

DATE OF MEETING [June 7, 2021]

AUTHORED BY [CALEB HORN, PLANNER, CURRENT PLANNING]

SUBJECT [DEVELOPMENT PERMIT APPLICATION NO. DP1151 – 3532 STEPHENSON POINT ROAD]

OVERVIEW

Purpose of Report

To present for Council’s consideration an aquatic development permit application for a proposed single residential dwelling at 3532 Stephenson Point Road.

Recommendation

That Council deny Development Permit Application No. DP1151 as proposed at 3532 Stephenson Point Road.

BACKGROUND

A development permit application, DP1151, was received from Rob Turgeon to reduce the watercourse setback to facilitate the construction of a single residential dwelling at 3532 Stephenson Point Road.

Subject Property and Site Context

<i>Zoning</i>	R1 – Single Dwelling Residential
<i>Location</i>	The subject property is located at the end of Stephenson Point Road, adjacent to the ocean.
<i>Lot Area</i>	0.23ha
<i>Official Community Plan (OCP)</i>	Map 1 – Future Land Use – Neighbourhood Map 3 – Development Permit Area No. 2 – Environmentally Sensitive Areas

The subject property is presently undeveloped and is largely forested. Though a separate legal lot, the property previously functioned as a single parcel with the neighbouring property to the south at 3522 Stephenson Point Road. The single residential dwelling at 3522 Stephenson Point Road encroaches onto the subject property within a private easement. There is an active building permit application on the subject property (BP127238) for a 90m² single residential dwelling that meets the bylaw requirements to function as a carriage house (an accessory secondary suite) should a larger principal dwelling be constructed on the site.

The property slopes downhill from west to east, and drops significantly towards the ocean along the east property line. An unnamed creek flows through a ravine across the neighbouring property to the north. Surrounding land uses are low-density single residential dwellings, and Planta Park is located across Stephenson Point Road to the southwest.

DISCUSSION

Proposed Development

The applicant is proposing to construct a single residential dwelling with a gross floor area of approximately 707m² and a building footprint of approximately 450m². The proposed dwelling is sited centrally on the lot at the crest of the slope facing the sea to the east. No setback variance from the sea is required. A portion of the proposed dwelling also approaches the crest of the slope for the unnamed creek to the north.

The subject property falls within 'Regime VI' of the "North Slope Development Policy" area where a geotechnical assessment is required prior to any development approvals. The geotechnical assessment submitted in support of the application determined that no geotechnical setback would be required from the top of slope and that the lot was safe and suitable for the intended use as proposed.

Proposed Variance

Minimum Watercourse Setback

The minimum required watercourse setback from top-of-bank above the unnamed creek is 7.5m, as identified in 'Schedule C' of the "City of Nanaimo Zoning Bylaw 2011 No. 4500" (the "Zoning Bylaw"). The proposed watercourse setback is 0.8m; a requested variance of 6.7m.

The creek is located approximately 20m north of the subject property within a ravine with a depth of approximately 9m. Watercourse setbacks are measured in the Zoning Bylaw as from top-of-bank above a watercourse rather than from the watercourse itself. These setbacks, also known as a leavestrips, allow for not only functional riparian habitats, but also wildlife corridors across the city where there are existing watercourses.

The subject creek is non-fish-bearing and Provincial Riparian Area Protection Regulations (RAPR) do not apply to such creeks. The creek is subject to the Environmentally Sensitive Areas Development Permit Area (DPA2) as per the City of Nanaimo Official Community Plan (OCP). DPA2 applies to watercourses that do not support fish or fish habitat and the OCP recognizes that these features "have high biodiversity and maintain natural hydrology". Where an encroachment into the riparian leavestrip is proposed, the OCP provides guidelines that include requiring an environmental assessment, minimizing negative impacts, completing riparian restoration, and committing to vegetation management. In particular, DPA2 Policy #7 states that in order to minimize impacts in the Environmentally Sensitive Area (ESA), the following types of development should be avoided:

- Removal / modification of native vegetation;
- Introduction of non-native invasive vegetation;
- Impacts to the protected root zones of trees within the ESA;
- Use of fill;
- Disturbance of native soil;
- Blasting;
- Changes to hydrology; and
- Run off of sediments and construction-related contaminants into the ESA.

An environmental assessment prepared by a Qualified Environmental Professional (QEP) has been submitted in support of the application, as well as a vegetation management plan (Attachment F) that will be implemented should the development proceed.

Prior to considering the impacts of a proposed aquatic development permit, an applicant is expected to provide a rationale and demonstrate the need to encroach into any riparian leavestrip. Where no functional building envelope exists outside of the leavestrip, an encroachment can be considered. The proposed single residential dwelling will encroach into the riparian leavestrip by 6.7m, and the applicant has identified the following factors as limiting the building footprint opportunities onsite:

1. *Riparian leavestrip.* The riparian leavestrip (watercourse setback) extends nearly 10m into a portion of the subject property from the north property line.
2. *Encroachment of existing house.* A private easement for the house on the neighbouring property at 3522 Stephenson Point Road extends approximately 5m into the property from the south property line, and is approximately 13m wide.
3. *Setback from the sea.* The Zoning Bylaw requires a 15m setback from the natural boundary of the sea.
4. *Septic field siting.* As the subject property is not connected to the City's sanitary sewer service, a septic field will be required on site. A Registered Onsite Wastewater Practitioner (ROWP) determined that the optimal siting for a septic field would be in the southwest portion of the lot with a total area of approximately 111m².

In addition to the above, the applicant has proposed to register a tree protection covenant as a condition of the development permit for existing in the western portion of the property (identified in Attachment H). Staff have noted that the identified trees are currently protected under the definition of "Significant Tree" in the City of Nanaimo "Management and Protection of Trees Bylaw 2013 No. 7126".

