

AGENDA

REGULAR MEETING OF COUNCIL

Monday, March 4, 2013

7:00 p.m.

Council Chamber, Municipal Hall

355 West Queens Road,

North Vancouver, BC

Council Members:

Mayor Richard Walton

Councillor Roger Bassam

Councillor Robin Hicks

Councillor Mike Little

Councillor Doug MacKay-Dunn

Councillor Lisa Muri

Councillor Alan Nixon



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REGULAR MEETING OF COUNCIL

7:00 p.m.
Monday, March 4, 2013
Council Chamber, Municipal Hall,
355 West Queens Road, North Vancouver

AGENDA

BROADCAST OF MEETING;

- Live broadcast on Shaw channel 4
- Rebroadcast on Shaw channel 4 at 9:00 a.m. Saturday
- Online at www.dnv.org

CLOSED PUBLIC HEARING ITEMS NOT AVAILABLE FOR DISCUSSION

- Bylaw 7954 – Rezoning Lot B – Barrow Street/Lynnwood
- Bylaw 7969 – 2635-2695 Mountain Highway
- Bylaw 7962 – The District of North Vancouver Rezoning Bylaw 1287

1. ADOPTION OF THE AGENDA

1.1. March 4, 2013 Regular Meeting Agenda

Recommendation:

THAT the agenda for the March 4, 2013 Regular Meeting of Council for the District of North Vancouver be adopted as circulated, including the addition of any items listed in the agenda addendum.

2. PUBLIC INPUT

(limit of two minutes per speaker to a maximum of thirty minutes total)

3. PROCLAMATIONS

4. RECOGNITIONS

5. DELEGATIONS

- 5.1. Sioned Dyer, North Shore Family Court & Youth Justice Committee** **p. 9 - 10**
Re: North Shore Family Court & Youth Justice Committee Annual Report

6. ADOPTION OF MINUTES

6.1. February 19, 2013 Public Hearing

p. 13 - 15

Recommendation:

THAT the minutes of the February 19, 2013 Public Hearing be received.

7. RELEASE OF CLOSED MEETING DECISIONS

8. REPORTS FROM COUNCIL OR STAFF

With the consent of Council, any member may request an item be added to the Consent Agenda to be approved without debate.

If a member of the public signs up to speak to an item, it shall be excluded from the Consent Agenda.

*Staff suggestion for consent agenda.

Recommendation:

THAT items _____ be included in the Consent Agenda and be approved without debate.

*** 8.1. Bylaw 7975: Development Servicing Bylaw Amendment – Road Classification** **p. 19 - 23**

File No. 09.3900.01/000.000

Recommendation:

THAT “Development Servicing Bylaw 7388, 2005, Amendment Bylaw 7975, 2012 (Amendment 4)” is ADOPTED.

*** 8.2. Bylaw 7976: Grant Connell Tennis Centre Expansion - Temporary Borrowing** **p. 25 - 27**

File No. 09.3900.01/000.000

Recommendation:

THAT “Grant Connell Tennis Centre Temporary Borrowing Bylaw 7976, 2013” is ADOPTED.

*** 8.3. 2013 Parcel Tax Roll Review** **p. 29**

File No. 05.1940.05/000.000

Recommendation:

THAT pursuant to Section 204 (2)(b) of the Community Charter, the sitting of the 2013 Parcel Tax Roll Review Panel for the Parcel Tax Roll, be held in the Council Chamber on Tuesday, the 16th of April 2013, at 5:00 pm.

8.4. Bylaw 7962: The District of North Vancouver Rezoning Bylaw 1287 (Bylaw 7962) p. 31 - 69

File No. 09.3900.01/000.000

Recommendation:

THAT “The District of North Vancouver Rezoning Bylaw 1287 (Bylaw 7962)” is given SECOND and THIRD readings.

8.5. Kwantlen Polytechnic University – Letter of Support for Proposed BA of Applied Geography p. 71 - 77

File No.

Recommendation:

THAT a letter of support be provided to the Kwantlen Polytechnic University for their proposed Bachelor of Arts Major in Applied Geography.

8.6. Request for Noise Bylaw Variance – Metro Vancouver Seymour/Capilano Twin Tunnels p. 79 - 118

File No. 01.0470.35/019.01

Recommendation:

THAT Council relax the provision of Noise Regulation Bylaw 7188 which regulates construction noise during the night and weekends in order that Metro Vancouver’s contractor can perform work during the night time period, including weekends and holidays as defined in the Bylaw, from March 2013 to January 2014.

8.7. Budget Public Input Opportunity p. 119

File No.

Verbal Presentation: Nicole Deveaux, General Manager – Finance & Technology

9. REPORTS

9.1. Mayor

9.2. Chief Administrative Officer

9.3. Councillors

9.4. Metro Vancouver Committee Appointees

10. ANY OTHER BUSINESS

11. ADJOURNMENT

Recommendation:

THAT the March 4, 2013 Regular Meeting of Council for the District of North Vancouver be adjourned.

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DELEGATIONS

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Delegation to Council Request Form

District of North Vancouver
Clerk's Department
355 West Queens Rd, North Vancouver, BC V7N 4N5

Questions about this form: Phone: 604-990-2311
Form submission: Submit to address above or Fax: 604.984.9637

COMPLETION: To ensure legibility, please complete (type) online then print. Sign the printed copy and submit to the department and address indicated above.

Name of person or group wishing to appear before Council: North Shore Family Court & Youth Justice Co

Title of Presentation: Presentation of 2011/2012 Annual Report

Purpose of Presentation:

- ☒ Information only
☐ Requesting a letter of support
☐ Other (provide details below)

Please describe.

The intent of the delegation is to briefly outline the work of the North Shore Family Court and Youth Justice Committee and present the Annual Report. Attach separate sheet if additional space is required

Contact person (if different than above): Sioned Dyer

Daytime telephone number: 604-619-9462

Email address: sionedyer@hotmail.com

Will you be providing supporting documentation?

☒ Yes

☐ No

If yes:

- ☒ PowerPoint presentation
☐ DVD
☒ Handout

Note: All supporting documentation must be provided 12 days prior to your appearance date.

Arrangements can be made, upon request, for you to familiarize yourself with the Council Chamber equipment.

Technical requirements:

- ☒ Laptop
☒ Multimedia projector

Delegation to Council Request Form

Rules for Delegations:

1. Scheduled by the Clerk after receipt of a request submitted in writing and addressed to Mayor and Council.
2. If a delegation request concerns a matter previously decided by Council or concerns an issue which is being or has been dealt with in a public participation process, the delegation's request to appear before Council may be placed on the appropriate agenda for Council direction.
3. Supporting submissions for the delegation should be provided to the Clerk by noon 12 days preceding the scheduled appearance.
4. A maximum of 3 delegations will be permitted at any Regular Council meeting.
5. Delegations will be allowed a maximum of five minutes to make their presentation.
6. Any questions to delegations by members of Council will seek only to clarify a material aspect of a delegate's presentation.
7. Persons invited to speak at the Council meeting may not speak disrespectfully of any other person or use any rude or offensive language or make a statement or allegation which impugns the character of any person.

Helpful Suggestions:

- have a purpose
- get right to your point and make it
- be concise
- be prepared
- state your request if any
- do not expect an immediate response to a request
- multiple-person presentations are still five minutes maximum
- be courteous, polite, and respectful
- it is a presentation, not a debate
- the Council Clerk may ask for any relevant notes from you if not handed out or published in the agenda

I understand and agree to these rules for delegations

North Shore Family Court & Youth Justice Committee
Name of Delegate or Representative of Group

November 21st, 2012
Date

Signature

For Office Use Only

☒ Approved

☐ Rejected

By: Signature: [Signature]

☒ Municipal Clerk

☐ Deputy Municipal Clerk

Appearance date if applicable: March 4, 2012

Applicant informed of approval/rejection on (date): Dec 12, 12

By (signature): [Signature]

Date: Dec 12, 12

The personal information collected on this form is done so pursuant to the Community Charter and/or the Local Government Act and in accordance with the Freedom of Information and Protection of Privacy Act. The personal information collected herein will be used only for the purpose of processing this application or request and for no other purpose unless its release is authorized by its owner, the information is part of a record series commonly available to the public, or is compelled by a Court or an agent duly authorized under another Act. Further information may be obtained by speaking with The District of North Vancouver's Manager of Administrative Services at 604-990-2207 or at 355 W Queens Road, North Vancouver.

MINUTES

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**DISTRICT OF NORTH VANCOUVER
PUBLIC HEARING**

REPORT of the Public Hearing held in the Council Chamber of the District Municipal Hall, 355 West Queens Road, North Vancouver, B.C. on Tuesday, February 19, 2013 commencing at 7:03 p.m.

Present: Mayor R. Walton
Councillor R. Bassam (7:13 pm)
Councillor M. Little (7:08 pm)
Councillor R. Hicks
Councillor D. Mackay-Dunn
Councillor A. Nixon

Absent: Councillor L. Muri

Staff: Mr. V. Penman, Fire Chief
Ms. D. Mason, Director – North Shore Emergency Program
Mr. B. Dwyer, Manager – Development Services
Ms. N. Letchford, Deputy Municipal Clerk
Ms. M. Weston, Section Manager – Public Safety
Mr. D. Allan, Planner
Ms. S. Berardo, Confidential Council Clerk

Bylaw 7962 The District of North Vancouver Rezoning Bylaw 1287

Purpose: Bylaw 7962 creates a new Comprehensive Development Zone 68 (CD68) and rezones the properties at 2011 Old Dollarton Road and 2151 Front Street to CD68 in order to permit a mixed commercial/residential project.

1. OPENING BY THE MAYOR

Mayor Walton welcomed everyone and advised that the purpose of the Public Hearing is to receive input from the community on the proposed amendments to the Zoning Bylaw as outlined in the notice of Public Hearing. He also informed those in attendance of the procedural rules that will be followed.

2. INTRODUCTION OF BYLAW BY CLERK

Ms. Natasha Letchford, Deputy Municipal Clerk, introduced the proposed bylaw.

3. PRESENTATION BY STAFF

Presentation: Doug Allan, Planner

Mr. Doug Allan, Planner, presented the proposal advising that the proposed CD68 Zone establishes permitted and accessory land uses and creates land use, building development and parking regulations for the project. The project consists of a four storey, mixed use building with at-grade commercial floor space and eight rental

apartments of which four are live/work units and two additional single storey commercial buildings, one of which, located at Dollarton Highway and Old Dollarton Road, is proposed as a restaurant. The site plan also illustrates siting areas for two additional commercial buildings, one north of the proposed restaurant and a second, adjacent to Dollarton Highway.

4. PRESENTATION BY APPLICANT

Presentation: Doug McCutcheon, Great West Life

The applicant thanked staff for providing a detailed overview of the proposed development and drew attention to the following points:

- Provided a history of the proposal; and,
- Commented that the proposed development will offer additional housing options, will provide retail opportunities, and will help revitalise the Maplewood area.

5. REPRESENTATIONS FROM THE PUBLIC

- 5.1 Ms. Linda Melville, 2200 Block Dollarton Road** **OPPOSED**
- Requested that staff undergo another risk assessment before passing the bylaw;
 - Commented that the proposed development will put too many people at risk because of the close proximity to the Canexus Chlorine Plant; and,
 - Suggested that staff engage the community with in-depth discussions.
- 5.2 Ms. Liz Barnett, 3100 Block Mountain Highway** **IN FAVOUR**
- Advised that she works with individuals who have a disability and commended the developers for the accessibility aspects of the proposed development; and,
 - Supports the development of more affordable living units on the North Shore.
- 5.3 Mr. Corrie Kost, 2800 Block Colwood Drive** **COMMENTING**
- Expressed concern that full information was not provided on the District of North Vancouver's website;
 - Questioned what input the Natural Hazard Task Force should have on the proposal;
 - Commented that the proposed development is in the wrong location because of the close proximity to the Canexus Chlorine Plant;
 - Expressed concern with regards to Phase 2; and,
 - Questioned what the public engagement process will be for Phase 2.
- 5.4 Mr. Corrie Kost, 2800 Block Colwood Drive** **SPEAKING A SECOND TIME**
- Questioned if Phase 2 will have a residential component; and,
 - Spoke to the involuntary risk standards and questioned what standards are acceptable for imposing risk onto members of the public.
- 5.5 Mr. Chris Mayer, Owner - North Shore Sports Swap** **COMMENTING**
- Spoke in support of the proposed development;
 - Questioned the community engagement process; and,

- Stated that as an owner of a business within the 75m radius of the proposed development, he had not been informed.

6. QUESTIONS FROM COUNCIL

Council queried whether the units would be single level units or multi levels. Staff advised that the units would be single level but are wider than normal.

Council queried how many units were at level two adaptability and how many units where at level three adaptability. Staff advised that all units will be level two adaptability and no units are at level three adaptability.

Council queried if the windows will be earthquake rated and if so what magnitude of earthquake are they rated for. Staff noted that the current building code requires that the proposed development be constructed to ensure that the building remains in place for enough time to allow residents to evacuate. There may still be damage to the building. The intent would be for residents to leave their units and migrate towards the corridor were there are no windows.

Staff advised that Phase 2 will be governed by CD68 zone requirements.

Council questioned the level of finish within the suites. The developer advised that the finish would be good quality but not luxurious to maintain affordability.

Council queried what the determined market rent will be. The developer advised that they are estimating \$1.90 to \$2.00 per square foot.

Council questioned what measures will be taken to ensure tenants are aware of the Canexus Chlorine Plant. The developer noted that this building will have professional management, tenant's guidelines, and safety sessions. Council requested that staff work with the developer to develop a disclosure form as part of the tenant agreement.

7. COUNCIL RESOLUTION

MOVED by Councillor NIXON

SECONDED by Councillor LITTLE

THAT the February 19, 2013 Public Hearing be closed;

AND THAT Bylaw 7962 "The District of North Vancouver Rezoning Bylaw 1287", be returned to Council for further consideration.

CARRIED

8. CLOSING

Mayor Walton declared the Public Hearing in respect to Bylaw 7962 CLOSED at 8:12p.m.

CERTIFIED CORRECT:

Confidential Council Clerk

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REPORTS

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COUNCIL AGENDA/INFORMATION			
<input type="checkbox"/> In Camera	Date:	Item #	
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Dept.
Manager


Director


CAO

The District of North Vancouver REPORT TO COUNCIL

February 19, 2013
File: 09.3900.01/000.000

AUTHOR: Natasha Letchford, Deputy Municipal Clerk

SUBJECT: Bylaw 7975: Development Servicing Bylaw Amendment – Road Classification

RECOMMENDATION:

THAT "Development Servicing Bylaw 7388, 2005, Amendment Bylaw 7975, 2012 (Amendment 4)" is ADOPTED.

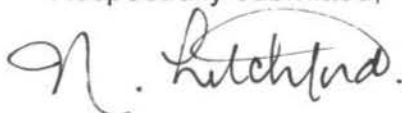
BACKGROUND:

Bylaw 7975 received FIRST, SECOND, and THIRD readings on February 4, 2013. THIRD reading was RESCINDED and given an amended THIRD reading on February 18, 2013. The bylaw is now ready to be considered for adoption by Council.

Options:

1. Adopt the bylaw;
2. Abandon the bylaw at 3rd reading; or,
3. Rescind 3rd reading and debate possible amendments to the bylaw.

Respectfully submitted,



Natasha Letchford
Deputy Municipal Clerk

Attachment: Development Servicing Bylaw 7388, 2005, Amendment Bylaw 7975, 2012 (Amendment 4)

The Corporation of the District of North Vancouver

Bylaw 7975

A bylaw to amend the Development Servicing Bylaw 7388 (2005)

The Council for The Corporation of the District of North Vancouver enacts as follows:

1. Citation

1.1 This bylaw may be cited as "Development Servicing Bylaw 7388, 2005, Amendment Bylaw 7975, 2012 (Amendment 4)".

2. Amendments

2.1 Schedule D.1 – Section 'B' of the Development Servicing Bylaw 7388 (2005) is amended by:

- (a) deleting the existing "Highway Classification Map – Figure B1" and replacing it with the map attached to this amending bylaw as Schedule A; and
- (b) deleting the existing "Table B1 – Road Classification" and replacing it with the table attached to this amending bylaw as Schedule B.

READ a first time this the 4th day of February, 2013.

READ a second time this the 4th day of February, 2013.

READ a third time this the 4th day of February, 2013.

THIRD READING RESCINDED on this the 18th day of February, 2013.

READ a third time as amended this the 18th day of February, 2013

ADOPTED this the

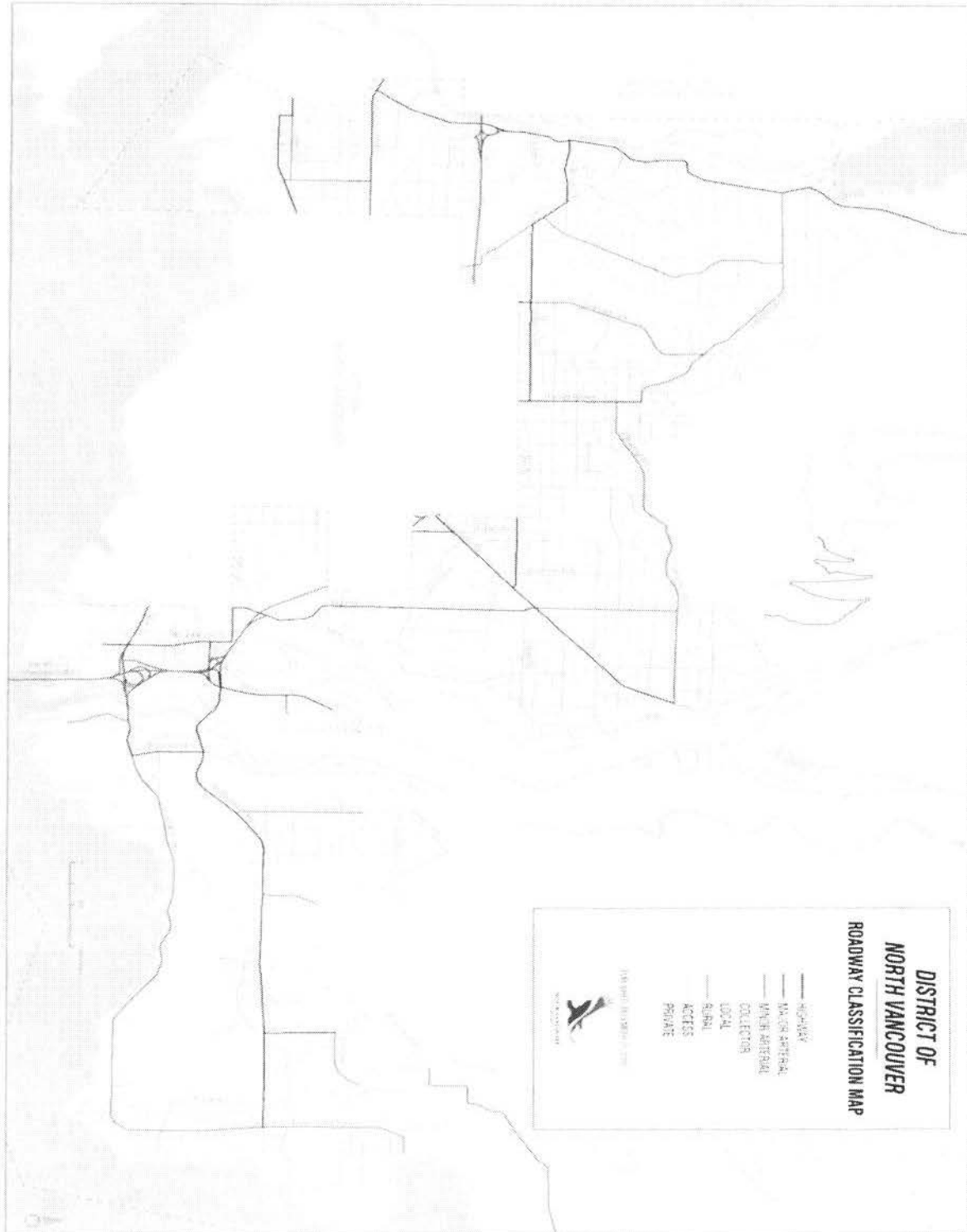
Mayor

Municipal Clerk

Certified a true copy

SCHEDULE A

HIGHWAY CLASSIFICATION MAP



SCHEDULE B

TABLE B1 – ROAD CLASSIFICATION

Features	Local	Collector	Arterial		Rural
			Minor Arterial	Major Arterial	
Land Access Function	Land access is the primary consideration	Traffic movement and land access are of equal importance	Land access is a secondary consideration	Limited, restricted or prohibited access	Traffic movement and land access are of equal importance
Expected daily traffic volume	<1,500	1,000-8,000	5,000-20,000	10,000-50,000	<2,000
Speed limit (km/h)	30 - 50	30 - 50	50 - 60	50 – 60	30 - 50
Vehicle type	passenger and service vehicles	passenger and service vehicles	all types	all types	passenger and service vehicles
Desirable connections	lanes, locals, collectors	locals, collectors, major and minor arterials	collectors, major and minor arterials	collectors, major and minor arterials, Highway	lanes, locals, collectors, minor arterials
Transit service	generally avoided	permitted	permitted	permitted	avoided
Bicycle access	no restrictions	no restrictions	separate facilities desirable	separate facilities	no restrictions
Pedestrian access	sidewalks on one side desirable	sidewalks on both sides desirable	sidewalks on both sides desirable	sidewalks on both sides required	no restrictions
Driveway access	preferred over collectors if lanes are not available	limited	limited	not permitted (except as approved by the Municipal Engineer)	limited

DISTRICT OF
NORTH VANCOUVER

ROADWAY CLASSIFICATION MAP

PUBLISHED: FEBRUARY 26, 2013

HIGHWAY

MAJOR ARTERIAL

MINOR ARTERIAL

COLLECTOR

LOCAL

RURAL

ACCESS

PRIVATE

NORTH VANCOUVER

GIS DEPARTMENT

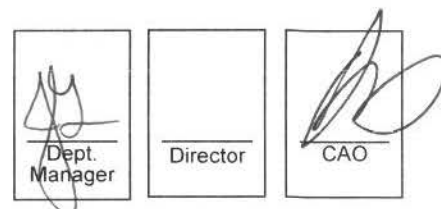
GEOGRAPHIC INFORMATION SYSTEMS

604.960.2311 www.geomatics.org gis@city.org

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<input type="checkbox"/> Agenda Addendum	Date: _____	Item# _____	
<input type="checkbox"/> Info Package	_____	_____	
<input type="checkbox"/> Council Workshop	DM# _____	Date: _____	Mailbox: _____



The District of North Vancouver REPORT TO COUNCIL

February 19, 2013
File: 09.3900.01/000.000

AUTHOR: Natasha Letchford, Deputy Municipal Clerk

SUBJECT: **Bylaw 7976: Grant Connell Tennis Centre Expansion – Temporary Borrowing**

RECOMMENDATION:

THAT "Grant Connell Tennis Centre Temporary Borrowing Bylaw 7976, 2013" is ADOPTED.

