

REGIONAL DISTRICT OF NANAIMO
ELECTORAL AREA PLANNING COMMITTEE
TUESDAY, MAY 12, 2009
6:30 PM

(RDN Board Chambers)

A G E N D A

PAGES

CALL TO ORDER

DELEGATIONS

MINUTES

- 3-4 Minutes of the regular Electoral Area Planning Committee meeting held April 14, 2009.

BUSINESS ARISING FROM THE MINUTES

COMMUNICATIONS/CORRESPONDENCE

UNFINISHED BUSINESS

PLANNING

AMENDMENT APPLICATIONS

- 5-13 Zoning Amendment Application No. 0521 – Linda Robinson for P & E Robinson – 3027/3029 Landmark Crescent – Area ‘C’.
- 14-24 Zoning Amendment Application No. 0809 – Focus Corporation for Island Timberlands and Nanaimo Fish & Game Club – Nanaimo Lakes Road – Area ‘C’.

DEVELOPMENT PERMIT WITH VARIANCE APPLICATIONS

- 25-42 Development Permit with Variance Application No. 60907 – Allen & Heppell – 3404 Carmichael Road – Area ‘E’.
- 43-62 Development Permit with Variance Application No. 60913 – Delesalle – 121 Kinkade Road – Area ‘G’.

63-73 Development Permit with Variance Application No. 60915 -- Knappett -- 5485
Deep Bay Drive -- Area 'H'.

DEVELOPMENT VARIANCE PERMIT APPLICATIONS

74-80 Development Variance Permit Application No. 90818 -- 127.0.0.1 Holdings Ltd.
-- 2933 Dolphin Drive -- Area 'E'.

ADDENDUM

BUSINESS ARISING FROM DELEGATIONS OR COMMUNICATIONS

NEW BUSINESS

ADJOURNMENT

IN CAMERA

REGIONAL DISTRICT OF NANAIMO

**MINUTES OF THE ELECTORAL AREA PLANNING COMMITTEE
MEETING HELD ON TUESDAY, APRIL 14, 2009, AT 6:30 PM
IN THE RDN BOARD CHAMBERS**

Present:

Director D. Bartram	Chairperson
Director J. Burnett	Electoral Area A
Director M. Young	Electoral Area C
Director G. Holme	Electoral Area E
Director L. Biggemann	Electoral Area F
Director J. Stanhope	Electoral Area G
Director E. Mayne	City of Parksville

Also in Attendance:

M. Pearse	Senior Manager, Corporate Administration
P. Thorkelsson	General Manager, Development Services
D. Trudeau	Gen. Manager, Transportation & Solid Waste Services
N. Tonn	Recording Secretary

MINUTES

MOVED Director Holme, SECONDED Director Biggemann, that the minutes of the Electoral Area Planning Committee meeting held March 10, 2009 be adopted.

CARRIED

PLANNING

DEVELOPMENT PERMIT APPLICATIONS

Development Permit Application No. 60811 – Lewin – 1505 Mason Trail – Area ‘G’.

MOVED Director Stanhope, SECONDED Director Burnett, that Development Permit Application No. 60811 submitted by JE Anderson, BCLS, on behalf of D & W Lewin, in conjunction with the subdivision on the parcel legally described as Lot 24, District Lot 38, Nanoose District, Plan 25031 and designated within the Sensitive Lands Development Permit Area pursuant to the “French Creek Official Community Plan Bylaw No. 1115, 1998”, be approved, subject to the conditions outlined in Schedules No. 1 and 2 of the corresponding staff report.

CARRIED

Development Permit Application No. 60848 – Beyeler – 204 Kinkade Road – Area ‘G’.

MOVED Director Stanhope, SECONDED Director Holme, that Development Permit Application No. 60848, to permit the construction of a dwelling unit and detached garage and to legalize the siting of an existing storage building on the property legally described as Lot 1, District Lot 9, Newcastle District, Plan 20326, be approved subject to the conditions outlined in Schedules No. 1 to 4.

CARRIED

ADJOURNMENT

MOVED Director Holme, SECONDED Director Burnett, that this meeting terminate.

CARRIED

TIME: 6:34 PM

CHAIRPERSON



PROJECT NUMBER	116/12/09
DATE	✓
OFFICER	
NAME OF PROJECT	
AREA	
BOARD	

MEMORANDUM

TO: Geoff Garbutt
Manager, Current Planning

DATE: April 30, 2009

FROM: Susan Cormie
Senior Planner

FILE: 3360 30 0521

SUBJECT: Zoning Amendment Application No. ZA0521 – Linda Robinson, on behalf of P & E Robinson
Electoral Area 'C' – 3027/3029 Landmark Crescent

PURPOSE

To consider an application to rezone property in the Landmark Crescent area of Electoral Area 'C' in order to facilitate a two-lot subdivision.

BACKGROUND

The Regional District has received an application to rezone a parcel located at 3027/3029 Landmark Crescent in Electoral Area 'C' for the purposes of facilitating a two lot subdivision of the parent parcel with proposed parcels a minimum of 1.0 ha in size.

The subject property, which is 2.0 ha in size and legally described as Lot 3, Section 20, Range 3, Mountain District, Plan 31215, is zoned Rural 1 and is situated within Subdivision District 'D' (RUID) (2.0 ha minimum parcel size with or without community services) pursuant to the "Regional District of Nanaimo Land Use and Subdivision Bylaw No. 500, 1987" (see Attachment No. 1 for location of subject property).

The parent parcel currently supports two dwelling units. All the surrounding properties are rurally zoned parcels with the parcel to the south being designated within the Provincial Agricultural Land Reserve.

Pursuant to the East Wellington-Pleasant Valley Official Community Plan Bylaw No. 1055, 1997 (OCP), the subject property is designated within the Fish Habitat Protection Development Permit Area for the purposes of protecting riparian areas within and adjacent to streams. The parent parcel contains a wetland which the applicants' qualified environmental professional has provided a report indicating the wetland is not within a fish habitat riparian area nor does it contribute to a fish habitat area. Therefore, a development for protection of fish habitat is not required. It is noted that the applicants recently, by way of Development Permit No. 60732, completed a restoration of this environmentally sensitive feature.

Charges registered on title of the subject property include statutory rights-of-way for BC Hydro, Greater Nanaimo Sewerage and Drainage District, a Statutory Building Scheme, and three private easements for private water service access for other parcels.

Submitted Proposal

The applicants are proposing to create two minimum sized 1.0 ha parcels (See Schedule No. 2 for proposed plan of subdivision). In support of this amendment application the applicants' agent has supplied the following documentation in addition to the application form and standard information:

- Proposed plan of subdivision;

- Undermining Assessment Report prepared by Lewkowich Engineering Associates Ltd., dated March 20, 2009;
- Septic disposal and well log information;
- Environmentally Sensitive Area Restoration Report and Post-restoration Report prepared by Streamline Environmental Consultants Ltd.; and
- Completed Sustainable Community Builder Checklist.

The parcels are proposed to be serviced by one individual on-site septic disposal system, one City of Nanaimo sanitary service connection, and individual water wells. This parent parcel is located within a RDN Building Services area.

Minimum 10% Perimeter Frontage Requirement

Both proposed Lots A and B will not be able to meet the minimum 10% perimeter frontage requirement pursuant to section 944 of the *Local Government Act*, therefore a request for relaxation of the minimum 10% frontage requirement is part of this application.

ALTERNATIVES

1. To approve the application to rezone the subject property from Subdivision District 'D' to Subdivision District 'F' subject to the conditions outlined in Schedule No. 1 for 1st and 2nd reading and proceed to Public Hearing.
2. To deny the amendment application.

DEVELOPMENT IMPLICATIONS

Official Community Plan Criteria Implications

The East Wellington–Pleasant Valley Official Community Plan, Bylaw No. 1055 (OCP) designates the parent parcel within the Rural Residential Land Use designation. The OCP has provisions for considering parcels for a minimum 1.0 ha parcel size provided a number of conditions can be met. In this case, the OCP Criteria No. a), b), c), and d) concerning appropriate zoning, minimum parcel size, and density will be able to be met if the amendment application proceeds.

With respect to Criterion No. e) concerning the character of surrounding lands, under the current Rural 1 zone, the parent parcel is permitted a maximum of two single dwelling units. As the proposed zoning amendment would not change the current number of dwelling units, this application is not expected to have a negative impact on the surrounding neighbourhood. With respect to the environmental considerations, the applicants have recently completed a restoration of the environmentally sensitive area of the parent parcel which included replanting of native species. All works were completed to the satisfaction of the applicants' qualified environmental professional.

With respect to Criterion No. f) concerning the on-site servicing, the applicants have provided information concerning the septic disposal field and well logs. If the application proceeds, it is recommended that applicants' engineer provide certification that the existing wells meet the current standard in terms of quantity and quality and the existing septic disposal system meet current Vancouver Island Health Authority regulations (*see Schedule No. 1 for Conditions of Approval*).

Minimum Frontage Requirements Implications

The proposed parcels will not be able to meet the minimum 10% perimeter frontage requirement (*see Schedule No. 2 for proposed Plan of Subdivision*). There are existing built driveways located within each proposed parcel which serve the existing dwelling units. As the proposed parcels and reduced frontages will be able to support accesses and intended uses, staff has no objection to the relaxation of the minimum frontage requirement.

PUBLIC CONSULTATION IMPLICATIONS

In consultation with the Electoral Area Director a Public Information Meeting was not held for this application as the proposal is consistent with the direction and policies of the OCP.

If this application proceeds, a Public Hearing will be required to be held as part of the zoning amendment process.

INTERGOVERNMENTAL IMPLICATIONS

Staff has contacted the following agencies with respect to this zoning amendment application:

Ministry of Transportation & Infrastructure – Ministry staff has indicated that they have no concerns with the zoning amendment application; but these comments are not to be construed as approval for subdivision.

Vancouver Island Health Authority (VIHA) – The health inspector has indicated this application will be reviewed as part of the subdivision approval process.

Local Fire Department – The parent parcel is currently being served by the City of Nanaimo Fire Department by agreement. Staff has indicated that, at this time, they have no concerns with the proposed rezoning.

SUSTAINABILITY IMPLICATIONS

In keeping with Regional District of Nanaimo Board policy, the applicants have completed the "Sustainable Community Builder Checklist". This proposed rezoning will not increase the existing residential density of the parent parcel and the environmentally sensitive feature has recently been restored. It is also noted that the proposal will meet the applicable OCP policies.

VOTING

Electoral Area Directors – one vote, except Electoral Area 'B'.

SUMMARY

This is an amendment application to permit the creation of two minimum 1.0 ha sized parcels on property located at 3027/3029 Landmark Crescent in Electoral Area 'C'.

Pursuant to the development activated policies set out in the East Wellington-Pleasant Valley OCP, the applicants will be able to meet these criteria subject to confirmation of on-site servicing meeting the current regulations.

The subject property is designated within the Environmentally Sensitive Areas and the Fish Habitat Protection Development Permit Areas specifically for protection of a wetland area. The applicants' have recently completed a restoration of the wetland and as a result a second development permit is not required. The applicants' Qualified Environmental Professional has provided a report that indicates the parent parcel is not subject to the Fish habitat Protection Development Permit Area.


With respect to provision of on-site services, the applicants' agent has provided a report that indicates the approval of septic disposal system and water log report for the existing wells. As part of the conditions of approval and to meet the OCP criteria, it is recommended that the applicants be required to provide proof of potable water for both proposed parcels. With respect to septic disposal, conditions include proof of acceptance from the Vancouver Island Health Authority.

The Ministry of Transportation and Infrastructure staff has no issues with the proposed application, but this is not to be construed as subdivision approval, the Vancouver Island Health Authority has indicated that the proposal will be reviewed through the subdivision approval process, and Fire Department staff has indicated support of the proposed application.

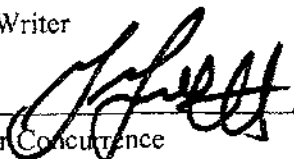
Given that the proposal fits the rural character of the neighbourhood, that the applicants are in concurrence to provide confirmation of on-site services in order to meet the criteria as set out in the applicable OCP policy, staff supports Alternative No. 1, to approve the amendment application subject to the conditions set out in Schedule No. 1, for 1st and 2nd reading and to proceed to public hearing.

RECOMMENDATIONS

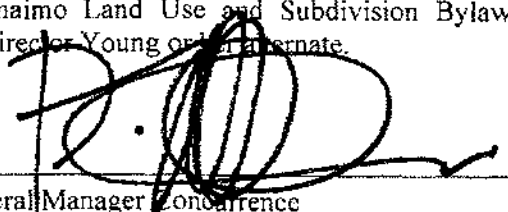
1. That Zoning Amendment Application No. ZA0521 as submitted by Linda Robinson, on behalf of P & E Robinson to rezone Lot 3, Section 20, Range 3, Mountain District, Plan 31215 from Subdivision District 'D' to Subdivision District 'F' be approved to proceed to public hearing subject to the conditions included in Schedule No. 1.
2. That "Regional District of Nanaimo Land Use and Subdivision Bylaw Amendment Bylaw No. 500.350, 2009" be given 1st and 2nd reading.
3. That "Regional District of Nanaimo Land Use and Subdivision Bylaw Amendment Bylaw No. 500.350, 2009" proceed to public hearing.
4. That the public hearing on "Regional District of Nanaimo Land Use and Subdivision Bylaw Amendment Bylaw No. 500.350, 2009" be delegated to Director Young or his alternate.



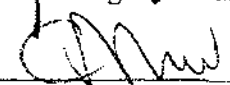
Report Writer



Manager Concurrence



General Manager Concurrence



CAO Concurrence

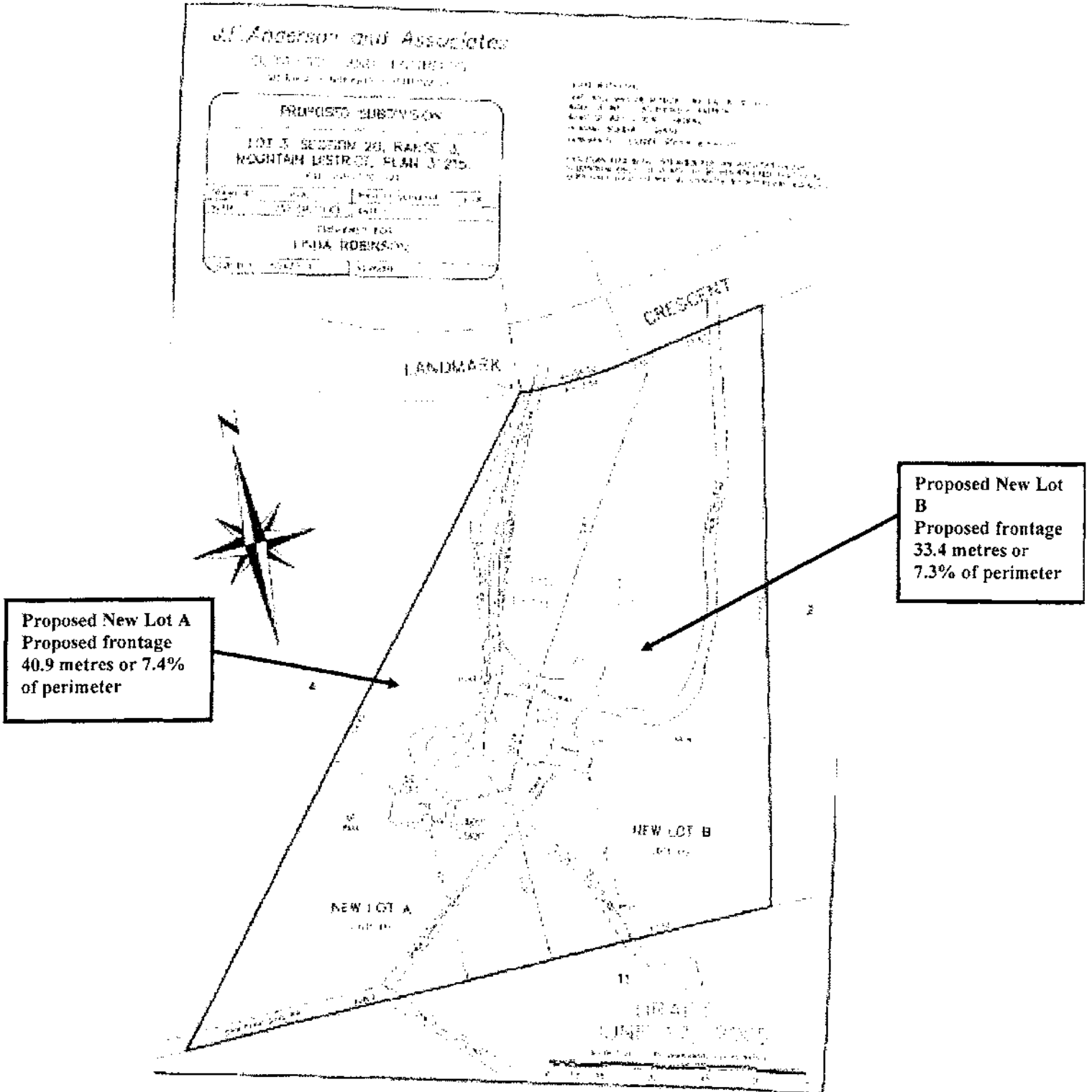
Schedule No. 1
Zoning Amendment Application No. ZA0521
Conditions of Approval

The following sets out the conditions of Zoning Amendment Application No. 0521:

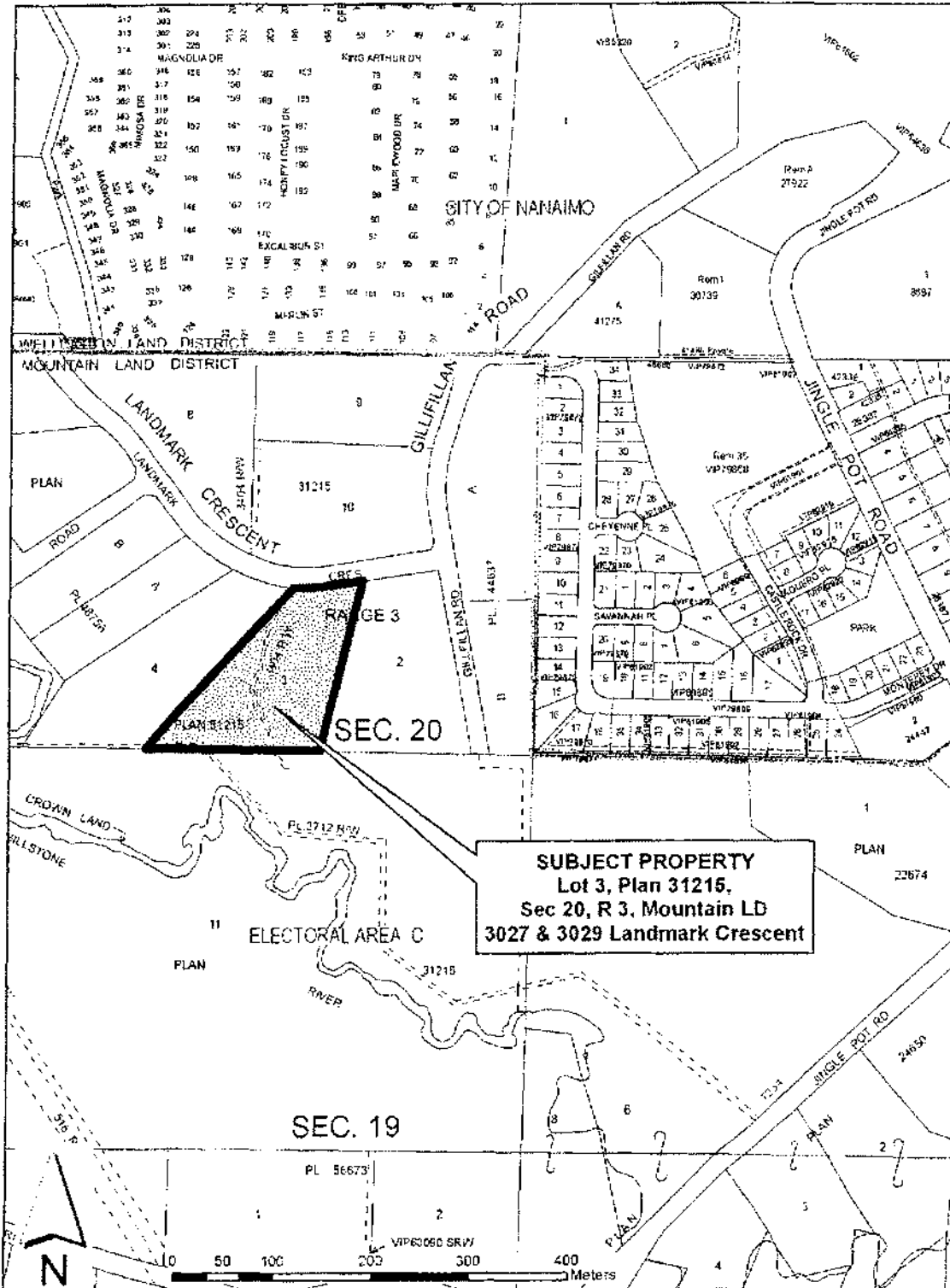
The applicants are to provide the following information prior to Amendment Bylaw No. 500.350, 2009 being considered for 4th reading:

1. Professional engineer's report certifying that the existing drilled wells have a year round potable water supply in the amount of 3.5 m³ per day and that the water supply meets the minimum Canadian Drinking Water Standards in terms of quality. Proof shall include the drilled wells has been constructed as per the current well regulations and pump tested and certified, including wellhead protection. This report must be acceptable to the Regional District.
2. Applicants to provide confirmation that provision of septic disposal has been met to the satisfaction of the Vancouver Island Health Authority.

Schedule No. 2
Zoning Amendment Application No. 0521
Proposed Plan of Subdivision



Attachment No. 1
Zoning Amendment Application No. 0521
Subject Property Map



SUBJECT PROPERTY
Lot 3, Plan 31215,
Sec 20, R 3, Mountain LD
3027 & 3029 Landmark Crescent

Attachment No. 3

Proposed Zoning Amendment Bylaw No. 500.350, 2009

REGIONAL DISTRICT OF NANAIMO

BYLAW NO. 500.350

**A Bylaw to Amend Regional District of Nanaimo
Land Use and Subdivision Bylaw No. 500, 1987**

The Board of the Regional District of Nanaimo, in open meeting assembled, enacts as follows:

A. Schedule 'A' of "Regional District of Nanaimo Land Use and Subdivision Bylaw No. 500, 1987", is hereby amended as follows:

1. **PART 3 LAND USE REGULATIONS, Schedule '4A', SUBDIVISION DISTRICT MAPS** is hereby amended by rezoning from Subdivision District 'D' to Subdivision District 'F' the land legally described as:

Lot 3, Section 20, Range 3, Mountain District, Plan 31215

as shown in heavy outline on Schedule '1' which is attached to and forms part of this Bylaw.

B. This Bylaw may be cited as "Regional District of Nanaimo Land Use and Subdivision Bylaw Amendment Bylaw No. 500.350, 2009".

