement required within the critical root zone.	Retain
	Non 44	No	On	Yes	Bigleaf maple	<i>Acer macrophyllum</i>	36	20	4.3	5	Fair	Fair/poor	Moderate	Conditional	Codominant crown with adjacent trees - poor trunk taper, corrected lean.	Project arborist to supervise all excavation and fill placement required within the critical root zone.	Retain
	997	Yes	On	Yes	Garry oak	<i>Quercus garryana</i>	44	20	4.4	5	Good	Fair/poor	Good	Conditional	Crown weighted entirely to West - was likely previously suppressed by Adjacent larger trees that have been removed historically, history of large limb removal, deadwood in lower crown.	*Underground electrical, water and gas services proposed within the critical root zone. Project arborist to supervise all excavation and fill placement required within the critical root zone. Deadwood prune prior to project commencement.	Retain*
	Non 45	No	On	Yes	Bigleaf maple	<i>Acer macrophyllum</i>	29	20	3.5	3	Fair	Fair/poor	Moderate	Conditional	Codominant crown with adjacent trees - poor trunk taper - asymmetric crown on East side due to shading.	Will be impacted by increased wind exposure (will not be windfirm as a stand-alone tree).	Remove
	998	Yes	On	Yes	Bigleaf maple	<i>Acer macrophyllum</i>	65	20	7.8	6	Fair/good	Fair/good	Moderate	Conditional	Codominant crown with adjacent cedar - asymmetric crown on East side due to shading, trunk leans to West - corrected, central leader removed historically at 10m above grade.	Foundation of the proposed childcare studio and underground sanitary service proposed within the critical root zone.	Remove
	999	Yes	On	Yes	Western redcedar	<i>Thuja plicata</i>	66	20	9.9	5	Fair/poor	Fair/poor	Poor	Conditional	Codominant crown with 0998 - moderate trunk taper, declining health - sparse crown.	Foundation of the proposed childcare studio and underground sanitary service proposed within the critical root zone.	Remove
	Non 46	No	On	Yes	Bigleaf maple	<i>Acer macrophyllum</i>	21	10	2.5	2	Fair	Fair/poor	Moderate	Conditional	Suppressed - poor trunk taper - lost small top historically.	Located within the footprint of the proposed childcare studio.	Remove
	Non 47	No	On	Yes	Bigleaf maple	<i>Acer macrophyllum</i>	23	15	2.8	2	Fair	Fair/poor	Moderate	Conditional	Suppressed - poor trunk taper.	Located within the footprint of the proposed childcare studio.	Remove
	Non 48	No	On	Yes	Bigleaf maple	<i>Acer macrophyllum</i>	26	15	3.1	3	Fair	Fair/poor	Moderate	Conditional	Suppressed - poor trunk taper.	Located within the footprint of the proposed childcare studio.	Remove
	Non 49	No	On	Yes	Bigleaf maple	<i>Acer macrophyllum</i>	37	15	4.4	3	Fair	Fair/poor	Moderate	Conditional	Suppressed - poor trunk taper, codominant stems form at 3m above grade - narrow angle of attachment.	Located within the footprint of the proposed childcare studio.	Remove
	Non 50	No	On	Yes	Douglas-fir	<i>Pseudotsuga menziesii</i>	37	20	4.4	4	Fair/poor	Poor	Moderate	Conditional	Suppressed - poor trunk taper, rubbing wound up lower trunk - from base to 3m above grade, declining health - sparse foliage.	Located within the footprint of the proposed childcare studio.	Remove

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					Common	Botanical					Health	Structural					
	1000	Yes	On	Yes	Bigleaf maple	<i>Acer macrophyllum</i>	54,19,10,10	20	8.6	4	Fair	Poor	Moderate	Unsuitable	Extensive Lower trunk decay - thin shell wall, appears to have been damaged by adjacent tree removal - large limb recently removed that was extended to the North.	Removal recommended – due to pre-existing structural defects – for risk mitigation – prior to project commencement.	Remove – for risk mitigation
	1001	Yes	On	Yes	Douglas-fir	<i>Pseudotsuga menziesii</i>	90	25	10.8	8	Fair/good	Fair/good	Moderate	Suitable	Located at edge of grove - good trunk taper, crown raise pruned to 15m above grade, concrete driveway recently installed within crz.	Project arborist to supervise all excavation and fill placement required within the critical root zone.	Retain
	1002	Yes	On	Yes	Douglas-fir	<i>Pseudotsuga menziesii</i>	95	25	11.4	8	Fair/good	Fair/good	Moderate	Suitable	Located at edge of grove - good trunk taper, crown raise pruned to 15m above grade, concrete driveway recently installed within crz.	*Parking spaces and sidewalk proposed within the critical root zone. Project arborist to supervise all excavation and fill placement required within the critical root zone.	Retain*
	1003	Yes	On	Yes	Douglas-fir	<i>Pseudotsuga menziesii</i>	88	25	10.6	8	Fair/good	Fair/good	Moderate	Conditional	Codominant crown with adjacent firs - good trunk taper, asymmetric crown on North side due to shading, s all deadwood in lower crown.	*Parking spaces and sidewalk proposed within the critical root zone. Project arborist to supervise all excavation and fill placement required within the critical root zone. Deadwood prune prior to project commencement.	Retain*
	Non 51	No	On	Yes	Grand fir	<i>Abies grandis</i>	31	15	4.7	2	Fair/poor	Poor	Poor	Conditional	Suppressed - poor trunk taper, health stress - sparse foliage throughout crown	Located within the footprint of the proposed interior access road.	Remove
	Non 52	No	On	Yes	Bigleaf maple	<i>Acer macrophyllum</i>	25	15	3	2	Fair	Fair/poor	Moderate	Conditional	Suppressed - poor trunk taper.	Located within the footprint of the proposed interior access road.	Remove
	Non 53	No	On	Yes	Douglas-fir	<i>Pseudotsuga menziesii</i>	27	15	3.2	2	Fair	Fair/poor	Moderate	Conditional	Suppressed - poor trunk taper.	Located within the footprint of the proposed interior access road.	Remove
	Non 54	No	On	Yes	Bigleaf maple	<i>Acer macrophyllum</i>	17,19	15	3.5	3	Fair	Fair/poor	Moderate	Conditional	Suppressed - poor trunk taper.	Located within the footprint of the proposed interior access road.	Remove
	Non 55	No	On	Yes	Bigleaf maple	<i>Acer macrophyllum</i>	12,18	15	3	3	Fair	Fair/poor	Moderate	Conditional	Suppressed - poor trunk taper.	Will be impacted by excavation required to construct the proposed interior access roadway and increased wind exposure (will not be windfirm as a standalone tree).	Remove
	Non 56	No	On	Yes	Douglas-fir	<i>Pseudotsuga menziesii</i>	36	15	4.3	4	Fair	Fair/poor	Moderate	Conditional	Suppressed - poor trunk taper.	Will be impacted by excavation required to construct the proposed interior access roadway and increased wind exposure (will not be windfirm as a standalone tree).	Remove