Staff have reviewed the DPA2 guidelines and the factors identified by the applicant and determined that a viable building envelope is available outside of the riparian leavestrip. The subject property is approximately 29m wide, nearly double the width of the typical R1 lot, and the lot area of approximately 2,300m² is more than four times the minimum R1 lot size. Taking into account the site constraints, a functional building envelope with an area of at least 500m² has been identified by Staff as shown in Attachment G. A building envelope of this size could accommodate the size of the proposed single residential dwelling and would not require tree removal beyond what is currently proposed.

If a structure were built within the functional building envelope, no watercourse setback variance or development permit would be required and there would be opportunity to maintain the riparian leavestrip as a wildlife habitat. Given that a functional building envelope is achievable on the subject property without encroaching into the riparian leavestrip, Staff do not support the watercourse setback variance.

Should Council approve Development Permit Application No. DP1151, the development will be subject to the Terms and Conditions outlined in Attachment A.

OPTIONS

1. That Council deny Development Permit Application No. DP1151 at 3532 Stephenson Point Road.
 - Advantages: No encroachment into the riparian leavestrip and associated wildlife habitat will occur as the single residential dwelling can be accommodated elsewhere onsite.
 - Disadvantages: The applicant will be required to revise the proposed building plans to construct a dwelling outside of the riparian leavestrip and development permit area.
 - Financial Implications: None identified.

2. The Council approve Development Permit Application No. DP1151 at 3532 Stephenson Point Road.
 - Advantages: The applicant will be able to proceed with the current design with the condition that the property be developed as per the Vegetation Management Plan as shown in Attachment F, and a vegetation maintenance bond be secured for a period of three years; and
 - Disadvantages: The proposed siting of the single residential dwelling will result in a reduction of wildlife habitat identified under the Environmentally Sensitive Areas Development Permit Area (DPA2) in the Official Community Plan.
 - Financial Implications: None identified.

SUMMARY POINTS

- Development Permit Application No. DP1151 proposes to reduce the minimum required watercourse setback from 7.5m to 0.8m, as measured from top-of-bank above an unnamed creek, to facilitate the construction of a single residential dwelling.
- Provincial Riparian Area Protection Regulations (RAPR) do not apply to the subject creek.
- A functional building envelope is achievable on the subject property without encroaching into the watercourse leavestrip.
- Staff recommend that Council deny Development Permit Application No. DP1151.

ATTACHMENTS

ATTACHMENT A: Permit Terms and Conditions
ATTACHMENT B: Context Map
ATTACHMENT C: Location Plan
ATTACHMENT D: Proposed Site Plan
ATTACHMENT E: Proposed Building Renderings
ATTACHMENT F: Vegetation Management Plan
ATTACHMENT G: Functional Building Envelope
ATTACHMENT H: Tree Protection Plan
ATTACHMENT I: Aerial Photo

Submitted by:

Lainya Rowett
Manager, Current Planning

Concurrence by:

Jeremy Holm
Director, Development Approvals

Dale Lindsay
General Manager, Development Services

ATTACHMENT A

PERMIT TERMS AND CONDITIONS

TERMS OF PERMIT

“City of Nanaimo Zoning Bylaw 2011 No. 4500” is varied as follows:

1. *Section 6.3.1.5 Location and Siting of Buildings and Structures to Watercourses* – to reduce the minimum watercourse setback from 7.5m to 0.8m as measured from the top of bank above the unnamed creek.

CONDITIONS OF PERMIT

1. The subject property is developed in accordance with the proposed Site Plan prepared by Charles O. Smythies & Associates, dated 2020-JUN-02, as shown on Attachment D.
2. The subject property is developed and maintained in substantial compliance with the Vegetation Management Plan prepared by AquaTerra Environmental Ltd., dated 2020-MAR-04, as shown on Attachment F.
3. Security is to be submitted prior to building permit issuance and held for three years from the date of completion, to ensure the lot is developed in accordance with the proposed Vegetation Management Plan.
4. Temporary construction fencing identifying the 15m setback to the sea is to be in place prior to any construction activity.
5. A Section 219 Covenant is to be registered on title prior to Building Permit issuance to protect the trees in the northwest portion of the subject property identified in the Tree Protection Plan, provided by Vancouver Island Tree Service Ltd., received 2021-MAY-17, as shown on Attachment H.