Introduced and read two times this

Public Hearing held pursuant to Section 890 of the *Local Government Act* this

Read a third time this

Adopted this

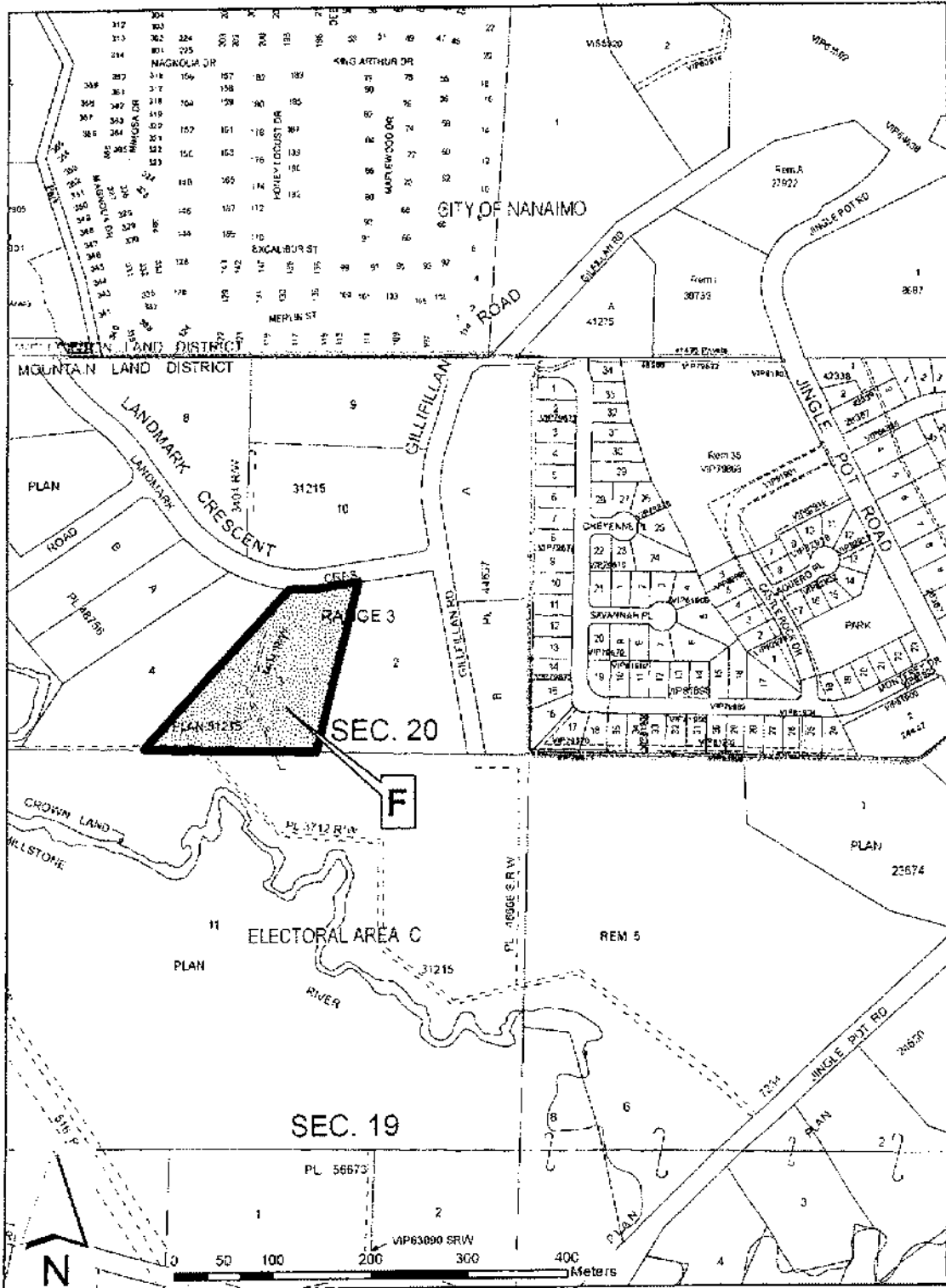
Chairperson

Sr. Mgr., Corporate Administration

Schedule '1' to accompany "Regional District of Nanaimo Land Use and Subdivision Bylaw Amendment Bylaw No. 500.350, 2009"

Chairperson

Sr. Mgr., Corporate Administration



BCGS MAPSHEETS: 92F.023.4.4, 930.22



CAO APPROVAL	
EAP	✓ May 12 09
COV	
RM-13	
BOARD	

MEMORANDUM

TO: Geoff Garbutt
Manager, Current Planning

DATE: April 30, 2009

FROM: Susan Cormie
Senior Planner

FILE: 3360 30 0809

SUBJECT: Zoning Amendment Application No. ZA0809 – Focus Corporation on behalf of Island Timberlands and Nanaimo & District Fish and Game Protective Association (Nanaimo Fish and Game Club)
Electoral Area 'C' – Nanaimo Lakes Road

PURPOSE

To consider an application to rezone property adjacent to the Nanaimo Lakes Road in Electoral Area 'C' in order to facilitate a lot line adjustment subdivision and the consolidation of the new parcel with the neighbouring Fish and Game Club parcel and to recognize the existing Nanaimo Fish and Game Club land uses.

BACKGROUND

The Regional District has received an application to rezone a portion of two parcels in the Nanaimo Lakes Road area of Electoral Area 'C' to facilitate a lot line adjustment subdivision and the consolidation of this proposed amended parcel with the adjacent Nanaimo & District Fish and Game Protective Association (Fish and Game Club) parcel and to recognize the existing rifle range, archery range, hand gun area, and black powder gun trail land uses.

The lot line adjustment property, which is proposed to be 41.4 ha in size, is located adjacent to Nanaimo Lakes Road and involves the parcels legally described as Section 19, Range 8, Except That Part Shown Coloured Red on Plan 309RW and Lot 1, Section 20, Range 8, Plan 3368, Except Parcel A (DD99245I) of Said Lot, Both of Douglas District (*New Lot 1*). The portion of the parcels under consideration for rezoning is zoned Resource Management 4 (RM4) / Resource Management 5 (RM5) and is situated within Subdivision District 'V' (50.0 ha minimum parcel size with or without community services) and Subdivision District 'B' (8.0 ha minimum parcel size with or without community services) pursuant to the "Regional District of Nanaimo Land Use and Subdivision Bylaw No. 500, 1987" (see Attachment No. 1 for location of Proposed New Lot 1 subject property).

The portion of this subject property, which is within Subdivision District 'B', is situated within the Provincial Agricultural Land Reserve (ALR).

This proposed lot line adjustment property (*New Lot 1*) is currently being used by the adjacent property owner, the Nanaimo Fish and Game Club, and includes portions of the existing rifle range, archery range, hand gun area as well as black powder gun trails. There are no buildings or structures located within this proposed property.

The Fish and Game Club property, which is 8.03 ha in size and legally described as Parcel A (DD 99245I) of Lot 1, Section 20, Range 8, Douglas District, Plan 3368, Containing 19.847 Acres More or Less (*Parcel A*), is zoned Recreation 4 and is situated within Subdivision District 'V' (RC4V) (50.0 ha

minimum parcel size with or without community services pursuant to the “Regional District of Nanaimo Land Use and Subdivision Bylaw No. 500, 1987” (*see Attachment No. 1 for location of Parcel A subject property*).

All existing Fish and Game Club buildings are located within the Fish and Game Club parcel.

The subject properties are designated within the Fish Habitat Protection Development Permit Area pursuant to the Arrowsmith Benson – Cranberry Bright Official Community Plan Bylaw No. 1148, 1999 (OCP), in this case for the protection of the riparian areas of Chase River, an unnamed creek, a ditch, and two wetlands, which are located within the subject properties.

Documents on title of *Parcel A* (Fish and Game Club) include a covenant that restricts sale of the property to a non-profit organization only.

The subject properties are surrounded by resource management zoned parcels on all sides with Nanaimo Lakes Road to the east. The parcel to the north also includes land within the Provincial Agricultural Land Reserve.

Submitted Proposal

The applicant is proposing to create *New Lot 1* by way of a lot line adjustment subdivision and then consolidating *New Lot 1* with the existing Fish and Game Club property (*Parcel A*). This will result in all the related Fish and Game Club uses within one property (*see Schedule No. 2 for proposed plan of subdivision*). In support of this amendment application the applicant’s agent has supplied the following documentation:

- Proposed plan of subdivision;
- Site plan showing existing uses;
- Riparian Assessment Report No. 1267, prepared by EBA Engineering Consultants, dated 2009-04-15; and
- Sustainable Community Builder Checklist.

The proposed newly consolidated parcel is to be serviced by the existing individual on-site septic disposal system and water well. This new parcel is located outside of a RDN Building Services area.

ALTERNATIVES

1. To approve the application to rezone Proposed *New Lot 1* from Resource Management 4/Resource Management 5 (RM4/RM5) to Recreation 4 (RC4) subject to the conditions outlined in Schedules No. 1 and 2.
2. To deny the amendment application.

DEVELOPMENT IMPLICATIONS

Official Community Plan Implications

The intent of this zoning amendment is to include all the related existing Fish and Game Club uses within one parcel. As outdoor recreational use is recognized as a permitted use under the Resource land use designation of the OCP, the new Fish and Game Club parcel will be consistent with related policies set out in the OCP.

With respect to minimum parcel size, as the proposed subdivision does not create any additional parcels, the minimum parcel sizes as supported by the OCP are not applicable.

Provincial Agricultural Land Reserve Implications

The Provincial Agricultural Land Commission has indicated that it has no issues with the existing Fish and Game Club uses that are located within the ALR portion of *Lot 1*.

On-Site Servicing / Subdivision Implications

Through the subdivision approval process, the Regional Approving Authority may require proof of potable water and septic disposal are requirements of subdivision for the proposed amended Fish and Game Club parcel.

In order to ensure that all Fish and Game Club uses are located within one parcel, the proposed lot line adjustment subdivision (*New Lot 1*) will not be able to meet the parcel size provisions of Bylaw No. 500, 1987 with respect to reducing the size of an existing parcel by more than 20%. As this is a technical requirement of subdivision, this issue will be considered through the subdivision review process.

Existing Uses Implications

Some of the black powder trails located near the portion of Chase River will be still located on the Island Timberlands property. As a condition of approval, the Fish and Game Club will remove these trails and relocate them to within the new parcel and meeting the minimum 30.0 metre setback requirement (*see Schedule No. 1 for Conditions of Approval*).

ENVIRONMENTALLY SENSITIVE AREAS IMPLICATIONS

The applicant has provided a Riparian Area Assessment prepared by a Qualified Environmental Professional which has been submitted, but not yet accepted by the Ministry of Environment for the portion of Chase River, the unnamed creek, a ditch, and two wetlands which are located within the subject properties. This report establishes a Stream Protection and Enhancement Area (SPEA) of 27.54 metres for Chase River, 10.0 metres for the unnamed creek and ditch, and 30.0 metres for the wetlands. As there are no measures or environmental monitoring required to be completed as part of the zoning amendment / subdivision process and if the report is accepted by the Ministry, this application will meet the exemption provisions as set out in the Fish Habitat Development Permit Area. Therefore, confirmation of acceptance of the report has been included in the Conditions of Approval as outlined in *Schedule No. 1*. If the report is not accepted by the Ministry, a development permit will be required.

PUBLIC CONSULTATION IMPLICATIONS

A Public Information Meeting concerning this application was held on March 25, 2008. Notification of the meeting was advertised in *The Harbour City News* newspaper and on the RDN website, along with a direct mail out to all property owners within 200 metres of the subject property. The Minutes of Public Information Meeting minutes are set out in *Attachment No. 2*.

If this application proceeds, a Public Hearing will be required to be held as part of the zoning amendment process.

INTERGOVERNMENTAL IMPLICATIONS

Ministry of Transportation & Infrastructure – Ministry staff has indicated that the Ministry has no objection to this application, but this is not to be construed as approval of subdivision.

Vancouver Island Health Authority (VIHA) – The health inspector has indicated that the application will be reviewed as part of the subdivision referral process.

Local Fire Department – The Fish and Game Club is currently being served by the City of Nanaimo Fire Department. Staff has indicated that, at this time, they have no concerns with the proposed rezoning.

SUSTAINABILITY IMPLICATIONS

In keeping with Regional District of Nanaimo Board policy, the applicant has completed the “Sustainable Community Builder Checklist”. The purpose of this proposal is to recognize the existing land uses. It is also noted that the proposal will meet the applicable OCP policies.

VOTING

Electoral Area Directors – one vote, except Electoral Area ‘B’.

SUMMARY

This report addresses a request to amend Bylaw No. 500, 1987 to allow a lot line adjustment and consolidation of parcels located adjacent to Nanaimo Lakes Road of Electoral Area ‘C’ and further to recognize the existing rifle range, archery range, hand gun area, and black powder gun trail land uses being used by the Nanaimo Fish and Game Club. A Public Information Meeting was held on March 25, 2008. Approximately 30 persons attended the meeting.

The subject properties are designated within the Fish Habitat Protection Development Permit Area pursuant to the Arrowsmith Benson – Cranberry Bright Official Community Plan Bylaw No. 1148, 1999. The applicant has submitted a riparian assessment and as there are no measures or environmental monitoring required as part of the zoning amendment / subdivision processes, this application will meet the exemption provisions from requiring a development permit.

The requirement to provide proof of potable water and adequate septic disposal areas is considered by the Approving Officer as part of the subdivision approval process.


Ministry of Transportation and Infrastructure staff has indicated the Ministry has no objection to this zoning amendment application, but this is not to be construed as subdivision approval. The Vancouver Island Health Authority has indicated that it will support the proposed application. The City of Nanaimo Fire Department which serves the Fish and Game Club property has indicated that it has no concerns with the requested amendment at this time.

A copy of the proposed amendment bylaw is attached to this report.

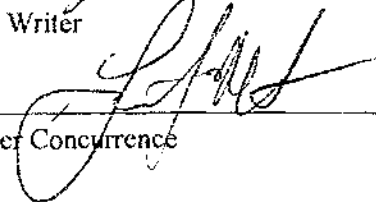
Given that the application is consistent with the OCP policies and that the zoning amendment will recognize the existing Fish and Game Club uses, staff supports the zoning amendment application, as submitted, subject to the conditions set out in *Schedule Nos. 1 and 2* of the corresponding staff report.

RECOMMENDATIONS

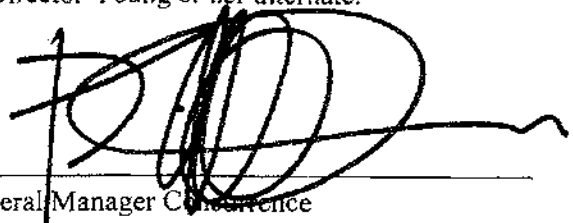
1. That the minutes of the Public Information Meeting held on March 25, 2009 be received.
2. That the That Zoning Amendment Application No. ZA0809, as submitted by Focus Corporation on behalf of Island Timberlands and Nanaimo & District Fish and Game Protective Association, to rezone the portions of the properties legally described as Section 19, Range 8, Douglas District, Except That Part Shown Coloured Red on Plan 309RW and Lot 1, Section 20, Range 8, Douglas District, Plan 3368, Except Parcel A (DD992451) of Said Lot, as shown on Schedule No. 2, from Resource Management 4 (RM4) and Resource Management 5 to Recreation 4 be approved to proceed to public hearing subject to the conditions included in Schedule No. 1.
3. That "Regional District of Nanaimo Land Use and Subdivision Bylaw Amendment Bylaw No. 500.349, 2009" be given 1st and 2nd reading.
4. That "Regional District of Nanaimo Land Use and Subdivision Bylaw Amendment Bylaw No. 500.349, 2009" proceed to public hearing.
5. That the public hearing on "Regional District of Nanaimo Land Use and Subdivision Bylaw Amendment Bylaw No. 500.349, 2009" be delegated to Director Young or her alternate.



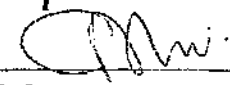
Report Writer



Manager Concurrence



General Manager Concurrence



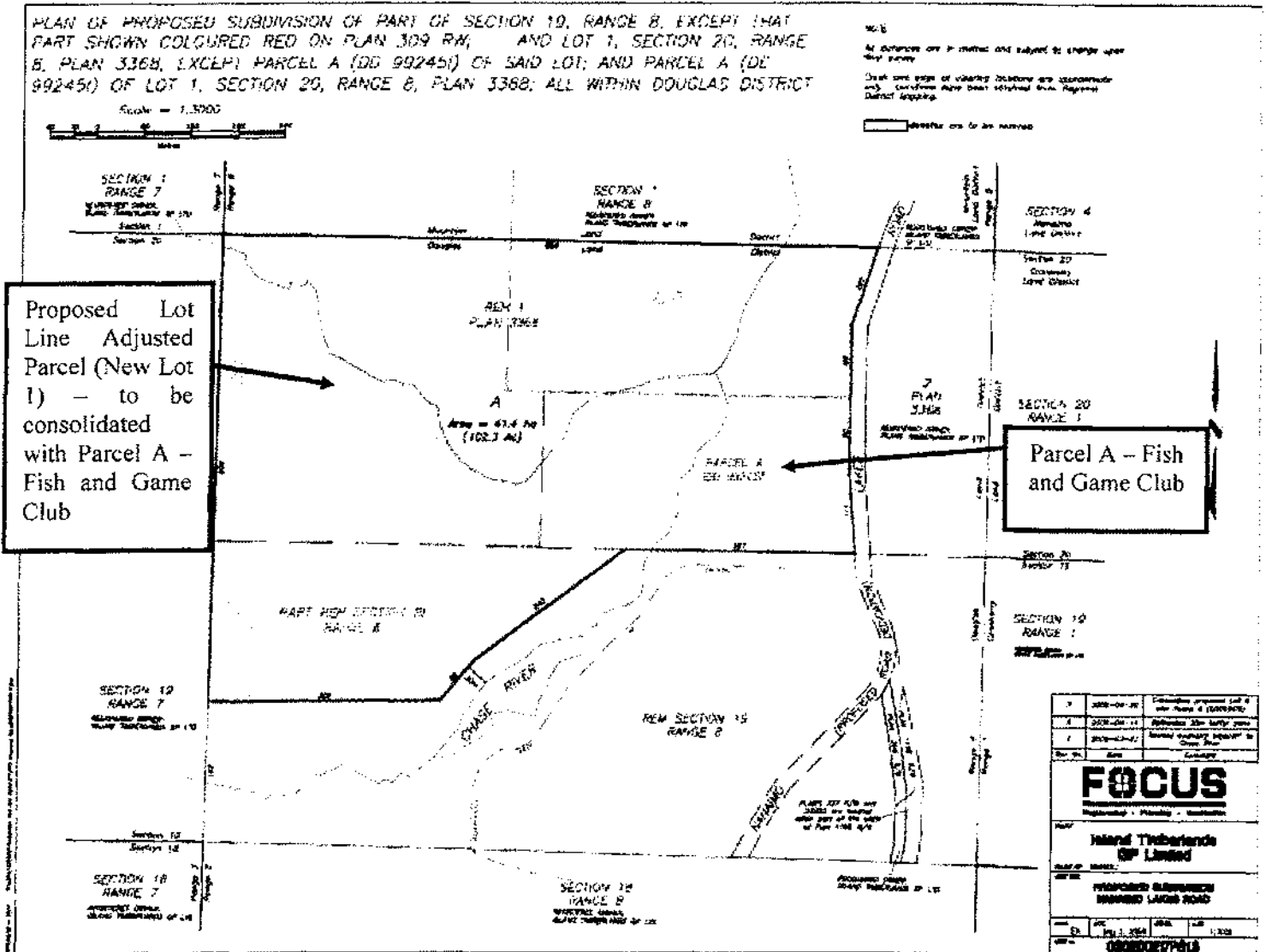
CAO Concurrence

Schedule No. 1
Zoning Amendment Application No. ZA0809
Conditions of Approval

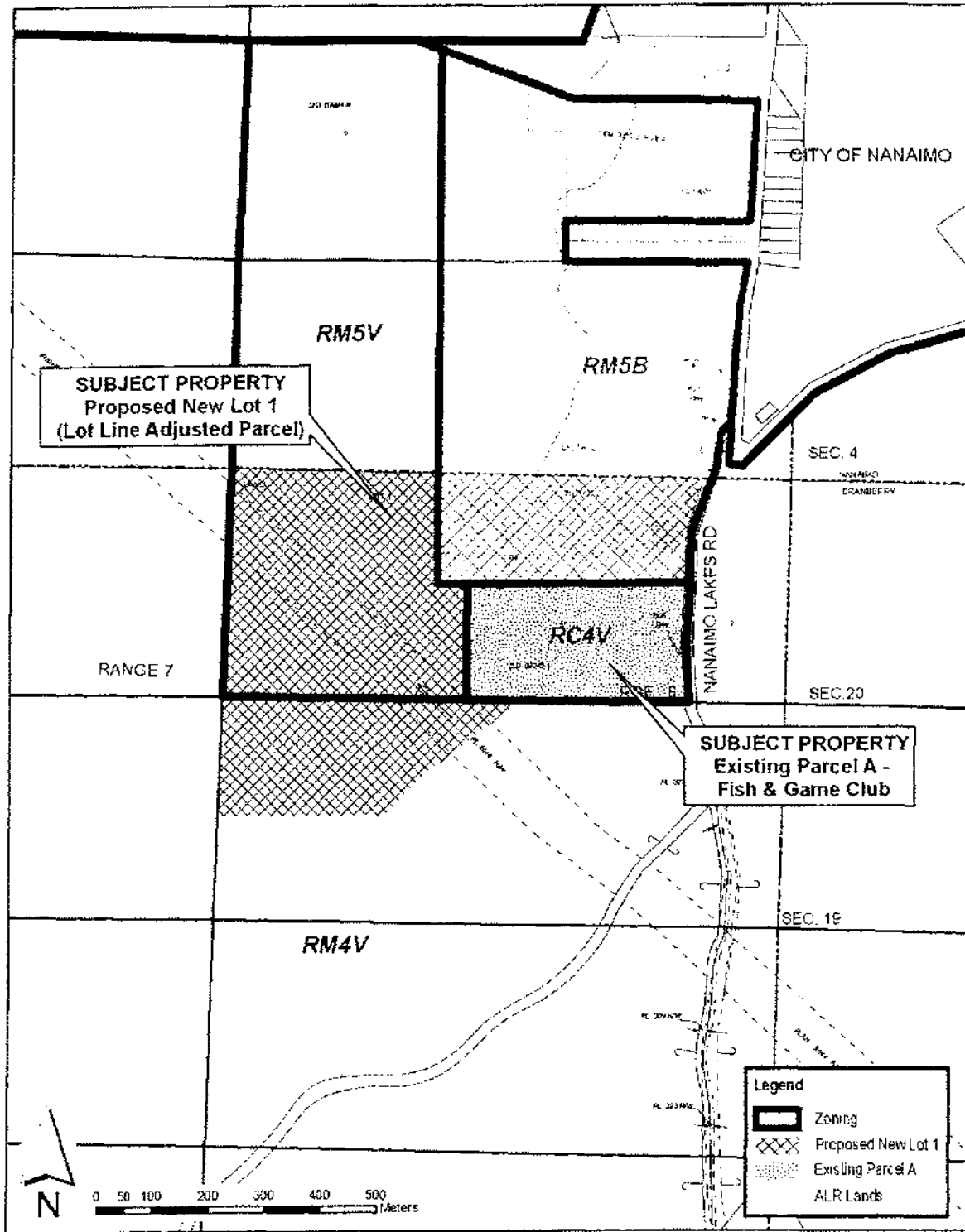
The following sets out the conditions of Zoning Amendment Application No. 0809:

1. Applicant to consolidate proposed new parcel with Fish and Game Club parcel as shown on Schedule No. 2 concurrently with the corresponding lot line subdivision application.
2. The Nanaimo Fish and Game Protective Association will relocate all black powder trails to meet the minimum 30.0 metre setback requirement pursuant to Bylaw No. 500, 1987 to the satisfaction of the RDN. These works must be completed by the Fish and Game Club and accepted by the RDN prior to final approval of the corresponding subdivision.

Schedule No. 2
Zoning Amendment Application No. 0809
Proposed Plan Showing Proposed New Fish and Game Club Parcel with
Lot Line Adjustment Parcel



Attachment No. 1
Zoning Amendment Application No. 0809
Subject Properties Map Including the Proposed New Fish and Game Club Parcel



Mapsheet 92G.011.1.3

Attachment No. 2
Zoning Amendment Application 0809
Summary of the Minutes of the Public Information Meeting
Held at the Nanaimo Fish and Game Club, 1321/1325 Nanaimo Lakes Road, Nanaimo, BC
March 25, 2009 at 7:00 pm

Note: this summary of the meeting is not a verbatim recording of the proceedings, but is intended to summarize the comments of those in attendance at the Public Information Meeting.

There were 32 persons in attendance.

