



DEVELOPMENT PERMIT NO. DP001014

KEITH ALEXANDER DYCE
Name of Owner(s) of Land (Permittee)

1019 VANCOUVER AVENUE
Civic Address

1. This development permit is issued subject to compliance with all of the bylaws of the municipality applicable thereto, except as specifically varied or supplemented by this permit.
2. This development permit applies to and only to those lands within the municipality described below, and any and all building structures and other developments thereon:

Legal Description:

LOT A, SECTION 1, AND DISTRICT LOT 96B, NANAIMO DISTRICT, PLAN EPP55847

PID No. 029-691-371

3. The land described herein shall be developed strictly in accordance with the following terms and conditions and provisions of this permit and any plans and specifications hereto which shall form a part thereof.

Schedule A Location Plan
Schedule B Site Survey
Schedule C Executive Summary
Schedule D Re-Vegetation Plan
Schedule E Water Features Assessment

- a) If the applicant does not substantially commence the development permitted by this permit within two years of the date of this permit, the permit shall lapse.

4. This permit is not a building permit nor does it constitute approval of any signage. Separate applications must be made for a building permit and sign permit.

5. The City of Nanaimo "ZONING BYLAW 2011 NO. 4500" is varied as follows:

Watercourse Setback (Section 6.3.1.5)

The required watercourse setback is 15m. The watercourse setback is 4.53m, a variance of 10.47m.

Rear Yard Setback (Section 7.5.1)

The required rear yard setback is 7.5m. The rear yard setback is 5.97m, a variance of 1.53m.

AUTHORIZING RESOLUTION PASSED BY COUNCIL
THE 7TH DAY OF NOVEMBER, 2016.