ATTACHMENT B CONTEXT MAP



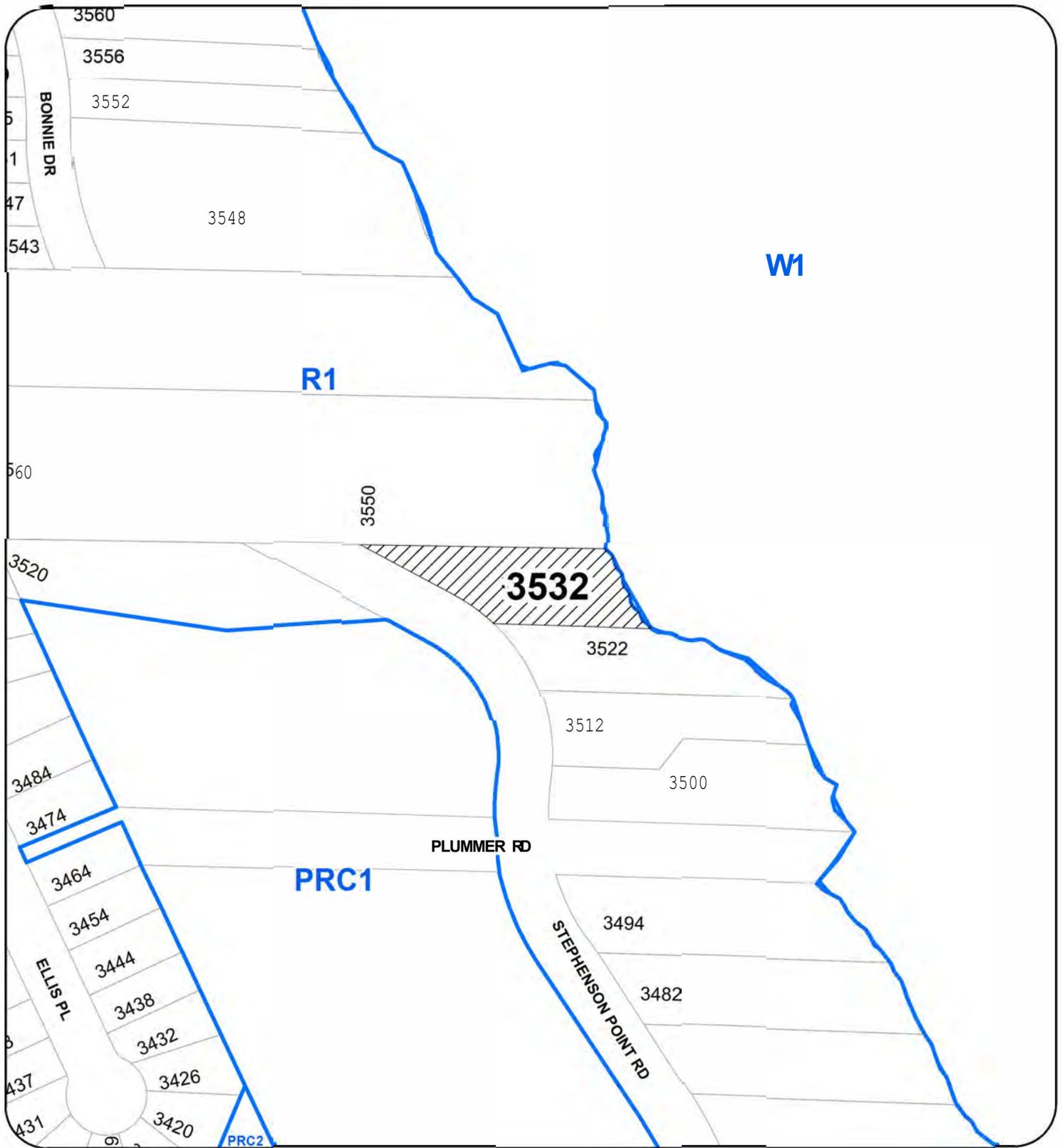
DEVELOPMENT PERMIT APPLICATION NO. DP001151



3532 STEPHENSON POINT ROAD

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ATTACHMENT C LOCATION PLAN



DEVELOPMENT PERMIT APPLICATION NO. DP001151



Subject Property

LOCATION PLAN

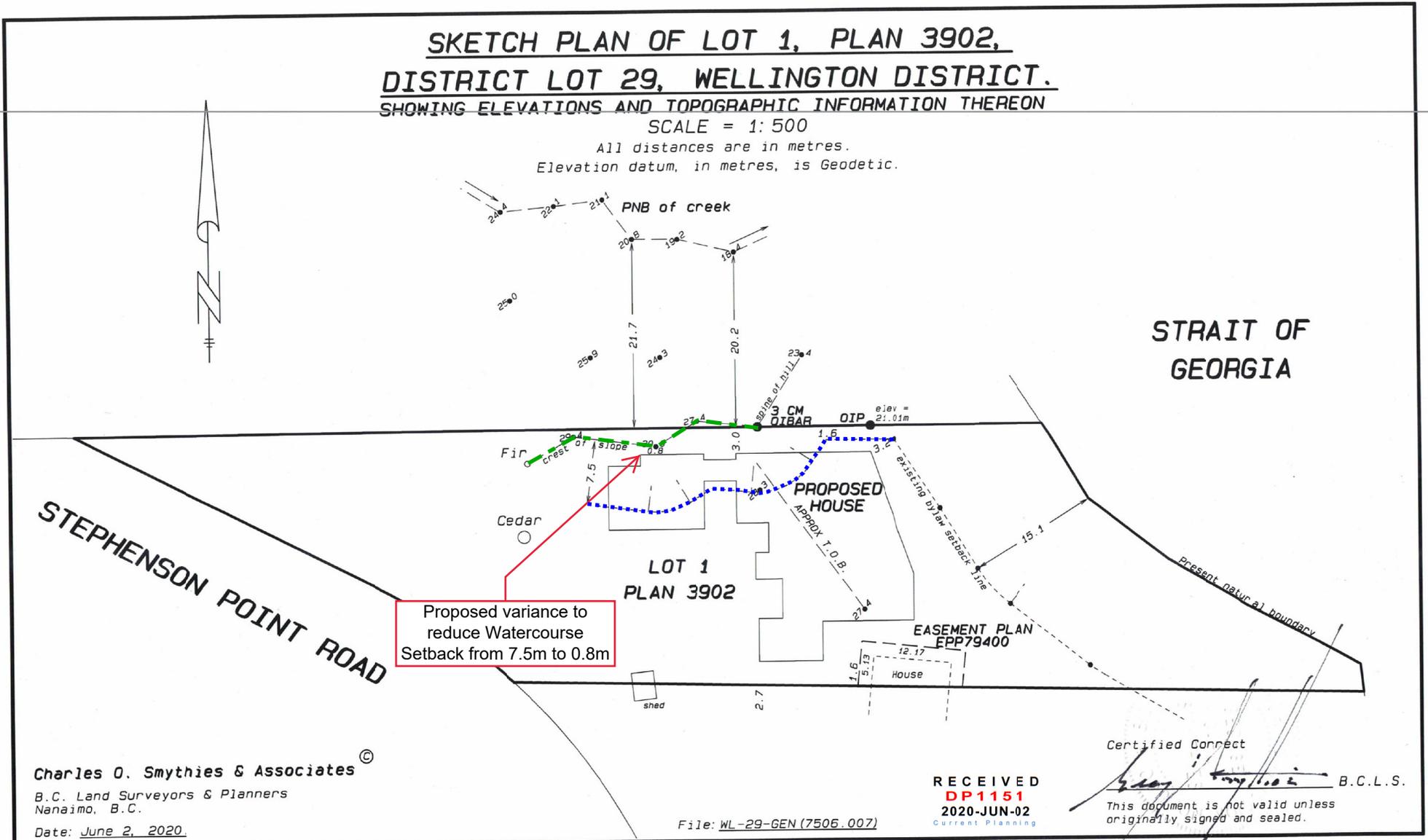
Civic: 3532 STEPHENSON PT ROAD
Legal: LOT 1, DISTRICT LOT 29
WELLINGTON DISTRICT, PLAN 3902