Present for the Regional District:

Chairperson Maureen Young, Director, Electoral Area 'C'
Susan Cormie, Senior Planner, Kristy Marks, Planner

Present for the Applicant: Chris Dawes, agent for applicant

Chairperson Young opened the meeting at 7:05 pm and outlined the agenda for the evening's meeting and introduced the head table and Mr. Chris Dawes, agent on behalf of the applicant. The Chair then stated the purpose of the Public Information Meeting and requested the Senior Planner to provide background information concerning the zoning amendment process.

The Senior Planner gave a brief outline of the application and the application process.

The Chairperson then invited Mr. Dawes, agent on behalf of the applicant, to give a presentation of the proposed zoning amendment. Mr. Dawes presented the proposed amendment application including the proposed subdivision layout.

Following the agent's presentation, the Chairperson invited questions and comments from the audience.

Norm High, 2181 Addison Way, asked about notification requirements and who would get notice of the application.

The Senior Planner explained that notices of this meeting, as set out in the relevant bylaw, were sent to all property owners within 200 metres of the subject property, a notice was advertised in the local newspaper, a notice was placed on the RDN Web page, and signage was placed on the property.

Mr. Doug Miller, 6397 Bell Road, asked about the parcel size and why the parcel has to be so large.

Mr. Chris Dawes explained that the parcel needed to be large enough to accommodate the existing uses on the property as some of the uses currently cross the property boundary.

Mr. Doug Janz, 741 Quail Place, asked for clarification on the variance that would be required for frontage.

The Senior Planner explained that there is a statutory requirement under the *Local Government Act* that a minimum of 10% of the perimeter of each parcel fronts on a dedicated road and if this requirement cannot be met, an applicant may apply to the Regional District for relaxation.

The Chair then invited further comments and questions from the audience.

The Chair then asked if there were any further submissions or comments a second time.

The Chair asked if there were any further submission or comments a third time. There being none, the Chair thanked those in attendance and closed the public information meeting.

The meeting concluded at 7:16 pm.

Kristy Marks, Recording Secretary

**Attachment No. 3
Proposed Zoning Amendment Bylaw No. 500.349, 2009**

REGIONAL DISTRICT OF NANAIMO

BYLAW NO. 500.349

**A Bylaw to Amend Regional District of Nanaimo
Land Use and Subdivision Bylaw No. 500, 1987**

The Board of the Regional District of Nanaimo, in open meeting assembled, enacts as follows:

A. Schedule 'A' of "Regional District of Nanaimo Land Use and Subdivision Bylaw No. 500, 1987", is hereby amended as follows:

1. **PART 3 LAND USE REGULATIONS, Schedule '3A', ZONING MAPS** is hereby amended by rezoning from Resource Management 4 (RM4) and Resource Management 5 (RM5) to Recreation 4 (RC4) those portions of the lands legally described as:

Section 19, Range 8, Douglas District, Except That Part Shown Coloured Red on Plan 309RW

and

Lot 1, Section 20, Range 8, Douglas District, Plan 3368, Except Parcel A (DD99245I) of Said Lot

as shown in heavy outline on Schedule 'I' which is attached to and forms part of this Bylaw.

B. This Bylaw may be cited as "Regional District of Nanaimo Land Use and Subdivision Bylaw Amendment Bylaw No. 500.349, 2009".

Introduced and read two times this

Public Hearing held pursuant to Section 890 of the *Local Government Act* this

Read a third time this

Adopted this

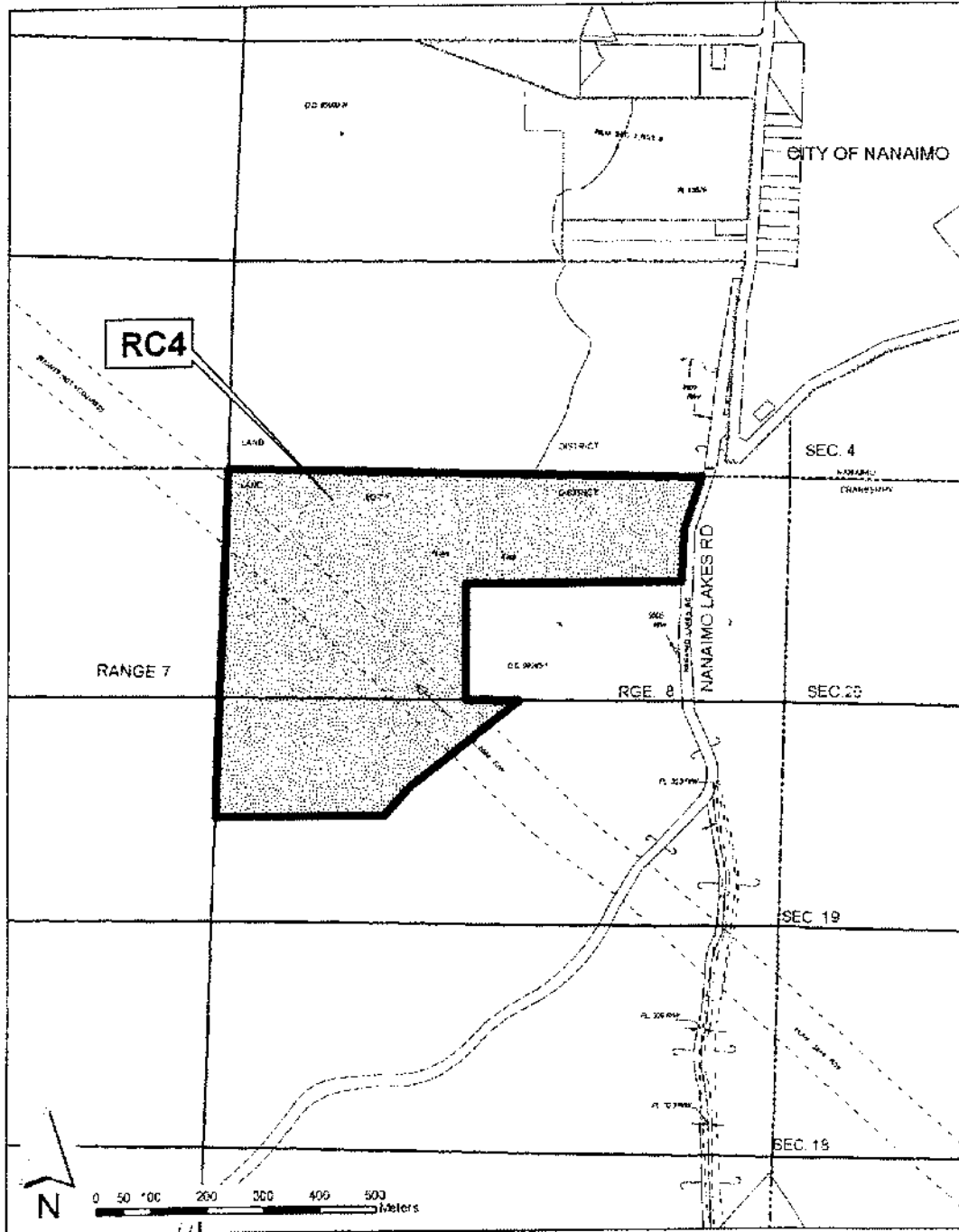
Chairperson

Sr. Mgr., Corporate Administration

Schedule 'I' to accompany "Regional District of Nanaimo Land Use and Subdivision Bylaw Amendment Bylaw No. 500.349, 2009"

Chairperson

Sr. Mgr., Corporate Administration



Mapsheet 92G 011 1.3



CAO APPROVAL	
EAP	✓ May 13 '09
COW	
APPROVAL	
RHD	
BOARD	

MEMORANDUM

TO: Geoff Garbutt, Manager of Current Planning **DATE:** April 29, 2009
FROM: Angela Buick, Planning Technician **FILE:** 3060 30 60907
SUBJECT: Development Permit with Variance Application No. 60907 – Allen / Heppell
Lot 6, District Lot 78, Nanoose District, Plan VIP78139
3404 Carmichael Road - Electoral Area 'E' Fairwinds

PURPOSE

To consider an application for a Development Permit with Variances to increase the maximum height requirement in order to accommodate the construction of a dwelling unit within the Sensitive Ecosystem Protection Development Permit Area.

BACKGROUND

The subject property, legally described as Lot 6, District Lot 78, Nanoose District, Plan VIP78139, located at 3404 Carmichael Road in Electoral Area 'E' (See Attachment No. 1). The parcel is 2338 m² in size and zoned Residential 1 Subdivision District 'P' (RS1P) pursuant to "Regional District of Nanaimo Land Use and Subdivision Bylaw No. 500, 1987." The subject property is surrounded by Residential 1 zoned properties to the north, south and easterly properties and Rockcliffe Comprehensive Development (CD35) zoning to the west. The property is currently unoccupied and the land is unaltered from its natural state.

Pursuant to "Regional District of Nanaimo Nanoose Bay Official Community Plan Bylaw No. 1400 2005", the subject property is located within the Sensitive Ecosystem Protection Development Permit Area for the protection of the Garry oak ecosystem. The applicant has provided an Environmental Assessment Report identifying the sensitive ecosystems on the site to be protected. Lot 6 consists predominantly of rock outcrop and woodland with a forest cover of young second growth Douglas fir, Arbutus, and Garry oak.

Requested Variances Summary

With respect to the lands, "Regional District of Nanaimo Land Use and Subdivision Bylaw No. 500, 1987", is requested to be varied as follows:

Section 3.4.61 – Minimum Number and Size of Buildings and Structures is requested to be varied by increasing the maximum height requirement from 8.0 metres to 8.7 metres. (see *Schedule No. 3* for Proposed Building Elevations).

The applicant has requested a height variance in order to minimize the amount of rock extraction by way of blasting into the lot material. The applicant has reduced the truss height and site configuration in order to minimize the requested variance from the original house design.

ALTERNATIVES

1. To approve the Development Permit with Variances application No. 60907 as submitted subject to the conditions outlined in *Schedules No. 1 – 5* and the notification requirements of the *Local Government Act*.
2. To deny the Development Permit with Variances application No. 60907 as submitted.

LAND USE AND DEVELOPMENT IMPLICATIONS

Zoning Implications:

The applicant is requesting to increase the maximum height from 8.0 metres to 8.7 metres in order to accommodate a dwelling unit. The request will apply to the main two peaks of the dwelling unit. All other portions of the proposed dwelling unit comply with the RS1 zoning requirements.

The subject property is made up primarily of rock outcrop. In order to meet the height requirements of the zoning, a substantial amount of rock blasting and extraction must occur (well over 3m of cut in some places). The applicants want to minimize the amount of rock extraction. Reducing the cut into the rock will result in a reduction of the allowable height of the dwelling unit. With this in mind, the subject property owners, together with their builder and designer, have reduced the height of the original dwelling unit plans by decreasing the height of the roof trusses and by shifting and changing the footprint in order to minimize the requested variance by 0.9 metres.

The dwelling unit is located in a cul-de-sac where it backs onto a walking trail with newly created lots beyond it. The adjacent property dwelling units face toward the road; therefore no negative view implications are foreseen due to the increased height. In staff's assessment, the proposed variance is reasonable and would not negatively impact the subject property or adjacent properties.

OCP and Environmental Implications:

Pursuant to the "Regional District of Nanaimo Nanoose Bay Official Community Plan Bylaw No. 1400, 2005" the subject property is designated within the Sensitive Ecosystem Protection Development Permit Area. The applicant has submitted an Environmental Assessment Report written by Toth and Associates Environmental Services (see Attachment No. 2) which indicates the presence of significant environmentally sensitive features including six Garry oak. These trees were flagged with pink flagging tape. Unflagged, were two dead Garry oak trees.

In keeping with the OCP and Develop with Care Guidelines, the applicant is responsible to protect the sensitive features identified (Garry oak and its ecosystem) in the submitted environmental assessment report. During construction, temporary fencing is to be placed around each Garry oak tree and its ground cover plants that will be protected on the parcel. The area around the base of each tree equal to the drip line of the tree must be retained in its natural, undisturbed state during development, as much as possible in order to ensure the survival of the Garry oak trees. In addition, the Develop with Care Guidelines points out that Garry oak trees are sensitive to changes in the hydrogeology of the ground which the root system is provided nutrients. Reducing the amount of rock blasting needed to site the dwelling unit may minimize the effects on the hydrogeology and thereby possibly minimizing negative effects on the health of the Garry oak trees and their ecosystems which may increase their chances of survival post construction.

Any Garry oak identified in the environmental report (*see Schedule No. 4*) that are unavoidably removed during the construction phase of the proposed dwelling unit, the destroyed trees and its ecosystem must be replaced with Garry oak saplings and native vegetation. As outlined in the report Garry oak saplings are often foraged by black-tailed deer therefore, the newly planted Garry oak saplings must be protected until

the tree can survive on its own. The following nurseries currently produce Garry oak saplings and associated plant for residential sale:

- Streamside Native Plants, 3222 Grant Road, Courtenay BC, Phone: 250-338-7509
- The NALT Natural Abundance Native Plant Material, 3145 Frost Road, Nanaimo BC, Phone: 250-714-1990

SUSTAINABILITY IMPLICATIONS

In keeping with Regional District of Nanaimo Board policy, the applicant has completed the "Sustainable Community Builder Checklist". The applicant has provided an Environmental Assessment by a Qualified Environmental Professional (QEP) which includes measures to protect the Garry oak ecosystem identified on the subject property. The applicant has indicated that the property owners want to maintain the parcels natural vegetative state as much as possible, and has identified some green building elements that would be incorporated in the proposed dwelling, including low flush toilets, energy efficient lighting and appliances.

PUBLIC CONSULTATION IMPLICATIONS

As part of the required public notification process, pursuant to the *Local Government Act*, property owners located within a 50 metre radius, must receive notice of the proposal and will have an opportunity to comment on the proposed variance, prior to the Board's consideration of the permit.

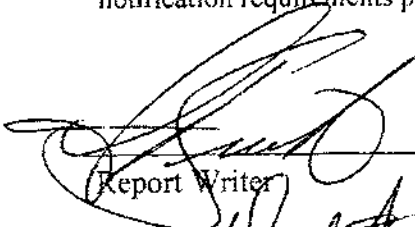
SUMMARY

This is an application for a Development Permit with Variances in order to permit the construction of an over height dwelling unit (from 8.0 metres to 8.7 metres) within a Sensitive Ecosystem Development Permit Area. The applicant has submitted an Environmental Assessment consistent with the requirements set out in the Development Permit Guidelines, pursuant to "Regional District of Nanaimo Nanoose Bay Official Community Plan Bylaw No. 1400, 2005".

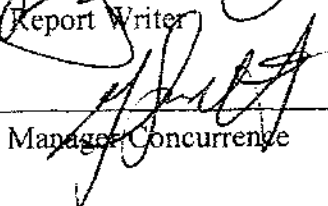
Given that this proposal will be able to meet the Sensitive Ecosystem Development Permit Area and Develop with Care Guidelines as outlined in *Schedule No. 5*, and minimal negative impacts to the subject property and surrounding lots, staff recommends approval of the Development Permit with Variances as submitted.

RECOMMENDATION

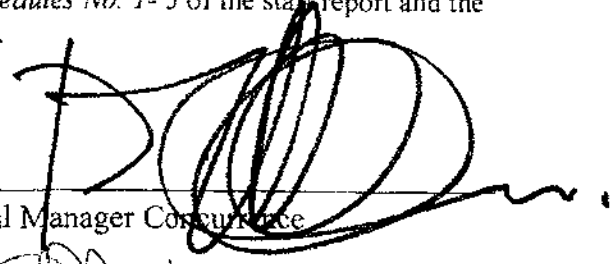
That Development Permit with Variances Application No. 60907 submitted by Walter Allen, on behalf of Robert and Wendy Heppell, to facilitate the construction of a dwelling unit within Sensitive Ecosystem Development Permit Area pursuant to "Regional District of Nanaimo Nanoose Bay Official Community Plan Bylaw No. 1400, 2005", on a lot legally described as Lot 6, District Lot 78, Nanoose District, Plan VIP78139, be approved subject to the conditions outlined in *Schedules No. 1- 5* of the staff report and the notification requirements pursuant to the *Local Government Act*.




 Report Writer



 Manager Concurrence



 General Manager Concurrence



 CAO Concurrence

Schedule No. 1

Terms of Development Permit No. 60907

The following sets out the terms and conditions of Development Permit No. 60907.

Bylaw No. 500, 1987 - Variance

With respect to the lands, "Regional District of Nanaimo Land Use and Subdivision Bylaw No. 500, 1987", is requested to be varied as follows:

1. **Section 3.4.61 – Minimum Number and Size of Buildings and Structures** is requested to be varied by increasing the maximum height requirement from 8.0 metres to 8.7 metres. (see *Schedule No. 3* for Proposed Building Elevations).

Conditions of Permit

1. The proposed dwelling shall be sited in accordance with the survey prepared by Sims Associates Land Surveying Inc. and dated April 23, 2009 attached as *Schedule No. 2*.
2. The proposed dwelling shall be developed in accordance with the building elevations prepared by Structure Design and Management and dated April 22, 2009 attached as *Schedule No. 3*.
3. The subject property, shall be developed in accordance with:
 - a. Environmental Assessment report written by Toth and Associates Environmental Services dated March 25th 2009; outlined in *Schedule No. 4*, and
 - b. Develop with Care Guidelines Section 3.5; as outlined in *Schedule No.5* for best environmental practices for re-vegetation landscaping.

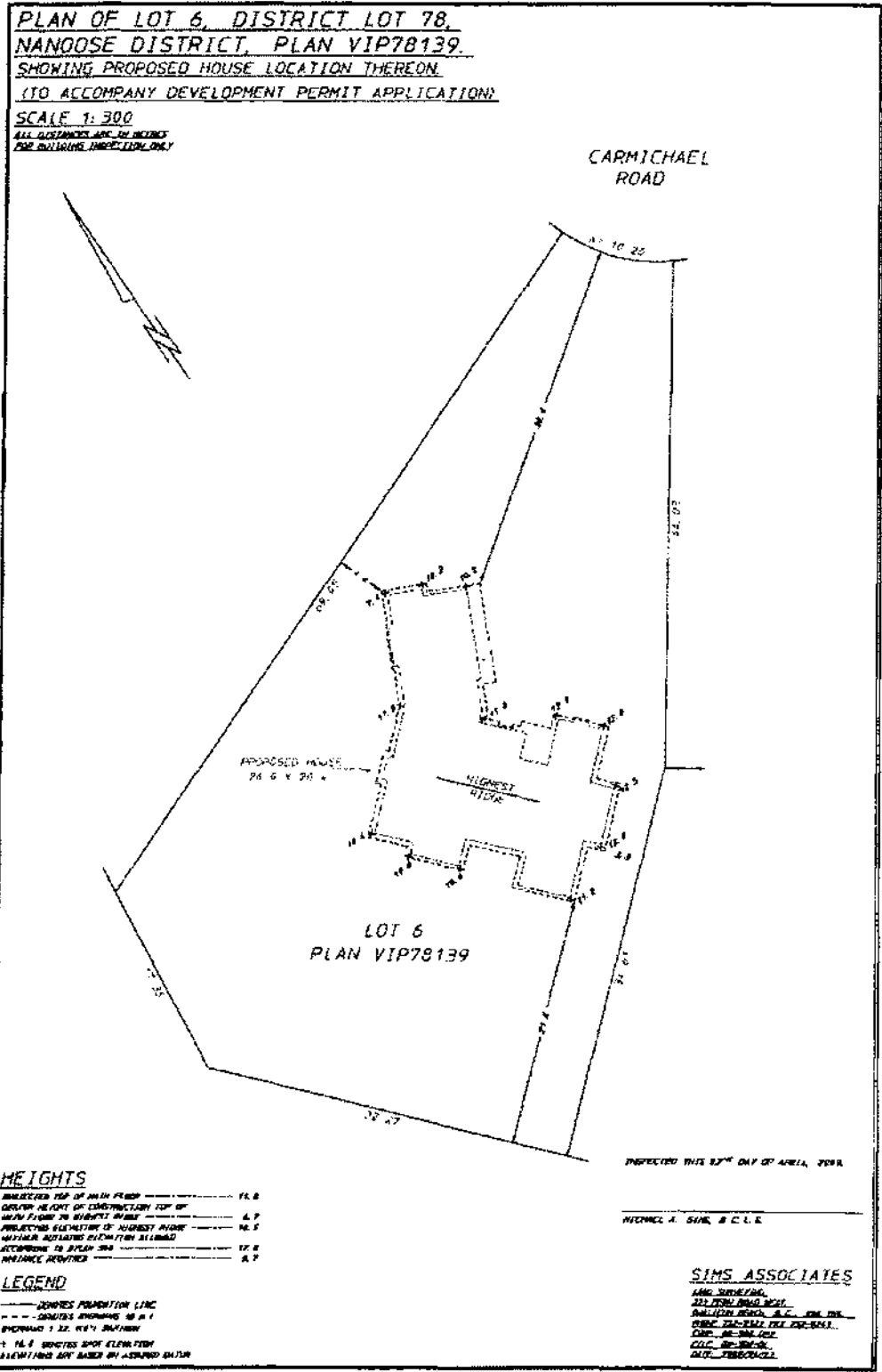
Environmental Protection

4. The Environmental Assessment report written by Toth and Associates Environmental Services dated March 25th 2009; outlined in *Schedule No. 4*, provides recommendations to protect the Garry oak trees and native plant community surrounding the Garry oak. Each Garry oak tree that does not survive the development of this lot it must be replaced with Garry oak saplings according to the Develop with Care Guidelines, Section 3.5; outlines in *Schedule No. 5*.
5. High visibility fencing shall be installed along the drip line of the Garry oak trees which are to be protected prior to any clearing of the lot in order to ensure that no encroachment in to the Garry oak native plant community surrounding the Garry oak tree potentially effected by the construction of the dwelling unit.

Vegetation Removal

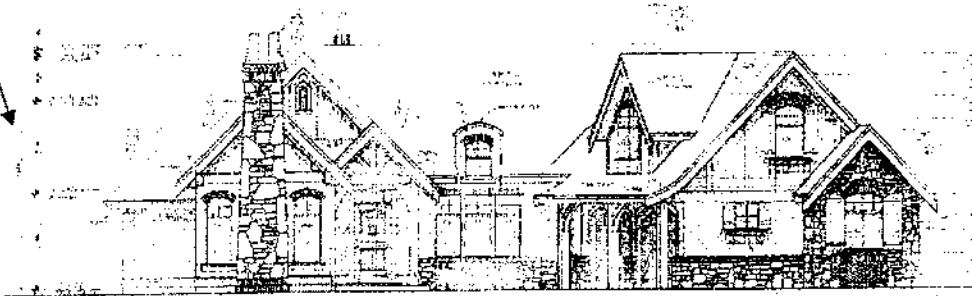
6. The identified Garry oak trees in Schedule No. 4, Figure 3, may be deemed hazardous only by a certified arborist and may be removed upon submission of an acceptable arborist's report to the Regional District of Nanaimo Planning Department. (Provided that the tree(s) being removed are replaced with an equal amount of native vegetation which is well suited to the local soil and water conditions present on the subject property).