Corporate Officer


Date

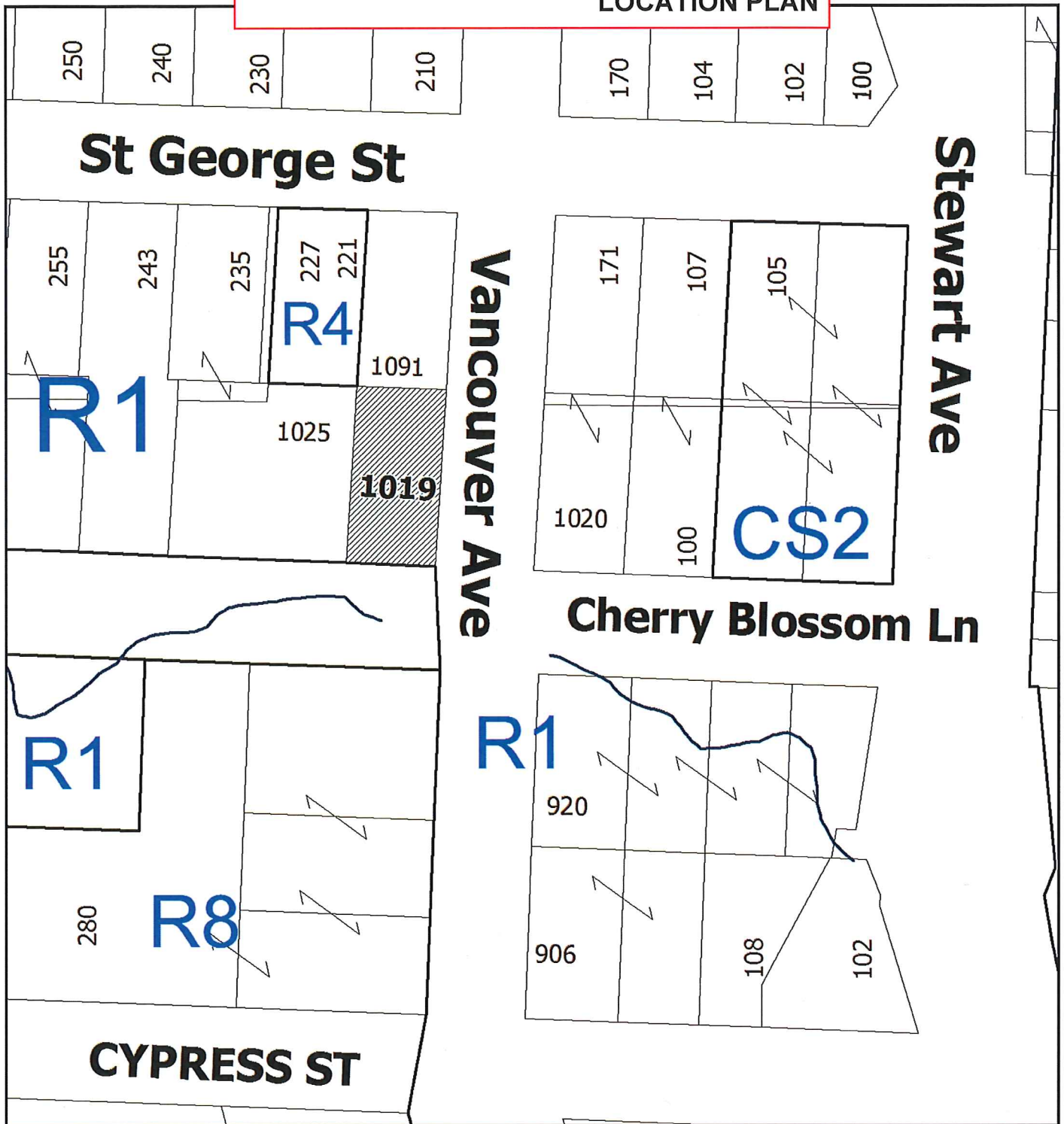
JC/ln

Prospero attachment: DP001014

Development Permit DP001014
1019 Vancouver Avenue

Schedule A

LOCATION PLAN



DEVELOPMENT PERMIT NO. DP001014

LOCATION PLAN

Civic: 1019 Vancouver Avenue
Lot A, Section 1 and District Lot 96B,
Nanaimo District, Plan EPP55847



**Subject
Property**



**J.E. ANDERSON
& ASSOCIATES**
SURVEYORS - ENGINEERS

TEL: 250-758-4631 FAX: 250-758-4660
NANAIMO - VICTORIA - PARKSVILLE

Development Permit DP001014
1019 Vancouver Avenue

Schedule B

SITE SURVEY

File: 88210

Civic: 1019 Vancouver Avenue, Nanaimo B.C.


Legal: Lot A, Section 1 and District Lot 96B, Nanaimo District, Plan EPP55847.

Dimensions are in metres and are derived from Plan EPP55847.

This sketch does not constitute a redefinition of the legal boundaries hereon described and is not to be used in any matter which would assume same.

This sketch plan has been prepared in accordance with the Professional Reference Manual and is certified correct this 24th day of August, 2016.

This document is not valid unless originally signed and sealed or digitally signed by BCLS


B.C.L.S.

© Copyright 2016 J.E. Anderson & Associates. All rights reserved. No person may copy, reproduce, transmit or alter this document in whole or in part without the consent of the signatory.

The signatory accepts no responsibility or liability for any damages that may be suffered by a third party as a result of any decision made, or actions taken based on this document.

Subject to charges, legal notations, and interests shown on: Title No. CA4747579 (P.I.D. 029-691-371)

