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The District of North Vancouver
REPORT TO COUNCIL

June 15, 2018
File: 08.3060.20/042.18

AUTHOR:  Kevin Zhang, Development Planner

SUBJECT:  Bylaws 8344, 8345, and 8356: OCP Amendment and Rezoning for 600 West Queens Road – 5 Storey Non-Market Rental and Seniors’ Respite Care Facility

RECOMMENDATION

THAT the District of North Vancouver Official Community Plan Bylaw 7900, 2011, Amendment Bylaw 8344, 2018 (Amendment 36) to amend the Official Community Plan (OCP) from Institutional (INST) to Residential Level 6 (RES6) be given FIRST reading;

AND THAT the District of North Vancouver Rezoning Bylaw 1380 (Bylaw 8345) to rezone the subject site from Public Assembly (PA) to Comprehensive Development Zone 124 (CD124) be given FIRST reading;

AND THAT pursuant to Section 475 and Section 476 of the Local Government Act, additional consultation is not required beyond that already undertaken with respect to Bylaw 8344;

AND THAT in accordance with Section 477 of the Local Government Act, Council has considered Bylaw 8344 in conjunction with its Financial Plan and applicable Waste Management Plans;

AND THAT Bylaw 8344 and Bylaw 8345 be referred to a Public Hearing;

AND THAT 600 West Queens Road Non-Market Rental Housing and Seniors Respite Care Facility Development Cost Charge Waiver Bylaw 8356, 2018 be given FIRST, SECOND, and THIRD reading.
REASON FOR REPORT

The applicant proposes to redevelop the southern portion of the site as a 5-storey mixed use building which consists of 80 non-market rental units and a seniors' respite care facility. Implementation of the proposed project requires Council’s consideration of:

- Bylaw 8344 to amend the Official Community Plan;
- Bylaw 8345 to rezone the subject property; and
- Bylaw 8356 to waive Development Cost Charges.

The OCP Amendment Bylaw and Rezoning Bylaw are recommended for introduction and referral to a Public Hearing. A Development Permit would be forwarded to Council for consideration if the rezoning proceeds.

SUMMARY

The following provides a brief summary of the background public engagement and resulting development proposal for consideration.

Background

On January 17, 2017, the Delbrook Deliberative Dialogue Series concluded after extensive consultation with the community and with Council. The one and half year engagement process included two public meetings with approximately 400 participants and over a thousand more providing feedback through an online engagement process. The final consensus from the community engagement process was that the Delbrook lands should:

- remain owned by the District, and
- have uses restricted to: non-market housing, community services (adult day care, child care), and park space.

Subsequently, Council directed staff to work with Care BC and seek out a non-profit housing society to deliver a project consisting of non-market rental housing and a seniors respite care facility on the parking lot portion of the Delbrook site.
Site and Proposed Development

The development site is the parking lot of the former Delbrook Community Recreation Centre, located at the corner of West Queens Road and Stanley Avenue. Surrounding properties include an apartment building to the west, the remainder of the Delbrook site to the north, and single family homes to the east and south.

The subject site will be leased through separate lease agreements executed by Catalyst Community Development Society and Health and Home Care Society of BC ("Care BC") for 60 years which will facilitate the construction and operation of a 5-storey mixed use building consisting of 80 non-market rental units and a seniors’ respite care facility.

The proposal is in keeping with the outcomes of the Delbrook Deliberative Dialogue process and the District’s Rental and Affordable Housing Strategy. The proposal also advances the OCP objectives of expanding rental options, improving housing affordability, providing non-market housing, and seniors’ care facility.

EXISTING POLICY

Official Community Plan

The Official Community Plan (OCP) designates the site as Institutional (INST), which envisions a range of public assembly uses. While the seniors’ respite care facility portion is generally in keeping with the Official Community Plan designation, the amount of residential proposed exceeds the intent of “accessory residential.” As a result, an OCP Amendment to Residential Level 6 (RES6) is required. The project is consistent with RES6 as it is predominately residential (80% of floor space).

The proposal is inline with the following OCP policies:

- 7.1.1 Encourage and facilitate a broad range of market, non-market and supportive housing;
- 7.4.4 Consider the use of District land, where appropriate, to contribute towards and leverage other funding for the development of social and affordable housing;
7.3.7 Consider incentives such as reduced Development Cost Charges to facilitate affordable rental housing; and
6.3.2 Plan and support initiatives for an age and disability-friendly community.

Rental and Affordable Housing Strategy

This proposal is in line with the District's Rental and Affordable Housing Strategy (RAHS) as it contributes to meeting the District's demand for non-market rental units in the next decade, which is estimated to be 1000 units.

Zoning

The subject site is currently zoned PA (Public Assembly). Rezoning is required to accommodate the project and Bylaw 8345 proposes to create a new Comprehensive Development Zone 124 (CD124) tailored specifically to this project. The proposed CD124 zone prescribes permitted uses and zoning provisions such as a maximum density, height, setbacks, and parking requirements. The existing siting area map is amended to accommodate the proposal as per Bylaw 8345 (attachment 3).

ANALYSIS

Site

The site (approximately 3400m², 36,600 ft²) slopes down to the west, which allows for the underground parking access to be off West Queens Road. The seniors' respite care
facility will be accessed via an at-grade drop off area from Stanley Avenue. The residential access will be at the south west corner of the site. Running along the western edge of the property will be a public path that connects West Queens Road to the future park lands to the north. The remainder of the former Delbrook Community Centre site will be the subject of a Parks planning process led by the District's Parks Department and informed by the outcomes of the Delbrook Deliberative Dialogues.

Project Description

The project consists of 80 non-market rental units and a seniors' respite care facility with 25 adult day care spaces and 18 over night spaces in a 5 storey building over one level of underground parking.

The District will enter into long term ground leases with both Catalyst Community Developments Society and Care BC. The District will retain ownership of the land and building. The non-market rental will be operated by Catalyst Community Developments Society. The seniors' respite care facility will be operated by Care BC. Both Care BC and Catalyst Community Developments Society are registered non-profit societies, each with their own volunteer Boards of Directors.

View looking northwest from West Queens and Stanley, showing Respite Care Facility Entrance
Housing Affordability

The lease will require that the total rents across the entire project must not exceed 80% of market value rents. In addition, rents must not exceed 30% of the Housing Income Limit for the applicable Lease Year. Canadian Mortgage and Housing Corporation's (CMHC) definition of housing affordability, considers housing to be “affordable” when a household spends no more than 30% of the gross household income on shelter costs (rent, mortgage, property taxes, strata fees, and heating costs).

Catalyst is also pursuing external grants with BC Housing and other organizations. Should these capital grant applications be successful, deeper levels of affordability of approximately 35% below market rents may be achieved.

Housing Mix

The proposal is targeted towards District tenants who want to continue to live and work in the District, but face a shortage of affordable, suitable housing. The unit types and variety are intended to accommodate a range of seniors, singles, couples, and families who want to live proximate to where they work in our local businesses, service organizations, and the customer service industry. There are 16 studios, 41 one-bedrooms, 15 two-bedrooms, and 8 three-bedrooms. The units are also geared to the
“missing middle”, young families who are having their first child and would like to remain renting in the District. The housing needs of the above groups have been determined to be primarily studios, one bedrooms, and some two bedroom units.

Accessibility

The proposal intends to fulfill the requirements of the Accessible Design Policy for Multifamily Housing with 100% of the apartment units (80) meeting the ‘Basic Accessible Design’ criteria and 5% of the apartment units (4) meeting the ‘Enhanced Accessible Design’ criteria. The care facility is designed to higher accessibility standards set by the Residential Care Regulations of the Community Care and Assisted Living Act.

Development Permits

The site is currently in the following Development Permit Areas:

- Form and Character;
- Energy and Water Conservation and GHG Emission Reduction;
- Protection of the Natural Environment;
- Creek Hazard; and
- Streamside Protection.

Form and Character of Multifamily Development

The proposal is generally in keeping with the Official Community Design Guidelines for Multi-Family Housing. Further details outlining the project’s compliance with the Design Guidelines for Multi-Family Housing will be provided for Council’s consideration at the Development Permit stage should the rezoning bylaw proceed.

Energy and Water Conservation and GHG Emission Reduction

This development will achieve Step 3 of the BC Energy Step Code. Further details outlining the project’s compliance with the Energy and Water Conservation and Greenhouse Gas Emission Reduction DPA will be provided for Council’s consideration at the Development Permit stage should the rezoning bylaw proceed.

Protection of the Natural Environment, Creek Hazard, and Streamside Protection

This property is within the Development Permit Areas for Protection of the Natural Environment, Creek Hazard, and Streamside Protection. However, the project does not fall within the setback areas for the above three DPAs. As a result, this proposal is exempted from the requirements of the above three DPAs.
Landscaping

A landscape plan (below) has been submitted with the rezoning application. Key components of the plan include a secured outdoor area for the seniors' respite care centre on the northern portion of the site, with spaces for seating, dining, activities and urban agriculture. The public pathway on the western portion of the site connects West Queens Road with the future park to the north. Stepped landscaping on the south portion of the site help negotiate the slopes and screen the exposed sections of the parkade.

Should the rezoning proposal proceed, a more detailed review of landscape issues will be included in the development permit report.

Vehicle Parking

The proposal includes a total of 82 parking spots (61 residential, 9 visitor, and 12 Care BC staff spaces). The reduced parking rate of 0.88 spaces/unit is justified by a transportation engineering report citing the observed parking demands at comparable, existing non-market rental developments on the North Shore. The report further
opportunities and increasing cycling infrastructure. The site is also adjacent to a future Frequent Transit Network (Queens).

**Bicycle Parking**

The proposal includes secured bike storage at rates of one space per studio and one-bed units and two spaces per two-bed and three-bed units. This results in a total of 103 residential bike parking and 8 bike parking spaces for visitors and Care BC staff.

**Financial Impacts**

**Offsite Works**

The District will fund offsite works associated with this proposal. Staff will prepare a Financial Plan amendment for Council consideration.

**Development Cost Charges**

DCC’s are estimated to be $950,000 (in accordance with the new DCC Bylaw). Bylaw 8328 (Attachment 4) established DCC rate at $0 for this development in support of decreased cost to provide 80 affordable rental units and the care facility. Finance staff are preparing a strategy to account for this waiver in order to keep the DCC funds whole.

**Concurrence**

The project has been reviewed by staff from the Development Planning, Building, Urban Design, Business Licencing, Fire and Rescue Services, Community Planning, Landscape, Environment, Arborist, Development Engineering, Construction Traffic Management, Real Estate and Properties, Parks, and Legal departments.

**Construction Traffic Management Plan**

In order to reduce development’s impact on pedestrian and vehicular movements, the applicant is required to provide a Construction Traffic Management Plan (CTMP) as a condition of a Development Permit.

The Plan must outline how the applicant will coordinate with other projects in the area to minimize construction impacts on pedestrian and vehicle movement along West Queens Road and Stanley Avenue. In particular, the plan should coordinate with the demolition of the former Delbrook Community Centre, stage on site whenever possible, and minimize impacts to West Queens Road. The only road closures will be during the roadworks and during service upgrades. The plan is required to be approved by the District prior to issuance of a building permit.
In particular, the Construction Traffic Management Plan must:

1. Provide safe passage for pedestrians, cyclists, and vehicle traffic;
2. Outline roadway efficiencies (i.e. location of traffic management signs and flaggers);
3. Make provisions for trade vehicle parking which is acceptable to the District and minimizes impacts to neighbourhoods;
4. Provide a point of contact for all calls and concerns;
5. Provide a sequence and schedule of construction activities;
6. Identify methods of sharing construction schedule with nearby developments;
7. Ascertain a location for truck marshalling;
8. Address silt/dust control and cleaning up from adjacent streets;
9. Provide a plan for litter clean-up and street sweeping adjacent to site; and,
10. Include a communication plan to notify surrounding businesses and residents.

Public Input

The applicant held a Public Information Meeting on May 30th, 2018. Notices were distributed to neighbours in accordance with the District’s policy on Non-Statutory Public Consultation for Development Applications. Two signs were placed on the property to notify passersby of the meeting, and advertisements were placed in the North Shore News. A webpage was established for this project on the District’s website.

The meeting was attended by approximately 65 residents. Some community members expressed support while other expressed concerns including the height of the building, unit mix, parking, and traffic impacts. The height of the building is required in order to deliver both the non-market rental units and the respite care centre. The proposal is consistent with the outcomes of the Delbrook Deliberative Dialogue process. The Public Information Meeting Summary Report is attached as Attachment 4.

Implementation

Implementation of this project will require an OCP amendment bylaw and a rezoning, as well as issuance of a development permit and registration of legal agreements.

Bylaw 8345 (Attachment 3) rezones the subject site from Public Assembly to a new Comprehensive Development Zone 124 (CD124) which:

- establishes the permitted uses;
- allows home occupations as an accessory use;
- establishes the maximum permitted floor area on the site;
- establishes setback and building height regulations; and
- establishes parking regulations specific to this project.
A legal framework will be required to support the project and it is anticipated that a development covenant will be used to secure items such as the details of off-site servicing and airspace parcel subdivision requirements. Additional legal documents required for the project will include:

- 60-year lease;
  - Topics normally covered by a development covenant and a Stormwater management covenant will be included in the lease.
- Subdivision plan;
- Airspace parcel subdivision plan; and
- Construction traffic management plan.

CONCLUSION

This development proposal provides 80 non-market rental units and a seniors’ respite care facility with 25 adult day care spaces and 18 overnight rooms. It assists in implementation of the District's Official Community Plan, the Rental and Affordable Housing Strategy, and the outcomes of the Delbrook Deliberative Dialogue process. The rezoning proposal is now ready for Council's consideration.

OPTIONS

The following options are available for Council's consideration:

1. Introduce Bylaws 8344, 8345 and 8356, and refer Bylaws 8344 and 8345 to a Public Hearing (staff recommendation); or

2. Defeat the Bylaws at First Reading.

Respectfully submitted,

Kevin Zhang
Development Planner
Re: Bylaws 8344, 8345, and 8356: OCP Amendment and Rezoning for 600 West Queens Road – 5 Storey Non-Market Rental and Seniors’ Respite Care Facility
June 15, 2018

Attachments:

1. Architectural and Landscape Plans
2. Bylaw 8344 – OCP Amendment
3. Bylaw 8345 – Rezoning
4. Bylaw 8356 – DCC Waiver
5. Public Information Meeting Summary Report
Re: Bylaws 8344, 8345, and 8356: OCP Amendment and Rezoning for 600 West Queens Road – 5 Storey Non-Market Rental and Seniors' Respite Care Facility
June 15, 2018

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<td>Museum &amp; Arch.</td>
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<td>Other:</td>
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The Corporation of the District of North Vancouver

Bylaw 8344

A bylaw to amend District of North Vancouver Official Community Plan Bylaw 7900, 2011

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

Citation

1. This bylaw may be cited as "District of North Vancouver Official Community Plan Bylaw 7900, 2011, Amendment Bylaw 8344, 2018 (Amendment 36)".

Amendments

2. District of North Vancouver Official Community Plan Bylaw 7900, 2011 is amended as follows:

   a) Map 2 Land Use: as illustrated on Schedule A, by changing the land use designation of the properties on Map 2 from "Institutional" (INST) to "Residential Level 6: Medium Density Apartment" (RES6);

READ a first time by a majority of all Council members.

PUBLIC HEARING held

READ a second time by a majority of all Council members.

READ a third time by a majority of all Council members.

ADOPTED by a majority of all Council members.

Mayor

Municipal Clerk

Certified a true copy

Municipal Clerk
Schedule A to Bylaw 8344

INSTITUTIONAL (INST) TO RESIDENTIAL LEVEL 6: MEDIUM DENSITY APARTMENT (RESS)
The Corporation of the District of North Vancouver

Bylaw 8345

A bylaw to amend District of North Vancouver Bylaw 3210, 1965

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

Citation

1. This bylaw may be cited as "District of North Vancouver Rezoning Bylaw 1380 (Bylaw 8345)".

Amendments

2. District of North Vancouver Zoning Bylaw 3210, 1965 is amended as follows:

   (a) Part 2A, Definitions is amended by adding CD 124 to the list of zones that Part 2A applies to.

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

       "Comprehensive Development Zone 124 CD 124"

   (c) Part 4B Comprehensive Development Zone Regulations by inserting the following, inclusive of Schedule B:

       "4B124 Comprehensive Development Zone 124 CD 124"

The CD 124 zone is applied to a portion of the site below as described in Schedule A to Bylaw 8345:

a) 006-999-832 LEGAL DESCRIPTION: BLOCK 19, EXCEPT PART IN EXPLANATORY PLAN 16399, WEST 1/2 OF DISTRICT LOT 617 PLAN 19489. R/P-R/W LMP24200

4B 124 – 1 Intent

The purpose of the CD 124 Zone is establish specific land use and development regulations for a residential rental building with a seniors' respite care facility.
4B 124 – 2 Permitted Uses:

The following *principal* uses shall be permitted in the CD 124 Zone:

a) Uses Permitted Without Conditions:
   i. *multi-level care facility* (as defined in Part 2); and
   ii. adult day care.

b) Conditional Uses:
   The following *principal* uses are permitted when the conditions outlined in Section 4B 124-3 Conditions of Use, are met:
   i. *residential use* (as defined in Part 2A).

4B 124-3 Conditions of Use

a) **All conditional uses**: All uses of land, buildings and structures are only permitted when the following condition of use is met:
   i) Each dwelling unit has access to private or semi-private outdoor space;
   ii) Balcony enclosures are not permitted.

4B 124-4 Accessory Use

a) Accessory uses are permitted and include, but not necessarily limited to:
   i. Storage;
   ii. Laundry;
   iii. Kitchen;
   iv. Dining;
   v. Administration spaces;
   vi. Therapy treatment rooms;
   vii. Multi-purpose rooms;
   viii. Activity rooms; and,
   ix. Other uses customarily incidental to the principal use.

b) *Home occupations* are permitted in *residential* dwelling units.

4B 124 – 5 Density

Buildings and structures shall be sited and constructed in accordance with the following regulations:

a) The maximum permitted floor space in the CD124 Zone is 7,237 sq m (77,900 sq ft);

b) For the purposes of calculating floor space ratio, the following areas are excluded:
i. All spaces underground including but not limited to parking and storage

ii. Balconies, decks, canopies, overhangs, architectural elements and awnings.

4B124 – 6 Height:

a) West end of the site from finished grade:
   i. The maximum permitted height measured to the top of the fifth floor of the building is 21.4m (70 ft).

b) East end of the site from finished grade:
   i. The maximum permitted height measured to the top of the fifth floor of the building is 16.7m (55 ft).

c) Rooftop elevator mechanical shafts and other utilities are exempted from the height calculation up to 1.5m (5 ft).

4B124 – 7 Setbacks:

a) Buildings shall be set back from property lines to the closest building face as established by development permit and in accordance with the following regulations:

<table>
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<tr>
<th>Setback</th>
<th>Minimum Required Setback</th>
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<tbody>
<tr>
<td>North</td>
<td>0m (0 ft)</td>
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<tr>
<td>East (Stanley Avenue)</td>
<td>6.5m (21.5 ft)</td>
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<tr>
<td>South (West Queens Road)</td>
<td>6.5m (21.5 ft)</td>
</tr>
<tr>
<td>West</td>
<td>0m (0 ft)</td>
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</tbody>
</table>

b) For the purpose of measuring setbacks, measurements exclude:
   i. Balconies, canopies, overhangs, architectural elements and awnings.

4B124 - 8 Coverage:

a) Building Coverage: The maximum building coverage is 80%.

b) Site Coverage: The maximum site coverage is 95%.

4B124 - 9 Landscaping and Storm Water Management:

a) All land areas not occupied by buildings, and patios shall be landscaped in accordance with a landscape plan approved by the District of North Vancouver.

b) All electrical kiosks and garbage and recycling container facilities not located underground or within a building must be screened.
4B 124 – 10 Parking, Loading and Servicing Regulations:

a) A minimum of 82 parking spaces are required, inclusive of 61 residential parking, 9 visitor parking, and 12 staff parking;

b) All parking spaces shall meet the minimum width and length standards established in Part 10 of the Zoning Bylaw, exclusive of building support columns;

c) Bicycle storage for residents shall be provided on the basis of minimum one space per studio and one-bed units and two spaces per two-bed and three-bed units.

d) A minimum of 8 class 2 visitor bicycle parking spaces must be provided."

(d) The Zoning Map is amended in the case of the lands illustrated on the attached map (Schedule A) by rezoning the land from the Public Assembly Zone (PA) to Comprehensive Development Zone CD 124 (CD124).

(e) The Siting Area Map section is amended by deleting Plan Section PA/03 and replacing with the revised Plan Section PA/03 attached in Schedule B.

READ a first time

PUBLIC HEARING held

READ a second time

READ a third time

Certified a true copy of “Bylaw 8345” as at Third Reading

________________________________________
Municipal Clerk

APPROVED by the Ministry of Transportation and Infrastructure on

ADOPTED

________________________________________  __________________________
Mayor                                                 Municipal Clerk

Document: 3582632
Certified a true copy

Municipal Clerk
Schedule A to Bylaw 8345

PUBLIC ASSEMBLY ZONE (PA) TO COMPREHENSIVE DEVELOPMENT ZONE 124 (CD124)
Schedule B to Bylaw 8345

Siting Area Map - Delbrook Recreation Centre

SCALE: 1:1000
BYLAWS: 7903
The Corporation of the District of North Vancouver

Bylaw 8356

A bylaw to waive Development Cost Charges

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

Citation

1) This bylaw may be cited as “600 West Queens Road Non-Market Rental Housing and Seniors Respite Care Facility Development Cost Charge Waiver Bylaw 8356, 2018”.

Waiver

2) Development Cost Charges are hereby waived in relation to the Eligible Development proposed to be constructed on “Site A” as shown on the attached map, and the development cost charge rates for the Eligible Development are hereby set at zero.

3) For the purpose of this Bylaw “Eligible Development” means not more than 80 non-market rental housing units and a seniors’ respite care facility in a building not exceeding 5 storeys, where the non-market rental rate structure is secured by way of a lease agreement or other measure acceptable to the Municipal Solicitor.

READ a first time

READ a second time

READ a third time

ADOPTED

Mayor

Municipal Clerk

Certified a true copy

Municipal Clerk
To: Kevin Zhang  
Development Planner  
District of North Vancouver

From: Robin Petri  
Vice-President, Development  
Catalyst Community Developments Society

Date: June 4, 2018

RE: Public Information Meeting Summary- 600 West Queens Road

Project Overview:  
In May 2017, the District of North Vancouver invited proponents to submit proposals for the development of an affordable rental housing project and an adult respite care facility at 600 West Queens Road in North Vancouver. Catalyst Community Developments Society ("Catalyst") was selected to develop 80 affordable rental homes above an 18 bed respite care facility operated by Care BC.

Event Details:  
A public information meeting was held for the proposed project at 600 West Queens Road. The event details are outlined below:

Date: Wednesday, May 30, 2018  
Time: 6:00pm – 8:00pm  
Place: New Delbrook Community Recreation Centre  
851 West Queens Road  
North Vancouver, BC

Notification Details:  

Mail Notification  
A notification was sent by Canada Post to all property owners within 100 metres of 600 West Queens Road (approximately 129 addresses) to notify them of the meeting. Mail notifications were also sent to the Delbrook Community Association and Upper Delbrook Community Association.

A copy of the notification is attached in the Appendix.
Site Sign
A site sign was erected on Wednesday May 16, 2018 (two weeks prior to the meeting) to notify the community of the meeting.

A picture of the site sign is attached in the Appendix.

Newspaper Advertisement
Advertisements were placed in the North Shore News on May 23, 2018 and May 25, 2018.

A copy of the advertisement is attached in the Appendix.

Number of Attendees:
There were approximately 65 people at the meeting. The District of North Vancouver sign in sheet includes 44 of these attendees. A number of attendees did not sign in.

Feedback:
There were 41 comment forms received during the public information meeting. The forms that have been submitted to date are included in the Appendix and the comments are summarized below.

The comments included concerns about:
- the number of parking stalls being provided by the proposed development;
- height and the number of storeys;
- shading of tennis courts and surrounding single family homes;
- percentage of family housing (25% too little);
- construction noise and traffic;
- tenant selection;
- childcare not being part of the project;
- amount of park space remaining;
- setback from Queens (min 25'); and
- length of lease (60 years too long).

There were also positive comments about:
- the provision of affordable rental housing;
- the respite facility;
- the height, massing and unit mix;
- streetscape, landscape, look and design elements;
- location of parking entrance off of Queens Avenue;
- tenant selection; and
- parking supply.
Public Information Meeting Notice

Catalyst Community Developments Society is hosting a Public Information Meeting to present the development proposal for a 5 storey mixed-use building at 600 West Queens Road.

This information is being distributed to the owners and occupants within 100 metres of the proposed development site in accordance with District of North Vancouver policy.

Meeting Time & Date:
Wednesday May 30, 2018
6:00-8:00pm

Meeting Location:
Delbrook Community Recreation Centre
Arbutus Meeting Room
851 West Queens Road
North Vancouver, BC V7N 4E3
Meeting Agenda

Doors Open: 6:00pm
Open House Discussion: 6:00-8:00pm

For further information please contact:
Danielle Dhaliwal  Catalyst Community Developments Society
250.320.9321
Kevin Zhang  District of North Vancouver, Planning Department
604.990.2321

The Proposal

Catalyst Community Developments Society proposes to construct a 5 storey mixed-use building at 600 West Queens Road, at the corner of Stanley Avenue and West Queens Road. The proposal is for 80 non-market rental homes (16 studios, 41 one bedroom units, 15 two bedroom units, and 8 three bedroom units) and an 18 bed seniors' respite care centre. The seniors' respite care centre has a pick-up/drop-off area accessed from a driveway off of Stanley Avenue. Access to the site is also provided off of West Queens Road to the underground parking garage for residents (60 stalls), visitors (8 stalls) and respite care staff (12 stalls).
Sign on Site at 600 West Queens Road

Developer’s Public Information Meeting

Proposal:
5-Storey Mixed-Use Building with
a Seniors’ Respite Care Centre and
80 non-market rental homes.

6pm- 8pm, Wednesday, May 30th
Deerbrook Community Recreation Centre
Arbutus Meeting Room
851 West Queens Road
North Vancouver, BC V7N 4J3

Danielle Dhaliwal
Catalyst Community Developments Society
250.320.9321

catalyst
Community Developments

This meeting has been required by the District of North Vancouver as part of the regulatory process.
PUBLIC INFORMATION MEETING

A redevelopment is being proposed for 600 West Queens Road, to construct a 5 storey, mixed-use building.

You are invited to a meeting to review and discuss the project.

Date: Wednesday May 30, 2018
Time: 6:00 – 8:00pm
Location of Meeting: Delbrook Community Recreation Centre
Arbutus Meeting Room
851 West Queens Road
North Vancouver, BC V7N 4E3

The applicant has applied to rezone the site from a public assembly zone to a comprehensive development zone to permit an 18 bed seniors' respite care centre and 80 non-market rental homes with 1 level of underground parking.

Information packages are being distributed to residents within a 100 metre radius of the site. If you would like to receive a copy or more information, please contact Danielle Dhaliwal of Catalyst Community Developments Society at 250.320.9321 or Kevin Zhang of the Development Planning Department at 604.990.2321 or bring your questions and comments to the meeting.

*This is not a Public Hearing. District of North Vancouver Council will receive a report from staff on the issues raised at the meeting and will formally consider the proposal at a later date.
The District of North Vancouver
REPORT TO COMMITTEE

January 6, 2017
File: 13.6680.20/005.000

AUTHOR: S. Lunn, Policy Planner

SUBJECT: Delbrook Lands - Analysis of Participants' Recommendations

RECOMMENDATION:
THAT the Committee of Council recommend to Council:

THAT
1. Staff be directed to:
   a. develop a concept plan for the Delbrook Lands that incorporates parks
      and open space, non-market housing, and community services,
   b. develop refined cost estimates, and
   c. develop a funding strategy in consideration of partnership funding
      opportunities and the District's long term funding strategy.

2. Staff be directed to commence discussions with potential non-profit housing
   providers and senior government agencies in regards to development of non-
   market housing on a portion of the Delbrook Lands, and

3. Staff be directed to commence discussion with potential community service
   providers and senior government agencies in regards to development of
   community services on a portion of the Delbrook Lands.

REASON FOR REPORT:
On September 19, 2016 Council directed staff to report back with:
   • An analysis of the participants' recommendations for the Delbrook Lands based on the
     alignment with District policies,
   • Financial implications of the participants' recommendations, and
   • Next steps and timelines.

This report presents information on the above and seeks Council input.
SUMMARY:
Staff analysis has concluded that the participants’ recommendations for a District-owned multi-use site including parkland, community services and non-market housing generally align with District policy. Participants opposed the idea of selling any of the land. If directed by Council, staff will explore opportunities for development and funding of the proposed uses through partnerships with non-profits, senior government and the District budget.

The following table summarizes information on the participants’ recommendations regarding multiple uses on site that benefit both the local and District wide community.

<table>
<thead>
<tr>
<th>Site Features/ Land Uses</th>
<th>Aligns with District Policy?</th>
<th>Policy</th>
<th>Capital Cost Estimates*</th>
<th>Operating Cost Estimates</th>
<th>Potential Funding Sources**</th>
<th>Land Ownership</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neighbourhood Parkland</td>
<td>Yes</td>
<td>Parks and Open Space Strategic Plan</td>
<td>$1.5M to $3M</td>
<td>$50-860K per year</td>
<td>Long term funding strategy or new District funding source</td>
<td>Remains DNV owned land</td>
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<tr>
<td>Community Services</td>
<td>Yes</td>
<td>OCP, Public Assembly Land Strategy</td>
<td>$3.35M</td>
<td>TBD-Requires partnerships</td>
<td>New district funding source and/or partnerships</td>
<td>DNV owned/ land or facility leased to partner</td>
</tr>
<tr>
<td>Non-Market Housing</td>
<td>Yes</td>
<td>OCP, Rental and Affordable Housing Strategy &amp; Public Assembly Land Strategy</td>
<td>$16.4 M</td>
<td>TBD-Requires partnerships</td>
<td>Partnerships</td>
<td>DNV owned/ land lease to partner</td>
</tr>
</tbody>
</table>

*Actual costs may change depends on features and design
** Align with financial parameters outlined in the Delbrook Lands Discussion Guide

BACKGROUND:
The District is consolidating the Delbrook and William Griffin community recreation centre (CRC) on the William Griffin site at 851 Queens Road. All recreation programs will transfer from the existing Delbrook CRC to the new facility in the summer of 2017, leaving the Delbrook Lands underutilized. Engineering studies commissioned by the District’s Facilities Department have concluded that both the Delbrook north and south buildings are at the end of their life and should be demolished.

On September 28, 2015 Council directed staff to proceed with an engagement strategy to help determine the future of the Delbrook Lands at 600 West Queens Road. As a result, the District partnered with Simon Fraser University’s Centre for Dialogue to conduct a community engagement process with a goal of determining the most broadly supported land use options for the Delbrook Lands.

In March of this year, Council received the Ideas Report from the Delbrook Lands Community Dialogue which documented over 1,000 ideas for the future of the Lands generated by the public.
Over the spring the District worked with SFU Centre for Dialogue to conduct research and technical analysis on the ideas from Phase One. This information was compiled in the Delbrook Lands Discussion Guide (http://www.dnv.org/sites/default/files/edocs/Delbrook-discussion-guide.pdf)

On June 18, 2016 the SFU Centre for Dialogue and the District co-hosted a Deliberative Dialogue event at the Delbrook Community Recreation Centre. This event provided a unique opportunity for local neighbourhood, other District of North Vancouver residents, and stakeholders to provide input to the District on the future of the Delbrook Lands.