Prev. Tag #	Tag or ID #	Surveyed ?	Location (On, Off, Shared, City)	Bylaw protected ?	Name		dbh (cm)	Ht (m)	Critical root zone radius (m)	Dripline radius (m)	Condition		Relative tolerance	Retention Suitability (onsite trees)	General field observations/remarks	Tree retention comments	Retention status
					Common	Botanical					Health	Structural					
	1004	Yes	On	Yes	Douglas-fir	<i>Pseudotsuga menziesii</i>	129	30	15.5	10	Good	Good	Moderate	Suitable	Located at edge of grove - good trunk taper crown raise pruned to 15 m above grade, deadwood in lower crown, pitch flow on East side of lower trunk.	*Interior access roadway proposed within the critical root zone. Project arborist to supervise all excavation required within the critical root zone. Deadwood prune prior to project commencement.	Retain*
	1005	Yes	On	Yes	Douglas-fir	<i>Pseudotsuga menziesii</i>	115	30	13.8	10	Good	Good	Moderate	Suitable	Located at edge of grove - good trunk taper, deadwood in lower crown.	*Parking spaces proposed within the critical root zone. Project arborist to supervise all excavation required within the critical root zone. Deadwood prune prior to project commencement.	Retain*
	Non 57	No	On	Yes	Douglas-fir	<i>Pseudotsuga menziesii</i>	18	10	2.2	2	Poor	Poor	Moderate	Conditional	Suppressed - poor trunk taper, declining health - 5%lcr.	Located within the footprint of the proposed interior access road.	Remove
	1006	Yes	On	Yes	Western redcedar	<i>Thuja plicata</i>	98	20	14.7	5	Fair/poor	Fair	Poor	Conditional	Codominant stems form at 2m above grade - included bark - not active, declining health - dead tops.	Project arborist to supervise all excavation required within the critical root zone.	Retain
	Non 58	No	On	Yes	Bigleaf maple	<i>Acer macrophyllum</i>	47	20	5.6	5	Fair	Fair/poor	Moderate	Conditional	Suppressed - poor trunk taper, adventitious root on North side of root collar, possible internal decay.	Project arborist to supervise all excavation required within the critical root zone. Closer exam recommended if retained.	Retain
	1007	Yes	On	Yes	Douglas-fir	<i>Pseudotsuga menziesii</i>	80	25	9.6	6	Fair/good	Fair/good	Moderate	Conditional	Codominant crown with adjacent firs - moderate trunk taper, trunk covered in dead ivy, small deadwood in lower crown.	Project arborist to supervise all excavation required within the critical root zone. Deadwood prune prior to project commencement.	Retain
	1008	Yes	On	Yes	Douglas-fir	<i>Pseudotsuga menziesii</i>	77	25	9.2	6	Fair/good	Fair/good	Moderate	Conditional	Codominant crown with adjacent firs - moderate trunk taper, trunk covered in dead ivy, small deadwood in lower crown.	Project arborist to supervise all excavation required within the critical root zone. Deadwood prune prior to project commencement.	Retain
	1009	Yes	On	Yes	Douglas-fir	<i>Pseudotsuga menziesii</i>	77	25	9.2	8	Fair/good	Fair/good	Moderate	Conditional	Codominant crown with adjacent firs - moderate trunk taper, trunk covered in dead ivy, small deadwood in lower crown, intertwined root system with 1010.	Project arborist to supervise all excavation required within the critical root zone. Deadwood prune prior to project commencement.	Retain
	1010	Yes	On	Yes	Douglas-fir	<i>Pseudotsuga menziesii</i>	107	25	12.8	9	Fair/good	Fair/good	Moderate	Conditional	Codominant crown with adjacent firs - moderate trunk taper, trunk covered in dead ivy, small deadwood in lower crown, intertwined root system with 1009.	Project arborist to supervise all excavation required within the critical root zone. Deadwood prune prior to project commencement.	Retain
	Non 59	No	On	Yes	Grand fir	<i>Abies grandis</i>	23,24	10	5.7	3	Fair/poor	Poor	Poor	Unsuitable	Suppressed - poor trunk taper - sparse crown, codominant stems form at 5m above grade - narrow angle of attachment.	Project arborist to supervise all excavation required within the critical root zone.	Retain
	1011	Yes	On	Yes	Bigleaf maple	<i>Acer macrophyllum</i>	81	25	9.7	8	Fair	Fair	Moderate	Conditional	Multiple stems form at 3m above grade - no major weaknesses visible at stem unions, deadwood throughout crown.	Project arborist to supervise all excavation required within the critical root zone. Deadwood prune prior to project commencement.	Retain

Prev. Tag #	Tag or ID #	Surveyed ?	Location (On, Off, Shared, City)	Bylaw protected ?	Name		dbh (cm)	Ht (m)	Critical root zone radius (m)	Dripline radius (m)	Condition		Relative tolerance	Retention Suitability (onsite trees)	General field observations/remarks	Tree retention comments	Retention status
					Common	Botanical					Health	Structural					
	1012	Yes	On	Yes	Douglas-fir	<i>Pseudotsuga menziesii</i>	67	25	8.0	6	Fair/good	Fair/good	Moderate	Conditional	Codominant crown with adjacent firs - moderate trunk taper.	Project arborist to supervise all excavation required within the critical root zone.	Retain
	Non 60	Yes	On	No	Bigleaf maple	<i>Acer macrophyllum</i>	18	15	2.2	3	Fair	Fair/poor	Moderate	Conditional	Suppressed - poor trunk taper.	Project arborist to supervise all excavation required within the critical root zone.	Retain
	1013	Yes	On	Yes	Douglas-fir	<i>Pseudotsuga menziesii</i>	87	30	10.4	8	Fair/good	Fair	Moderate	Conditional	Codominant crown with adjacent firs - moderate trunk taper, crown raise pruned to 20 meters above grade, corrected lean.	*Southeast corner of the childcare studio proposed within the critical root zone. Project arborist to supervise all excavation and fill placement required within the critical root zone.	Retain*
	1014	Yes	On	Yes	Bigleaf maple	<i>Acer macrophyllum</i>	41,100	25	15	12	Fair/good	Fair	Moderate	Conditional	Multiple stems form at 3m above grade - narrow angles of attachment, large stem removed historically, deadwood throughout crown.	Will be impacted by excavation required to construct the foundation of the proposed childcare studio.	Remove
	Non 61	Yes	On	No	Douglas-fir	<i>Pseudotsuga menziesii</i>	39	15	4.7	2	Fair	Fair/poor	Moderate	Conditional	Suppressed - poor trunk taper.	Will be impacted by excavation required to construct the proposed interior access roadway and increased wind exposure (will not be windfirm as a standalone tree).	Remove
	Non 62	Yes	On	No	Douglas-fir	<i>Pseudotsuga menziesii</i>	27	15	3.2	2	Fair	Fair/poor	Moderate	Conditional	Suppressed - poor trunk taper.	Will be impacted by excavation required to construct the proposed interior access roadway and increased wind exposure (will not be windfirm as a standalone tree).	Remove
	Non 63	Yes	On	No	Douglas-fir	<i>Pseudotsuga menziesii</i>	33	15	4.0	2	Fair	Fair/poor	Moderate	Conditional	Suppressed - poor trunk taper	Located within the footprint of the proposed interior access roadway.	Remove
	Non 64	Yes	On	No	Douglas-fir	<i>Pseudotsuga menziesii</i>	17	15	2.0	2	Fair	Fair/poor	Moderate	Conditional	Suppressed - poor trunk taper	Located within the footprint of the proposed interior access roadway.	Remove
	Non 65	Yes	On	No	Douglas-fir	<i>Pseudotsuga menziesii</i>	24	15	2.9	2	Fair	Fair/poor	Moderate	Conditional	Suppressed - poor trunk taper	Located within the footprint of the proposed interior access roadway.	Remove
	Non 66	Yes	On	No	Douglas-fir	<i>Pseudotsuga menziesii</i>	35	15	4.2	3	Fair	Fair/poor	Moderate	Conditional	Suppressed - poor trunk taper	Located within the footprint of the proposed interior access roadway.	Remove
	1015	Yes	On	Yes	Douglas-fir	<i>Pseudotsuga menziesii</i>	60	20	7.2	6	Fair/good	Fair	Moderate	Conditional	Codominant crown with adjacent fir - moderate trunk taper - asymmetric crown on West side due to shading, deadwood in lower crown.	Located within the footprint of the proposed interior access roadway.	Remove
	Non 67	Yes	On	No	Douglas-fir	<i>Pseudotsuga menziesii</i>	56	20	6.7	5	Fair	Fair	Moderate	Conditional	Codominant crown with 1015 - moderate trunk taper - asymmetric crown on East side due to shading deadwood in lower crown.	Will be impacted by excavation required to construct the proposed interior access roadway and increased wind exposure (will not be windfirm as a standalone tree).	Remove