Schedule No. 2
Location of Proposed dwelling unit

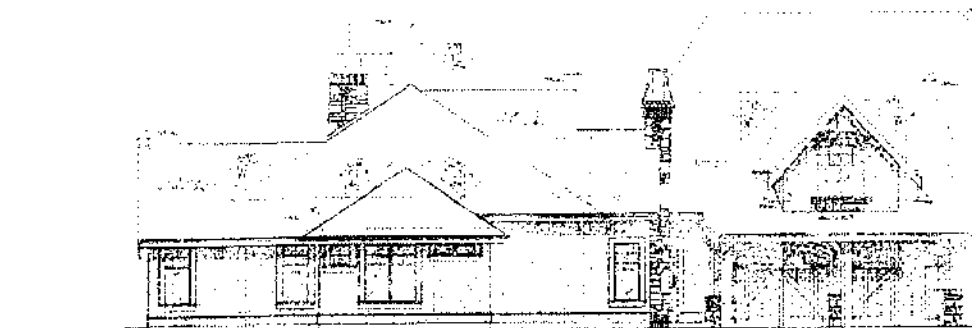


Schedule No. 3 Proposed Building Elevations

6.69 m



FRONT ELEVATION



LEFT ELEVATION

WINDY NOTES
TRUSS NOTES

MATERIALS LEGEND

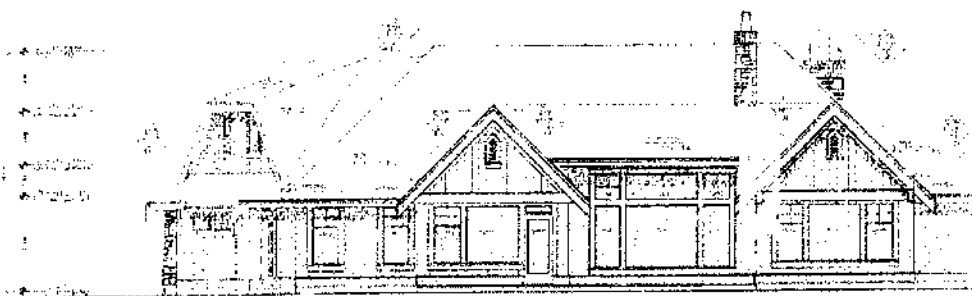
- 1. BRICK
- 2. STUCCO
- 3. SIDING
- 4. SHINGLES
- 5. ...
- 6. ...
- 7. ...
- 8. ...
- 9. ...
- 10. ...
- 11. ...
- 12. ...
- 13. ...
- 14. ...
- 15. ...
- 16. ...
- 17. ...
- 18. ...
- 19. ...
- 20. ...
- 21. ...
- 22. ...
- 23. ...
- 24. ...
- 25. ...
- 26. ...
- 27. ...
- 28. ...
- 29. ...
- 30. ...
- 31. ...
- 32. ...
- 33. ...
- 34. ...
- 35. ...
- 36. ...
- 37. ...
- 38. ...
- 39. ...
- 40. ...
- 41. ...
- 42. ...
- 43. ...
- 44. ...
- 45. ...
- 46. ...
- 47. ...
- 48. ...
- 49. ...
- 50. ...

CONTRACTOR
WALTER ALLEN HOMES
QUALITY HOMES INC.

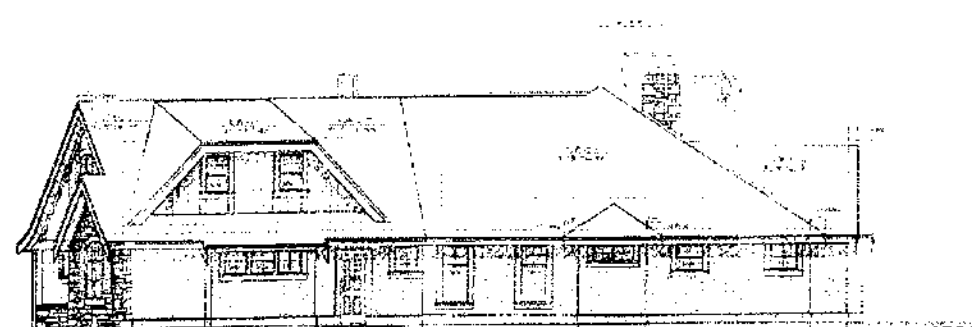
CLIENT
ROB & WENDY HEPPELL
NANCOOS BAY BC

LOT 4 CHARNICK RD.
SOUTH ELEVATIONS **6/9**

6.69 m



REAR ELEVATION



RIGHT ELEVATION

WINDY NOTES
TRUSS NOTES

CONTRACTOR
WALTER ALLEN HOMES
QUALITY HOMES INC.

CLIENT
ROB & WENDY HEPPELL
NANCOOS BAY BC

LOT 4 CHARNICK RD.
SOUTH ELEVATIONS **7/9**

**Schedule No. 4
Environmental Assessment Report**



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

March 25, 2009

Mr. Walter Allen
2443 Arlington Rd
Nanoose Bay, BC
V9P9E5

Re: Environmental Assessment of Lot 6 Carmichael Road, Nanoose.

Toth and Associates Environmental Services conducted an Environmental Assessment of Lot 6, (PID # 026149966) Carmichael Road in the Fairwinds area of Nanoose on March 21, 2009. According to the Nanoose Bay Official Community Plan (OCP) the property is located on the eastern edge of a Sensitive Ecosystem Protection Development Permit Area (DPA, Figure 1). The DPA is applicable to eagle and heron nests, and to Sensitive Ecosystem types as identified by the Sensitive Ecosystem Inventory (i.e. woodlands, coastal bluff, terrestrial herbaceous, wetland and sparsely vegetated ecosystems). A Development Permit is required prior to any development of the property (i.e. disturbance of vegetation, soils or construction).

The Nanoose Bay OCP indicates that "the Sensitive Ecosystem Protection DPA is comprised of lands that have been identified in the Sensitive Ecosystem Inventory" (SEI 1997, including 2004 updates), however our background review of the property indicated that the SEI did not identify the subject property as occurring within a SEI polygon (SEI Mapsheet 092F.030, March 2004) as indicated on Figure 2.

Lot 6 consisted of a rock outcrop / woodland dominated property with forest cover of young second growth Douglas fir (*Pseudotsuga menziesii*), arbutus (*Arbutus menziesii*), and garry oak (*Quercus garryana*). Site photographs are included at the end of this report. The understory was consistent with the definition of the Arbutus-Douglas fir Woodland ecotype and included salal (*Gaultheria shallon*), dull Oregon-grape (*Mahonia nervosa*), hairy honeysuckle (*Lonicera hispidula*), ballhip rose (*Rosa gymnocarpa*), and ocean spray (*Holodiscus discolor*). Topography consisted of a relatively flat access at the north end of the lot at Carmichael Road, with increasing slope grade to the south end of the lot and an overall southwest facing aspect.

ES4 Assessment of Lot 6, Carmichael Road, Nanoose

Six garry oak trees were flagged with pink flagging tape and geo-referenced with a Garmin GPS Map60CSx global position system (Figure 3). The garry oak at waypoint 165 is likely located on the adjacent property at 3411 Carmichael Road. Satellite reception was excellent during the survey with a minimum of 10 satellites collected at each waypoint. Waypoint locations of garry oaks and significant sized trees are provided in table 1. All tree measurements provided are diameter-at-breast-height (DBH).

Table 1. GPS Waypoints of Features on Lot 6

Waypoint	UTM Coordinates		Date / Time	Comments	
159	10U	417040	5458809	21/03/2009 11:09	30.5 + 18.5 cm G Oak
160	10U	417034	5458810	21/03/2009 11:13	29.5 cm G. oak
161	10U	417024	5458806	21/03/2009 11:17	2 dead G. oaks
162	10U	417020	5458803	21/03/2009 11:20	52 cm Arbutus
163	10U	417013	5458818	21/03/2009 11:23	25 cm G. oak
164	10U	417018	5458827	21/03/2009 11:26	3 Arbutus: 46, 53 + 38 cm
165	10U	417003	5458830	21/03/2009 11:29	23 cm G. oak
166	10U	417035	5458824	21/03/2009 11:50	Sapling G. oak

In order to preserve these garry oak trees, we recommend that an area around the base of each tree equal to the drip line of the tree be retained in its natural, undisturbed state during development of Lot 6, if possible. Figure 3 provides the location of the garry oak trees and mature arbutus on Lot 6.

We noted that on some neighboring properties garry oak trees had been retained, but landscaping, soils disturbance and planting of non-indigenous plant species had occurred to the base of the oak trees. The goal of preservation of the garry oak trees is to conserve not just the tree, but the native plant community surrounding the garry oaks as well.

Only one garry oak sapling was noted during the survey, and seedling oaks were not found. This lack of oak seedlings is likely due to heavy use of the property by foraging black-tailed deer.

Raptor, heron or other bird nests were not observed on, or adjacent to the property.

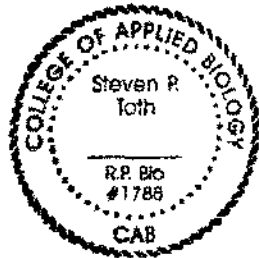
If you should have any questions regarding the contents of this report, please call us at (250) 390-7602.

ESA Assessment of Lot 6, Carnichael Road, Nanoose

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

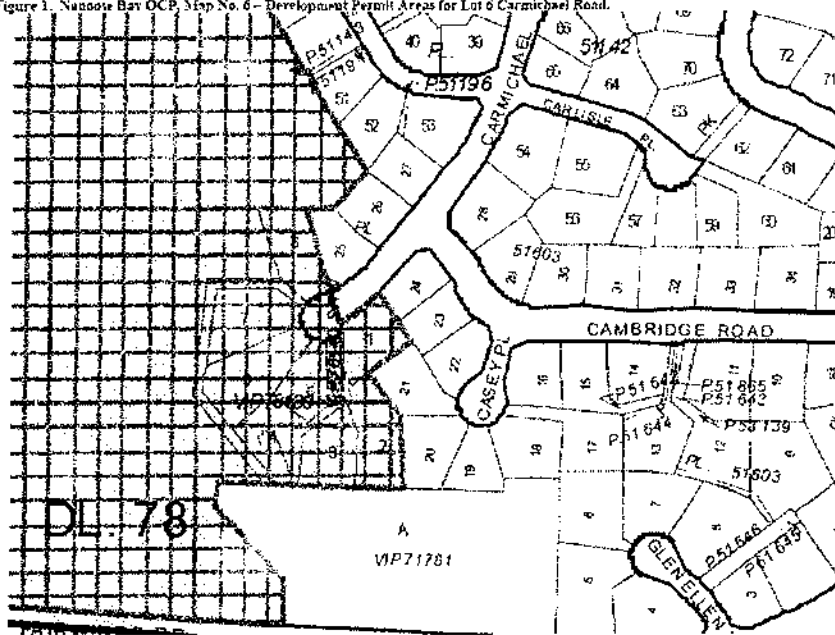


Toth and Associates Environmental Services



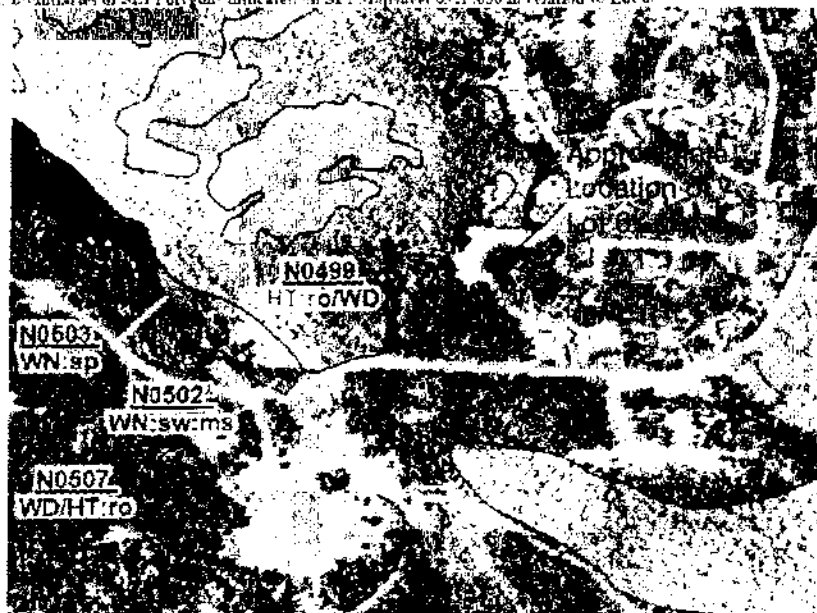
ESA Assessment of Lot 5, Carmichael Road, Nanoose

Figure 1. Nanoose Bay OCP, Map No. 6 – Development Permit Areas for Lot 6 Carmichael Road.



ESA Assessment of Lot 6, Carmichael Road, Nanoose

Figure 2. Boundaries of SEI Polygons indicated on SEI Mapsheet 091F.030 in relation to Lot 6.



ESA Assessment of Lot 6, Carnichei Road, Nanoose

Figure 3. GPS locations of garry oak and mature arbutus trees on Lot 6



6

ESA Assessment of Lot 6, Carnichei Road, Nanoose



Photograph 1. View from south to north across lot



Photograph 2. View of Lot 6 from Carnichei Road



Photograph 3. View of garry oak at waypoint 160



Photograph 4. Ringed garry oak at waypoint 169

8

7

Schedule No. 5 Develop With Care Guidelines - Section 3.5



SECTION 3.5 DEVELOPMENT AND MANAGEMENT

3.5 GUIDELINES FOR ECOSYSTEMS AND RIPARIAN PROTECTION

Protection is MUCH cheaper than restoration.

Protection of existing ecosystems is MUCH cheaper and more effective than ecosystem enhancement and restoration. In many cases, it is not technically possible to restore ecosystems to their original functioning state.

3.5.1 Site Design

To protect ecosystems and the plants and animals that live in them, we need to protect the ecosystems' form and functions.

Ecosystem features are physical and biological elements that determine the structure of an ecosystem. Examples include trees, shrubs, grasses, and other plants and animals that live in the ecosystem.

RETAIN AND ENHANCE ECOSYSTEM FEATURES AND FUNCTIONS

- Design the site to retain and enhance ecosystem features such as significant trees, tree fence lines, hedgerows, and windbreaks.
- Design buildings, infrastructure, and other development so that established trees can be retained with enough undisturbed space around them to protect their sensitive root systems.
- Maintain natural hydrologic cycles in wetlands, ponds, streams, and seepage areas to retain biodiversity and wetland function.
- Build wall away from floodplains. Allow natural flooding cycles to continue to support flood-dependent ecosystems and species.
- Ensure that natural (predevelopment) hydrological cycles are maintained during and after development. Changes in drainage patterns can impact ecosystems by providing too much or too little water. This will change the plant species that can survive there, which in turn can affect all other species which use that ecosystem.
- Where required for wildfire management, reduce fuel loads and manage ladder fuels by trimming lower dead branches while maintaining green shrubby vegetation. Fire-proofing plans may suggest that shrubby vegetation close to buildings be removed, but if this is within a riparian protection area, it may contravene the

Ecosystem functions are processes that keep an ecosystem working. Examples include water cycling, nutrient cycling, and carbon cycling.

SPANISH BANKS CREEK DAYLIGHTING, VANCOUVER

"The [Spanish Banks Creek] project opened up the creek to daylight and removed sections of an old culvert that prevented adult fish passage. Several components of a natural stream were recreated, including pool and riffle sequences. Spawning gravel was placed in the newly created creek bed. ... Woody debris was also installed to provide cover for young fish. As well, the banks were replanted with native vegetation and a foreshore area on the beach side of the trail was planted with dune grass to stabilize the area. ... Beginning in 2001, Coho salmon have been returning to the stream to spawn. The stream habitat has shown itself to be very productive and the returns have been earlier and larger than expected. The restored and expanded riparian habitat is also attracting additional species, including river otter and mink. The Streamkeepers group responsible for the stream is very active and involved in the upkeep and maintenance of the stream."

(From Greater Vancouver Regional District Sustainable Region Initiative Case Studies <http://www.pvrd.bc.ca/sustainability/casestudies.htm>).



SECTION 2: SITE DEVELOPMENT AND MANAGEMENT

WILDLIFE CORRIDORS

"Wildlife corridors provide animals with an opportunity to move freely between two or more habitat patches or habitat types in an otherwise fragmented landscape. This movement is essential to provide genetic links between populations and prevent inbreeding, and to compensate for temporary population declines in one of the habitat patches. The habitat needs of all priority species should be incorporated into the design of the corridor. Corridors must be suitably wide with appropriate habitat features to provide security cover during movement. Corridors usually consist of linear habitats such as streamside riparian areas. ... Development and roads should avoid these zones, and mitigation will be required where roads and other developments transect the corridor" (Clarke et al. 2004).

Feeding Air Avoid this conflict by siting buildings well away from riparian areas.

CONNECT HABITAT AREAS WITH WILDLIFE CORRIDORS

- Protect habitat features that can contribute to wildlife corridors. For example, a clump of trees or shrubs may provide a resting place for small birds as they travel between feeding and nesting areas.
- Maintain and create wildlife corridors between the natural areas on the development site and those on adjacent properties. Riparian areas and natural grasses often function well as wildlife corridors. Other areas such as utility corridors may provide travel routes for some species.
- Maintain the natural vegetation in wildlife corridors as much as possible. Placing salvaged woody debris (logs, stumps) in these areas enhances habitat and minimizes disposal costs.
- Consider restoring sites and corridors that will provide connectivity between natural habitats. The B.C. Chapter of the Society for Ecological Restoration can provide information on restoration planning.

The timing of the riparian forest formation is key to protect and enhance riparian forest habitat. Riparian forest is a natural resource. For more information see <http://www.ringo.bc.ca/mot.org/usingenvironmental.htm>

MINIMIZE IMPACTS FROM ROADS

- Design roads to minimize habitat fragmentation. For example, place roads along the edge of forests or grasslands rather than through the middle.
- Minimize disruption to wildlife travel using techniques such as toad tunnels (see Section 4).
- Control impacts from such things as road dust, oil drips from construction equipment, and erosion/sedimentation that result from construction activities.

Vehicle emissions and oil drips can be a major source of habitat fragmentation.

MINIMIZE IMPACTS ON NEIGHBORING PROTECTED AREAS

Developments adjacent to parks, ecological reserves, and other protected areas must be undertaken with particular sensitivity in order to protect the ecological values of these sites. Proximity to protected areas adds to property values. Maintain the value of your development by ensuring it does not damage the protected area.

A good idea is to ask the government to help fund the riparian forest. Riparian forest is a natural resource. For more information see <http://www.ec.gc.ca/comunity/greenpace/pdf/greenpace.pdf>



SECTION 3. SITE DEVELOPMENT AND MAINTENANCE

- ☑ Learn about the conditions that led to protection of the area. Contact Regional Ministry staff to obtain copies of reports that provide information on the environmental values of the protected area. Such sites may be listed in the Protected Areas Catalogue. These documents may include information on the environmental values of the development property.
- ☑ Retain tree, shrub, and understory vegetation that matches that of the protected area. This will help reduce the introduction of invasive species into the protected area and will help the development blend with the natural surroundings.
- ☑ Minimize modifications to ecological features and functions within the development (e.g. through tree clearing, drainage changes, and alien invasive species introductions) to avoid adversely affecting nearby protected areas.
- ☑ Leave adequate natural vegetated buffers between the protected area and houses or roads. See Table 4-2 for suggested buffer widths.
- ☑ Fence development lands during and after development to prevent unintended trespass into the protected area. The fence should be on the development land and should have an adequate buffer between it and the protected area boundary to prevent damage to vegetation within the protected area. Design fencing to discourage pet access to the protected area. This will help minimize damage to the site and the wildlife that live there.
- ☑ Restrict illegal access. Unauthorized recreational access (e.g. by mountain bikes) may increase as a result of the development, with severe impacts on adjacent sensitive areas.
- ☑ Consider community tolerance for wildlife that may use these protected areas as wildlife corridors and, as a result, come in conflict with people. Avoid establishing preferred food sources for large predators, such as bears and cougars, near developed areas. For example, bears will be attracted to fruit trees.
- ☑ Do not install services (e.g., water, sewer, gas, power) in areas where they might impact the adjacent protected area.
- ☑ Avoid or minimize outdoor lighting adjacent to the protected area. Outdoor lighting can affect some wildlife by altering their diurnal behaviours and feeding and hunting activities.



Fence lands during and after development
PHOTO: MARLENE CASKEY

The City of Vancouver has acquired, planted, and reserved parts of the creek as part of the Greenway Boundary Initiative area redevelopment.

CONSIDER OPPORTUNITIES FOR RESTORATION

Restoring degraded ecosystems can provide benefits such as habitat enhancement for fish and other wildlife, parks for people, and pleasant views.



SECTION 3: SITE DEVELOPMENT AND MANAGEMENT

Cost: \$100,000.00
 The City of Vancouver has approved the following conditions for the proposed development in the area of 10750 Fraser Street, Vancouver, BC. The City of Vancouver has approved the following conditions for the proposed development in the area of 10750 Fraser Street, Vancouver, BC. The City of Vancouver has approved the following conditions for the proposed development in the area of 10750 Fraser Street, Vancouver, BC.



Conduct work on existing approved timing windows
 Photo: Dave Polster



Construction too close to this tree has severely damaged its root system.
 Photo: Judith Collington

- If developing a brownfield or greyfield site, seek opportunities to restore natural areas and wildlife corridors, to daylight culverted streams, or to replant riparian buffers. Work with an appropriately qualified professional to develop a site restoration plan. This will include determining the appropriate restoration goals for the ecosystem. For example, in a rural area, the goal may be to re-create the natural ecosystem, whereas in a highly urbanized area, the goal may be to establish specific habitat values (e.g., perch trees for eagles).

3.5.2 During Construction

PROTECT ECOSYSTEM FEATURES AND FUNCTION DURING CONSTRUCTION

- Construct permanent or temporary fencing around sensitive features and their buffers before starting to clear the site.
- Develop a site map of environmental features that can be referred to during construction, and ensure all subcontractors and site workers have seen it.
- Minimize the size of the cleared area required for construction, and retain as much natural vegetation as possible.
- Prevent any disturbance within the root zone ('drip line') of established trees. The tree's 'drip line' (the extent of the branches) can be used as an approximate guide to the area of its root system, although for mature trees, the root zone may extend much further.
- Preserve snags, downed logs, stumps, and other forest features unless they present a danger to workers or the public. Rather than removing an identified hazard tree, consider topping it (at 3-5 m or more, and retaining it as a wildlife tree). Where a hazard tree must be removed, the work should be as non-invasive as possible. Felled trees should be left on the ground to provide habitat for wildlife, including a wide variety of invertebrates. Note that a hazard tree assessor is the only qualified professional for assessing hazard trees but that this person may not be sensitive to wildlife needs. For more information, see [Best Management Practices for Hazard Tree and Non-Hazard Tree Limiting, Topping or Removal](#). The International Society of Arboriculture also provides information on consulting arborists.
- Avoid heavy blasting in areas that have ephemeral (seasonal) pools; fracturing the bedrock may drain these important features. Blasting may also impact the stability of mature trees.
- Undertake construction only during identified timing windows or 'least risk' windows so that impacts on local plants and wildlife are

SECTION 3.3.3 DEVELOPMENT AND MANAGEMENT



The City of Vancouver has a goal to reduce the amount of waste generated in the city by 50% by the year 2012. For more information on the City's waste management program, visit the City's website at www.vancouver.ca.

The City of Vancouver has a goal to reduce the amount of waste generated in the city by 50% by the year 2012. For more information on the City's waste management program, visit the City's website at www.vancouver.ca.

The City of Vancouver has a goal to reduce the amount of waste generated in the city by 50% by the year 2012. For more information on the City's waste management program, visit the City's website at www.vancouver.ca.

minimized. The Least Risk Work Windows for Instream Works in British Columbia provides information on timing windows in your region. For more information on timing windows for work conducted close to environmentally valuable resources, see Section 4: Environmentally Valuable Resources.

MONITOR ENVIRONMENTAL IMPACTS

- If environmentally valuable resources (on or near the development site) could be at risk during the land clearing and construction stages, hire an appropriately qualified professional to assist in planning and monitoring. Environmental consultants and monitors should be given the authority to halt all work if they believe on-site conditions could create impacts on sensitive habitats.
- Before land clearing and construction begin, determine who will be responsible for site monitoring after the development has been completed and for how long it needs to continue.