Key findings from the Deliberative Dialogue included:
- strong support for a multi-use site that includes neighbourhood parkland and indoor community services such as child care and adult day care.
- the majority of participants also support non-market housing if paid for by other levels of government.
- to help fund on-site amenities, participants proposed that the District of North Vancouver work to develop partnerships with senior levels of government and non-profit organizations, as well as allocate funding from the District budget.
- the majority of participants opposed the ideas of building market housing and/or selling the Delbrook Lands.

ANALYSIS:
Over the last few months, staff evaluated the participants’ recommendations against applicable District policies. Staff have also provided financial implications including cost estimates and potential funding sources. The recommended funding sources are consistent with the financial parameters that were outlined in the Discussion Guide. These parameters included:
- Renewal capital is already funded,
- District priorities are first in line for District funding, and
- New assets or amenities require new funding sources such as development proceeds, funding from other levels of government or partnerships with other organizations.

Staff conducted a spatial analysis of the Delbrook Lands to test whether the community’s desired multi-uses can be accommodated on the site along with parking, access and protection of the environment. Staff concluded that these uses fit. Staff will present the spatial analysis at the Council workshop. Note that the analysis is not meant to be a site plan but to assess whether the uses will fit on the site. Site planning will occur at a later stage.

Parks and Open Space
The majority of participants supported neighbourhood parkland features such as: green space, community gardens, children’s playground, trails, retention of the tennis courts, Mission Creek enhancements and a picnic area.
Policy Alignment
The Parks and Open Space Strategic Plan identifies a need for neighbourhood parkland in the Delbrook neighbourhood. Neighbourhood parkland is defined as a local park that primarily serves District residents within a safe walking distance and provides limited recreational facilities such as a playground.

Financial Implications
Depending on the potential parkland features cost estimates varies from $1.5M to $3M for approximately 80,000 square feet or 50% of the site (this includes the protected natural areas and the proposed park space). Annual operating funding is in the range of $50-$60K per year. Capital and operating funding sources could potentially come from the District’s long term funding strategy or new funding sources from development proceeds.

Community Services
The majority of participants supported indoor community services such as licensed group child care, adult day care and a community service hub.

Policy Alignment
The OCP and District’s Child Care Policy identify childcare as a priority and support the facilitation of the provision of quality child care. A child care needs assessment completed for the District indicates there is demand for additional childcare in the area especially for infant/toddler care.

There is a growing population of seniors on the North Shore, and a limited number of adult day care centres to provide respite for families who care for seniors with complex needs. The centres that do exist have extensive waiting lists. Co-locating childcare with adult day care would allow for intergenerational programming which is proven to have positive benefits.

Retention of community services aligns with the District’s Public Assembly Land Strategy. The site is currently zoned public assembly and community services are an allowable use in this zone. One of the guiding principles of the Public Assembly Land Strategy is the retention of public assembly lands where possible.

Financial Implications
Depending on the features or design a new purpose building for the community services may cost approximately $3.35M for approximately 9,400 square feet of indoor space and outdoor space. Capital funding could potentially come from new District funding sources such as local development proceeds or partnerships with non-profits or senior levels of government. The District may consider leasing the building or land to a non-profit organization.

Non-Market Housing
The majority of participants supported non-market housing on the Delbrook site, if paid for by an external funding source. Non-market affordable housing could include rental housing for low income seniors, families and/or single mothers. Non-market housing is usually developed and operated by non-profit organizations, in partnerships with government. They often use government housing funding programs, they may rely on a mixed-income model of
rents, and/or financial contributions from government, non-profits, philanthropic organizations, or others in order to make the project financially viable.

**Policy Alignment**

A key objective of the OCP is to increase housing choices to meet the diverse needs of residents of all ages and incomes. The focus of the recently approved Rental and Affordable Housing Strategy is on the needs of low and low to moderate income earning households that are most likely to face challenges in finding appropriate and affordable housing. The Strategy outlines six goals, including partnering with other agencies to deliver affordable housing. The policy includes exploring opportunities to utilize District owned land for affordable rental housing subject to consideration of, but not limited to:

- proximity to frequent transit network,
- access to community services and employment,
- availability of external funding and partnerships, and
- alignment with OCP, centres implementation plans and other applicable municipal policies.

Subject to Council consideration, the Delbrook Lands could provide an important opportunity for expanding our supply of non-market housing and helping to achieve the District’s target of 60 to 100 units per year.

Changing the land use for a portion of the site to residential would require an OCP amendment, rezoning and an assessment under the Public Assembly Land Strategy evaluation framework. The evaluation would ensure that any proposed change is in the public interest and provides an overall benefit to the community.

An OCP amendment is required to change the designation from institutional to residential as residential use was not originally contemplated for this site. The OCP directs the majority of new residential growth into key town and village centres. However, Council may consider sensitive neighbourhood infill along transit corridors or close to community amenities and sensitively integrates with the single family neighbourhood. The proposed location of the non-market housing is along Queens Road. The neighbouring multi-family development at Queens Road and Delbrook is 3 storeys. The Delbrook Lands are located on two transit corridors and within walking distance of schools, parks, recreation facilities and Westview shopping centre.

**Financial Implications**

The preliminary cost estimates for a sample four story building (located on the south parking lot along West Queens Road) with about 40 family units is approximately $16.4 million. Capital and operating funding could potentially come from partnerships with senior government (BC Housing, CMHC, etc) and/or non-profit organizations. The District may consider leasing a portion of the site at a nominal rate to a housing provider and waiving fees to leverage funding opportunities.
Transportation Implications
Last spring, the District commissioned a transportation study on the Delbrook Lands to examine the implications of a variety of land uses, including the community's recommendations. The study concludes that the proposed land uses will generate less traffic than is currently generated by the existing recreation centre and other site uses. Transportation staff have provided further recommendations regarding site circulation, parking, walking and cycling connectivity. Staff have also highlighted a number of offsite opportunities that could improve the neighbourhood connections.

Next Steps
If directed by Council, staff will:
- develop a concept plan, refined cost estimates and funding strategy for the proposed uses,
- identify a non-profit housing provider to work with the District to leverage senior government funding to develop non-market housing on a portion of the site, and
- identify a non-profit organization(s) to work with the District to leverage senior government funding to develop community services on a portion of the site.

Timing/Approval Process and Phasing:
Recreation programs at the existing Delbrook CRC will transfer to the new centre in 2017.

Little Rascal's Childcare Facility has a ground lease with the District until 2023. Consideration of future site options has included a commitment to retaining child care on the site.

Capilano Community Services Society and their partner agencies rent space in the Delbrook North building. They are moving to their new home at the new CRC in Lion Gate Village in approximately 2019. Staff are working with the society on interim space planning.

The District may wish take advantage of potential funding for affordable housing from senior government put forward an application in a timely manner.

Construction of the new buildings and park space may occur in distinct phases over a number of years depending on the availability and timing of funding.

Concurrence:
Engineering (Parks, Transportation and Facilities), Social Planning, Development Planning, Real Estate, Finance, and Communications & Community Relations has reviewed and provided input to this report.

Liability/Risk:
Decisions should be made in a timely manner so that the buildings do not sit empty once the recreation programs transfer.

Social Policy Implications:
Non-market housing, services for seniors and for children were identified as a key priority during the community consultation for this site. Retaining the Delbrook Lands as a public
asset and creating needed community services and a non-market housing project helps to address these priorities and helps to advance social policy objectives as laid out in the Official Community Plan.

Environmental Impact:
Mission Creek, a fish bearing water way, runs along the eastern edge of the site. Any development on the site will need to be setback 15 metres from the top of bank in order to keep the creek habit healthy. In addition to the riparian set back, the District environment team recommends protecting the natural area to the west of the south building.

Public Input:
The District has conducted a robust public engagement process over the last year including two community events and online surveys. Further opportunities for input on the design of the site will be provided at a later date and as directed by Council.

Conclusion:
Staff analysis has concluded that the participants' recommendations of a District-owned multi-use site including neighbourhood parkland, community services and non-market housing align with District policy. If directed by Council, staff will explore opportunities for development and funding of the proposed uses through partnerships with non-profits, senior government and the District.

Respectfully submitted,

Suzy Lunn
Policy Planner
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DELBROOK NON-MARKET RENTAL - AFFORDABILITY FRAMEWORK SUMMARY

The affordability framework that Catalyst will commit to from occupancy of the project is as follow:

- 100% of the units will be affordable to households earning at or below the area median income (for the District of North Vancouver), paying no more than 30% of gross annual household income on rent;
- 25% of all units will rent at Housing Income Limits (HILs) as specified by BC Housing annually;
- Tenant eligibility is determined by checking that household income is at or below the corresponding maximum household incomes;
- All units in the development are at least 10% below market rents; and
- The development as a whole will achieve at least 20% below market rents.

Catalyst is also pursuing external grants with BC Housing and other organizations. Should these capital grant applications be successful, deeper levels of affordability may be achieved.
FREQUENTLY ASKED QUESTIONS - 600 WEST QUEENS ROAD

This document provides answers to common questions received regarding the proposed OCP Amendment and Rezoning Bylaws for the development at 600 West Queens Road (former Delbrook Community Centre, PLN2018-00042).

1. Building size and location
   - The proposed building size and location results from combining two uses (non-market rental housing and seniors respite care) in the interest of maximizing the remaining park land. Should these uses be separated into two buildings, portions of the future park land would be compromised.
   - Combining the two uses into one building also creates economies of scale benefits (one parkade, one construction process, shared utilities etc) that reduce the cost of both the non-market housing and the seniors’ care facilities.
   - BC Housing has indicated a sufficient number of units are needed for optimal management and use of resources to meet funding objectives.
   - Both the uses, along with park use and childcare, were envisioned through the Delbrook Deliberative Dialogue public consultation process.
   - The building location and height mitigates the impacts to the tennis courts. The upper floors are also set back to mitigate impacts to the east and west neighbours.

2. Building height relative to adjacent neighbours to the west
   - The zoning bylaw sets the overall parameters for zoning on the site but does not set the architectural form and character development permit (DP) parameters. Since zoning introduction, the building has been modified to reduce the western end to 3 stories above the parkade / residential lobby level. The parkade and residential lobby are fully out of the ground at the south-west corner due to the lot slope. This a similar condition for the apartment building located at 678 W. Queens Rd.
o The red highlighted area in the illustration below shows the approximate portion of the building removed since the first submission.

3. Building distance from neighbouring property lines

o Since introduction of bylaws, top 2 storeys on the west side have been further set back. The distance from the neighbouring property lines are as follows:

<table>
<thead>
<tr>
<th>Level</th>
<th>Distance from west neighbour property line</th>
<th>Distance from east neighbour property line</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parkade to</td>
<td>~21ft (6.4m)</td>
<td>~80ft (24.4m)</td>
</tr>
<tr>
<td>Level 3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Level 4 and 5</td>
<td>~51ft (17.3m) to 44ft (12.4m)</td>
<td>~80ft (24.4m)</td>
</tr>
<tr>
<td>Level 3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

o The illustration below shows the distance between neighbouring property lines.
4. Revised Drawings
   - The revised drawings have been included in the public hearing package available online [http://app.dnv.org/OpenDocument/Default.aspx?docNum=3704566](http://app.dnv.org/OpenDocument/Default.aspx?docNum=3704566) (see Architectural Plans (second submission)) and at the Clerk’s Department at District Hall. You can contact the planner Kevin Zhang (zhangk@dnv.org) if you’d like him to review the changes with you.

5. Parks Planning Process
   - The draft 2019 budget includes a request to develop a conceptual park plan based upon the preliminary public feedback through the Delbrook Deliberative Dialogue process. If funding is approved, a consultant would be engaged in the spring, and the project would continue through 2019. The conceptual park planning process will include public consultation.
   - Following Council approval of the park plan, capital budgets will be developed for the park improvements.

6. Tennis Courts
   - The existing tennis courts will remain operational for the foreseeable future. The location of the proposed building accommodates the tennis courts. Future decisions regarding the tennis courts will be arrived at through the parks planning process.

7. DNV Financial Contribution
   - The District’s waived fees associated with this project is estimated at $3.3 million dollars (including permit fees, DCCs, forgone CACs and off-site improvements).

8. Tenant Eligibility
   - The affordability of the units are secured by the District through a property lease. The rental tenancies will be managed by Catalyst. Anyone who applies to live in the building will be required to meet the income eligibility requirements. Annual tenant eligibility review will be conducted by Catalyst.

9. Change in Eligibility
   - For those tenants that are fortunate enough to have gained increases in their annual incomes, the Catalyst team will work with them to find appropriate housing. Catalyst typically provides up to one year for this transition for their tenants as the increases in income may be temporary.
or finding other housing, even with increases in annual incomes, may be challenging. Catalyst would take into consideration circumstance such as a tenant getting a contract or commission that was unexpected and is not anticipated to form part of the tenant’s anticipated regular income.

- Catalyst’s first choice would be to find alternative housing within the tenant’s income range (and at the development if, for example, the tenant now qualifies for a one bedroom rather than a studio). Following that first year of higher than usual income, and assuming they are not able to find another unit, the tenant would be given extended notice as described above.

10. Planning Process and Timing


- The public hearing scheduled for September 18th, 2018 is for the OCP Amendment and Rezoning bylaws. The zoning bylaw establishes the use, density, setbacks and other general parameters for the site.

- Should the OCP Amendment and Rezoning bylaws be adopted by Council, a Development Permit application will be submitted. At the Development Permit application stage, details such as the design of the building, servicing, construction traffic management will be reviewed further.

11. Construction Management Plan

- As per standard practice, a Construction Management Plan will be required to be submitted and approved as part of a Development Permit Application and Engineering Service Agreement.

12. Unit Mix

- The proposal is targeted towards residents who want to continue to live and work in the District, but face a shortage of affordable, suitable housing. The unit types and variety are intended to accommodate a range of seniors, singles, couples, and families who work in our local businesses, service organizations, and the customer service industry and who want to live close to where they work. There are 16 studios, 42 one-bedrooms, 14 two-bedrooms, and 8 three-bedrooms. The units are also geared to the “missing middle”, young families who are having their first child and would like to remain renting in the District as well as to seniors.
The housing needs of the above groups have been determined to be primarily studios, one bedrooms, and some two bedroom units.

13. Parking

- The proposal includes a total of 84 parking spots (61 residential, 9 visitor, 2 surface, and 12 Care BC staff spaces). The parking rate of 0.88 spaces/unit is based on a transportation engineering report prepared by Bunt and Associates citing the observed parking demands at existing non-market rental developments on the North Shore. The report further suggests Transportation Demand Management strategies such as exploring car-share opportunities and increasing cycling infrastructure. The site is also on a future Frequent Transit Network (Queens). The report is available at http://app.dnv.org/OpenDocument/Default.aspx?docNum=3704566 (see parking variance memorandum)

- The proposal includes secured bike storage at rates of one space per studio and one-bed units and two spaces per two-bed and three-bed units. This results in a total of 106 residential bike parking (85 residential and 21 for residential visitors and staff).

14. Workforce Housing

- The term “workforce housing” emerged from Catalyst as a means of putting a name to the demographics of some likely future residents. Many people who work in the District of North Vancouver cannot afford to live here, resulting in longer commute times, which contribute to traffic congestion. While this development is not required to be occupied by workers, it is acknowledged that many people who work in our local businesses, service organizations, and the customer service industry cannot afford housing in the community.

15. Affordability Framework

- The affordability framework that Catalyst will commit to from occupancy of the project is as follow:
  - 100% of the units will be affordable to households earning at or below the area median income (for the District of North Vancouver), paying no more than 30% of gross annual household income on rent;
  - 25% of all units will rent at Housing Income Limits (HILs) as specified by BC Housing annually;
Tenant eligibility is determined by checking that household income is at or below the corresponding maximum household incomes;

All units in the development are at least 10% below market rents; and

The development as a whole will achieve at least 20% below market rents.

Catalyst is also pursuing external grants with BC Housing, CMHC, and other organizations. Should these capital grant applications be successful, deeper levels of affordability may be achieved.
QUESTIONS ARISING FROM THE PUBLIC HEARING
FOR PROPOSED REZONING OF 600 WEST QUEENS ROAD

The following are questions arising from the September 18th Public Hearing that have been referred to Catalyst and Care BC. Responses are presented below.

A) Project Financing

1) What is the financial model for this project?
   a) The applicant has provided the following:
      i) The land is being contributed by DNV through a 60 year land lease at nominal value.
      ii) The costs for the project (including design, permitting, financing, and construction) are estimated to be $29.8M, with rental housing portion costing $22.4M and the seniors respite care centre costing $7.4M.
      iii) The rental housing portion will be funded by Catalyst through equity of $2.4M and a mortgage of $20.0M.
      iv) The seniors care portion will be funded by Care BC through raised funds and/or a mortgage.
      v) Once completed, the rents from leases cover the building’s operating costs (including capital reserves), and mortgage payments.
      vi) The lender requires a cash flow buffer (i.e. an amount by which net rents exceed the mortgage payments), this is currently estimated at $120,000 per year.
      vii) If grant funding is secured (e.g. BC Housing, CMHC), then these funds would be used to reduce the mortgage amount and rents would be decreased in proportion to the reduction in mortgage payments.

2) How much more expensive would it be to build an additional 50 parking stalls?
   a) Based on current cost estimates, the 50 extra parking stalls would cost approximately $2.75M, which translates to $55,000 per parking stall.

3) Would a three storey project be financially viable?
   a) No. If the housing component is reduced by two floors (eliminating 40 rental homes), it would reduce the rental income of the housing by approximately half. Rents of the remaining units would need to be increase by approximately $688 per unit per month in order to cover operation and mortgage payments. This would eliminate the affordability component.
   b) Reducing the number of units by half does not reduce projects costs by half because there are some component costs that stay much the same, such as
the roof, the outdoor spaces, the underground parking, the slab, as well as the costs for permitting, consulting, etc.

c) Theoretically, if height is reduced to 3 stories without reducing the number of units, the building would need to use additional land because it would have a larger footprint with impacts to the park. Catalyst has indicated that this is likely not financially viable due to the costs and delays associated with a complete redesign. Delays in the timeline may also impact VCH’s funding for the respite care centre.

4) Would a three storey project attract grant funding from senior levels of government?
   a) This is undetermined. Senior government funders seek to maximize the value for their investments. Both the capital and operating costs/unit decrease as the number of units approaches 80 on this site. The provision of 40 vs 80 homes would be viewed as having relatively low benefit compared to cost, and thereby would be less attractive to government funders.
   b) Also, any grant amount would be reduced on a proportionate basis.

5) How much are construction costs increasing on a monthly basis?
   a) Local construction index (Vanmar) suggests a cost escalation contingency for 2018 of 5-7%. With project hard costs of approximately $25 million, this means that over a year, the costs would increase to $26.75M via cost escalation alone. This is approximately $145,000 per month.

6) How do increases in construction costs impact the rents for the potential residents?
   a) There is contingency built into the financials to allow for estimated cost increases between now and start of construction.
   b) The project may be able to absorb some delays if additional equity is secured and additional grant monies are awarded.
   c) Every month that goes by, the project costs increase by about $145,000, making it more challenging to deliver below market rents.
   d) A delay of six months adds about $870,000 to the project, which translates to rent increases of $565 per unit, per year.

B) Adult Day Care & Overnight Seniors Respite Care

1) What are the demands for overnight respite care on the North Shore?
   a) Care BC estimates the demand for overnight respite care on the North Shore to be approximately 4,500 seniors.
   b) The demand estimates are based on the population of North Shore seniors aged 65 years and older who are being looked after by caregivers who require a break from their 24/7 responsibilities.
2) How many overnight respite beds and adult day care centre spaces are currently available on the North Shore?
   a) There are seven overnight beds and 50 adult day care spaces in total located in North and West Vancouver.

3) How many overnight beds are included in the proposed respite care centre?
   a) This proposal includes 18 overnight beds.

4) What are the costs of adult day care and overnight respite services?
   a) Currently the cost per day for adult day care is $10.
   b) The cost for overnight care is $37.10. The overnight rate is reviewed annually and established by the provincial government.

5) Will this care centre only cater to dementia patients? Will this care centre also cater to patients with autism?
   a) This care centre will not only cater to seniors with dementia; it will also cater to clients with other chronic illnesses.

6) How many residents can be accommodated at the respite care centre during the day?
   a) It is anticipated there will be 20 - 22 adult day clients in addition to the 18 overnight clients attending the adult day program on weekdays (approximately 40 total).

C) Non-Market Rental

1) How are residents selected for the non-market rental units?
   a) Interested parties make an application to Catalyst providing details of current income. Catalyst then processes applicants that qualify by income and undertakes income verification and reference checks. Applicant households also need to be within minimum and maximum occupancy levels to avoid overcrowding, or over-housing (e.g. a single person occupying a two bedroom home). At this point, if the housing is over subscribed, applications are prioritized based on when the application was made.

2) How will provincially published maximum allowable rent increases be addressed?
   a) The projected rent increases over time are at or below the current provincially mandated maximums. Catalyst endeavours to minimize annual rent increases. By way of example, at Madrona, Catalyst’s project in Victoria, rent increases for 2019 are fixed at 1%.
3) What are the proposed rents/maximum incomes allowed in the building?

<table>
<thead>
<tr>
<th></th>
<th>Studio</th>
<th>1 bedroom</th>
<th>2 bedroom</th>
<th>3 bedroom</th>
</tr>
</thead>
<tbody>
<tr>
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<td>$1,000 to $1,260</td>
<td>$1,125 to $1,680</td>
<td>$1,388 to $2,100</td>
<td>$1,663 to $2,550</td>
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<td>$1,680</td>
<td>$2,100</td>
<td>$2,550</td>
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<tr>
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<td></td>
<td></td>
</tr>
<tr>
<td>HILs* rate</td>
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</tr>
<tr>
<td>Range of annual</td>
<td>$40,000 to $50,400</td>
<td>$45,000 to $67,200</td>
<td>$55,500 to $84,000</td>
<td>$66,520 to $102,000</td>
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<td>household income</td>
<td></td>
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Table 1: Proposed Rents and Qualifying Incomes

*HILs: Housing Income Limits (HILs) are rents set by BC Housing derived from CMHC rental figures. HILs stipulates that not more than 30% of annual household income (see second row of the table) is spent on rent.

4) Explain the process for tenants who earn more than the eligibility criteria.
   a) Catalyst will work with all tenants with changing needs and financial situations. The ultimate goal is to find suitable housing within the building, within other Catalyst projects, or elsewhere.
   b) Annual income-testing for all tenants will be conducted by Catalyst.
   c) For those whose annual incomes have consistently increased beyond the permitted maximum for their home type, the Catalyst team will work with them to find other housing, more appropriate to their income, including potentially alternative housing within the project (e.g. someone moving from a studio to a one bedroom).
   d) Catalyst’s policy is to provide a one-year grace period as often tenant incomes vary significantly from year to year. If a tenant has income for two consecutive years greater than the permitted levels for all units within the building, they will be given four months notice, in accordance with RTA regulations.

5) Can Catalyst implement a locals targeting strategy?
   a) Yes, the marketing and advertising for tenants is very locally focussed. Most applicants hear about the project from site signage, local word of mouth and referrals from local community organizations. Catalyst’s experience has been that the vast majority of applicants for these types of developments already live in the community.

6) How is this proposed development suitable for families given the share of studio and one-bed apartments?
   a) Families vary in size and economic situation.
   b) Based on CMHC data, there are 1,470 single or two parent families in DNV paying more than 30% of their income in rent (i.e. core need housing).
c) There are also 1200 seniors households (singles and couples) and 1800 single and two person households.

d) While there is a need for affordable housing for large families, there is also a significant need from other family types in the District, in particular seniors on a fixed income. The project contains a mix of housing that meets all these needs including 22 homes suitable for larger families with children.

7) Further explanation of the affordability model required.
   a) The affordability of this project increases with time (translating into lower monthly rents), as the construction loan and other financing is paid off.
   b) At initial occupancy of the building (assuming no grant funding) average rents across the building as a whole will be a minimum of 20% below market, with each unit being a minimum of 10% below market. All homes will be affordable to people at or below the Area Median (DNV) Income (with rents based on max 30% of income).
   c) At the outset a minimum of 25% of homes will be rented at rents based on HILs (30% of household income allocated to housing is the ‘Housing Income Limit’ or HILs rate). See Table 1.
   d) Over time, as the mortgage is paid down and if the project receives grant funding, the intent is that all units will offer lower rents based on HILs, see Table 1.

8) How does the median income of the District/Metro Region factor into the rent calculations?
   a) All of the units will be affordable to households earning at or below the Area Median Income (for DNV), which is $103,981. The highest proposed rents (3-bedroom units) are $2,550/month which is less than 30% of the monthly median income. Most units will be rented for less, see Table 1.

9) How would additional parking affect the affordability of rental units?
   a) If 50 parking stalls are added this would increase overall project cost by $2.75M, which would equate to an average rent increase of $164 per unit per month.

10) What is ‘workforce housing’ and is this building restricted to workforce housing?
    a) Workforce rental housing is a term typically used to describe housing that is targeted towards people who are working (excluding non-working seniors) as opposed to people who are solely on social assistance. While this building is not restricted to working people, the rents and resulting incomes would typically mean that people are working.
D) **Building and Site Design**

1) How many stories is the building?
   a) The building ranges from 3-5 storeys over a partially exposed parkade and lobby on the west end (same configuration as the adjacent apartment building), and over a fully underground parkade on the east end. See image below.

![Rendering along West Queens Road](image)

2) What are the changes to the building since first submission?
   a) Three major changes were made in response to the comments from the public and the Advisory Design Panel.
      i) The west end of the building was lowered by two storeys to better relate to the adjacent building. Also the 4th and 5th floor at this corner were pushed back from West Queens Road.
      ii) The lobby was enlarged and wraps around the ground floor to create a friendlier ground level environment and residential entry. This helps to reduce the amount of visible concrete wall from the parkade, which is exposed at this corner of the building.
      iii) The stepping on the west-side of the building impacted the rental housing program. The upper floor residential units were relocated to the northeast corner facing Stanley Avenue.

3) Why was the eastern end of the building also not lowered?
   a) The 4th and 5th floors on the east end already benefit from a large setback from the property line and Stanley Avenue.
   b) Lowering the building on the east end would also reduce the number of units, rental affordability, and financial feasibility (see section A: Project Financing).

4) Why is the open space on the north side of the building?
   a) The open space on the north side creates a more private outdoor space for the residents and users of the respite care facility. The building provides a visual and acoustic separation from the noise and traffic along Queens Road.
   b) The respite program requires the outdoor space to be secured due to the nature and sensitivity of the types of seniors in care, such as those with dementia.
c) In addition, if the open space were to be swapped with the building, the building would then shadow the tennis courts. In its current location, shadowing is not an issue.

5) Why was the parking lot chosen as the location for the building instead of somewhere else on the site?
   a) The parking lot was chosen as a location for the following reasons:
      i) It is the lowest point on the site, thereby mitigating the impact of height and minimising the amount of exposed parkade;
      ii) It has access to both West Queens Road and Stanley Avenue, key for accommodating both residential and seniors’ care uses.
      iii) Having the parkade entrance from Queens reduces the need for parking ramps, which reduces the total construction costs, which directly affects the monthly rental cost by unit; and
      iv) It does not impact current uses on the site including the North Buildings, Little Rascals Daycare, existing green space, and the tennis courts.

6) How much taller would the building have to be if the entrance to the parkade is on Stanley Avenue?
   a) Having the parkade entrance on Stanley Avenue would have significant impacts to the overall project program.
      i) The grade along Stanley Avenue is at the highest topographical point for the project site. If the parkade entrance were on the Stanley Avenue side of the building, the parkade would need to be raised and would look like two storeys at the lowest south-west corner of the site. This would create a less desirable ground/pedestrian sidewalk relationship.
      ii) Also a parkade ramp length of over 200 ft would be required to meet the current parking level and would eliminate 1/4 of the current parking spaces. (Note, the site slopes from the north-east corner to south-west corner by 23 ft or 7m).
      iii) The current location of the respite drop-off area provides a safe and level drop off zone, with direct access to the respite care facility, away from the busier West Queens Road. Putting a parking ramp adjacent to the respite drop-off area creates traffic congestion and conflicts with the respite program for daily drop-off/pickup, deliveries, Handi-Dart vehicle parking, and loading areas.

7) Are there 80 or 82 units proposed?
   a) There are 80 units proposed. There are 16 studios, 42 one-bedrooms, 14 two-bedrooms, and 8 three-bedrooms.

8) How tall is the building relative to the trees to the west?
   a) The tops of the existing trees to the west are currently approximately half a storey above the west end of the building (see previous illustration).
E) **Traffic and Parking**

1) **Why is parking reduced?**
   a) Affordable rental projects require less parking. In affordable rental housing projects, typically not every resident will own a vehicle. There are more trips taken by transit and car share.
   b) A number of municipalities are working on affordable rental housing sections to their parking bylaws to address this. The Bunt Engineering report includes information on similar affordable housing projects which show a lower parking demand.

2) **How is the reduced parking calculated?**
   a) A literature review of parking rates for three comparable non-market rental developments on the North Shore were used. For the three sites studied, an observed parking supply rate was collected along with an observed parking demand. This resulted in a weighted average demand of 0.85 stall per unit.
   b) Another parking reduction was in regards to the visitor parking rate. DNV requires 0.25 stalls per unit for visitors, however, the Metro Vancouver Apartment Parking Study has results hovering under 0.10 visitor stalls per unit. Hence, a visitor supply of 0.10 stalls per unit is more applicable.
   c) Utilizing both the reduced visitor rate and parking demand, a lower parking rate was proposed.

3) **How are Bunt’s comparisons applicable to this proposed development?**
   a) The comparisons that were used for the purpose of this project are based on non-market rental developments on the North Shore. These units are comparable to the proposed development. The developments include the following:
      i) St. Andrews Place (North Shore Housing Society): affordable rental housing by the Kiwanis North Shore Housing Society; they develop homes to serve seniors in need of below market housing.
      ii) Klahanee Park Lodge (North Shore Disability Resource Centre): senior housing for aged 55 and older, families, person with disabilities and couples; subsidized housing (rent geared to income).
      iii) Creekside Coop: co-operative affordable housing.

4) **Why is access from West Queens Road and not Stanley Avenue?**
   a) See previous response (D6).
F) Process

1) What document was sent on Friday, September 14th?

2) Has the planning process for the proposed development been rushed?
   a) No, the land use consultation was wide-ranging and spanned several years before the rezoning process began. As a result, the process provided clear direction from the public.
   b) The timeline is as follows:
      i) In September 2015 the land use planning process began with the Delbrook Deliberative Dialogue public consultation, which provided residents and stakeholders from across the District with multiple in-depth opportunities to participate in discussing possibilities, and providing ideas and opinions regarding possible future uses for the site.
      ii) By the fall of 2016 the public input report was finalized and provided to council indicating that there was highest public support for affordable housing, parks, and seniors and child care, as future uses for the site.
      iii) In 2017 Council chose Catalyst to create the housing development proposal for the project through a formal Request for Expressions of Interest process.
      iv) In January 2018 Council signed an Agreement to Lease with Catalyst to deliver an affordable rental and seniors care project on the site.
      v) In March 2018 the detailed rezoning application was submitted.
   c) The overall timeline of this project is longer than average due to the extensive land use planning work.
   d) Public engagement opportunities regarding the rezoning proposal were provided according to District policies and the Local Government Act.

3) Why can’t you build the park first?
   a) Council has identified affordable housing as a priority through the adoption of the Rental and Affordable Housing Strategy.
   b) While the planning work for the subject development and the park inform each other, the two timelines are dictated by the availability of funding.
   c) The 2019 budget includes a request to develop a conceptual park plan based upon the preliminary public feedback from the Delbrook Deliberative Dialogue process. A consultant will be engaged, and the project will continue through 2019.
   d) The conceptual park planning process will include public consultation.
   e) Following Council approval of the park plan, capital budgets will be developed for the park improvements.
4) Can the District rezone the remainder of the Delbrook site from Public Assembly (PA) to Park, Recreation, and Open Space (PRO)?
   a) That decision will be at the discretion of Council.