Prev. Tag #	Tag or ID #	Surveyed ?	Location (On, Off, Shared, City)	Bylaw protected ?	Name		dbh (cm)	Ht (m)	Critical root zone radius (m)	Dripline radius (m)	Condition		Relative tolerance	Retention Suitability (onsite trees)	General field observations/remarks	Tree retention comments	Retention status
					Common	Botanical					Health	Structural					
	Non 68	Yes	On	No	Douglas-fir	<i>Pseudotsuga menziesii</i>	48	20	5.8	4	Fair	Fair/poor	Moderate	Conditional	Suppressed - poor trunk taper, suppressed 16cm dbh Douglas-fir forms at base.	Will be impacted by excavation required to construct the foundation of the proposed studio building and increased wind exposure (will not be windfirm as a standalone tree).	Remove
	Non 69	Yes	On	No	Douglas-fir	<i>Pseudotsuga menziesii</i>	28	20	3.4	2	Fair	Fair/poor	Moderate	Conditional	Suppressed - poor trunk taper.	Project arborist to supervise all excavation and fill placement required within the critical root zone.	Retain
	Non 70	Yes	On	No	Douglas-fir	<i>Pseudotsuga menziesii</i>	29	20	3.5	2	Fair	Fair/poor	Moderate	Conditional	Suppressed - poor trunk taper.	Project arborist to supervise all excavation and fill placement required within the critical root zone.	Retain
	Non 71	Yes	On	No	Douglas-fir	<i>Pseudotsuga menziesii</i>	37	20	4.4	2	Fair	Fair/poor	Moderate	Conditional	Suppressed - poor trunk taper.	Project arborist to supervise all excavation and fill placement required within the critical root zone.	Retain
	1016	Yes	On	Yes	Douglas-fir	<i>Pseudotsuga menziesii</i>	60	25	7.2	4	Fair	Fair	Moderate	Conditional	Codominant crown with adjacent firs - moderate trunk taper - asymmetric crown on North side due to shading.	Project arborist to supervise all excavation and fill placement required within the critical root zone.	Retain
	1017	Yes	On	Yes	Douglas-fir	<i>Pseudotsuga menziesii</i>	88	30	10.6	9	Fair/good	Fair/good	Moderate	Conditional	Codominant crown with adjacent firs - good trunk taper - asymmetric crown on North side due to shading, deadwood in lower crown.	Project arborist to supervise all excavation and fill placement required within the critical root zone. Deadwood prune prior to project commencement.	Retain
	1018	Yes	On	Yes	Douglas-fir	<i>Pseudotsuga menziesii</i>	93	30	11.2	8	Fair/good	Fair/good	Moderate	Conditional	Codominant crown with adjacent firs - good trunk taper, crown raise pruned to 20 meter height.	Project arborist to supervise all excavation and fill placement required within the critical root zone.	Retain
	1019	Yes	On	Yes	Douglas-fir	<i>Pseudotsuga menziesii</i>	80	30	9.6	8	Fair/good	Fair/good	Moderate	Conditional	Codominant crown with adjacent firs - good trunk taper, intertwined root system with 1020, deadwood in lower crown.	Project arborist to supervise all excavation and fill placement required within the critical root zone. Deadwood prune prior to project commencement.	Retain
	1020	Yes	On	Yes	Douglas-fir	<i>Pseudotsuga menziesii</i>	84	30	10.1	8	Fair/good	Fair/good	Moderate	Conditional	Codominant crown with adjacent firs - good trunk taper, intertwined root system with 1019, deadwood in lower crown.	Project arborist to supervise all excavation and fill placement required within the critical root zone. Deadwood prune prior to project commencement.	Retain
	1021	Yes	On	Yes	Douglas-fir	<i>Pseudotsuga menziesii</i>	86	30	10.3	8	Fair/good	Fair/good	Moderate	Conditional	Codominant crown with adjacent firs - good trunk taper, crown raise pruned to 20-meter height, small deadwood in upper crown.	Project arborist to supervise all excavation and fill placement required within the critical root zone. Deadwood prune prior to project commencement.	Retain

Table 2. TRAQ Table

Tag or ID #	DBH (cm)	Ht (m)	Common Name	Tree Part	Condition(s) of Concern and target description	Likelihood (1 year timeframe)			Consequences	Risk Rating	Mitigation Recommendations	Residual Risk
						Failure	Impact	Failure & Impact				
878	95	25	Douglas-fir	Whole tree	<i>Porodaedalea pini</i> fruiting bodies attached to lower trunk indicates infection with a decay pathogen. The occupants of the vehicles using the proposed parking spaces and turnaround area will become targets.	Possible	High	Somewhat likely	Severe	Moderate	Modify to 10m height – for risk mitigation – prior to project commencement.	Low
975	61	15	Bigleaf maple	Decayed stems with tearout injuries	2 stems recently failed and still attached at .5m above grade, extensive trunk decay, remaining portions of tree likely compromised. The pedestrians using the proposed pathway will become targets.	Possible	High	Somewhat likely	Severe	Moderate	Modify to 10m height – for risk mitigation – prior to project commencement.	Low
non 29	56	25	Douglas-fir	Whole tree	<i>Porodaedalea pini</i> fruiting bodies attached to lower trunk indicates infection with a decay pathogen. The occupants of the proposed childcare studio and outdoor play area will become targets.	Possible	High	Somewhat likely	Severe	Moderate	Modify to 10m height – for risk mitigation – prior to project commencement.	Low
996	76	20	Western redcedar	Whole tree	Trunk cavity and internal decay. The occupants of the proposed childcare studio and outdoor play area will become targets.	Possible	High	Somewhat likely	Severe	Moderate	Modify to 10m height – for risk mitigation – prior to project commencement.	Low
non 39	49	15	Western redcedar	Dead portions	Dead top. The occupants of the proposed childcare studio and outdoor play area will become targets.	Possible	High	Somewhat likely	Severe	Moderate	Modify to 10m height – for risk mitigation – prior to project commencement.	Low
1000	54,19,10,10	20	Bigleaf maple	Whole tree	Extensive Lower trunk decay - thin shell wall. The occupants of the proposed childcare studio and parking spaces will become targets.	Possible	High	Somewhat likely	Severe	Moderate	Remove entire tree - for risk mitigation - prior to project commencement.	Low

5. SITE INFORMATION & PROJECT UNDERSTANDING

The development site consists of one property (7420 Veyaness Road), in Central Saanich, B.C.. It is our understanding that the proposal is to create 3 childcare studio buildings, an outdoor play area, a connection pathway (through a right of way at the West side of the property), a new 1.8 meter wide concrete sidewalk along the Veyaness frontage and a paved entrance/exit, drop off area, parking stalls, a rain garden and underground utility connections.

Below is a general observation of the tree resource, as it appeared at the time of our site visit:

6. FIELD OBSERVATIONS

The subject site is a lot at the corner of Veyaness and White Road, which has no existing building structures, and has a closed tree canopy over the majority of the site (see *figure 1*). The central portion of the site thinly treed, with primarily non-bylaw protected size trees. The onsite tree resource consists of a mixture of native conifer and deciduous tree species, including Douglas-fir, Western Redcedar, Grand fir, Pacific yew, Bigleaf maple, willow sp., Pacific dogwood, and a single Garry oak.



figure 1: Site context air photo: The approximate boundary of the subject site is outlined in Yellow.

7. TREE RISK ASSESSMENT

During our December 31, 2020, January 07, 2021, January 20, 2021 site visits and in conjunction with the tree inventory, onsite trees were assessed for risk, on a limited visual assessment basis (level 1), and in the context of the existing and proposed land uses. The time frame used for the purpose of our assessment is one year (from the date of the tree inventory). Unless otherwise noted herein, we did not conduct a detailed (level 2) or advanced (level 3) risk assessment, such as resistograph testing, increment core sampling, aerial examinations, or subsurface root/root collar examinations.

Existing Land Uses

We did not observe any trees that were deemed to be moderate, high or extreme risk (in the context of the existing land uses, that would require hazard abatement to eliminate present and/or future risks (within a 1-year timeframe). Targets considered during this TRAQ assessment include: Occupants of adjacent residences (constant use), occupants of vehicles travelling on the White Road and Veyaness Road (frequent use), pedestrians travelling along existing sidewalks (frequent use), hydro lines (constant use).

Proposed Land Uses

The following trees were observed to have significant health or structural defects, that do not pose a risk to the existing land uses, but the risk rating will increase, once targets are introduced. Targets considered during this TRAQ assessment include: Occupants of adjacent residences (constant use), occupants of vehicles travelling on the White Road and Veyaness Road (frequent use), pedestrians travelling along existing sidewalks (frequent use), hydro lines (constant use). Refer to [Table 2](#) for risk ratings and mitigation recommendations for each tree.

- 878, 975, non 29, 996, non 39, 1000.

8. IMPACT ASSESSMENT

8.1. RETENTION AND REMOVAL OF MUNICIPAL TREES

The following municipal trees (indicated by tag #) are located within influencing distance of the proposed development, where they are possible for retention providing that their critical root zones are adequately protected during construction. The project arborist must be onsite to supervise and excavation or fill placement required within their critical root zones:

Retain and protect 104 municipal trees

- 851, 852, 853, 854, 855, 856, 857, 858, 864, 865, 866, 867, 868, 869, 870, 871, 874, 875, 876, 877, 881, 884, 885, 886, 887, 888, 889, 890, 891, 894, 895, 896, 897, 899, 901, 902, 903, 904, 905, 906, 907, 908, 909, 910, 911, 912, 913, 914, 915, 916, 917, 918, 919, 920, 921, 922, 923, 924, 925, 926, 927, 928, 929, 930, 931, 932, 933, 934, 935, 936, 937, 938, 939, 940, 941, 942, 943, 944, 945, 946, 947, 948, 949, 950, 951, 952, 953, 954, 955, 956, 957, 958, 959, 960, 961, 962, 963, 964, 965, 966, 967, 968, 969, 970 (shared).