3.5.3 After Construction

USE NATURAL LANDSCAPING TECHNIQUES

- Retain natural soils and put them back on site during landscaping.
- Ensure that at least 20 cm of topsoil is replaced on all future lawn areas after development has been completed. This will promote deeper-rooted lawns and plants that will require less water in summer and will be able to absorb more rainwater in winter.
- Use drought-resistant species and very small lawns to minimize post-development watering needs.
- Reduce soil compaction by avoiding the use of machinery wherever possible.
- Use local native plants in landscaping, they are adapted to local climates (such as hot, dry summers), and once established, will need less maintenance and watering than non-native plants. Avoiding using invasive alien species. They could spread into neighbouring areas and damage environmentally valuable resources. For more information, see the Naturescape website and Alien Species website.
- Leave fallen and topped trees on the ground in undeveloped areas and future greenspaces. Coarse woody debris provides habitat for small mammals, salamanders, and a wide variety of invertebrates. If necessary for fire-proofing, remove fine fuels (twigs and branches), but leave large logs and topped trees for habitat.
- When pruning trees to improve sightlines, prune selected branches rather than cutting the main tree trunk. This will allow the tree to

SECTION 5: SITE DEVELOPMENT AND MANAGEMENT



continue to grow and its roots to hold the soil in place. Avoid causing changes to the shade and cover provided by these trees; these play an important role in maintaining ecosystem health.

- Design landscaping to eliminate hiding cover for large predators (such as bears and cougars) near school yards and children's play areas. This will minimize wildlife conflicts.
- Encourage local residents to use landscaping techniques such as establishing nest boxes, bat boxes, and other habitat features on their property. Some species will use backyard habitats as connecting corridors.
- Where sites are being restored, allow natural succession to proceed with minimal intervention or disturbance wherever possible. Active management may be needed to enhance or maintain habitat value or to control trees or brush that pose fire or safety hazards.

MANAGE INVASIVE PLANTS

Development sites should be protected from invasive alien plants. Invasive plants will often establish on development sites and then spread rapidly to nearby natural areas. See the regional information in Section 5: Regional Information Packages, the [Alien Species](#) website, or the [Weeds BC](#) website for more details on problem species in your area.

- Minimize the extent of bare soil on the development site to prevent invasive plant species from establishing. Mowing and/or establishing a grassy ground cover can also prevent invasive plants from establishing or setting seed.
- Remove invasive species (such as purple loosestrife, buckthorn, and Himalayan blackberry) from the site, but be careful not to damage the native vegetation. Invasive species can seriously degrade ecosystems and are most easily dealt with before they become widespread. Removal of invasive species should be undertaken only with expert advice as improper removal can encourage the spread of invasives. Persistence is required when dealing with invasive species because regrowth is common until native groundcover species re-establish themselves.
- Never use invasive species (such as English ivy or purple loosestrife) in landscaping as these could spread into nearby natural areas and displace native vegetation and wildlife.
- Control flowering of invasive plants around development sites to avoid infestations. Cutting flowering heads from thistles and other invasive plants prior to seed set can significantly reduce their establishment on development sites.

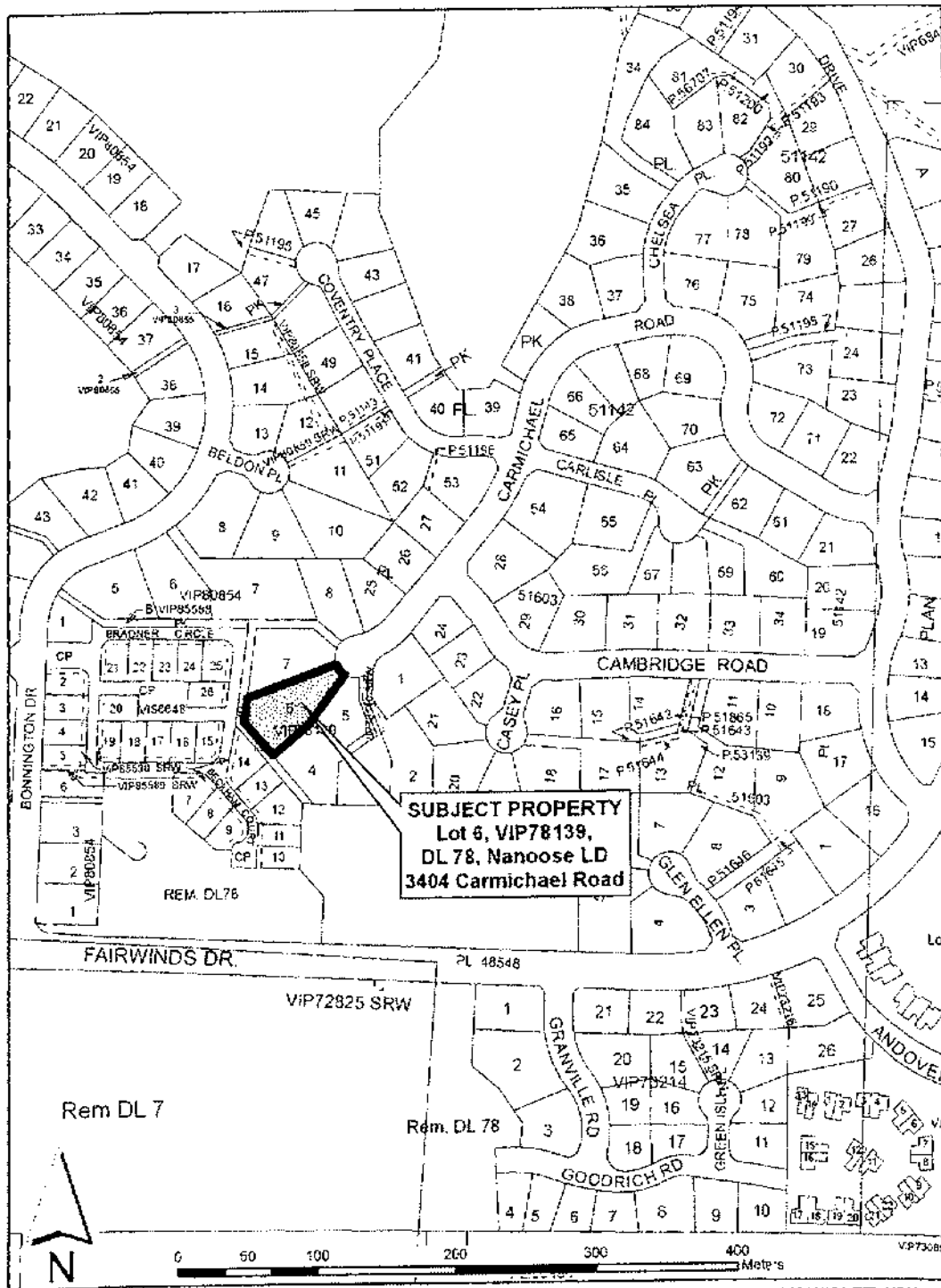
provide for a diverse
level of vegetation
and a good mix of
plant life.

These plants are typical
of a well-managed site
and are a good mix of
plant life. They are
easy to maintain and
provide a good mix of
plant life and are a
good mix of plant life
and are a good mix of
plant life.



American bullfrog
PHOTO: KEVIN BRUCE

Attachment No. 1
Location of Subject Property



APPROVED	✓	May 12 2009
CCW		
MAY 12 2009		
HRD		
BOARD		

TO: Geoff Garbutt
Manager of Current Planning

DATE: April 29, 2009

FROM: Kristy Marks
Planner

FILE: 3060 30 60913

SUBJECT: Development Permit with Variance Application No. 60913 – Delesalle
Lot 1, District Lot 10, Newcastle District, Plan 22939 - Electoral Area 'G'
RDN Map Ref. No. 92F.038.4.1 – Folio No. 769.011552.025

PURPOSE

To consider an application to amend Development Permit with Variance No. 60830 that was issued on September 30, 2008 to allow the construction of a dwelling unit and attached garage with a height variance on a property located at 121 Kinkade Road.

BACKGROUND

The subject property, legally described as Lot 1, District Lot 10, Newcastle District, Plan 22939, is a coastal property located on Kinkade Road in Electoral Area 'G' (*See Attachment No. 1 for location of subject property*). The property previously contained a dwelling unit and tennis court that were recently demolished and the dwelling unit and attached garage, approved under Development Permit No. 60830, are currently under construction. The subject property is bordered by the sea to the northeast, developed residential parcels to the southeast and Kinkade Road to the west.

The subject property is designated within the Hazard Lands, Environmentally Sensitive Areas for Aquifer protection, Farm Land Protection, Fish Habitat Protection Development Permit Areas (DPA) pursuant to "Regional District of Nanaimo French Creek Official Community Plan Bylaw No. 1007, 1996". The applicant has completed the Riparian Areas Regulation Property Declaration Form and as there are no streams on or within 30 metres of the subject property, the application is exempt from the requirements of the Fish Habitat Protection DPA. As this is an amendment to DP No. 60830 and the original application was made prior to the adoption of "Regional District of Nanaimo Electoral Area 'G' Official Community Plan Bylaw No. 1540, 2008" this is application exempt from any new Development Permit requirements.

The property is approximately 0.26 hectares in size and is currently zoned Residential 2 (RS2) pursuant to "Regional District of Nanaimo Land Use and Subdivision Bylaw No. 500, 1987". The applicant is requesting approval to construct an approximately 424m² dwelling unit and attached garage with a height variance. As the property is located adjacent to the sea and within the Little Qualicum River Floodplain a minimum floor elevation of 3.8 metres Geodetic Survey of Canada (GSC) is required. The pre-existing ground elevation at the proposed building site was approximately 2.5 metres to 2.9 metres and the dwelling unit was required to be elevated approximately 0.9 metres in order to meet the minimum floodplain elevation. The property has been filled in order to achieve this elevation requirement.

As noted above, Development Permit No. 60830 was issued on September 30, 2008 for a dwelling unit and attached garage. Since the issuance of DP 60830 the applicant has started construction but would like to construct an approximately 70m² addition to the dwelling unit approved in the previous Development

Permit. Although the proposed addition will meet the maximum permitted height and there are no additional variances requested, an amendment to DP 60830 is required in order to recognize the proposed addition.

Requested Variance Summary - Section 3.4.62 Dwelling Unit Height

Maximum Dwelling Unit Height	Proposed Height	Requested Variance
8.0 metres	8.81 metres	0.81 metres

ALTERNATIVES

1. To approve Development Permit with Variance application No. 60913 subject to the conditions outlined in Schedules No. 1-4 and the notification requirements of the *Local Government Act*.
2. To deny the Development Permit with Variance application as submitted.

POLICY B1.5

Regional District of Nanaimo Development Variance Permit Application Policy B1.5 Evaluation provides staff with guidelines for reviewing and evaluating Development Variance Permit applications. The policy requires that the potential impacts of the variance are warranted by the need for the variance.

The applicants have provided the following justifications for the requested height variance:

- The proposed dwelling unit and attached garage would be under height if they were not required to meet the minimum floodplain elevation;
- There are no anticipated view implications related to the requested height variance for adjacent properties;
- The applicant has submitted a Geotechnical Hazards Assessment in order to ensure that the property is safe and suitable for the intended use.

LAND USE AND DEVELOPMENT IMPLICATIONS

As outlined above, the applicant is requesting approval for a height variance to allow the redevelopment of a residential property at 121 Kinkade Road. The location of the proposed dwelling unit and attached garage are outlined on *Schedule No. 2*. Building elevations for the proposed development are outlined on *Schedule No. 3*.

In keeping with the Hazard Lands DPA the applicant has submitted a Geotechnical Hazards Assessment prepared by Ground Control Geotechnical Engineering Ltd. dated April 28, 2009 which addresses the proposed dwelling unit, attached garage and the proposed addition (*Schedule No. 4*). This report states that the proposed development is considered safe and suitable for the use intended. As per board policy, staff recommends that the applicant be required to register a Section 219 covenant that registers the Geotechnical Report prepared by Ground Control Geotechnical Engineering Ltd., and includes a save harmless clause that releases the Regional District of Nanaimo from all losses and damages as a result of erosion and/or landslide.

Given the location of the subject property in relation to adjacent developed parcels and that the applicant is proposing to locate the dwelling and attached garage in the general location of the previous dwelling, staff do not anticipate that the requested variance will impede the views of adjacent property owners. In addition the applicant is proposing to construct a dwelling that would meet the maximum height requirements if it was not required to meet the minimum floodplain elevation.

SUSTAINABILITY IMPLICATIONS

In keeping with Regional District of Nanaimo Board policy, the applicant has completed the “Sustainable Community Builder Checklist”. This proposal represents the redevelopment of an existing residential parcel. The applicant is proposing to construct in the general location of the previous dwelling and to retain existing vegetation on the subject property. With respect to the dwelling under consideration, it will be constructed to current building code standards which reflect reduced environmental impact and energy efficient design elements.

PUBLIC CONSULTATION PROCESS

As part of the required public notification process, pursuant to the *Local Government Act*, property owners and tenants located within a 50 metre radius, will receive a direct notice of the proposal, and will have an opportunity to comment on the proposed variance, prior to the Board’s consideration of the application.

VOTING - Electoral Area Directors – one vote, except Electoral Area ‘B’.

SUMMARY/CONCLUSIONS

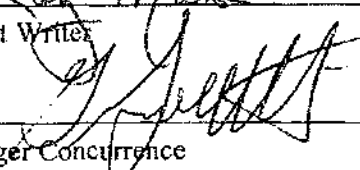
This is an application for a Development Permit with Variance to increase the maximum permitted height from 8.0 metres to 8.81 metres to allow the construction of a dwelling unit and attached garage with an addition at 121 Kinkade Road in Electoral Area ‘G’. Given that the applicant has submitted a Geotechnical Hazards Assessment, the guidelines of the Hazard Lands DPA have been addressed. With respect to the requested variance, the property is located within the Little Qualicum River Floodplain and construction is required to meet the floodplain elevations, and there are no anticipated impacts related to the requested height variance. Staff recommends that the requested Development Permit with Variance be approved subject to the terms outlined in Schedules No. 1-4 of this report, and the notification requirements of the *Local Government Act*.

RECOMMENDATION

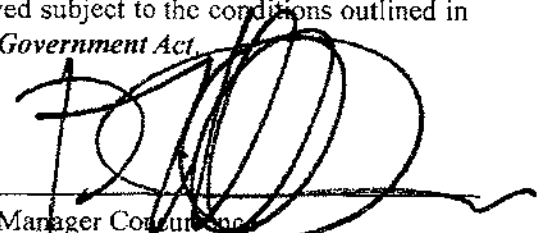
That Development Permit with Variance application No. 60913, to permit the construction of a dwelling unit and attached garage with a maximum height of 8.81 metres on the property legally described as Lot 1, District Lot 10, Newcastle District, Plan 22939, be approved subject to the conditions outlined in Schedules No. 1-4 and the notification requirements of the *Local Government Act*.



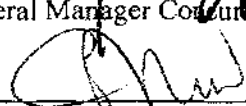
Report Writer



Manager Concurrence



General Manager Concurrence



CAO Concurrence

Schedule No. 1
Terms of Development Variance Permit No. 60913

Bylaw No. 500, 1987 – Requested Variance

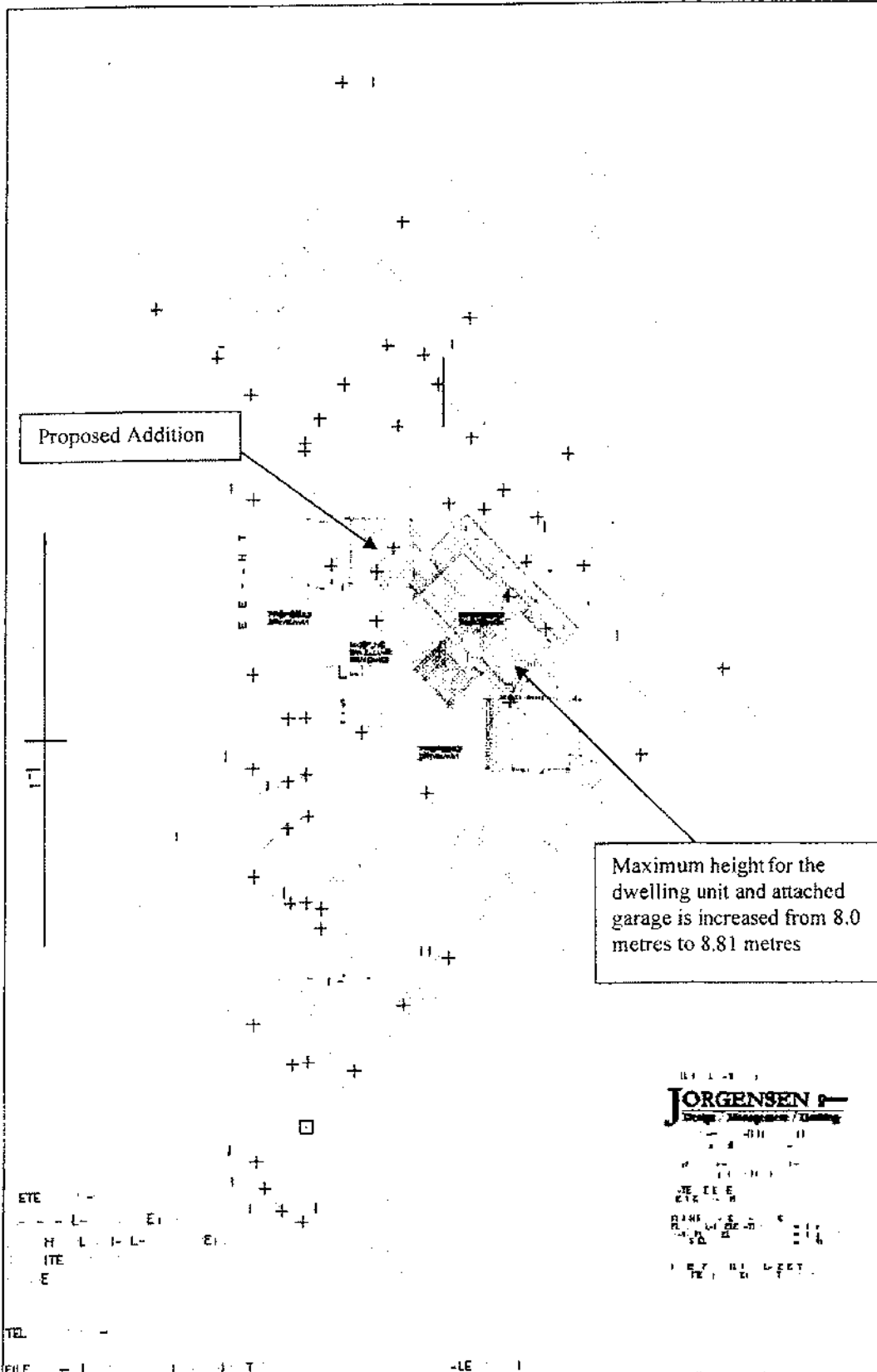
With respect to the lands, “Regional District of Nanaimo Land Use and Subdivision Bylaw No. 500, 1987,” is varied as follows:

1. **Section 3.4.62, Dwelling Unit Height** is varied by increasing the maximum height of the dwelling unit and attached garage located on Lot 1, District Lot 10, Newcastle District, Plan 22939 from 8.0 metres to 8.81 metres as shown on *Schedule No. 2*.

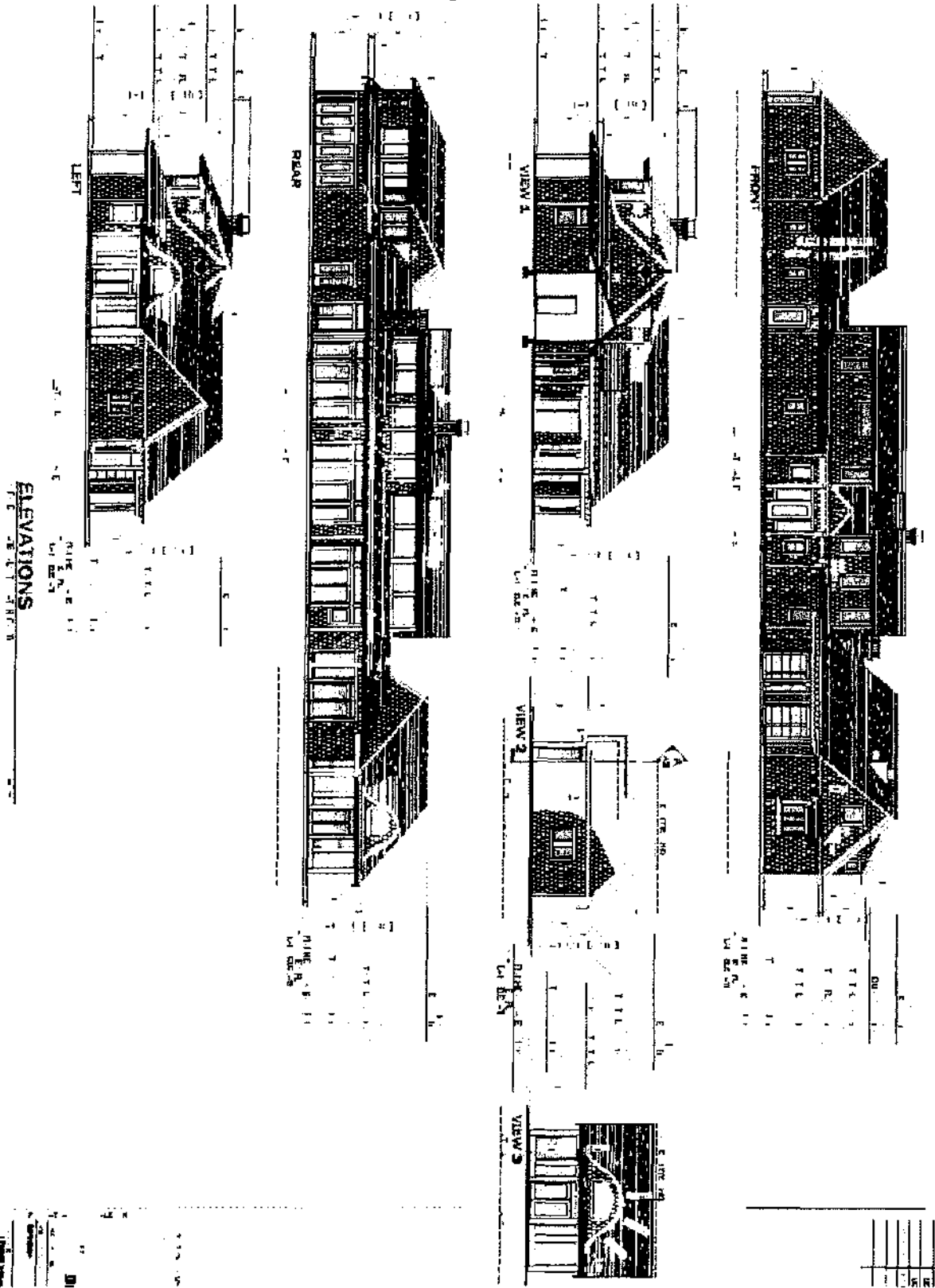
Conditions of Approval

2. The dwelling unit and attached garage shall be sited in accordance with the site plan prepared by Jorgensen Osmond Ltd. dated March 31, 2009 based on the survey prepared by Peter T. Mason BCLS attached as *Schedule No. 2*.
3. The dwelling unit and attached garage shall be developed in accordance with the building elevations prepared by Jorgensen Osmond Ltd. attached as *Schedule No. 3*.
4. The dwelling unit and attached garage shall be constructed in accordance with the Geotechnical Hazards Assessment prepared by Ground Control Geotechnical Engineering Ltd. dated April 28, 2009, attached as *Schedule No. 4*.
5. Staff shall withhold the issuance of this Permit until the applicant, at the applicant's expense, registers a Section 219 covenant that registers the Geotechnical Hazards Assessment prepared by Ground Control Geotechnical Engineering Ltd. dated April 28, 2009 and includes a save harmless clause that releases the Regional District of Nanaimo from all losses and damages as a result of erosion and/or landslide.

Schedule No. 2
Site Plan



Schedule No. 3
 Building Elevations
 (Page 1 of 2)



**Schedule No. 4
Geotechnical Hazards Assessment
(Page 1 of 13)**

GROUND CONTROL 
GEOTECHNICAL ENGINEERING LTD.
2751 Lana Road, Nancoose Bay, BC
Phone/Fax: (250) 469-1769

File: JDC-001
April 28, 2009

J D Construction
Box 264
Parksville, BC
V9P 2G4

Attention Mr. Joe Beaulac

SUBJECT: GEOTECHNICAL HAZARDS ASSESSMENT
PROJECT: PROPOSED ADDITION TO SINGLE-FAMILY RESIDENCE
LOCATION: 121 KINCADE STREET, QUALICUM BEACH, B.C.
LEGAL DESC: LOT 1, DL 10, VIP22939, NEWCASTLE LAND DISTRICT

Dear Mr. Beaulac:

1. Introduction

- a. As requested, Ground Control Geotechnical Engineering Ltd. (Ground Control) has carried out a geotechnical hazards assessment of the above site. This report provides a summary of our findings and recommendations.