5) Where is childcare proposed to be located in the future Delbrook Plan?
   a) The location of a child care will be determined by the future park planning process with input from the community and stakeholders.

6) Please clarify Advisory Design Panel input and process.
   a) Advisory Design Panel review is required as part of a Detailed Development Permit application. The Panel reviews applications for their adherence to Form and Character Guidelines.
   b) In this case, Catalyst has voluntarily attended ADP at the earlier Rezoning stage in order to address design issues as early as possible.
   c) Should the application advance to the Development Permit stage, the design will return to the ADP once again for further analysis.
The Corporation of the District of North Vancouver

Bylaw 8344

A bylaw to amend District of North Vancouver Official Community Plan Bylaw 7900, 2011

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

Citation

1. This bylaw may be cited as “District of North Vancouver Official Community Plan Bylaw 7900, 2011, Amendment Bylaw 8344, 2018 (Amendment 36)”.

Amendments

2. District of North Vancouver Official Community Plan Bylaw 7900, 2011 is amended as follows:

   a) Map 2 Land Use: as illustrated on Schedule A, by changing the land use designation of the properties on Map 2 from “Institutional” (INST) to “Residential Level 6: Medium Density Apartment” (RES6);

READ a first time June 25th, 2018 by a majority of all Council members.

PUBLIC HEARING held

READ a second time by a majority of all Council members.

READ a third time by a majority of all Council members.

ADOPTED by a majority of all Council members.

Mayor

Municipal Clerk

Certified a true copy

Municipal Clerk
Schedule A to Bylaw 8344

INSTITUTIONAL (INST) TO RESIDENTIAL LEVEL 6: MEDIUM DENSITY APARTMENT (RES6)
The Corporation of the District of North Vancouver

Bylaw 8345

A bylaw to amend District of North Vancouver Bylaw 3210, 1965

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

Citation

1. This bylaw may be cited as “District of North Vancouver Rezoning Bylaw 1380 (Bylaw 8345”).

Amendments

2. District of North Vancouver Zoning Bylaw 3210, 1965 is amended as follows:

   (a) Part 2A, Definitions is amended by adding CD 124 to the list of zones that Part 2A applies to.

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

       “Comprehensive Development Zone 124 CD 124”

   (c) Part 4B Comprehensive Development Zone Regulations by inserting the following, inclusive of Schedule B:

       “4B124 Comprehensive Development Zone 124 CD 124”

The CD 124 zone is applied to a portion of the site below as described in Schedule A to Bylaw 8345:

   a) 006-999-832 LEGAL DESCRIPTION: BLOCK 19, EXCEPT PART IN EXPLANATORY PLAN 16399, WEST 1/2 OF DISTRICT LOT 617 PLAN 19489. R/P-R/W LMP24200

4B 124 – 1 Intent

The purpose of the CD 124 Zone is establish specific land use and development regulations for a residential rental building with a seniors’ respite care facility.
4B 124 – 2 Permitted Uses:

The following principal uses shall be permitted in the CD 124 Zone:

a) Uses Permitted Without Conditions:
   i. multi-level care facility (as defined in Part 2); and
   ii. adult day care.

b) Conditional Uses:
The following principal uses are permitted when the conditions outlined in Section 4B 124-3 Conditions of Use, are met:
   i. residential use (as defined in Part 2A).

4B 124-3 Conditions of Use

a) All conditional uses: All uses of land, buildings and structures are only permitted when the following condition of use is met:
   i) Each dwelling unit has access to private or semi-private outdoor space;
   ii) Balcony enclosures are not permitted.

4B 124-4 Accessory Use

a) Accessory uses are permitted and include, but not necessarily limited to:
   i. Storage;
   ii. Laundry;
   iii. Kitchen;
   iv. Dining;
   v. Administration spaces;
   vi. Therapy treatment rooms;
   vii. Multi-purpose rooms;
   viii. Activity rooms; and,
   ix. Other uses customarily incidental to the principal use.

b) Home occupations are permitted in residential dwelling units.

4B 124 – 5 Density

Buildings and structures shall be sited and constructed in accordance with the following regulations:

a) The maximum permitted floor space in the CD124 Zone is 7,237 sq m (77,900 sq ft);

b) For the purposes of calculating floor space ratio, the following areas are excluded:
i. All spaces underground including but not limited to parking and storage
ii. Balconies, decks, canopies, overhangs, architectural elements and awnings.

**4B124 – 6 Height:**

a) West end of the site from finished grade:
   i. The maximum permitted height measured to the top of the fifth floor of the building is 21.4m (70 ft).

b) East end of the site from finished grade:
   i. The maximum permitted height measured to the top of the fifth floor of the building is 16.7m (55 ft).

c) Rooftop elevator mechanical shafts and other utilities are exempted from the height calculation up to 1.5m (5 ft).

**4B124 – 7 Setbacks:**

a) Buildings shall be set back from property lines to the closest building face as established by development permit and in accordance with the following regulations:

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<th>Setback</th>
<th>Minimum Required Setback</th>
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<td>North</td>
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<tr>
<td>East (Stanley Avenue)</td>
<td>6.5m (21.5 ft)</td>
</tr>
<tr>
<td>South (West Queens Road)</td>
<td>6.5m (21.5 ft)</td>
</tr>
<tr>
<td>West</td>
<td>0m (0 ft)</td>
</tr>
</tbody>
</table>

b) For the purpose of measuring setbacks, measurements exclude:
   i. Balconies, canopies, overhangs, architectural elements and awnings.

**4B124 - 8 Coverage:**

a) Building Coverage: The maximum building coverage is 80%.

b) Site Coverage: The maximum site coverage is 95%.

**4B 124 - 9 Landscaping and Storm Water Management:**

a) All land areas not occupied by buildings, and patios shall be landscaped in accordance with a landscape plan approved by the District of North Vancouver.

b) All electrical kiosks and garbage and recycling container facilities not located underground or within a building must be screened.
4B 124 – 10 Parking, Loading and Servicing Regulations:

a) A minimum of 82 parking spaces are required, inclusive of 61 residential parking, 9 visitor parking, and 12 staff parking;

b) All parking spaces shall meet the minimum width and length standards established in Part 10 of the Zoning Bylaw, exclusive of building support columns;

c) Bicycle storage for residents shall be provided on the basis of minimum one space per studio and one-bed units and two spaces per two-bed and three-bed units.

d) A minimum of 8 class 2 visitor bicycle parking spaces must be provided."

(d) The Zoning Map is amended in the case of the lands illustrated on the attached map (Schedule A) by rezoning the land from the Public Assembly Zone (PA) to Comprehensive Development Zone CD 124 (CD124).

(e) The Siting Area Map section is amended by deleting Plan Section PA/03 and replacing with the revised Plan Section PA/03 attached in Schedule B.

READ a first time June 25th, 2018

PUBLIC HEARING held

READ a second time

READ a third time

Certified a true copy of “Bylaw 8345” as at Third Reading

______________________________________________
Municipal Clerk

APPROVED by the Ministry of Transportation and Infrastructure on

ADOPTED

______________________________________________  _______________________________________
Mayor  Municipal Clerk
Certified a true copy

_________________________
Municipal Clerk
Schedule A to Bylaw 8345

PUBLIC ASSEMBLY ZONE (PA) TO COMPREHENSIVE DEVELOPMENT ZONE 124 (CD124)
The Corporation of the District of North Vancouver

Bylaw 8356

A bylaw to waive Development Cost Charges

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

Citation

1) This bylaw may be cited as “600 West Queens Road Non-Market Rental Housing and Seniors Respite Care Facility Development Cost Charge Waiver Bylaw 8356, 2018”.

Waiver

2) Development Cost Charges are hereby waived in relation to the Eligible Development proposed to be constructed on “Site A” as shown on the attached map, and the development cost charge rates for the Eligible Development are hereby set at zero.

3) For the purpose of this Bylaw “Eligible Development” means not more than 80 non-market rental housing units and a seniors’ respite care facility in a building not exceeding 5 storeys, where the non-market rental rate structure is secured by way of a lease agreement or other measure acceptable to the Municipal Solicitor.

READ a first time June 25th, 2018

READ a second time

READ a third time

ADOPTED

Mayor

Municipal Clerk

Certified a true copy

Municipal Clerk
What changes?

Bylaw 8344 proposes to amend the OCP land use designation of the subject site from Institutional (INST) to Residential Level 6: Medium Density Apartment (RES6). Bylaw 8345 proposes to amend the District’s Zoning Bylaw by rezoning the subject site from Public Assembly (PA) to Comprehensive Development Zone 124 (CD124). The CD124 Zone addresses use and accessory use, density, height, setbacks, building and site coverage, landscaping and storm water management and parking, loading and servicing regulations.

When can I speak?

We welcome your input Tuesday, September 18, 2018, at 7 pm. You can speak in person by signing up at the hearing, or you can provide a written submission to the Municipal Clerk at input@dnv.org or by mail to Municipal Clerk, District of North Vancouver, 355 West Queens Road, North Vancouver, BC, V7N 4N5, before the conclusion of the hearing. Please note that Council may not receive further submissions from the public concerning this application after the conclusion of the public hearing.

Need more info?

Relevant background material and copies of the bylaws are available for review at the Municipal Clerk’s Office or online at dnv.org/public_hearing from September 4 to September 18. Office hours are Monday to Friday 8 am to 4:30 pm, except statutory holidays.
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, June 25, 2018 in the Council Chambers of the District Hall, 355 West Queens Road, North Vancouver, British Columbia.

Present: 
Mayor R. Walton  
Councillor R. Bassam  
Councillor J. Hanson  
Councillor R. Hicks  
Councillor D. MacKay-Dunn  
Councillor L. Muri

Absent:  
Councillor M. Bond

Staff:  
Mr. D. Stuart, Chief Administrative Officer  
Ms. C. Grant, General Manager – Corporate Services  
Mr. G. Joyce, General Manager – Engineering, Parks & Facilities  
Mr. D. Milburn, General Manager – Planning, Properties & Permits  
Mr. J. Gordon, Manager – Administrative Services  
Mr. T. Lancaster, Manager – Community Planning  
Ms. J. Paton, Manager – Development Planning  
Ms. M. Welman, Manager – Strategic Communications & Community Relations  
Ms. L. Brick, Deputy Municipal Clerk  
Ms. A. Reiher, Confidential Council Clerk  
Mr. D. Veres, Planner

Also in Attendance:  
Mr. Tim Chan, Vice President, NRG Research Group

1. ADOPTION OF THE AGENDA

Councillor MURI left the meeting at this point in the proceedings. (7:00 p.m.)

1.1. June 25, 2018 Regular Meeting Agenda

MOVED by Councillor BASSAM  
SECONDED by Councillor MACKAY-DUNN  
THAT the agenda for the June 25, 2018 Regular Meeting of Council for the District of North Vancouver is adopted as circulated, including the addition of any items listed in the agenda addendum.

CARRIED  
Absent for Vote: Councillor MURI

Councillor MURI returned to the meeting at 7:02 p.m.
2. PUBLIC INPUT

2.1. Mr. Dave Iverson, 550 Block Browning Place:
• Spoke in opposition to item 9.2.;
• Expressed concern about potential noise and pollution;
• Commented about developments within the District; and,
• Requested that the application be delayed.

2.2. Mr. John Lando, 600 Block Ellis Street:
• Spoke in opposition to item 9.2.;
• Opined that Dollarton Highway is dangerous to pedestrians and cyclists;
• Commented regarding anticipated road improvements by the Federal and Provincial governments; and,
• Suggested that transportation and green space be addressed by the developer.

2.3. Mr. Peter Teevan, 1900 Block Indian River Crescent:
• Commented about Public Hearings, Public Information Meetings and Council Meetings;
• Expressed concern that Council and staff are not sufficiently informed with content ahead of meetings; and,
• Expressed concern regarding a potential disconnect of information amongst staff in the Planning Department.

2.4. Mr. Oliver Webb, 4700 Block Eastridge Road:
• Spoke as President of Darwin Properties;
• Spoke in favour of item 9.2.; and,
• Expressed concern that delays to a Public Hearing could jeopardize employment opportunities within the District.

2.5. Mr. John Miller, 1600 Block Tatlow Avenue:
• Spoke as a member of the North Vancouver Community Association Network;
• Opined that numerous Council meetings and large agenda packages hinder public consultation; and,
• Expressed concern about the frequency of proposed developments for Council consideration.

2.6. Mr. Len Slade, 1500 Block Larkhall Crescent:
• Spoke in opposition to item 9.2.; and,
• Expressed concern regarding developments and their impact to the community, amenities, traffic and transportation.

2.7. Mr. Mauro Chiesa, 1500 Block Larkhall Crescent:
• Spoke in opposition to item 9.2.; and,
• Expressed concern that a population growth by further proposed developments is not sustainable to the infrastructure and services on the North Shore.
2.8. Ms. Katherine Fagerlund, 1800 Block Deep Cove Road:
• Spoke in opposition to item 9.2.; and,
• Expressed that further community input and public engagement is required.

2.9. Ms. Megan Curren, 2700 Block Badger Road:
• Expressed concern about development applications, large agendas and community engagement;
• Commented regarding the definitions of affordable housing and market housing; and,
• Suggested that proposed developments should be compared to the Official Community Plan and that residents be permitted sufficient time to do so.

2.10. Ms. Linda Melville, 2200 Block Old Dollarton Road:
• Spoke in opposition to item 9.2.;
• Commented regarding the history of the Maplewood lands;
• Expressed concern to the environmental sensitivities; and,
• Suggested that the Tsleil-Waututh Nation be permitted to develop the property.

With the consent of Council, Mayor Walton varied the agenda as follows:

9. REPORTS FROM COUNCIL OR STAFF

9.2. Bylaws 8347, 8348, 8349, 8350, 8354 and 8355: Rezoning Bylaw, Phased Development Agreement, and Housing Agreement Bylaws for the Maplewood Innovation District (2420 - 2468 Dollarton Highway)
File No. 08.3060.20/043.18

Public Input:

Mr. James Copp, 500 Block Bournemouth Crescent:
• Spoke in opposition to item 9.2.;
• Expressed concern about traffic levels, infrastructure and impact on trails;
• Expressed concern regarding the timing and accuracy of public information; and,
• Suggested that further community engagement should be provided.

Ms. Kris Neely, 100 Block West 1st Street:
• Spoke as the Senior Program Manager, Economic Partnership North Vancouver;
• Spoke in support of item 9.2.;
• Suggested that the proposed development allows for further employment and housing options within the North Shore.

MOVED by Councillor MURI
SECONDED by Councillor HANSON
THAT consideration of this item be postponed until a full public engagement process is completed and not sooner than mid-September 2018.

DEFEATED
Opposed: Mayor WALTON, Councillors BASSAM and HICKS

Regular Council – June 25, 2018
MOVED by Councillor BASSAM  
SECONDED by Councillor HICKS  
THAT this item be postponed to the July 16th or 23rd Council meeting when a full Council will be present.  

DEFEATED  
Opposed: Councillors HANSON, MACKAY-DUNN and MURI

Council recessed at 8:24 p.m. and reconvened at 8:28 p.m.

3. PROCLAMATIONS
   Nil

4. RECOGNITIONS
   Nil

5. DELEGATIONS
   Nil

6. RELEASE OF CLOSED MEETING DECISIONS
   Nil

7. COUNCIL WORKSHOP REPORT
   Nil

9. REPORTS FROM COUNCIL OR STAFF

9.1. Reunification Public Engagement Results
File No.

Ms. Mairi Welman, Manager – Strategic Communications & Community Relations, provided an overview of the public engagement approach, the various methods used to provide information to the public and professional survey methodology.

MOVED by Councillor BASSAM  
SECONDED by Councillor MURI  
THAT staff report back in the July 9, 2018 Regular Council Meeting on possible wording for a ballot question to determine community support of the creation and funding of an impartial arms length advisory body, such as a “Citizen’s Assembly”, to further study the costs, benefits and potential implications of a reunification of North Vancouver District and City.

CARRIED
MOVED by Councillor MURI
SECONDED by Councillor BASSAM
THAT items 9.6, 9.7 and 9.8 are included in the Consent Agenda and be approved without debate.

CARRIED

9.3. Bylaws 8327, 8328 and 8329: Rezoning, Waiver of Development Cost Charges and Housing Agreement and for a Six Storey Seniors Rental Building at 2555 Whiteley Court
File No. 08.3060.20/025.18

Public Input:

Mr. Patrick McLaughlin, 2200 Block Nelson Avenue;
• Spoke as the President of Kiwanis North Shore Housing Society;
• Spoke in support of item 9.3.; and,
• Commented regarding the proposed low-income apartments for seniors with close proximity to services and amenities.

MOVED by Councillor HICKS
SECONDED by Councillor BASSAM
THAT "District of North Vancouver Rezoning Bylaw 1375 (Bylaw 8327)" is given FIRST Reading;

AND THAT "Whiteley Court Seniors Affordable Rental Housing Development Cost Charge Waiver Bylaw 8328, 2018", is given FIRST Reading;

AND THAT "Housing Agreement Bylaw 8329, 2018 (2555 Whiteley Court)" is given FIRST Reading;

AND THAT "District of North Vancouver Rezoning Bylaw 1375 (Bylaw 8327)" is referred to a Public Hearing.

CARRIED
Opposed: Councillor MURI

9.4. Bylaws 8344, 8345 and 8356: OCP Amendment and Rezoning for 600 West Queens Road - 5 Storey Non-Market Rental and Seniors Respite Care Facility
File No. 08.3060.20/042.18

Public Input:

Mr. Robert Brown, 4400 Block James Street:
• Spoke as the President of Catalyst Community Developments Society;
• Spoke in support of item 9.4; and,
• Commented regarding the facility, respite centre and non-market rental units which will be 10 – 20 % below market values to increase affordability and retain North Shore residents.
MOVED by Councillor BASSAM
SECONDED by Councillor MACKAY-DUNN
THAT “District of North Vancouver Official Community Plan Bylaw 7900, 2011, Amendment Bylaw 8344, 2018 (Amendment 36)” is given FIRST Reading;

AND THAT “District of North Vancouver Rezoning Bylaw 1380 (Bylaw 8345)” is given FIRST Reading;

AND THAT pursuant to Section 475 and Section 476 of the Local Government Act, additional consultation is not required beyond that already undertaken with respect to Bylaw 8344;

AND THAT in accordance with Section 477 of the Local Government Act, Council has considered Bylaw 8344 in conjunction with its Financial Plan and applicable Waste Management Plans;

AND THAT Bylaw 8344 and Bylaw 8345 are referred to a Public Hearing;

AND THAT “600 West Queens Road Non-Market Rental Housing and Seniors Respite Care Facility Development Cost Charge Waiver Bylaw 8356, 2018” is given FIRST, SECOND and THIRD Readings.

CARRIED

Opposed: Councillor MURI

9.5. Development Variance Permit 18.18 – 3635 Bluebonnet Rd
File No. 08.3060.20/018.18

Public Hearing:

Mr. Steven Piers, 3600 Block Bluebonnet Road:
• Spoke in support of item 9.5; and,
• Expressed the desire to continue living within the District.

MOVED by Councillor BASSAM
SECONDED by Councillor MACKAY-DUNN
THAT Development Variance Permit 18.18, to allow for the construction of a Coach House at 3635 Bluebonnet Road, is APPROVED.

CARRIED

6. ADOPTION OF MINUTES

6.1. June 11, 2018 Regular Council Meeting

MOVED by Councillor BASSAM
SECONDED by Councillor MACKAY-DUNN
THAT the minutes of the June 11, 2018 Regular Council meeting are adopted.

CARRIED
6.2. June 12, 2018 Public Hearing

MOVED by Councillor BASSAM
SECONDED by Councillor MACKAY-DUNN
THAT the minutes of the June 12, 2018 Public Hearing are received.

CARRIED

6.3. June 12, 2018 Public Hearing

MOVED by Councillor BASSAM
SECONDED by Councillor MACKAY-DUNN
THAT the minutes of the June 12, 2018 Public Hearing are received.

CARRIED

9. REPORTS FROM COUNCIL OR STAFF

9.6. BC Bike Race 2018: July 11-12, 2018 at Parkgate Park in DNV

File No.

MOVED by Councillor MURI
SECONDED by Councillor BASSAM
THAT the Parks Regulation Bylaw 8310 be relaxed to permit overnight camping in Parkgate Park for the BC Bike Race on July 11, 2018.

CARRIED

9.7. Museum Deaccessions #10 Report

File No.

MOVED by Councillor MURI
SECONDED by Councillor BASSAM
THAT the North Vancouver Museum and Archives (NVMA) Commission is authorized to deaccession and dispose of 181 artifacts owned solely by the District of North Vancouver as outlined in the June 8, 2018 report of the Director – North Vancouver Museum and Archives entitled Recommended Museum Deaccessions #10;

AND THAT the North Vancouver Museum and Archives (NVMA) Commission is authorized to deaccession and dispose of 13 artifacts owned jointly by the District and the City of North Vancouver as outlined in the June 8, 2018 report of the Director – North Vancouver Museum and Archives entitled Recommended Museum Deaccessions #10;

AND THAT the NVMA Commission is authorized to dispose of 554 unaccessioned objects that have been found in the Museum Collection as outlined in the June 8, 2018 report of the Director – North Vancouver Museum and Archives entitled Recommended Museum Deaccessions #10.

CARRIED
9.8. Community Emergency Preparedness Fund Grant Application
File No.

MOVED by Councillor MURI
SECONDED by Councillor BASSAM
THAT Council supports the submission of the application to the Community
Emergency Preparedness Fund for the North Shore Seismic Sensors Network
project;

AND THAT Council commits to the District providing overall grant management for
the project.

CARRIED

File No. 01.0645.20/001.000

Councillor MURI left the meeting at this point in the proceedings. (9:32 p.m.)

Public Input:

Mr. Corrie Kost, 2800 Block Colwood Drive:
• Commented on the Annual Report and provided feedback and suggestions for
  improvement;
• Expressed concern that the report is not clear and understandable to the public;
• Commented regarding other municipalities and their annual reports;
• Suggested that the Council agendas and support documents could be reduced;
  and,
• Expressed concern to the number of Council meetings and Public Hearings.

Mr. Peter Teevan, 1900 Block Indian River Crescent,
• Opined that the annual report is an important way to communicate with the citizens
  of the District of North Vancouver;
• Suggested that filming revenue could be reflected in the annual report;
• Expressed that communication could be better conveyed to residents in regards
  to tax and budget allocations; and,
• Suggested that an entire Council meeting be dedicated to the report.

MOVED by Councillor MACKAY-DUNN
SECONDED by Councillor BASSAM
THAT Council receive the District of North Vancouver 2017 Annual Report, including:
the consolidated audited financial statements for 2017; permissive tax exemptions; a
report on municipal services and operations; and, municipal objectives for the period
2015 to 2018, with an outlook to 2019.

CARRIED
Absent for Vote: Councillor MURI
10. REPORTS

10.1. Mayor

Mayor Walton reported on his attendance at the North Shore Congress where an update was provided on the work by the Integrated North Shore Transportation Planning Project (INSTEPP).

10.2. Chief Administrative Officer

Nil

10.3. Councillors

10.3.1. Councillor Hicks commented on the work by INSTEPP.

10.3.2. Councillor Bassam commented on the TransLink B-Line project and community engagement.

10.4. Metro Vancouver Committee Appointees

10.4.1. Aboriginal Relations Committee – Councillor Hanson

Nil

10.4.2. Housing Committee – Councillor MacKay-Dunn

Nil

10.4.3. Regional Parks Committee – Councillor Muri

Nil

10.4.4. Utilities Committee – Councillor Hicks

Nil

10.4.5. Zero Waste Committee – Councillor Bassam

Nil

10.4.6. Mayors Council – TransLink – Mayor Walton

Nil

11. ANY OTHER BUSINESS

Nil
12. ADJOURNMENT

MOVED by Councillor MACKAY-DUNN
SECONDED by Councillor BASSAM
THAT the June 25, 2018 Regular Meeting of Council for the District of North Vancouver is adjourned.

CARRIED
Absent for Vote: Councillor MURI
(10:10 p.m.)
MINUTES OF THE ADVISORY DESIGN PANEL MEETING HELD ON
July 12, 2018 AT THE DISTRICT OF NORTH VANCOUVER
These minutes are draft, pending adoption at the September 13, 2018 ADP meeting.

ATTENDING:  Mr. Jordan Levine (Chair)
Ms. Carolyn Kennedy
Mr. Samir Eidnani
Mr. Steve Wong
Mr. Tieg Martin
Sgt. Kevin Bracewell
Ms. Diana Zoe Coop

REGRETS:  Mr. Stefen Elmitt
Mr. Darren Burns
Mr. Charles Leman

STAFF:  Ms. Tamsin Guppy
Mr. Nathan Andrews
Mr. Kevin Zhang (Item 3.a.)
Ms. Tamsin Guppy (Item 3.b.)

The meeting came to order at 6:06 pm.

1. ADOPTION OF MINUTES

A motion was made and carried to adopt as circulated the minutes of the Advisory Design Panel meeting of June 14, 2018.

2. ANNOUNCEMENTS AND ADMINISTRATION

• Today’s items are both affordable housing projects. Despite the financial constraints of an affordable housing project, the Panel’s role is still to speak to urban design objectives.
• No meeting is scheduled for the month of August therefore, the next meeting will be held on September 13th 2018.
• Tour arrangements will be made for sometime in September with Sergeant Kevin Bracewell to visit a couple of sites that demonstrate the dos and don’ts of CPTED design.
3. NEW BUSINESS

a.) 600 West Queens Road - Rezoning for a 5-storey mixed-use building with 80 non-market rentals and a seniors respite care facility

Mr. Kevin Zhang, Development Planner, introduced the project and explained the context.

The Panel members for clarification raised the following questions to Mr. Zhang:

- Is the northern portion of the site meant to be used for park? Yes mostly, and likely some childcare. It will be a planning process led by the Parks Department and will be consistent with the outcomes of the Delbrook Dialogue Process.
- Is the site completely vacant? No, the north building is used by the Red Cross and the Little Rascals daycare is in its own separate building leased until 2023.
- The second phase will include the deconstruction of the old school buildings correct? Yes.

The Chair welcomed the applicant team and Duane Siegrist from Integra Architecture Inc. and Peter Kreuk and Michelle Biggs, from Durante Kreuk Ltd introduced the project.

The Chair thanked the applicant team for their presentation and asked if there were any questions of clarification from the Panel.

Questions were asked and answered on the following topics:

- Can the applicant describe the care space more in detail? Funded through Vancouver Coastal Health, the respite centre exists for people in need of 24 hour care and the support staff who provide it.
- What are the 18 beds for? The respite care home includes beds for frail seniors to stay over night, thereby giving their care givers a much needed break, and reducing the occurrence of burnout.
- How will this service help the community? The goal for the respite centre is to provide a place that keeps individuals in homes and in communities before having to leave for more institutionalized form of hospital care.
- Who will the non-market housing be for? The non-market rental housing includes a mix of unit styles to appeal to a mix of ages and stages of life.
- Will there be two separated outdoor spaces? Yes, the outdoor space for the respite care facility will be separate from the residential one, with a gate between them.

Ms. Tamsin Guppy, on behalf of Mr. Alfonso Tejada, Urban Design Planner, provided a brief presentation and provided the following comments for consideration:

- Explore stepping down the slope to both follow the topography.
- Improve the relationship of the project to the street, especially at the parkade level.
• The residential entrance at the southwest corner of the site needs work, the lobby should relate to the street allowing people to wait safely inside, consider lowering the lobby so that there is less need for stairs up to the lobby.
• Consider further articulation of the building to minimize impacts of a long building.

The Chair invited comments from the Panel members, and the following comments and items for consideration were provided:

• Great to see that a respite centre is happening on the north shore.
• Materials work quite well and the vertical elements along the façade are good and do help break up the length of the building.
• Explore ways of improving relation to adjacent buildings, for example through roof articulations.
• The mews on the west side of the development works well and creates a mid block path to the future park and open space.
• Good plant mix.
• The landscaped walls along West Queens to help soften the frontage and help screen the parkade.
• The patio in the back has a good variety of seating and arrangements to accommodate for a vibrant social setting or for a space of tranquility.
• The parkade could be improved to reduce its effect on the ground floor as important frontage rather than a blank concrete facade.
• The residential entry on the southwestern side seems tight, hidden and with a lobby that needs more attention.
• Have a closer look at the shadow impacts, I think the rear garden may not get enough light and you may need to adjust the patio design.
• The housing entrance may create CPTED issues.
• The residential lobby is a concern – there might be an opportunity to work with the mews and improve the layout that way.
• Adding more of a podium base on the south side could allow for better outdoor private amenity space as well as more pedestrian scale frontage.
• The boxed elements along the façade are a nice addition but need some refinement as it seems quite busy, and the hierarchy is not clear.
• Paving and sidewalk space along Stanley Avenue could use a little more life instead of van parking as it is an important access point to the building and the future park space.
• Entrances need to be delineated clearly for first responders, so a clear access for the residential lobby is important.
• The parkade with gated separation between the residential and visitor parking could be challenging as in and out traffic will be sharing the one access point.
• Defining the public and private space will be important to address CPTED issues next to public park space.
• The shared garbage area should consider all of the needs from both the commercial and residential uses whether be access or sizing of the bins.
• From a Code standpoint, there might be a lot of firestopping especially with the mixed uses and dead ends so consider the best means to address this issue.
• It is a complicated building from a code perspective.
• Spatial separation to the existing old Delbrook facilities need to be considered.
• The parkade exit must be separate from the elevator vestibules.
• The residential entry vestibule is also a stairway which may be problematic and an energy issue.
• Given the complexity you may need a safety review of the building.
• Consider reducing dead ends.
• Consider the width of the corridors in the respite care area which may need to be wider.
• Look at glazing opportunities for the east dining area to enhance the access to natural light.
• Consider adding more windows and engagement with West Queens Road to the ground floor to make it more appealing and less institutional.
• Consider the time of year and how the dark brick finish might impact comfort in the outdoor public amenity space along with the shadows.
• Consider improving the relationship of the care facility with the street – potentially by adding windows to the dining area that face onto Stanley thereby connecting the residents with the street.

The Chair invited the applicant to respond to the Panel's comments, and the following comments were provided:

• The comments from the Panel are appreciated and will be considered when assessing the relationship of the entry points, building composition, and issues of access for first responders and the general public.

The Chair invited the Panel to compose a motion:

MOVED by Mr. Steve Wong and SECONDED by Ms. Carolyn Kennedy

That the ADP has reviewed the proposal and supports the general concept, and looks forward to a presentation at the development permit stage that includes a review of the items noted by the panel in its review of the project.

CARRIED
b.) 267 Orwell St (Oxford Street Affordable Housing) – Preliminary Planning Application for a Development Permit for a non-market affordable housing development

Ms. Tamsin Guppy, Development Planner, introduced the project on behalf of Ms. Casey Peters, the primary planner for the development proposal, and explained the context.

The Chair welcomed the applicant team and Mr. Steven McFarlane from the Office of McFarlane Biggar Architects and Designers introduced the project.

The Chair thanked the applicant team for their presentation and asked if there were any questions of clarification from the Panel:

Questions were asked and answered on the following topics:

- Are there any building overhangs that the Panel should be aware of? At this point no deep overhangs are part of the development proposal.
- Did you explore the horseshoe shape or other shapes for that matter? It was difficult to reach proforma and efficiency targets with other shapes, therefore the 4 bar scheme stuck as the proposed plan.
- Is the patio space accessible from the street or simply from within? The shared patio space is only accessed from within.

Ms. Tamsin Guppy, on behalf of Mr. Alfonso Tejada, Urban Design Planner, provided a brief presentation and provided the following comments for consideration:

- Staff are concerned that this proposed building layout pushes the density to the edges of the site and lessens the liveability of this building and its neighbour.
- The proportions of a 6 storey building versus 12 foot wide courtyard spaces might need to be re-evaluated so that more light and more privacy can be achieved.
- Consider the Bars’ impact on sustainability and affordability.
- As the project progresses, look at improving the arrivals and entrance sequence to have a stronger relationship to each street, and better connections for residents to the main street.
- Review the relationship the units have to each street.
- Consider how this building may improve the public realm and overlook of Phibbs Exchange and how residents may want to watch for “their bus.”