The following municipal trees (indicated by tag #) are located where they will be heavily impacted by proposed construction works required to install the proposed entrance/exit driveway and/or the 1.8 meter wide concrete sidewalk and are proposed for removal:

Remove 15 municipal trees

- 859, 860, 861, 862, 863, 872, 873, 879, 880, 882, 883, 892, 893, 898, 900

***Note that the municipality will need to provide consent, prior the removal of any trees that are located on Municipal property.**

8.2. RETENTION AND REMOVAL OF PRIVATE OFFSITE TREES

The following private offsite trees (indicated by tag #) are located within influencing distance of the proposed development, where they are possible for retention providing that their critical root zones are adequately protected during construction. The project arborist must be onsite to supervise and excavation or fill placement required within their critical root zones:

Retain and protect 2 private offsite trees

- 893, 894

There were not private offsite trees observed within influencing distance of the proposed development, that we anticipate requiring removal due to impacts associated with the proposed development.

***Prior written consent from the neighbouring owner is required prior to the removal of any trees located on neighbouring properties. Unsurveyed trees may require surveying to verify ownership.**

8.3. RETENTION AND REMOVAL OF ONSITE TREES

The following bylaw protected size onsite or shared trees (indicated by tag #) are located where they are possible for retention providing that their critical root zones are adequately protected during construction. The project arborist must be onsite to supervise and excavation or fill placement required within their critical root zones:

Retain and protect 43 bylaw protected onsite trees

- 971, 972, 973, 974, 976, 977, 978, 979, 980, 981, 982, 983, 984, 985, 986, 987, 988, 989, 990, 991, 992, 993, 994, 997, 1001, 1002, 1003, 1004, 1005, 1006, 1007, 1008, 1009, 1010, 1011, 1012, 1013, 1016, 1017, 1018, 1019, 1020, 1021.

The following non bylaw protected size onsite trees (indicated by ID #) are located where they are possible for retention providing that their critical root zones are adequately protected during construction. The project arborist must be onsite to supervise and excavation or fill placement required within their critical root zones:

Retain and protect 42 non bylaw protected trees

- non 1, non 2, non 3, non 4, non 5, non 6, non 7, non 8, non 10, non 11, non 12, non 13, non 14, non 15, non 16, non 17, non 18, non 19, non 20, non 21, non 22, non 23, non 24, non 25, non 26, non 27, non 28, non 30, non 31, non 32, non 33, non 40, non 41, non 42, non 43, non 44, non 58, non 59, non 60, non 69, non 70, non 71.

The following bylaw protected size onsite trees (indicated tag #) are located where they will be heavily impacted by proposed construction works and are proposed for removal:

Remove 5 bylaw protected onsite trees

- 995 – Located within the footprint of the proposed childcare studio building.
- 998 – Will be impacted by excavation required to install the proposed Underground sanitary, water, electrical and gas services and to construct the foundation of the childcare studio building and perimeter drainage and this tree is located within striking distance of the existing neighbouring residences and proposed childcare studio building. 998 and 999 are codominant (should only be considered for preservation as a pair – if services were relocated outside of the critical root zone).
- 999 - Will be impacted by excavation required to install the proposed Underground sanitary and storm services and to construct the childcare studio building and perimeter drainage and this tree is located within striking distance of the existing neighbouring residences and proposed childcare studio building. (*note that this tree is in declining health condition). 998 and 999 are codominant (should only be considered for preservation as a pair – if services were relocated outside of the critical root zone).
- 1014 – Will be impacted by excavation required to construction of the proposed childcare studio building.
- 1015 – Located within the footprint of the proposed interior roadway/turnaround and within the footprint of the proposed underground stormwater retention area. Note that this tree is codominant with the surrounding trees (non 61 – non 65) and should only be considered for retention if this whole group was preserved.

The following non bylaw protected size onsite trees (indicated by ID #) are located where they will be heavily impacted by proposed construction works and are proposed for removal:

Remove 26 non bylaw protected trees

- non 9, non 34, non 35, non 36, non 37, non 38, non 46, non 47, non 48, non 49, non 50, non 51, non 52, non 53, non 54, non 55, non 56, non 57, non 61, non 62, non 63, non 64, non 65, non 66, non 67, non 68.

8.4. TREE REPLACEMENT

It is understood that a tree replacement plan will be prepared by others. If the site cannot accommodate the required quantity of replacement trees, any shortfall will be compensated to the city via a cash in lieu payment by the client. Current arboricultural best management practices and BCSLA/BCLNA standards apply to; quality, root ball, health, form, handling, planting, guying/staking and establishment care of replacement trees.

9. IMPACT MITIGATION

Tree Protection Barrier: The areas, surrounding the trees to be retained should be isolated from the construction activity by erecting protective barrier fencing (see [Appendix A](#) for municipal barrier specifications). Where possible, the fencing should be erected at the perimeter of the critical root zone. The barrier fencing to be erected must be a minimum of 4 feet in height, of solid frame construction that is attached to wooden or metal posts. A solid board or rail must run between the posts at the top and the bottom of the fencing. This solid frame can then be covered with flexible snow fencing. The fencing must be erected prior to the start of any construction activity on site (i.e. demolition, excavation, construction), and remain in place through completion of the project. Signs should be posted around the protection zone to declare it off limits to all construction related activity. The project arborist must be consulted before this fencing is removed or moved for any purpose.

Arborist Supervision: All excavation occurring within the critical root zones of protected trees should be completed under supervision by the project arborist. Any severed or severely damaged roots must be pruned back to sound tissue to reduce wound surface area and encourage rapid compartmentalization of the wound. In particular, the following activities should be completed under the direction of the project arborist:

- All excavation, fill placement and stump removal required within critical root zones during the proposed entrance/exit driveway, turnaround and parking lot installation.
- All excavation, fill placement and stump removal required within critical root zones during grading for the footprint of the proposed childcare studio building.
- All excavation, fill placement and stump removal required within critical root zones during installation of the proposed underground utilities.
- All excavation, fill placement and stump removal required within critical root zones during installation of the proposed 1.8 meter wide concrete sidewalk (and culvert – if required), along the Veyaness Road frontage.
- All excavation, fill placement and stump removal required within critical root zones during installation of the proposed gravel pathway on the East side of the property.
- All excavation, fill placement and stump removal required within critical root zones during proposed rain garden installations.

Methods to Avoid Soil Compaction: In areas where construction traffic must encroach into the critical root zones of trees to be retained, efforts must be made to reduce soil compaction where possible by displacing the weight of machinery and foot traffic. This can be achieved by one of the following methods:

- Installing a layer of hog fuel or coarse wood chips at least 20 cm in depth and maintaining it in good condition until construction is complete.
- Placing medium weight geotextile cloth over the area to be used and installing a layer of crushed rock to a depth of 15 cm over top.

- Placing two layers of 19mm plywood.
- Placing steel plates.

Demolition of the Existing Buildings: The demolition of the existing houses, driveways, and any services that must be removed or abandoned, must take the critical root zone of the trees to be retained into account. If any excavation or machine access is required within the critical root zones of trees to be retained, it must be completed under the supervision and direction of the project arborist. If temporarily removed for demolition, barrier fencing must be erected immediately after the supervised demolition.

Paved Surfaces Above Tree Roots:

If the new paved surfaces within the CRZ of tree to be retained require excavation down to bearing soil and roots are encountered in this area, this could impact their health and structural stability. If tree retention is desired, a raised and permeable paved surface should be constructed in the areas within the critical root zone of the trees. The “paved surfaces above root systems” diagram and specifications is attached.

The objective is to avoid root loss and to instead raise the paved surface and its base layer above the roots. This may result in the grade of the paved surface being raised above the existing grade (the amount depending on how close roots are to the surface and the depth of the paving material and base layers). Final grading plans should take this potential change into account. This may also result in soils which are high in organic content being left intact below the paved area.

To allow water to drain into the root systems below, we also recommend that the surface be made of a permeable material (instead of conventional asphalt or concrete) such as permeable asphalt, paving stones, or other porous paving materials and designs such as those utilized by Grasspave, Gravelpave, Grasscrete and open-grid systems.

Mulching: Mulching can be an important proactive step in maintaining the health of trees and mitigating construction related impacts and overall stress. Mulch should be made from a natural material such as wood chips or bark pieces and be 5-8cm deep. No mulch should be touching the trunk of the tree. See “methods to avoid soil compaction” if the area is to have heavy traffic.