Scale 1:250



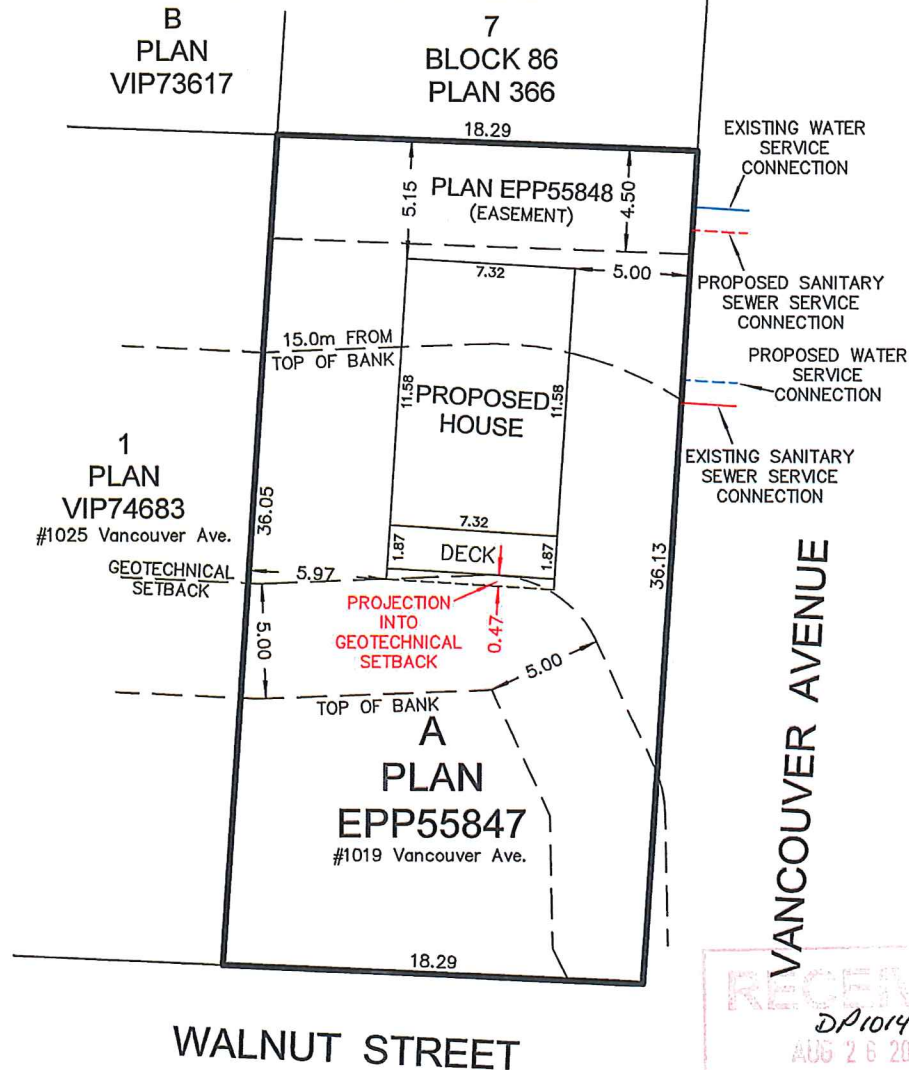
Existing water and sanitary sewer service locations provided by City of Nanaimo.

Existing water service to remain connected to 1025 Vancouver Avenue.

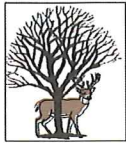
Existing sanitary sewer to be connected to 1019 Vancouver Avenue.

New water service to be connected to 1019 Vancouver Avenue.

New sanitary sewer service to be connected to 1025 Vancouver Avenue.



RECEIVED
DP1014
AUG 26 2016
COMMUNITY DEVELOPMENT



Toth and Associates Environmental Services

6821 Harwood Drive, Lantzville, B.C. V0R 2H0

Tel: (250) 390-7602 Fax: (250) 390-7603

E-mail: stoth@shaw.ca

Development Permit DP001014

Schedule C

1019 Vancouver Avenue

EXECUTIVE SUMMARY

October 3, 2016

Keith Dyce

1025 Vancouver Avenue

Nanaimo, BC, V9S 4H1

Summary of the environmental assessment for the proposed development of a single family residence on 1019 Vancouver Avenue, Nanaimo

My field survey conducted on March 25, 2015 concluded that, as St. George's Creek south of 1019 Vancouver Avenue does not provide, or flow to freshwater fish bearing habitat, it does not meet the definition of an assessable "stream" under the provincial *Riparian Areas Regulation* (RAR), and the RAR will not apply to the development of the property.

The proposed development includes construction of a single family residence on 1019 Vancouver Avenue. The City of Nanaimo's watercourse setbacks measure 15 m from top of ravine bank. A geotechnical assessment conducted by Lewkowich Engineering Associates Ltd. has set the safe building setback from top of ravine bank at 5 m. The new proposed house plan provided by J.E. Anderson & Associates indicates that the house will be located 6.87 m from top of ravine bank with a slight intrusion into the 5.0 m geotechnical setback of 0.47 m for a non-permanent deck structure. Previous plans had the house foundation at the geotechnical setback boundary. The new plan further reduces the geotechnical risk of ravine bank instability posed by development of the property.

I do not consider the intrusion significant in terms of ecological impact, as the area of intrusion is currently a landscaped garden area. As a condition of issuance of Development Permit #1014 the City of Nanaimo has requested a re-vegetation plan for the 5.0m setback from top of ravine bank. I have provided a re-vegetation plan that includes re-vegetation of this area with 40 native plantings.

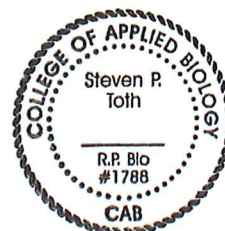
My assessments of the subject property indicated that the primary constraints to construction of a residence on 1019 Vancouver Avenue were the geotechnical considerations and ensuring that all hard-surface derived run-off is directed away from the ravine bank area.