BACKGROUND:

Bylaw 7976 received FIRST, SECOND, and THIRD readings on February 18, 2013 and is now ready to be considered for adoption by Council.

Options:

1. Adopt the bylaw;
2. Abandon the bylaw at 3rd reading; or,
3. Rescind 3rd reading and debate possible amendments to the bylaw.

Respectfully submitted,

Natasha Letchford
Deputy Municipal Clerk

Attachment: Grant Connell Tennis Centre Temporary Borrowing Bylaw 7976, 2013

The Corporation of the District of North Vancouver

Bylaw 7976

A bylaw to authorize temporary borrowing pending the sale of debentures

WHEREAS it is provided by section 181 of the *Community Charter* that the Council may, where it has adopted a loan authorization bylaw, without further assents or approvals, borrow temporarily from any person under the conditions set out therein;

AND WHEREAS the Council has adopted "Grant Connell Tennis Centre Loan Authorization Bylaw 7951, 2012" that authorizes the expansion of the Grant Connell Tennis Centre in the amount of \$4,600,000;

AND WHEREAS the sale of debentures has been temporarily deferred;

NOW THEREFORE, the Council of the Corporation of the District of North Vancouver enacts as follows:

1. This bylaw may be cited as "Grant Connell Tennis Centre Temporary Borrowing Bylaw 7976, 2013".
2. The Council is hereby authorized and empowered to borrow an amount or amounts not exceeding the sum of \$4,600,000, as the same may be required.
3. The form of obligation to be given as acknowledgement of the liability shall be a promissory note or notes bearing the corporate seal and signed by Chief Financial Officer and Manager of Financial Services.
4. The money so borrowed shall be used solely for the purposes set out in said Bylaw No. 7951.
5. The proceeds from the sale of the debentures or so much thereof as may be necessary shall be used to repay the money so borrowed.

READ a first time this the 18th day of February, 2013.

READ a second time this the 18th day of February, 2013.

READ a third time this the 18th day of February, 2013.

ADOPTED this the

Mayor


Municipal Clerk

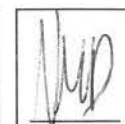
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Municipal Clerk

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Dept.
Manager


Director


CAO

The District of North Vancouver REPORT TO COUNCIL

February 14, 2013

File: 1940.05

Tracking Number: RCA -

AUTHOR: Elio Iorio, Manager Revenue and Taxation

SUBJECT: 2013 Parcel Tax Roll Review

RECOMMENDATION:

THAT, pursuant to Section 204(2)(b) of the Community Charter, the sitting of the 2013 Parcel Tax Roll Review Panel for the Parcel Tax Roll, be held in the Council Chamber on Tuesday, the 16th of April 2013 at 5:00 p.m.

REASON FOR REPORT:

Requirement under Section 204(2)(b) of the Community Charter requires Council to establish a time and place for the sitting of the panel with respect to Parcel Tax Roll Review procedures.

BACKGROUND:

The Parcel Tax Roll Review Panel meets to consider and review the Parcel Tax Roll and possible revisions thereto. The Parcel Tax Roll Review Panel is presented with a roll containing recently completed local improvement projects. The Parcel Tax Roll Review Panel reviews public complaints and may direct the correction of the Parcel Tax Roll as to errors or omissions respecting a name or address of the owner, the inclusion of a parcel, the taxable area or frontage of the parcel, and the granting of an exemption. The Parcel Tax Roll must be confirmed and authenticated by the Parcel Tax Roll Review Panel to provide the District with the authority to levy local improvement charges against each benefiting property. Advance notice of the time and place will be published in accordance with section 94 of the Community Charter.

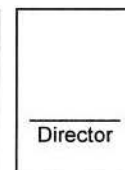


Elio Iorio
Manager, Revenue and Taxation

REVIEWED WITH:	REVIEWED WITH:	REVIEWED WITH:	REVIEWED WITH:
<input type="checkbox"/> Sustainable Community Development	<input type="checkbox"/> Clerk's Office	External Agencies:	Advisory Committees:
<input type="checkbox"/> Development Services	<input type="checkbox"/> Corporate Services	<input type="checkbox"/> Library Board	<input type="checkbox"/> _____
<input type="checkbox"/> Utilities	<input type="checkbox"/> Communications	<input type="checkbox"/> NS Health	<input type="checkbox"/> _____
<input type="checkbox"/> Engineering Operations	<input type="checkbox"/> Finance	<input type="checkbox"/> RCMP	<input type="checkbox"/> _____
<input type="checkbox"/> Parks & Environment	<input type="checkbox"/> Fire Services	<input type="checkbox"/> Recreation Commission	
<input type="checkbox"/> Economic Development	<input type="checkbox"/> Human resources	<input type="checkbox"/> Other: _____	
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The District of North Vancouver REPORT TO COUNCIL

February 21, 2013
File: 09.3900.01/000.000

AUTHOR: Natasha Letchford, Deputy Municipal Clerk

SUBJECT: Bylaw 7962: The District of North Vancouver Rezoning Bylaw 1287 (Bylaw 7962)

RECOMMENDATION:

THAT "The District of North Vancouver Rezoning Bylaw 1287 (Bylaw 7962)" is given second and third readings.

BACKGROUND:

Bylaw 7962 received FIRST reading on January 21, 2013. A Public Hearing was held and closed on February 19, 2013. The bylaw is now ready to be considered for SECOND and THIRD readings by Council. Of note, this bylaw will require Ministry of Transportation and Infrastructure approval following third reading before it can be considered for adoption due to its location within 800m of a controlled access highway.

Options:

1. Give the bylaw 2nd and 3rd readings;
2. Debate possible amendments to the bylaw,
3. Abandon the bylaw at 1st reading.

Respectfully submitted,

Natasha Letchford
Deputy Municipal Clerk

Attachment: The District of North Vancouver Rezoning Bylaw 1287 (Bylaw 7962)

The Corporation of the District of North Vancouver

Bylaw 7962

A bylaw to amend The District of North Vancouver Zoning Bylaw (3210) to rezone Lot A, Block H, District Lot 193, Plan LMP44272 PID: 024-721-930 and, Lot A, Except: Part Dedicated Road on Plan LMP52867, Block 18, District Lot 193, Plan 1587 PID: 014-538-415, (2151 Front Street and 2011 Old Dollarton Road) pursuant to Section 903 of the Local Government Act (Great West Life Realty Advisors Inc.)

The Council for The Corporation of the District of North Vancouver enacts as follows:

1. Citation

This bylaw may be cited as "The District of North Vancouver Rezoning Bylaw 1287 (Bylaw 7962)".

2. Amendments

The following amendments are made to the "District of North Vancouver Zoning Bylaw 1965":

(A) Part 2 by replacing:

"For definitions applicable to the Employment Zones and Village Commercial Zones and Comprehensive Development Zones 65 and 67 see Part 2A, for all other zones see below."

with

"For definitions applicable to the Employment Zones, Village Commercial Zones, Comprehensive Development Zones 65, 67 and 68 see Part 2A, for all other zones, see below."

(B) Part 2A by replacing:

"Definitions Applicable to the Employment Zones, Village Commercial Zones and Comprehensive Development Zone 65 (Sections 600-A, 600-B, 750, 770 and 4B370 to 4B385) and Comprehensive Development Zone 67 (Sections 600-A, 600B, 750, 770, 4B370 to 4B385, and 4B402 to 4B410) only:"

with:

"Definitions Applicable to the Employment Zones, Village Commercial Zones, Comprehensive Development Zone 65 (Sections 600-A, 600-B, 750, 770 and 4B370 to 4B385, Comprehensive Development Zone 67 (Sections 600-A,

600B, 750, 770, 4B370 to 4B385, and 4B402 to 4B410) and Comprehensive Development Zone 68 (Sections 600-A, 600-B, 750, 770, 4B370 to 4B385, 4B402 to 4B410 and 4B411 to 4B418) only.”

(C) Section 301(2) by inserting the following zoning designation:

Comprehensive Development Zone 68 CD68

(D) Part 4B by inserting the following new section:

4B411 Comprehensive Development Zone 68 CD68

Intent

The purpose of the CD68 Zone is to establish specific land use and development regulations for project consisting of commercial floor space in separate buildings and a mixed use building containing at-grade commercial space and not more than 80 multi-family residential units, including live/work units, in the Maplewood Village Centre.

4B412 Uses

(1) All uses of land, buildings and structures in the Comprehensive Development Zone 68 are prohibited except for those uses expressly permitted in this section.

(2) Principal Uses:

Permitted principal uses may include:

- (i) liquor store;
- (ii) live/work use;
- (iii) neighbourhood public house;
- (iv) office use;
- (v) personal service use;
- (vi) residential use;
- (vii) restaurant use;
- (viii) retail use, excluding auctioneer use; and
- (ix) service use.

(3) Accessory Uses:

Permitted accessory uses may include, but are not necessarily limited to:

- (i) administrative offices;
- (ii) display, sales and reception areas;

- (iii) home occupations;
- (iv) interior storage; and
- (v) outdoor customer service areas.

4B413 Use Regulations

(1) The following regulations apply to principal uses:

(a) All operations associated with permitted principal uses shall be completely contained within an enclosed building, except outdoor merchandise displays, outdoor customer service areas and, outdoor play area required for a child care use.

(b) In the case of residential use:

(i) not more than 80 residential units, including live/work units, are permitted;

(ii) with the exception of live/work units, the dwelling units shall be located above the ground floor of the building and shall be provided with a separate entrance from ground level; and

(iii) the dwelling units, in addition to the live/work use, may contain home occupations in accordance with Section 405 of the Zoning Bylaw.

(c) In the case of live/work use:

(i) not more than 4 units devoted to live/work use, are permitted;

(ii) businesses within a live/work use are limited to those permitted in the CD68 Zone, excluding:

- (1) dating service;
- (2) exotic dancer business;
- (3) gun shops;
- (4) liquor store;
- (5) restaurant use;
- (6) social escort business, or other similar business; and
- (7) tattooing, piercing, branding, or other similar service; and

(iii) not more than 3 persons shall be engaged in a business at one time.

(d) In the case of a liquor store:

(i) not more than two liquor stores are permitted in the CD68 Zone;

- (ii) in the case of 2 liquor stores, one of the two liquor stores must be associated with a neighbourhood pub or restaurant.
 - (e) In the case of a neighbourhood public house:
 - (i) the neighbourhood public house may not be located on the lot legally described as Lot A, Except: Part Dedicated Road on Plan LMP52867, Block 18, District Lot 193, Plan 1587 PID: 014-538-415.
 - (f) in the case of a pet care establishment or veterinarian:
 - (i) a separate exterior entrance is required;
 - (ii) all noise associated with the keeping of and caring for animals must be contained within the premises.
 - (g) Noise, glare, odour and air pollution generated on a parcel shall not be detectable from the parcels property line and all permitted uses shall comply with Section 414 of the Zoning Bylaw.
 - (h) Drive-through service windows and drive-through aisles are prohibited.
- (2) The following regulations apply to accessory uses:
- (a) In the case of the outdoor display of goods:
 - (i) the display area must be located adjacent to the business for which it is required and may not extend beyond the frontage or flanking side of the premises of the business;
 - (ii) the display area must not prevent safe pedestrian movement on a sidewalk; and
 - (iii) the display area may not occupy any parking or loading spaces.
 - (b) In the case of outdoor customer service areas:

Despite Section 413, outdoor customer service areas in the CD68 Zone shall be permitted only in accordance with the following regulations:

 - (i) an outdoor customer service area must be operationally tied to the principal use of premises which it serves;
 - (ii) in conjunction with a restaurant use or retail use, the outdoor customer service area shall not exceed the lesser of 50% of the total gross floor area of the premises to which it relates or 20 seats in the case of a retail use and 124 seats in the case of a restaurant use; and
 - (iii) additional parking is not required for an outdoor customer service area.

- (c) Attached and detached accessory buildings and structures are not permitted in the CD68 Zone, except in accordance with an approved development permit.

4B414 Acoustical Requirements:

In the case of residential purposes, including live/work uses, a development permit application shall require evidence in the form of a report and recommendations prepared by persons trained in acoustics and current techniques of noise measurement, demonstrating that the noise levels in those portions of the dwelling listed below shall not exceed the noise levels expressed in decibels set opposite such portions of the dwelling units. For the purpose of this section, the noise level is the A-weighted 24-hour equivalent (Leq) sound level and will be defined simply as the noise level in decibels:

Portion of Dwelling Unit	Noise Level (Decibels)
bedrooms	35
living, dining, recreation rooms	40
kitchen, bathrooms, hallways	45

For the purposes of this section, the acoustical report shall provide evidence that commercial activities will not result in contraventions of the above-noted residential noise-level limits.

4B415 Height, Size and Density Regulations

Buildings and structures in the CD68 zone shall comply with the following regulations:

(1) Height:

As measured from the lesser of natural or finished grade to the highest point of the roof of a building:

- (i) the height of a mixed use commercial/residential building shall not exceed 18.9m (62ft.); and
- (ii) the height of a commercial building, including a building used as a restaurant, shall not exceed 12m (40ft.).

(2) Building Coverage:

The maximum building coverage shall not exceed 80%.

(3) Site Coverage:

The maximum site coverage shall not exceed 90%.

(4) Floor Space Ratio:

- (i) The floor space ratio shall exclude the floor area of an underground parking structure; and
- (ii) The maximum floor space ratio shall not exceed 1.0.

4B416 Landscaping Regulations:

- (1) All setback areas shall either be landscaped or hard surfaced in accordance with an approved landscape plan.
- (2) All surface garbage and recycling container temporary storage areas shall be screened with a minimum 2m (6.5ft.) high screen consisting of a screening wall, landscaping or a combination thereof.
- (3) All electrical kiosks not located underground or within a building shall be screened with landscaping.

4B417 Flood Construction Requirements:

All construction must be done in accordance with requirements to address the flood hazard, in particular, all habitable floor space must be constructed above the established flood construction levels, and any basements or underground parking garages constructed must incorporate appropriate flood protection measures as determined by a professional engineer specializing in flood hazard assessment and as required by any restrictive covenant registered on the title of the property.

4B418 Parking, Loading and Bicycle Parking Regulations:

- (1) Parking for vehicles shall be provided in accordance with the following regulations:

- | | |
|---|---|
| a) Commercial Use (excluding business use in a live/work use) | 1 space/45m ² of Gross Floor Area |
| b) Residential Use (including Live/Work Use) | 1 space per unit + 0.25 spaces/unit for visitor parking |

- (2) The ratio of small car spaces may not exceed 35% of the total parking requirement;
 - (3) The provision of handicapped parking spaces and loading spaces for all commercial uses, including any restaurant use, shall be provided in accordance with Part 10 of the Zoning Bylaw;
 - (4) All regular, small car, handicapped parking spaces and all loading spaces and all manoeuvring aisles shall be provided in accordance with the minimum stall sizes in accordance with Part 10 of the Zoning Bylaw;
 - (5) A total of 16 Bicycle Class 2 spaces are required for the residential use and a minimum of 15 Bicycle Class 2 spaces are required for all commercial and restaurant uses.”
- (E) The Zoning Map is amended by rezoning the following lands from General Commercial 3 (C3) and General Industrial (I2) to Comprehensive Development Zone 68 (CD68):
- (i) Lot A, Block H, District Lot 193, Plan LMP44272 PID: 024-721-930; and,
 - (ii) Lot A, Except: Part Dedicated Road on Plan LMP52867, Block 18, District Lot 193, Plan 1587 PID: 014-538-415,
- as shown on the attached Schedule A.

READ a first time this the 21st day of January, 2013.

PUBLIC HEARING held this the 19th day of February, 2013.

READ a second time this the

READ a third time this the

Certified a true copy of “Rezoning Bylaw 1287” as at Third Reading

Municipal Clerk

APPROVED BY THE MINISTRY OF TRANSPORTATION AND INFRASTRUCTURE
this the th day of, 2013

ADOPTED this the

Mayor

Municipal Clerk

Certified a true copy

Municipal Clerk

Schedule A to Bylaw 7962

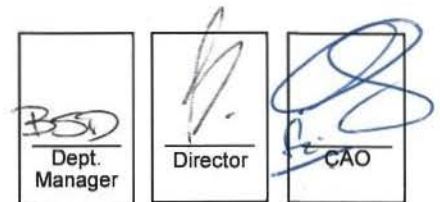


 CD68 Zoning

PROPOSED REZONING
GREAT WEST LIFE REALTY ADVISORS (BCIMC)
BYLAW 7962



COUNCIL AGENDA/INFORMATION				
<input type="checkbox"/> In Camera	Date:	Item #		
<input checked="" type="checkbox"/> Regular	Date: JAN 21, 2013	Item #		
<input type="checkbox"/> Agenda Addendum	Date:	Item#		
<input type="checkbox"/> Info Package				
<input type="checkbox"/> Council Workshop	DM#	Date:	Mailbox:	



The District of North Vancouver REPORT TO COUNCIL

January 7, 2013

File: 3060-20/86.11

Tracking Number: RCA -

AUTHOR: Doug Allan, Community Planner

SUBJECT: REZONING BYLAW 7962 – REZONING OF LAND AT 2151 FRONT STREET AND 2011 OLD DOLLARTON FOR A MIXED COMMERCIAL/RESIDENTIAL PROJECT

RECOMMENDATION:

That:

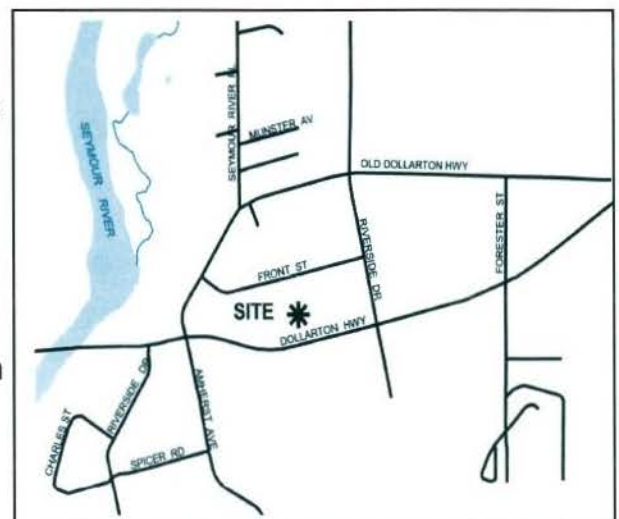
1. Council give First Reading to Bylaw 7962, Rezoning Bylaw 1287 (Attachment A), rezoning the properties at 2011 Old Dollarton Road and 2151 Front Street to CD68 in order to permit a mixed commercial/residential project; and
2. Bylaw 7962, Rezoning Bylaw 1287, be referred to a Public Hearing;

REASON FOR REPORT:

To obtain Council's consideration of First Reading of a zoning amendment to facilitate the development of a mixed commercial and residential project by Great West Life Realty Advisors Inc.(GWL), on behalf of the owner, bcIMC Realty Corporation.