Blasting: Care must be taken to ensure that the area of blasting does not extend beyond the necessary footprints and into the critical root zones of surrounding trees. The use of small low-concussion charges and multiple small charges designed to pre-shear the rock face will reduce fracturing, ground vibration, and overall impact on the surrounding environment. Only explosives of low phytotoxicity and techniques that minimize tree damage should be used. Provisions must be made to ensure that blasted rock and debris are stored away from the critical root zones of trees.

Scaffolding: This assessment has not included impacts from potential scaffolding including canopy clearance pruning requirements. If scaffolding is necessary and this will require clearance pruning of retained trees, the project arborist should be consulted. Depending on the extent of pruning required, the project arborist may recommend that alternatives to full scaffolding be considered such as hydraulic lifts, ladders or platforms. Methods to avoid soil compaction may also be recommended (see “Minimizing Soil Compaction” section).

Landscaping and Irrigation Systems: The planting of new trees and shrubs should not damage the roots of retained trees. The installation of any in-ground irrigation system must take into account the critical root zones of the trees to be retained. Prior to installation, we recommend the irrigation technician consult with the project arborist about the most suitable locations for the irrigation lines and how best to mitigate the impacts on the trees to be retained. This may require the project arborist supervise the excavations associated with installing the irrigation system. Excessive frequent irrigation and irrigation which wets the trunks of trees can have a detrimental impact on tree health and can lead to root and trunk decay.

Windthrow: Where forest edge trees are proposed to be removed, we recommend that trees that may experience an increase in wind exposure be re-examined, once tree clearing has taken place, to ensure that they are structurally stable, and suitable for retention as leading-edge trees.

Arborist Role: It is the responsibility of the client or his/her representative to contact the project arborist for the purpose of:

- Locating the barrier fencing
- Reviewing the report with the project foreman or site supervisor
- Locating work zones, where required
- Supervising any excavation within the critical root zones of trees to be retained
- Reviewing and advising of any pruning requirements for machine clearances

Review and site meeting: Once the project receives approval, it is important that the project arborist meet with the principals involved in the project to review the information contained herein. It is also important that the arborist meet with the site foreman or supervisor before any site clearing, tree removal, demolition, or other construction activity occurs and to confirm the locations of the tree protection barrier fencing.

10. DISCLOSURE STATEMENT

This arboricultural field review report was prepared by Talbot Mackenzie & Associates for the exclusive use of the Client and may not be reproduced, used or relied upon, in whole or in part, by a party other than the Client without the prior written consent of Talbot Mackenzie & Associates. Any unauthorized use of this report, or any part hereof, by a third party, or any reliance on or decisions to be made based on it, are at the sole risk of such third parties. Talbot Mackenzie & Associates accepts no responsibility for damages, if any, suffered by any third party as a result of decisions made or actions based on this report, in whole or in part.

Arborists are professionals who examine trees and use their training, knowledge, and experience to recommend techniques and procedures that will improve a tree's health and structure 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. The arborist's review is limited to a visual examination of tree health and structural condition, without excavation, probing, resistance drilling, increment coring, or aerial examination. There are inherent limitations to this type of investigation, including, without limitation, that some tree

conditions will inadvertently go undetected. The arborist's review followed the standard of care expected of arborists undertaking similar work in British Columbia under similar conditions. No warranties, either express or implied, are made as to the services provided and included in this report.

The findings and opinions expressed in this report are based on the conditions that were observed on the noted date of the field review only. The Client recognizes that passage of time, natural occurrences, and direct or indirect human intervention at or near the trees may substantially alter discovered conditions and that Talbot Mackenzie & Associates cannot report on, or accurately predict, events that may change the condition of trees after the described investigation was completed.

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. The only way to eliminate tree risk entirely is to remove the entire tree. All trees retained should be monitored on a regular basis. 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.

Immediately following land clearing, grade changes or severe weather events, all trees retained should be reviewed for any evidence of soil heaving, cracking, lifting or other indicators of root plate instability. If new information is discovered in the future during such events or other activities, Talbot Mackenzie & Associates should be requested to re-evaluate the conclusions of this report and to provide amendments as required prior to any reliance upon the information presented herein.

11. IN CLOSING

We trust that this report meets your needs. Should there be any questions regarding the information within this report, please do not hesitate to contact the undersigned.

Yours truly,

Talbot Mackenzie & Associates

Prepared by:



Noah Talbot, BA
ISA Certified Arborist PN – 6822A
Tree Risk Assessment Qualification
Email: tmtreehelp@gmail.com

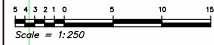
12. REFERENCES

Dunster, J.A., E.T. Smiley, N. Matheny, and S. Lily. 2017. Tree Risk Assessment Manual, International Society of Arboriculture (ISA).

The Corporation of the District of Central Saanich, Bylaw No. 2020.

APPENDIX A – TREE MANAGEMENT SKETCH (SITE PLAN MARKUP)

**Topographic Plan Of:
Lot A, Section 8, Range 3 East,
South Saanich District, Plan 17298,
P.I.D. 003-922-766**



Dated this 19th day of February, 2019,
Distances and elevations shown are in metres.
Elevations are based on geodetic datum CND288C.
This site plan is for building and design purposes
and is for the exclusive use of my client.
This document shows the relative location of the
surveyed structures and features with respect to
the boundaries of the parcel described above.
This document shall not be used to define property
lines or property corners.

Legend

- Unsurveyed tree with tag or ID reference number
- ✕ Bylaw protected tree proposal for removal
- ✕ Non-Bylaw protected tree proposal for removal
- R Moderate Risk Tree - refer to arborist report for mitigation recommendation
- Tree protection fencing

See appendix D of arborist report for
hard surface installation over tree roots
detail. adjust tree protection fencing at
time of hard surface installation.

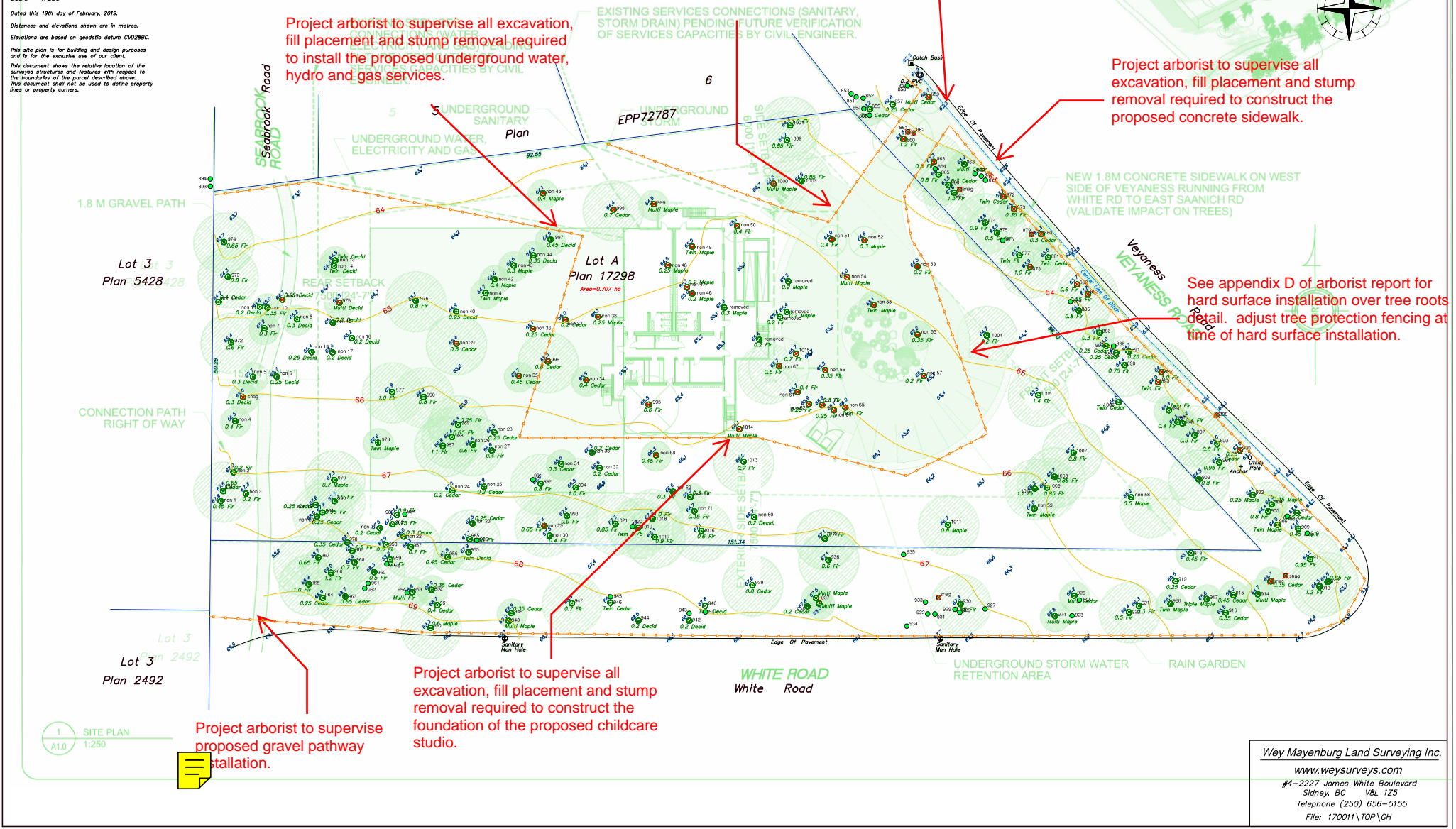
Project arborist to supervise all excavation, fill placement
and stump removal required to construct the proposed
entrance/exit roadway and parking/turnaround areas.