ATTACHMENT D PROPOSED SITE PLAN

SKETCH PLAN OF LOT 1, PLAN 3902, DISTRICT LOT 29, WELLINGTON DISTRICT. SHOWING ELEVATIONS AND TOPOGRAPHIC INFORMATION THEREON

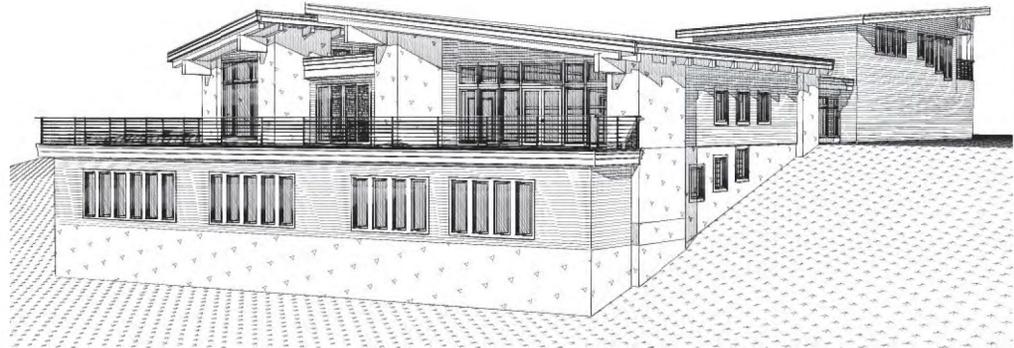
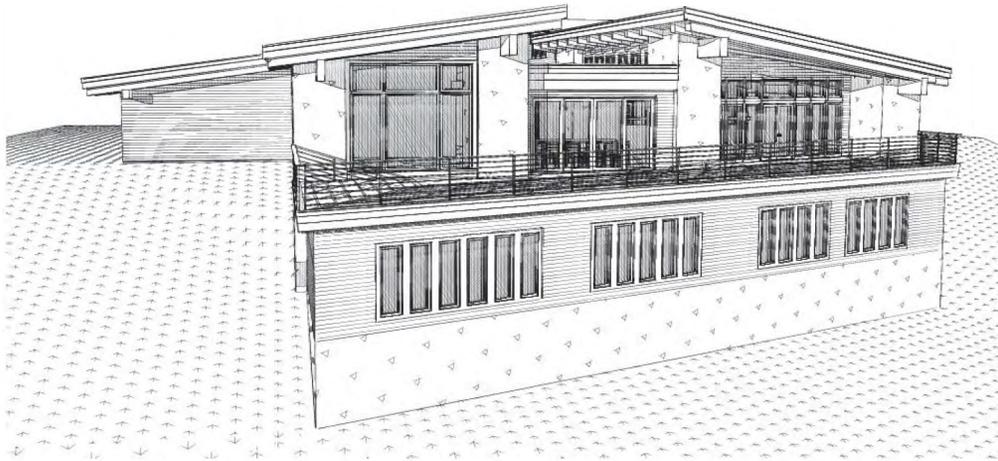
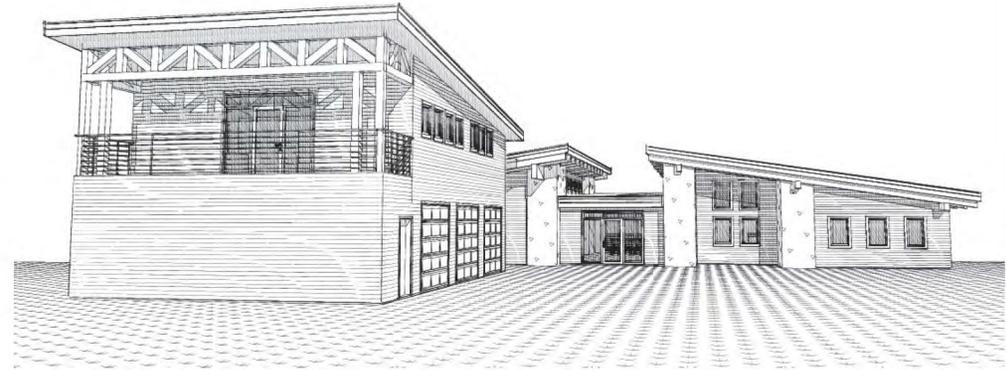
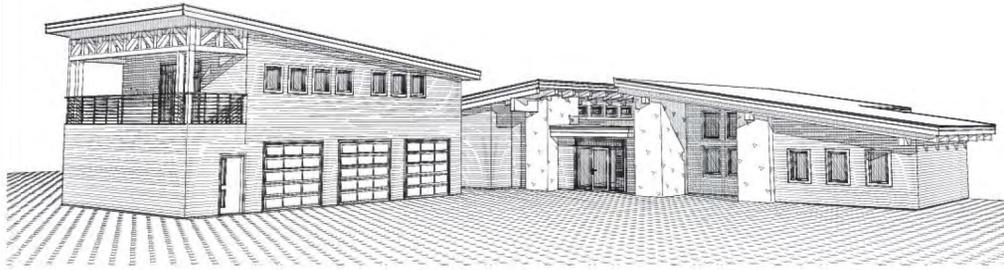
SCALE = 1: 500

All distances are in metres.
Elevation datum, in metres, is Geodetic.