The Chair invited comments from the Panel members, and the following comments and items for consideration were provided:

- The simplicity of the concept plan really works in a functional way.
- The proposal utilizes the 12 foot courtyard gaps well ensuring that lighting is provided at various times during the day.
- Architecturally the project looks to be very attractive.
• Appreciate the reasoning behind the lack of balconies but potentially adding viewing platforms or window access along the internal corridors facing the courtyard space could help give life to it.
• The built form is very sculptural-like and interesting visually. With no art plan mentioned perhaps the ground or streetscape could be used as an alternative medium for artistic expression and connection to the building.
• The unusual design is refreshing and nice to see when a lot of proposals seem so similar.
• Very intriguing design with the implementation of a shared corridor at each level.
• The landscape plan for the courtyards is a bit worrisome but could provide for an opportunity to be more creative with the space – recognize from the outset that plant material will not survive and explore options that may work for this spaces.
• Strengthen the relationship to both Oxford Street and Orwell Street and consider ways to animate the frontages.
• Consider moving the main lobby towards the centre of the building.
• The roof landscaping creates some great outdoor rooms for various amenities.
• While I understand staff concerns about impacts on the neighbours, the lack of balconies may balance this.
• The ventilation and air circulation seems to work well with no glaring issues.
• A Zen garden idea might be an option for making use of the inaccessible courtyards and act as spaces for contemplation.
• The proposal would be a valuable and iconic addition to the neighbourhood.
• With new code requirements in place, the structurally components of the proposed building plan should be assessed very soon.
• The building envelope will need to consider shrinkage of materials and the impact of using mixed methods like wood frame versus concrete.
• The location and proximity to amenities and other buildings makes for an appropriate design.
• Given the width of the light wells, consider using light coloured cladding that may help reflect light to the lower levels.
• Consider a more central location for the lobby.

The Applicant team thanked the Panel members for the comments and look forward to improving upon the proposal.

The Chair invited the Panel to compose a motion:

MOVED by Ms. Diana Zoe Coop and SECONDED by Mr. Tieg Martin

That the ADP has reviewed the proposal and supports the general concept, and looks forward to a presentation at the development permit stage that includes a review of the items noted by the panel in its review of the project.

CARRIED
4. OTHER BUSINESS

None.

5. ADJOURNMENT

The meeting was adjourned at 8:12 p.m.

6. NEXT MEETING

September 13, 2018
Local governments have a critical role to play in making neighbourhoods healthy, vibrant, diverse and inclusive. Fulfilling this role requires a combination of direct municipal action as well as partnering with various organizations, government agencies and non-profit service providers. The District’s objective is to foster a safe, socially inclusive and supportive community that enhances the health and well-being of its residents. OCP policies related to social well-being contribute to the health and vitality of the District and strive to address the needs of all citizens, including those that are most vulnerable and marginalized. These policies are also aimed at empowering the community to develop services and supports to meet its own needs. Increasing demands for existing services, changing demographics and other emerging issues, require that the District respond in a coordinated and comprehensive manner to ensure the continued livability and sustainability of the community. A Social Strategy will provide further direction on coordination and implementation of these OCP policies.

6.1 Citizen Engagement

6.2 Arts, Culture, Libraries, Leisure and Recreation

6.3 Community Services, Programs, and Facilities

6.4 Personal and Public Safety

6.5 Heritage and Archaeological Resources
6.1 Citizen Engagement

The District’s objective is to involve citizens meaningfully in civic affairs and community life. Effective civic engagement builds strong communities, leads to greater public participation and interest in the things we share, and facilitates more responsive governance and better decision-making.

POLICIES

1. Provide opportunities for all citizens to meaningfully participate in civic affairs and community life

2. Utilize effective and leading edge communication tools and outreach efforts to enhance citizen engagement

3. Encourage and support community capacity building
6.2 Arts, Culture, Libraries, Leisure and Recreation

Arts, culture, recreation and library services play an enormous role in building a healthy and creative community. They are vital to the fabric of our community and strengthen our identity. The District’s objective is to support lifelong learning, active living and cultural and artistic expression. Community spaces like libraries and recreation centres are heavily utilized and their effective provision along with delivery of associated services is key to community health. In addition to providing access to opportunities for learning, exercise and cultural expression, these various facilities also act as hubs for socializing and building community connectedness.

Policies

1. Foster an environment that promotes creativity and cultural expression and facilitates community access and engagement in arts and cultural experiences

2. Support the development and delivery of creative community events and activities that celebrate the full spectrum of diversity of the District, build on the District’s unique identity and engage local residents, artists and businesses

3. Further develop working partnerships with local First Nations to foster the expression of their cultural identity

4. Promote healthy and active living and inclusive community participation in leisure and recreation activities throughout the District

5. Encourage and facilitate a broad range of leisure and recreation opportunities to match community needs and interests that are accessible through the development and coordination of public and non-profit services

6. Provide accessible library services and resources to facilitate lifelong learning for residents of all ages, backgrounds and abilities

7. Promote and provide technologies that improve access and efficiencies as part of the service continuum for libraries, arts, cultural and recreation services

8. Provide responsive and appropriate library, arts, cultural and recreation services to under-served and developing neighbourhoods
6.3 Community Services, Programs, and Facilities

The District’s objective is to provide, facilitate and support a range of community programs and social services that meet the needs of the community. Most citizens need community support and social services at some point in their lives. A strong network of community programs and services for children, youth, adults, families, seniors, at risk populations, and those with a range of abilities and means, supports individuals and a healthy community.

POLICIES

1. Facilitate the delivery of accessible community services and social programs to meet the current and future needs of all District residents

2. Plan and support initiatives for an age and disability-friendly community

3. Facilitate the provision of accessible services, programs, and facilities that encourage seniors and people with disabilities to function independently

4. Promote the establishment and maintenance of affordable quality child care services

5. Support orientation and community services for welcoming new immigrants

6. Support the creation of a network of community hubs to provide services to residents in a coordinated and cost-effective manner

7. Support the role of schools as neighbourhood centres of learning with comprehensive and integrated community facilities and services

8. Encourage the retention of sufficient space in surplus public facilities (schools, churches, recreation centres) to meet changing community needs (such as adult daycare, childcare)

9. Explore and pursue a variety of governance and partnership models regarding service delivery within municipal buildings

10. Enhance programming and service connections between outdoor and indoor community facilities

11. Support civic and community partners with resources, information sharing and collaboration in the achievement of District objectives

12. Encourage sustainable, local food systems through initiatives such as promotion of healthy, local foods and food production, and the facilitation of community gardens, farmers markets, urban agriculture initiatives in appropriate locations

13. Integrate opportunities for urban agriculture in planning Town and Village centres

14. Collaborate with Vancouver Coastal Health and other community partners in their efforts to provide increased access for all members of the community to safe, nutritious food

15. Develop a food policy that defines the District’s vision and commitment to facilitating a food system that supports long-term community and environmental health
6.4 Personal and Public Safety

The District’s objective is to create safe and caring communities. This means working proactively to prevent risks, and being able to respond to emergencies, crime and disorder in a collaborative and effective manner.

6.4 POLICIES

1. Ensure that effective and coordinated services supporting personal safety, including policing, emergency aid, fire safety, disaster response, and support services, are in place across the District.

2. Support and advocate for coordinated programs and services to prevent and address crime, violence, and substance abuse.

3. Work with community partners, stakeholders and service providers to address safety and security, crime prevention, education, victims’ rights and to promote positive intercultural relationships.

4. Review community policing models and provide community policing as appropriate.

5. Prepare a fire service policy to define appropriate service levels.

6. Locate fire halls strategically to deliver effective service and contribute to the fabric of the community.

7. Facilitate the development of safe and accessible community and public spaces and consider crime prevention design principles and accessibility guidelines in their design and retrofit.

8. Assess the potential risk of chemical industries in the District and prepare an appropriate development permit area with guidelines to assist in protecting development from such risks.

9. Review community notification and emergency response measures related to industrial chemical hazards and facilitate effective community preparedness.

Foster a safe, socially inclusive and supportive community that enhances the health and well-being of all residents.
6.5 Heritage and Archaeological Resources

Our rich cultural and natural history contributes greatly to the identity of the community and its sense of place. The District’s objective is to ensure that the community has a clear sense of identity and place and a legacy that links our past, present and future. This means facilitating learning about our past, present and future while preserving our archaeological, heritage and cultural resources.

POLICIES

1. Support the preservation of our community’s history and documentary of heritage in a publicly accessible repository of archival and cultural resources

2. Support the programs and services that enable people to understand and appreciate the community’s rich and unique history

3. Support community-wide facilities which connect people from different areas, groups and generations and allow them to learn about each other and explore ideas together

4. Encourage the protection and enhancement of buildings and sites which have historic significance to the community by exploring opportunities to use the tools and incentives available under the Local Government Act

5. Encourage and facilitate the protection of archaeological and cultural sites in land development and management activities through coordinated efforts with First Nations governments, the Province and stakeholders

6. Support continued community involvement in identifying and advising on issues pertaining to District heritage resources and programming

7. Establish a Heritage Plan to implement the policies contained in the Official Community Plan
7 Housing

2030 TARGET

a net increase in rental housing units (overall percentage)

The profile of the District resident of today has changed significantly from that of 20 years ago. During this time there has been a noticeable demographic shift from a younger family-oriented community towards more seniors with fewer young adults and children. Our housing mix, comprised largely of detached single family homes, has not kept pace with the needs of this changing community profile. Providing more diverse and affordable housing choice is needed for seniors, young singles, couples, and families with children so that a wide mix of ages can thrive together and ensure a healthy, diverse and vibrant community. Emergency, transitional and social housing is also needed to support vulnerable populations. The District’s objective is to increase housing choices across the full continuum of housing needs.

7.1 Housing Diversity

7.2 Rental Housing

7.3 Housing Affordability

7.4 Non-Market Housing and Homelessness
7.1 Housing Diversity

The network of centres concept provides important opportunities for increasing housing diversity and approximately 75 - 90% of future development will be directed to the four planned centres (Chapter 2). While growth will be restricted in detached residential areas, opportunities will exist to sensitively introduce appropriate housing choices such as coach houses, duplexes and small lot infill that respect and enhance neighbourhood character. Some flexibility is encouraged to enable residents to better age in place, live closer to schools, or have a mortgage helper. The District’s objective is to provide more options to suit different residents’ ages, needs and incomes.

POLICIES

1. Encourage and facilitate a broad range of market, non-market and supportive housing

2. Undertake Neighbourhood Infill plans and/or Housing Action Plans (described in Chapter 12) where appropriate to:
   a) identify potential townhouse, row house, triplex and duplex areas near designated Town and Village Centres, neighbourhood commercial uses and public schools
   b) designate additional Small Lot Infill Areas
   c) develop criteria and identify suitable areas to support detached accessory dwellings (such as coach houses, backyard cottages and laneway housing)

3. Develop design guidelines to assist in ensuring the form and character of new multifamily development contributes to the character of existing neighbourhoods and to ensure a high standard of design in the new Town and Village Centres

4. Encourage and facilitate a wide range of multifamily housing sizes, including units suitable for families with an appropriate number of bedrooms, and smaller apartment units

5. Require accessibility features in new multifamily developments where feasible and appropriate
7.2 Rental Housing

Entry into home ownership is increasingly challenging given the high housing prices in the District. Rental housing typically offers more affordable options for mid-to-low income groups, which may include single parents, students, young families and seniors. **The District's objective is to provide more alternatives to home ownership. Currently, only 18% of the dwellings in the District are rental.**

**POLICIES**

1. Explore increasing the maximum permitted size of secondary suites

2. Consider permitting secondary suites or lock-off units within townhouses, row houses and apartments

3. Encourage the retention of existing, and the development of new, rental units through development, zoning and other incentives

4. Facilitate rental replacement through redevelopment

5. Continue to limit the conversion of rental units to strata title ownership and require, where possible and appropriate, that new strata units be available for rental

6. Establish a minimum acceptable standard of maintenance for rental properties

7. Develop a rental and affordable housing strategy through Housing Action Plan(s) and/or Centres Implementation Plans

8. Support, where appropriate, parking reductions for purpose built market and affordable rental units

9. Encourage the provision of student housing at or near the campus of Capilano University

10. Support the addition of ancillary rental housing on church sites where additional development can be accommodated

Encourage and enable a diverse mix of housing type, tenure and affordability to accommodate the lifestyles and needs of people at all stages of life.
7.3 Housing Affordability

Lack of affordable housing in the District is often cited as a factor contributing to the loss of our “missing generation” of 20-40-year-olds and the inability of many local employers to find and retain staff. With approximately 2,045 households in core need of appropriate housing and 1,460 households spending at least half of their income on housing, our lack of affordability is widely felt. **The District’s objective is to formulate development strategies and work with community partners and senior levels of government to provide housing for modest to moderate income residents.**

**POLICIES**

1. Reflect District housing priorities through an appropriate mix, type and size of affordable housing

2. Focus a higher proportion of affordable housing in designated growth areas

3. Apply incentives (including, but not limited to density bonussing, pre-zoning and reduced parking requirements) as appropriate, to encourage the development of affordable housing

4. Require, where appropriate, that large multifamily developments contribute to the provision of affordable housing by, but not limited to:
   a) including a portion of affordable rental or ownership units as part of the project
   b) providing land dedicated for affordable housing
   c) providing a payment-in-lieu to address affordable housing

5. Expand the District’s Affordable Housing Fund to receive funds from non-municipal sources

6. Work with community partners and the Province to facilitate options for affordable housing and advocate the Federal government to develop a national housing strategy for affordable housing

7. Consider incentives such as reduced Development Cost Charges to facilitate affordable rental housing
7.4 Non-Market Housing and Homelessness

Emergency, transitional and supportive housing is needed to provide access to the full continuum of housing in the District. This section addresses the housing needs of our growing homeless population, those most at risk of homelessness, those with substance abuse and mental health issues, seniors who need support to remain living independently and others. Provision of such housing requires funding that the District cannot address on its own. The District’s objective is to work with senior levels of government and social service providers to support our most disadvantaged residents.

POLICIES

1. Encourage non-profits, supportive housing groups, developers, senior levels of government and others to develop or facilitate the development of:
   
a) transitional housing for homeless adults, families and youth

b) supportive housing for those with mental health and/or addiction issues

c) independent living units for people with disabilities

d) assisted living facilities for people with cognitive and/or developmental disabilities

2. Work with community partners to explore opportunities for social housing, co-operative and innovative housing solutions

3. Continue to facilitate community facility lease policies to provide municipal land or infrastructure for services to vulnerable populations

4. Consider the use of District land, where appropriate, to contribute towards and leverage other funding for the development of social and affordable housing

5. Encourage other levels of government to contribute financial support and/or a portion of surplus lands towards appropriate and affordable housing for those with special needs

6. Continue to support regional efforts to eliminate and prevent homelessness on the North Shore

7. Continue to support non-profit agencies that provide short-term emergency and transitional shelter, food and access to social services for those in need

8. Support community partners in providing a full continuum of support services to address issues related to mental health, addictions, health services, housing, employment, and food security; and to provide assistance for homeless people to facilitate their transition to independent living
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Rental and Affordable Housing Strategy

Updated November 2016
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INTRODUCTION

As guided by the North Vancouver District’s Official Community Plan (OCP), increasing housing choices to meet the diverse needs of residents of all ages and incomes is a key objective for this community.

While important strides have been made to increase the type and tenure of housing through revitalization and mixed use redevelopment of designated town and village centres, a more focused strategy is needed to address the needs of low and moderate income households in their efforts to find affordable housing choices.

Intent of this Strategy

The District has an opportunity to promote retention of existing rental, and the expansion of the affordable rental housing inventory through the implementation of the OCP and other relevant bylaws and policies, and the administration of the land development application and review process. Realization of affordable housing objectives will require collaboration and partnerships with senior government agencies, non-profit housing providers, and other community stakeholders.

This Rental and Affordable Housing Strategy has been developed with the input of District residents, non-profit housing providers, housing agencies, and development industry representatives. Goals, policies and implementation measures in this strategy are intended to guide the community, developers, Council and staff towards the provision of housing choices for low to moderate income households in the District.

This strategy also supplements and provides additional detail to inform existing housing policies in the Official Community Plan (OCP), centres implementation plans, and other relevant Council policies.
Public and Stakeholder Engagement

This Rental and Affordable Housing Strategy has been shaped by housing research, data from OCP-related forums on housing, a series of workshops with Council, online and in-person public surveys, and stakeholder feedback. This process is illustrated in Figure 1.

In February - March 2016, the District hosted a number of workshops with non-profit organizations, housing providers/agencies, and development industry representatives to gather feedback on the draft strategy. Approximately 45 participants, representing 32 organizations, attended these workshops.

In May 2016, the District retained NRG Research Group to conduct statically valid telephone and onsite interviews with home owners and renters in the District. A total of 689 residents provided input through these surveys. An additional 83 residents submitted responses through an online survey posted on the District’s website.

Figure 1. Planning and engagement process to develop the strategy
Low and moderate income households

A healthy community has a diverse spectrum of housing types to accommodate the housing needs of residents of all ages, incomes, abilities and household sizes. Figure 2 illustrates the continuum of housing in the District from non-market housing for vulnerable and low income populations to market housing for higher income households.

1. **Focus on the needs of low and low to moderate income earning households that are most likely to face challenges in finding appropriate and affordable housing.**

These households are largely renters earning an estimated 30 - 50% and 50 - 80%, respectively, of the District’s median rental household income. This area of focus roughly coincides with the social housing, low end market rental and market rental housing segments of the District’s housing continuum.

<table>
<thead>
<tr>
<th>Non-Market Housing</th>
<th>Market Housing</th>
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<tbody>
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<td>Emergency Shelters &amp; Transitional Housing</td>
<td>Low End Market Rental</td>
</tr>
<tr>
<td>Supportive Housing</td>
<td>Market Rental Housing</td>
</tr>
<tr>
<td>Social and Co-op Housing</td>
<td>Entry Level Market Ownership</td>
</tr>
<tr>
<td></td>
<td>Market Home Ownership</td>
</tr>
</tbody>
</table>

*Figure 2. Housing continuum in the District*

The above focus aligns with OCP direction to develop a rental and affordable housing strategy to address the housing needs of low to moderate income earning households. It is also consistent with and helps support key goals in the Regional Affordable Housing Strategy.
Target resident households

Ensuring an intergenerational mix of residents of all ages, incomes and abilities is important to the ongoing health and vibrancy of our community.

2. Consider the housing needs of lower income families as a key area of focus.

3. Seek to address the housing needs of lower income seniors, students, persons with disabilities and vulnerable populations at risk of being homeless, as well.

There is an on-going need for more affordable and rental housing choices for the following types of residents.

### Families

Housing is needed for families that cannot afford home ownership and need additional space for children and/or extended family members. In 2011, an estimated 1,520 District households were living in core need and spending at least half of their income on housing, and approximately 860 (56%) of these were family households. In the absence of more affordable housing choices, many of these families may be forced to leave the District.

### Young Adults and Students

Demographic trends for the District show a declining number of young adults aged 20 - 40 years, and identified as the ‘missing generation’ in the OCP. At the same time, local business operators report challenges in attracting and retaining qualified employees given the high land values on the North Shore. Affordable housing choices are needed to ensure that young adults receiving education, entering the work force and starting to raise families can continue to live and thrive in the District.
Seniors are projected to comprise the largest proportion of the District’s population in the coming decades. While the majority of seniors over 55 years own their current home and expect to be owning a home for the next 10 years, some lower income seniors are looking for low maintenance and affordable rental housing choices close to transit and other community amenities and services.

Persons living with cognitive and/or mobility disabilities are faced with tough challenges in finding affordable, barrier free housing. Some older purpose built rental units present limited options for persons with disabilities and an increased supply of affordable accessible designed units is needed.

While the numbers of homeless people have, in recent years, remained relatively constant; social service providers across the North Shore report a growing number of vulnerable populations at risk of homelessness and waitlists for social and non-market housing continue to grow.
The OCP (2011) anticipates capacity for approximately 10,000 net new units in the District by 2030.

As guided by the Metro Vancouver housing demand estimates in the Regional Growth Strategy (Metro 2040) and the Regional Affordable Housing Strategy, the District has established an estimated 10 year demand for affordable housing.

4. The 10 year (2016 – 2026) estimated demand for affordable rental units in the District is 600 -1,000 units.

These affordable rental units are intended to form part of, and not in addition to, the anticipated 10,000 net new units.
Canada Mortgage and Housing Corporation (CMHC) generally considers housing to be “affordable” when a household spends no more than 30% of their gross household income on shelter costs (rent, mortgage payments, property taxes, strata fees, and heating costs). CMHC has also established a set of recognized and regularly updated affordability levels that are derived from the CHMC annual rental market survey.

5. Establish rental thresholds for new affordable rental units at the time of rezoning and through a signed Housing Agreement.

6. Use the established CMHC Affordability Criteria, as updated on an annual basis, to guide the determination of affordability levels.

7. Include provisions in the Housing Agreement to the effect that existing and potential renters are income tested to ensure that affordable units are provided to low and low-moderate income earners.

Calculations of actual rents must refer to annually updated CMHC Market Rental reports.

Stats Canada census provides median household income (MHI) data every 5 years. MHI calculations may be adjusted by the annual rate of inflation to reflect incremental changes to income in the interim years.
5 | KEY RENTAL AND AFFORDABLE HOUSING GOALS

This section establishes key goals and corresponding policies to guide the rental and affordable housing in the District.

GOAL 1: Expand the supply and diversity of housing

As we move towards 2030, the majority (75 – 90%) of new housing is anticipated to be added in key growth centres, while preserving the neighbourhood character and lower density of established neighbourhoods. Increased supply of housing in centres will add diverse multi-family housing choices (type, tenure, unit sizes etc.) for District residents, and encourage competitive pricing for homes.

8. Continue to encourage diversity and increase the supply of housing in town and village centres in accordance with OCP and centre implementation plan policies.
GOAL 2: Expand the supply of new rental and affordable housing

Following a 30 - 40 year period of little change in the inventory of rental housing, some renewed interest in developing new purpose built market rental is emerging. Low interest rates, higher rental returns, municipal incentives and other factors have contributed to making the market rental housing more attractive to some developers. Municipal policy, partnerships and negotiated approaches at rezoning are needed to increase the supply of affordable rental housing that the market will not ordinarily provide. Locating affordable rental in centres that are within walking distance to frequent transit provides alternate transportation choices and helps ease the transportation costs and financial burden for renters.

9. Expand the supply of rental and affordable housing in a manner that is consistent with the OCP, and enables low and moderate income households to access transit and community services, retail and employment within walking distance from their homes.

10. Encourage development applicants to demonstrate how the proposed project will support rental and affordable housing in the District, where feasible.

11. Ensure that new rental includes a range of units, (i.e. number of bedrooms) to suit the needs of families and other households.

12. Negotiate for rental and affordable units, land (typically for larger projects), a cash-in-lieu contribution (typically for smaller projects) towards affordable housing, or some combination thereof, at the time of rezoning, and on a case-by-case.

13. Consider opportunities for density/height bonus zoning, on a case-by-case basis, to facilitate provision of affordable housing.

14. Consider opportunities, on a case-by-case basis, to incentivise rental and affordable housing with parking reductions in key centres and along the frequent transit network, and in consideration of applicable centres plans and transportation policies.

15. Continue to apply the strata rental protection policy recognizing that strata rental provides an important source of market rental housing.
GOAL 3: Encourage the maintenance and retention of existing affordable rental

Existing, older purpose built rental housing makes an important contribution to the affordable rental inventory in the District, and provides a key source of more affordable housing for low to moderate income families and other households. Progressive maintenance and restoration of these buildings is necessary to extend their service life and to ensure their functionality and liveability for residents.

16. Encourage the maintenance of purpose built rental to the end of its economic life, and ensure the appropriate enforcement of the Standards of Maintenance Bylaw in consideration of other applicable policies.

17. Prioritize the maintenance, restoration and retention of purpose built rental subject to an objective assessment of the building condition, and in consideration of applicable centres plans objectives and policies.

GOAL 4: Enable the replacement of existing rental housing with conditions

It is recognized that even with ongoing and regular maintenance, by 40 - 50 years of age, several major mechanical components of residential buildings may need to be replaced outright. Higher maintenance costs associated with this work may be reflected in higher rents and/or sub-standard living conditions if maintenance is deferred. On a case-by-case basis, the condition of an existing rental building may warrant redevelopment.

18. Consider the replacement of existing rental, on a case-by-case basis, and subject to negotiation of the replacement rental units reflecting the number of bedrooms and affordability of original units, or some combination thereof, to meet the affordable housing needs of families and other households.
GOAL 5: Minimizing Impacts to Tenants

Potential demolition of older multi-family rental buildings has raised concerns for displaced renters who may face significant challenges in finding suitable affordable housing in a low vacancy rate climate.

A Residential Tenant Relocation Assistance Policy outlines procedures to assist current tenants in finding alternative and affordable accommodation. Such procedures may include providing advanced notice to tenants, assistance with relocation, moving cost allowance, right of first refusal in the new building, long term tenant bonus, and/ or other measures.

19. Work with land owners and developers to explore a phased approach to development to minimize impacts to existing tenants, where feasible.

20. Apply a Residential Tenant Relocation Assistance Policy to encourage development proponents to offer assistance to tenants in their search for new housing.
GOAL 6: Partner with other agencies to help deliver affordable housing

Addressing the affordable housing needs of lower and low to moderate income households will require partnership and collaboration with diverse community partners. Efficiencies can be realized when affordable housing is constructed as part of a market housing or mixed use development project. The day-to-day operation of affordable housing units and provision of services to tenants, as needed, is often managed by non-profit housing providers. Capital grants or other financing from Provincial and Federal governments can strengthen the economic feasibility of an affordable housing project. Strategic use of District owned lands, which may involve a long-term lease, can help leverage senior government funding.

21. Seek opportunities to partner with community stakeholders and senior government towards achieving affordable housing goals.

22. Explore opportunities to utilize District owned land subject to consideration of, but not limited to: proximity to frequent transit network; access to community services and employment; availability of external funding and partnerships; alignment with OCP, centres implementation plans and other applicable municipal policies.

23. Derive value from individual District owned lots for affordable housing in a manner that is consistent with Council policies.
Successful implementation of rental and affordable housing in the District will require regular data collection and monitoring to ensure alignment with changing community needs. A reporting framework will provide a consistent and comprehensive means of tracking important housing metrics, and may be used to inform future adjustments, as may be needed, for Council’s consideration. Implications to the existing funding levels will be considered with the long-term funding strategy.

26. Establish a reporting framework to routinely monitor appropriate affordable housing metrics, not limited to the number of units and bedrooms, and level of affordability of existing and new affordable units, by project and by area.

27. Report on these metrics for each applicable residential development application and on a consolidated, annual basis and compare to projected demand estimates.

28. Consider the allocation of Community Amenity Contribution funds for affordable housing, on a case-by-case basis, and subject to consideration of the District’s long-term funding strategy.
The District of North Vancouver
REPORT TO COUNCIL

September 6, 2016
File: 13.6680.20/005.000

AUTHOR: S. Lunn, Policy Planner

SUBJECT: Summary of Delbrook Lands Deliberative Dialogue from June 2016

RECOMMENDATION:

THAT

1. The Delbrook Lands Community Dialogue, Final Report prepared by Simon Fraser University’s Centre for Dialogue be received for information; and

2. Staff report back in late fall with:
   a. an analysis of the participants’ recommendations based on the alignment with District policies,
   b. financial implications of the participants’ recommendations, and
   c. next steps and timelines.

REASON FOR REPORT:
On April 18, 2016 Council directed staff to proceed with Phase Two and Three of the Delbrook Lands Community Dialogue and report back after the June dialogue event with a summary of the participants’ recommendations. This Council report presents the summary of the participants’ recommendations from this event and seeks direction on next steps.

SUMMARY:
Staff are pleased to present the Delbrook Lands Community Dialogue Final Report, prepared by SFU Centre for Dialogue (See attachment one). This report marks the end Community Dialogue process led by SFU. Staff will report back with an analysis of participants’ recommendations in late fall and include next steps, including further opportunities for community engagement, and timelines.

BACKGROUND:
The Delbrook High School was built in 1956 and used as a school until 1977 when a portion of the school was destroyed by a fire. The District of North Vancouver bought the site from the North Vancouver School District in 1981. Since 1982, the site and remaining buildings have been operated by the North Vancouver Recreation and Culture Commission (NVRC) as a community recreation centre. See the site map below of 600 West Queens Road.
In 2006 the NVRCC completed a comprehensive study on behalf of the District and the City to assess indoor recreation facilities and services, and identify the community’s future needs. The research, along with public input, helped form the Indoor Recreation Facility Plan. Included in the Plan’s recommendations was the consolidation of William Griffin and Delbrook Community Recreation Centres (CRC) into one facility. The William Griffin Centre closed in December 2013. The new consolidated facility being constructed on the old William Griffin site at 851 Queens Road is anticipated to open in early 2017. All recreation programs will transfer from the existing Delbrook CRC to the new facility in spring 2017. At this time the site will be underutilized and planning for the future use of the site needs to occur in a timely way. Little Rascal’s Childcare Facility has a ground lease with the District until 2023. Consideration of future site options has included a commitment to retaining Little Rascal’s on the site. Capilano Community Services Society and their partner agencies rent space in the Delbrook North building. They are moving to their new home at the new CRC in Lion Gate Village in approximately 2019. Staff are working with their Executive Director to determine an interim space plan.

Figure 1: Site Map of 600 West Queens Road

On September 28, 2015 Council directed staff to proceed with an engagement strategy to help determine the future of the Delbrook Lands. As a result, the District partnered with Simon Fraser University’s Centre for Dialogue to conduct a community engagement process with a goal of determining the most broadly supported land use option for the Delbrook Lands at 600 West Queens Road.
In March of this year, Council received the Ideas Report from Phase One of the Delbrook Lands Community Dialogue which documented over 1,000 ideas for the future of the Lands generated by the public. In Phase Two District staff worked with SFU Centre for Dialogue staff to conduct research and technical analysis on the ideas from Phase One. This information was then compiled in the Discussion Guide (see Attachment Two). In Phase Three SFU Dialogue and District staff hosted a successful Deliberative Dialogue event on June 18, 2016 at the Delbrook Community Recreation Centre. See Attachment Three for a visual guide to the Delbrook Lands engagement process.

EXISTING POLICY:
The Official Community Plan and Public Assembly Land Strategy provide the policy context for any potential land use changes to the Delbrook Lands. Information on these policies were outlined for participants in the Discussion Guide.

ANALYSIS:
The June 18, 2016 Delbrook Lands Deliberative Dialogue provided a unique opportunity for local neighbourhood and other District of North Vancouver residents and stakeholders to provide input to the District on the future of the Delbrook Lands. The District of North Vancouver and SFU's Centre for Dialogue implemented an extensive outreach campaign to ensure that the 89 participants reflected the demographics and interests of the community. Of the 89 participants, 46 were from the local neighbourhood and/or were site users. The other 43 participants were from outside the local neighbourhood and live in the District and/or attended as a member of stakeholder groups within the larger District area. Participants reflected a range of ages; however, despite significant efforts made to register youth, the youth quota was not filled (those seats were assigned to alternates).

The data collected in the post-event surveys highlight the level of satisfaction with the event. Eight-five percent of respondents would be interested in participating in similar events in the future and 72% of respondents are satisfied with the District of North Vancouver's consultation so far on the Delbrook Lands. The event also provided professional development opportunities for District staff to enhance their facilitation skills. Eighty seven percent of respondents felt that table facilitators provided clear explanations, guidance and support throughout the event.

The Discussion Guide provided factual information in advance of the full-day dialogue event, including a range of community and Council-generated site ideas for the Delbrook Lands, as well as relevant District policy and stakeholder perspectives.