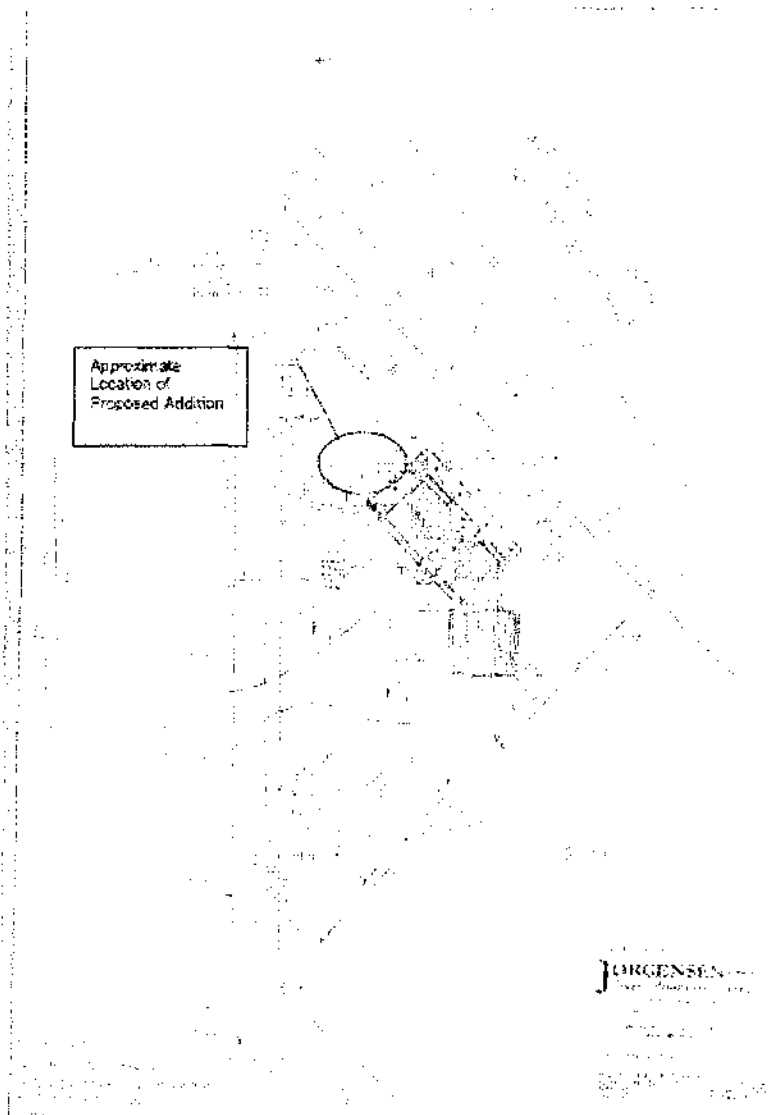
2. Background

- a. The property is currently undergoing development with the construction of a new house and attached garage, for which we carried out a geotechnical hazards assessment in June of last year, and as previously documented in our previous report dated June 10, 2008.
- b. We understand that the project has now been expanded, and an addition will now be constructed on the northwest end of the house. We understand that the new addition will be of similar construction to the house and garage, which is a standard low-rise residential building using wood frame construction supported on a concrete foundation with concrete slab-on-grade main floors (i.e. no crawl-space or basement).
- c. The Regional District of Nanaimo (RDN) has requested that a new geotechnical hazards report be provided for the new addition specifically. This report is provided to fulfil that requirement.

**Schedule No. 4
Geotechnical Hazards Assessment
(Page 2 of 13)**

Geotechnical Hazards Assessment - Addition
File: JDC-001
April 28, 2009
Page 2 of 13

- d. For the reader's reference, a June 2008 site plan (prepared by the others) showing the site layout, and pre-development ground elevations is shown below. We have added the proposed location of the addition in red.



Schedule No. 4
Geotechnical Hazards Assessment
(Page 3 of 13)

Geotechnical Hazards Assessment - Addition
File: JDC-001
April 28, 2009
Page 3 of 13

3. Assessment Objectives

- a. Our assessment, as summarized within this report, is intended to meet the following objectives:
 - i. Determine whether the land is geotechnically safe and suitable for the intended purpose (addition to residential house), where 'safe' is defined as a probability of a geotechnical failure or another substantial geotechnical hazard resulting in property damage of less than 10 percent in 50 years;
 - ii. Identify any geotechnical deficiency that might impact the design and construction of the development, and prescribe the geotechnical works and any changes in the standards of the design and construction of the development that are required to ensure the land, buildings, and Works and Services are developed and maintained safely for the use intended; and
 - iii. Acknowledge that Approving Officers may rely on this Report when making a decision on applications for the subdivision or development of the land.
- b. When assessing the safety of the site from flood related hazards, we have used one-in-200 year flood levels. The one-in-200 year event is the prescribed flood event in BC.

4. Assessment Methodology

- a. As a follow-up to our previous assessment, Richard McKinley, P.Eng, of Ground Control re-visited the site on April 24, 2008 to observe general site conditions and to note apparent geotechnical hazards. The author has also visited the site on numerous occasions during construction of the house and garage to carry out 'field reviews' as part of our Professional Assurance obligations related to the existing Building Permit.
- b. BC Ministry of the Environment Flood Maps were referenced to determine expected flood levels at the site, both for the adjacent ocean and the Little Qualicum River. The elevation of maximum tides at the site was reviewed using data from the Homby Island Tide Station.

**Schedule No. 4
Geotechnical Hazards Assessment
(Page 4 of 13)**

Geotechnical Hazards Assessment - Addition
File: JDC-001
April 28, 2009
Page 4 of 13

- c. Data from a pre-development survey carried out by Peter T. Mason, Canada Land Surveyor (shown on the site plan on page 2), was reviewed to determine ground elevations of the site, and of the foreshore area in relation to GSC datum, for comparison to tide and flood map elevations. Recent construction grading is not reflected in the pre-development elevation data.

5. Site Conditions

5.1. General

- a. The subject lot is triangular in shape, bounded by Kincade Street to the west, the foreshore of the Georgia Strait to the northeast, and a neighbouring residential property to the southeast. A new house and attached garage are under construction on the site.



Site, looking north from Kincade Street

- b. The site has a gentle slope downward to the south, with a total topographic relief of about one and a half metres. Vegetation consists of a few remnant areas of grassy lawn outside the construction zone, plus a few scattered trees of varying ages. The presence of mature trees along the northeast side of the property (see photos indicate that these areas adjacent to the foreshore have been stable for many years (i.e. have not been subjected to large-scale ocean erosion or scour).

**Schedule No. 4
Geotechnical Hazards Assessment
(Page 5 of 13)**

Geotechnical Hazards Assessment - Addition
File: JDC-001
April 28, 2009
Page 5 of 13



Site and foreshore, looking southeast along the foreshore berm

- c. Along the northeast side of the property the land rises to the crest of a wide rounded berm of granular soils apparently built up at the natural boundary by ocean waves. The berm is vegetated with dune-grass. The current natural boundary is indicated by a line of driftwood logs.



Site and foreshore looking northwest along foreshore berm.

Schedule No. 4
Geotechnical Hazards Assessment
(Page 6 of 13)

Geotechnical Hazards Assessment - Addition
File: JDC-001
April 28, 2009
Page 6 of 13

- d. The foreshore area beyond the berm has a relatively gentle slope and consists of coarse sand and gravel aggregates.
- e. A comparison of the present natural boundary to the natural boundary recorded on historical plans indicates that accretion of soil is occurring along the foreshore, and rather than eroding the land, the ocean has historically been depositing soil and increased the land area.

5.2. Site History

- a. The site has previously been used single-family residency, a use similar in nature to the current re-development. An older house that was demolished as part of the re-development was reported by the client to be greater than 40 years old. We understand from the client that there are no known instances of flooding or wave impacts to that earlier building.
- b. Our observations of the earlier building's exterior at the time of our previous assessment in 2008 found no indications of apparent flood or wave related damage, nor were there any indications of significant foundation distress that would indicate problems with foundation support conditions.

5.3. Soil Conditions

- a. Based on our observations of soils exposed at the surface, in ditches, along the foreshore, and in the excavations for the current house, the soils that will be encountered within the expected depth of construction will consist of marine deposits; primarily compact to dense, poorly-graded sandy gravel and gravelly sand.
- b. In general, these soil conditions are considered to be favourable for the project, as the gravel and sand deposits are expected to have good bearing capacity properties and be free draining.

Schedule No. 4
Geotechnical Hazards Assessment
(Page 7 of 13)

Geotechnical Hazards Assessment - Addition
File: JDC-001
April 28, 2009
Page 7 of 13

5.4. Groundwater Conditions

- a. Due to the relatively permeable nature of the local soils, groundwater is expected to be approximately coincident with the level of the adjacent ocean. The highest high tides at this site are 2.1m so there is a potential that groundwater will be encountered within excavations below elevation 2.1m GSC during periods of high tides. Excavations for the new addition are not expected to reach this depth and consequently are not expected to be impacted by groundwater. No groundwater was encountered during construction of the existing house.

5.5. Flood Level Information and Discussion

- a. The primary flooding hazard in relation to this site is the risk of flooding from the adjacent ocean as a result of a storm surge and/or wave run-up. A secondary flooding hazard is the Little Qualicum River, whose channel is located about half a kilometer to the southwest of the site, and whose flood-plain is mapped as including the subject property.
- b. British Columbia uses the 1 in 200-year flood to define flood risk areas. BC Ministry of Environment flood maps (*Flood Plain Mapping, Little Qualicum River, Drawing 93-11-1, September 1997, prepared by Hay and Company*) prescribe a flood elevation for this site of 3.8m GSC.

6. Conclusions & Recommendations

6.1. General

- a. From a geotechnical perspective the proposed development is considered 'safe' for the intended use, provided the recommendations in this report are followed.
- b. The principal geotechnical hazards associated with this site are flooding and wave related hazards associated with the adjacent ocean, and flooding hazards from the Little Qualicum River. The following sections discuss these issues as well as any other pertinent geotechnical items.

Schedule No. 4
Geotechnical Hazards Assessment
(Page 8 of 13)

Geotechnical Hazards Assessment - Addition
File: JDC-001
April 28, 2009
Page 8 of 13

6.2. Flooding Issues

- a. To protect against building damage during flooding, the interior spaces and water-susceptible components of occupied or high value structures should be constructed with a minimum floor elevation of 3.8 metres GSC, based on the Ministry of the Environment prescribed one-in-two-hundred-year flood elevation. This elevation is suitable to protect against flooding events from both the ocean and the Little Qualicum River (the ocean flood level is the higher, and controls).
- b. Portions of structures below the design flood elevation (e.g. foundations) should be constructed entirely of materials not susceptible to water damage, such as concrete.
- c. We recommend that the preferred method for raising the minimum floor level of the proposed building above 3.8m GSC will be to elevate the building on a suitably tall concrete foundation, with footings supported on the existing natural soils.
- d. Concrete foundations should be supported on native soils and be embedded a minimum of 0.5 m below the finished ground surface for protection from frost. Based on this minimum embedment, no special requirements are considered necessary to protect against soil scour from flood waters.

6.3. Set-back Distances from the Natural Boundary

- a. We understand that the proposed addition will have a minimum setback from the seaward property line of 8.0 metres, and so will be more than 8.0 metres back from the current natural boundary. This is considered to be a geotechnically safe and suitable separation of the building from ocean hazards (shoreline erosion, wave impacts, and sea-spray).
- b. As discussed above, wave action has been accreting land along the shore, and as such, erosion of the land is not expected to be an issue at this site, nor are special shore protection measures considered necessary.

Schedule No. 4
Geotechnical Hazards Assessment
(Page 9 of 13)

Geotechnical Hazards Assessment - Addition
File: JDC-001
April 28, 2009
Page 9 of 13

- c. In the event that the current pattern of shoreline deposition were to reverse itself and significant erosion of the shoreline begin to occur, the proposed setback is considered to be a sufficient buffer of land to allow for erosive trends to be identified and corrective action to be taken well before the proposed building is endangered (e.g. by installing erosion protection such as rip rap).

6.4. Footing Design

- a. Foundation loads may be suitably supported on undisturbed, natural mineral soils or structural fill and may be designed based on an allowable bearing capacity of 100 kPa. This bearing value is considered conservative for the types of soil present.
- b. This value assumes a minimum 0.3 metre depth of confinement or cover on all sides of the footings (i.e. on the interior as well as the exterior). Exterior footings should be provided with a minimum 0.6 metre depth of ground cover for frost protection purposes.
- c. The allowable bearing value may be increased by 1/3 in the case of short duration loads, such as those induced by seismic forces or wind.
- d. The recommended minimum footing plan dimension is 400mm.
- e. Provided foundations are designed, constructed, and inspected as recommended in this report, settlements should be less than 25mm total, and 15mm differential between normal column/wall spacings.

6.5. Foundation Construction

- a. Prior to placement of concrete footings, any bearing soils that have been softened, loosened, or otherwise disturbed during the course of construction should be removed, or else compacted following our recommendations for structural fill. Compaction will only be feasible if the soil has a suitable moisture content and if there is access for heavy compaction equipment. If the soils are overly wet, or if footing forms are in place, removal will likely be the only practical option.

Schedule No. 4
Geotechnical Hazards Assessment
(Page 10 of 13)

Geotechnical Hazards Assessment - Addition
File: JDC-001
April 28, 2009
Page 10 of 13

- b. Ground Control has been retained to provide Geotechnical Assurance services during construction, and has prepared and submitted Schedules B1 and B2 for the geotechnical aspects of the project. As such, we are responsible for carrying out field reviews during construction, and must visit the site prior to footings being poured, to confirm that new footings will be founded on appropriate and properly prepared bearing soils.
- c. The client should contact Ground Control to carry out the required field following excavation for the new addition, but prior to placement of the new footings.

6.6. Interior Floor Slabs-On-Grade

- a. We understand that interior main level floors will be a concrete slab-on-grade. Consequently, after construction of the foundation walls, it will be necessary to place engineered fill within the building's interior to elevate the subgrade to the required elevation for slab support. Ground Control should be notified prior to placement, to allow field review of these operations.
- b. Engineered fills should be placed in lifts suitable for the size and type of compactor, but in no case thicker than 0.3m (1') thick as measured loose. The use of granular fill (free draining gravel and/or sand) is recommended. Each lift should be thoroughly compacted with a heavy (500 kg) vibratory diesel plate compactor or better. Contact Ground Control if alternate methods are being considered.
- c. Ground supported interior slabs should be underlain by a minimum 100 mm thickness of free draining granular material, and a continuous vapour barrier to limit entry of moist vapours from the damp soils below, as required by the BC Building Code.

6.7. Seismic Issues

- a. No compressible or liquefiable soils have been identified at this site, nor are any expected. As such, no unusual seismic design requirements have been identified for this site.

Schedule No. 4
Geotechnical Hazards Assessment
(Page 11 of 13)

Geotechnical Hazards Assessment - Addition
File: JDC-001
April 28, 2009
Page 11 of 13

6.8. Slopes

- a. There are no significant slopes within or near the proposed building site, therefore no special requirements are necessary to address slope issues.

6.9. Permanent Drainage

- a. Site soils are free-draining and the building will be constructed above the expected groundwater level, so no unusual permanent drainage provisions will be required. As such, conventional requirements of the B.C. Building Code pertaining to building drainage are considered suitable at this site.
- b. Building drainage requirements as outlined by the B.C. Building Code typically include damp-proofing of foundation walls, installation of a standard footing-level perimeter drainage pipe system, drain rock burial of the perforated piping, roof drainage connected to a separate drainage system constructed from solid piping, and a provision for gravity drainage of all collected waters to a suitable discharge point down-slope and away from the building.
- c. Based on information provided by the client, slab-on-grade construction is to be employed (i.e. no crawlspaces or basements) so there will be no below-grade interior spaces that might be susceptible to groundwater infiltration. Provided slabs-on-grade are at least 0.15m (6") above the surrounding ground level, it is considered acceptable to delete the requirements for footing level drains.
- d. Lot surfaces should be grading to direct surface water away from buildings

6.10. Excavations

- a. No shallow bedrock was observed on site, nor is any expected, and standard soil excavation construction practices are expected to be suitable for foundation construction.
- b. The sidewalls of all construction excavations should meet the requirements of applicable Occupational Health and Safety Regulations.

Schedule No. 4
Geotechnical Hazards Assessment
(Page 12 of 13)

Geotechnical Hazards Assessment - Addition
File: JDC-001
April 28, 2009
Page 12 of 13

7. Acknowledgements

- a. Ground Control Geotechnical Engineering Ltd. acknowledges that this report may be requested by Approving Officers and Building Inspectors as a precondition to the issuance of a building or development permit and that this report, or any conditions contained in this report, may be included in a restrictive covenant filed against the title to the subject property. It is acknowledged that the Approving Officers and Building Officials may rely on this report when making a decision on application for the subdivision or development of the land.
- b. We acknowledge that this report has been prepared solely for, and at the expense of, the client addressed on page 1.

8. Limitations

- a. The conclusions and recommendations submitted in this report are based upon the data obtained from surface observations and previous construction excavation, and are to be confirmed by 'field reviews' during construction as discussed previously. Although not expected, should undiscovered conditions become apparent later (e.g. during excavation for construction) our office should be contacted immediately to allow reassessment of the recommendations provided.
- b. The current scope of investigation was selected to provide an assessment of obvious geotechnical hazards. If stakeholders in these matters desire a greater degree of certainty, additional investigations can be carried out.
- c. Our recommendations apply to the specific proposed structure described. Other structures may have unique requirements and so our recommendations should not be considered applicable to other developments, even within the same property.

**Schedule No. 4
Geotechnical Hazards Assessment
(Page 13 of 13)**

Geotechnical Hazards Assessment - Addition
File: JDC-001
April 28, 2009
Page 13 of 13

9. Closure

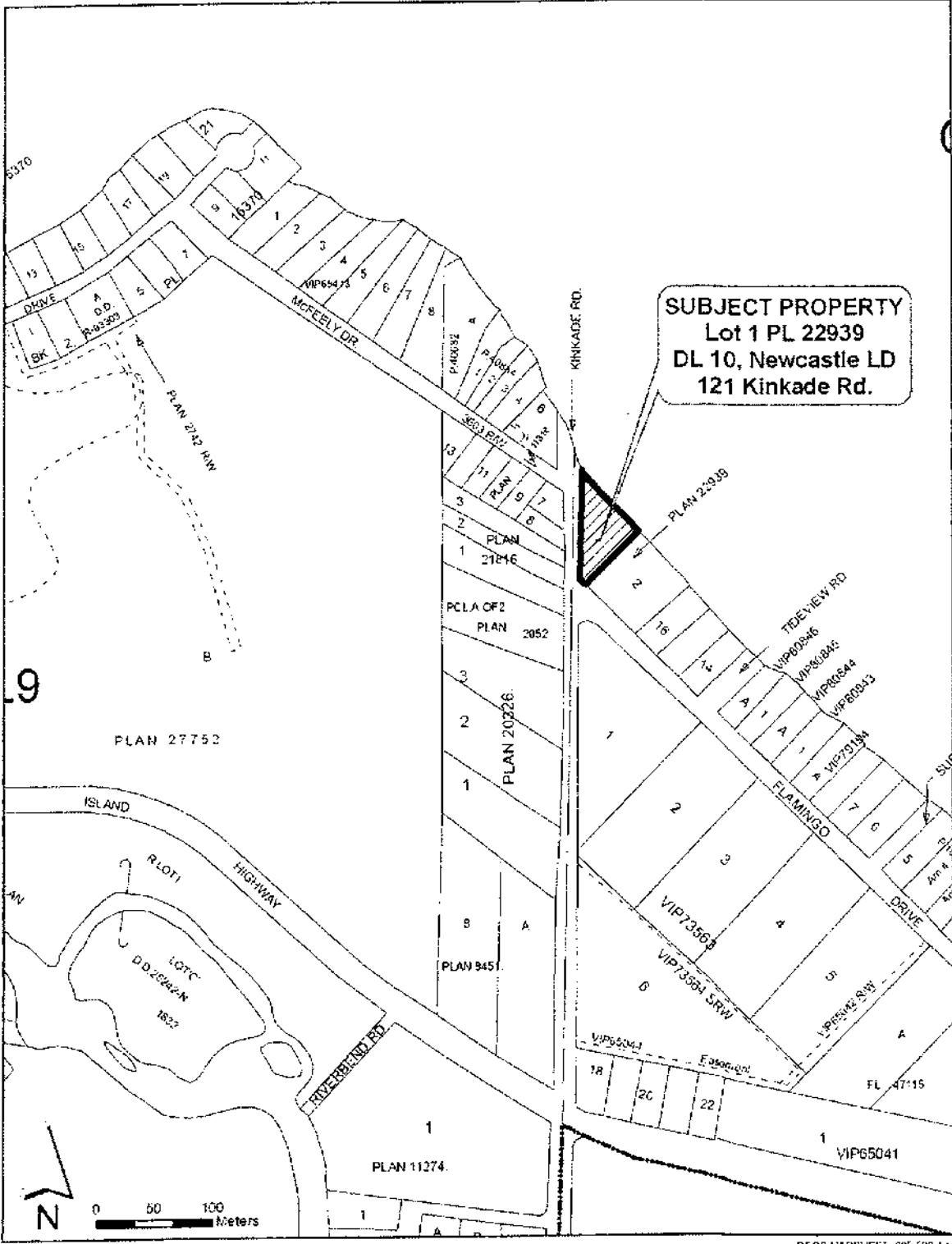
- a. Ground Control Geotechnical Engineering Ltd. appreciates the opportunity to be of service on this project. If you have any comments, or additional requirements at this time, please contact us at your convenience.

Respectfully Submitted,
Ground Control Geotechnical Engineering Ltd.



Richard McKinley, P. Eng.
Geotechnical Engineer

Attachment No. 1
 Location of Subject Property



BCGS MAPSHEET: 92F (08 4.1)

EAP	✓	May 9 09
COV		
RHD		
BOARD		

TO: Geoff Garbutt
Manager of Current Planning

DATE: April 29, 2009

FROM: Kristy Marks
Planner

FILE: 3060 30 60915

SUBJECT: Development Permit with Variance Application No. 60915 – Knappett
Lot 38, District Lot 1, Newcastle District, Plan 20442
Electoral Area 'H' – 5485 Deep Bay Drive

PURPOSE

To consider an application for a Development Permit with Variance to allow the construction of a dwelling unit and detached garage on a property located at 5485 Deep Bay Drive.

BACKGROUND

The subject property, legally described as Lot 38, District Lot 1, Newcastle District, Plan 20442, is located on the Deep Bay Spit in Electoral Area 'H' (see subject property map - Attachment 1). The property is approximately 0.13 hectares in size and contains a relatively flat upper plateau which slopes down to the north near the centre of the property. The parcel is vegetated primarily with grasses and a few fruit trees and is bound by residential lots to the east and west, Deep Bay Drive to the south and Baynes Sound to the north.

The subject property is located within the Hazard Lands, Environmentally Sensitive Features for Coastal Areas and Fish Habitat Protection Development Permit Areas (DPA) pursuant to "Regional District of Nanaimo Electoral Area 'H' Official Community Plan Bylaw No. 1335". This application is exempt from the Fish Habitat Protection DPA as there are no streams within 30.0 metres of the proposed development.