Based on the lack of fish habitat, and overall relatively low wildlife habitat values associated with St. George's ravine in the vicinity of the subject property it is my opinion that the construction of a residence outside the geotechnical setback on previously developed land as proposed has minimal potential to result in environmental impacts.

Sincerely,

Steve Toth, ASCT, R.P.Bio.

Toth and Associates Environmental Services





Toth and Associates Environmental Services

6821 Harwood Drive, Lantzville, B.C. V0R 2H0

Tel: (250) 390-7602 Fax: (250) 390-7603

E-mail: stoth@shaw.ca

Development Permit DP001014

Schedule D

1019 Vancouver Avenue

1/4

RE-VEGETATION PLAN

October 3, 2016

Keith Dyce

1025 Vancouver Avenue

Nanaimo, BC, V9S 4H1

Re-vegetation plan for the 5.0m geotechnical setback from top of ravine bank on 1019 Vancouver Avenue, Nanaimo

As a condition of issuance of Development Permit #1014 for construction of a new house on 1019 Vancouver Avenue the City of Nanaimo has indicated that "a native re-vegetation plan of trees and shrub plantings is required within the 5.0m setback from top of bank in order to provide a wildlife buffer between the ravine and the house".

In order to fulfill this requirement I offer the following re-vegetation plan for the 5.0m setback from top of ravine bank on the subject property. The 5.0m setback area is already vegetated with a mix of nursery variety small tree, shrub, and herb plantings contained within a rectangular courtyard area bordered by a cedar hedge, as well as along the slope fronting Vancouver Avenue. These existing plantings will be incorporated into the re-vegetation plan and augmented with native plant species. In order to allow more sunlight into the planting area the line of cedar hedging running along the top of ravine bank on the subject property will need to be removed. I would also recommend removal of the purple-leaf plum tree and the Leyland cypress (Figure 1).

There is no space available within the re-vegetation area for planting of full size native tree species, without the trees eventually shading out the rest of the re-vegetation area or becoming a hazard to the new house. There are several dwarf non-native tree species on site that over time will become substantial, but manageable small trees.

The proposed re-vegetation area is approximately 80m² in size. Existing nursery plants occupy approximately 50% of the re-vegetation area, leaving approximately 40 m² for re-vegetation with native species. At a planting density of 1 shrub per 1 square metre there is room for 40 plantings. Recommended plantings are indicated in Table 1, below and shown on Figure 2.

Table 1. Recommended re-vegetation species for 1019 Vancouver Ave.

Common name	Scientific name	Mature height (m)	Best Growth conditions	Purchase Size	Quantity
Red elderberry *	<i>Sambucus racemosa</i>	to 6	m-w	1 gal.	2
Common snowberry *	<i>Symphoricarpos albus</i>	0.5-2	d-m	1 gal.	8
Dull Oregon grape*	<i>Mahonia nervosa</i>	0.5	d	1 gal.	6
Evergreen huckleberry*	<i>Vaccinium ovatum</i>	to 4	d-m	1 gal.	3
Indian plum*	<i>Oemlaria cerasiformis</i>	1.5-2.5	d-m	1 gal.	3
Red-flowering currant*	<i>Ribes sanguineum</i>	1-3	d-m	1 gal.	3
Saskatoon*	<i>Amelanchier alnifolia</i>	to 4	d-m	1 gal.	4
Tall Oregon-grape*	<i>Mahonia aquifolium</i>	0.5-1.5	d	1 gal.	8
Gummy gooseberry*	<i>Ribes lobbii</i>	0.5-1.5	d	1 gal.	3

d = dry, m = moist, w = wet, * = fruit / berry producer

Planting Criteria

- All plantings should be based on 1 shrub per 1 square metre density.
- All tree/shrub species should be of guaranteed nursery stock.
- 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.
- Stock planted during the fall (Sept - Oct) and spring (Mar - Apr) has the greatest likelihood of surviving. Additional advice on proper planting procedures should be obtained from the nursery supplying the stock (see http://members.shaw.ca/nativeplants/streamside_home.html).
- A minimum of 50% of trees and shrubs planted should be fruit-bearing species.
- All invasive species within the re-vegetation area should be removed prior to planting.