- Key:
- = Top of Bank
 - ⋯ = Watercourse Setback

ATTACHMENT E PROPOSED BUILDING RENDERINGS



RECEIVED
DP1151
2019-JUL-19
Current Planning

BIG JOHN'S CUSTOM HOME DESIGN LTD.	
DRAWN BY: JOHN PHONE: 250 616 8815	
SCALE: 1/8"	
R. Turgeon	
PAGE: 1	JOB No. _____

VEGETATION MANAGEMENT PLAN

3532 Stephenson Point Road
City of Nanaimo



To: Rob Turgeon
1870 Dufferin Crescent
Nanaimo BC V9S 1H1

CC: City of Nanaimo

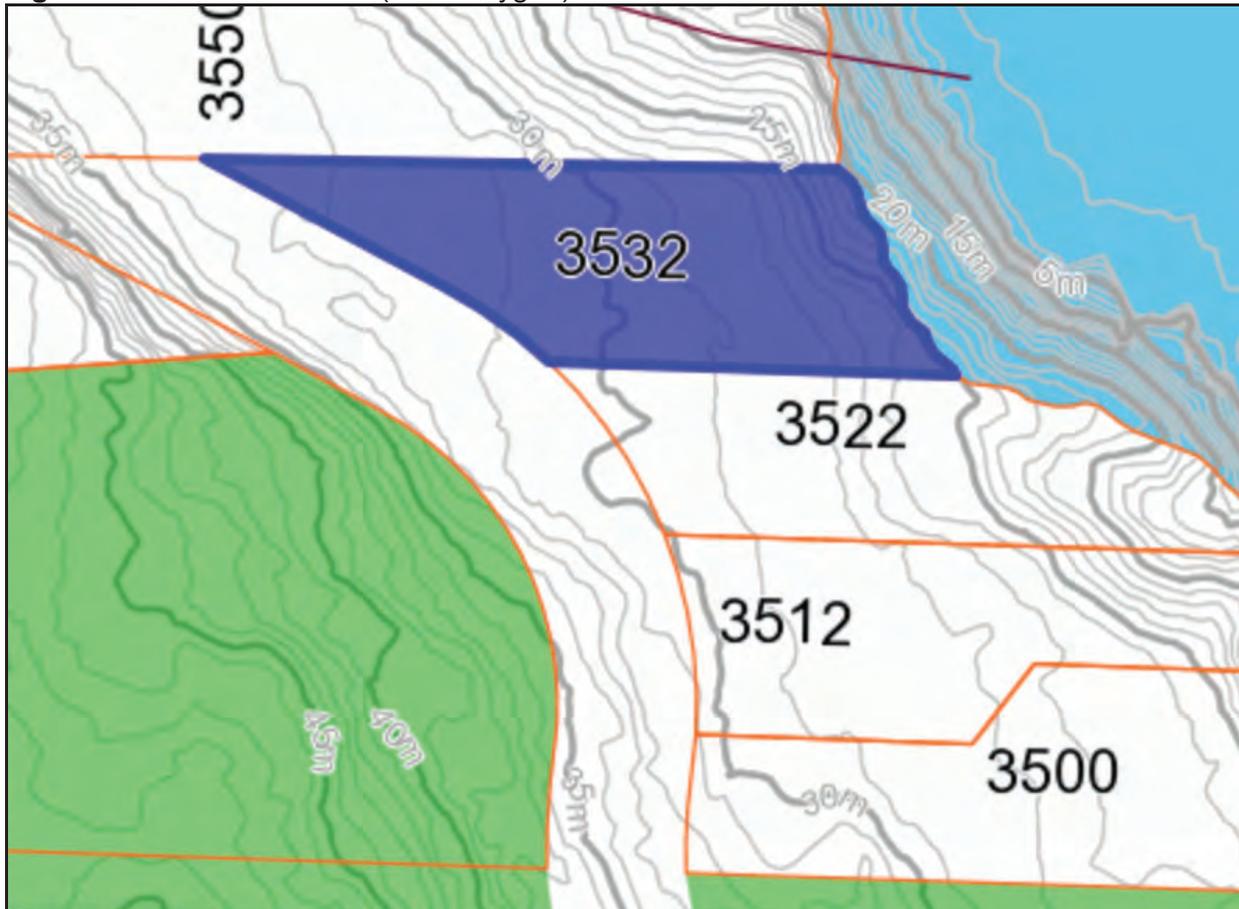
Date: 04 March 2020

1. Overview

This Vegetation Management Plan (the 'plan') was completed at the request of City of Nanaimo (the 'city') for 3532 Stephenson Point Road (**Figure 1**) per their letter dated 24 October 2019 (File DP001151). AquaTerra had previously completed and issued an Environmental Assessment (EA) for the site; however, the city specifically requested:

- 1) A Vegetation Management plan to address habitat compensation (Section 2); and
- 2) Invasive Species Management (Section 2.1).

Figure 1: Site Location Plan (Blue Polygon).



2. VEGETATION MANAGEMENT PLAN

The EA prepared by AquaTerra, and per the city letter, habitat compensation should be implemented to offset the 150 m² lost setback area. The city expressed concern that planting density would typically be 1 plant per 1 m², or denser; however, the provision of 6 trees and 17 shrubs only equated to 1 plant per 0.12 m². Therefore, based on the comments provided by the city, and in accordance with the BC Landscape Standards per the BC Society of Landscape Architects (BCSLA), AquaTerra has supplemented the habitat compensation design and invasive species management provisions (herein, referred to as the 'Vegetation Management Plan'), increasing planting density to 1 plant per 1 m².

TREES

- 10 Western Redcedar (*Thuja plicata*) (2 gallon pots)
- 10 Bigleaf Maple (*Acer macrophyllum*) (2 gallon pots)

SHRUBS AND HERBACEOUS

- 40 Salal (*Gaultheria shallon*) (2 gallon pots)
- 40 Dull Oregon-grape (*Mahonia nervosa*) (2 gallon pots)
- 20 Salmonberry (*Rubus spectabilis*) (1 gallon pots)
- 30 Swordfern (*Polystichum munitum*) (1 gallon pots)

TOTAL NUMBER OF PLANTS: 150.

A detailed, prescriptive planting plan is provided per Attachment I.