Project arborist to supervise all excavation,
fill placement and stump removal required
to install the proposed underground water,
hydro and gas services.

Project arborist to supervise all
excavation, fill placement and stump
removal required to construct the
proposed concrete sidewalk.

See appendix D of arborist report for
hard surface installation over tree roots
detail. adjust tree protection fencing at
time of hard surface installation.



APPENDIX B - PHOTOGRAPHS



Photograph 1. Looking toward the site at the Veyaness Road and White Road intersection.



Photograph 2 – Looking toward the Veyaness Road frontage.



Photograph 3 – Yellow arrow indicates failed portion of Bigleaf maple (tag# 975).



Photograph 4 – Yellow arrow indicates decayed lower trunk of Bigleaf maple (tag# 1000).



Photograph 5 – Photo taken from the center of the site looking North.



Photograph 6 – Photo taken from the center of the site looking South.

APPENDIX C – ARCHITECTURAL SITE, FLOOR AND ELEVATION PLANS

DECEMBER 18TH, 2020



- A-0.0 COVER SHEET AND BYLAWS
- A-1.0 SITE PLAN
- A-1.1 SITE PLAN
- A-2.0 FLOOR PLAN
- A-3.0 ELEVATIONS

OWNER /PROJECT CONTACT :	ROB LUMB DIRECTOR OF FACILITIES, SAANICH SCHOOLS 2125 KEATING CROSS ROAD SAANICHTON, BC V8M 2A5 P: 250-652-7341 C: 250-217-4163
ARCHITECT :	BRADLEY SHUYA ARCHITECT INC. 762 RALPH ST. VICTORIA B.C. V8X 3C9 F: 250-727-0636

ALL WORK SHALL CONFORM TO THE LATEST BRITISH COLUMBIA BUILDING CODE OR LOCAL BUILDING CODES AND BY-LAWS WHICH MAY TAKE PRECEDENCE.

DO NOT SCALE OFF DRAWINGS; CONTACT THE CONSULTANT FOR MISSING INFORMATION.

CONTRACTOR TO VERIFY ALL DIMENSIONS ON SITE.

ALL DOCUMENTS TO BE READ AS A WHOLE.

LARGER SCALE DRAWINGS TAKE PRECEDENCE OVER SMALL SCALE DRAWINGS.

REFER TO SPECIFICATIONS FOR MATERIALS.

USABLE FLOOR AREA:

STUDIO SECTION #1	94.4 SQ.M	24 CHILDREN
STUDIO SECTION #2	89.0 SQ.M	24 CHILDREN
STUDIO SECTION #3	89.0 SQ.M	24 CHILDREN
TOTAL	272.4 SQ.M	72 CHILDREN

3 TOILETS AND 2 WASH BASINS PROVIDED FOR EACH STUDIO
TOTAL 9 TOILETS AND 6 WASH BASINS

OUTDOOR PLAY AREA: 72 CHILDREN X 6 M2 = MINIMUM 432 M2

CIVIC ADDRESS:	WHITE ROAD AND VENEZIANES		
LEGAL DESCRIPTION:	LOT 2 SECTION 8, RANGE 3 EAST, SOUTH SAUNDRA COUNTY, DISTRICT 12, PLAN 17298		
ZONING:	CURRENT RE-2 - REZONE TO P1		
SITE AREA		17,965.90 SQ. M.	
SITE COVERAGE ALLOWED:		40%	
SITE COVERAGE EXIST:		0.80 M ± 0%	
SITE COVERAGE PROPOSED:		431.90 SQ. M.	
SITE COVERAGE TOTAL:		431.90 M ± 0% (± 1%)	
SETBACKS			
FRONT YARD		7.5 M	
REAR YARD		7.5 M	
SIDE YARD		6.0 M	
AVERAGE GROUND		66.5 M	
GROSS FLOOR AREA PROPOSED:		431.90 SQ. M.	
FLOOR SPACE RATIO:		0.4	
MAX HEIGHT:		8.0 M	
STOREYS:		1 STOREY PROPOSED	
IMPERMEABLE SURFACE:			
ROOF		414	SQ. M.
STAIRS AND LANDING		167	SQ. M.
TOTAL		200	SQ. M.
ASPHALT ROAD		820	SQ. M.
TOTAL		1,020	SQ. M.

STORMWATER WILL BE A COMBINED INFILTRATION AND RETENTION CAPACITY GREATER THAN DEPTH TO THE DEPTH OF 20 MM OF WATER OVER THE AREA OF THE PARCEL. WATER SURFACE CAPACITY OF THE PARCEL EQUAL TO 1.0 M³ OF WATER. A DEVICE LIMITING THE STORMWATER FLOW IN THE PARCEL TO THE PUBLIC CHARGE SYSTEM TO A MAXIMUM OF 17.5 LITRES PER SECOND PER HECTARE OF PARCEL AREA. ENGINEERING DRAWINGS WILL BE SUBMITTED FOR BUILDING PERMITS.

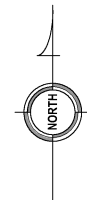
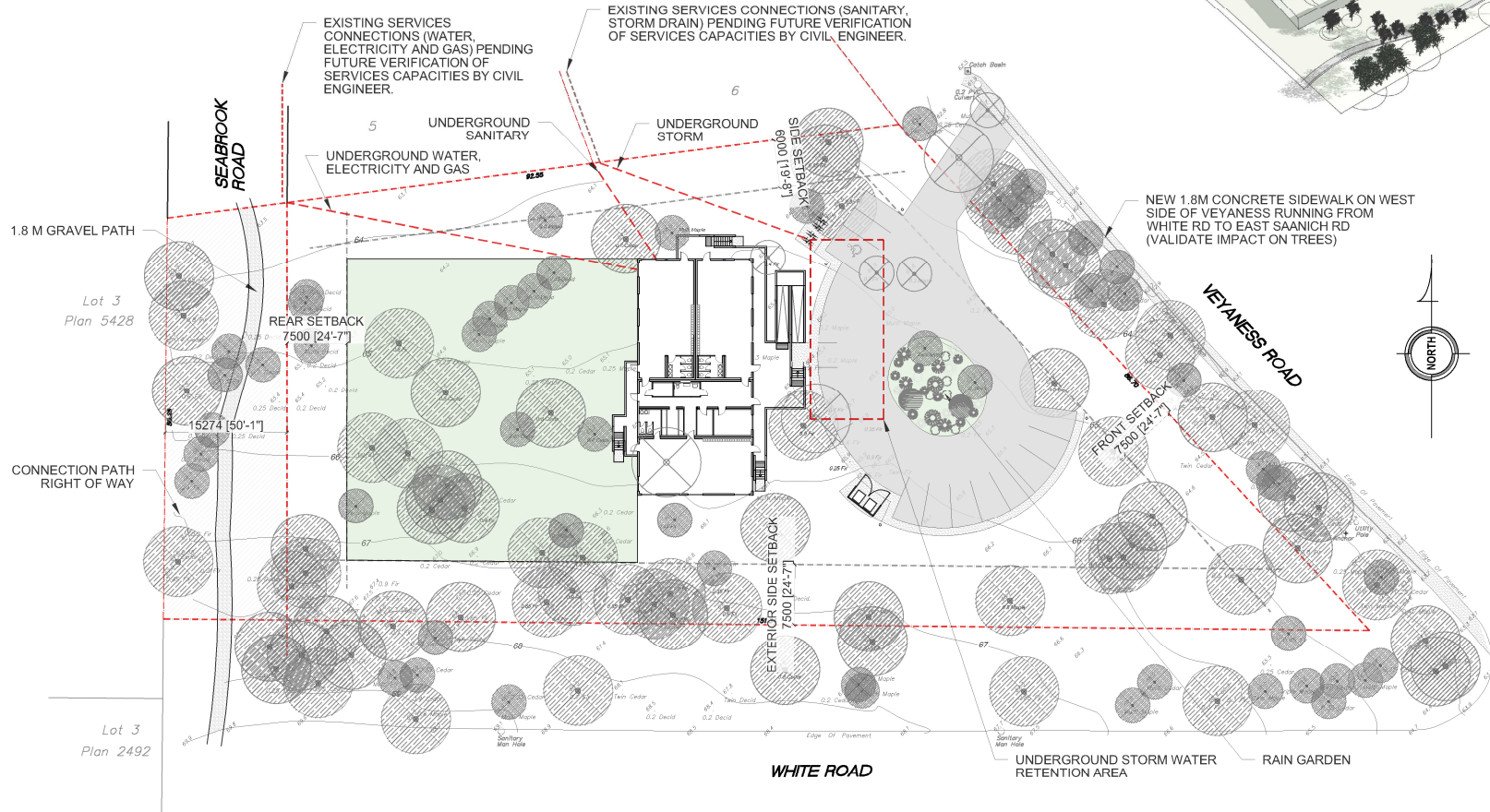
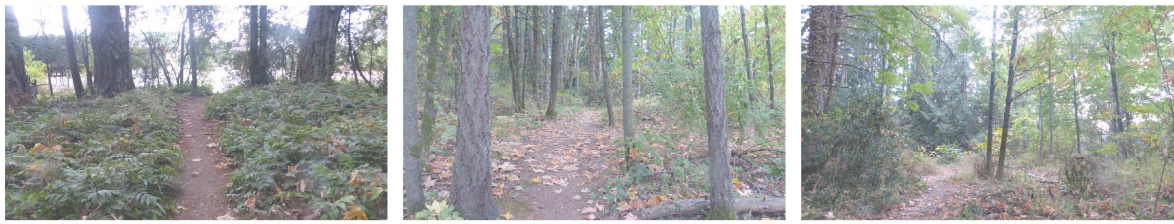
OFF STREET PARKING