Maintenance

- Regular watering will be required during the first growing season until the plants are established.
- Planting on a given area being enhanced must be successful to an 80% take. If more than 20% die over one year, replanting of dead plants is required.
- Most of the species listed do well (particularly red elderberry) with annual pruning during the dormant season.
- Many of the woody-stemmed species indicated in Table 1 can be propagated by stem cuttings (see below).

Procedures for Rooting Stem Cuttings

- Cuttings should be taken during the dormant season of current or past season's growth.
- While terminal parts of the stem are best, a long shoot can be divided into several cuttings. Cuttings are generally 10 to 16 inches long.
- Remove any leaves or side shoots from the lower 1/2 to 2/3 of the cutting.
- Dip cuttings in rooting hormone.
- Insert the cuttings 1/2 to 2/3 their length into standard 1 or 2 gallon black planters filled with sterile potting soil. Space cuttings just far enough apart to allow all leaves to receive sunlight. Water after inserting the cuttings and place in indirect light.

Sincerely,
Steve Toth, AScT, R.P.Bio.



Toth and Associates Environmental Services

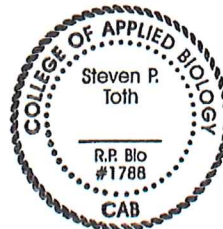
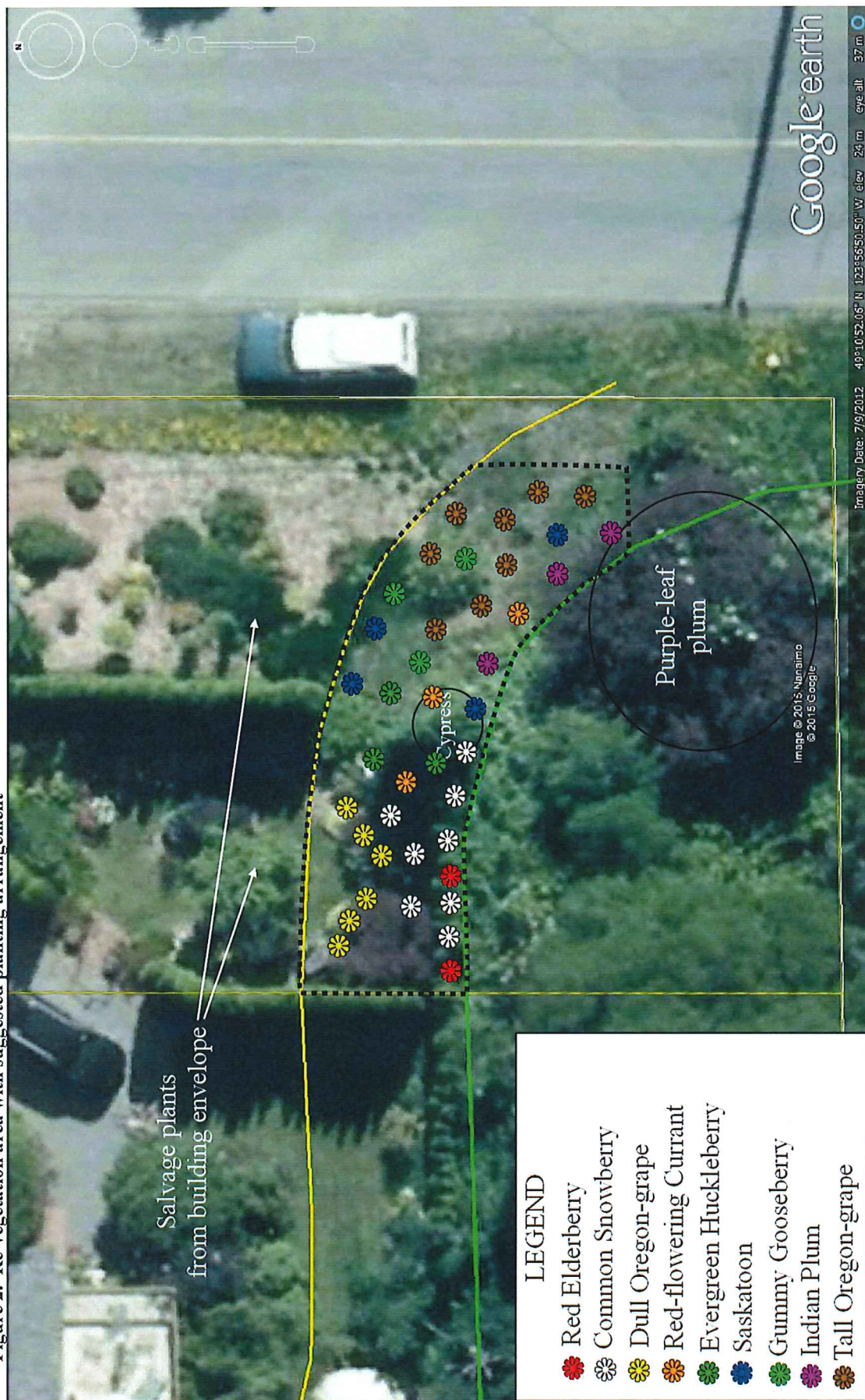