SUMMARY:

The proposal is a mixed commercial/residential project in Maplewood Village. The entire development site consists of two lots located between Dollarton Highway and Front Street and between Old Dollarton and Riverside Drive. This application is the first of two development Phases, located on the west half of the site. This Phase consists of: a 4 storey,



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mixed use building with at-grade commercial floor space and 80 rental apartments of which 4 are live/work units. The other two structures are single storey commercial buildings, one of which, located at Dollarton Highway and Old Dollarton Road, is proposed as a restaurant. Phase 2, on the east side of the property will be developed for commercial uses at a later date. The Phase 1 site plan also identifies building siting areas for two additional buildings, one north of the restaurant and a second, along Dollarton Highway. The building adjacent to Dollarton Highway is required to be constructed prior to Phase 2.

Implementation requires rezoning from General Commercial Zone 3 (C3) and General Industrial (I2) to a new Comprehensive Development 68 Zone which is applied to the entire property, and issuance of a Development Permit for the Phase 1 component.

BACKGROUND:

Since the adoption of the OCP, Great West Life has been working with staff to refine the proposal to address the Maplewood Village Centre Plan objectives. The key objective has been to establish a clear contextual relationship to the Village Centre, north of Front Street and a strong pedestrian connection from the site to the Village Centre core area.

EXISTING POLICY:

The subject property has two different designations under the OCP (Maplewood Village Centre Plan): the former service station site and the east half of the larger property are designated as 'Commercial' with an FSR of up to 1.0 and the remainder of the site is designated Commercial Residential Mixed Use Level 1 with an FSR of up to 1.75, as illustrated on the following map.



Key Village Centre Plan policies include:

- the provision of rental housing through redevelopment;

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- provision of a mix of residential building types and unit sizes; and
- a focus on local serving commercial uses in mixed use, street-oriented development in the village heart.

The project also addresses a number of OCP housing objectives:

- an increase in housing choices across the full continuum of housing needs;
- the provision of more housing options to suit different ages, needs and incomes; and
- the provision of more alternatives to home ownership.

The site is designated as Development Permit Areas for: the regulation of the Form and Character of Commercial and Multi-Family Development; Energy and Water Conservation and Reduction of Greenhouse Gas Emissions, and Protection of Development from Hazardous Conditions (arising from a potential flood hazard). A development permit will be forwarded to Council for consideration should the project advance through Bylaw adoption.

ANALYSIS:

1. Site and Surrounding Area

The subject property consists of two lots, approximately 2.25ha (5.55 acres) in size, located between Dollarton Highway, Front Street, Old Dollarton and Riverside Drive as illustrated on the following aerial photograph. The two parcels are separated by a 4m wide, unopened lane allowance traversed by a Metro Vancouver sanitary sewer line which is proposed to be incorporated into the development for access and parking under a licence-to-occupy. The former service station site was partially contaminated and some contamination migrated onto the larger Lot A parcel, however, the sites have been remediated and the Province has issued Certificates of Compliance for both parcels.

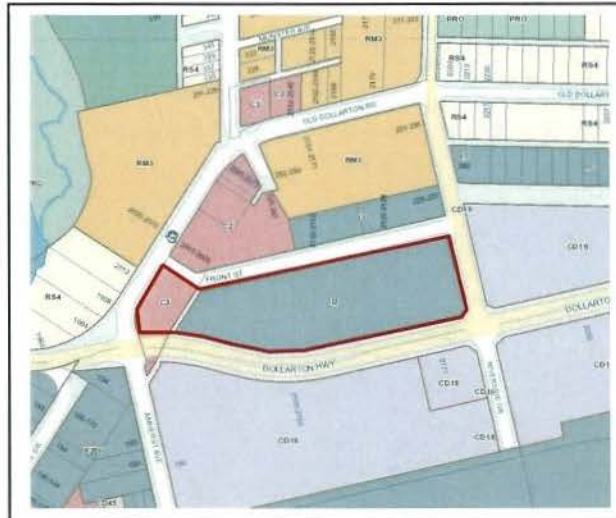
Surrounding land uses include: to the south and southeast, developed light industrial/commercial buildings (CD18); to the east, a mixed business/commercial project currently under construction (CD19); to the north, developed light industrial (I3) and mixed commercial/residential (C2) properties and, to the west, single family (RS4) and multi-family (RM3) development.



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2. The Proposal

As submitted, this application is for rezoning of the property to allow a 2 phased commercial and residential development. As shown on the following site plan, Phase 1 consists of a 4 storey, mixed commercial/residential building and 2 freestanding commercial buildings. The site plan also illustrates the siting of two other future commercial buildings.



Future Commercial Buildings

The mixed commercial/residential building located on the north side of the site adjacent to Front Street consists of approximately 1,681.5m² (18,100sq.ft.) of grade level commercial space and 76 rental apartment units over three floors. This building also includes 4 rental

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live/work units located at grade on the north side of the building, for a total of 80 residential rental units. The proposed residential suites consist of 6 bachelor/studios; 29, 1 bedroom units including the 4 live/work units; 18, 1 bedroom + den units and 27, 2 bedroom units. The units vary between 41.62m^2 (448sq.ft.) and 79.25m^2 (853sq.ft.) in size. The building is approximately 18.9m (62ft.) in height.

As illustrated on the site plan, the mixed use building partly appears as two buildings due to a grade level pedestrian breezeway. Otherwise, the upper residential floors of the building extend across the breezeway as shown on the elevation plan below.



South Elevation of Mixed-Use Building

The freestanding single storey retail CRU building is 278.2m^2 (2,994sq.ft.) in size and the restaurant building is 504m^2 (5,424sq.ft.) in size. These two buildings are single storey structures although the restaurant building has been designed with a vaulted central roof to appear as a two storey structure, creating a more significant gateway building at the entrance into the Village Centre. The retail building is approximately 9.1m (30ft.) in height and the restaurant is 10.4m (34ft.) high.

The site plan also illustrates two additional commercial building footprints: one on Dollarton Highway and one, north of the proposed restaurant. GWL intends to construct these on market demand. Staff have advised GWL that the building along Dollarton Highway is necessary to improve the Dollarton Highway streetscape by reducing the visibility of the at-grade parking from the street augmenting the existing perimeter landscaping. The actual size and location of this building will be determined in conjunction with the planning for Phase 2 although the Development Covenant will establish minimum dimensions to ensure that it addresses the urban design objectives. These buildings will require separate development permits.

The total floor area amounts to $8,714\text{m}^2$ (93,793sq.ft.) excluding the future CRU building. For the Phase 1 development, building and site coverages are approximately 25.6% and 65%, respectively, and the FSR is 0.71.

Parking for the residential building is provided underground on the basis of 1 space per unit + two additional spaces for the live/work units for a total of 82 spaces, accessed off Front Street. The remainder of the spaces (133 spaces) are provided on the surface for shared commercial and residential visitor needs. The OCP (Policy 7.2.8) supports reductions in

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parking for purpose built market and affordable rental units where appropriate and GWL has provided a parking study for a reduced residential parking requirement which has been reviewed and supported by Transportation Planning. In this case, a reduction is supportable as the site is within a Village Centre and has reasonable access to transit. However, as no specific spaces have been assigned as residential visitor parking, the Development Covenant will establish conditions to ensure that the visitor spaces are available during higher demand periods. The architectural site plan and representative building elevation plans are included as Attachment B. Representative images of the proposed restaurant and CRU buildings and a view of the project from Dollarton Highway are provided below.



East Elevation – Restaurant Building



North Elevation – CRU Building



**South Elevation of Restaurant
(from Dollarton Highway and Old Dollarton Intersection)**

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Landscaping is proposed around the perimeter of the site, augmenting the planting along Dollarton Highway and within the site to assist in screening the open parking area. The project incorporates a central pedestrian plaza with a water feature on the south side of the mixed use building at the entry to the breezeway and a plaza at the west end of the mixed use building. The landscape plan is included as Attachment C.

Canexus Impact

Building Measures and Shelter-in-Place Guidelines

To assess the location of the proposed residential units in terms of the proximity of the project to Canexus and the potential hazard associated with their liquid chlorine manufacturing process and storage, GWL retained a consultant to develop specific measures including the introduction of exterior chlorine gas detectors on the building and a voice communication system tied to the fire alarm system. In addition, the consultant has developed shelter-in-place guidelines for building occupants. These building measures and guidelines will be enforced under the development covenant as a condition of rezoning which will also require that GWL provide the shelter-in-place guidelines to their future tenants.

Chemical Risk Assessment:

This development site is located between the 10^{-5} and 10^{-6} risk hazard contours which were established as a result of the proximity of the Canexus chlorine plant. Under the MIACC Land Use Guidelines, residential development between these risk contours should be limited. Council previously limited the residential density to 8 units per acre. This application for 80 units is consistent with that limitation, but it includes the residential development potential associated with GWL's Lot C property on the east side of Riverside Drive. This approach to aggregate the residential development potential utilizing all of the Company's lands north of Dollarton Highway and mass those units at the north end of the development site was reviewed by risk hazard consultant Doug McCutcheon and Associates, to determine if it met the intent of the MIACC Land Use Guidelines. Mr. McCutcheon confirmed that the proposal does meet the intent of the MIACC Guidelines and from a risk perspective, is supported. Mr. McCutcheon's analysis was peer reviewed by Canexus' risk hazard consultant. The conclusions of the McCutcheon and Associates report were supported by the Canexus peer review.

Land Use Covenants:

A covenant between Canexus and GWL is registered on Lot A limiting land uses to those permitted on the south side of Dollarton Highway which does not include residential uses. On the strength of Mr McCutcheon's report and their own consultant's review, Canexus has agreed to amend the covenant to allow residential development as proposed and a letter from the company to that effect is included as Attachment D. The covenant document is in the process of being amended and will be executed and ready for registration prior to adoption of a rezoning bylaw.

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To further support this approach, GWL will be required to register an additional restrictive covenant over their Lot C lands east of Riverside Drive prior to adoption of a rezoning bylaw which will prohibit any future residential development on that property, ensuring that the residential development on the Company's lands north of Dollarton Highway does not exceed the 8 unit/acre limitation.

Bylaw 7962

To implement this project, Bylaw 7962 (Attachment A) creates a new Comprehensive Development Zone 68 (CD68) which is applied to the entire site, including the Phase 2 area and the new zone:

- establishes the list of uses, including live/work uses,
- limits the number of residential units to 80, including the 4 live/work units;
- establishes an overall FSR of 1.0 for the entire property, including the future Phase 2 commercial component;
- sets building and site coverages of 80% and 90% respectively, based on the total site area;
- establishes parking requirements of 1 space per rental residential unit + 0.25 spaces/unit for visitor spaces and 1 space/45sq.m for all commercial uses including the proposed restaurant; and
- establishes minimum bicycle parking requirements for the residential and commercial uses.

It should be noted that the former service station lot legally extends across Dollarton Highway and the proposed CD68 Zone applies to that small triangle of land as shown on the map attached to the CD68 Zone, however, it does not have any separate development potential and the Development covenant will specify that this part of the land cannot be developed.

3. Community Amenity Contribution:

GWL has indicated the development economics of this project support a very minimal ability to provide community amenity contributions. They are, however, able to participate in the public art program and will provide \$70,000 as part of the first phase and a further \$35,000 as part of the future Phase 2 project. The public art objective is to establish a significant element at the southwest corner of the site to highlight the entry into the Maplewood Village Centre which may be augmented with other smaller elements within the site. If the rezoning proceeds, information on the public art component will be provided to Council as part of the development permit report. The Development Covenant will secure the provision of the contribution for Phase 2.

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4. Green Building Strategy:

GWL has indicated that the project will achieve the BuiltGreen 'gold' level and meet the energy performance baseline. Building performance measures will be focussed on mechanical systems, building materials and finishes, indoor air quality, water conservation and waste management. A more detailed list of building and energy measures will be prepared and reported at the development permit issuance stage if the rezoning proceeds and a green building covenant will be secured prior to zoning.

5. Road Dedication:

In order to facilitate widening of a portion of Front Street for improved vehicle and pedestrian movement and safety, a 5m strip of land will be dedicated along the north end of the former service station site. A plan of subdivision to facilitate the dedication will be required as a condition of rezoning.

Social Policy Implications:

The provision of new rental stock offered by this project is supportable and would add to the supply of market units available in the municipality. The developer proposes to combine the District's existing Adaptable Design Guidelines as they pertain to the outside of the individual units and apply the SAFERHomes standards to the interiors of 100% of the units which results in both a building and individual units incorporating a higher standard of universal adaptability. This initiative is strongly supported.

IMPLEMENTATION:

In addition to the adoption of Bylaw 7962, the following are required prior to adoption of the bylaw:

- a 5m road dedication on Front Street;
- an amendment to the restrictive covenant registered on Lot A between GWL and Canexus to allow the proposed residential units;
- a covenant prohibiting any residential units on the owner's other lands north of Dollarton Highway;
- a Development Covenant which will:
 - require that the units be maintained as rental for a period of at least 20 years;
 - prohibit the development of Phase 2 until the second commercial building on Dollarton Highway is constructed;
 - establish minimum dimensions for the additional retail building on Dollarton Highway;
 - prohibit the subdivision of the property;
 - establish provisions for the sharing of commercial and residential visitor parking spaces;
 - secure the provision of the funds for public art for the Phase 2 project;

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- establish adaptable design guideline requirements;
- prohibit neighbourhood public house use on the former gas station lot;
- require a flood hazard covenant to establish minimum flood construction levels for the proposed buildings;
- require a stormwater management covenant;
- require a nuisance covenant to ensure that future residential and commercial occupants are aware of the Canexus plant; and
- require the incorporation of the chlorine gas detection system and shelter-in-place guidelines for the mixed commercial/residential building as recommended by the consultant; and
- a green building covenant.

As conditions of the Development Permit, the following will be required:

- a Licence to Occupy for the use of the unopened lane allowance between the two development parcels;
- an Engineering Services Agreement; and
- a public art plan accepted by the Public Art Advisory Committee.

CONCURRENCE:

Advisory Design Panel:

This application was reviewed by the Advisory Design Panel on September 13, 2012 and the Panel passed the following motion:

‘THAT the ADP has reviewed the proposal, commends the applicant for the quality of the proposal and recommends **APPROVAL** of the project as presented.’

Public Input:

A facilitated public information meeting was held on June 29, 2012 following the required public notification and advertising. Approximately 12 people attended the meeting comprised of residents and several adjacent property owners and overall, there was neighbourhood support for the project. The questions and comments raised during the meeting related to:

- sustainable measures to be incorporated to preserve and enhance the environment;
- the amount of parking;
- traffic movements;
- noise control, particularly arising from the location of the outdoor seating area associated with the restaurant.

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CONCLUSION:

Overall, this project addresses the urban design objectives in the Maplewood Village Centre Plan and the provision of rental apartment housing, addresses important OCP housing objectives relating to unit types and tenure.

OPTIONS:

In considering this application, Council may either:

1. give First Reading to Bylaw 7962, Rezoning Bylaw 1287 (Attachment A), rezoning the subject site to CD68 in order to permit a mixed commercial/residential project and refer Bylaw 7962, Rezoning Bylaw 1287 to a Public Hearing; (staff recommendation); or
2. consider and defeat Bylaw 7962 at First Reading.



Doug Allan
Community Planner
da/

Attachments

- A – Bylaw 7962;
- B – Reduced architectural site plan and building elevation plans;
- C – Reduced landscape plan
- D - Letter from Canexus

REVIEWED WITH: <input type="checkbox"/> Sustainable Community Development <input type="checkbox"/> Development Services <input type="checkbox"/> Utilities <input type="checkbox"/> Engineering Operations <input type="checkbox"/> Parks & Environment <input type="checkbox"/> Economic Development	REVIEWED WITH: <input type="checkbox"/> Clerk's Office <input type="checkbox"/> Corporate Services <input type="checkbox"/> Communications <input type="checkbox"/> Finance <input type="checkbox"/> Fire Services <input type="checkbox"/> Human resources <input type="checkbox"/> ITS <input type="checkbox"/> Solicitor <input type="checkbox"/> GIS	REVIEWED WITH: External Agencies: <input type="checkbox"/> Library Board <input type="checkbox"/> NS Health <input type="checkbox"/> RCMP <input type="checkbox"/> Recreation Commission <input type="checkbox"/> Other: _____	REVIEWED WITH: Advisory Committees: <input type="checkbox"/> _____ <input type="checkbox"/> _____ <input type="checkbox"/> _____
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The Corporation of the District of North Vancouver

Bylaw 7962

A bylaw to amend The District of North Vancouver Zoning Bylaw (3210) to rezone Lot A, Block H, District Lot 193, Plan LMP44272 PID: 024-721-930 and, Lot A, Except: Part Dedicated Road on Plan LMP52867, Block 18, District Lot 193, Plan 1587 PID: 014-538-415, (2151 Front Street and 2011 Old Dollarton Road) pursuant to Section 903 of the Local Government Act (Great West Life Realty Advisors Inc.)

The Council for The Corporation of the District of North Vancouver enacts as follows:

1. Citation

This bylaw may be cited as "The District of North Vancouver Rezoning Bylaw 1287 (Bylaw 7962)".

2. Amendments

The following amendments are made to the "District of North Vancouver Zoning Bylaw 1965":

(A) Part 2 by replacing:

"For definitions applicable to the Employment Zones and Village Commercial Zones and Comprehensive Development Zones 65 and 67 see Part 2A, for all other zones see below."

with

"For definitions applicable to the Employment Zones, Village Commercial Zones, Comprehensive Development Zones 65, 67 and 68 see Part 2A, for all other zones, see below."

(B) Part 2A by replacing:

"Definitions Applicable to the Employment Zones, Village Commercial Zones and Comprehensive Development Zone 65 (Sections 600-A, 600-B, 750, 770 and 4B370 to 4B385) and Comprehensive Development Zone 67 (Sections 600-A, 600B, 750, 770, 4B370 to 4B385, and 4B402 to 4B410) only:"

with:

"Definitions Applicable to the Employment Zones, Village Commercial Zones, Comprehensive Development Zone 65 (Sections 600-A, 600-B, 750, 770 and 4B370 to 4B385, Comprehensive Development Zone 67 (Sections 600-A,

600B, 750, 770, 4B370 to 4B385, and 4B402 to 4B410) and Comprehensive Development Zone 68 (Sections 600-A, 600-B, 750, 770, 4B370 to 4B385, 4B402 to 4B410 and 4B411 to 4B418) only.”

(C) Section 301(2) by inserting the following zoning designation:

Comprehensive Development Zone 68 CD68

(D) Part 4B by inserting the following new section:

“4B411 Comprehensive Development Zone 68 CD68

Intent

The purpose of the CD68 Zone is to establish specific land use and development regulations for project consisting of commercial floor space in separate buildings and a mixed use building containing at-grade commercial space and not more than 80 multi-family residential units, including live/work units, in the Maplewood Village Centre.

4B412 Uses

(1) All uses of land, buildings and structures in the Comprehensive Development Zone 68 are prohibited except for those uses expressly permitted in this section.

(2) Principal Uses:

Permitted principal uses may include:

- (i) liquor store;
- (ii) live/work use;
- (iii) neighbourhood public house;
- (iv) office use;
- (v) personal service use;
- (vi) residential use;
- (vii) restaurant use;
- (viii) retail use, excluding auctioneer use; and
- (ix) service use.

(3) Accessory Uses:

Permitted accessory uses may include, but are not necessarily limited to:

- (i) administrative offices;
- (ii) display, sales and reception areas;

- (iii) home occupations;
- (iv) interior storage; and
- (v) outdoor customer service areas.