Participants worked in small groups with District staff as facilitators to develop recommendations in the best interest of the entire community, and also expressed their individual preferences in a post-event survey.

Key findings include strong support for a multi-use site that includes green space and indoor community services such as child care and adult daycare. The majority of participants also support non-market housing if paid for by other levels of government. To help fund on-site amenities, participants proposed that the District of North Vancouver work to develop partnerships with senior levels of government and non-profit organizations, as well as
allocate funding from the District budget. A majority of participants opposed the ideas of building market housing and/or selling the Delbrook Lands.

The feedback provides a good indication of the types of uses for the site that would be supported by the community. At this stage in the process, staff recommend conducting an analysis of the participants’ recommendations based on policy alignment and financial implications such as cost estimates and funding sources. Staff will need to test various land use concepts before presenting a recommended concept to Council.

Timing/Approval Process:
Staff will report back to Council on next steps regarding the Delbrook Lands process in late fall of 2016. Recreation programs will transfer to the new centre in 2017.

Concurrence:
Corporate Communications has reviewed and provided input to this report.

Financial Impacts:
The Discussion Guide included financial impacts of the future site options for consideration by event participants. The Final Report included participants’ estimates of costs and funding sources based on uses recommended. Staff will refine the financial information related to the participants’ recommendations and present this to Council in the late fall.

Liability/Risk:
Decisions regarding the use of the buildings and site need to be made in a timely manner so that the buildings do not sit empty once the recreation programs transfer.

Social Policy Implications:
The social policy implications have been included in the Discussion Guide and shaped participants deliberations. Maintaining childcare and ongoing community services on the Delbrook Lands was well-supported by event participants.

Environmental Impact:
Participants deliberated on site ideas with a shared understanding regarding the environmental constraints, such as protection and enhancement of Mission Creek. Staff will conduct a refined analysis on the environmental impact of the site options which will be presented to Council in late fall.

Conclusion:
Staff are pleased to present the Delbrook Lands Community Dialogue Final Report. This report marks the end Community Dialogue process led by SFU. Staff will report back with an analysis of participants’ recommendations in late fall and include next steps, including further opportunities for community engagement and timelines.

Respectfully submitted,

Suzy Lunn
Policy Planner
Attachment One: Delbrook Lands Community Dialogue, Final Report
Attachment Two: Discussion Guide
Attachment Three: Visual Guide

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The District of North Vancouver
REPORT TO COMMITTEE

January 6, 2017
File: 13.6680.20/005.000

AUTHOR: S. Lunn, Policy Planner

SUBJECT: Delbrook Lands - Analysis of Participants' Recommendations

RECOMMENDATION:
That the Committee of Council recommend to Council:

1. Staff be directed to:
   a. develop a concept plan for the Delbrook Lands that incorporates parks and open space, non-market housing, and community services,
   b. develop refined cost estimates, and
   c. develop a funding strategy in consideration of partnership funding opportunities and the District’s long term funding strategy.

2. Staff be directed to commence discussions with potential non-profit housing providers and senior government agencies in regards to development of non-market housing on a portion of the Delbrook Lands, and

3. Staff be directed to commence discussion with potential community service providers and senior government agencies in regards to development of community services on a portion of the Delbrook Lands.

REASON FOR REPORT:
On September 19, 2016 Council directed staff to report back with:
• An analysis of the participants’ recommendations for the Delbrook Lands based on the alignment with District policies,
• Financial implications of the participants’ recommendations, and
• Next steps and timelines.

This report presents information on the above and seeks Council input.
SUMMARY:
Staff analysis has concluded that the participants’ recommendations for a District-owned multi-use site including parkland, community services and non-market housing generally align with District policy. Participants opposed the idea of selling any of the land. If directed by Council, staff will explore opportunities for development and funding of the proposed uses through partnerships with non-profits, senior government and the District budget.

The following table summarizes information on the participants’ recommendations regarding multiple uses on site that benefit both the local and District wide community.

<table>
<thead>
<tr>
<th>Site Features/ Land Uses</th>
<th>Aligns with District Policy?</th>
<th>Policy</th>
<th>Capital Cost Estimates*</th>
<th>Operating Cost Estimates</th>
<th>Potential Funding Sources**</th>
<th>Land Ownership</th>
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<tbody>
<tr>
<td>Neighbourhood Parkland</td>
<td>Yes</td>
<td>Parks and Open Space Strategic Plan</td>
<td>$1.5M to $3M</td>
<td>$50-$60K per year</td>
<td>Long term funding strategy or new District funding source</td>
<td>Remains DNV owned land</td>
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<td>Community Services</td>
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<td>OCP, Public Assembly Land Strategy</td>
<td>$3.35M</td>
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<td>New district funding source and/or partnerships</td>
<td>DNV owned/ land or facility leased to partner</td>
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<td>Non-Market Housing</td>
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<td>OCP, Rental and Affordable Housing Strategy &amp; Public Assembly Land Strategy</td>
<td>$16.4 M</td>
<td>TBD-Requires partnerships</td>
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*Actual costs may change depends on features and design  
** Align with financial parameters outlined in the Delbrook Lands Discussion Guide

BACKGROUND:
The District is consolidating the Delbrook and William Griffin community recreation centre (CRC) on the William Griffin site at 851 Queens Road. All recreation programs will transfer from the existing Delbrook CRC to the new facility in the summer of 2017, leaving the Delbrook Lands underutilized. Engineering studies commissioned by the District’s Facilities Department have concluded that both the Delbrook north and south buildings are at the end of their life and should be demolished.

On September 28, 2015 Council directed staff to proceed with an engagement strategy to help determine the future of the Delbrook Lands at 600 West Queens Road. As a result, the District partnered with Simon Fraser University’s Centre for Dialogue to conduct a community engagement process with a goal of determining the most broadly supported land use options for the Delbrook Lands.

In March of this year, Council received the Ideas Report from the Delbrook Lands Community Dialogue which documented over 1,000 ideas for the future of the Lands generated by the public.
Over the spring the District worked with SFU Centre for Dialogue to conduct research and technical analysis on the ideas from Phase One. This information was compiled in the Delbrook Lands Discussion Guide (http://www.dnv.org/sites/default/files/edocs/Delbrook-discussion-guide.pdf)

On June 18, 2016 the SFU Centre for Dialogue and the District co-hosted a Deliberative Dialogue event at the Delbrook Community Recreation Centre. This event provided a unique opportunity for local neighbourhood, other District of North Vancouver residents, and stakeholders to provide input to the District on the future of the Delbrook Lands.

Key findings from the Deliberative Dialogue included:

- strong support for a multi-use site that includes neighbourhood parkland and indoor community services such as child care and adult day care.
- the majority of participants also support non-market housing if paid for by other levels of government.
- to help fund on-site amenities, participants proposed that the District of North Vancouver work to develop partnerships with senior levels of government and non-profit organizations, as well as allocate funding from the District budget.
- the majority of participants opposed the ideas of building market housing and/or selling the Delbrook Lands.

**ANALYSIS:**

Over the last few months, staff evaluated the participants' recommendations against applicable District policies. Staff have also provided financial implications including cost estimates and potential funding sources. The recommended funding sources are consistent with the financial parameters that were outlined in the Discussion Guide. These parameters included:

- Renewal capital is already funded,
- District priorities are first in line for District funding, and
- New assets or amenities require new funding sources such as development proceeds, funding from other levels of government or partnerships with other organizations.

Staff conducted a spatial analysis of the Delbrook Lands to test whether the community’s desired multi-uses can be accommodated on the site along with parking, access and protection of the environment. Staff concluded that these uses fit. Staff will present the spatial analysis at the Council workshop. Note that the analysis is not meant to be a site plan but to assess whether the uses will fit on the site. Site planning will occur at a later stage.

**Parks and Open Space**

The majority of participants supported neighbourhood parkland features such as: green space, community gardens, children’s playground, trails, retention of the tennis courts, Mission Creek enhancements and a picnic area.
Policy Alignment
The Parks and Open Space Strategic Plan identifies a need for neighbourhood parkland in the Delbrook neighbourhood. Neighbourhood parkland is defined as a local park that primarily serves District residents within a safe walking distance and provides limited recreational facilities such as a playground.

Financial Implications
Depending on the potential parkland features cost estimates varies from $1.5M to $3M for approximately 80,000 square feet or 50% of the site (this includes the protected natural areas and the proposed park space). Annual operating funding is in the range of $50-$60K per year. Capital and operating funding sources could potentially come from the District’s long term funding strategy or new funding sources from development proceeds.

Community Services
The majority of participants supported indoor community services such as licensed group child care, adult day care and a community service hub.

Policy Alignment
The OCP and District’s Child Care Policy identify childcare as a priority and support the facilitation of the provision of quality child care. A child care needs assessment completed for the District indicates there is demand for additional childcare in the area especially for infant/ toddler care.

There is a growing population of seniors on the North Shore, and a limited number of adult day care centres to provide respite for families who care for seniors with complex needs. The centres that do exist have extensive waiting lists. Co-locating childcare with adult day care would allow for intergenerational programming which is proven to have positive benefits.

Retention of community services aligns with the District’s Public Assembly Land Strategy. The site is currently zoned public assembly and community services are an allowable use in this zone. One of the guiding principles of the Public Assembly Land Strategy is the retention of public assembly lands where possible.

Financial Implications
Depending on the features or design a new purpose building for the community services may cost approximately $3.35M for approximately 9,400 square feet of indoor space and outdoor space. Capital funding could potentially come from new District funding sources such as local development proceeds or partnerships with non-profits or senior levels of government. The District may consider leasing the building or land to a non-profit organization.

Non-Market Housing
The majority of participants supported non-market housing on the Delbrook site, if paid for by an external funding source. Non-market affordable housing could include rental housing for low income seniors, families and/or single mothers. Non-market housing is usually developed and operated by non-profit organizations, in partnerships with government. They often use government housing funding programs, they may rely on a mixed-income model of
rents, and/or financial contributions from government, non-profits, philanthropic organizations, or others in order to make the project financially viable.

Policy Alignment
A key objective of the OCP is to increase housing choices to meet the diverse needs of residents of all ages and incomes. The focus of the recently approved Rental and Affordable Housing Strategy is on the needs of low and low to moderate income earning households that are most likely to face challenges in finding appropriate and affordable housing. The Strategy outlines six goals, including partnering with other agencies to deliver affordable housing. The policy includes exploring opportunities to utilize District owned land for affordable rental housing subject to consideration of, but not limited to:

- proximity to frequent transit network,
- access to community services and employment,
- availability of external funding and partnerships, and
- alignment with OCP, centres implementation plans and other applicable municipal policies.

Subject to Council consideration, the Delbrook Lands could provide an important opportunity for expanding our supply of non-market housing and helping to achieve the District’s target of 60 to 100 units per year.

Changing the land use for a portion of the site to residential would require an OCP amendment, rezoning and an assessment under the Public Assembly Land Strategy evaluation framework. The evaluation would ensure that any proposed change is in the public interest and provides an overall benefit to the community.

An OCP amendment is required to change the designation from institutional to residential as residential use was not originally contemplated for this site. The OCP directs the majority of new residential growth into key town and village centres. However, Council may consider sensitive neighbourhood infill along transit corridors or close to community amenities and sensitively integrates with the single family neighbourhood. The proposed location of the non-market housing is along Queens Road. The neighbouring multi-family development at Queens Road and Delbrook is 3 storeys. The Delbrook Lands are located on two transit corridors and within walking distance of schools, parks, recreation facilities and Westview shopping centre.

Financial Implications
The preliminary cost estimates for a sample four story building (located on the south parking lot along West Queens Road) with about 40 family units is approximately $16.4 million. Capital and operating funding could potentially come from partnerships with senior government (BC Housing, CMHC, etc) and/or non-profit organizations. The District may consider leasing a portion of the site at a nominal rate to a housing provider and waiving fees to leverage funding opportunities.
Transportation Implications
Last spring, the District commissioned a transportation study on the Delbrook Lands to examine the implications of a variety of land uses, including the community's recommendations. The study concludes that the proposed land uses will generate less traffic than is currently generated by the existing recreation centre and other site uses. Transportation staff have provided further recommendations regarding site circulation, parking, walking and cycling connectivity. Staff have also highlighted a number of offsite opportunities that could improve the neighbourhood connections.

Next Steps
If directed by Council, staff will:
- develop a concept plan, refined cost estimates and funding strategy for the proposed uses,
- identify a non-profit housing provider to work with the District to leverage senior government funding to develop non-market housing on a portion of the site, and
- identify a non-profit organization(s) to work with the District to leverage senior government funding to develop community services on a portion of the site.

Timing/Approval Process and Phasing:
Recreation programs at the existing Delbrook CRC will transfer to the new centre in 2017.

Little Rascal's Childcare Facility has a ground lease with the District until 2023. Consideration of future site options has included a commitment to retaining child care on the site.

Capilano Community Services Society and their partner agencies rent space in the Delbrook North building. They are moving to their new home at the new CRC in Lion Gate Village in approximately 2019. Staff are working with the society on interim space planning.

The District may wish take advantage of potential funding for affordable housing from senior government put forward an application in a timely manner.

Construction of the new buildings and park space may occur in distinct phases over a number of years depending on the availability and timing of funding.

Concurrence:
Engineering (Parks, Transportation and Facilities), Social Planning, Development Planning, Real Estate, Finance, and Communications & Community Relations has reviewed and provided input to this report.

Liability/Risk:
Decisions should be made in a timely manner so that the buildings do not sit empty once the recreation programs transfer.

Social Policy Implications:
Non-market housing, services for seniors and for children were identified as a key priority during the community consultation for this site. Retaining the Delbrook Lands as a public
asset and creating needed community services and a non-market housing project helps to address these priorities and helps to advance social policy objectives as laid out in the Official Community Plan.

**Environmental Impact:**
Mission Creek, a fish bearing water way, runs along the eastern edge of the site. Any development on the site will need to be setback 15 metres from the top of bank in order to keep the creek habit healthy. In addition to the riparian set back, the District environment team recommends protecting the natural area to the west of the south building.

**Public Input:**
The District has conducted a robust public engagement process over the last year including two community events and online surveys. Further opportunities for input on the design of the site will be provided at a later date and as directed by Council.

**Conclusion:**
Staff analysis has concluded that the participants' recommendations of a District-owned multi-use site including neighbourhood parkland, community services and non-market housing align with District policy. If directed by Council, staff will explore opportunities for development and funding of the proposed uses through partnerships with non-profits, senior government and the District.

Respectfully submitted,

Suzy Lunn
Policy Planner
The District of North Vancouver
REPORT TO COUNCIL

July 17, 2017
File: 13.6680.20/005.000

AUTHOR: Annie Mauboules, Senior Community Planner
Suzy Lunn, Community Planner

SUBJECT: Delbrook Lands Update - Non Market Housing and Community Service Partners

RECOMMENDATION:

THAT the July 17, 2017 report from the Senior Community Planner and the
Community Planner entitled Delbrook Lands Update - Non Market Housing and
Community Service Partners is received for information.

REASON FOR REPORT:
On January 17, 2017 Council moved the following resolution:

1. Staff be directed to:
   a. develop a concept plan for the Delbrook Lands that incorporates parks and open space, non-market housing, and community services,
   b. develop refined cost estimates, and
   c. develop a funding strategy in consideration of partnership funding opportunities and the District’s long term funding strategy.

2. Staff be directed to commence discussions with potential non-profit housing providers and senior government agencies in regards to development of non-market housing on a portion of the Delbrook Lands, and

3. Staff be directed to commence discussion with potential community service providers and senior government agencies in regards to development of community services on a portion of the Delbrook Lands.

This report provides an update on the progress made on discussions with non-market housing and community service providers to determine a model to deliver a non-market housing and community care facility on the southern portion of the Delbrook site.
SUMMARY:
In 2016 the District partnered with the SFU Centre for Dialogue to conduct the Delbrook Lands Dialogue. The community’s recommendations for future use of the lands included: continued district ownership of the site and provision for non-market housing, community services, and neighbourhood parkland. In January 2017 Council directed staff to commence discussions with potential non-profit housing providers, community service providers, and senior government agencies in regards to development of non-market housing and community services on a portion of the Delbrook Lands.

In response to Council’s direction, staff has been working to identify non-profit housing and community service partners to fund, construct, and operate non-market housing and community services on a portion of the Delbrook site. District staff reviewed proposals from non-market housing providers who had previously responded to a request for Expressions of Interest for affordable housing on District-owned lands. The applications were reviewed against the following criteria:

1. Non-Market housing project delivery and operating experience (Have they done this before? Are they able to get financing to make it happen?).
2. Unit mix, levels of “affordability”, total number of units.
3. Compatibility with partners.
4. Viability of co-delivering the non-market housing with the Care BC facility.
5. Innovation.

The proposal from Catalyst Community Developments Society (Catalyst) for the non-market housing component of the project was determined to be the best fit for this site.

Staff has been working with Health and Home Care of BC (Care BC) for several years to identify a location in the District for an Adult Daycare Program and Overnight Seniors Respite (ADP/OSR) project. Care BC has secured the necessary operational dollars from Vancouver Coastal Health (VCH), which makes the project feasible. The Care BC project requires a single, ground-oriented story and can be co-located with the non-profit housing project on the floors above. While planning and design for the entire Delbrook site will be recommencing in the fall, 2017, staff recommends initiating the negotiations for a ground lease on the south portion of the Delbrook lands to these two partners at a nominal rate. Detailed design development will include further public engagement as the overall Delbrook site planning continues this fall. This process will consider the timing for the existing tenants and will include public engagement.

BACKGROUND:
Site Information
The Delbrook site is located at 600 West Queens Road. The site is 4.3 acres (17,607m2) and is near two arterial roads, and along two transit corridors and on a future frequent transit network (FTN), identified in the North Shore Area Transit Plan for future frequent transit service. The site is within walking distance of schools, parks, recreation facilities, and shops. The land is designated "Institutional" in the Official Community Plan (OCP) and is zoned "Public Assembly". The site currently includes the Delbrook north and south recreation
buildings, two parking lots, three lit tennis courts, a public children's play area, a privately run child care facility (Little Rascals), and the Mission Creek riparian area (with a 15 meter setback). See Figure 1 below.

![Figure 1: Aerial Map of the Existing Delbrook Site](image)

In 2017, the District opened a brand new recreation centre at 851 Queens Road, which consolidated the former Delbrook and William Griffin community recreation centres (CRC). All recreation programs have transferred to the new facility, leaving the Delbrook Lands underutilized. Engineering studies commissioned by the District's Facilities department conclude that the Delbrook north and south buildings are both at the end of their lives and should be demolished.

**Delbrook Lands Dialogue**

In 2016 the District partnered with the SFU Centre for Dialogue to conduct a community consultation process with the goal of determining the most broadly-supported land use options for the site.

On June 18, 2016 the SFU Centre for Dialogue and the District co-hosted a Deliberative Dialogue event at the old Delbrook Community Recreation Centre. This event provided a unique opportunity for local and District-wide residents, and stakeholders to provide input to the District.

Key findings from the Deliberative Dialogue included:

- strong support for a multi-use site that includes neighbourhood parkland and indoor community services such as child care and adult day care.
the majority of participants supported non-market housing, if paid for by other levels of government.

- to help fund onsite amenities, participants proposed that the District of North Vancouver work to develop partnerships with senior levels of government and non-profit organizations, as well as allocate funding from the District budget.

- the majority of participants opposed the ideas of building market housing and/or selling the Delbrook Lands.

Staff presented these findings at a regular Council meeting on January 17, 2017. Council directed staff to begin discussions with non-profit housing providers and non-profit community service providers to explore options for the site and to develop a concept plan, cost estimates, and a funding strategy.

This report includes an update on this discussion. It includes some preliminary information on the non-market housing and community service building, high level cost estimates and a conceptual funding strategy. A concept plan for the south parking lot portion, refined cost estimates, funding strategy, and public input will be presented to Council later this fall.

Further planning for the site will occur later in 2017 and will include public engagement to determine a preferred concept plan that will be used to inform cost estimates and the funding strategy for the remainder of the site. Staff will present a draft scope for this work to Council in the fall.

EXISTING POLICY:

Official Community Plan

The District Official Community Plan (OCP) Housing Affordability section states that the "District's objective is to formulate development strategies and work with community partners and senior levels of government to provide housing for modest to moderate income residents" (Bylaw 7900, Section 7.3). The OCP also states "the District's objective is to work with senior levels of government and social service providers to support our most disadvantaged residents" (Bylaw 7900, Section 7.4). Policy 7.4.4 states the District should "consider the use of District land, where appropriate, to contribute toward and leverage other funding for the development of social and affordable housing.

Rental and Affordable Housing Strategy

The District's Rental and Affordable Housing Strategy (RAHS) states the need to "focus on the needs of low and low to moderate income earning households that are most likely to face challenges in finding appropriate and affordable housing" (page 5). Goal Six is to "partner with other agencies to help deliver affordable housing" and includes:

- seeking opportunities to partner with community stakeholders and senior levels of government towards achieving affordable housing goals and,
- exploring opportunities to utilize District owned land subject to consideration of, but not limited to: proximity to FTN; access to community services and employment; availability of external funding and partnerships; alignment with OCP, centres implementation plans and other applicable municipal policies. (page 14)
The 10 year (2016-2026) estimated demand in the RAHS for affordable rental units in the District is 600-1,000 units. In order to meet this target, staff must seek to maximize and expedite the analysis of options for delivering non-market housing projects across the District.

Child Care and Seniors Services
The OCP and the District’s Child Care Policy identify childcare as a priority and support the facilitation of the provision of quality child care. A child care needs assessment completed for the District indicates there is demand for additional childcare in the area, especially for infant/toddler care.

There is a growing population of seniors on the North Shore, and a limited number of adult day care centres to provide respite for families who care for seniors with complex needs. The centres that do exist have extensive waiting lists. Co-locating childcare with adult day care allows for intergenerational programming, which is proven to have many positive benefits.

Public Assembly Land Strategy
The site is currently zoned public assembly and community services (adult and child care) are an allowable use in this zone. One of the guiding principles of the Public Assembly Land Strategy is the retention of public assembly lands where possible. During the rezoning process, District staff will conduct an evaluation on any proposed change of use based on the criteria laid out in the Public Assembly Land Strategy to ensure any proposed changes are in the public interest.

Parks and Open Space Strategic Plan
The Parks and Open Space Strategic Plan identifies a need for neighbourhood parkland in the Delbrook neighbourhood. Neighbourhood parkland is defined as a local park that primarily serves District residents within a safe walking distance and provides limited recreational facilities such as a playground.

ANALYSIS:

Site Analysis:
The development of non-market housing and community services on District-owned land provides positive benefits to the neighbourhood and to the District as a whole. Analysis by staff has determined the most appropriate location for the project is the southern portion of the site, fronting onto West Queens Road (see Figure 2 below). The co-location of the two projects on the south parking lot allows the other tenants (Capilano Community Services and Little Rascals Child Care) on the Delbrook Lands to remain in place to the end of their leases. The proposed project also retains District ownership of the land.

In this preliminary stage Catalyst has proposed a low rise apartment building accommodating between 80-88 homes. Care BC and child care is proposed for the ground floor with underground parking beneath. The scale, size, and layout of the project will be refined
through design development, operational review, and municipal approvals processes, which includes public input. Sensitive integration with the surrounding single family neighbourhood will be a key objective in the design exercise.

Figure 2: Aerial Map with the Proposed Location of the Non-Market Housing and Community Services Building

In order to allow for non-market housing, Council would need to consider an OCP amendment for the south parking lot to change the land use designation from institutional to residential. The OCP directs the majority of new residential growth into key town and village centres and along corridors. The proposed location of the non-market housing is on Queens Road, near Delbrook Avenue, both of which are transit corridors. Queens Road is a future frequent transit corridor. The proposed site is located within walking distance of schools, parks, recreation facilities, and Westview shopping centre. The neighbouring multi-family development at the corner of Queens Road and Delbrook Ave. is three storeys and the rest of the neighbourhood is mainly single family (see Figure 3 below).
Changing the land use designation for a portion of the site to residential also requires a rezoning process and an assessment under the Public Assembly Land Strategy evaluation framework. The evaluation would ensure that any proposed change is in the public interest and provides an overall benefit to the community.

**Transportation Implications**

In 2016, the District commissioned a transportation study on the Delbrook Lands to examine the implications of a variety of land uses, including the uses proposed in this report. The study concluded that the proposed land uses (non-market housing and community services) will generate less traffic than was generated by the recreation centre and other existing site uses. The study also noted this site is suitably located near transit and within walking distance to shops, recreation, and schools.

Transportation staff has provided further recommendations regarding site circulation, parking, walking, and cycling connectivity for the whole Delbrook Lands site.

Staff has also highlighted a number of offsite opportunities that could improve the neighbourhood connections, such as creating wider sidewalks and landscape buffers along site frontage and improvements to pedestrian crossings at West Queens and Stanley, cycling facilities along West Queens, and upgrading the transit stop facility.

More detailed analysis of the transportation implications of locating this project on the southern portion of the site will be needed when the project moves ahead to rezoning.
Catalyst Community Developments Society

Catalyst is a registered BC non-profit society that brings a unique financing model to delivering non-market housing projects across the Lower Mainland. The Society raises social equity from foundations and private individuals wishing to invest in, and support, projects that provide a 'triple bottom line' return (financial, social, and environmental).

Catalyst provides an innovative and proven model that ensures the project is viable. Catalyst does not rely on grant funding but, should it become available, any grants would improve and deepen the affordability, which benefits future tenants.

Catalyst's mission is to create housing that is affordable to a cross section of the community, including seniors, singles, couples, and families. The Society targets those residents with a gross income level in the range of $25,000 to $65,000 per year, and income-tests appropriately. In addition the Society would endeavour to provide homes to individuals with incomes well below these levels and to those with rent subsidies (e.g. seniors with SAFER subsidies).

Catalyst brings innovative non-market housing development expertise and a proposal that offers a broad range of unit types and levels of affordability. Their preliminary proposal includes rental affordability targeted to Canada Mortgage and Housing Corporation (CMHC) level two and three and may range from one bedrooms at $1,086-$1,220 to $1,356-$1,526 for three bedrooms. The exact blend of affordability within the building is flexible and will be driven by need and demand, as well as other financial considerations such as debt-financing, construction costs, etc. By way of example, 15% of homes could be offered at the income assistance shelter rate ($375/month) and the remaining rent at an adjusted rate.

Catalyst has also included space for a child care facility in the building, although capital funding and an operator have not yet been identified. Staff will work to identify a non-profit child care operator over the next few months.

Care BC

Care BC has been working with District staff to locate a site for their facility for many years. Care BC is proposing to build and operate an integrated facility for 20 adult daycare program clients and 12 overnight seniors respite beds. It would serve a client population of older adults (70+ years) living on the North Shore who are eligible for home support services in BC, require ADP or OSR, and have been referred by Vancouver Coastal Health (VCH). Their facility must be located on the ground floor of the residential building. CareBC has secured annual operating dollars from Vancouver Coastal Health (VCH). They have also confirmed the ability to secure capital funding for construction from private donors and foundations.

Catalyst and Care BC have met several times and have formally agreed to partner together on the development of this project. Catalyst will take on the responsibility of project management in the design and build process, with both organizations working collaboratively, but independently, to secure the necessary capital dollars to make the project
work. District staff will be working with both organizations to develop a ground lease at a nominal rate and a Partnership Agreement, itemizing the details and conditions.

Timing/Approval Process:
Staff will work with Catalyst and Care BC to develop a preliminary design for the non-market housing and community services building on the south parking lot portion of the Delbrook site in the fall of 2017. Opportunities for public input will be available during the OCP amendment and rezoning processes, as well as during the site planning process.

Staff will engage the community on the planning and design of the site through the fall/winter of 2017 into 2018. The planning will consider the constraints on the remaining site, including Capilano Community Services Society (CCSS) staying in the north building until 2019, and Little Rascals Child Care's ground lease to 2023. Planning will include the development of a draft concept plan for the Delbrook Lands based on the uses recommended through the Delbrook Lands process, District priorities, refined cost estimates, and a funding strategy.

Concurrence:
Finance, Real Estate, Communications, and Engineering staff have reviewed this report.

Financial Impacts:
Partnering with Catalyst and CareBC leverages significant capital and ongoing operational dollars (Care BC only) from senior levels of government, foundations, and social equity investors. The District has various options to further reduce the rents for residents living in the building. Some of the options are design related, and include parking requirements and site access and others relate to waiving fees, DCCs, nominal land lease, etc. These contributions are listed below for Council's information. Staff will provide refined estimates at a later date.

What is the District contributing?
- One-time costs $1.6M
  - Waiving of fees (~$300,000 permit fees, ~$500,000 DNV DCC's)
  - Offsite servicing (~$500,000 pipes, ~$300,000 sidewalks, boulevards, etc.)
- Ongoing tax exemption ~$70,000 to $90,000 per annum
- Land lease at a nominal rate, southern portion of site valued in 2016 at over $6M (property values in the vicinity rose more than 35% since 2016, therefore a final number will be provided to Council at the time of signing a Partnership Agreement)
- Foregone CAC's if developed as market housing ($1.4M)

TOTAL ~$9,000,000 + annual tax exemption

How is the District benefitting?
- 80-88 subsidized rentals units (subsidy valued at ~$300,000 per year)
- 20 adult daycare spaces (subsidy valued at $400,000 - $500,000 per year)
- 12 overnight respite beds (subsidy valued ~$950,000 per year)
• 37 spaces of child care (0-5 years, value to be determined)
• Retain ownership of land, long term flexibility for site

Funding for the District’s $1.6M in one-time costs is referred to the Long Term Financial Plan, with likely sources including the development stabilization reserve. Metro Vancouver will also be waiving GVS&DD DCC’s valued at ~$70,000 for the subsidized rental units included in the development.

Financial details will be laid out in a Partnership Agreement between the District and the project proponents, which is subject to final approval by Council.

Liability/Risk:
Previous experience using District-owned land for supportive and non-market housing projects indicates that project partners who build and operate the non-market housing assume the liability and responsibility for the project during the term of the lease. Staff recommends continuing with this model through the future processes of negotiating lease agreements for any such project.

Social Policy Implications:
The creation of new non-market housing and community services are priorities for the District. The Delbrook Lands planning process revealed an opportunity to begin to address the critical need in the District for these important services. Based on community feedback, both of these proposed uses would be acceptable and would allow the land to remain a public asset, owned by the District for future benefit to all District residents.
Metrics
This project will add approximately **80-88** units of non-market subsidized rental housing to The District's estimated demand of 600-1000 units by 2026.

**Environmental Impact:**
Mission Creek riparian area will be protected and enhanced.

**Public Input:**
The community have been involved extensively in determining the future of the Delbrook Lands. The proposed project is in keeping with the community recommendations from the Dialogue process in 2016 as it includes District-owned lands for non-market housing and community services. The remainder of the site will include some neighbourhood parkland.

Local and District-wide residents are continuing to be engaged and will have further opportunity to comment on the proposed non-market housing and community service project through the OCP amendment and rezoning process. Staff will engage with the community
association and the wider public on the preferred concept for the site, and will present this information to Council in 2018, including cost estimates and a funding strategy.

Conclusion:
This report provides an update on the progress made on discussions with non-market housing and community service providers to determine a model of delivering a joint non-market housing and community care facility on the southern portion of the Delbrook site.