1 STALL PER 5 CHILDREN REQUIRED FOR CHILDCARE
NEW PARKING FOR CHILDCARE = 14 STALLS

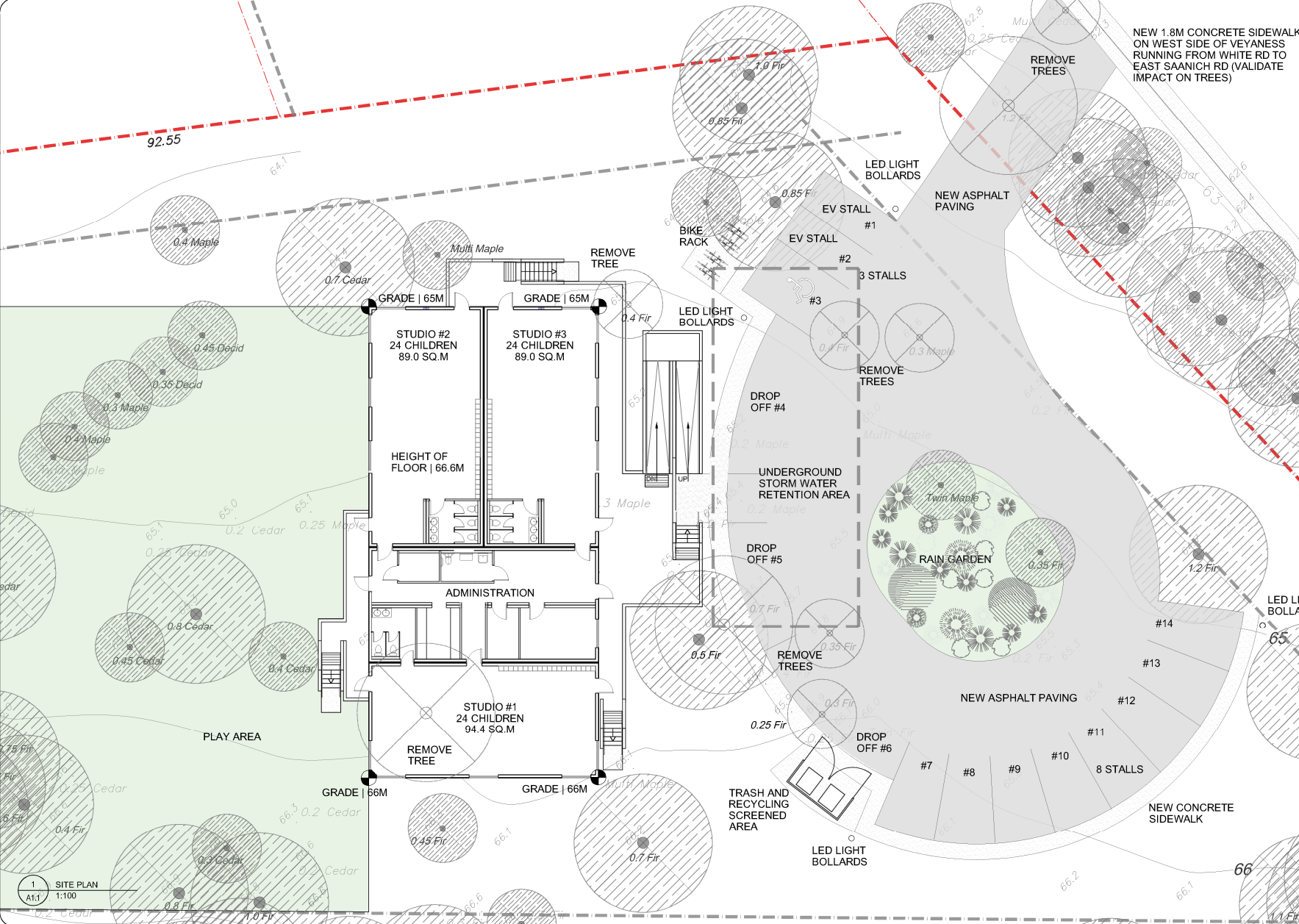
PROPOSED FOR PROJECT = 14 STALLS
(1 ACCESSIBLE AND 2 ENERGIZED SPACES WITH 2 ENERGIZED ELECTRIC VEHICLE
SUPPLY EQUIPMENT)

NO BIKE PARKING REQUIRED | 8 PARKING SPACES IN EXTERIOR BIKE RACK PROVIDED

1.3 M H VEGETATION SCREEN REQUIRED AROUND PARKING



WHITE ROAD



1 SITE PLAN
A1.1 1:100

NEW 1.8M CONCRETE SIDEWALK
ON WEST SIDE OF VEYANESS
RUNNING FROM WHITE RD TO
EAST SAANICH RD (VALIDATE
IMPACT ON TREES)

REVISIONS	
1	SCALE 1:100 (SHEET 1 OF 1)