4B413 Use Regulations

(1) The following regulations apply to principal uses:

(a) All operations associated with permitted principal uses shall be completely contained within an enclosed building, except outdoor merchandise displays, outdoor customer service areas and, outdoor play area required for a child care use.

(b) In the case of residential use:

- (i) not more than 80 residential units, including live/work units, are permitted;
- (ii) with the exception of live/work units, the dwelling units shall be located above the ground floor of the building and shall be provided with a separate entrance from ground level; and
- (iii) the dwelling units, in addition to the live/work use, may contain home occupations in accordance with Section 405 of the Zoning Bylaw.

(c) In the case of live/work use:

- (i) not more than 4 units devoted to live/work use, are permitted;
- (ii) businesses within a live/work use are limited to those permitted in the CD68 Zone, excluding:
 - (1) dating service;
 - (2) exotic dancer business;
 - (3) gun shops;
 - (4) liquor store;
 - (5) restaurant use;
 - (6) social escort business, or other similar business; and
 - (7) tattooing, piercing, branding, or other similar service; and
- (iii) not more than 3 persons shall be engaged in a business at one time.

(d) In the case of a liquor store:

- (i) not more than two liquor stores are permitted in the CD68 Zone;

- (ii) in the case of 2 liquor stores, one of the two liquor stores must be associated with a neighbourhood pub or restaurant.
- (e) In the case of a neighbourhood public house:
 - (i) the neighbourhood public house may not be located on the lot legally described as Lot A, Except: Part Dedicated Road on Plan LMP52867, Block 18, District Lot 193, Plan 1587 PID: 014-538-415.
- (f) in the case of a pet care establishment or veterinarian:
 - (i) a separate exterior entrance is required;
 - (ii) all noise associated with the keeping of and caring for animals must be contained within the premises.
- (g) Noise, glare, odour and air pollution generated on a parcel shall not be detectable from the parcels property line and all permitted uses shall comply with Section 414 of the Zoning Bylaw.
- (h) Drive-through service windows and drive-through aisles are prohibited.

(2) The following regulations apply to accessory uses:

- (a) In the case of the outdoor display of goods:
 - (i) the display area must be located adjacent to the business for which it is required and may not extend beyond the frontage or flanking side of the premises of the business;
 - (ii) the display area must not prevent safe pedestrian movement on a sidewalk; and
 - (iii) the display area may not occupy any parking or loading spaces.

(b) In the case of outdoor customer service areas:

Despite Section 413, outdoor customer service areas in the CD68 Zone shall be permitted only in accordance with the following regulations:

- (i) an outdoor customer service area must be operationally tied to the principal use of premises which it serves;
- (ii) in conjunction with a restaurant use or retail use, the outdoor customer service area shall not exceed the lesser of 50% of the total gross floor area of the premises to which it relates or 20 seats in the case of a retail use and 124 seats in the case of a restaurant use; and
- (iii) additional parking is not required for an outdoor customer service area.

- (c) Attached and detached accessory buildings and structures are not permitted in the CD68 Zone, except in accordance with an approved development permit.

4B414 Acoustical Requirements:

In the case of residential purposes, including live/work uses, a development permit application shall require evidence in the form of a report and recommendations prepared by persons trained in acoustics and current techniques of noise measurement, demonstrating that the noise levels in those portions of the dwelling listed below shall not exceed the noise levels expressed in decibels set opposite such portions of the dwelling units. For the purpose of this section, the noise level is the A-weighted 24-hour equivalent (Leq) sound level and will be defined simply as the noise level in decibels:

Portion of Dwelling Unit	Noise Level (Decibels)
bedrooms	35
living, dining, recreation rooms	40
kitchen, bathrooms, hallways	45

For the purposes of this section, the acoustical report shall provide evidence that commercial activities will not result in contraventions of the above-noted residential noise-level limits.

4B415 Height, Size and Density Regulations

Buildings and structures in the CD68 zone shall comply with the following regulations:

(1) Height:

As measured from the lesser of natural or finished grade to the highest point of the roof of a building:

- (i) the height of a mixed use commercial/residential building shall not exceed 18.9m (62ft.); and
- (ii) the height of a commercial building, including a building used as a restaurant, shall not exceed 12m (40ft.).

(2) Building Coverage:

The maximum building coverage shall not exceed 80%.

(3) Site Coverage:

The maximum site coverage shall not exceed 90%.

(4) Floor Space Ratio:

- (i) The floor space ratio shall exclude the floor area of an underground parking structure; and
- (ii) The maximum floor space ratio shall not exceed 1.0.

4B416 Landscaping Regulations:

- (1) All setback areas shall either be landscaped or hard surfaced in accordance with an approved landscape plan.
- (2) All surface garbage and recycling container temporary storage areas shall be screened with a minimum 2m (6.5ft.) high screen consisting of a screening wall, landscaping or a combination thereof.
- (3) All electrical kiosks not located underground or within a building shall be screened with landscaping.

4B417 Flood Construction Requirements:

All construction must be done in accordance with requirements to address the flood hazard, in particular, all habitable floor space must be constructed above the established flood construction levels, and any basements or underground parking garages constructed must incorporate appropriate flood protection measures as determined by a professional engineer specializing in flood hazard assessment and as required by any restrictive covenant registered on the title of the property.

4B418 Parking, Loading and Bicycle Parking Regulations:

- (1) Parking for vehicles shall be provided in accordance with the following regulations:

- | | |
|---|---|
| a) Commercial Use (excluding business use in a live/work use) | 1 space/45m ² of Gross Floor Area |
| b) Residential Use (including Live/Work Use) | 1 space per unit + 0.25 spaces/unit for visitor parking |

- (2) The ratio of small car spaces may not exceed 35% of the total parking requirement;
 - (3) The provision of handicapped parking spaces and loading spaces for all commercial uses, including any restaurant use, shall be provided in accordance with Part 10 of the Zoning Bylaw;
 - (4) All regular, small car, handicapped parking spaces and all loading spaces and all manoeuvring aisles shall be provided in accordance with the minimum stall sizes in accordance with Part 10 of the Zoning Bylaw;
 - (5) A total of 16 Bicycle Class 2 spaces are required for the residential use and a minimum of 15 Bicycle Class 2 spaces are required for all commercial and restaurant uses."
- (E) The Zoning Map is amended by rezoning the following lands from General Commercial 3 (C3) and General Industrial (I2) to Comprehensive Development Zone 68 (CD68):
- (i) Lot A, Block H, District Lot 193, Plan LMP44272 PID: 024-721-930; and,
 - (ii) Lot A, Except: Part Dedicated Road on Plan LMP52867, Block 18, District Lot 193, Plan 1587 PID: 014-538-415,
- as shown on the attached Schedule A.

READ a first time this the

PUBLIC HEARING held this the

READ a second time this the

READ a third time this the

Certified a true copy of "Rezoning Bylaw 1287" as at Third Reading

Municipal Clerk

APPROVED BY THE MINISTRY OF TRANSPORTATION AND INFRASTRUCTURE
this the xxth day of xxxx, 20xx

ADOPTED this the

Mayor

Municipal Clerk

Certified a true copy

Municipal Clerk

Schedule A to Bylaw 7962



CD68 Zoning

PROPOSED REZONING
GREAT WEST LIFE REALTY ADVISORS (BCIMC)
BYLAW 7962





Rositch Hemphill Architects

120 Powell Street, Unit 10
Vancouver, BC Canada
V6A 1G1

T 604.669.6002
F 604.669.1091

www.rharchitects.ca

ISSUED:	DATE:
1. REZONING PRE APPLICATION	4 MARCH 2010
2. REZONING APPLICATION	08 APRIL 2010
3. DISCUSSION	03 JUNE 2010
4. DISTRICT COMMENTS	20 JUNE 2010
5. CIVIL PLAN REVIEW	20 APRIL 2011
6. CIVIL PLAN REVIEW	20 MAY 2011
7. CIVIL ELEVATION REVIEW	28 JUNE 2011
8. CIVIL ELEVATION REVIEW	11 JULY 2011
9. PROGRESS REVIEW	26 SEPT 2011
10. DP / REZONING	16 DEC 2011
11. DESIGN PANEL	26 JUNE 2012
12. DP / REZONING RE SUB	31 OCT 2012

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ATTACHMENT
13

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PROJECT:
NORTHWOODS MIXED USE

NORTH VANCOUVER, B.C.

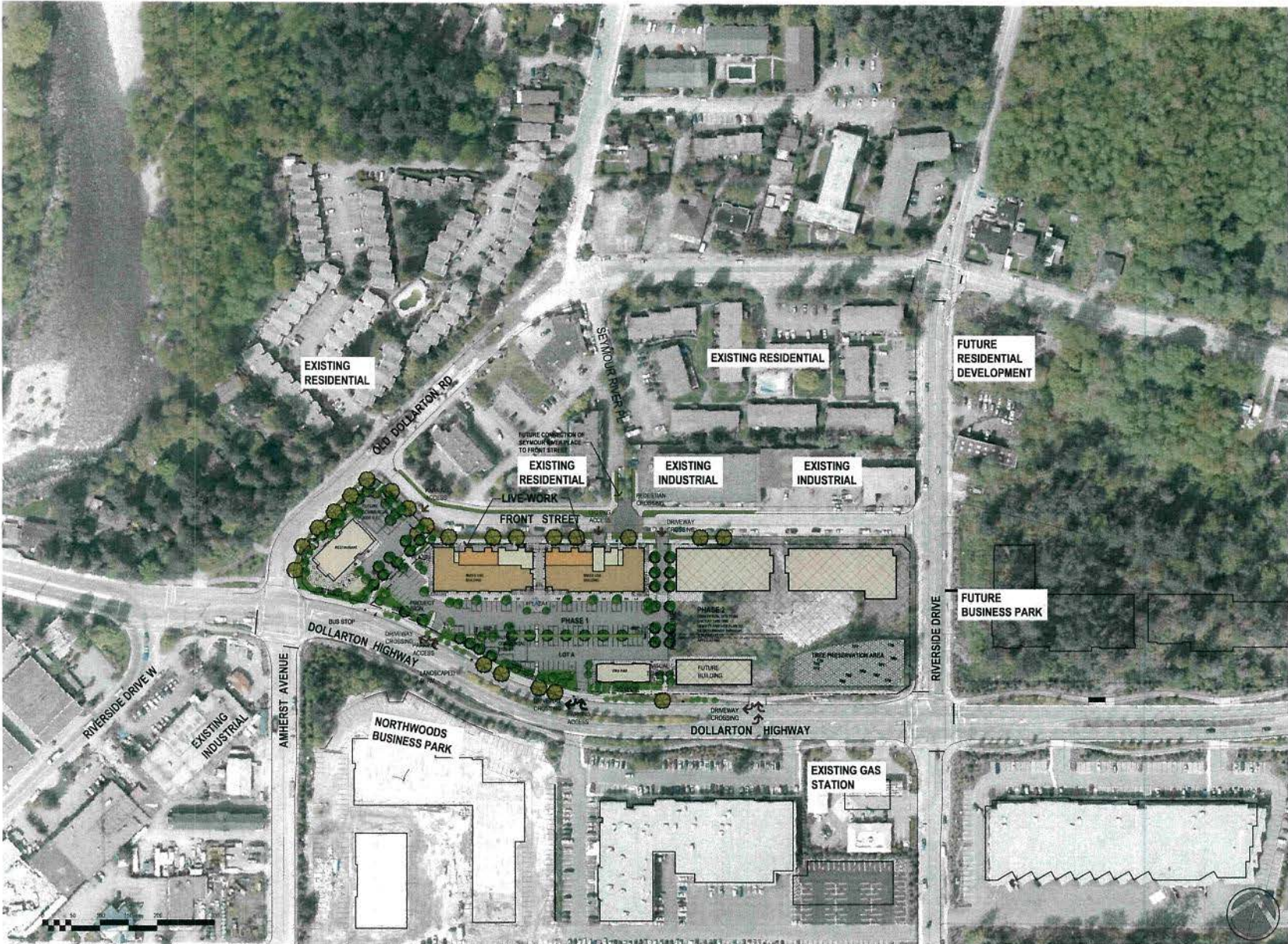
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CHECKED: KSH

PROJECT NO: 0919

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PLOT DATE: 29 OCT 2012
D.P. & No.:



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REAL



Rositch Hemphill Architects
120 Powell Street, Unit 10
Vancouver, BC Canada
V6A 1G1
1 604.669.6002
1 604.669.1091
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PROJECT: NORTHWOODS MIXED USE

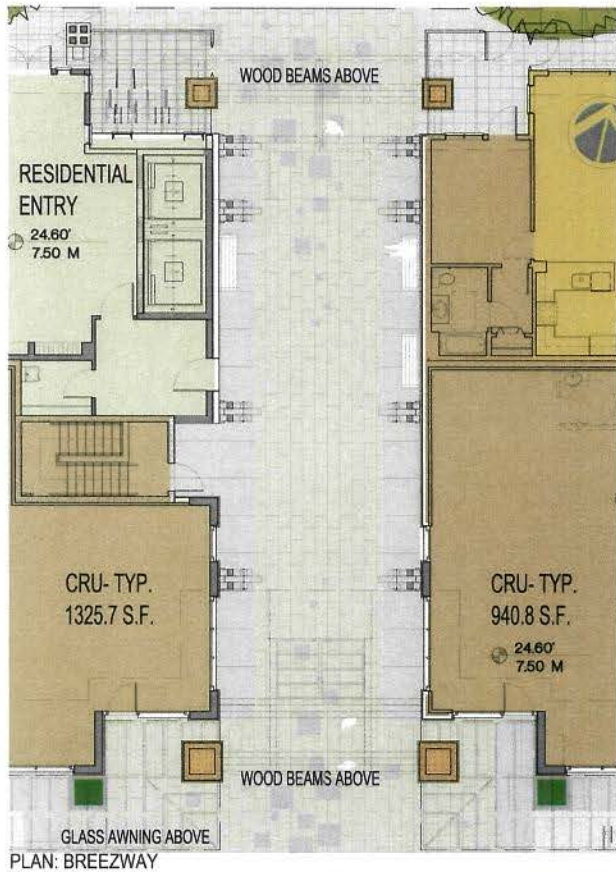
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DATE: AUG. 2011
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PROJECT NO: 0919

UNPL. NO: A1.2

PLOT DATE: 29 OCT 2012
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3D MODEL FOR THE BREEZWAY FROM THE RETAIL SIDE



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120 Powell Street, Unit 10
Vancouver, BC Canada
V6A 1G1

T 604.669.6002
F 604.669.1091

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PROJECT:
NORTHWOODS MIXED USE

NORTH VANCOUVER, B.C.

DRAWING TITLE:
MIXED USE BUILDING
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Rositch Hemphill Architects

120 Powell Street, Unit 10
Vancouver, BC Canada
V6A 1G1

T 604.669.6002
F 604.669.1091

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CLIENT:
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PROJECT:
NORTHWOODS MIXED USE

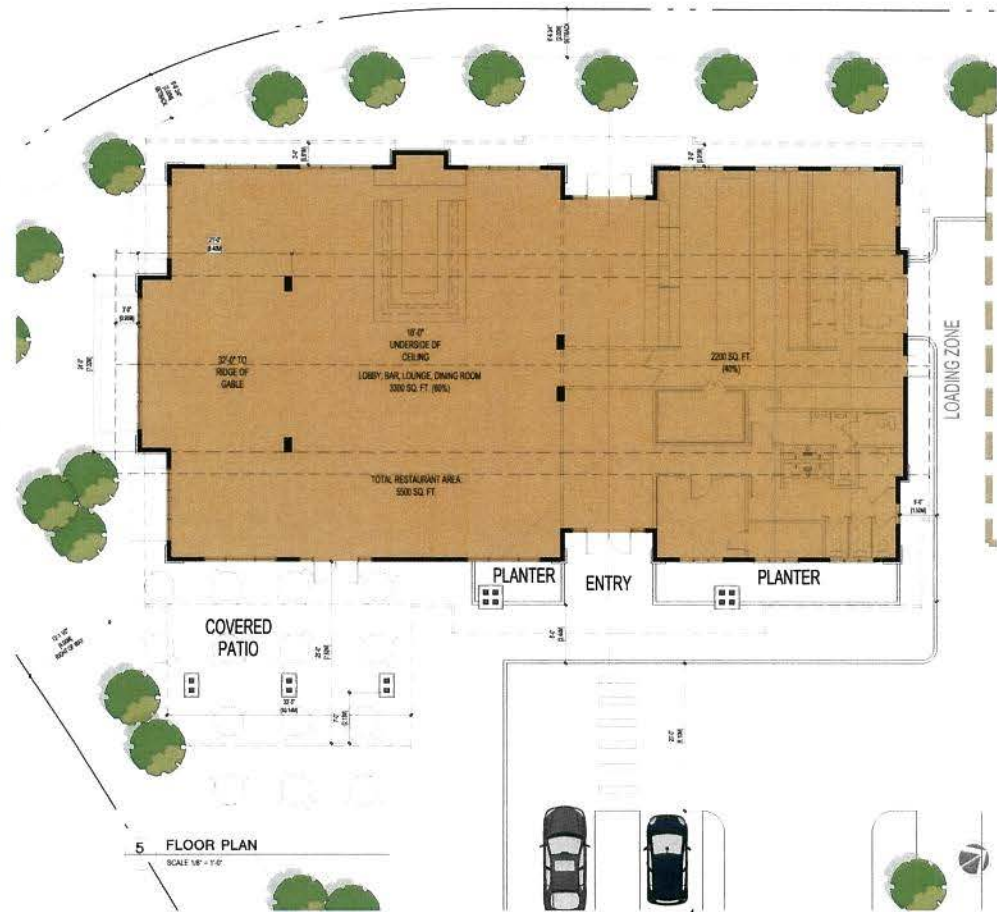
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ELEVATIONS

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DATE: AUG. 2011
DRAWN: AH
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PROJECT NO:
0919

DWG. NO.
A4.0

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120 Powell Street, Unit 10
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t 604.669.6002
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3. DISCUSSION	15 JUNE 2011
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10. DP / REZONING	16 DEC 2011
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PROJECT:
NORTHWOODS MIXED USE

NORTH VANCOUVER, B.C.

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**RESTAURANT
PLAN & ELEVATIONS**

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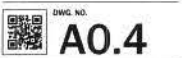
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DATE: SEPT. 2011

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PROJECT NO. 0919



PLOT DATE: 29 OCT 2012

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SHARP & DIAMOND
Landscape Architecture Inc.

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**NORTHWOODS VILLAGE
REVITALIZATION**
NORTH VANCOUVER, BC

GWL REALTY ADVISORS INC.

At the time of the study, the authors had no knowledge of the results of the study. The authors have no financial or personal relationships with other people or organizations that could inappropriately influence or bias the work reported.

[illegible]

LANDSCAPE SITE PLAN

L1.0





January 10, 2013

bcIMC Realty Corporation
and GWL Realty Advisors Inc.
c/o Scott Smythe
McCarthy Tetrault LLP
Suite 1300 – 777 Dunsmuir Street
Vancouver, BC V7Y 1K2

Dear Sirs

Re: Rezoning and Development Permit Application
District of North Vancouver File No. 3060-20/86.11
Modification of Covenant BN324242 (the "Covenant")

We are writing to confirm that, in order to facilitate your rezoning and development permit application, Canexus Corporation ("Canexus", formerly Canexus Chemicals Canada Ltd.) is prepared to modify the Covenant by executing and delivering a modification (the "Modification") of the Covenant in the form attached to this letter, on the terms and conditions set out herein.

We understand that the form of the Modification is acceptable to you and to the District of North Vancouver (the "District") and that the rezoning bylaw (the "Bylaw") to be attached to the Modification as Schedule "A", although currently in draft form, will be substantially in the form attached to this letter as Schedule "B". We also understand that the District requires, as a condition of further consideration of your rezoning and development permit application, that Canexus confirm that it will enter into the Modification (with the form of Bylaw attached as Schedule "A") once the form of Bylaw has been finalized and, in any event, prior to final adoption of the Bylaw.