Figure 1. Revegetation Area with top of ravine bank (green line), and 5 m setback boundary (yellow line)



Figure 2. Re-vegetation area with suggested planting arrangement





Toth and Associates Environmental Services

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Development Permit DP001014

Schedule E

1019 Vancouver Avenue

1/5

WATER FEATURES ASSESSMENT

October 3, 2016

Keith Dyce

1025 Vancouver Avenue

Nanaimo, BC

V9S 4H1

Re: Assessment of surface water features adjacent to 1025 Vancouver Avenue, Nanaimo

Based on a review of air photos available on Google Earth, the City of Nanaimo's information and my site visit conducted on March 25, 2015 St. George's Creek south of 1025 Vancouver Avenue is not an assessable watercourse under the provincial *Riparian Areas Regulation* (RAR). St. George's Creek originates from a storm drain outlet on the undeveloped easement of Belford Avenue located approximately 270 m upstream of the subject property and flows within the steep sided St. George's Ravine to a storm drain inlet on the west side of Stewart Avenue approximately 122m downstream of the subject property. The storm drain continues 115 m east under Stewart Avenue, discharging to Nanaimo Harbour on the east side of 1000 Stewart Avenue. According to the City's information there is no fish utilization of St. George's Creek due to the gradient of the storm drain at / near Nanaimo Harbour. Fish were not observed during the field survey. The high water mark of St. George's Creek and the top of ravine bank on the subject property were flagged with pink with black dot flagging tape.

To be considered a RAR assessable watercourse a water feature must either provide fish habitat, or be connected to downstream freshwater fish-bearing waters via a surface water connection. As St. George's Creek does not provide, or flow to freshwater fish bearing habitat, it does not meet the definition of an assessable "stream" under the RAR, and the provincial *Riparian Areas Regulation* will not apply to the development of the property.

According to the City of Nanaimo's mapping, St. George's Creek requires a watercourse setback of 15 m from "top of bank", which in this case means top of ravine bank. Based on our map measurements (Figure 1) approximately $\frac{3}{4}$ of the subject property is located within the watercourse setback. As a comparison, under the RAR's Detailed Assessment methods St. George's Creek would receive a 10 m setback from high water mark, which would fall upon the ravine side slope below the top of ravine bank.

The proposed development includes construction of a single family residence on the vacant smaller lot (1019 Vancouver Avenue). A geotechnical assessment has been conducted and has set the safe building setback from top of ravine bank at 5 m.

Vegetation within St. George's Ravine consists of a mixed mature forest of native and introduced tree species (primarily black locust and bigleaf maple) with a near continuous matting of invasive English ivy. The construction of a new residence would not require the removal of any native vegetation.

Based on the lack of fish habitat, and overall relatively low habitat values associated with St. George's ravine in the vicinity of the subject property it is my opinion that the construction of a residence outside the geotechnical setback as proposed has minimal potential to result in environmental impacts.

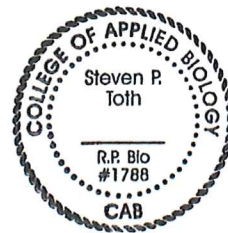
Geotechnical constraints and ensuring that all hard-surface derived run-off is directed away from the ravine bank area are the primary considerations for development of the property.

Please contact us if you require any additional information.

Sincerely,
Steve Toth, ASCT, R.P.Bio.



Toth and Associates Environmental Services



Photograph 1. View of St. George's Creek at culvert inlet at Vancouver Avenue.



Photograph 2. View downstream on St. George's Creek.



Photograph 3. View from top of ravine bank to St. George's Creek.



View from existing driveway to proposed building envelope.

Figure 1. July 2012 air photo of 1025 Vancouver Ave. with setbacks and features