The subject property is zoned Residential 2 (RS2), pursuant to "Regional District of Nanaimo Land Use and Subdivision Bylaw No. 500, 1987." The applicant is requesting approval to construct an approximately 320m² dwelling unit with a height variance and 67m² detached garage within the Hazard Lands and Environmentally Sensitive Features Development Permit Areas. As the property is located adjacent to the sea the geotechnical engineer has recommended that the dwelling unit be elevated a minimum of 1.5 metres above the natural boundary of the sea. The average natural grade at the proposed building site is approximately 0.5 metres and the dwelling unit is required to be elevated approximately 1 metre in order to meet the minimum floodplain elevation.

Requested Variance Summary - Section 3.4.62 Dwelling Unit Height

Maximum Dwelling Unit Height	Proposed Height	Requested Variance
8.0 metres	8.9 metres	0.9 metres

As mentioned above, the property is located on the Deep Bay Spit which contains known archaeological sites. The applicant has submitted an Archaeological Impact Assessment prepared by I.R. Wilson Consultants Ltd. dated December 8, 2008 and has received a Site Alteration Permit from the Provincial Archaeology Branch under the Heritage Conservation Act. The report indicates that no archeological deposits were identified during investigation of the site. In the event that shell midden or archaeological

deposits are encountered during development of the parcel, the applicant is to stop construction and contact the Archaeology Branch immediately.

ALTERNATIVES

1. To approve Development Permit with Variance No. 60915 subject to the conditions outlined on Schedules No. 1 – 4.
2. To deny Development Permit No. 60915 as submitted.

POLICY B1.5

Regional District of Nanaimo Development Variance Permit Application Policy B1.5 Evaluation provides staff with guidelines for reviewing and evaluating Development Variance Permit applications. The policy requires that the potential impacts of the variance are warranted by the need for the variance.

The applicant has provided the following justifications for the requested height variance:

- The proposed dwelling unit would be under height if they were not required to meet the minimum elevation requirements;
- The proposed dwelling unit is proposed to be located on the lower portion of the property as it will be less likely to have view implications for adjacent properties than if it were on the upper bench, closer to the road;
- There are no anticipated view implications related to the requested height variance for adjacent properties;
- The applicant has submitted a Geotechnical Evaluation in order to ensure that the property is safe and suitable for the intended use.

The garage is proposed to be located on the upper bench of the property and does not require any variances as submitted.

LAND USE AND DEVELOPMENT IMPLICATIONS

As outlined above, the applicant is requesting approval to construct a dwelling unit and detached garage on a parcel on Deep Bay Drive. The location of the proposed dwelling unit and garage are outlined on *Schedule No. 2* and building elevations for the proposed development are outlined on *Schedule No. 3*.

The applicant has submitted a geotechnical evaluation prepared by Lewkowich Engineering Associates Ltd. dated April 8, 2009, which states that the proposed development is considered safe and suitable for the use intended provided that the recommendations outlined in the report are followed (*Schedule No. 4*). The engineer recommends the habitable floor of the residence be located a minimum of 1.5 meters above the natural boundary of the ocean. As per board policy, staff recommends that the applicant be required to register a Section 219 covenant that registers the geotechnical evaluation prepared by Lewkowich Engineering Associates Ltd., and includes a save harmless clause that releases the Regional District of Nanaimo from all losses and damages as a result of erosion and/or landslide or flood.

The applicant is proposing to construct the dwelling unit near the centre of the property and have indicated verbally that they wish to maintain the existing vegetation including lawn and sea grass adjacent to the sea. As the existing vegetation is to be retained, no re-vegetation plan has been required.

Given that the applicant has provided a geotechnical evaluation and is proposing to maintain the existing vegetation adjacent to the sea, in staff's assessment, the proposed development meets the requirements of the Hazard Lands and Environmentally Sensitive Features Development Permit Area.

SUSTAINABILITY IMPLICATIONS

In keeping with Regional District of Nanaimo Board policy, the applicant has completed the "Sustainable Community Builder Checklist". This proposal represents the development of an existing residential parcel. The applicant is proposing to construct near the centre of the parcel approximately 15 metres from the present natural boundary and to retain existing vegetation on the subject property. In addition, the applicant has provided a Geotechnical Evaluation of the potential flood hazard in order to ensure that the property is safe and suitable for residential use.

PUBLIC CONSULTATION PROCESS

As part of the required public notification process, pursuant to the *Local Government Act*, property owners and tenants located within a 50 metre radius, will receive a direct notice of the proposal, and will have an opportunity to comment on the proposed variance, prior to the Board's consideration of the application.

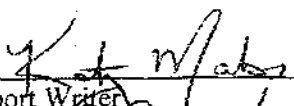
VOTING - Electoral Area Directors – one vote, except Electoral Area 'B'.

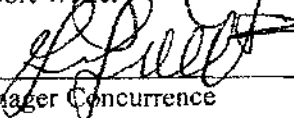
SUMMARY/CONCLUSIONS

This is an application for a Development Permit with Variance to allow the construction of a dwelling unit and detached garage on a property located at 5485 Deep Bay Drive in Electoral Area 'H'. Given that the applicant has submitted a Geotechnical Evaluation of the suitability of the property for the proposed use consistent and is proposing to retain the existing vegetation on the subject property, the guidelines of the "Electoral Area 'H' Official Community Plan Bylaw No. 1335, 2003" Hazard Lands and Environmentally Sensitive DPA have been met. With respect to the requested variance, the property is located adjacent to the sea and construction is required to meet the flood construction elevations, and there are no anticipated impacts related to the requested height variance. Staff recommends that the requested Development Permit with Variance be approved subject to the terms outlined in Schedules No. 1- 4 of this report and the notification requirements of the *Local Government Act*.

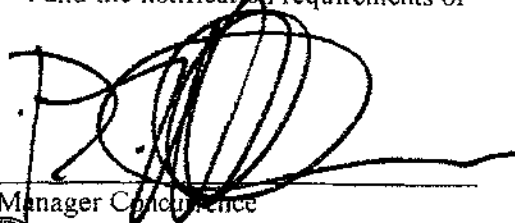
RECOMMENDATION


That Development Permit with Variance application No. 60915, to construct a dwelling unit and detached garage within the Hazard Lands and Environmentally Sensitive Features Development Permit Area pursuant to "Regional District of Nanaimo Electoral Area 'H' Official Community Plan Bylaw No. 1335, 2003", for the property legally described as Lot 38, District Lot 1, Newcastle District, Plan 20442 be approved subject to the conditions outlined in Schedules No. 1- 4 and the notification requirements of the *Local Government Act*.



Report Writer


Manager Concurrence



General Manager Concurrence


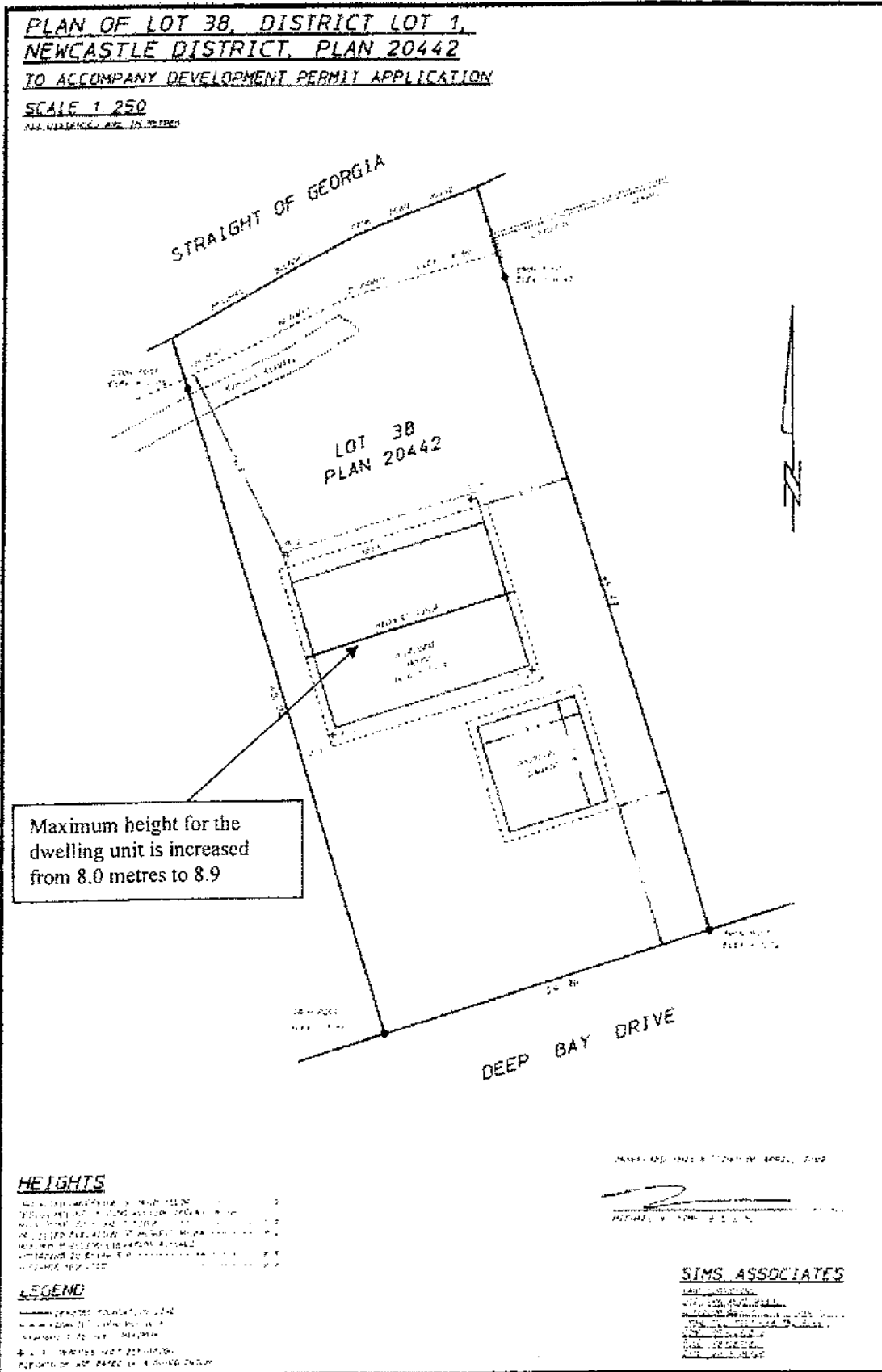
CAO Concurrence

Schedule No. 1
Terms of Development Permit No. 60915

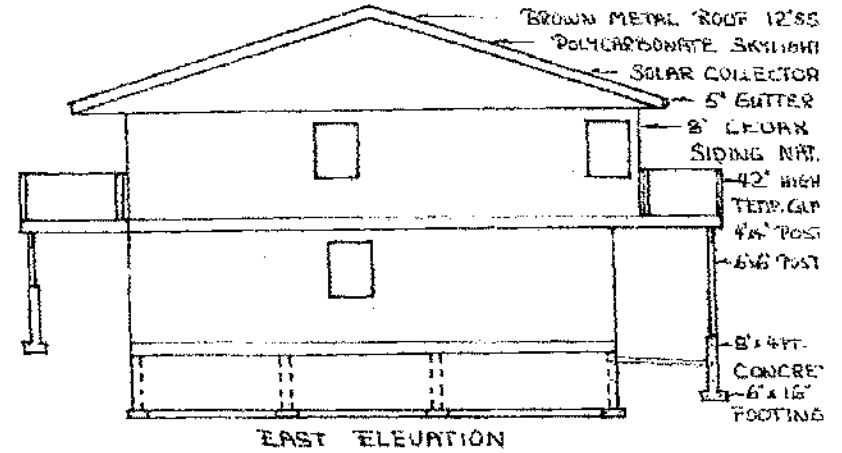
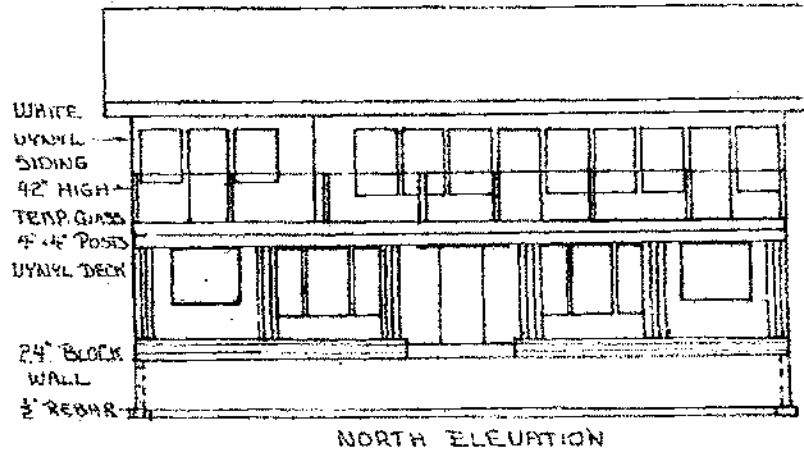
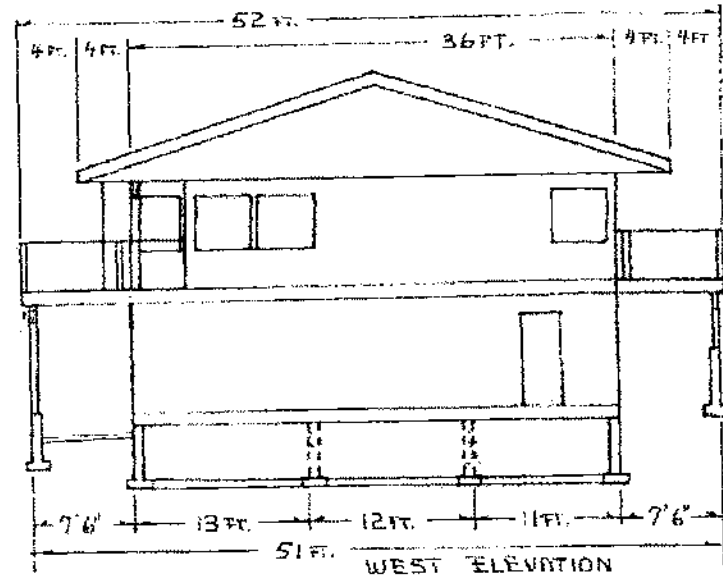
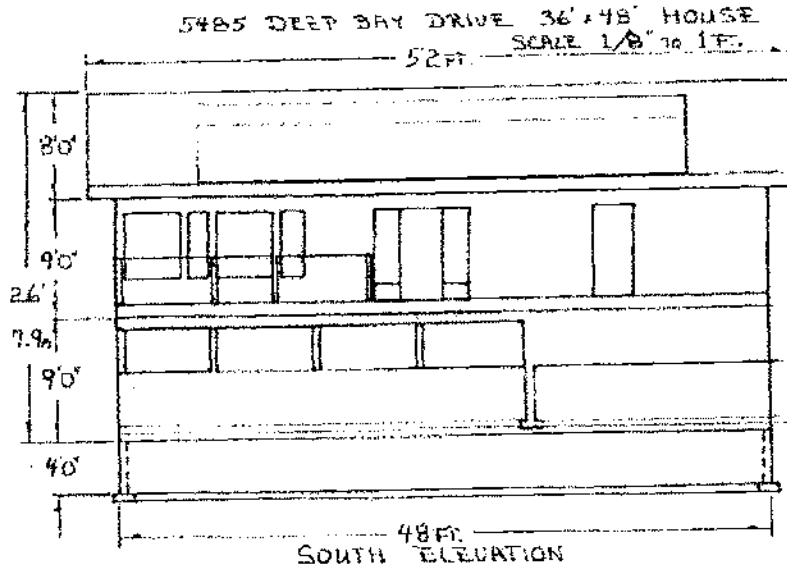
The following sets out the terms and conditions of Development Permit No. 60915.

1. The dwelling unit and detached garage shall be sited in accordance with site survey prepared by Sims Associates dated April 8, 2009 attached as *Schedule No. 2*.
2. The dwelling unit shall be constructed in accordance with the elevation drawings prepared by the applicant attached as *Schedule No. 3*.
3. The detached garage shall be constructed in accordance with the elevation drawings prepared by the applicant attached as *Schedule No. 3*.
4. The dwelling unit and detached garage shall be constructed in accordance with the Geotechnical Evaluation prepared by Lewkowich Engineering Associates Ltd. dated April 8, 2009 attached as *Schedule No. 4*.
5. Staff shall withhold the issuance of this Permit until the applicant, at the applicant's expense, registers a Section 219 covenant that registers the Geotechnical Evaluation prepared by Lewkowich Engineering Associates Ltd., dated April 8, 2009 and includes a save harmless clause that releases the Regional District of Nanaimo from all losses and damages as a result of erosion and/or landslide.
6. The applicant shall provide confirmation of building height and setbacks by a British Columbia Land Surveyor at the framing stage of construction.

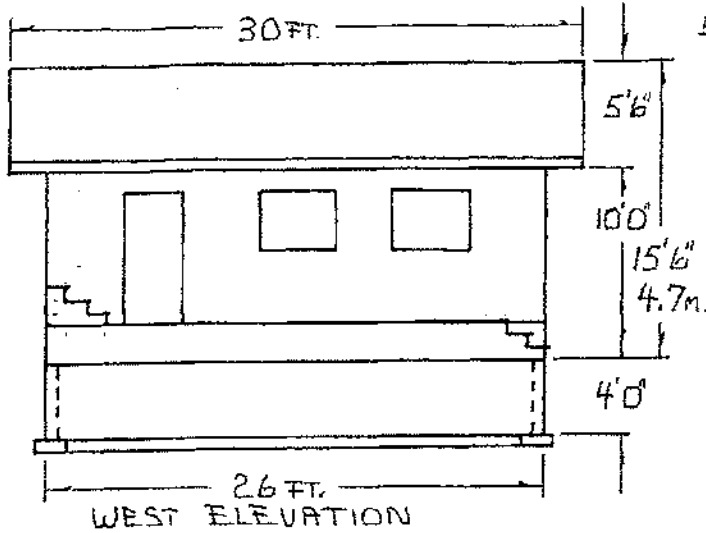
Schedule No. 2
 Site Plan



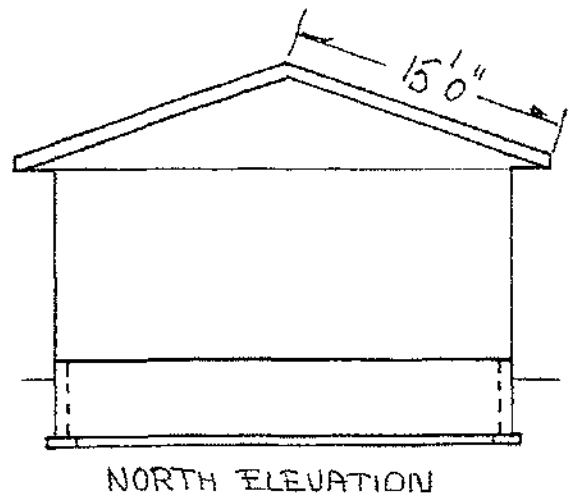
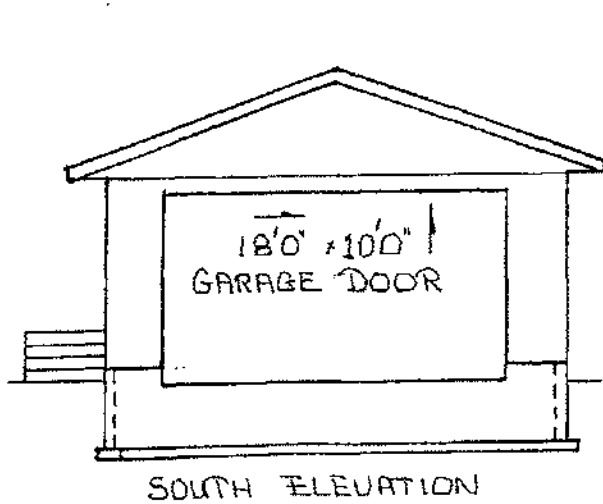
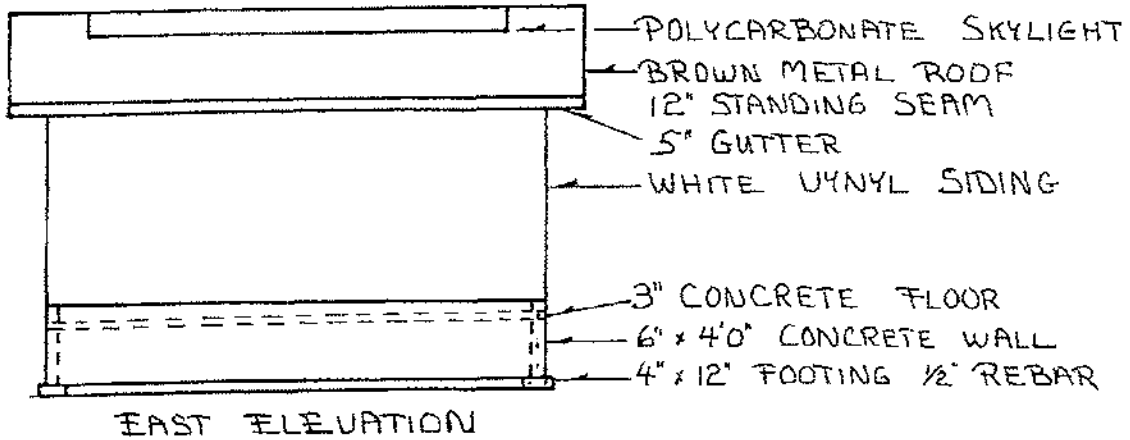
Schedule No. 3
 Building Elevations - Dwelling Unit
 (Page 1 of 2)



Schedule No. 3
Building Elevations - Garage
(Page 2 of 2)



5485 DEEP BAY DRIVE
24' x 26' GARAGE
SCALE 1/8" TO 1 FT.



Schedule No. 4
Geotechnical Report
(Page 1 of 3)



File: G6468.02

April 8, 2009

Kate Knappett and Rick MacKay
856 Walfred Rd.
Victoria, BC
V9C 2P2

Attention: Mrs. Kate Knappett and Mr. Rick MacKay

PROJECT: KNAPPETT RESIDENCE – 5485 DEEP BAY DRIVE, DEEP BAY, BC

SUBJECT: GEOTECHNICAL EVALUATION

Dear Mrs. Knappett and Mr. MacKay:

1. Introduction

- a. As requested, Lewkovich Engineering Associates Ltd. (LEA) evaluated the subject site to determine whether the property is geotechnically safe and suitable for the intended purpose of residential development. This letter summarizes our site observations, together with our comments, conclusions and recommendations.
- b. We understand that you propose to construct a single family residential home at the approximate centre of the property. This proposed residence and proposed garage are shown on a Plot Plan prepared by Sims & Associates Land Surveyors.
- c. Lewkovich Engineering Associates Ltd. acknowledges that this report may be requested by the Building Inspector of the Regional District of Nanaimo as a precondition to the issuance of a Development Permit and that this report, or any conditions contained in this report may be included in a restrictive covenant under Section 699 of the Local Government Act and filed against the title to the subject property.
- d. Lewkovich Engineering Associates Ltd. acknowledges that this report has been prepared for and at the expense of the Owner of the subject land. LEA has not acted for or as an agent of the Regional District of Nanaimo in the preparation of this report.

Suite A - 2569 Kerworth Road, Nanaimo, B.C., Canada V9T 3M4
Tel (250) 756-0355 Fax (250) 756-3831 www.lewkovich.com

**Schedule No. 4
Geotechnical Report
(Page 2 of 3)**



Client: Kate Knappert and Rick MacKay
Project: 5485 Deep Bay Drive
File: G6468.02
April 8, 2009
Page 2 of 3

2. Site Conditions

- a. The property is located on a spit of land jutting out into the Strait of Georgia, and around to form Deep Bay. It is bounded by the Georgia Strait to the north, and other residential properties to the south, east and west. In general, the property consists of a relatively level upper plateau area at the south third of the property, the middle third drops to 0.2m above the Natural Boundary elevation, and the northern third rises to approximately 0.6m above the Natural Boundary elevation before sloping gently to the foreshore.
- b. Soil conditions at this site consist of primarily sand with some gravel. The property is vegetated with grasses, low lying vegetation and several small trees. Development includes a short rip-rap seawall and a temporary greenhouse. We understand that the lot will be cleared prior to construction of the proposed house.
- c. The foreshore at the northern end of the property and the tidal area is relatively flat. We examined the condition of the shoreline. There was no indication of wave-induced erosion.