Respectfully submitted,

Annie Mauboules
Senior Community Planner

Suzy Lunn
Community Planner

Attachment 1: Delbrook Lands Presentation

REVIEWED WITH:

☐ Sustainable Community Dev. ☐ Development Services ☐ Utilities ☐ Engineering Operations ☐ Parks ☐ Environment ☐ Facilities ☐ Human Resources ☐ Clerk's Office ☐ Communications ☐ Finance ☐ Fire Services ☐ ITS ☐ Solicitor ☐ GIS ☐ Real Estate

External Agencies:
☐ Library Board ☐ NS Health ☐ RCMP ☐ NVRC ☐ Museum & Arch. ☐ Other:
Delbrook Lands
July 24, 2017,
Regular Meeting of Council

Tom Lancaster, Manager of Community Planning
Suzy Lunn, Community Planner

Presentation Overview

1. Housing Continuum
2. Background: Delbrook Lands Dialogue
3. Project Overview
4. Project Partners
5. Next Steps
Housing Continuum

Delbrook Lands Dialogue

January 28, 2016 event
- 177 participants (56% local, 29% District-wide, 16% other)
- 103 responses to online survey

June 18, 2016 event
- 89 participants (52% local, 48% District-wide)
- 128 responses to online survey

January 17, 2017
- Council approval to commence discussion with partners
Delbrook Site

Project Overview

Catalyst Community Developments
- 80-88 units
- Four storey wood frame

Care BC
- Ground level – 12 respite beds and 20 adult day care spaces

Child Care
- 37 spaces
Catalyst Community Developments Society

- Non-profit society
- Leveraging real estate assets for social change
- Innovative funding model – social equity
- Proven partnership track record
- 7 current non-market housing projects across BC

Care BC

- Non-profit society
- Long history of providing preventive and supportive health services
- Operates facilities in Vancouver
Conclusion

- Timeline
- Next steps
The Delbrook Lands Community Dialogue was a significant undertaking and could not have happened without the hard work and dedication of many individuals. The District of North Vancouver and its leaders are credited with taking an innovative approach to engage with their citizens. Staff members Mairi Welman and Suzy Lunn, along with many others from the Planning, Communications and Finance departments, provided key support and helped explain and describe the connections between dialogue topics and relevant District policies. Additional contributors include the large team of District staff who facilitated and took notes at each table during the two events.

Several Centre for Dialogue staff contributed to the success of this event, including Shauna Sylvester, who designed and moderated the dialogue event, Robin Prest, who provided project management in addition to designing and moderating the dialogue event, and Jenna Dunsby, who led the stakeholder outreach and served as primary author of the report and analyst of the dialogue outputs.

Finally, an especially large thank you to the residents and stakeholders who provided the ideas, input and invaluable background information in advance of the deliberative dialogue session, and to the almost 100 participants who dedicated a Saturday in June to work across individual perspectives and identify solutions that are in the best interest of the entire community. This report reflects your collective input and wisdom.
About this report

**Purpose of Document**
This report was independently prepared by Simon Fraser University’s Centre for Dialogue under the sponsorship of the District of North Vancouver. The purpose is to provide a summary of public input shared during the Delbrook Lands Deliberative Dialogue, held June 18, 2016.

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**About the District of North Vancouver**
With its naturally beautiful wilderness surroundings, high quality of life and close proximity to downtown, North Vancouver District is one of the most desirable places to live, work and play in the world. Home to over 85,000 residents and many major waterfront industry employers, the District’s unique characteristics provide residents, business owners and visitors alike with the benefits of being part of a dynamic metropolitan region, along with the appealing attributes of living in a smaller community.

**About the SFU Centre for Dialogue, Civic Engage Program**
Civic Engage is a program of Simon Fraser University’s Centre for Dialogue designed to increase the capacity of governments and citizens to work collaboratively on policy decisions. The program leverages the Centre for Dialogue’s status as a neutral facilitator and reputation as a globally-recognized centre for knowledge and practice in dialogue. Program areas include capacity building, direct services, research and public forums. For more information, visit [sfu.ca/civic-engage](http://sfu.ca/civic-engage)
Executive Summary

The June 18 Delbrook Lands Deliberative Dialogue provided a unique opportunity for local neighbourhood and other District of North Vancouver residents and stakeholders to provide input to the municipality on the future of the Delbrook Lands. The dialogue event was part of the larger Delbrook Lands Community Dialogue process that began in January 2016.

The District of North Vancouver and SFU’s Centre for Dialogue implemented an extensive outreach campaign to ensure that the 89 participants reflected the demographics and interests of the community. A Discussion Guide provided factual information in advance of the full-day dialogue event, including a range of community and Council-generated site ideas for the Delbrook Lands, as well as relevant District policy and stakeholder perspectives. Participants worked in small groups to develop recommendations in the best interest of the entire community, and also expressed their individual preferences in a post-dialogue survey. This survey allowed the SFU Centre for Dialogue team to analyze responses by stakeholder group.

Key findings include strong support for a multi-use site that includes green space and indoor community services such as additional child care and an adult daycare. The majority of participants also support non-market housing if paid for by other levels of government. To help fund on-site amenities, participants proposed that the District of North Vancouver work to develop partnerships with senior levels of government and non-profit organizations, as well as allocate funding from the District budget. A majority of participants opposed the ideas of building market housing and/or selling the Delbrook Lands.

Post-event surveys indicated that 85% of respondents would be interested in participating in similar events in the future, compared to only 3% who would not, and 72% are satisfied with the District of North Vancouver’s consultation so far on the Delbrook Lands, compared to 13% who are not. Council will consider the findings in this report in fall 2016, with the timeline for a final decision and implementation to be determined.
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   District consultation events ..................... 16
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1. Introduction

In the fall of 2015, the District of North Vancouver partnered with Simon Fraser University’s Centre for Dialogue to develop an engagement process on the future of the Delbrook Lands at 600 West Queens Road, with the goal of determining the most broadly supported land use options through a community dialogue. The process consisted of three phases:

**PHASE ONE: IDEAS GENERATION**
People from the immediate neighborhood and across the District were invited to share their ideas on the potential future uses of the Delbrook Lands and provide input on the next steps of the engagement process via an evening community dialogue event and an online survey. Outcomes of this phase can be found in the February 2016 Ideas Report.

**PHASE TWO: RESEARCH AND TECHNICAL ANALYSIS**
District staff and external subject matter experts analyzed suggestions from the community and members of Council to determine a range of options for the future use of the Delbrook Lands, as well as their positive and negative impacts. This information was compiled in a discussion guide. Guidelines for the deliberative dialogue were also developed and approved by District Council.

**PHASE THREE: DELIBERATIVE DIALOGUE**
Local and District-wide residents and stakeholders participated in a day-long dialogue event, where they took on the role of a District planner and recommended the options they believed to be in the best interest of the entire community.

This report summarizes the results of the Phase 3 Delbrook Lands Deliberative Dialogue that took place on Saturday June 18, 2016.
2. Event Overview

Outreach
The District and SFU’s Centre for Dialogue worked together to identify and promote the Delbrook Lands Deliberative Dialogue to local neighbourhood and District-wide residents and stakeholders. A variety of communications channels were used to spread the word about the event, including:

- On-street signage in over six locations throughout the District, including at District Hall, on the Delbrook Lands site, and at a number of high-traffic intersections (Parkgate Mall, Lynn Valley fire hall, Mt. Seymour Parkway at Lillooet and Capilano at Ridgewood)
- Two postcard mail drops to all District residences
- Posters and postcards in major civic facilities
- Paid advertisements in the North Shore News and Deep Cove Crier
- Social media, including paid Facebook ads targeting specific age groups
- Direct outreach to stakeholder groups and community members who previously registered interest in the issue
- Targeted promotion to relevant organizations, such as community and business associations, site users, District advisory committees and community associations
- Direct outreach to nearby schools and youth-involved organizations (e.g. youth outreach groups, North Vancouver Recreation and Culture Commission, etc.) to identify and invite youth aged 15 and older
- Mayor’s column in Deep Cove Crier
- A promotional video shared on the District’s Delbrook Lands webpage and District social media accounts

Selection process
Given staff resources required to support the event and limitations on venue size and availability within the District, registration was limited to 100 participants. To balance community input in a fair and transparent way, the Centre for Dialogue designed a selection process for these 100 spaces that included both random selection for interested residents as well as reserved seats for community organizations directly impacted by the future of the Delbrook Lands.

The selection criteria listed on page three reflect input from participants in the first phase of the engagement process, who suggested the District include a diversity of interests by ensuring that local residents, current site users, District-wide residents and District-wide community groups, and especially youth and parents of young families were present. The criteria also reflect District Council’s directives to engage both local and District-wide residents and stakeholders, and to strive for inclusion of youth and gender parity among participants.
SELECTION CRITERIA

Local neighbourhood – 50 seats

• 37 seats randomly allocated amongst residents and property owners within the local neighbourhood, including:
  • A guaranteed minimum of seven seats randomly assigned to interested young people aged 15-30.
  • Priority access for seven seats randomly assigned to interested adults aged 31-45.
  • Priority access for 13 seats randomly assigned to interested residents or property owners within 100 meters of the Delbrook Lands.
  • A maximum of three seats for interested residents or property owners from the local neighbourhood who live within the jurisdiction of the City of North Vancouver. This group was otherwise selected using the same random process as others from the local neighbourhood, with no guaranteed or priority seats.

• 13 seats directly assigned by the SFU Centre for Dialogue to representatives from identified groups that currently use the Delbrook site and/or community organizations within the local neighbourhood, up to a maximum of two seats for any single group, space allowing.

District-wide – 50 seats

• 37 seats randomly allocated to District residents and property owners from outside the local neighbourhood, including:
  • A guaranteed minimum of seven seats randomly assigned to interested young people aged 15-30.
  • Priority access for seven seats randomly assigned to interested adults aged 31-45.

• 13 seats directly assigned by the SFU Centre for Dialogue to representatives from community groups outside the local neighbourhood with an interest in the future of the Delbrook Lands, up to a maximum of two seats per group, space allowing.

SFU aimed to ensure approximate gender parity with a minimum of 45 seats for female participants and a minimum of 45 seats for male participants.

For the purpose of the deliberative dialogue, the local neighbourhood (see page four for map) was defined as:

• East of Mosquito Creek
• West of Lonsdale Avenue
• North of the Trans-Canada Highway
• South of the urban containment boundary
Residents and stakeholders were asked to register their interest via an online system or by phone. Registration was open from April 26 to May 18, and the SFU Centre for Dialogue conducted the random selection of participants in District Hall Council Chambers on May 20. In total, 100 seats were assigned.

**Participant demographics**

Eighty-nine of the 100 registered participants attended the Delbrook Lands Deliberative Dialogue on June 18. The demographic and other information they provided through a pre-event survey allowed event organizers to confirm the intended participant composition and to analyze results by stakeholder group.

**Figure 2.** Local neighborhood and surrounding area

- Delbrook Lands site
- R = Public recreation centre
- S = School
- F = Firehall
Of the 89 participants, 46 were from the local neighbourhood and either live there (including 18 who live within 100 metres of the Delbrook Lands and two who live in adjacent areas of the City of North Vancouver) and/or were site users (Little Rascals Daycare and Capilano Community Services Society). The other 43 participants were from outside the local neighbourhood and live in the District and/or attended as members of stakeholder groups within the larger District area.

Out of the 89 participants, 45 reside in the local neighbourhood.

While a number of stakeholder groups participated in the event, the following groups were specifically invited to attend:

Local neighbourhood
- Braemar School Parent Advisory Council
- Capilano Community Services Society
- Delbrook Community Association
- Little Rascals Daycare
- Norwood Queens Community Association

District-wide
- Capilano University Students Union
- Community Housing Action Committee (North Shore Community Resources)
- Edgemont Village Business Association
- North Shore Advisory Committee on Disability Issues
- North Shore Disability Resource Centre
- North Vancouver Chamber of Commerce
- North Vancouver Parent Advisory Council
- North Shore Sports Council
- North Shore Streamkeepers
- Vancouver Coastal Health
- Seniors Tennis Association of the North Shore

The full list of participants and participating stakeholder groups is available in Appendix A.

Participants reflected a range of ages—however despite significant efforts made to register youth, the 14-seat quota was not met (eight out of 14 seats were filled, with the rest assigned to alternates).
Sixty percent of participants were female, and 40% were male.

![Participant breakdown by gender](image)

**Figure 5.** Participant breakdown by gender

### Dialogue proceedings

The Delbrook Lands Deliberative Dialogue ran from 10 am – 4:30 pm on June 18, 2016. Participants were seated at 12 tables with six to eight participants each, based on a seating chart created by Centre for Dialogue staff to ensure a diversity of interests at each table.

Each table had at least one resident who lives 100 metres from the site, an approximately equal number of local and District-wide residents and stakeholders, a range of different ages, and was as close to gender parity as possible. Each table was also assigned two District staff to fill the roles of facilitator and note-taker, who helped ensure participation from everyone at the table and accurately capture the ideas expressed.

Upon arrival, participants received a printed copy of the dialogue discussion guide that everyone had received electronically prior to the event and was strongly encouraged to read. They were asked by their table facilitators to fill out a pre-event survey to help SFU’s Centre for Dialogue gather demographic information and attitudes about the Delbrook Lands.

The event began with an opening from Acting Mayor Jim Hanson and SFU Centre for Dialogue Moderators Shauna Sylvester and Robin Prest, who clarified the scope of the dialogue and how community input would be used. Participants were then taken on small group site tours of the Delbrook Lands. The remainder of the morning was spent reviewing each major site idea in the discussion guide, with participants sharing what they liked and disliked about each idea.

After lunch, tables spent the afternoon envisioning what they would like to see on the site in the future and then working together to develop recommendations in the best interest of the entire community. Tables were encouraged to find areas of agreement and use a map of the site to help illustrate their recommendations. Recommendations included site features, site composition, estimated cost, and how the features could be paid for. Towards the end of the event, one representative from each table was asked to pitch their table’s proposal to the entire room. Nine tables arrived at recommendations that everyone in the group could agree on. Five minority reports emerged from four tables unable to reach agreement among all participants.
The event ended with Mayor Richard Walton addressing participants and Dan Milburn, Acting General Manager of Planning, Property and Permits, discussing next steps in the process of deciding the future use of the Delbrook Lands. Participants were asked to fill out a post-event survey, which provided them with an opportunity to express their individual preferences for specific ideas – in contrast to the table proposals, which represented areas of agreement and compromise among groups. Each anonymous survey was assigned a tracking code, allowing Centre for Dialogue staff to pair pre- and post-surveys to participant demographic information and break down results by stakeholder group. The survey also allowed participants to provide feedback about their satisfaction with the dialogue event and consultation process.

**DISCUSSION GUIDE**

To help support the event, SFU’s Centre for Dialogue worked with the District of North Vancouver to prepare a discussion guide. The guide contained factual information to support participant conversations, including the relevant policies and plans that set the context for future change in the District and local neighbourhood. It also contained a range of six potential site ideas based on earlier community and Council input from phase one, each with a description including estimated cost and common arguments for and against each action from different stakeholder perspectives.
3. Major Themes and Findings

Methodology

This section outlines the major themes emerging from table recommendations during the Delbrook Lands Community Dialogue. For the purpose of this report, ‘themes’ are defined as recommendations proposed by at least four of the 12 tables. These recommendations represent areas of agreement that emerged after several hours of deliberation among participants who reflected diverse perspectives. Within each theme, we present the full list of table suggestions to highlight variations in approach.

Policy alignment, cost and funding sources are important factors in deciding on the site’s future and were outlined for participants to consider during their deliberations. Explicit evaluation of participant recommendations based on these criteria is outside of the scope of this report.

Quantitative results from the post-dialogue surveys are presented alongside each theme to provide a better understanding of overall participant support. These survey results use a scale where a score of one indicates ‘strongly against,’ a score of three indicates ‘neutral’ and a score of five indicates ‘strongly in favour.’ Centre for Dialogue staff explicitly highlight results from local neighbourhood and District-wide participants when support varies between these groups by more than 10 percentage points. Broad support among participants is intended to be a major criterion for shaping the plan that goes forward to Council.

Qualitative results from the post-dialogue survey free-text questions are presented where relevant. Responses that received more than 10 mentions by participants are highlighted.

MINORITY REPORTS

For the tables unable to reach consensus on site composition and features, participants holding dissenting views were asked to submit a minority report. These reports consisted of the same information included in the majority recommendations: site features, total cost and funding sources. A total of five minority reports were submitted from four different tables.

The views shared in these minority reports were largely captured in post-event survey data, but have also been noted in footnotes where applicable. For the full text of the minority reports, please see Appendix C.
Key findings

The following sections highlight key findings from both table recommendations and individual participant input. These include:

- Participants want to see the Delbrook Lands benefit both the local and District-wide community, and showed strong support for a multi-use site that includes green space and indoor community amenities, such as additional child care and an adult daycare

- The majority of participants supported non-market housing if paid for by other levels of government

- To fund on-site amenities, participants proposed that the District of North Vancouver work to:
  - Develop partnerships with senior levels of government and non-profit organizations
  - Re-allocate funding from the District budget

- The majority of participants opposed building market housing and/or selling the Delbrook Lands

The full text of each table’s recommendation and site composition map are available in Appendix B. Full individual survey results are available in Appendix D.

Site composition

Group recommendations

In their recommendations, tables grouped site features into a variety of combinations. Two themes emerged:

- Eight out of 12 tables envisioned a multi-use site with parkland, indoor community amenities and non-market housing

- Four tables proposed a multi-use site with parkland and indoor community amenities only

Further details about what tables meant by community amenities can be found on page 12.

Relevant survey results

Site ideas appear as themes in this report if recommended by four or more tables. The following site ideas failed to meet this threshold and were opposed by the majority of participants in post-event surveys:

---

1 One of these tables submitted a minority report that did not include non-market housing.
2 Two of these tables submitted minority reports that included housing.
• Demolishing the buildings and seeding the grounds with grass, leaving the rest of the site as is (63% of respondents were against or strongly against)

![Pie chart showing participant support for seeding building site with grass.](image)

Figure 6. Participant support for seeding building site with grass

• Upgrading the existing buildings to provide community use for another 25 years (77% of respondents were against or strongly against)

![Pie chart showing participant support for building upgrades.](image)

Figure 7. Participant support for building upgrades

• Market housing (68% of respondents were against or strongly against)

![Pie chart showing participant support for market housing.](image)

Figure 8. Participant support for market housing

• A commercial business that serves the local community (73% of respondents were against or strongly against)

![Pie chart showing participant support for commercial use.](image)

Figure 9. Participant support for commercial use

Participants were also asked to select whether the future use of the Delbrook Lands should primarily serve the local neighborhood, the entire District, or both. Results show that the majority of participants (63% of respondents) feel the future use of the Delbrook Lands should serve both the local neighbourhood and the District-wide population.

![Pie chart showing participant preferences for who the Delbrook Lands should serve in the future.](image)

Figure 10. Participant preferences for who the Delbrook Lands should serve in the future
Site features
The following section highlights recommended site feature themes, mentioned by four or more tables. For the full recommendations, please see Appendix B.

Theme 1: Parks and outdoor recreation

Group recommendations
For parks and outdoor recreation, seven ‘neighbourhood parkland’ features were proposed. These features, which would primarily serve residents within a 10-minute walking distance, are:

- Multi-use park/green space (11 tables)
- Community garden (eight tables)
- Playground (seven tables)
- Trails (seven tables)
- Retaining the tennis courts (six tables)
- Mission Creek enhancements (five tables)
- Picnic area (five tables)

Relevant survey results
Post-event survey results show that the majority of all participants individually support neighbourhood parkland and related features. Seventy-two percent of respondents were in support, with 82% of local neighbourhood participants in favour or strongly in favour compared to 61% of District-wide participants.

Participants were asked to provide input specific to the idea of having community gardens on the site and 62% of respondents were in favour or strongly in favour.
Only 30% of all respondents were in favour or strongly in favour of community and district park ideas, which are features suited for larger park spaces that serve a greater number of residents (e.g. bike skills park, long board course).

**Theme 2: Community services, recreation and cultural facilities**

**Group recommendations**

For community services, recreation and cultural facilities, three features were proposed by four or more tables:

- Additional child care and adult daycare (eight tables)
- A multi-use building or ‘community hub’ (four tables)
- Underground parking (four tables)

All four tables who proposed the multi-use building recommended that it include an additional child care and adult daycare (and have been counted in the eight tables that recommended this feature). They also recommended that the building include a seniors and youth/intergenerational centre (two tables), a café (two tables), cultural space (two tables), a medical clinic (one table) and recreational services (one table).

**Relevant survey results**

A strong majority of all participants support the idea of an additional child care and adult daycare facility, with 88% of respondents in favour or strongly in favour.
Theme 3: Non-market housing

Group recommendations
Eight tables proposed non-market housing for the site.3

Relevant survey results
The idea of non-market housing, if paid for by another level of government or non-profit housing funding source, received support from a majority of all participants—60% of respondents were in support. Among District-wide participants, 70% were in favour or strongly in favour, with 5% neutral and 25% against or strongly against.

Among local neighbourhood participants, 51% were in favour or strongly in favour, with 18% neutral and 31% against or strongly against.

There is significantly less support for the idea of non-market housing if paid for through proceeds from market housing development on the Delbrook Lands, with the majority of respondents against or strongly against (63%).

Land ownership and funding

Group recommendations
Participants were asked to include potential funding sources for their recommendations, with four ideas proposed by four or more tables:

- Partnering or seeking funding from provincial and/or federal levels of government (all tables)
- Reallocating funding available in the District budget and/or tax revenue (10 tables)
- Partnerships with non-profit organizations (Six tables)
- Earning revenue from rental units and commercial leases (Four tables)

Figure 16. Participant support for non-market housing (if paid through market housing development on the Delbrook Lands)

3 One of these tables submitted a minority report that did not include non-market housing.
Relevant survey results
In the post-dialogue survey, participants individually shared their proposed funding sources and these responses closely aligned with the group recommendations above.

The proposed funding sources that received more than 10 mentions are listed below, and the number of participants who contributed suggestions for each theme is indicated in parentheses:

**50** Partnering with provincial and/or federal levels of government

**34** District budget and tax revenue

**15** Partnerships with non-profit organizations

**11** Fundraising in the community

Post-event survey results show that the majority of both local and District-wide respondents strongly oppose the sale of the Delbrook Lands in all the circumstances queried—see Figure 17 for full results. The strongest opposition emerged with regard to selling the land to fund community amenities elsewhere in the District and selling the land to fund District financial priorities.

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4 89% of local neighbourhood respondents were against or strongly against compared to 75% of District-wide respondents.
4. Evaluation

Event feedback

Figure 18 below shows post-event survey results for participant event feedback. Eighty-five percent of respondents indicated they would be interested in participating in similar events in the future and 80% felt that as a whole, dialogue participants reflected the diversity of opinions and interests in the community.

**Question:** The Discussion Guide was clear and contained useful information relevant to our discussions

- **Strongly against:** 6%
- **Against:** 21%
- **Neutral:** 41%
- **In favour:** 32%
- **Strongly in favour:** 6%

**Question:** My views on the future of the Delbrook Lands have been impacted by hearing the views of other participants

- **Strongly against:** 5%
- **Against:** 7%
- **Neutral:** 22%
- **In favour:** 45%
- **Strongly in favour:** 21%

**Question:** The discussions today helped produce solutions that are in the best interest of both the local and District-wide community

- **Strongly against:** 2%
- **Against:** 4%
- **Neutral:** 19%
- **In favour:** 47%
- **Strongly in favour:** 27%

**Question:** The Centre for Dialogue moderators provided clear explanations, guidance and support throughout today’s event

- **Strongly against:** 6%
- **Against:** 16%
- **Neutral:** 49%
- **In favour:** 28%
- **Strongly in favour:** 19%

**Question:** My table facilitator provided clear explanations, guidance and support throughout today’s event

- **Strongly against:** 6%
- **Against:** 7%
- **Neutral:** 20%
- **In favour:** 67%

**Question:** As a participant, I felt as though my needs (e.g. dietary requirements, etc.) were met by event organizers

- **Strongly against:** 2%
- **Against:** 18%
- **Neutral:** 78%
- **In favour:** 15%

**Question:** Given my experience at today’s dialogue, I am interested in participating in similar events in the future

- **Strongly against:** 1%
- **Against:** 12%
- **Neutral:** 15%
- **In favour:** 70%
- **Strongly in favour:** 78%

Figure 18. Participant event feedback
Participants were also asked how often they participate in District consultation events—65% of respondents indicated they participate “once or twice per year” or less.

**Figure 19.** Participant rate of participation in District consultation events

### Satisfaction with process

The question “I am satisfied with the District of North Vancouver’s consultation process so far on the Delbrook Lands” was asked in both the pre- and post-event surveys, where participants were asked to rank their agreement with the statement from one (strongly disagree) to five (strongly agree).

Survey results indicate that participant satisfaction with the process increased over the course of the day by approximately eight percentage points (Figure 20).

**Figure 20.** Participant satisfaction with the District of North Vancouver’s consultation process so far on the Delbrook Lands
5. Next Steps

Participant recommendations to the District

In the post-event survey, participants were asked to individually recommend their preferred uses for the future of the Delbrook Lands to the District of North Vancouver, with many providing more than one response. Several themes emerged, largely reflecting those proposed in table recommendations. Common responses that received more than 10 mentions are listed below, with the number of participants who contributed suggestions for each theme indicated in parentheses:

(46) Green space
(27) Additional child care and adult day care
(26) Flexible/multi-use indoor community space
(23) Retain public ownership of the land
(21) Non-market housing
(14) Multi-use (no housing)
(14) Multi-use (housing)
(12) Playground
(10) Prioritize community use and public space
(10) Outdoor recreational activity space (e.g. trails, exercise equipment, etc.)

Reflections on the process

The future of the Delbrook Lands is an issue that many in the District of North Vancouver community care about passionately and a wide range of views were shared during the discussion on June 18. Participants worked hard to bridge differences in individual perspectives and identify recommendations that are in the best interest of the entire community. The overall tone of the dialogue was respectful and productive, with 85% of participants indicating they would be interested in attending similar events in the future, compared to only 3% who would not.

This level of satisfaction, combined with participants’ ability to identify areas of compromise and mutual agreement, provides a quality reference point for Council to consider when deciding upon the future of the Delbrook Lands. Council will consider these findings in fall 2016, with the timeline for a final decision and implementation to be determined. Additional consultation may be required for detailed site design, depending on the nature of Council’s final decision, as these elements were not included in the discussions.
### APPENDIX A: June 18 Participant List

Below is the list of the 89 participants who attended the June 18th dialogue event.¹ Those listed as “name withheld” do not wish to have their name made public.

#### Local participants

<table>
<thead>
<tr>
<th>Name</th>
<th>Stakeholder seat?</th>
<th>Affiliated organization</th>
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</thead>
<tbody>
<tr>
<td>1. Diana Belhouse</td>
<td>Yes</td>
<td>Delbrook Community Association</td>
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<tr>
<td>2. Jane Chersak</td>
<td>Yes</td>
<td>Norwood Queens Community Association</td>
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<td>3. Keith Collyer</td>
<td>Yes</td>
<td>Delbrook Community Association</td>
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<td>4. Lora Hargreaves</td>
<td>Yes</td>
<td>Braemar Parent Advisory Committee</td>
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<tr>
<td>5. Sigrid Lightfoot</td>
<td>Yes</td>
<td>Little Rascals Daycare</td>
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<td>6. Francesca Mastroieni</td>
<td>Yes</td>
<td>Little Rascals Daycare</td>
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<tr>
<td>7. Renée Strong</td>
<td>Yes</td>
<td>Capilano Community Services Society</td>
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<td>8. Bonnie Adie</td>
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<td>9. Steve Alavi</td>
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<td>10. Tina Bailey</td>
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<td>12. James Bateman</td>
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<td>13. David Bolt</td>
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<td>14. Gerry Brewer</td>
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<td>15. Deb Brown</td>
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<td>16. Antonia Collyer</td>
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<td>17. Fred Evetts</td>
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<td>18. James Gill</td>
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<td>19. Susan Inouye</td>
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<td>20. Colin Lancaster</td>
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<td>22. Andrew MacKay</td>
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<td>23. Natalie Marchesan</td>
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<td>24. Ramona Materi</td>
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<td>25. Terry McAlduff</td>
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<td>26. Mary Moher</td>
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<td>27. Shirin Nabavinejad</td>
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<td>28. Stephanie Olsen</td>
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<td>29. Nina Preto</td>
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<tr>
<td>30. Keith Reynolds</td>
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</tbody>
</table>

¹ Of the 13 seats originally reserved for local stakeholders, eight were filled and the rest were given to alternates chosen during the May 20 random selection process (one of the eight did not attend). Of the 13 seats originally reserved for District-wide stakeholders, 11 were filled, and the rest were given to alternates.
31. Susan Rhodes  
32. Dan Ross  
33. George Stewart  
34. Shelley Tapp  
35. Linda Travers  
36. Amy Tsang  
37. Krista Tulloch  
38. Allison Walter  
39. Dave Watt  
40. Karin Weidner  
41. Patricia Young  
42. Name withheld  
43. Name withheld  
44. Name withheld  
45. Name withheld  
46. Name withheld  

**District-wide participants**

<table>
<thead>
<tr>
<th>Name</th>
<th>Stakeholder seat?</th>
<th>Affiliated organization</th>
</tr>
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<tr>
<td>47. Erin Black</td>
<td>Yes</td>
<td>Vancouver Coastal Health</td>
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<td>48. Alexis Chicoine</td>
<td>Yes</td>
<td>North Shore Advisory Committee on Disability Issues</td>
</tr>
<tr>
<td>49. Dawn Copping</td>
<td>Yes</td>
<td>North Shore Sports Council</td>
</tr>
<tr>
<td>50. Alysa Huppler-Poliak</td>
<td>Yes</td>
<td>Capilano University Students Union</td>
</tr>
<tr>
<td>51. Warren McKay</td>
<td>Yes</td>
<td>Cool North Shore Society</td>
</tr>
<tr>
<td>52. Kim Miles</td>
<td>Yes</td>
<td>North Shore Disability Resource Centre</td>
</tr>
<tr>
<td>53. Karen Munro</td>
<td>Yes</td>
<td>North Shore Streamkeepers</td>
</tr>
<tr>
<td>54. Amanda Nichol</td>
<td>Yes</td>
<td>North Vancouver Parent Advisory Council</td>
</tr>
<tr>
<td>55. Don Peters</td>
<td>Yes</td>
<td>Community Housing Action Committee (North Shore Community Resources)</td>
</tr>
<tr>
<td>56. Bella Tata</td>
<td>Yes</td>
<td>Seniors Tennis Association of the North Shore</td>
</tr>
<tr>
<td>57. Sherry Violette</td>
<td>Yes</td>
<td>Edgemont Village Business Association</td>
</tr>
<tr>
<td>58. Eric Godot Andersen</td>
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<td>Blueridge Community Association</td>
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<tr>
<td>59. Arzoo Babul</td>
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<td>Edgemont &amp; Upper Capilano Community Association</td>
</tr>
<tr>
<td>60. Grig Cameron</td>
<td></td>
<td>Edgemont &amp; Upper Capilano Community Association</td>
</tr>
<tr>
<td>61. Marta Carlucci</td>
<td></td>
<td>Driftwood Village Co-housing</td>
</tr>
<tr>
<td>62. Lisa Chapman</td>
<td></td>
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<td>63. Adrian Chaster</td>
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<td>64. Peter Clark</td>
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<td>65. Hazen Colbert</td>
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</tr>
<tr>
<td>66. Jillian Cooke</td>
<td></td>
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</tr>
</tbody>
</table>
67. Pamela Costanzo
68. Hesam Deihimi
69. Diana Dorey
70. Barry Forward
71. Cyndi Gerlach North Vancouver School District
72. Kim Gilker
73. McKenna Herback
74. Meggie Hou
75. Corrie Kost Edgemont & Upper Capilano Community Association
76. Kulvir Mann North Shore Safe Routes Association
77. Sian Mill
78. Catriona Moore
79. Mario Rivadeneira
80. Martyn Schmoll
81. Claire Shepansky
82. David Sinclair
83. Peter Thompson Edgemont & Upper Capilano Community Association
84. Paul Tubb Pemberton Heights Community Association / OCP Implementation Committee
85. Dave Vyner North Shore Curling Association
86. Dianne Wood Palgova
87. Stanley Zhao
88. Name withheld
89. Name withheld
APPENDIX B: Table Recommendations and Maps

The following section includes verbatim text from table recommendations and associated maps with proposed site composition.