We confirm our agreement that, after the Bylaw has been finalized and upon request by bcIMC Realty Corporation ("bcIMC") and/or GWL Realty Advisors Inc. ("GWL"), Canexus will execute and deliver the Modification (with the Bylaw attached as Schedule "A") to bcIMC or GWL for registration in the Land Title Office, provided that the Bylaw is substantially in the form attached to this letter and permits not more than 80 dwelling units (including live/work units) on the lands legally described as Parcel Identifier: 024-721-930, Lot A, Block H, District Lot 193, Group 1, New Westminster District, Plan LMP44272 ("Lot A"), at a maximum density of 8 units per acre, in addition to general commercial uses, calculated based on the combined area (exclusive of all intervening roads) of:

1. Lot A;
2. Parcel Identifier: 024-721-930
3. Lot C, Block H, District Lot 193, Group 1, New Westminster District, Plan LMP44272; and

CANEXUS CORPORATION Sun Life West Tower, Suite 2100, 144 - 4th Avenue S.W., Calgary, AB T2P 3N4 T 403 571-7300 F 403 571-7800 www.canexus.ca



4. Parcel Identifier: 014-538-415 Lot A, Except: Part dedicated Road on Plan LMP52867, Block 18, Group 1, District Lot 193 New Westminster District Plan 1587.

Please acknowledge receipt of this letter and enclosures by signing where indicated below and an returning a copy of this letter by email to Diane Pettie (Diane.Pettie@canexus.ca), with a copy to Elizabeth Jawl (ejawl@stikeman.com).

Yours truly,

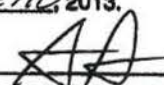
Canexus CORPORATION

By: 

Diane Pettie

Vice President, General Counsel &
Corporate Secretary

cc: District of North Vancouver
Attention: Richard Parr/Doug Allan

<p>Acknowledged and received <u>Jan 17/13</u> 2013.</p> <p></p> <p>SCOTT SMYTHE, on behalf of bcIMC Realty Corporation and GWL Realty Advisors Inc.</p>	<p>Acknowledged and received _____, 2013.</p> <p>DISTRICT OF NORTH VANCOUVER</p> <p>Per: _____</p> <p>Richard Parr</p>
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COUNCIL AGENDA/INFORMATION			
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<input checked="" type="checkbox"/> Regular	Date: <u>March 4</u>	Item # _____	
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<input type="checkbox"/> Info Package	_____	_____	
<input type="checkbox"/> Council Workshop	DM# _____	Date: _____	Mailbox: _____

Dept. Manager	Director	CAO
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The District of North Vancouver REPORT TO COUNCIL

February 19, 2013

File:

Tracking Number: RCA -

AUTHOR: Roger Bassam, Councillor

SUBJECT: Kwantlen Polytechnic University - Letter of support for proposed BA of Applied Geography

RECOMMENDATION

THAT a letter of support be provided to the Kwantlen Polytechnic University for their proposed Bachelor of Arts Major in Applied Geography.

REASON FOR REPORT

To advise Council of the request from Kwantlen Polytechnic University for a letter of support for their proposed Bachelor of Arts Major in Applied Geography.

SUMMARY

Kwantlen University is developing a new degree program in Applied Geography. This degree will concentrate on urban geography with a specific focus on metropolitan Vancouver. Kwantlen Polytechnic curriculum utilizes 'hands on' learning experiences so as to prepare students for current employment opportunities.

The District of North Vancouver has an award winning GIS department that provides some of the region's best municipal data and mapping services. The information the GIS department stores and makes available is instrumental in the day to day management of the municipality.

The District of North Vancouver is facing demographic challenges consistent with other employers, an aging workforce, and forecasts a need for skilled technical employees. Graduates of Kwantlen Polytechnic are likely to seek employment close to where they are schooled, and the District of North Vancouver will benefit from having a larger potential employee pool trained in Applied Geography.

SUBJECT: Kwantlen Polytechnic University - Letter of support for proposed BA of Applied Geography

February 19, 2013

Page 2

The District of North Vancouver's GIS department is supportive of Kwantlen's Applied Geography degree proposal. The attached letter from Kwantlen Polytechnic University further explains their request for a letter of support.

Options:


1. THAT a letter of support be provided to the Kwantlen Polytechnic University for their proposed Bachelor of Arts Major in Applied Geography.
2. Council could choose to not send a letter of support to Kwantlen Polytechnic University.



Roger Bassam
Councillor

Attach

1. Letter from Kwantlen Polytechnic University
2. Degree proposal overview

REVIEWED WITH:	REVIEWED WITH:	REVIEWED WITH:	REVIEWED WITH:
<input type="checkbox"/> Sustainable Community Development	<input type="checkbox"/> Clerk's Office	External Agencies:	Advisory Committees:
<input type="checkbox"/> Development Services	<input type="checkbox"/> Corporate Services	<input type="checkbox"/> Library Board	<input type="checkbox"/> _____
<input type="checkbox"/> Utilities	<input type="checkbox"/> Communications	<input type="checkbox"/> NS Health	<input type="checkbox"/> _____
<input type="checkbox"/> Engineering Operations	<input type="checkbox"/> Finance	<input type="checkbox"/> RCMP	<input type="checkbox"/> _____
<input type="checkbox"/> Parks & Environment	<input type="checkbox"/> Fire Services	<input type="checkbox"/> Recreation Commission	
<input type="checkbox"/> Economic Development	<input type="checkbox"/> Human resources	<input type="checkbox"/> Other: _____	
	<input type="checkbox"/> ITS		
	<input type="checkbox"/> Solicitor		
	<input checked="" type="checkbox"/> GIS 		

Roger Bassam,
DISTRICT OF NORTH VANCOUVER
355 West Queens Road
North Vancouver, BC
V7N 4N5

Dear Roger Bassam,

It is my pleasure to contact you with news of an innovative and exciting new *Bachelor of Arts Major in Applied Geography* degree being developed at Kwantlen Polytechnic University. On behalf of the Department of Geography, I ask that you take some time to review our proposal, consider writing a short letter of endorsement, and, most importantly, explore with us the possibilities for future collaboration that this degree would facilitate.

Since Fall 2008, our department has offered students the option of a *Bachelor of Arts Minor in Geography*. This degree has served well those with a moderate interest in geography, but our most engaged and accomplished students have repeatedly called for us to offer a degree which would allow them to further pursue their interests in the field and complete a Major in Geography at Kwantlen Polytechnic University. Consistent with Kwantlen's *polytechnic* designation and mandate, we have developed the proposed *Bachelor of Arts Major in Applied Geography* degree to prepare students for relevant employment opportunities, advanced academic study, and service to their communities. The degree is characterized by its focus on applied urban geography, emphasis on skills development, and opportunities for hands-on, student service and research in the third and fourth years of study.

The implementation of this degree, and the achievement of these goals, will not be possible without the support of other academic institutions, government agencies, non-governmental organizations, and private sector employers. We are particularly excited by the potential for our applied geography students to be working on service and research projects, formulated by faculty in conjunction with such external partners, in their third and fourth year coursework. Please have a look at the attached summary description of the program, consider writing a letter of support, and contact me if you have any questions or would like to discuss further opportunities for collaboration between your organization and the Department of Geography.

Copies of the more extensive draft Full Program Proposal are available by request. Please address any letters of support to our department chair:

Dr. John Rose,
Chair,
Department of Geography,
Kwantlen Polytechnic University,
12666-72nd Avenue,
Surrey, BC V3W 2M8
john.rose@kwantlen.ca

Regards,

John Martin M.Sc.
Department of Geography,
Kwantlen Polytechnic University

Overview:

The curriculum of the *Bachelor of Arts Major in Applied Geography* is organized around a thematic focus on *urban geography*. This provides a framework for student skills development, applied to service and research in the communities comprising metropolitan Vancouver. The degree is designed to prepare students for entry level employment in relevant fields utilizing geographic/spatial information and skillsets, and/or further, post-graduate, study in geography.

These ends are supported by a degree framework which progressively introduces students to geographic concepts and approaches, skills development in information, gathering, and analysis, and hands-on service and research. Within the 120 credit BA degree framework at Kwantlen Polytechnic University, students are required to take 54 credits (18, 3 credit courses) in Geography.

Year 1: 9 credits in Geography

In the first year of their program, students are introduced to the subject matter and approaches characteristic of geography, through introductory courses in human geography, atmospheric science, and earth science. Students may also take, during their first year of study, a regional geography course (listed for Year 2) which integrates social/environmental knowledge of a particular geographic area of interest. Through their coursework, students begin developing their ability to collect, interpret, and present qualitative, quantitative, and cartographic information.

Required Courses—All Of:

Geography 1101: Human Geography

Geography 1110: Atmospheric Science

Geography 1120: Earth Science

Year 2: 18 credits in Geography

The second year of the program features 9 credits of coursework focused on geographic skills development in qualitative methods, quantitative methods, and cartographic methods (via computerized Geographic Information Systems [GIS]). These courses provide the skills foundation to support student service and research during their third and fourth year coursework. Students also learn more about the *city*, which will serve as the spatial focus of the upper-level coursework, via a course on urban geography. In this second year of their program students maintain and develop their understanding of the natural environmental context of human activity, through a regional geography course and a second-year course in physical geography.

Required Courses—All Of:

Geography 2380: Qualitative Methods

Geography 2400: Introduction to GIS

Geography 2390: Geographic Data Analysis
--

Geography 2400: The City

+ One Of:

Geography 2310: Climatology

Geography 2320: Geomorphology

+ One Of:

Geography 1160: Geography of BC

Geography 2185: Reg. Geog. of East Asia

Geography 2140: Reg. Geog. of Canada

Geography 2190: Reg. Geog. of South Asia

Geography 2170: Reg. Geog. of Europe

Year 3: 18 credits in Geography

Third year, advanced courses in social, economic, and political geography develop students' understanding of how urban space is organized, with particular focus on metropolitan Vancouver. Building on the skills foundation established in year two, these courses provide avenues for students to engage in applied service and research in their communities. Like courses on natural hazards and environmental geography, in the third year, provide comparable opportunities for applied service and research on topics which emphasize the urban interface of humans and the natural environment.

A dedicated course on geographic thought, at the third-year level, provides insight into the intellectual heritage of geography. Students explore the broader theories, and ethical and practical considerations, which have informed their geography coursework to date, and which they will need to consider as they take on a more active role as geographic researchers and engaged citizens.

Required Courses-All Of:

Geography 3120: Space Economies

Geography 3310: Natural Hazards

Geography 3130: Society and Urban Space

Geography 3320: Resources and Env.

Geography 3220: Urb. Politics and Planning

Geography 3260: Geographic Thought

Year 4: 9 credits in Geography

At the fourth-year level, the degree framework features three courses, two of which are explicitly geared towards the advanced development and application of geographic skills. An applied GIS course, building on the introductory GIS skills course at the second-year level and subsequent thematic coursework, has students develop and complete a GIS-based research project. A broader research design course has students craft a program of study—entailing considerations of theory, methods, funding, and dissemination—appropriate for answering a research question which they have formulated. Students will thus be well-positioned to pursue this, or other research interests, in their post-graduation employment and/or academic careers. Finally, a fourth-year special topics course on current geographic issues affords students an opportunity to investigate unique geographic topics (teaching faculty and topic change yearly), crafted to foster student engagement with community partners and contemporary urban developments.

Required Courses—All Of:

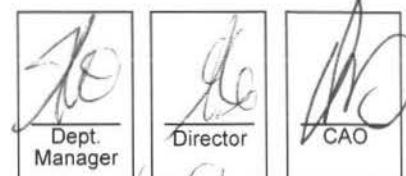
Geography 4100: Research Design in Geog.

Geography 4380: Applications in GIS

Geography 4501: Special Topics in Geog.

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The District of North Vancouver REPORT TO COUNCIL

February 22, 2013
File: 01.0470.35/019.01
Tracking Number: RCA -

AUTHOR: Angela Mawdsley – Project Engineer, Engineering Design Services

SUBJECT: Request for Noise Bylaw Variance – Metro Vancouver Seymour/Capilano Twin Tunnels

RECOMMENDATION:

THAT Council relax the provision of Noise Regulation Bylaw 7188 which regulates construction noise during the night and weekends in order that Metro Vancouver's contractor can perform work during the night time period, including weekends and holidays as defined in the Bylaw, from March 2013 to January 2014.

REASON FOR REPORT:

Metro Vancouver has applied for a variance to the District's Noise Regulation Bylaw in order to complete the construction of the Capilano shafts for the Seymour/Capilano Twin Tunnels in June 2014. Relaxation of the Bylaw will allow the contractor to timely and efficiently complete the works avoiding any further delays. The 24/7 night time work would be in effect starting March 1st, 2013 right through to January 31st, 2014.

BACKGROUND:

Council passed a resolution in July 2010 relaxing the provisions of Bylaw 7188 which regulates construction noise during the night for the Metro Vancouver Seymour/Capilano Twin Tunnels project. This request is an extension of the previous resolution that terminated December 2011. The earlier request from Metro Vancouver and Council's approval are attached (Attachments 3 and 4).

EXISTING POLICY:

Under Section 6(b) of Noise Regulation Bylaw 7188 Council may, by resolution, relax the regulation that prohibits construction noise during the night and on weekends when such activities would not enable the timely completion of critical public utility projects if carried out during the day. Similar requests have been approved by the Council in the past.

SUBJECT: Request for Noise Bylaw Variance – Metro Vancouver Seymour/Capilano Twin Tunnels

February 22, 2013

Page 2

ANALYSIS:

The contractor engaged by Metro Vancouver to complete the remainder of the twin tunnels and the Capilano shafts have completed 100% of the tunnel excavation and as of February 2013, 87% of the overall project has been completed. The proposed schedule calls for pipe installation and backfill from March 2013 - January 2014, Capilano surface pipe installation from January 2014 – March 2014 and cleanup and demobilization of the project from April 2014 - June 2014.

Attached is a letter from Metro Vancouver Engineering dated February 20, 2013 (Attachment 1) requesting a variance to the District's Noise Regulation Bylaw for work items which require construction to take place during the night time. These items include pipe installation and backfilling.

The District's noise bylaw states that continuous noise, when measured at a point of reception within a Quiet Zone (i.e. residential zone), should not exceed 55 dBA during the daytime or 45 dBA during the nighttime. The sound level survey performed in May 2009 on the raise bore drill to be used for the project indicated that the average sound level over a distance of 100 metres should fall to approximately 63 dBA.

The predicted noise level at the nearest house on Capilano Road, which is about 230 metres away from the source, is 50 dBA. The acoustics consultant report states however that noise levels inside a house are generally 30 dBA lower than exterior levels with windows closed and 15 dBA lower with windows open. Therefore, during the hours when residents are sleeping, construction noise would be approximately 20 dBA or 35 dBA inside the house with windows closed or open respectively. These predicted noise levels are below the nighttime Bylaw maximum of 45 dBA.

Daily noise test measurements and monitoring are conducted by Metro Vancouver and their contractor. Noise levels for equipment that will be used to construct the Capilano shafts were determined from published data and the measured attenuations were subtracted from these source levels to predict the resulting noise levels at the residences. Any equipment that exceeds predicted and allowable noise levels will be immediately attenuated or removed from site.

TIMING / APPROVAL PROCESS

In order to complete the Capilano shafts in a timely manner, approval by council is required as early as possible.

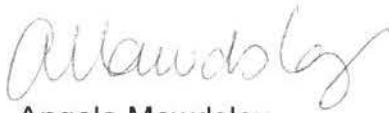
CONCURRENCE:

The community Monitoring and Advisory Committee (CMAC) has reviewed the request by Metro Vancouver and has no objections. A copy of their memo is attached (Attachment 2).

**SUBJECT: Request for Noise Bylaw Variance – Metro Vancouver Seymour/Capilano
Twin Tunnels**

February 22, 2013

Page 3



Angela Mawdsley
Project Engineer, Engineering Design Services

<u>REVIEWED WITH:</u>	<u>REVIEWED WITH:</u>	<u>REVIEWED WITH:</u>	<u>REVIEWED WITH:</u>
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<input type="checkbox"/> Development Services	<input type="checkbox"/> Corporate Services	<input type="checkbox"/> Library Board	<input type="checkbox"/> _____
<input type="checkbox"/> Utilities	<input type="checkbox"/> Communications	<input type="checkbox"/> NS Health	<input type="checkbox"/> _____
<input type="checkbox"/> Engineering Operations	<input type="checkbox"/> Finance	<input type="checkbox"/> RCMP	<input type="checkbox"/> _____
<input type="checkbox"/> Parks & Environment	<input type="checkbox"/> Fire Services	<input type="checkbox"/> Recreation Commission	
<input type="checkbox"/> Economic Development	<input type="checkbox"/> Human resources	<input type="checkbox"/> Other: _____	
	<input type="checkbox"/> ITS		
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	<input type="checkbox"/> GIS		



metro vancouver

4530 Kingsway, Burnaby, BC Canada V3H 4G3 604-432-6200 www.metrovancouver.org

Water and Wastewater Treatment Engineering
Tel: 604-436-6757 Fax: 604-432-6298

February 20, 2013

File: WA-11-02-SCT/50

Mr. Gavin Joyce, General Manager
Engineering, Parks and Facilities Management Division
District of North Vancouver
355 Queens Road
North Vancouver, BC V7L 4K1

Dear Mr. Joyce:

**Re: Seymour-Capilano Twin Tunnels
Capilano Shafts-Noise Bylaw Variance Extension**

We are writing to request a noise bylaw variance extension related to the construction of the Capilano shafts portion of the Seymour-Capilano Twin Tunnels Project.

Background

The original noise bylaw variance for the Capilano shafts construction was issued by the District of North Vancouver on November 8, 2005. Due to extenuating circumstances the project was delayed, and Metro Vancouver was granted a second noise bylaw variance by the District of North Vancouver on July 12, 2010. Our contractor for the Seymour-Capilano Twin Tunnels completion project has completed 100% of the tunnel excavation and the overall project is 87% complete.

Capilano Site Noise Conditions

- The sound over a distance of 100 meters should fall to approximately 63dBA. The predicted noise level at the nearest house on Capilano Road, which is about 230 meters away from the source, is 50dBA. The BKL report states however that noise levels inside a house are generally 30 dBA lower than exterior levels with windows closed and 15 dBA lower than windows open. Therefore, during the hours when residents are sleeping, construction noise would be approximately 20 dBA or 35 dBA inside the house with windows closed or open respectively. These predicted noise levels are below the nighttime Bylaw maximum of 45 dBA.
- Daily noise test measurements and monitoring by Metro Vancouver and Contractor
- Noise levels for equipment that will be used to construct the Capilano shafts were determined from published data and the measured attenuations were subtracted from these source levels to predict the resulting noise levels at the residences. Any equipment that exceeds predicted and allowable noise levels will be immediately attenuated or removed from site.
- Work items which require construction to take place during nighttime include pipe installation and backfill.

Revised Schedule

The current construction schedule identifies the Capilano Shafts construction to be complete in June 2014. The timely and efficient completion of the work necessitates the continuation of work on the Capilano shafts up to 24 hours a day, 7 days per week. The contractor's schedule shows the following activities at the Capilano shaft site and their durations:

Pipe Installation and backfill	March 2013 – January 2014
Capilano surface pipe installation	January 2014 – March 2014
Cleanup & demobilization	April 2014 – June 2014

We are requesting this variance to allow construction work at the Capilano shafts site to continue 24 hours per day, 7 days per week.

Should you require any additional information please contact Boris Obrknezev at 604-452-4567.

Yours truly,



Boris Obrknezev P.Eng
Senior Project Engineer

BO/pg

cc: Mark Ferguson P. Eng., Metro Vancouver, Engineering and Construction
Steve Billington, Metro Vancouver, Engineering and Construction
Marie Griggs, Metro Vancouver, Engineering and Construction
Jeff Spruston P. Eng., SNC Lavlin (Pacific Liaison and Associates)

MEMORANDUM

To: Gavin Joyce – General Manager, Engineering, Parks and Facilities
Management Division, District of North Vancouver
CC: Boris Obrknezev - Senior Project Engineer, Engineering and Construction
Metro Vancouver
From: Raymond Penner – CMAC Facilitator
Subject: Request for Extension to Metro Vancouver Variance to Construction Noise
Bylaw – Capilano Raise Bore Shafts
Date: February 21, 2013

Please accept this memo prepared for and sent on behalf of the District of North Vancouver's Community and Monitoring Advisory Committee. Metro Vancouver's February 20, 2013 memo (file: WA-11-02-SCT/50) sent to General Manager of Engineering, Parks and Facilities Management, Gavin Joyce, District of North Vancouver with regards to Metro Vancouver's request for an extension to their current variance to DNV's Construction Noise Bylaw for Seymour Capilano Twin Tunnels Capilano Shafts (raise bore project) has been reviewed by members of CMAC and no objections were raised regarding this request.