The cost of these trees/shrubs is approximately \$10.00 (1 gallon) and \$20.00 (2-gallon) + delivery (\$200.00). Estimated cost for 1 cubic yard of top-soil is \$100.00 (delivered). Estimated time for planting is approximately 2 days + time for invasive species management (1 day).

A general best management practice is to monitor the newly planted trees/shrubs and to maintain regular watering practices as well as invasive species management on a semi-annual basis for 3 years, until such time that plants are established. An additional measure to improve plant health and survival is to include some new top-soil blend with bone meal to provide nutrients for rooting establishment.

Landscaping of the area within the area is encouraged per the latest version of the BCSLA. A summary of applicable measures per the standards are provided below:

1. Import top-soil, if required, to achieve a minimum rooting depth of 0.6 m for trees and 0.3 m for shrubs
2. All tree/shrub species should be of guaranteed nursery stock.
3. Trees are to comprise at least 15% of the total planting prescription.
4. The botanical name should be used when ordering stock to ensure that the desired native species is being purchased. Each specimen should be tagged with the botanical name and the tag should be left attached after planting.
5. Stock planted during the fall (Sept. - Oct.) and spring (March - April) have the greatest likelihood of surviving. Regular watering may be required until the plants are established.
6. Additional advice on proper planting procedures should be obtained from the nursery supplying the stock.
7. Planting on a given area being enhanced must be successful to an 80% take. If more than 20% die over one year, replanting is required.
8. A minimum of 50% of trees and shrubs planted should be fruit-bearing species.

2.1 Invasive Species Management

Invasive vegetation is present throughout the site sporadically, including adjacent sites, being most prevalent in the shrub layer and ravine. Invasive vegetation should be removed from the vegetation management (habitat compensation) area, per the recommended removal methods prescribed in the following sections, and maintained twice a year for 3 years, until planted vegetation becomes well established.

2.1.1 Himalayan Blackberry

Himalayan Blackberry was initially brought over from Europe as a result of their large, delicious berries. These species results in dense thickets that often outcompete native vegetation and reduce biological diversity. In addition to reducing the plant diversity, these species also serve to limit utilization by aquatic and terrestrial wildlife, serving as a barrier to movement. Certain bird species, such as Dark-eyed Junco (*Junco hyemalis*), Black-capped Chickadee (*Poecile atricapillus*) and Yellow-breasted Chat (*Icteria virens*; provincially red-listed and federally

'threatened'), do utilize invasive blackberry species, as they provide some forage opportunities and protection; however, the impacts relating to barrier movement and loss of habitat diversity outweigh the perceived benefits.

Dispersal Capabilities: Invasive blackberry species spread by seed and vegetatively by rooting at the stem tips as well as sprouting from root buds. Birds and omnivorous mammals, such as raccoons, bears, and coyotes can consume berries and disperse seeds.



Preferred Control Method: The primary management goal is to control and manage the spread of Himalayan Blackberry into adjoining, intact habitats within the Musqueam IR#3 lands. Maintenance to prevent additional encroachment into Musqueam IR#3 lands includes persistent cultivation (tillage), fine mulching and hand removal (including roots when possible) to limit spread. Due to the fact that mechanical control can stimulate strong regrowth, removal efforts should be followed up with regular hand digging and trimming to manage the spread.

Removal Timing: Removal can proceed at any time of year, but is anticipated to be more effective during the flowering and early fruiting periods. Removal should not occur when fruits are at or nearing maturity, as it may increase the potential of spread during removal and disposal efforts. Removal and follow-up maintenance should occur a minimum of 2–3 times per year, for 2–3 years following initial removal.

Disposal: If plants are cut, all plant material must be collected in bags or tarps and incinerated or bagged and deeply buried at a landfill. Care should be taken to ensure that plant parts are not distributed during transport.

2.1.2 *Spurge Laurel*

Spurge Laurel is an evergreen shrub that was imported from Britain for ornamental use in North American gardens. Spurge Laurel is similar in appearance to Pacific Rhododendron, however it grows rapidly and outcompetes native species. In addition, the bark, berries and sap are poisonous to people and it is classified as a poisonous plant with the Canadian poisonous plant information system (Invasive Species of BC, 2014). In contrast to most invasive species, Spurge Laurel is able to establish without any ground disturbance. It is commonly found along roadsides and in moist forested lowland areas. Its rapid growth and adaptability to varying light condition allows it to quickly colonize new areas where it alters the soil chemistry displacing native species.



Dispersal Capabilities: Birds and rodents spread the seeds contained within the berries.

Preferred Control Method: Due to its toxic nature, gloves should be worn when removing Spurge Laurel. Small plants may be pulled by hand while large plants may require digging for root removal. After removal the area should be reassess bi-annually to monitor for regrowth.

2.1.3 *English Ivy*

English Ivy is a perennial evergreen vine native to Europe and Asia that is widely cultivated in North America. It is often planted for groundcover and frequently invades nearby natural and urban areas. English Ivy grows rapidly and is able to grow year-round in a wide variety of light conditions, but does best in shaded areas. It quickly outcompetes native plants and forms a dense monoculture that prevents natural seedling succession and can damage or kill trees and shrubs.

Dispersal Capabilities: English Ivy spreads vigorously by vegetative growth and by production of small black seed containing fruits that are consumed and spread by birds (Swearingen et al. 2010).



Preferred Control Method: English Ivy can be pulled and cut by hand and then left to dry. Mowing is also a viable control option, as is covering the affected areas with thick poly and/or tarps. When climbing trees it should be removed from breast height to the ground and then treated with a herbicide on the cut portions. Ivy that is above breast height in a tree should not be pulled down as it may dislodge large tree branches. After English Ivy removal, native shrubs should be replanted and the area should be reassessed to monitor for re-growth. Additional removal efforts will likely be required as re-growth from roots is common.