SCHOOL DISTRICT 63
EARLY LEARNING CENTER
WHITE ROAD AND VEYANESS
NEW CHILDREAN STUDIOS - ISSUED FOR ZONING

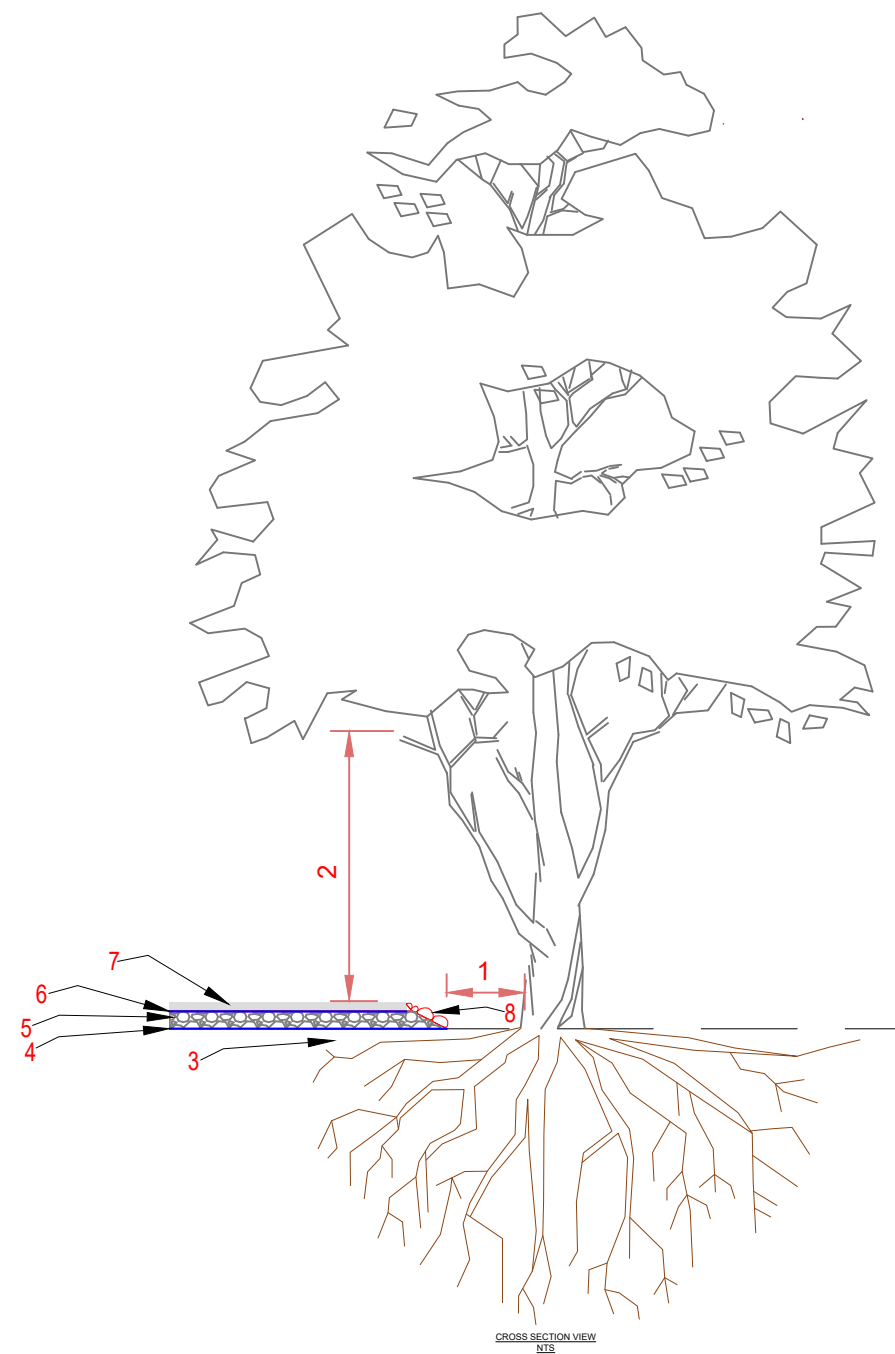
The drawings and designs provided in this document are for informational purposes only. The user of this document is responsible for the accuracy of the information and for the validity of the information. The user of this document is responsible for the accuracy of the information and for the validity of the information. The user of this document is responsible for the accuracy of the information and for the validity of the information.

BSA
25 YEARS
BRADLEY SHIVA
ARCHITECT INC.
7822 Highway 10, Victoria B.C.
p. 250.727.2005 • f. 250.727.2006
info@bradleyshivaarchitect.com
www.bradleyshivaarchitect.com

SITE PLAN	
Date	DEC 18 2020
Scale	AS NOTED
Drawn	AC
App	20-17
Sheet	A1.1

APPENDIX D – HARD SURFACE INSTALLATION OVER TREE ROOTS DETAIL

HARD SURFACE ABOVE TREE ROOTS DETAIL



HARD SURFACE ABOVE TREE ROOTS NOTES

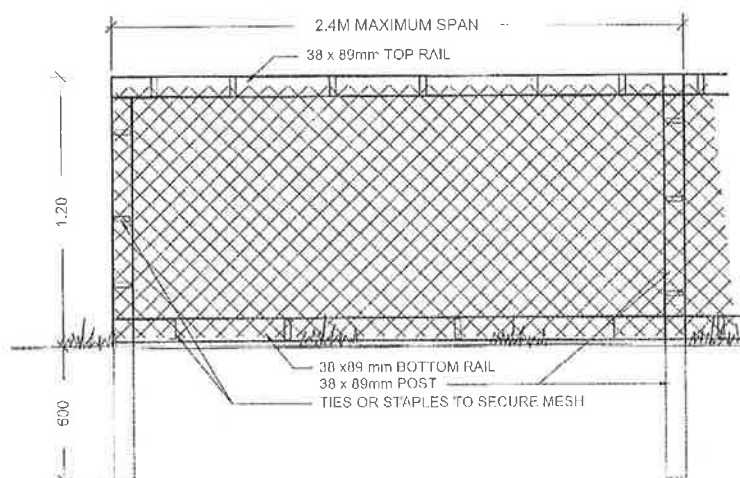
1. Maintain as large a setback between the fill encroachment and the root collar of the tree as possible.
2. Review any canopy clearance pruning requirements to accommodate vehicle or pedestrian clearances (Pruning to be performed to ANSI A300 standards).
3. Excavate the new footprint of the driveway or sidewalk under the supervision of the project arborist. Excavation will be limited to the removal of the existing sod layer. Excavation around root structures must be performed by hand, airspade, or hydroexcavation.
4. Install a two-dimensional (such as Combigrid $\frac{30}{30}$) or Three-dimensional geogrid reinforcement.
5. Install a 150mm depth layer of clear crushed gravel (no fines) using 20mm and/or 75mm diameter material or approved equivalent. *Note - the depth may be less than 150mm in some situations (dependant on grading constraints).
6. Install meduim weight geotextile fabric (such as Nilex 4535 or similar) over the clear crushed gravel layer to prevent fine particles of sand from infiltrating this layer.
7. The bedding or base layer and new driveway or sidewalk surface can be installed directly on top of the felted filter fabric.
8. Fill slopes - where possible install loose stacked boulders to reduce the footprint of the fill slopes that encroach within the critical root zone. Fill slope materials must be permeable to air and water. Do not pile fill material directly against the trunk of a tree.



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VICTORIA, BC, V8Z 7H2
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www.treehelp.ca

APPENDIX E – CENTRAL SAANICH TREE PROTECTION FENCING SPECIFICATIONS

SCHEDULE "D" TREE PROTECTION BARRIER REQUIREMENTS

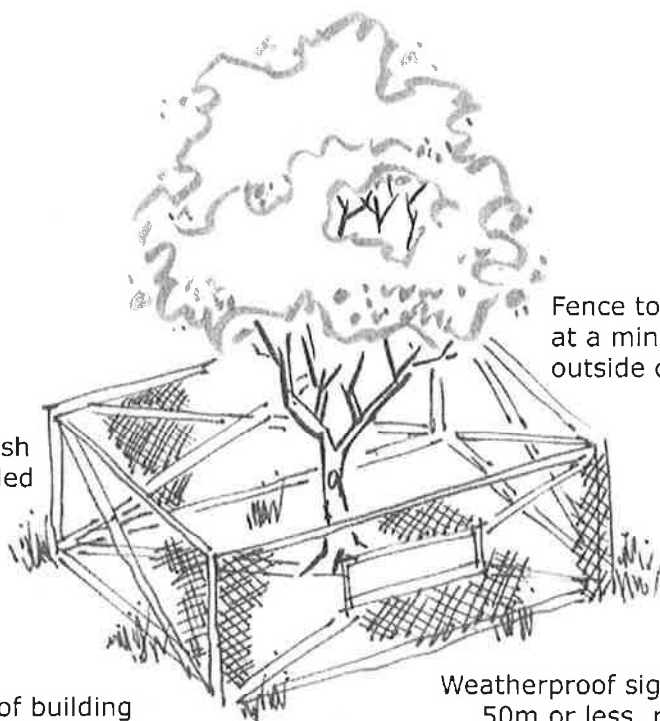


TREE PROTECTION FENCING DISTANCE TABLE	
Trunk Diameter (cm)	Minimum Distance in Meters From Tree (=dia x 12)
15.0	1.8
20.0	2.4
25.0	3.0
30.0	3.6
35.0	4.2
40.0	4.8
45.0	5.4
50.0	6.0
55.0	6.6
60.0	7.2
75.0	9.0
90.0	10.0
100.0	12.0

TREE PROTECTION FENCING
FENCE WILL BE CONSTRUCTED USING
38 X 89 mm (2"X4") WOOD FRAME:
TOP, BOTTOM AND POSTS. *
USE ORANGE SNOW-FENCING MESH AND
SECURE TO THE WOOD FRAME WITH
"ZIP" TIES OR GALVANIZED STAPLES

* IN ROCKY AREAS, METAL POSTS (T-BAR
OR REBAR) DRILLED INTO ROCK WILL BE
ACCEPTED

Solid barrier fence with mesh
or plywood panels as detailed



Fence to be located
at a minimum
outside dripline

NOTE: no storage of building
materials within or against protection barrier

Weatherproof sign every
50m or less, reading
"Tree Protection Area, Keep Out"