Sincerely



Raymond Penner, CMAC Facilitator

Click here to view the entire meeting: 

ATTACHMENT 3

DISTRICT OF NORTH VANCOUVER REGULAR MEETING OF COUNCIL

Minutes of the Regular Meeting of the Council for the District of North Vancouver held at 7:00 p.m. on Monday, July 12, 2010 in the Council Chamber of the District Hall, 355 West Queens Road, North Vancouver, British Columbia.

PRESENT: Mayor R. Walton
Councillor R. Bassam
Councillor R. Hicks
Councillor M. Little
Councillor D. MacKay-Dunn (7:34 pm)
Councillor L. Muri
Councillor A. Nixon

Staff: Mr. D. Stuart, Chief Administrative Officer
Mr. B. Bydwell, Director of Planning, Permits & Bylaws
Mr. D. Trussler, Fire Chief
Mr. J. Gordon, Manager - Administrative Services
Ms. N. Letchford, Deputy Municipal Clerk
Ms. S. Clift, Manager - Engineering Administration & Technical Services
Mr. B. Dwyer, Manager - Development Services
Ms. J. Paton, Section Manager - Development Planning
Ms. N. Valdes, Council Clerk

1. ADOPTION OF THE AGENDA

1.1. July 12, 2010 Regular Meeting Agenda

MOVED by Councillor MURI
SECONDED by Councillor BASSAM

THAT the agenda for the July 12, 2010 Regular Meeting of Council for the District of North Vancouver be adopted as circulated, including the addition of any items listed in the agenda addendum.

CARRIED

2. PUBLIC INPUT

Mr. J. Surridge, 2500 Block Panorama Drive, North Vancouver regarding Item 8.6: 2568-2570 Panorama Drive.

- Spoke in approval of the staff recommendation, and stressed the following points:
 - *Motivation* - as a neighbour, he feels strongly about the issue and has been very patient;
 - *Present status* – he lives adjacent to a property and expressed concern on the structure that has “seen the end of their days”;
 - *Culpability* - as a neighbour, he does not care who is to blame and the issues behind it but that it affects the enjoyment of his property; and,
- Encouraged Council to adopt staff’s recommendation.

Ms. N. Roberts, 1500 Block Ostler Court, North Vancouver regarding Item 8.6: 2568-2570 Panorama Drive.

- Spoke on behalf of her parents who are residents of the area and in approval of the staff recommendation; and,
- Expressed appreciation to staff in solving this issue.

Mr. Corrie Kost, 2800 Block Colwood Drive, North Vancouver regarding a non-agenda item on, "informing local residents."

- Expressed concern on the following:
- Restoring the publication of the agenda items of council meetings in North Shore News; and,
- Restoring the simple HTML version of the agenda which has links to the reports as opposed to a single large file which many internet users cannot download.

Ms. S. Laszlo, 1100 Block Croft Road regarding a non-agenda item, "Fromme Road traffic calming."

- Presented Council with her response in writing to comments made by Ms. S. Clift, Manager, engineering Services which appear in the North Shore News on July 11, 2010;
 - Fromme Road should not be compared to Capilano Road;
 - Residents should be involved in making a decision - Fromme Elementary School Parent Advisory Committee does not represent the neighbourhood;
 - Traffic patterns are changing - Fromme Road Elementary has ceased to be a public school;
 - Speed limits are effective if drivers comply;
 - Limiting roadways to certain sizes of vehicles has consequences; and,
- Encouraged Council to hire an independent organization to reassess the traffic calming project and to be transparent to the public.

3. PROCLAMATIONS

No items presented.

4. RECOGNITIONS

No items presented.

5. DELEGATIONS

No items presented.

6. ADOPTION OF MINUTES

6.1. June 22, 2010 Public Hearing

MOVED by Councillor MURI
SECONDED by Councillor BASSAM

THAT the report of the June 22, 2010 Public Hearing be received.

CARRIED

6.2. July 5, 2010 Regular Council

MOVED by Councillor MURI

SECONDED by Councillor BASSAM

THAT the minutes of the July 5, 2010 Regular Council meeting be adopted

CARRIED

7. RELEASE OF CLOSED MEETING DECISIONS

No items presented.

8. REPORTS FROM COUNCIL OR STAFF 

MOVED by Councillor MURI

SECONDED by Councillor BASSAM

THAT the following items listed within the Consent Agenda be approved without debate.

***8.1 Industrial Zoning** 

File No. 08.3060.20/004.10

Tracking No. 2010-00288

THAT Bylaws 7831, 7832, 7833, 7834, 7835, 7837, 7838 be now ADOPTED.

***8.10 Solar Hot Water Ready Regulation** 

File No. 08.3010.00/000.001

Tracking No. 2010-00669

THAT the District of North Vancouver Council request that the Province include the District in the new Provincial "Solar Hot Water Ready Regulation."

***8.11 Local Area Service Bylaw 7855 – Lane Paving North of East Braemar Road between Lonsdale Avenue and St. Pauls Avenue** 

File No. 11.5320.40/000.000.

Tracking No. 2010-00633

THAT Bylaw 7855 be now ADOPTED.

ARRIED UNANIMOUSLY

8.2. OCP Amendment, Rezoning & Development Permit – 3600 
Block Mount Seymour Parkway (Pacific Arbour Retirement Communities)

File No. 08.3060.20/006.08

Tracking No. 2010-00346

Each Council member read a prepared statement.

MOVED by Councillor LITTLE

SECONDED by Councillor BASSAM


THAT:

1. Bylaws 7850 and 7851 to be read for a SECOND and THIRD TIME; and,

2. Staff prepare the necessary documents to require six studios be rented at \$950 per

month and four one bedroom suites for \$1250 per month (adjusted annually by the national inflation index) for a period of 15 years following occupancy prior to adoption of those bylaws.

CARRIED

- 8.3. Proposed Highway Closing and Dedication Removal Bylaw** 
7825 – 3600 Block Mount Seymour Parkway
 File No. 08.3060.20/006.084
 Tracking No. 2010-00346

MOVED by Councillor LITTLE
SECONDED by Councillor BASSAM

THAT Highway Closing Bylaw 7825 be now read a SECOND and THIRD TIME.

CARRIED

- 8.4. Seymour's Pub – Liquor Licence Extension of Hours** 
 File No. 09.4320.50/006.000
 Tracking No. 2010-00671

Mr. D. Crowm, 700 Block Lillooet Road, North Vancouver

- Spoke in approval of the recommendation
- He was involved in the building of Seymour Pub;
- Management has an excellent rapport with regulatory boards;
- Informed Council that the Seymour Pub is a good corporate citizen, involved in charity work and employs 60 staff; and,
- Informed Council that the Pub had extended operation hours during the recently concluded Olympics and had no complaints.

MOVED by Councillor MURI
SECONDED by Councillor HICKS

THAT Council pass the following resolution in relation to Seymour's Pub liquor licence application to extend their closing times by one hour on Friday and Saturday nights:

Be it resolved that:

1. The Council of the District of North Vancouver recommends, in relation to Seymour Pub's application for an extension of hours on Friday and Saturday nights from 1:00am to 2:00am, that the Liquor Control and Licensing Branch condition the approval for a trial period of 12 months after which time the application may be reconsidered having regard to performance over this trial period and any neighbourhood impacts.
2. The Council of the District of North Vancouver comments on the prescribed consideration are as follows:
 - (a) The potential for noise if the application is approved.
To address the issue of noise concerns the applicant has agreed to provide additional onsite security in the parking lot at closing time on Friday and Saturday nights in addition to a contact phone number for the use of the adjacent neighbours so that issues arising at closing time (or other periods) can be promptly addressed by the Pub management. Approval of the application is also subject to a twelve month trial period after which the application may be reconsidered.

- (b) The impact on the community if the application is approved.

The provision of additional security in the parking area on Friday and Saturday nights and a contact number will help to minimize the impact of the additional open hours on the surrounding residential neighbourhood. The applicant has also agreed to have staff regularly check the street in front of the pub adjacent to the new multi-family development for beer bottles, broken glass or other refuse that may have originated from pub patrons.

- (c) Whether the amendment may result in the establishment being operated in a manner that is contrary to its primary purpose.

As licensed liquor primary establishments are customarily incidental to a hotel this application is not contrary to the establishment's primary purpose. The additional operating hour on Friday and Saturday night will not change its use as a liquor primary establishment.

3. The Council's comments on the views of residents are as follows:

Staff followed the public notification procedures outlined by the province and set out in District Policy 9-4320-1 which includes:

- *Referral of the proposal to the Inter-River Community Association (local Community Association);*
- *Placement of a sign in a prominent location near the entrance to the Hotel and pub;*
- *Running two advertisements in the local newspaper (The North Shore News); and,*
- *A direct mail out by staff to all property owners and occupiers within a 100 metre of the establishment (in this case 75 notices were mailed).*

While there were some objections raised to the additional operating hours, the 12 month trial period together with the ameliorative measures offered by the applicant will enable the pub to demonstrate the operation before any permanent approval is given.

CARRIED

8.5. Capilano University Film School – Construction Impacts – Report Back 

File No. 08.3060.20/023.010

Tracking No. 2010-00658

MOVED by Councillor MURI

SECONDED by Councillor BASSAM

THAT Council instruct staff not to enforce the Noise Regulation Bylaw against Capilano University from July 12 – December 15, 2010, in connection with the construction occurring at 2055 Purcell Way, provided that Capilano University complies with and fulfils all of the terms and obligations set forth in Schedule A of the Community Planner's report dated June 29, 2010.

CARRIED

8.6. Remedial Action Requirements – 2568 – 2570 Panorama Drive – Unsafe Condition and Declared Nuisance 

File No. 08.3221.14/000.000

Tracking No. 2010-00668

Mr. P. Dunsford, 2500 Block Panorama Drive, North Vancouver

- Spoke in approval of the staff recommendation;
- Spoke as a resident of the area for almost 40 years and lives next door to the subject property;
- Informed Council that the issue affects the neighbourhood as a whole; and,
- Encouraged Council to solve the issue.

The Chief Administrative Office advised Council that a Maintenance and Property Bylaw is being drafted to establish a guideline on issues such as this. This will be presented to Council at a future workshop.

MOVED by Councillor MURI

SECONDED by Councillor MACKAY-DUNN

THAT Council:

1. Declare that Council considers that the buildings (the "Buildings") located on property at 2568-2570 Panorama Drive (the "Property") create an unsafe condition;
2. Declare that the Buildings located on the Property are a nuisance;
3. Require that Rahoul Sharan, the owner of Property (the "Owner"), by August 16, 2010:
 - a. secure the Property by erecting appropriate safety fencing to prevent unauthorized access; and
 - b. demolish and remove the Buildings and restore the Property to a neat and tidy condition to the satisfaction of the Chief Building Official.

(collectively, the "Remedial Action Requirements"); and

4. Direct that if the Owner fails to comply with the Remedial Action Requirements by August 16, 2010, then:
 - a. the District and its contractors or agents may enter the Property and carry out the Remedial Action Requirements;
 - b. the charges incurred by the District in carrying out the Remedial Action Requirements be recovered from the Owner as a debt; and,
 - c. if the amount due to the District under section 4(b) above is unpaid on December 31st in any year, then the amount due be deemed to be property taxes in arrears under section 258 of the Community Charter.

CARRIED

8.7. Appeal of Stop Work Order Issued for the Parking Structure on District Boulevard adjacent to 2324 Caledonia Avenue 

File No. 11.5460.01/003.000.

Tracking No. 2010-00674

Mr. P. Hansen, 2300 Block Caledonia Avenue, North Vancouver

- Spoke as the owner of the property;
- Submitted an appeal to staff;

- Informed Council that the fence line, right of way, paving of the boulevard and some of the structure were already in place when he bought the property;
- Acknowledged that throughout process and his discussion with staff, they have been very helpful and assisted him in the process;
- Acknowledged that he constructed without a permit since he did not install any electrical and plumbing to the structure;
- Informed Council that the neighbours have no complaints; and,
- Advised that he will do everything in accordance to requirement.

MOVED by Councillor LITTLE
SECONDED by Councillor BASSAM

THAT the District maintain the stop work order in place and staff enter into negotiation with the owner, to come up with a compromise agreement in the Fall.

CARRIED

Voting Against: Councillors MURI, BASSAM and NIXON

8.8 Conversion of E-Comm Share 

File No. 14.7150.20/000.000

Tracking No. 2010-00679

The Chief Administrative Officer informed Council that staff has been working with E-Comm and would need Council's approval in principle.

MOVED by Councillor MURI
SECONDED by Councillor HICKS

THAT Council direct the Fire Chief to convert the District's Class "B" Fire Share to a Class "A" Fire Share and proceed with the transition to the E-Comm Wide-Area Radio System subject to successful conclusion of negotiations with E-Comm regarding an agreement.

CARRIED

8.9 Request for Noise Bylaw Variance – Metro Vancouver Seymour/Capilano Twin Tunnels – Capilano Shafts Construction 

File No. 01.0470.35/019.001

Tracking No. 2010-00670

MOVED by Councillor NIXON
SECONDED by Councillor HICKS

THAT Council relax the provision of Noise Regulation Bylaw 7188 which regulates construction noise during the night in order that Metro Vancouver's contractor can perform work during the night time period, including weekends and holidays as defined in the Bylaw, to complete the construction of the Capilano shafts for the Seymour/Capilano Twin Tunnels.

CARRIED

8.12. Public Input and Revised Council Policy – Indian Arm

File No. 08.3010.01/016.000

Tracking No. 2010-00672

This item was withdrawn.

10. MOTIONS AND NOTICES OF MOTION

No items presented.

11. REPORTS 

- Councillor Mike LITTLE reported on the July 2, 2010 Deep Cove Park and Panorama House presentation on parks.
- Councillor Alan NIXON reported on the successful car show held in Edgemont Village. Out of 140 cars entered, Councillor Nixon's car won in the "Best European Car" category.

12. ANY OTHER BUSINESS

No items presented.

13. ADJOURNMENT 

MOVED by Councillor MACKAY-DUNN
SECONDED by Councillor MURI


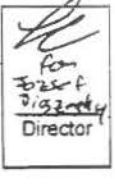

THAT the July 12, 2010 Regular Meeting of Council for the District of North Vancouver be adjourned.

CARRIED
(Time: 9:23 p.m.)

Mayor

Municipal Clerk

COUNCIL AGENDA/INFORMATION				
<input type="checkbox"/> In Camera	Date:		Item #	
<input checked="" type="checkbox"/> Regular	Date:	July 12, 10	Item #	
<input type="checkbox"/> Agenda Addendum	Date:		Item #	
<input type="checkbox"/> Info Package	DM#		Date:	Mailbox:

 Dept. Manager	 Director	 CAO
---	---	--

**The District of North Vancouver
REPORT TO COUNCIL**

June 30, 2010

File: 0470-35/19.001

Tracking Number: RCA - 2010-00670

ORIGINAL	
File No. _____	
Engineering Department	

AUTHOR: Marcel Bernier, P. Eng. Section Manager, Engineering Design Services

SUBJECT: Request for Noise Bylaw Variance – Metro Vancouver Seymour/Capilano Twin Tunnels – Capilano Shafts Construction

RECOMMENDATION:

THAT Council relax the provision of Noise Regulation Bylaw 7188 which regulates construction noise during the night in order that Metro Vancouver's contractor can perform work during the night time period, including weekends and holidays as defined in the Bylaw, to complete the construction of the Capilano shafts for the Seymour/Capilano Twin Tunnels.

REASON FOR REPORT:

In order to maintain the Seymour-Capilano Filtration Project on schedule, it will be necessary to carry out night work. Relaxation of the Bylaw will allow the contractor to proceed with the work at a rate of 24 hours per day, 7 days per week, thereby avoiding further delays in the completion of the overall project. The 24/7 nighttime work would be in effect starting September 1st right through to February 28, 2011. Weekly working hours will be reduced to 24 hours per day, 5 days per week from March 1st through to December 31st 2011 during the final phase of the shaft pipe installation and backfilling.

EXISTING POLICY:

Under Section 6(b) of Bylaw 7188 (Noise Regulation Bylaw) Council may, by resolution, relax the regulation that prohibits construction noise during the night and on weekends when such activities would not enable the timely completion of critical public utilities projects, which are normally carried out during regular working hours on weekdays. Similar requests have been approved by Council in the past.

ANALYSIS:

The contractor engaged by Metro Vancouver to complete the remainder of the twin tunnels and the Capilano shafts resumed tunnel excavation in July 2009. As of June 2010, more than 70% of the work has been completed. The schedule calls for surface works to start in July 2010 and the completion of the remainder of the project by November 2012.

Attached is a letter from Metro Vancouver Engineering dated June 18, 2010 (Attachment 1) requesting a variance to the District's Noise Regulation Bylaw for work items which require construction to take place during the nighttime. These items include the drilling of the treated and raw water pilot holes followed by construction of the two 4m diameter shafts, pipe installation and backfilling.

SUBJECT: Request for Noise Bylaw Variance – Metro Vancouver Seymour/Capilano Twin Tunnels – Capilano Shafts Construction

June 30, 2010

Page 2

Prior to the tunnel work stoppage in 2008, Council passed a resolution in November 2005 relaxing the provisions of Bylaw 7188 which regulates construction noise during the night. Attachments 2 and 3 cover the earlier request from Metro Vancouver and Council's approval. Attachment 4 is the March 2004 report that was prepared by BKL Consultants in Acoustics for Metro Vancouver.

The District's noise bylaw states that continuous noise, when measured at a point of reception within a Quiet Zone (i.e. residential zone), should not exceed 55 dBA during the daytime or 45 dBA during the nighttime. The sound level survey performed last May on the raise bore drill to be used for the project indicated that the average sound level over a distance of 100 metres should fall to approximately 63 dBA.

The predicted noise level at the nearest house on Capilano Road, which is about 230 metres away from the source, is 50 dBA. The BKL report states however that noise levels inside a house are generally 30 dBA lower than exterior levels with windows closed and 15 dBA lower with windows open. Therefore, during the hours when residents are sleeping, construction noise would be approximately 20 dBA or 35 dBA inside the house with windows closed or open respectively. These predicted noise levels are below the nighttime Bylaw maximum of 45 dBA.

Timing/Approval Process:

In order to complete the Capilano shafts in a timely manner, approval by Council is required as early as possible.

Concurrence:

The Community Monitoring and Advisory Committee (CMAC) unanimously supports the request. A copy of their memo is attached (Attachment 5).



Marcel Bernier, P.Eng.
Section Manager, Engineering Design Services

- Att: 1. Letter from Metro Vancouver Engineering dated June 20, 2010
2. Letter from Municipal Clerk dated November 5, 2005
3. Letter from Metro Vancouver Engineering dated September 27, 2005
4. Report by BKL Consultants in Acoustics dated March 5, 2004
5. Memo from CMAC dated June 30, 2010

REVIEWED WITH:	REVIEWED WITH:	REVIEWED WITH:	REVIEWED WITH:
<input type="checkbox"/> Sustainable Community Development	<input type="checkbox"/> Clerk's Office	External Agencies:	Advisory Committees:
<input type="checkbox"/> Development Services	<input type="checkbox"/> Corporate Services	<input type="checkbox"/> Library Board	<input type="checkbox"/> _____
<input type="checkbox"/> Utilities	<input type="checkbox"/> Communications	<input type="checkbox"/> NS Health	<input type="checkbox"/> _____
<input type="checkbox"/> Engineering Operations	<input type="checkbox"/> Finance	<input type="checkbox"/> RCMP	<input type="checkbox"/> _____
<input type="checkbox"/> Parks & Environment	<input type="checkbox"/> Fire Services	<input type="checkbox"/> Recreation Commission	
<input type="checkbox"/> Economic Development	<input type="checkbox"/> Human resources	<input type="checkbox"/> Other: _____	
	<input type="checkbox"/> ITS		
	<input type="checkbox"/> Solicitor		
	<input type="checkbox"/> GIS		



metro vancouver

Greater Vancouver Regional District • Greater Vancouver Water District

Greater Vancouver Sewerage and Drainage District • Metro Vancouver Housing Corporation

4330 Kingsway, Burnaby, BC, Canada V5H 4G8 604-432-6200 www.metrovancouver.org

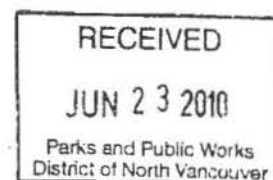
ATTACHMENT 1

Water and Wastewater Treatment Engineering
Tel: 604-436-6757 Fax: 604-451-6180

June 18, 2010

File: WA-11-02-SCT/50

Mr. Jozsef Dioszeghy, P.Eng., Director of Environment, Parks and Engineering
District of North Vancouver
355 Queens Road
North Vancouver, BC V7L 4K1



Dear Mr. Dioszeghy:

**Re: Seymour Capilano Twin Tunnels
Capilano Shafts – Noise Bylaw Variance**

We are writing to request an approval for the noise bylaw variance related to the construction of the Capilano shafts. The noise bylaw variance for the Capilano shafts construction was issued by the District of North Vancouver on November 8, 2005, as per the attached letter.