2.1.4 English Holly

English Holly is native to western and southern Europe, northwest Africa and southwest Asia. It was originally imported for ornamental use in North American gardens and is widely used for decorations during the Christmas season. English Holly is very adaptable and rapidly grows in well-drained soils in the shade or sun to heights of up to 10 m tall (Invasive Species Council of BC, 2014). Its broad evergreen leaves, rapid growth and overall size, shade out other native plants allowing it to form dense thickets over time. In addition, the roots of English Holly out-compete native species for nutrients and water (Klinkenberg, 2014)



Dispersal Capabilities: The bright red berries of English Holly are attractive to birds and widely dispersed.

Preferred Control Method: Small English Holly shrubs can be pulled when the ground is moist. Large trees should be cut at the base of the trunk and herbicide may be applied. Management areas should be re-assessed annual to monitor for re-growth (Sea to Sky Invasive Species Council, 2009).

3. CLOSURE

We trust this provides the necessary information regarding RAR compliance. Should you have any questions, please feel free to contact the undersigned.

Respectfully submitted,

 Digitally signed by Chris Lee
DN: cn=Chris Lee, o=AquaTerra
Environmental Ltd., ou,
email=chris@aquaterra.ca, c=CA
Date: 2020.03.14 11:00:50 -07'00'

Chris Lee, M.Sc., R.P. Bio., QEP, BC-CESCL
Principal, AquaTerra Environmental Ltd.

Attachment(s):

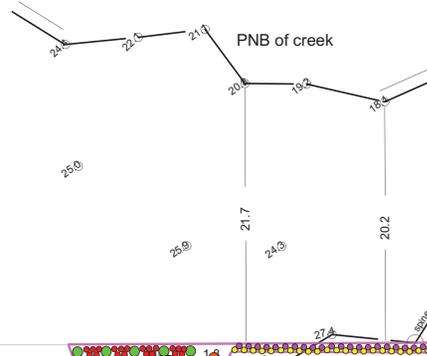
Attachment I – Detailed Restoration Planting Plan

**SKETCH PLAN OF LOT 1, PLAN 3902,
DISTRICT LOT 29, WELLINGTON DISTRICT.**
SHOWING ELEVATIONS AND TOPOGRAPHIC INFORMATION THEREON

SCALE = 1:500

All distances are in metres.

Elevation datum, in metres, is Geodetic.

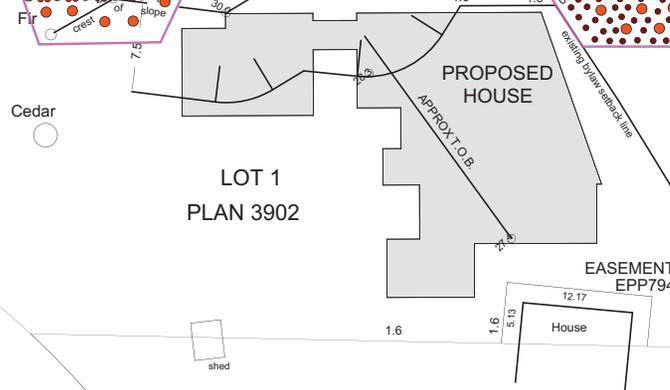


PLANTING LEGEND

- Western Redcedar (*Thuja plicata*) n=10
- Big-leaf Maple (*Acer macrophyllum*) n=10
- Salal (*Gaultheria shallon*) n=40
- Dull Oregon-grape (*Mahonia nervosa*) n=40
- Swordfern (*Polystichum munitum*) n=30