Table 1
Site features:
- Tennis courts: remain
- Child/adult daycare $3.35M or retain
- Playground $400,000
- Green space with washrooms $200,000
- Non market housing: seniors; people with disabilities, single parents; co-op; no emergency shelter; underground parking; pets allowed $16.4M

Total cost:
$20.4 M

Funding sources:
- Rental units
- Non market housing provider agreement
- Taxes
- Partner with senior government

Table 2
Site features:
- Non-market housing
- Adult/child daycare
- Parkland (passive - benches, trees, picnic areas)
- Cultural space
- Mission creek enhancements
- Underground parking

Total cost:
$27.55 M

Funding sources:
- Community amenity contributions
- Municipal Budget
- Community Fundraising
- Non-profits
- Province (affordable housing)
- Federal gov’t funds
Table 3

Site features:
- Demolish buildings
- Riparian and walking trails
- Retain tennis courts
- Adventure playground and picnic area
- Green space/landscaping/garden
- Multi-use building (child/adult care, cultural space, community café/restaurant)
- Food trucks/farmer’s market/music?
- Parking
- Balance of site available for other (future uses) when needed

Total cost:
Capital: $6.5 M; Operating: $110,000

Funding sources:
- Taxes
- Phasing
- Development (off-site)
- Rent from spaces
- Positive impact to health care

Table 4

Site features:
- Supportive housing for specific needs
- Community care space (cradle to grave, with services and below market housing, underground parking)
- Community garden
- Green space (multi-use)
- Playground/exercise equipment/picnic area
- Spray park
- Small scale retail (artisan specific)
- Adventure playground
- Trail
- Retain north parking lot
- Retain tennis courts

Total cost:
$25.25 M

Funding sources:
- Partnerships with non-profit sector
- Fundraising/lease space
- Grants (federal and provincial)
- DNV funding - development cost charges
Table 5

Site features:
- Stays in the public domain
- Green space, playground, picnic (integrated green space)
- Creek improvements/trail enhancement
- Keep childcare
- Market garden, tennis courts (hold until further analysis of more community centres/banquet hall/gym/etc.)
- Non-market housing for diverse population/good design

Total cost:
$18.5 M

Funding sources:
- Non-market housing funding from feds, province, NGO
- Taxpayers

Table 6

Site features:
- 4-6 stories mixed housing on leased District land, main floor with community services space
- Adjacent inclusive child and adult care
- Playground and picnic area on north side of lot (higher elevation and sunny)
- Open green park space on west side beside creek
- Trail on both sides of creek
- Community gardens

Total cost:
$14.25 M

Funding sources:
- Taxes
- Federal and provincial government
Table 7

Site features:
- Adventure playground
- Mission creek enhancements
- Green space with walking trails
- Community garden urban farm
- Tennis courts (possibly on roof of market)
- Existing daycare
- Non-market housing (20 units)
- Market housing (6 stories)

Total cost:
$8.9 M

Funding sources:
- Market housing
- Property taxes
- Existing funds
- Grants

Table 8

Site features:
- Community garden
- Community kitchen
- Non-market housing
- Tennis courts (remain as is)
- Child and adult day care
- Playground circuit
- Green space (park)
- Creek enhancements
- Curling needs to be addressed

Total cost:
$22.15 M

Funding sources:
- Daycare - provincial funding
- Non-market housing (Fed/Prov/local/BC housing)
- Hollyburn resource Centre (if land available)
- District
- Partner with non-profit
### Table 9

**Site features:**
- Affordable market housing
- Child/adult day care/cultural space
- Tennis courts
- Trails
- 4-story non-market housing
- Community gardens
- Bikes/car-share
- Mission creek enhancements
- Playground

**Total cost:**
$17.4 M

**Funding sources:**
- Fed/prov housing
- BC municipal and finance authority
- Vancouver Foundation
- Property tax as last resort

---

### Table 10

**Site features:**
- Community hub (20% of site, underground parking), with adult daycare, seniors and youth centre, medical clinic, gym, daycare, possible coffee shop
- Existing daycare
- Community garden
- Playground/outdoor events
- Tennis courts (existing)
- Green space (farmers market)
- Trail/benches

**Total cost:**
$15.5 M

**Funding sources:**
- User fees
- Commercial leases
- Financed
- Community amenity contributions
- Government funding
### Table 11

**Site features:**
- Intergenerational centre and playground
- Underground parking
- Retain north parking lot (could be grassed in the future)
- Park green space

**Total cost:**
$6.1 M ($-5.8 M as keeping building for now)

**Funding sources:**
- Coastal Health
- User Fees
- Funding from different levels of government

### Table 12

**Site features:**
- Mission creek enhancements
- Child and adult day care
- Green space (active and passive)
- Spray park/active play
- Community/educational gardens and passive gardens
- Tennis courts (existing)

**Total cost:**
$4.35 M

**Funding sources:**
- Child care/adult care revenue
- Federal and provincial grants
- Fundraising
- District budgeting
- Non-traditional funding sources
APPENDIX C: Minority Reports

This section contains five minority reports from four tables submitted to SFU Centre for Dialogue organizers. Text has been provided verbatim.

**Table 1 (3 participants in support)**

**Site features:**
- Tennis courts with lighting
- Child care
- Playground expansion
- Green space and washrooms
- Do not want the land sold–key point: 3 out of 7 DO NOT want the land developed

**Total cost:**
- $600,000 (in budget)
- $110,000 (playground)
- $200,000 (general green space)
- $50,000 (picnic area)
- = $360,000

**Funding sources:**
It is in the budget already

**Table 7 (1 participant in support)**

**Site features:**
- Adult/seniors & child daycare
- Cultural space
- Playground
- Trails
- Long board
- Contribution to capital fund for offsite infrastructure (e.g. pay down new Delbrook Centre debt) if possible
- Non-market housing
- Green space maximized beyond site use needs

**Total cost:**
- 3.35 M
- 3.8 M
- 110 K
- 100 K
- 50K
- = 7.4 M + non-market (16.4M) + contributions (6.2M) = 30M

**Funding sources:**
- Market housing 15.0M
- Non-profit partners
- Prov & Feds for non-market housing (15M/30M)

**Table 7 (1 participant in support)**

**Site features:**
- Mission Creek enhancement
- Same as Group 7 except no sale of public land
- Agree to non-market housing but this must be funded without selling public land

**Total cost:**
$700,000

**Funding sources:**
- Existing capital fund
- Urban farm self-funded
- Provincial/federal government
- Property taxes
Table 11 (1 participant in support)

Site features:
• Lower 30% dual purpose adult day care and child care
• Mid 30% affordable housing and market housing, land leased or sold (innovative model)
• Upper 40% and creek area: green space and park, with minimal development and more nature

Total cost:
N/A

Funding sources:
• Tri-government funding
• Development funding and future land acquisition

Table 12 (Participant support N/A)

Site features:
• Mission Creek enhancements
• Child care and adult day care
• Green space (active and passive)
• Spray park/active play
• Educational gardens/passive gardens
• Tennis courts [remain in] current location (no cost)
• Non-market housing – seniors and family

Total cost:
20.7 million

Funding sources:
• Federal, provincial, District
• Fundraising
• Revenue
• District budgeting
• Explore non-traditional funding sources
APPENDIX D: Event Survey Questions and Responses

Pre-Event Survey

1. How old are you?
Please refer to Figure 4 on page 5.

2. What is your home postal code?

<table>
<thead>
<tr>
<th></th>
<th># of participants based on location of postal code</th>
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<tr>
<td>Local neighbourhood</td>
<td>45</td>
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<td>District-wide</td>
<td>44</td>
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<tr>
<td>Total</td>
<td>89</td>
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</table>

3. Are you registered as an official representative for an organization or stakeholder group?
Please refer to Appendix A on page 18 for the participant list breakdown.

4. I have read the discussion guide.

<table>
<thead>
<tr>
<th></th>
<th>% of respondents</th>
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<tbody>
<tr>
<td>Yes</td>
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<td>No</td>
<td>3%</td>
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5. I am satisfied with the District of North Vancouver’s consultation process so far on the Delbrook Lands.
Please refer to Figure 20 on page 16.

6. The future use of the Delbrook Lands should primarily serve:

<table>
<thead>
<tr>
<th></th>
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<tbody>
<tr>
<td>The needs of the local neighbourhood</td>
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<tr>
<td>The needs of the entire District</td>
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<tr>
<td>The needs of both the local neighbourhood and entire District</td>
<td>72%</td>
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<tr>
<td>Other</td>
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</tr>
</tbody>
</table>

Text responses to “Other”:
- Community, District, region
- Local community (70%), entire District (30%)
Post-Event Survey

Section 1A: Support for Site Ideas

1. Minimal change to site

*Demolishing the buildings and seeding the grounds with grass, leaving the rest of the site as is*

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<td>42%</td>
<td>36%</td>
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<tr>
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<td>16%</td>
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<tr>
<td>In favour</td>
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<tr>
<td>Strongly in favour</td>
<td>15%</td>
<td>13%</td>
<td>17%</td>
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</table>

*Upgrade existing buildings to provide community use for another 25 years*

<table>
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<th>% of District-wide participants</th>
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<tr>
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<tr>
<td>In favour</td>
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<td>9%</td>
<td>5%</td>
</tr>
<tr>
<td>Strongly in favour</td>
<td>4%</td>
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</table>

2. Parks and outdoor recreation

*Neighbourhood park ideas*

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<tr>
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<tr>
<td>Against</td>
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<tr>
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<td>9%</td>
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<tr>
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<tr>
<td>Strongly in favour</td>
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*Community & District park ideas*

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<tr>
<td>In favour</td>
<td>18%</td>
<td>13%</td>
<td>23%</td>
</tr>
<tr>
<td>Strongly in favour</td>
<td>12%</td>
<td>11%</td>
<td>13%</td>
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</table>
3. Community services, recreation and cultural facilities

Child care and adult daycare

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<td>4%</td>
<td>10%</td>
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<tr>
<td>In favour</td>
<td>22%</td>
<td>27%</td>
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<tr>
<td>Strongly in favour</td>
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<td>60%</td>
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Curling rink

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<td>6%</td>
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<td>3%</td>
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<tr>
<td>In favour</td>
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<td>2%</td>
<td>0%</td>
</tr>
<tr>
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<td>2%</td>
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Cultural space

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<td>16%</td>
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<td>22%</td>
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<td>25%</td>
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4. Non-market housing

Paid for by another level of government or non-profit housing source

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<tr>
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<tr>
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### Paid through market housing development on the Delbrook Lands

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<tr>
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<tr>
<td>Strongly in favour</td>
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#### 5. Market housing

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#### 6. Commercial use

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#### Additional ideas

**Community garden**

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Farmer’s market

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Eco-education at Mission Creek

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<td>25%</td>
<td>24%</td>
<td>26%</td>
</tr>
<tr>
<td>In favour</td>
<td>20%</td>
<td>17%</td>
<td>23%</td>
</tr>
<tr>
<td>Strongly in favour</td>
<td>39%</td>
<td>39%</td>
<td>40%</td>
</tr>
</tbody>
</table>

Section 1B: Composition of Site Uses on The Delbrook Lands

1. Potential site uses can be combined. Please indicate which types of combinations you support. Check up to three (3). Answers with more than three checks will be ignored.

The responses to this question were not considered in the data analysis.

<table>
<thead>
<tr>
<th></th>
<th># of times selected</th>
<th>% of respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parkland and community amenities</td>
<td>47</td>
<td>53%</td>
</tr>
<tr>
<td>Parkland, community amenities and non-market housing</td>
<td>42</td>
<td>47%</td>
</tr>
<tr>
<td>Parkland, community amenities and a mix of non-market and market housing</td>
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<td>25%</td>
</tr>
<tr>
<td>Parkland, community amenities and market housing</td>
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</tr>
<tr>
<td>Parkland and non-market housing</td>
<td>16</td>
<td>18%</td>
</tr>
<tr>
<td>Parkland and a mix of non-market and market housing</td>
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<td>11%</td>
</tr>
<tr>
<td>Parkland and market housing</td>
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<td>2%</td>
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<tr>
<td>Community amenities and non-market housing</td>
<td>16</td>
<td>18%</td>
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<td>15%</td>
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<td>Community amenities and market housing</td>
<td>2</td>
<td>2%</td>
</tr>
</tbody>
</table>
Section 1C: Selling or Leasing the Delbrook Lands to Raise Revenue

Please refer to Figure 17 on page 14.

Section 1D: Final Questions

1. The future use of the Delbrook Lands should primarily serve:

<table>
<thead>
<tr>
<th>Option</th>
<th>Percentage</th>
</tr>
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<tbody>
<tr>
<td>The needs of the local neighbourhood</td>
<td>27%</td>
</tr>
<tr>
<td>The needs of the entire District</td>
<td>6%</td>
</tr>
<tr>
<td>The needs of both the local neighbourhood and entire District</td>
<td>63%</td>
</tr>
<tr>
<td>Other</td>
<td>5%</td>
</tr>
</tbody>
</table>

Text responses to “Other”:
- Community, District, and region (Housing)
- It has to fit with the neighbourhood but can serve some district needs.
- The needs of the local community (70% weight) and the entire community (30% weight)
- Needs of community are the needs of the District - they are not mutually exclusive!

2. After everything I've heard today:
   a) My recommendation to the District of North Vancouver for the future use of the Delbrook Lands is:

   No response: 5

   Verbatim text from participant responses:

   - Build a dynamic community care (Daycare + Adult Daycare) and targeted supportive housing facility on a small percentage of the site (25% of site max)
   - The site is large enough to incorporate multiple uses. Parkland, community amenity spaces (i.e. adult and child daycare), and most importantly non-market housing should all be included
   - Table #4’s ideas.
   - As much mixed use as possible: diversity of housing types; “soft” density; integrated community amenities (daycares and flexible community space); integrated green space
   - Community use only.
   - Keep the lands - take your time in considering the primary issue - the needs of the West side of the District from Lonsdale to Capilano Road. This whole “dialogue” has been rushed through too quickly, so it has become a farce! The majority of attendees were very poorly informed.
   - Do not sell any District land 2) Gradually repurpose/rebuild present buildings 3) Gradually increase and improve site for neighborhood parkland use
   - Neighbourhood park/child daycare and adult daycare/ Regional educational park
   - An environment for community fun and recreation by the construction of open park space and gardens, with an adult-child care center anchored by Queens Road.
   - 40% - Green space/better Creek Protection, 30% - Innovative, affordable market housing, 30% - Adult and child day care
   - Enhance trail network near Creek, Green Space, Community Garden/Urban Farm, keep existing daycare and tennis courts
   - Mostly green overall with outdoor active spaces - playground, walking paths - not organize sports. With most important services or housing (market housing can be used to fund amenities).
   - Multi use - seniors/childcare, non-market housing + + +
   - As much mixed use as possible: diversity of housing types; “soft” density; integrated community amenities (daycares and flexible community space); integrated green space
   - Mainly park land - with community amenities/services
   - Multi-use, multi-generational with outdoor activities, community services hub including medical clinic.
• Do not sell any.
• Keep it open to the community. Make sure it’s agreed upon from a lot of people.
• Multi-purpose
• Keep the land publicly owned, mainly neighbourhood park with adult/child play areas and an adult/child care facility
• Keep lands public, use for community gardens, parkland, picnic areas, farmer’s markets, bolster day care/adult care facilities
• Develop it for the benefit of the local community - develop much needed social gathering spaces for the community and education
• Combination of green space/place space/child + elder care and maybe non-market or rental housing.
• Park area and enhance creek play areas for youth. Retain existing buildings. Keep land in Public Assembly use. Create Community Facility to support community.
• Mixed use; community facilities, green space (dynamic, high quality park/play area for kids), childcare. Also would be open to non-market housing ONLY if well designed and mix of income levels. Not just low income.
• Retain land! Once its gone, it’s gone. The best use involves not having too much on the plot, but creating a purposeful green space.
• Lease land for market housing to fund Parkland, Community Services of Child Care, Adult Care, Cultural Space
• Trial with equipment to workout. Activities for all groups of ages, outdoor gym, bike grid, skateboard area, in line skate area, table tennis, checker table, basket ball, volleyball, tennis, picnic area, walker park, outdoor swimming 7/11 store
• Preserve sunlight, green space and fresh air via passive spaces, etc.
• Mixed use - in order of priority: 1) Housing is priority - mix of market and non-market, 2) Daycare for children and adults, 3) Open space element
• Green park space and some buildings for Child Adult community use.
• Parkland, green space, multi-generational day care facilities.
• Mixed market and non-market housing of leased land. Revenues to pay for other site amenities.
• Parkland and community amenities
• Reforest and establish community amenities (child care, seniors care, eco-education, gathering place, trails, and picnic facilities)
• Listen to the people not a (the) developer
• I support daycare/after school care, green space with community gardens, adventure/natural playground for school aged kids, and non-market housing for single parents, and people with disabilities that could allow pets like cats and rabbits.
• Do not sell or lease the land for any cause or reason. Tennis courts, green/park space with washrooms, daycare with child’s play space
• Green space/park, daycare
• Parkland/tennis courts/adult/childcare; trails/washrooms/maintain parking lot.
• Parkland, Non-market housing without the loss of public land, community amenities
• Community parkland - Active/Passive, Riparian zone expansion, eco-education, childcare/eldercare community sources
• The overwhelming consensus has to protect the land for future use (do not sell) and Public Assembly.
• No sale or lease of PA land.
• Preserve land for community amenity.
• Multi-purpose to meet needs of current and future demographics.
• Community Garden; community kitchen, multi-use area, Parkland
• Be creative, be inclusive of needs of all ages in design, be environmentally aware, respect creek, keep green space, improve transport (public) to site
• To stay as close as possible to the recommendation made through this process.
• Parkland, public space, picnic area. Child/adult daycare, tennis courts, community center/area
• Do not sell. Establish non-market housing on a green, natural site.
• Parkland grass, space with bathroom, maintain tennis courts, maintain Little Rascals (upgrade, if needed) to child and adult care and develop non-market housing on only 20% of land.
• Save this piece of land for public use as the last resort to nature when higher density is rolling into North Vancouver District.
• Be BOLD! Learn from live examples nationally, globally.
• Make it a community space - Adventure Playgrounds, Community Garden, Daycare, Tennis Courts, Upgrade Creek for Education Use, Housing - Single Family/Seniors
• District facilities on a modest portion of the site - non-market housing, cultural space, adult/child daycare, playground; raising funds to district priorities.
• Adult/child daycare, non-market housing, green space, no sale of land, perhaps minimal leasing
• Gentle density, walkability, aging in place
• Mixed use! As a person who will be entering the housing market soon, I think it is critical the district starts to think about how to provide affordable housing in order to make sure our “missing generation” is not completely lost.
• A mix of: Child/adult daycare; non-market housing; affordable (modest) market housing (4 storey max); cultural space; adventure neighbourhood park
• Lands remain public
• Maintain ownership of the land and maximize the space to fulfill much needed support services and Rental Housing.
• Keep it district owned and multi-use multi-generational facilities
• Community based. Flexible and open for future generations. Community garden, multi-use space (farmer’s market, outdoor festival) outdoor ex. Circuit, Adventure play park, increase childcare, elder care, youths/senior center.
• To provide indoor and outdoor facilities that service both young and senior citizens; multi-use facilities
• A combination between service amenities such as adult and senior care, co-operative non-market housing, community garden, multi-use center that can be rented out as event space as revenue.
• Build a combination of non-market housing and community amenities, in particular child + adult daycare, with some green space
• Parkland, community amenities, non-market housing, non-profit kitchen and cafeteria
• Green spaces and playground focused on families, 2) Urban farm focused on social engagement and education, 3) Non-market housing for special needs and first responders (police, fire, EMT)
• Affordable non-market housing
• Take down the N. building, convert to grass. Keep the lit tennis courts, make sure the new Delbrook meets needs before destroying. Need more green space.
• Mixed use - you can do it! Keep riparian/some green space but build care facility /housing on ~50% or less.
• Improve riparian tract, replace existing buildings with a mixed use - 3-4 storey building on the N. end to serve as a daycare, senior center, community space; keep the tennis courts; add an adventure playground
• To make it a beautiful and pleasant place for all generations to enjoy - keeping the tennis courts or increasing the number of care for children and adults
• This could be a progressive, creative, innovative model (environmental, mixed use, social non-market housing, community/cultural space). Please take the time to research and carefully consider this unique opportunity to get the most social value in this land.
• Parkland, adventure playground. Green space. Public plaza (i.e. for outdoor movie or concerts). Community space if necessary.
• Community, open and inclusive to all community members including children, youth, adults with disabilities
• Parkland/play areas, non-market housing, community amenities + child + senior care
• Do not sell lands. Non-market housing, community and cultural space.
• Support multiple generations: Kids, young adults, adults and seniors. Promote community living with communal spaces and facilities. Do not sell the land, or portions of it.
• Staged re-use over 2 generations.
• Protect Mission Cr. Riparian Area, keep public land public - no housing of any sort, look to other zoning options and strategies for affordable housing; keep a mix of indoor and outdoor recreation and culture activities suitable for all ages.
• It should be used as green space/park for all district residents - playgrounds, tennis courts, gardens (maybe a special botanical garden) gathering place, outdoor basketball, outdoor hockey nets, but not skateboard, etc.
• Keep all as public assembly land! Consider mix use with multi-generational targets. Parks, community gardens, passive/active recreational options
• Not to sell the public lands. Use the Delbrook Lands for community purposes, such as a center and recreational facilities and Parkland.

b) In my opinion, this use should be paid for with funding from the following sources:
No response: 10
Verbatim text from participant responses:

• Prov/Fed/Muni/CACS/Foundation
• Municipal, provincial, and federal gov’t, taxes, partner with non-profit to administer non-market housing, available grants
• Fundraisers, taxes.
• DNV should consent with the senior levels of government before even considering embarking on any housing strategy. What is the rush? Why? The discussion in January did not reveal sufficient interest in affordable housing to include in the discussion.
• CAC Partnership with community services of District Leading medical office space.
• House taxes (my taxes increased $700.00 this year because of the high price/value of my house). This extra cost is a “boom” to the district.
• District/Pronounce and Fed. Gov’t.
• Multi-source tax funding
• Green space - funded from Market Housing sale; Care Building - District donates land and senior government pays
• Existing capital budget, property taxes, federal and provincial grants.
• Sale or leasing of land (only a little). Maintenance should be funded by property taxes. Not many grants from other levels of government are tax payer dollars as well so they are not free.
• Sale of a small portion of land.
• Sale and lease of some land (limited); other gov’t funding sources; taxes
• Property taxes
• Government, tax payers
• Private, governmental -> federal, prov, local, other parties
• Government and non-government organization funding
• Partnerships with non-profits, partnerships with all levels of government (provincial/federal) - non-market housing
• Level of governments, sale of small proportion of land.
• Provincial + federal governments/taxes already collected. NOT raising taxes.
• Rental from Community facility. Fundraising - Community Events @ Delbrook Rec Centre
• Federal/provincial grants, taxes
• Federal government/allocating from something else that is not as important.
• Leasing land for market housing
• Federal and --
• Two senior levels of gov’t, DC charges taxes, lower health care costs
• Sale of market and non-market units - developer contributions; federal and provincial grants for social uses; district general fund and/or taxes
• Taxes, funding from other governments, taken over several years
• DNV, any other appropriate government sources
• Appropriate grants from senior governments and agencies, tax base, community fundraising
• Provincial funding - (PIAH) - Fed Gov’t #2, Municipal funding
• Municipal government, federal government, non-profit organizations
• Government sources, lease of spaces for child/elder care
• General revenue, community fund-raising, federal/provincial partnerships. *Levy tax on foreign investors of real estate as they also need to contribute to community costs and don’t presently through the general economy
• Government funding, grants; some taxation if required.
• Partnerships
• ?? That I don’t have knowledge on.
• Sale/lease of some of the land, any other funds that can be gathered
• No more than 25% land sold, grants, partnerships, 20% for sale housing, taxes if need be
• Government (all levels), non-profit organizations
• District property taxes, miscellaneous other funding.
• Additional tax on foreign property owners. Transition Tax of Property Transfer, Property Tax
• Developer, Provincial, Federal and Grants
• Market housing.
• Provincial and federal governments.
• Fed/prov gov, private foundations, partnerships with other organizations, district funds.
• I think District land is the perfect place for non-market housing which could see sizable funding from both the federal and provincial governments. Sale of same land for market housing.
• Fed/prov/mun govt.; DNV borrowing; DNV property taxes; sale/lease of some of site
• CAC, Taxes, Prov/Fed Grants
• CAC funds, provincial, and federal grants currently being made available
• CAC, 3 levels of government, usage fee
• Any and every grant available :) Non-profits, long term leases for space from comm. Groups/non-profit, coastal health, nursing/community health partnerships
• Sale of 20% of land; user groups funding
• Collaborations, partnerships with non-profits, provincial and federal, funding sources, throughout working with non-profit societies such as Hollyburn Resource Centre.
• Federal + provincial governments and some non-profits, with market housing if necessary to find non-market supportive housing.
• Taxes, provincial + federal funding, fundraising/non-profit management
• The farm would pay for all green space maintenance and create employment, some market housing, got funding (particularly non-market housing)
• CACs, Senior levels of government
• Where ever you can find money and taxes.
• Sorry - that’s your job.
• Cost-efficiencies/savings; tax revenue; development permits - from future development of lands along Queen’s corridor
• Partnerships, Fed + Provincial funding, grants
• District/provincial/government; tax
• Fed/prov/municipal
• Federal $ recently announced, provincial affordable housing fund, culture development budget, NVD $ for OCP objectives (see pg. 21 of Tuesday guide), CACs
• Partnerships - federal funding, provincial funding (PIAH Program), non-profits, District’s 10 year capital plan
• District taxes, provincial, and federal funding, 2) CAC from other development across NS, 3) Partnerships with others
• Provincial and federal government; taxes
• Mixed sources federal/provincial/municipal/other
• Staged development (not all $ up front), future development cost charges, taxes, fund-raising
• Be open to new/creative thinking for the public retention of these land even if it takes a long time.
• From our parks funding.
• CAC, Federal, Provincial, local fundraising
• Federal/provincial grants for special needs non-market housing/services. Fundraising, living wills.
• Non-profit organizations/fundraising. Higher levels of government.
Section 2

For questions 1-10, please see pages 15-16.

11. Please leave any additional feedback on today’s event or the Delbrook Lands Community Dialogue engagement process:

No response: 33

Verbatim text from participant responses:

- Morning was rushed - needed more time - afternoon better dialogue and pace.
- Well done!
- It would be unconscionable not to have a housing element. I hope Council takes this on board in making its decision based on the outcomes of this process. Everything else is gravy.
- Very well organized with a chance for diverse groups to participate. Facilitation was great :)
- The results were very clearly presented, with only a couple of tables proposing some market housing (sale) thus sale should not be part of Council’s decision making. It was loud and clear that these lands should be retained as Public Assembly. If anything else happens, then the entire process well have been a waste of time and money.
- What does this mean?
- I believe that the District of North Van has already made a decision. By doing this “so-called” consultation, they make it appear that they are consulting but they really aren’t. Questions are leading and confusing. Not all information provided - Need Engineering Reports on Delbrook Buildings, should be posted on District Website; Need budget info on building etc. - where and what does the information come from?
- The day felt very rushed. More time would have been better. Perhaps breaking it into 3-4 half day events.
- I felt a bit rushed, perhaps more than one initial idea generation event could be hosted, I felt like I didn’t have enough info on funding, finances, etc.
- It was rushed - a lot of detail, some of it confusing and lacking context. The concern this remains simply an exercise without weight. Lack of clarity about development plans for the broader area (e.g. Queen’s corridor) that would impact thoughts and decision-making for the Delbrook lands.
- I did feel that the process steered participants towards choosing too much housing on the site.
- Community is made up of diverse needs and people. I hope we don’t give up our current lands to the detriment of future generations.
- Too many unknowns: The third party recommendations that the building has seen the end of useful life are not available to us.
- Great democratic process that should be transparent and traceable in final council decision. Thanks. “Tension” between market and non-market housing reflects larger District (CNV) challenge to address broader zoning issues (e.g. prospective need for higher density conversion of single family properties to townhouses, etc.)
- Our team member who is a representative of the curling community made a stand that curling was ousted from the North Shore and needs a North Shore Home. This should be an important dialogue within the community and Recreation Commission. Funding is possible for the build totally by the curling clubs. The need for non-market housing was recognized but it was noted that there is little knowledge that the NVD has or is doing what is needed to address this. This is a huge and important issue that needs creative solutions now. The community wants to be party of this conversation. Action is required immediately.
- Proud to be part of this community! Thank you. Well organized and good job staying on time!
- Great front - nice process SFU.
- Thank you :)
- Great job. Hopeful that the next stages will allow for more input - as the Devil is in the Details!
- I really enjoyed the process. Would like to be invited to future event concerning our community.
• We hope to be heard, and to know about the future plan.
• The provision of answers to questions posed when filling the online survey would have assisted in group knowledge. E.g. what is allowed use in Creekside area.
• The process from the start lacked transparency and the participants were molded to support council’s pre-determined decision to build non-market housing
• None.
• Do not sell the land, support non-market housing for single parents/co-op/people with disability, provide natural playground for all ages, we need community gardens, place to walk dogs
• Typical how this survey included so many questions about rezoning for density. Council clearly has an agenda to increase housing density (i.e. sell land to developers)
• Please listen to the wishes of the community and do not sell the land for market housing and development.
• This post-event survey clearly indicates a desire to build a case for the sale of at least a portion of the lands despite a consensus in the room to protect the lands. 7 questions between pages 1-5 are leading towards sale. I was under the impression that this was meant to be a brainstorming session but it appears that it’s now become a way to create an argument to sell some portion of land.
• My suspicions about this process have not diminished with this survey so heavily biased towards housing.
• It was an interesting process. Well organized but too rushed. Needed more time on the “meat” of the matter. Could have used more facts to do with ways to afford amenities.
• More time would have been very helpful and could have produced more detailed ideas
• Well done, all!
• Please do not sell the land. It can generate revenue via non-market housing.
• Wish this land won’t be sold to residential housing!
• I appreciate being chosen to participate in this community process to provide my feedback for this important community space. DNV is taking positive steps for more of an inclusive community for everyone, while keeping the beautiful, natural community space in contact/preserved. We can be leaders with this project and be innovators for other municipalities.
• This is a District asset so reserving 50% of the spaces for people from the neighbourhood was not appropriate. 20% would have been more than fair. Needed more time (perhaps 4 more days) to do topics justice.
• Please proceed very carefully and thoughtfully and being sensitive to the existing natural features of this very special Delbrook site!
• SFU Facilitators spoke too much. Would have liked explanation in the morning (where our group felt really rushed) as to specific purpose of group to go through every recommendation possibly. I am sure there was one but I just didn’t understand why I was doing this chaotic and group tension creating task.
• I loved this community engagement process! I think this is the forward thinking and innovative processes that need to be happening with community development.
• Sad to see that the third party report relating to the state of the existing buildings was not publically available. Distribution (rather than just referencing) of council policies and OCP extracts relating to the issue should have taken place before meeting. The discussion report was insufficient.
• Seems heavily biased to housing.
• The suggestions made it challenging to come up with anything new. Numbers presented seemed inaccurate and led to a perception that we are being led a particular direction (i.e. housing is the only option, its just a matter of how high/how much/what type)
• As a rep of the Curling facility, I found all receptive to my presentation of the curlers needs. I found they were positive in our willingness to combine with other uses and possibly fund a facility if we have access to land.
• I hope the ultimate decision makers have an open mind. I hope we, as a wealthy community, can commit to using our resources to care for vulnerable populations.
• Good facilitation - quite an investment.
• My hope is Council will recognize that these are valuable community lands that need to be preserved for the community in perpetuity. Once they are sold - they are lost forever. Also, traffic pressures throughout the DNV and City of NV increases much added development. This needs to be addressed
with the plans for the Delbrook Site and any plan to add market or non-market housing on this site.