At the time of our application the anticipated start work was April 2007 and anticipated completion October 2008.

As you are aware, our contractor for the Seymour Capilano Twin Tunnel completion project, resumed tunnel excavation in July 2009 and as of today more than 86% of tunnel excavation has been completed. The contractor's construction schedule shows the following activities at the Capilano end and their duration:


- | | |
|-----------------------------------|-------------------------------|
| a) Surface works | July 2010 – September 2010 |
| b) Drill TWT Pilot Hole | September 2010 – October 2010 |
| c) Drill RWT Pilot Hole | October 2010 – November 2010 |
| d) RWT Shaft Construction | November 2010 – February 2011 |
| e) TWT Shaft Construction | November 2010 – February 2011 |
| f) Pipe Installation and Backfill | March 2011 – December 2011 |
| g) Surface Piping & Cleanup | December 2011 – May 2012 |

Items (b), (c), (d) and (e) noted above will be constructed 24 hrs per day, 7 days a week. Item (f) will be constructed 24 hours per day, 5 days a week.

Furthermore, we requested the sound level measurements for the proposed raise drill and on May 27, 2010 the contractor completed a sound level survey on the Robbins Raise Drill Model 81R at the Drummond Main Hoist Shaft Project. The actual recorded noise level is shown in the attached letter from Frontier-Kemper Constructors and closely match the predicted noise level in our construction noise assessment completed by BKL in March 2004 (attached).

Should you require any additional information, please contact Goran Oljaca at (604) 451-6134.

Yours truly,



Goran Oljaca, P.Eng.
Senior Engineer

GO/mc

Attachment:

81R Raise Drill Sound Level Survey by Frontier-Kemper May 27, 2010
Letter from District of North Vancouver dated November 8, 2005
Letter from GVRD (Metro Vancouver) to DNV dated September 27, 2005
Noise Assessment by BKL dated March 5, 2004

cc: Raymond Penner) CMAC
Vanessa Langan) Metro Vancouver, E&C
Jeff Spruston) PLA



Corporate Safety Department

1965 Allen Lane

Evansville, Indiana 47710

81R Raise Drill Sound Level Survey

On May 27, 2010 a sound level survey was performed on the Robbins Raise Drill Model 81R (FKC: 39 0003) at the Drummond Main Hoist Shaft project. The drill was back-reaming the hole at the time of sampling. Drilling was constant, with no unusual conditions or practices being observed as part of the drilling process.

CONDITIONS:

Location: N 33 Degrees 31.163'
W 087 Degrees 18.235'
Elevation 410'

Weather: Temperature 84 Degrees F
Humidity 57%
Wind 8 MPH from North
Barometric Pressure 29.95

Fugitive Sound Generation

- Pilot hole drilling performed approximately 350 meters SW of 81R
- Truck Haulage and loading performed 100 meters North of 81R. Sampling was suspended during truck loading activities. Sampling limited to 30 meters.
- Ventilation Blowers located 10 meters North of 81R (91dBA)

SAMPLING PROTOCOLS:

Sound level measurements were performed at 10 meter intervals ranging from 0 – 100 meters. Samples were taken on an X/Y axis format, with additional sampling points placed at 45 degree angles adjacent to the axis, at intervals of 50 and 100 meters. Sampling was performed with a hand-held sound level instrument and a noise dosimeter. All measurements were taken at 6.0 feet (1.8 meters) from ground level. A total of 42 samples were taken during this survey. Please see figure 1.

RESULTS:

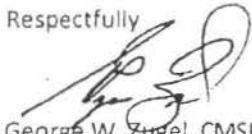
- Average sound level= **65.29 dBA**
- Two significant point sources of sound generation were indentified:
Ventilation Blower = **91.0 dBA** (at source)
Hydraulic Power Unit= **88.9dBA** (at source)

OBSERVATIONS AND RECOMMENDATIONS:

- The ventilation blower system will not be required at SEYCAP. As a result the average sound level should fall to approximately 63 dBA.
- Due to cooling concerns, the door of the hydraulic power unit was open during these sampling activities. In the unlikely event that the door must remain open during operations at SEYCAP, a sound attenuating panel could easily be placed in front of the noise source. Estimated average sound level with both sources controlled= 60-61 dBA.

Cooperation from site personnel during this effort was excellent. Should you have any questions or comments regarding this survey, please do not hesitate to contact me.

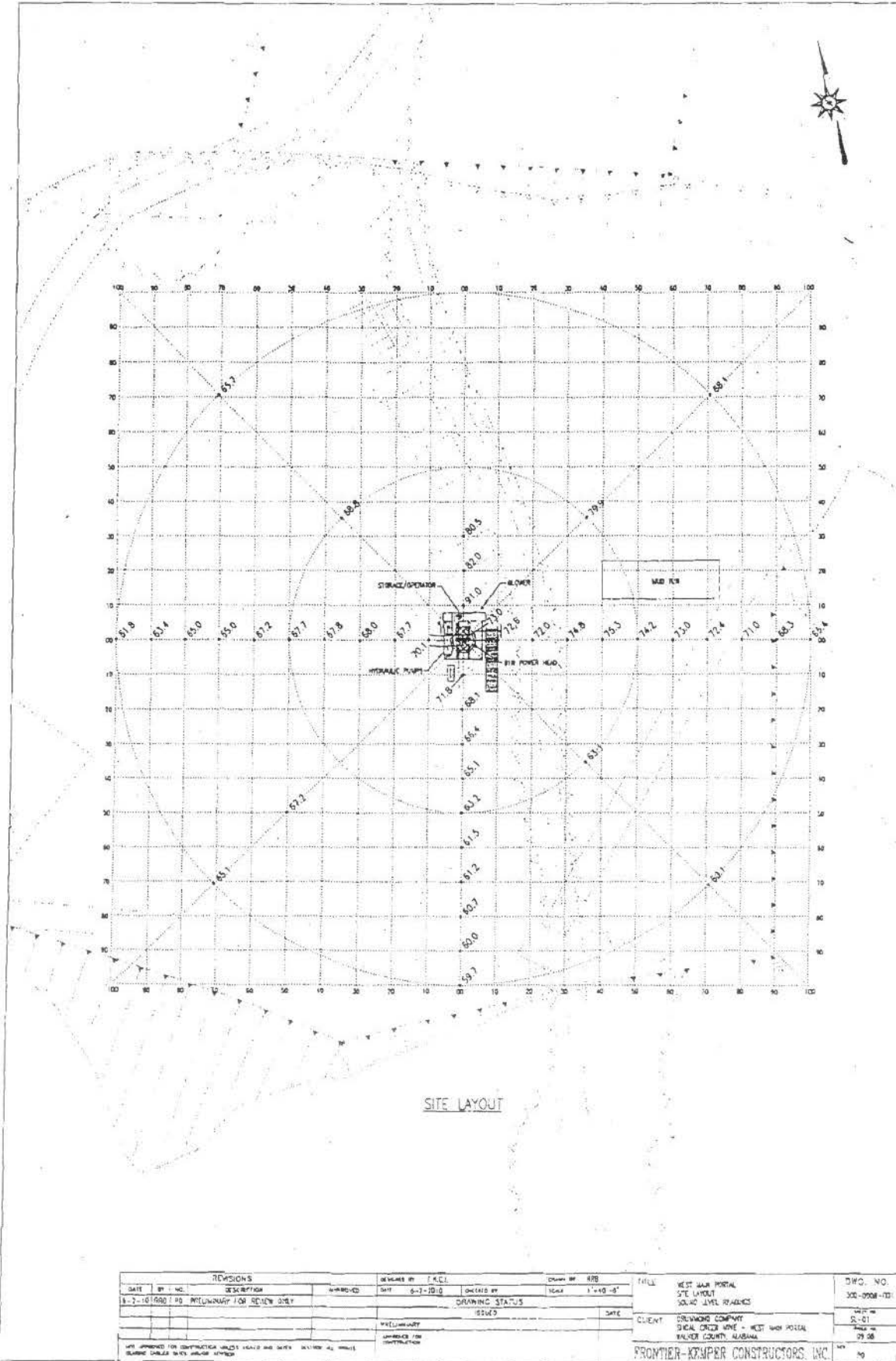
Respectfully



George W. Zugel, CMSP
Corporate Safety Director
Frontier-Kemper Constructors Inc.

ATTACHMENTS:

- Figure 1: Sampling plot on project plan view
Figure 2: USEPA Acceptable Sound Level by location per dose
Figure 3: USEPA Average Sound Levels measured at various locations
Figure 4: Certificate of Calibration-Source
Figure 5: Instrumentation Used in Survey



Ads by Google Sound Measurement Noise Measurement Noise Sound Effects Noise Annoyance Noise Test

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Acceptable Noise - dBA - Levels

Acceptable noise - dBA - levels at some locations

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What every engineer should know before buying FEA software

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The main advantages with dBA - the A weighting in noise measurements - are

- adapted to the human ear response to sound
- possible to measure with low cost instruments

Acceptable Equivalent Sound Level - L_{eq} - at some common locations are indicated in the table below:

Location	Effects	L_{eq} (dBA)	Time (hours)	Time of day
Bedroom	sleep disturbance, annoyance	> 30	8	night
Living area	annoyance, speech interference	> 50	16	day
Outdoor living area	moderate annoyance	> 50	16	day
Outdoor living area	serious annoyance	> 55	16	day
Outdoor living area	sleep disturbance, with open windows	> 45	8	night
School classroom	speech interference, communication disturbance	> 35	8	day
Hospitals patient rooms	sleep disturbance, communication interference	> 30-35	8	day and night

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Noise Studies
FHA/HUD Compliant by Professional Engineers
NationalConsulting.com

Ads by Google

Related Topics

- Acoustics Room acoustics, acoustic properties - decibel A, B and C - Noise Rating (NR) curves, sound transmission, sound pressure, sound intensity, attenuation and more...

Related Documents

- Sound Power Sound Power Level and the Sound Power from some common sources as fans, jet engines, cars, humans and more...
- Outdoor Ambient Sound Levels Outdoor ambient sound level (dBA) in rural and urban business and industrial environments with or without limited traffic
- Sound Pressure - Recommended Maximum Levels in Rooms Maximum recommended sound pressure levels in rooms with activities as kindergartens, auditoriums, libraries, cinemas and more...
- Online Noise Criterion - NC - Calculator An online Noise Criterion - NC - Calculator

Figure 2

Ads by Google Sound Measurement Noise Sound Effects Sound Meter Sound Barriers Sound Reduction



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L_{dn} - Day and Night Sound Level

The EPA has defined an A-weighted sound level day and night equivalent for a 24 hour period

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Source: NCEM/NECA/ENR

Ads by Google

The Environmental Protection Agency (EPA) has adopted a system of four "sound descriptors"

- A-weighted sound level
- Sound Exposure Level - L_E
- Equivalent Sound Level - L_{eq}
- Day-Night Sound Level - L_{dn}

to summarize how sound is heard and measured, and to determine the impact of noise on health and welfare.

Day-Night Sound Level - L_{dn}

is the A-weighted equivalent sound level for a 24 hour period with an additional 10 dB imposed on the equivalent sound levels for night time hours of 10 p.m. to 7 a.m.

Day-Night Sound Level can be expressed as

$$L_{dn} = 10 \log \left(\frac{1}{24} \left(15 (10^{L_d/10}) + 9 (10^{L_n/10}) \right) \right) \quad (1)$$

where

L_{dn} = day-night sound level (dB)

L_d = daytime equivalent sound level (dB)

L_n = nighttime equivalent sound level (dB)

Examples of outdoor Day-Night Average Sound levels measured at various locations:

Location	L_{dn} (dBA)
Apartment next to freeway	87
3/4 mile from runway at major airport	86
Downtown with construction activity	79
Old urban residential area	69
Wooded residential	62
Agricultural cropland	44
Rural residential	39
Wilderness ambient	35

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FHA/HUD Compliant by
Professional Engineers
National Contractors Association

Noise Surveys
OSHA Sound Level Monitoring
Personal Dosimetry Testing
www.eit.com

Sound Level Meters - MCM
Analog & Digital Sound Level
Meters at Great Prices. From only
\$29.99!

www.MCMElectronics.com/meters

Ads by Google

Related Topics

- **Acoustics** Room acoustics, acoustic properties, decibel A, B and C - Noise Rating (NR) curves, sound transmission, sound pressure, sound intensity, attenuation and more...

Related Documents

Figure 3



Certificate of Calibration

Certificate Number: 242056QIJ030105

Model: QC-10

Date issued: 12-March-2010

S/N: QIJ030105

Quest Technologies, Inc. certifies that the above listed product meets or exceeds the requirements of the following standard(s):

ANSI S1.40-1984 - Standard For Sound Calibrators

IEC 942-1988 For Sound Calibrators

Test Conditions: Temp: 18-25°C Humidity: 20-80% R.H. Barometer: 950-1050 mBar

Test Procedure: S056-981

Subassemblies: N/A

Reference Standard(s):

Device	Cal Due Date	Uncertainty - Estimated at 95% Confidence Level (k=2)
Fluke 45	3-March-2011	+/- 1.4% AC Voltage, +/-0.1% DC Voltage
B&K Ensemble	11-May-2010	+/- 2.2% Acoustic (0.19dB)
Fluke 45	3-March-2011	+/- 1.4% AC Voltage, +/-0.1% DC Voltage

Calibrated By:


Cathy Vieth Assembler

In order to maintain best instrument performance over time and in the event of inspection, audit or litigation, we recommend the instrument be recalibrated annually. Any number of factors may cause the calibration item to drift out of calibration before the recommended interval has expired.

All equipment used in this test is traceable to NIST, and applies only to the unit identified above.
This report must not be reproduced except in its entirety without the written approval of Quest Technologies, Inc.

Figure 4

Sound Level Meter:

Quest Model 2400
Serial Number JN&110007
Pre-Calibration 114.0 dBA
Post Calibration 114.0dBA

Dosimeter:

Quest Noise Pro DLX
Serial Number NXH1000057
Pre- Calibration 113.9 dBA
Post Calibration 113.8 dBA

Figure 5

ATTACHMENT 2

District of North Vancouver

355 West Quebec Road
North Vancouver
British Columbia
V7N 4N5



Agnes S. H.
Municipal Clerk

Telephone: 604.969.1111
Fax: 604.969.1112
Web: www.dnv.ca

November 8, 2005
File No.: 01.0470.35/001.000

Mr. Marvin Hunt, Chair
GVRD
4330 Kingsway
Burnaby, B.C. V5H 4G8

Dear Mr. Hunt:

Subject: Request for Noise Bylaw Variance, GVRD-Seymour Capilano Twin Tunnels, Capilano Shafts Construction

This is to advise that on Monday, November 8, 2005, the Council for the District of North Vancouver considered the October 28, 2005, report of the Municipal Engineer regarding the *Request for Noise Bylaw Variance, GVRD-Seymour Capilano Twin Tunnels, Capilano Shafts Construction*. Council subsequently passed the following resolution:

"THAT Council relax the provision of Bylaw 7188 (Noise Regulation Bylaw) which regulates construction noise during the night, so that the Greater Vancouver Regional District (GVRD) contractor may perform work during the night time period and Sundays and holidays, as defined in the Bylaw, to complete the construction of the Capilano shafts for the Seymour Capilano Twin Tunnels."

A copy of the relevant report is attached for your information.

Yours truly,

A handwritten signature in cursive script that reads "Agnes Hilsen".

Agnes Hilsen
Municipal Clerk

ASH/nfy

Xc. Mr. Peter Thompson - Community Monitoring Advisory Committee
Gavin Joyce, Municipal Engineer
Tom Morrison - GVRD

ATTACHMENT 3



Building A Sustainable Region
Greater Vancouver Regional District

4330 Kingsway, Burnaby, BC, Canada V5H 4G8

Greater Vancouver Regional District - Greater Vancouver Water District

Greater Vancouver Sewerage and Drainage District - Greater Vancouver Housing Corporation

Engineering & Construction

Water Treatment Engineering

Fax (604) 432-6420

TM

September 27, 2005

File: WA-11-02-SCT/50

District of North Vancouver
355 West Queens Road,
North Vancouver, BC
V7N 4N5

Attention: **Mr. Gavin Joyce, P.Eng.**
Municipal Engineer

Dear Sirs:

Re: Request for noise bylaw variance - Seymour Capilano Twin Tunnels, Capilano Shafts Construction

The Seymour-Capilano Filtration Project comprises the Filtration Plant in the LSCR, the Capilano Pumping Station and the Breakhead Tank/Energy Recovery Facility nearby to Capilano Lake. These two areas will be connected by the Twin Tunnels currently being constructed.

Approximately between April 2007 and October 2008 work related to the Twin Tunnels will be undertaken on the western edge of the Pump Station site south of Cleveland Dam. The proposed work is construction of two Capilano shafts by a raise boring method and lowering of the steel shaft liner sections (3m diameter) by means of a crane. This work involves equipment similar to equipment used to complete the geotechnical drilling for the project. The raise boring method consists of a large electric drive rotary drill rig that drills pilot holes (approx 200 mm diameter) from the surface down 270 metres to the two tunnels. A 4 m diameter cutter head is then mounted on the rotary shaft and then the vertical shaft is bored from the bottom, dropping the cuttings into the tunnel as it rises to the surface. Other related construction work such as welding and pipe bolt up are also expected at this location. No night work or night deliveries will occur in the Park above the Dam. The likely noise impacts caused by this work (up to 35 dBA inside the residences on the west side of Capilano Road) were predicted in a March 2004 report by our acoustics consultant, BKL Consultants, which is attached hereto. This report concludes that the construction noise caused by this work will not exceed the night-time noise levels (45 dBA) prescribed in the District of North Vancouver Noise Bylaw 7188 and will not cause a nuisance, either by day or by night. As required of our contract with Bilfinger Berger, this letter is to request a variance to this bylaw to allow work to go on at this site 24 hours a day, 7 days a week. This will result in an overall project duration shorter than would be the case if construction noise is limited to the working hours prescribed in the bylaw.

The details of this proposed variance have been discussed with your Community Monitoring and Advisory Committee and memo dated September 26, 2005 is attached.

We recognize that the anticipated start date of this work is still some time away in the future. We have, however, been asked by the tunnels contractor, Bilfinger Berger, to apply for this variance now so that they can obtain tenders from prospective sub-contractors based on 24/7 operations.

We look forward to your response on this matter.

Yours truly,



Tom Morrison, P.Eng.
Senior Project Engineer

TM/mc

cc. D. Neden) GVRD, Engineering and Construction
G. Oljaca) GVRD, Engineering and Construction
A. Saltis) Pacific Liaison & Associates Inc

Attachment:

Construction Noise Assessment for Water Filtration Shafits at Capilano Reservoir, BKL
Consultants March 5, 2004
CMAC memo of September 26, 2005

ATTACHMENT 4

Construction Noise Assessment for Water Filtration Shafts at Capilano Reservoir

Prepared for:

Greater Vancouver Regional District

File:0337-03C II

March 5, 2004



BKL CONSULTANTS LTD.
#308 - 1200 Lynn Valley Road, North Vancouver, B.C. V7J 2A2

e-mail: sound@bkla.com website: www.bkla.com
Phone: (604) 988-2508 Fax: (604) 988-7457

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EXECUTIVE SUMMARY

Construction of the raw water and treated water shafts at the new Capilano pumping station will require approximately 18 months beginning in the second half of 2006 and in order to complete this work on schedule, it will be necessary for the contractor to work up to 24 hours per day and seven days per week. Although the District of North Vancouver does not normally permit construction during nighttime hours or on Sundays and holidays, District Council may waive this restriction in cases where such activities would not enable the timely completion of critical public utilities projects if carried out during the daytime. BKL Consultants Ltd. has been retained by the Greater Vancouver Regional District (GVRD) to assess what, if any, noise impact would occur at the nearest residences, if work at the shaft portals is permitted to continue throughout the night.

In order to predict the noise levels that will result from the construction work described above, BKL carried out noise measurements at the nearest residences while construction equipment was working on site, preparing it for the new pump station. Noise levels were measured simultaneously at the work site and at the nearest residences in order to determine the amount of sound attenuation from source to receiver locations. Noise levels for equipment that will be used to construct the Capilano shafts were determined from published data and the measured attenuations were subtracted from these source levels to predict the resulting noise levels at the residences.