STRAIT OF
GEORGIA

STEPHENSON POINT ROAD



File: WL-29-GEN

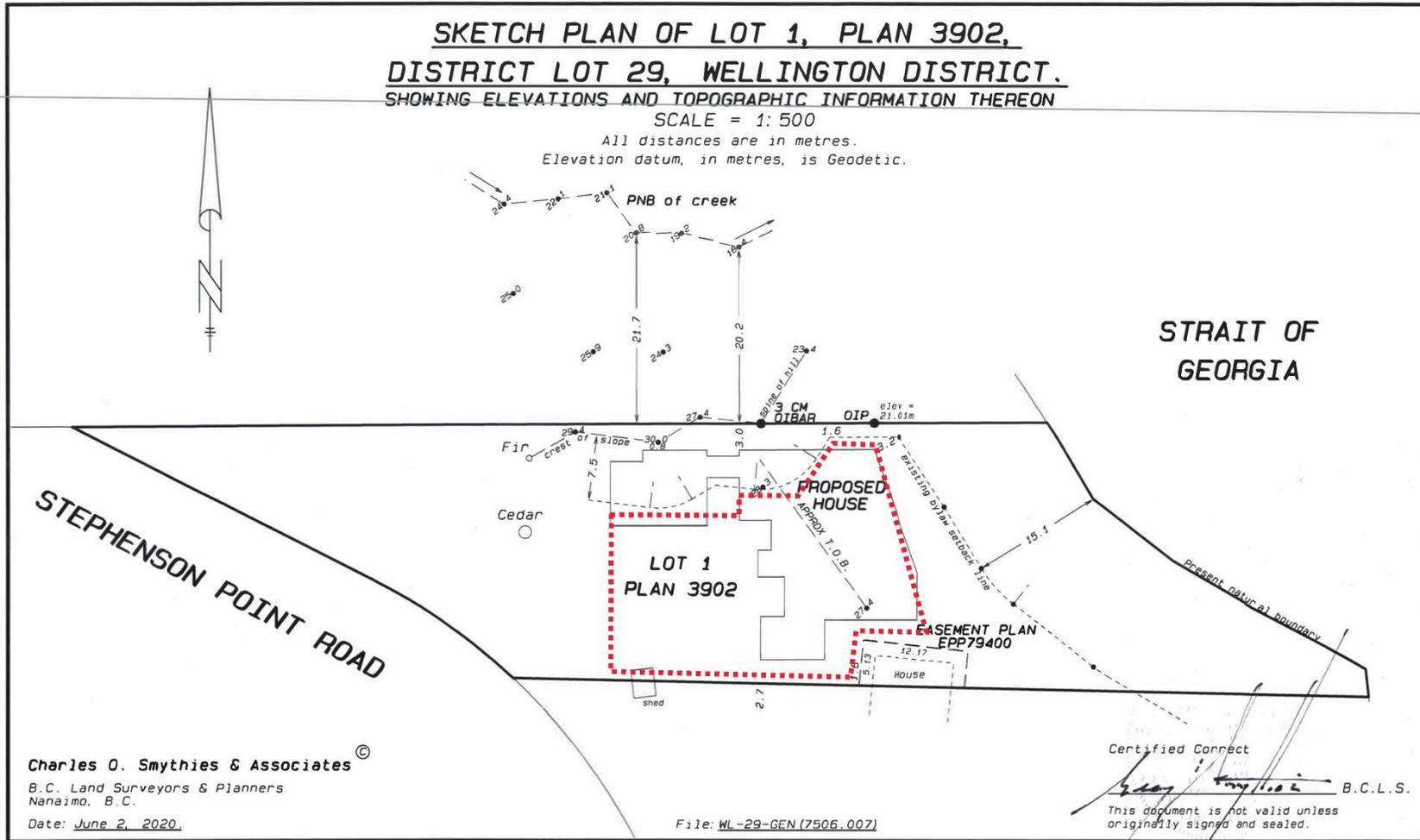
BIRD'S EYE VIEW

SCALE: 1/16" = 1'-0"

THIS DRAWING IS FOR
PRELIMINARY USE ONLY
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NOT TO BE USED FOR
CONSTRUCTION

Big John's Custom Home Design LTD 250 616 8815 R. Turgeon	
<small>2020 - FEB. 05 PRE</small>	<small>PAGE 6</small>

ATTACHMENT G FUNCTIONAL BUILDING ENVELOPE

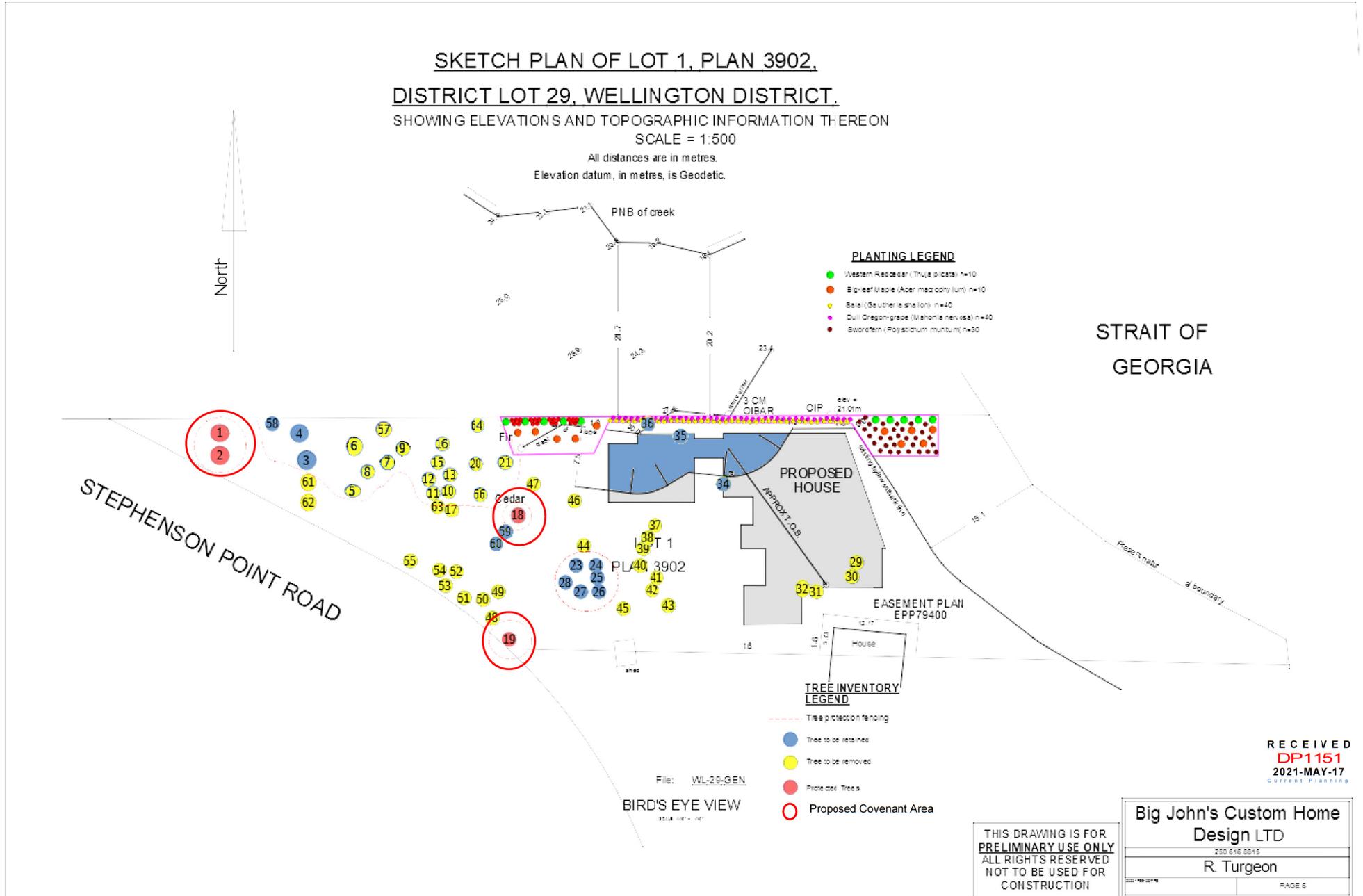


Comparison of proposed building location and functional building envelope identified by Staff.

Approximate area of functional building envelope outlined in red.

ATTACHMENT H TREE PROTECTION PLAN

Figure 1: Survey of all trees corresponding with inventory table. Tree protective fencing is also shown on map.



ATTACHMENT I
AERIAL PHOTO



DEVELOPMENT PERMIT NO. DP001151

Legend

 Subject Property