3. Comments, Conclusions and Recommendations

- a. We conclude that the site is geotechnically safe and suitable for the intended purpose of support for a residential building provided recommendations outlined here are followed during development.
- b. In general, shallow ground conditions across the property are expected to be reasonably favourable, consisting of granular soils consisting of compact to dense well graded sand with gravel. A conventional spread footing foundation system designed and built in accordance with the current B.C. Building Code should be suitable for building support, provided any fill, organic or disturbed soils are removed prior to construction. Allowable bearing pressure could

Lewkowich Engineering Associates Ltd.

**Schedule No. 4
Geotechnical Report
(Page 3 of 3)**



Client: Kate Knappett and Rick MacKay
Project: 5485 Deep Bay Drive
File: G6468.02
April 8, 2009
Page 3 of 3

be taken as 100 kPa. If soil conditions that are substantially different from those described above are encountered during construction, the Geotechnical Engineer should be informed immediately in order to review the conditions in the field and provide revised recommendations, if required..

- c. It is recommended that the minimum habitable floor elevation for the proposed residence be at least 1.5m above the Natural Boundary established by Sims Associates, based on their File: 06-061-BL dated 2009/04/03.
- d. Drainage from the house (perimeter and roof drains) should readily dissipate in the native soil. Concentrated flows should be avoided. This may be done through the use of down-spouts and splash-pads spread around the periphery of the house, or through the use of a ground infiltration system that is installed to distribute intercepted and/or gathered flows.

4. **Closure**

Lewkowich Engineering Associates Ltd. appreciates the opportunity to be of service on this project. If you have any comments, or if we can be of further service, please contact us at your convenience.

Respectfully Submitted,
Lewkowich Engineering Associates Ltd.

Reviewed By:



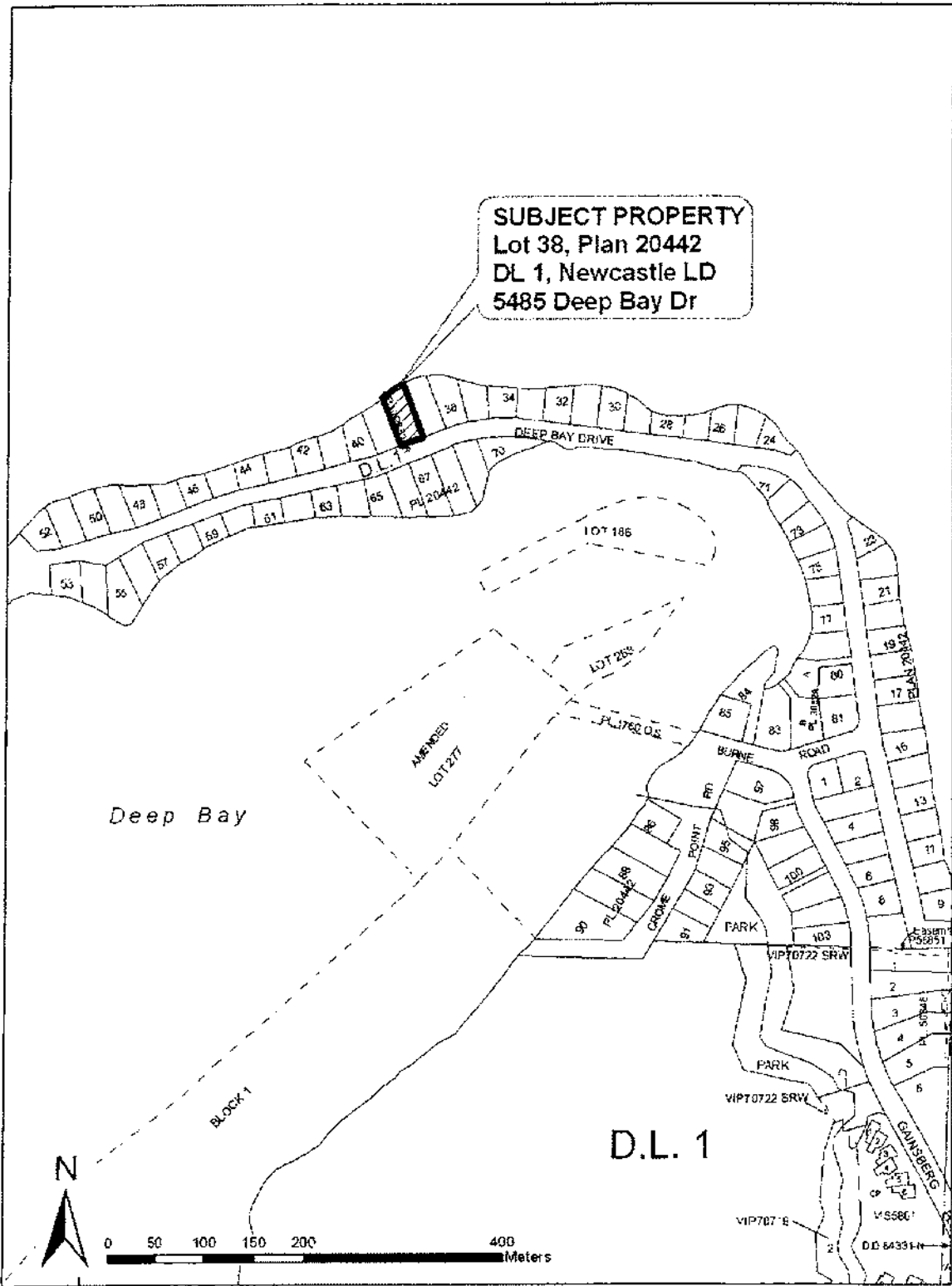
Chris Hudec, M.A.Sc., P.Eng.
Project Engineer

A handwritten signature in black ink, appearing to read 'M. Ren'.

Matthew Ren, B.E., M.Sc.

Lewkowich Engineering Associates Ltd.

Attachment No. 1
Location of Subject Property



BCGS MAPSHEET 92F 047 32



EAP	✓	May 12 2007
COW		
RdD		
BOARD		

MEMORANDUM

TO: Geoff Garbutt
Manager of Community Planning

DATE: April 17, 2009

FROM: Lainya Rowett
Planner

FILE: 3090 30 90818

SUBJECT: Development Variance Permit Application No. 90818 – 127.0.0.1 Holdings Ltd
Lot A, District Lot 78, Nanoose District, Plan VIP85344
Electoral Area 'E'

PURPOSE

To consider an application for a Development Variance Permit to legalize recently reconstructed beach access stairs and attached deck within a residential ocean-fronting property located in Nanoose Bay.

BACKGROUND

The subject property (0.15 ha in area) is located at 2933 Dolphin Drive (see *Attachment No. 1*) and is split-zoned Residential 1 (RS1) and Water 1 (W1) pursuant to “Regional District of Nanaimo Land Use and Subdivision Bylaw No. 500, 1987.” The zoning boundary follows the previous natural boundary of the ocean. The property was re-surveyed by Sims Associates and it was determined that there was an error in the original survey of the parcel (Plan 14212, which showed the natural boundary at the top of the bank). The applicant obtained approval for a natural boundary adjustment, and the new plan (VIP85344) was registered on July 9, 2008. This plan shows the property boundary extended to the present natural boundary, and the beach access stairs reconstructed within the expansion area (see Schedule No. 2).

The property is designated Coast Residential in “Regional District of Nanaimo Electoral Area ‘E’ Official Community Plan Bylaw No. 1400, 2005.” The property is located within the Watercourse Protection and Farmland Protection Development Permit Areas of the OCP. A Development Permit is not required because there are no streams on or within 30 metres of the subject property, and the property does not abut the Agricultural Land Reserve.

In 2007, a new dwelling was constructed in the westerly (upland) portion of the property. Subsequently, the existing beach access stairs were reconstructed within the rear yard (east side) without a building permit. The stairs extend from the top of the slope in the rear yard down 15 metres to the ocean. The slope is moderately vegetated with mature trees and understory.

Upon inspection of the reconstructed stairs by the RDN Building Inspection Department it was concluded that more than 75% of the stairs had been replaced, so the structure was no longer considered legal non-conforming and required a Development Variance Permit. A Stop Work order was issued for the stairs in July 2006. The applicant submitted a Building Permit application for the stairs in October 2007, and a Development Variance Permit application in September 2008. The submission of a survey plan and height calculation by the applicant revealed that the stairs, in particular the deck (lowest platform), required a height variance and setback variances as described below.

Proposed Height Variance

The Water 1 Zone (WA1) in the Regional District of Nanaimo Zoning Bylaw No. 500 restricts the height of buildings and structures to a maximum of 1.0m above the surface of the water as measured from the natural boundary. The height of the lower portion of the reconstructed stairs and deck, as measured to the top of the railing, is 8.37m. The elevation of the natural boundary is 2.7m, so the structure is 5.67 metres above the natural boundary. The maximum permitted height for buildings and structures in the WA1 Zone is 1.0 metre above the natural boundary. Therefore, the applicant is requesting a variance to increase the maximum allowable height from 1.0 metre to 5.67 metres.

Proposed Setback Variances

The reconstructed stairs and deck are located 0.2 metre from the natural boundary. The WA1 Zone requires a minimum setback of 3.0 metres from all lots lines. Therefore, the applicant is requesting a variance to reduce the minimum setback from 3.0 metres to 0.2 metre.

The location of the stairs and deck would also require a variance to the General Regulations – Setbacks from the Sea (in Electoral Area 'E') in the Regional District of Nanaimo Zoning Bylaw No. 500, which requires minimum setback of "8.0 metres horizontal distance inland from the top of a slope of 30% or greater; or within 15.0 metres horizontal distance from the natural boundary, whichever is greater." The applicant proposes to vary the setback from the sea from 8.0 metres inland from the top of the slope to 0.2 metre from the natural boundary as illustrated on Schedule No. 2.

ALTERNATIVES

1. To approve the Development Variance Permit to permit the beach access stairs and deck, subject to the conditions outlined in Schedules No. 1 and 2.
2. To deny the requested Development Variance Permit.

LAND USE AND DEVELOPMENT IMPLICATIONS

The Regional District of Nanaimo Policy B1.5 (Regional District of Nanaimo Development Variance Permit, Development Permit with Variance and Floodplain Exemption Application Evaluation Policy) provides staff with guidelines for reviewing and evaluating Development Variance Permit applications. In accordance with this policy staff has reviewed the information in consideration of geotechnical issues, aesthetic impact, environmental impact, and access.

In discussions with the applicant, staff advised that it did not have a concern with the replacement of the existing beach access stairs in the same location, which were said to be in poor condition. These stairs enable the property owner to use the property to its fullest extent with safe personal access to the beach. However, staff advised of its concerns with the construction of an attached viewing deck near the bottom of the stairs.

The original stairs structure did not include a viewing deck, but was limited to stairs and standard size landing areas. A typical landing is 0.9 metre by 0.9 metre (0.81 m² in area). The viewing deck that was constructed is 5.0 metres by 3.5 metres (17.5 m²), which largely exceeds the function of a landing area. Furthermore, the deck was designed to accommodate a private recreational amenity space along the foreshore, including glass glazing surrounding the deck space. This type of structure is uncharacteristic of

residential properties along the coast. Therefore, the deck, as constructed exceeds what is reasonable and intended for beach access.

Furthermore, the proposed height variance, from 1.0 metre to 5.67 metres above the natural boundary, and with the size of the deck will result in notable aesthetic impacts that contradict the RDN's policy (B1.5) in terms of minimizing the aesthetic impacts as a result of a proposed variance. The deck is highly visible along the foreshore and has significant aesthetic impacts on the marine foreshore and ocean views, as seen by adjacent properties, recreational users of the beach area, and boaters.

RDN Staff is also concerned about the precedence this deck will establish for other coastal property owners seeking to construct similar amenity-type structures along the shoreline. A proliferation of such structures would negatively impact the aesthetics of the shoreline, and may result in other negative impacts from an environmental and public access perspective.

Staff discussed these concerns with the applicant and explored the opportunity to reduce the size and area of the constructed deck. It is feasible to modify the deck and reduce its size without compromising its structural integrity or function in providing adequate beach access. However, the applicant was not willing to modify the structure. Therefore, from staff's assessment of this application the applicant has not demonstrated an acceptable land use justification for the constructed deck, nor has the applicant demonstrated reasonable efforts to avoid, or reduce, the variances pertaining to the deck structure. In accordance with the RDN Policy B1.5 staff recommends the Development Variance Permit as proposed be denied on this basis.

SUSTAINABILITY IMPLICATIONS

The applicant has completed the "Sustainable Community Builder Checklist" and advised that the previous stairs were unsafe to use, and that the design of the reconstructed new stairs and deck has been inspected and approved by Lewkowich Geotechnical Engineering Ltd. The applicant also noted that the reconstruction utilized local labour and materials.

PUBLIC CONSULTATION IMPLICATIONS

As part of the required public notification process, pursuant to the *Local Government Act*, property owners located within a 50 metre radius, must receive notice of the proposal and will have an opportunity to comment on the proposed variance, prior to the Board's consideration of the permit.

SUMMARY / CONCLUSIONS

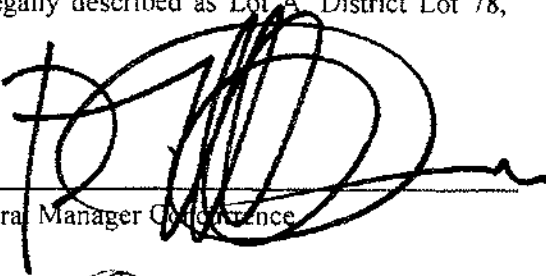
The applicant proposes to vary the height and setback requirements of the Regional District of Nanaimo Zoning Bylaw No. 500 to legalize the reconstructed stairs, and an attached deck, within the subject property. The WA1 Zone requires buildings and structures to be a maximum of 1.0 metre above the natural boundary, and a minimum of 3.0 metres from the lot line. The General Regulations of Bylaw No. 500 also requires a setback from the sea of 8.0 metres from the top of the bank that is 30% or greater in slope. The applicant proposes to increase the maximum permitted height of structures in the WA1 Zone from 1.0 metre to 5.67 metres above the natural boundary. The applicant also proposes to vary the minimum setback of the stairs/deck from 3.0 metres in the WA1 Zone, and 8.0 metres from the top of the slope (General Provisions), to 0.2 metres inland from the natural boundary. Given the potential impacts and precedence in permitting the structure to be retained as constructed staff recommends denial of the Development Variance Permit as submitted.

RECOMMENDATION

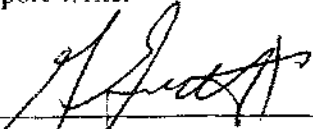
That Development Variance Permit application No. 90818 to vary the requirements of the WA1 Zone and the General Regulations 3.3.9 (b) to legalize a reconstructed set of beach access stairs and attached deck, as submitted by 127.0.0.1 Holdings Ltd., for the property legally described as Lot A, District Lot 78, Nanoose District, Plan VIP85344 be denied.



Report Writer



General Manager Concurrence



Manager Concurrence



CAO Concurrence

Schedule No. 1
Conditions of Development Variance Permit No. 90818
2933 Dolphin Drive

The following sets out the terms of Development Variance Permit No. 90818:

Bylaw No. 500, 1987 – Variance

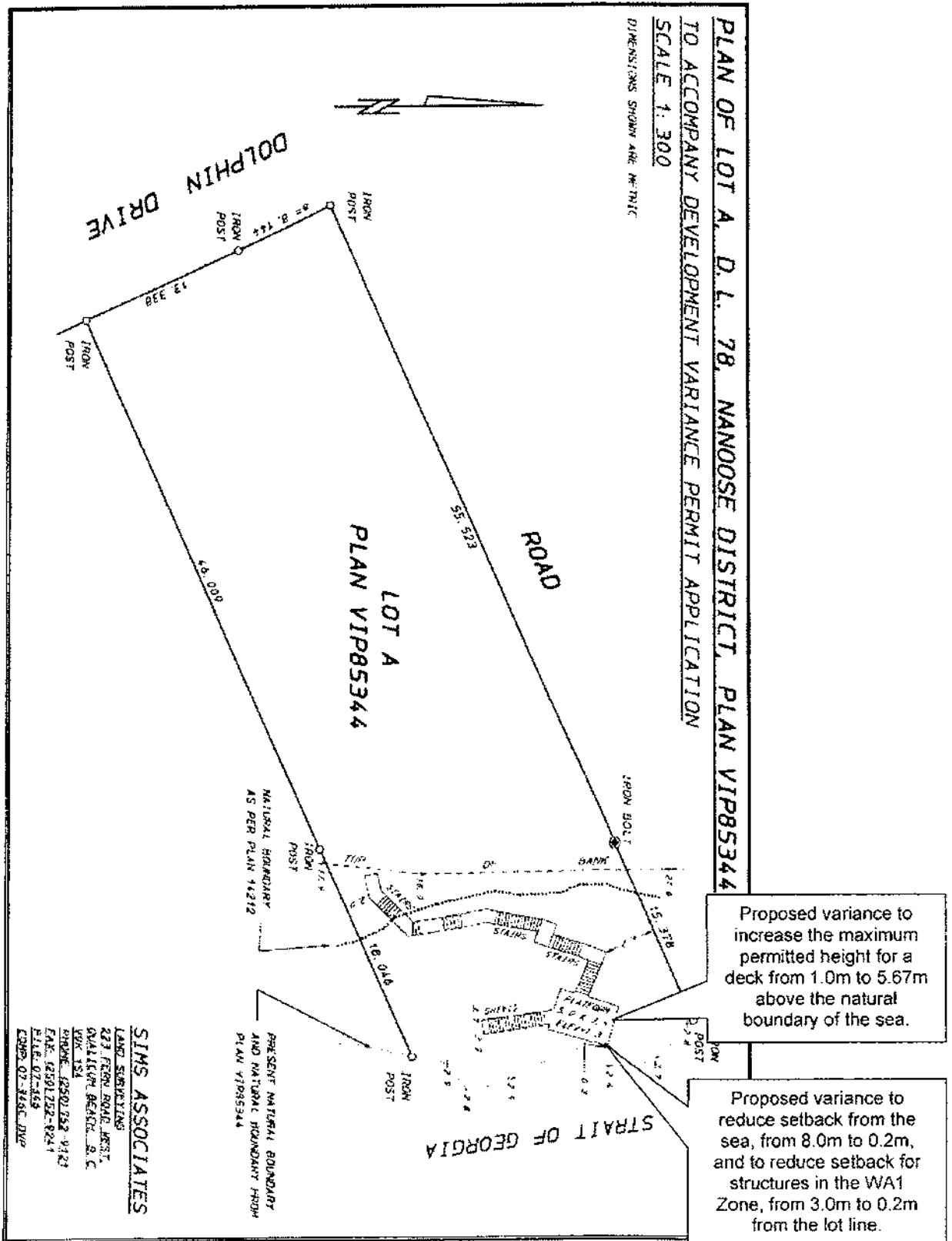
With respect to the lands, “Regional District of Nanaimo Land Use and Subdivision Bylaw No. 500, 1987,” is varied as follows:

1. **Section 3.4.91 Maximum Number and Size of Buildings and Structures** is hereby varied by increasing the maximum permitted height for structures from 1.0 metre above the surface of the water measured from the natural boundary to 5.67 metres above the natural boundary as noted on *Schedule No. 2*.
2. **Section 3.4.91 Minimum Setback Requirements** is hereby varied by reducing the minimum setback from 3.0 metres from all lot lines or lease boundaries to 0.2 metre from the natural boundary as shown on *Schedule No. 2*.
3. **Section 3.3.9 b) Setbacks – Sea** (Electoral Area ‘E’) is hereby varied by reducing the minimum setback from 8.0 metres inland from the top of a slope of 30% or greater to 0.2 metre inland from the natural boundary as shown on *Schedule No. 2*.

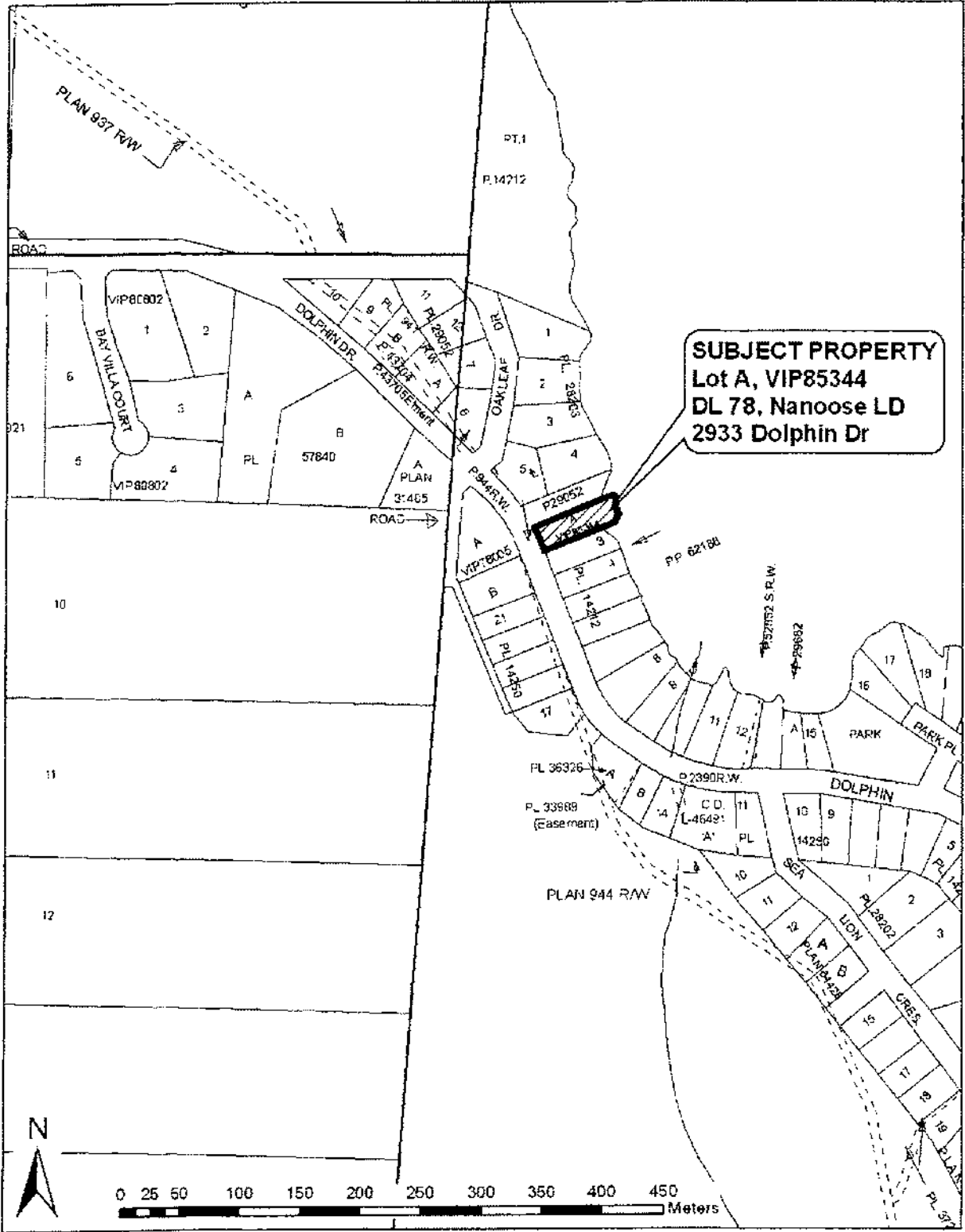
Conditions of Permit

1. The beach access stairs and deck are maintained and sited in accordance with the survey prepared by Sims Associates Land Surveying attached as *Schedule No. 2*.

Schedule No. 2
Survey Plan for 2933 Dolphin Drive



Attachment No. 1
Location of Subject Property



BCSS MAPSHEET NO 92F 330 33