The District of North Vancouver and the West Vancouver noise bylaws state that continuous noise when measured at a point of reception within a Quiet Zone (i.e. residential zone) should not exceed 55 dBA during the daytime or 45 dBA during the nighttime.

The North Vancouver residence most likely to be affected by construction noise is at 4951 Capilano Road, which has its back yard overlooking Capilano Canyon and is approximately 230m from the construction site. The predicted noise level at this location, due to construction activity, is 50 dBA. Based on 24-hour noise monitoring conducted during a period with no construction activity, road traffic continually generates levels of 50 dBA and higher during daytime and evening so any noise impact during these periods would be minor. During the quietest hours of the night, between 1:00 am and 5:30 am, ambient noise levels were typically between 35 dBA and 45 dBA with higher levels occurring occasionally.

Noise levels inside a house are generally 30 dBA lower than exterior levels with windows closed and 15 dBA lower with windows open. Therefore, during the hours when residents are likely to be sleeping, construction noise would be approximately 20 dBA or 35 dBA inside the house, with

windows closed or open respectively. With windows closed, construction noise would likely be inaudible. With windows open, construction noise might be slightly audible but the resultant interior level of 35 dBA would not be unusually high for a residence and would be considered by CMHC and other authorities to be an acceptable environment for sleeping.

The nearest West Vancouver residence is on the east side of Glenmore Drive, approximately 750m from the construction site. Based on measurements and observations by BKL while construction equipment was working on the pumping station site, noise levels during construction of the water shafts is expected to be less than 37 dBA and should be inaudible during both day and night.

1. Introduction

The Seymour Filtration Plant will treat water from both the Seymour and Capilano reservoirs. Untreated water from Capilano will be pumped through a tunnel to the filtration plant and treated water will return to Capilano through a second parallel tunnel by gravity flow. The western ends of these tunnels will emerge from the ground at portals located just west of a new pumping station currently under construction just below Cleveland Dam (see Figure 1). Once the tunnels from Seymour have been completed, vertical shafts will be raised up to the surface at Capilano and this will require some construction activity at the surface, over a period of approximately 18 months. In order to complete this work within the scheduled time frame, it would be necessary for the contractor to work up to 24 hours per day and 7 days per week.

The District of North Vancouver does not normally permit construction during nighttime hours or on Sundays and holidays. However, District Council may waive this restriction in cases where such activities would not enable the timely completion of critical public utilities projects if carried out during the daytime. BKL Consultants Ltd. has been retained by the Greater Vancouver Regional District (GVRD) to assess what, if any, noise impact would occur at the nearest residences if work at the Capilano tunnel portals is permitted to continue throughout the night. Noise levels within Capilano River Regional Park were not assessed since the park is not used by the public during nighttime hours.

2. Project Description

When the tunnels have reached Capilano, 270m below the GVRD Pumping Station, two pilot holes (about 200mm diameter) will be drilled from the surface to intersect the tunnels. Two shafts, 4m in diameter, will then be reamed from the tunnels upwards to the surface. A raiseboring machine will be used to create the 4m diameter shafts. A drill shaft will be lowered down through the pilot hole and attached to the reaming head at the base of the shaft. The shaft will then be bored in an upward direction with waste rock transported back through the tunnels to the Seymour portal. The raiseboring machine will be electric powered, taking power from a transformer at the site, and will have hydraulic components so it will be quieter than most diesel-powered construction equipment. This portion of the work is expected to take about 4 months.

Once the shafts have been reamed out to 4m diameter, steel liners will be installed in the tunnels and shafts. The liners will be made up of approximately 3m long sections of pipe that will be lowered down into the shafts using a crane. A compressor and other powered equipment will also be present

on site. The liner sections will be delivered to the site by truck, during daytime hours but the project schedule requires that installation of the liners continue throughout the night. Installation of liners and associated setup is expected to take about 14 months for a total duration of approximately 18 months at this site. All of this work will commence after construction of the new pump station has been completed.

3. Noise Level Predictions

3.1 Methodology

In order to predict noise levels that will result from the construction work described above, BKL carried out noise measurements at the closest residences while construction equipment was working on site, preparing it for the new pump station. Noise levels were measured simultaneously at the work site and at the nearest residences in order to determine the amount of sound attenuation from the source to receiver locations. Since outdoor sound attenuation is frequency dependent, all measurements were made in octave bands (i.e. in eight different frequency bands). These measured attenuations were then subtracted from the octave band source levels that are expected to result from the construction equipment that will be used to bore and line the water shafts. This established the octave band noise levels that will occur at the receiver locations. Finally, the octave band levels were combined to give overall A-weighted noise levels¹ for each receiver location.

3.2 Equipment Source Levels

Installation of the shaft liner is expected to create higher noise levels than reaming of the shafts and lining of the shaft will take longer than the reaming operation. Therefore, in order to represent the worst case condition, the source levels assumed for noise calculations were for the equipment to be used during lining of the shafts. The predominant noise sources will be a diesel-powered crane and a compressor. Table 1 indicates the assumed source levels for this equipment. Noise levels for a given type of equipment can vary over a wide range depending upon make, model, age and condition. The overall A-weighted levels assumed are somewhat higher than could be achieved with new

¹ The A-weighted noise level, in decibels, includes all of the sound energy throughout the entire audible frequency range. However, since human hearing is less sensitive at low frequencies and at very high frequencies, "A-weighting" is applied to measured sound levels to de-emphasize these frequencies, thereby simulating the frequency response of human hearing. Virtually all environmental noise studies employ A-weighted sound levels because they have been found to correlated well with peoples' subjective response to noise. For noise prediction and noise control studies, the audible frequency range is usually subdivided into octave bands and calculations are performed separately in each band before eventually combining all octave bands into a single A-weighted noise level.

equipment. They are representative of well maintained equipment manufactured within the past ten years.

Equipment	Octave Band Centre Frequency (Hz)							
	63	125	250	500	1000	2000	4000	dBA
30-Ton Crane	82	83	79	79	79	76	71	83
700 cfm Compressor	81	82	78	78	78	75	70	82
Both Sources Combined	85	86	82	82	82	79	74	86

Table 1: Source Levels Assumed for Construction Equipment

3.3 Predicted Construction Noise Levels at Nearest Residences

Measurements of noise propagation from the construction site to the back yard of the residence at 4951 Capilano Road were conducted by BKL. Measurements were also made to the east side of Glenmore Drive in West Vancouver, which borders on Capilano River Regional Park (see Figure 1a). Although the residence immediately north of 4951 Capilano Road is slightly closer to the construction site, its back yard is more exposed to traffic noise so 4951 was judged to be the residence most likely to be affected by construction noise (see Figure 1b). Measurements at the North Vancouver and West Vancouver sites were made on separate occasions but in both cases, the weather was dry and there was no perceptible wind. A hydraulic rock drill and an excavator were operating on site when measurements were made at 4951 Capilano Road. When measurements were made at Glenmore Drive in West Vancouver, there was a hydraulic rock drill, a pneumatic rock drill, a compressor and two excavators working on site.

The measurement location at 4951 Capilano Road is approximately 230m from the construction site and some acoustic shielding is provided by the edge of the canyon and a fence along the rear of the property. The noise level measured by BKL was 51 dBA and after adjusting the source levels to be representative of the equipment that will actually be used during shaft construction, the predicted noise level for this location was 50 dBA. There were also several impact noises observed due to the excavator bucket hitting bedrock while scraping off overburden. The loudest of these impact noises was 57 dBA (using the "slow" response setting on the sound level meter as specified by the District of North Vancouver Noise Bylaw requirements). Although excavators will not be used during shaft construction, there may occasionally be impact noise generated during handling of the steel shaft liners.

At the Glenmore Drive location, the background noise level in the absence of local traffic was typically 37 to 39 dBA but it frequently increased above 60 dBA due to local traffic and aircraft overflights. Noise levels were monitored at this location for 30 minutes, with construction equipment operating on site throughout this period. At no time throughout this period, was any of the construction activity audible at the Glenmore Drive site, which indicates that the construction noise was below the lowest background level of 37 dBA. With the more limited construction equipment that will be involved in the future shaft construction, even less noise will be propagated to this nearest West Vancouver location. This result is not surprising considering that the source to receiver distance is approximately 750m and the intervening topographic may be providing some acoustic shielding.

As noted above, the predicted noise levels at the nearest residences in North Vancouver and West Vancouver are 50 dBA and < 37 dBA respectively. To help put these noise levels into perspective, Table 2 below, provides examples of typical sound levels resulting from some common sources.

Common Noise Source or Environment	Typical Noise Level (dBA)
inside quiet residence with no activity, late at night	30
inside typical residence with no activity	35
inside public library / in kitchen with refrigerator on / exterior background noise in quiet residential area	40
next to desk-top computer or photocopier at idle	45
moderately noisy office / window air conditioner	50
residential washing machine operating	55

Table 2: Sound Levels Associated with Some Common Sources

4.0 Assessment of Construction Noise Impact

The District of North Vancouver and the West Vancouver noise bylaws state that continuous noise when measured at a point of reception within a Quiet Zone (i.e. residential zone) should not exceed 55 dBA during the daytime or 45 dBA during the nighttime.

In order to quantify the level of existing ambient noise, baseline noise monitoring was carried out over a 24-hour period in the back yard of 4951 Capilano Road. The monitoring was conducted on December 29th and 30th, 2003 during a period of dry weather. A graph of ambient noise levels

throughout the monitoring period is presented in Figure 2. The levels graphed are 1-second equivalent sound levels, which is equivalent to "slow" response on a sound level meter.

Ambient noise levels at this location were established primarily by traffic on Capilano Road. During the quietest hours of the night, between 1:00 am and 5:30 am, ambient noise levels were typically between 35 dBA and 45 dBA with higher levels occurring occasionally. Although the predicted construction noise of 50 dBA is significantly higher than these late night levels, noise levels inside a house are generally 30 dBA lower than exterior levels when windows are closed and 15 dBA lower when windows are open. Therefore, during the hours when residents are likely to be sleeping, construction noise would be approximately 20 dBA inside the house, with windows closed, or 35 dBA with windows open. With windows closed, construction noise would likely be inaudible. With windows open, construction noise might be audible but the resultant interior level of 35 dBA would still be considered by most authorities to be an acceptable noise level for sleeping.²

As illustrated by the noise monitoring results shown in Figure 2, traffic on Capilano Road continually generates noise levels of 50 dBA and higher from early morning through to midnight. During these hours, when residents are most likely to be outdoors, construction noise may be audible on many occasions but it will not exceed the noise levels that are currently being generated by road traffic.

In West Vancouver, construction noise received at the nearest residences is expected to be less than 37 dBA and will likely be inaudible during both day and night.

² Beranek & Ver (1992) in Noise and Vibration Control Engineering recommend 38 to 48 dBA for bedrooms. Egan (1988) in Architectural Acoustics recommends 34 to 42 dBA for bedrooms. Rettinger (1973) in Acoustic Design and Noise Control recommends 34 and 38 dBA for rural and suburban homes respectively. Canada Mortgage and Housing Corporation (1986) in Road and Rail Noise: Effects on Housing, recommends maximum nighttime levels of 35 dBA for bedrooms.

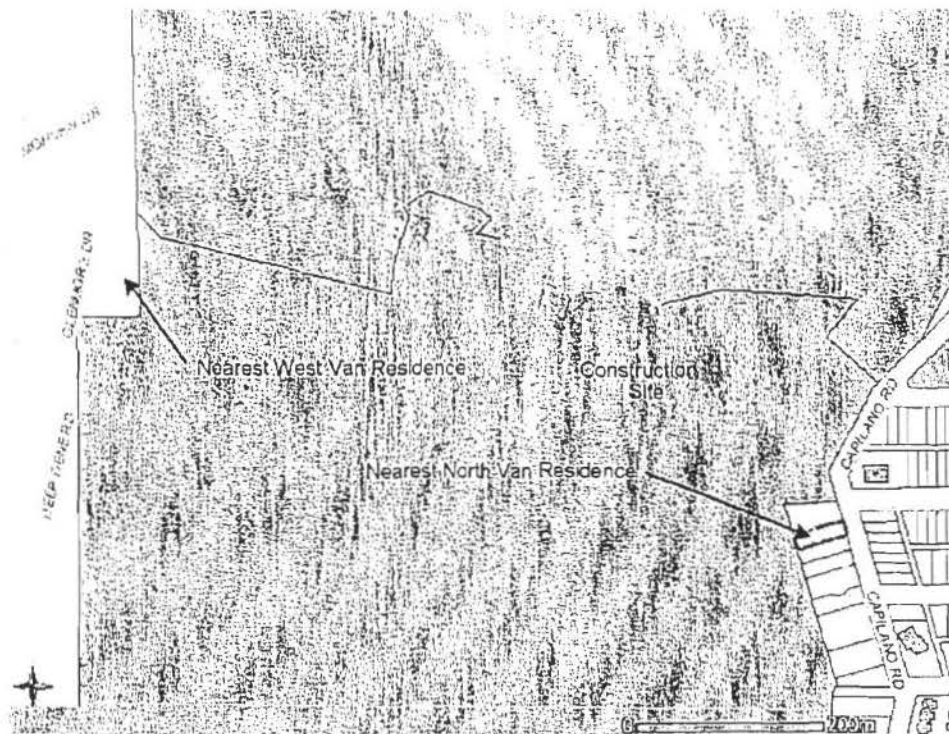


Figure 1a: Locations of Nearest Residences to Construction Site

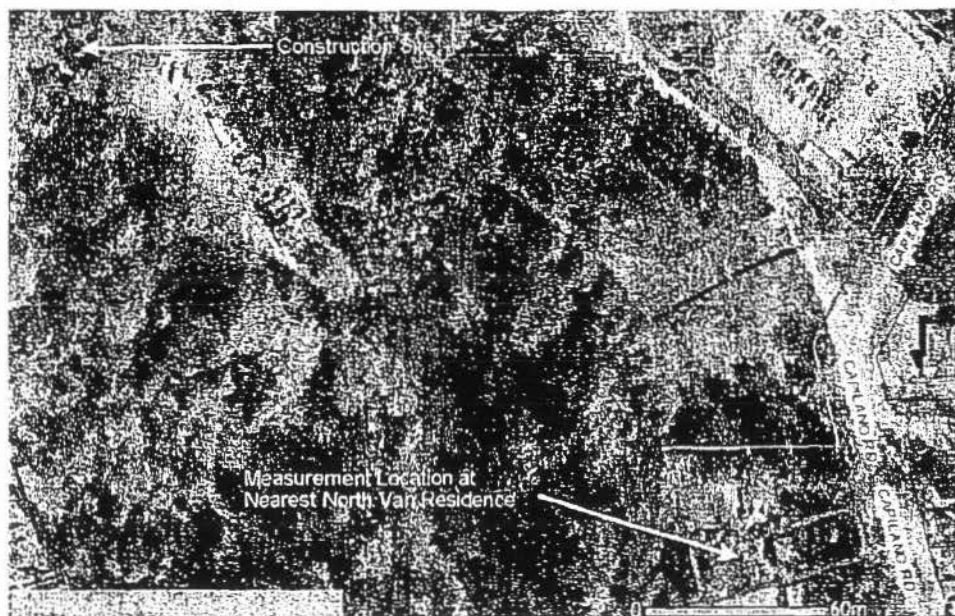


Figure 1b: Aerial Photo of Site and Nearest North Vancouver Residence

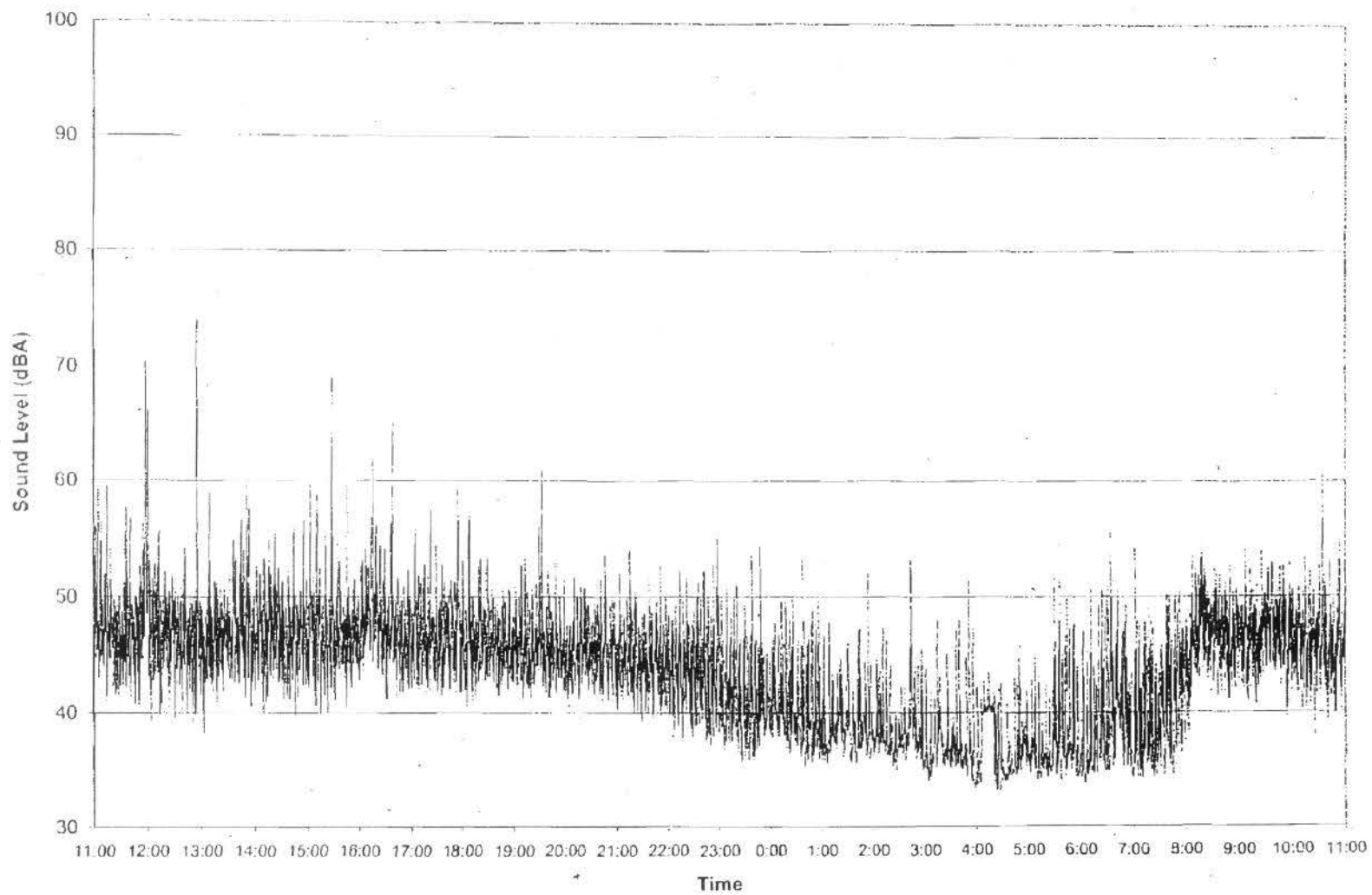


Figure 2: 24-Hour Ambient Noise Monitoring Conducted at 4951 Capilano Rd. on Dec. 29-30, 2003

MEMORANDUM

To: Marcel Bernier, Section Manager, Engineering Design Services
District of North Vancouver
CC: Goran Oljaca, Senior Engineer, Water Treatment Engineering
Division, Metro Vancouver
From: Raymond Penner – CMAC Facilitator
Subject: Request for Variance to Construction Noise Bylaw – Capilano Raise
Bore Shaft
Date: June 30, 2010

Please accept this memo prepared for and sent on behalf of the District of North Vancouver's Community and Monitoring Advisory Committee. Metro Vancouver's June 18, 2010 memo (file: WA-11-02-SCT/50) sent to Director of Environment, Parks and Engineering, Jozsef Dioszechy, District of North Vancouver with regards to Metro Vancouver's request for a variance to DNV's Construction Noise Bylaw for Seymour Capilano Twin Tunnels Capilano Shafts (raise bore drilling) has been reviewed by members of CMAC and no objections were raised regarding this request.

Sincerely



Raymond Penner, CMAC Facilitator

Budget Public Input Opportunity

Verbal Presentation: Nicole Deveaux, GM – Finance & Technology

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