- I enjoyed the process which was well thought of. Full marks to SFU, our facilitator and note takers. Why is traffic not being given consideration?
- Very good event, let people engage in the decision process, and have an impact on what we care about (in) our community’s future.
- A good process. A little touchy-feeling for my taste at times, but overall excellent.
- Well-organized and staff support.
- Concern that Council may still see sale of Public Land a viable option, despite majority feeling to protect land. We need to think of future needs of a denser community. Right now we have no idea how soon new Delbrook Centre will reach capacity. As we live in smaller spaces, we need more community resources. Shouldn’t think that Delbrook Land development address housing affordability issues in any meaningful way - that takes a community-wide solution on density and zoning, not development of giant houses. Once the land is gone, that’s it - a fund won’t go for in the escalating land costs.
- Hopefully council will take the recommendations seriously and not simply pay lip service to the process.
- Since participating in the January discussions, I have been pleased with how I have been kept up to date. It’s a great process…my only hope is that is that it has a large bearing on what DNV Council decides!
- Awesome process - don’t forget about adults with developmental disabilities, they are part of our community!
- Engaging activities all day, great use of limited time, would love to see a cork board at the entrance of the facility so users can quickly contribute what they would like to see on the property.
- The proof’s in the pudding: Let’s see how council deals with this issue.
MEMO

DATE: May 25, 2018
PROJECT NO: 04-18-0062
PROJECT: 600 West Queens Road Housing Development - DRAFT
SUBJECT: Parking Variance Memorandum

TO: Robin Petri, P.Eng.
Catalyst Community Developments Society

PREPARED BY: James Lao, EIT

1. BACKGROUND

Bunt & Associates (Bunt) has been retained by Catalyst Community Developments Society (Catalyst) to provide an updated parking supply and transportation demand management (TDM) strategy for the proposed mixed-use development at 600 West Queens Road in the District of North Vancouver, BC.

As part of the development’s rezoning application, the District of North Vancouver (DNV) has requested for the completion of a draft traffic impact study (TIS) report. As a preliminary submission, DNV has requested that a parking variance memo be submitted prior to the full TIS report. This memorandum examines the current proposed development statistics and the justification for the reduced parking rate.

This memorandum is broken down into three main components including:

- Section 2: Proposed Development
- Section 4: Transportation Demand Management Strategies
- Section 5: Conclusions and Recommendations

cc: Danielle Dhaliwal (1)
2. PROPOSED DEVELOPMENT

Catalyst is proposing to develop a 5-storey affordable residential rental development. The site is approximately 0.84 acres and is located on the northwest corner of West Queens Road and Stanley Avenue. It is immediately south of the Little Rascals Preschool and the now closed Delbrook Community Centre. The existing site is currently a surface parking lot.

The proposed development consists of 80 units of affordable non-market rental housing and 17,886 square feet of ground floor respite care centre. Vehicular access to the development will be provided by three driveways. A porte-cochere is proposed on the eastern side of the site for pick-up/drop-off to occur at the respite care centre. The plan is for an inbound and outbound driveway in a counter clockwise configuration for the porte-cochere. Also, the parkade for residential, visitors and staff will be from the driveway access off West Queens Road, south of the site.

The development is composed of 16 studios, 41 1-bedroom units, 15 2-bedroom units and 8 3-bedroom units. The respite care centre operates by offering a homelike environment where seniors with cognitive decline or physical frailties receive temporary care from nursing staff, partake in therapeutic programs and socialize with other guests and volunteers. The proposed respite care facility will accommodate 18 beds. Staffing numbers are anticipated to be roughly 8 persons at any given time.

3. PARKING

3.1 Parking Supply Requirements (per District Bylaw)

The District of North Vancouver parking requirements were calculated based on DNV’s Zoning Bylaw (Bylaw 3210). Off-street parking requirements for the two land uses proposed have been calculated based on the most applicable land use type from the Zoning Bylaw; Table 3.1 summarizes the total off-street parking supply required for each of the land uses along with the proposed parking provision and variance.

<table>
<thead>
<tr>
<th>LAND USE</th>
<th>SIZE</th>
<th>BYLAW RATE</th>
<th>BYLAW SUPPLY REQUIREMENT</th>
<th>PARKING PROVIDED</th>
<th>STALL VARIANCE FROM BYLAW</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multiple Unit Residential Building</td>
<td>80 units, 4,659 m²</td>
<td>1 per unit + 1 per 100m² GFA (up to 2 per unit) of which 0.25 per unit visitor</td>
<td>127, of which 20 visitor</td>
<td>70</td>
<td>-57</td>
</tr>
<tr>
<td>Multi-Level Care Facility</td>
<td>18 beds,</td>
<td>1 per 2 beds</td>
<td>9</td>
<td>12</td>
<td>+3</td>
</tr>
</tbody>
</table>

Note: “-” means a parking shortage from the District’s Bylaw; “+” means a parking surplus from the District’s Bylaw requirements

Catalyst plans to provide a total of 82 parking spaces in the underground parkade with 2 additional at-grade spaces accessed from the porte-cochere, intended for short-term parking. A total of 16 spaces out
of the 82 are allocated as small car stalls, which translates to about 20% of the total parking provision, falling below the bylaw maximum small car provision of 35%.

**Disabled Parking**

The District’s Accessible Design Policy for Multi-Family Housing governs the provision of disabled stalls for the residential component of the site. Table 3.2 below provided the District’s requirement, which is based on the total number of residential stalls provided on the site.

**Table 3.2: District of North Vancouver Residential Disabled Stall Requirements**

<table>
<thead>
<tr>
<th>WHERE THE TOTAL NUMBER OF OVERALL REQUIRED PARKING SPACES (UNDER THE ZONING BYLAW) IS:</th>
<th>THEN THE TOTAL NUMBER OF ACCESSIBLE PARKING SPACES TO BE PROVIDED WILL BE:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 - 25</td>
<td>2</td>
</tr>
<tr>
<td>26 - 50</td>
<td>4</td>
</tr>
<tr>
<td>52 - 100</td>
<td>6</td>
</tr>
<tr>
<td>101 - 150</td>
<td>8</td>
</tr>
<tr>
<td>151 - 200</td>
<td>10</td>
</tr>
<tr>
<td>201 - 250</td>
<td>12</td>
</tr>
<tr>
<td>251 - 300</td>
<td>14</td>
</tr>
<tr>
<td>301 - 350</td>
<td>16</td>
</tr>
<tr>
<td>351 - 400</td>
<td>18</td>
</tr>
<tr>
<td>401 - 450</td>
<td>20</td>
</tr>
</tbody>
</table>

Based on the 70 provided residential parking stalls, the total number of parking stalls in the left hand column would be 52-100 stalls, which will require 6 disabled stalls.

For the non-residential uses, the District’s Zoning Bylaw Part 10 would govern the required provision of disabled stalls. The Bylaw requires 1 disabled space for every 100 parking spaces or part thereof provided, if more than 22 stalls are required. As the total number of stalls proposed to be provided for the respite care centre is fewer than 22 stalls, no disabled stall would be required within the public parking supply for the site.

With the current site plan, there are 5 disabled stalls provided in the underground parkade, four of which are in the secure residential parking area, with the remaining stall in the public parking area that contains stalls both for residential visitors and for the respite care centre. Two additional handicap stalls are located at grade next to the porte-cochere, bringing the total provision to 7 and meeting the accessible design policy.

As shown in Table 3.1, the residential parking variance proposed is 57 stalls (45% reduction) from the Bylaw requirements. Conversely, 3 extra stalls (33% addition) are provided for the respite care centre at the request of the future occupant, CareBC. The large discrepancy from the residential bylaw rates arises from the lack of a bylaw rate for affordable rental housing. Rationale for this overall reduced parking supply is provided in the subsequent sections.
3.2 Parking Rates for Affordable Multi-family Residential Rental Buildings

The DNV Zoning Bylaw provides only one parking rate for all types of multifamily housing, which is under the classification, “Multiple Unit Residential Building”. The requirement states “1 space per unit plus 1 space per 100m² of gross residential floor area (to a maximum of 2 spaces per unit inclusive of 0.25 per dwelling unit designated for visitor parking)”. With the proposed size of the residential units totaling 4,659 m², this leads to a requirement of 1.59 stalls/unit, inclusive of visitor parking. Catalyst is proposing a rate of 0.88 stalls per unit, as the residential portion of the development is solely affordable non-market rental housing.

Other communities that have studied auto ownership associated with non-market rental housing have found that non-market rental units have lower auto ownership than market rental units, which in turn have lower auto ownership levels than strata units. Figure 1 below illustrates the auto ownership levels of residents of approximately 4,700 apartment buildings in a large study conducted on behalf of the City of Toronto, which clearly demonstrates the relationship. It should be noted that Figure 1 shows the culmination of all various housing types which include the downtown core, close to subway or frequent transit networks as well as areas outside of the City center. While the proposed development site is not within a frequent transit network (FTN), the purpose of this Toronto study is to show the relationship between rental and strata residential units.

Figure 1: 2006 Average Auto Ownership by Housing Type and No. of Bedrooms

Source: City of Toronto Parking Standards Review – Phase Two Apartment Building/Multi-Unit Block Developments Component, New Zoning Bylaw Project, Cansult Limited, February 2007

Non-market rental or “targeted” housing units as indicated in the graph were found to have auto ownership levels approximately 30% to 60% lower than market units; the smaller units in particular were found to have 60% fewer vehicles. Therefore, the forecasted residential parking demand for the
development is anticipated to be lower than the District’s parking requirement by approximately 30% to 60%. It is also important to note that of the proposed non-market rental apartments, over 70% are expected to be studio of 1 bedroom units. As presented, the smaller the number of bedrooms per unit, the lower the parking demand will be. This indicates that the parking demand for this development should be lower.

Aside from a literature review of parking rates, Bunt completed parking supply and demand surveys at 3 non-market rental developments on the North Shore to gain an understanding of current parking rates. The three sites surveyed were:

- St. Andrews Place: 95 St. Andrew Ave, North Vancouver
- Klahanie Park Lodge: 380 Klahanie Court, West Vancouver
- Creekside Housing Coop: 44-710 W. 15th Street, North Vancouver

The on-site parking and the on-street parking on the block faces fronting the sites were surveyed on Thursday, October 5th, 2017 every 30 minutes between 8:00pm to 11:00pm to capture the weeknight peak residential parking demand. This is generally the peak parking period for residential developments. Table 3.3 and 3.4 below show the observed parking supply and demand at each location.

**Table 3.3: Observed Parking Supply at North Shore Non-Market Rental Buildings**

<table>
<thead>
<tr>
<th>LOCATION</th>
<th>UNITS</th>
<th>ON SITE PARKING SUPPLY</th>
<th>ON SITE SUPPLY RATE (STALLS/UNIT)</th>
</tr>
</thead>
<tbody>
<tr>
<td>St. Andrews Place</td>
<td>15</td>
<td>18</td>
<td>1.20</td>
</tr>
<tr>
<td>Klahanie Park Lodge</td>
<td>88</td>
<td>63</td>
<td>0.72</td>
</tr>
<tr>
<td>Creekside Coop</td>
<td>43</td>
<td>65</td>
<td>1.51</td>
</tr>
<tr>
<td>WEIGHTED AVERAGE</td>
<td></td>
<td></td>
<td>1.00</td>
</tr>
</tbody>
</table>

**Table 3.4: Observed Parking Demand at North Shore Non-Market Rental Buildings**

<table>
<thead>
<tr>
<th>LOCATION</th>
<th>UNITS</th>
<th>ON SITE PARKING DEMAND</th>
<th>ON SITE DEMAND RATE (STALLS/UNIT)</th>
<th>ON SITE + NEARBY ON STREET PARKING DEMAND</th>
<th>ON SITE + NEARBY ON STREET RATE (STALLS / UNIT)</th>
</tr>
</thead>
<tbody>
<tr>
<td>St. Andrews Place</td>
<td>15</td>
<td>9</td>
<td>0.60</td>
<td>14</td>
<td>0.93</td>
</tr>
<tr>
<td>Klahanie Park Lodge</td>
<td>88</td>
<td>44</td>
<td>0.50</td>
<td>48</td>
<td>0.55</td>
</tr>
<tr>
<td>Creekside Coop</td>
<td>43</td>
<td>46</td>
<td>1.07</td>
<td>62</td>
<td>1.44</td>
</tr>
<tr>
<td>WEIGHTED AVERAGE</td>
<td></td>
<td></td>
<td>0.68</td>
<td></td>
<td>0.85</td>
</tr>
</tbody>
</table>
As Table 3.4 indicates, a weighted average of on-site peak demand of 0.68 stalls/unit (including visitor parking) was observe for the three sites combined. If the nearby on-street parking demand (one side of the street directly fronting the site) was assumed to be associated with the development, the parking demand rate increases to 0.85 stalls/unit. However, it is unlikely all on-street parking fronting the site is associated with the building. Findings from the Metro Vancouver Apartment Parking Study (MVAPS) indicate that about 11% of households within multi-family developments park a vehicle on-street. If the on-site parking demand rate was increased by 11% to account for on-street parking rather than the street parking observed, the rate would be 0.75 stalls/unit.

As the proposed residential parking supply exceeds all metrics calculated from similar nearby buildings, and as the proposed supply rate falls within the expected 30-60% reduction when compared to the strata based bylaw, the proposed 82 parking stalls provided should be sufficient to accommodate the demand.

### 3.3 Parking Rates for Residential Visitor

The development is proposing to provide 9 visitor parking stalls for 80 residential units. Overall, this equates to a rate of 0.11 stalls/unit, while the DNV bylaw requires 0.25 stalls/unit.

The MVAPS surveyed residential visitor parking demand at three apartment buildings and compared visitor parking supply rates for different municipalities. Across the three surveyed sites, the peak visitor parking demand rate observed was 0.06 stalls/unit. Using this data, as well as surveys conducted by Bunt around Metro Vancouver, it is found that a supply rate of 0.10 visitor stalls/unit is acceptable for the vast majority of buildings. Furthermore, in one of Bunt’s studies in Guildford Town Centre, over 50% of the users in designated visitor parking stalls were residents using the visitor parking for short-term convenience parking. It is our view that this may be a common occurrence, leading to higher than required visitor parking rates when such rates are based solely on direct observation.

In general, the findings from previous visitor parking studies completed by Bunt and MVAPS indicate the proposed visitor supply rate of 0.11 stalls/unit is adequate.

### 3.4 Parking Supply Recommendations

In summary, Table 3.5 below utilizes the observed weighted average for the non-market rental housing in the North Shore as extracted from Table 3.4. Utilizing the weighted average of the on-site parking demand and nearby on-street parking demand, a proposed residential parking rate can be justified. Similarly, utilizing the Metro Vancouver Apartment Parking Study for visitor parking demand rates, a proposed visitor parking demand of 0.1 stalls/unit is used. From the weighted average of 0.85 stalls/unit from Table 3.4, a portion equating to 0.1 stalls/unit will be allocated for residential visitor parking with the remaining 0.75 stalls/unit designated for residential parking. The proposed parking provision and recommended parking rates are presented below.
Table 3.5: Vehicle Parking Supply Requirement & Provision

<table>
<thead>
<tr>
<th>LAND USE</th>
<th>DENSITY</th>
<th>BYLAW SUPPLY REQUIREMENT</th>
<th>BUNT PROPOSED PARKING RATE</th>
<th>BUNT PROPOSED PROVISION</th>
<th>PROJECT PROPOSED PARKING</th>
<th>STALL Variance FROM BYLAW</th>
<th>STALL Variance FROM BUNT RATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential Parking</td>
<td>80 units, 4659 m²</td>
<td>107</td>
<td>0.75</td>
<td>60</td>
<td>61</td>
<td>-46</td>
<td>+1</td>
</tr>
<tr>
<td>Residential Visitor</td>
<td>80 units, 4659 m²</td>
<td>20</td>
<td>0.1¹</td>
<td>8</td>
<td>9</td>
<td>-11</td>
<td>+1</td>
</tr>
<tr>
<td>Respite Care Centre</td>
<td>18 beds</td>
<td>9</td>
<td>12²</td>
<td>12</td>
<td>12</td>
<td>+3</td>
<td>0</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>136</strong></td>
<td><strong>80</strong></td>
<td><strong>82</strong></td>
<td><strong>-54 (-40%)</strong></td>
<td><strong>+2 (+2%)</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

¹From Metro Vancouver Apartment Parking Study, residential visitor parking demand rates
²Under the direction from CareBC, the adult respite care centre will require 12 parking spaces for staff and visitor parking

4. TRANSPORTATION DEMAND MANAGEMENT

4.1 Definition

Transportation Demand Management is the use of policies and procedures to influence travel behaviour and encourage people to use modes of transportation other than the single occupant automobile. For the 600 West Queens Road development, the primary goal of the TDM Plan is to reduce the on-site parking demand to ensure that the provided parking is adequate to suit the needs of the residents, site visitors and the neighbourhood.

4.2 Suggested TDM Strategy

Bunt has developed a recommended TDM Plan for the site developer’s consideration that is focused on reducing parking demand on the site and specifically residential parking demand. The TDM Plan addresses measures that are recommended to be in place at build out of the developments. Table 4.1 below summarizes Bunt’s recommended measures.

Table 4.1: Recommended TDM Plan

<table>
<thead>
<tr>
<th>STRATEGY</th>
<th>MEASURE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marketing, Promotion, &amp;Monitoring</td>
<td>Prepare marketing materials to attract residents who want a car-free lifestyle</td>
</tr>
<tr>
<td></td>
<td>Provide a Welcome Brochure, with an information package on transportation alternatives, that is issued to all new residents and posted in common areas</td>
</tr>
<tr>
<td>Car Share Stall</td>
<td>Provision of 1 dedicated stall for car share program and partner with Modo/other to arrange for a car to service the building</td>
</tr>
<tr>
<td>Parking management</td>
<td>Require residents to pay for monthly use of their parking stalls</td>
</tr>
<tr>
<td>Pedestrian Infrastructure Improvements</td>
<td>Provide sidewalks on the site fronting streets and improve pedestrian landscape/streetscape</td>
</tr>
<tr>
<td>Pedestrian Amenities</td>
<td>Provide amenities in the pedestrian realm (planters, lighting, seating, etc)</td>
</tr>
</tbody>
</table>
5. CONCLUSIONS & RECOMMENDATIONS

5.1 Conclusions

Catalyst is proposing to develop an 80 unit residential non-market affordable rental housing with a 17,900 square feet of ground floor adult respite care facility. The site is located at 600 W Queens Road in the District of North Vancouver. Bunt has been retained as part of the rezoning application to submit a parking variance memorandum with justification for the reduced parking provision. The following summarizes our conclusions and recommendations for the parking provision.

1. The District of North Vancouver parking requirement for the proposed development is 127 residential parking spaces (20 being visitor spaces) and 9 spaces for the respite care facility, for a total of 136 spaces.

2. From evidence provided herein, which included a mix of City of Toronto Studies, Metro Vancouver studies and North-Shore based site surveyed rental buildings, a proposed parking supply was determined. A weighted average (including visitor parking) and on-street parking demand was found to be 0.85/unit.

3. After referencing the Metro Vancouver Apartment Parking Study, it was determined that the average visitor parking demand is roughly 0.10 stalls/unit.

4. As directed by CareBC, the adult respite care facility requires 12 parking spaces for both staff and visitor parking.

5. Based on the results provided herein along with supportive literature, the total parking provision is proposed to total 82 spaces within the underground parkade with 2 spaces at-grade within the porte-cochere.

5.2 Recommendations

1. A transportation demand management strategy is proposed to include the following initiatives:
   - Catalyst will prepare marketing materials to attract residents who want a car-free lifestyle;
   - Catalyst will prepare a Transportation Information Package with information on transportation alternatives, nearby amenities, local cycling and transit routes, etc;
   - Catalyst will provide bicycle maps and way finding signage so visitors and commercial customers are aware of the short term bicycle parking on site;
   - Catalyst will require residents to pay on a monthly basis for each parking stall usage;
   - Catalyst will provide sidewalk and pedestrian improvements and amenities surrounding the site; and,
Catalyst will partner with a car share organization and provide 1 car share stall to service the building.

2. According to the data collected and related literature, the forecasted parking demand may be optimized to the provision of 60 residential spaces, 8 visitor spaces and 12 respite care stalls for a total of 80 spaces. Since the project is proposing to provide 82 spaces in the underground, the parking provision is expected to be sufficient for this development.
600 West Queens Road
Transportation Impact Study (TIS)
Draft Report

Prepared for
Catalyst Community Development Society

Date
June 18, 2018

Project No.
04-18-0062
June 18, 2018
04-18-0062

Danielle Dhaliwal
Development Coordinator
Catalyst Community Development Society
90-425 Carrall Street
Vancouver, BC
V6B 6E3

Dear Danielle:

Re: 600 West Queens Road – Transportation Impact Study
Proposal for Consulting Services

As requested, Bunt & Associates has completed the transportation impact study for the proposed redevelopment of 600 West Queens Road in the District of North Vancouver (DNV). This report has been prepared to accompany the project’s rezoning permit application. More specifically, DNV staff expressed that a comprehensive Transportation Impact Study (TIS) for the proposed development is not required. A complete study is not necessary because Bunt completed a previous Delbrook Lands Transportation Study back in 2016. Therefore, this report will update the previous Delbrook Lands report and estimate the future site generated traffic along with other elements summarized by the Engineering Development Servicing Review document (dated February 26, 2018).

We trust that the attached report is satisfactory to your needs. Should you have any questions or comments, please do not hesitate to get in touch with the undersigned.

Yours truly,

Bunt & Associates

James Lao, P.Eng.
Transportation Engineer

cc: Robin Petri
CORPORATE AUTHORIZATION

Prepared By: James Lao, P.Eng.  
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Date: 2018-06-08  
Project No. 04-18-0062  
Status: DRAFT

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600 West Queens Road | Transportation Impact Study – DRAFT REPORT | June 18, 2018
S:\PROJECTS\CL04-18-0062 600 West Queens Rd.S.0.0 Deliverables\15.1 Draft Report\20180618_04-18-0062_600W-Queens_RPT_V91.docx
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1. INTRODUCTION

1.1 Background

Catalyst Community Development Society is proposing to develop and operate a 5-storey affordable rental residential development located at 600 West Queens Road in the District of North Vancouver (DNV) with a seniors respite care centre on the ground floor. The site is approximately 0.84 acres and is located on the northwest corner of West Queens Road and Stanley Avenue. It is immediately south of the now-closed Delbrook Community Centre and tennis courts. The existing site was the surface parking lot for the former community centre.

The proposed development will consist of the following:

- 80 units of affordable non-market rental housing (includes 16 studio, 41 one-bedroom units, 15 two-bedroom units, and 8 three bedroom units); and,
- An 18 bed seniors respite care centre on the ground floor (17,887 square feet)

As part of the application process, DNV expressed that a comprehensive Transportation Impact Study (TIS) for the proposed development is not required. A new study is not required because Bunt completed a previous Delbrook Lands Transportation Study (DLTS) in 2016. The District only requires an update to this study to estimate the future site generated traffic along with other elements summarized by the Engineering Development Servicing Review document dated February 26, 2018.

1.2 Study Scope & Area

As part of the rezoning application package, an abridged Transportation Impact Study has been requested by the District of North Vancouver.

The parameters of this study have been agreed to with District staff and are outlined in a Terms of Reference provided in Appendix A.

The District of North Vancouver requires that an abridge TIS be undertaken for the proposed development and would like to achieve the following main objectives:

- Identify the volume of traffic likely to be generated by the proposed development and its potential impact to the traffic operations on the area street network;
- Assess the existing conditions along West Queens Road and Stanley Avenue by reviewing ICBC crash data, site visit and observations;
- Conduct future improvement recommendations for potential new access points or laning configuration updates;
• Conduct a parking assessment to ensure adequate off-street parking is provided to meet the anticipated demand in the future;

• Conduct a site plan design review to ensure vehicular tracking is functional for residents, waste management, loading and emergency vehicles; and,

• Identify measures for the proposed development to reduce the reliance on single occupancy automobile trips and promote alternative travel modes including walking, cycling and transit.

The study area is shown in Exhibit 1.1 and is bounded by West Windsor Road to the north, Stanley Avenue to the east, West Queens Road to the south and Delbrook Avenue to the west. The site occupies the southeast corner of the study area. The study area is in close proximity to Exit 17 of Highway 1, accessed from Westview Drive.

1.3 Organization of Report

This Transportation Impact Study is structured as follows:

• Section 2 provides a review of the existing transportation infrastructure facilities and accessibility, traffic volumes for all travel modes, parking demand and existing operations;

• Section 3 provides a review of the proposed development site, assessment of the future trip generation, traffic conditions and propose development impact;

• Section 4 provides an assessment and review of the future site plan design, driveway access review, vehicular and bicycle parking requirements, service vehicle operations and sightline review;

• Section 5 summarizes the applicable and recommended transportation demand management measures for the site; and,

• Section 6 concludes and summarizes the report and provides recommendations.

1.4 Proposed Development Plan

The proposed development includes 1 5-storey low-rise building composed of 80 affordable rental residential units and a 17,887 square foot respite care facility. The main driveway access to the site will front West Queens Road on the south side of the site while two second driveways access off Stanley Avenue will allow for one-way traffic circulation with right-in and left-in for the northerly driveway and right-out only for the southerly driveway. Exhibit 1.2 summarizes the site plan.
2. EXISTING CONDITIONS

The following section highlights the existing context of the area surrounding the site with respect to walking, cycling, transit, the adjacent street network as well as vehicle volumes and traffic operations at study intersections.

2.1 Existing Transportation Network

The proposed development is situated within the Delbrook Lands area which is bounded by West Windsor Avenue to the north, Stanley Avenue to the east, West Queens Road to the south and Mission Creek to the west. It is situated within a mature residential neighbourhood with an established street grid pattern to the east and south. A more segmented street pattern lies to the north and west given the presence of Mission Creek to the west of the site, (and Mosquito Creek farther west) which bisect the east-west street grid. There are existing connections to the site for pedestrians, cyclists, and transit users.

Exhibit 2.1 highlights the site accessibility for existing walking, cycling, and transit connections along with key amenities nearby.

2.1.1 Walking Network

Sidewalks are present on typically one side of the local streets in the surrounding area; however, these streets are still favourable for walking. Sidewalks are present on both sides of West Queens Road but they are generally narrow (i.e. 1.3m – 1.5m) and may not provide an ideal level of comfort for pedestrians. Key issues for pedestrians today are that:

- With a 1.5m or narrower sidewalk, a pedestrian cannot pass someone in a wheelchair or pushing a cart/stroller without some level of difficulty;

- West Windsor Road and Stanley Avenue have sidewalks on just one side; and

- Boulevards adjacent to sidewalks that provide a buffer for pedestrians only exist along Stanley Avenue, West Windsor Road, and portions of West Queens Road.

Marked crosswalks are provided at key locations including at the intersection of Stanley Avenue and West Queens Road, as well as Delbrook Avenue and West Windsor Road. Figure 2.1 below shows the Delbrook Avenue at West Windsor Road marked crossing (left) and another at West Queens Road and Stanley Avenue (right). These two locations have street crossing distances of approximately 18.5m at Delbrook Avenue/West Windsor Road and 12m at West Queens Road/Stanley Avenue.
Figure 2.1: Southbound on Delbrook Avenue & W Windsor Road (left), and Eastbound on W Queens Road & Stanley Avenue (right)

At the signed and marked crossing at Delbrook Avenue and West Windsor Road, the geometry of the curved road may result in reduced motorist visibility of pedestrians already engaged in the marked crossing. Additionally, this crossing has a bus stop immediately to the south which leads to buses stopping on top of the marked crossing and reduces northbound drivers’ visibility of crossing pedestrians.

It is noted that the exposure of pedestrians to vehicle traffic can be improved by reducing the crossing distance for pedestrians through provision of curb bulges or a centre median. A reduced crossing distance using curb bulges would further benefit pedestrians as it would increase their visibility to approaching motorists. A reduced crossing distance using a centre median would create a two-stage crossing resulting in pedestrians finding more gaps in traffic and being more visible to vehicles.

2.1.2 Cycling

Existing or planned on-street cycling routes surround the site on West Windsor Road to the north, Stanley Avenue to the east, West Queens Road to the south, and Delbrook Avenue to the west. Existing routes are generally informal in that they do not delineate space specifically for cyclists, but provide cycling links in all directions from the site and extend to connect with key amenities nearby, and the wider cycling network.

At present however, there are no formal cycling facilities such as painted bike lanes, shared/marked curb lanes, or cycle tracks which would help to encourage cycling as a travel mode for a wider range of users in the broader community. As highlighted in Exhibit 2.1 there are also gaps in the existing cycling network near the site with no connection on West Queens Road between Stanley Avenue and Delbrook Avenue, nor on Westview Drive south of West Queens Road. However, in the future, there are plans to eliminate the gaps as shown in Exhibit 2.1.

2.1.3 Transit Network

The Delbrook Lands site can be accessed by two bus routes that provide service directly to and from the site, including the #246 (Lonsdale Quay/Highland/Vancouver) on Delbrook Avenue, and #232 (Grouse Mountain / Phibbs Exchange) on West Queens Road. These routes provide medium (i.e. 15-minute
headways at peak times) to low (i.e. 30 minute headways) frequency service to the local area and connect users to other key local and regional destinations.

Nearby bus stops for the #232 route are located on the south site frontage on West Queens Road, while bus stops for the #246 route are located on Delbrook Avenue, just west of the site. The majority of existing bus stop facilities are marked using a ‘bus stop’ sign, while other stops provide improved amenities such as benches or shelters. These bus stops are easily accessible for the Table 2.1 summarizes the existing transit service frequencies for the two bus routes that travel adjacent to site.

**Table 2.1: Existing Transit Service Frequency**

<table>
<thead>
<tr>
<th>#</th>
<th>BUS ROUTE NAME</th>
<th>AN</th>
<th>MID-DAY</th>
<th>PM</th>
<th>EVENING</th>
<th>WEEKEND</th>
</tr>
</thead>
<tbody>
<tr>
<td>232</td>
<td>Grouse Mountain / Phibbs Exchange</td>
<td>30</td>
<td>30</td>
<td>30</td>
<td>30</td>
<td>30</td>
</tr>
<tr>
<td>246</td>
<td>Highland / Vancouver</td>
<td>15</td>
<td>30</td>
<td>15</td>
<td>60</td>
<td>30</td>
</tr>
</tbody>
</table>

Bus routes and stop locations are highlighted on Exhibit 2.1. Transit challenges and opportunities are described in Section 6.
Exhibit 2.1
Existing Pedestrian, Cyclist, and Transit Infrastructure
2.2 Existing Transportation Network

2.2.1 Road Network

The key corridors within the study area include West Windsor Road, Stanley Avenue, West Queens Road, and Delbrook Avenue. The following is a summary of the corridor attributes.

**West Windsor Road**

West Windsor Road is a two-lane collector road that runs east-west along the north frontage of the site. Sidewalks are provided along the south side and parking is allowed along both sides of the roadway with no restrictions.

**Stanley Avenue**

Stanley Avenue is a two-lane collector road running north-south along the east frontage of the subject site. North of West Windsor Road, it transitions into West St. James Road, which is classified as a local road. Sidewalks are provided along the west side only and parking is allowed along both sides of the roadway with no restrictions.

**West Queens Road**

West Queens Road is an east-west major arterial that borders the south side of the proposed site. Sidewalks are provided on both sides of the street, and the two-lane roadway allows parking along both sides along the site frontage. Additionally, two bus stops are provided between Stanley Avenue and Delbrook Avenue that serve the #232 bus route – one westbound and one eastbound.

**Delbrook Avenue**

Delbrook Avenue is a two-lane minor arterial within the study area and transitions into a four-lane major arterial road (Westview Drive) south of West Queens Road. It serves as an important connection between the surrounding residential areas to the Trans-Canada Highway and further to the south. Angled parking is provided along the west side of the road to serve the playing fields west of the subject site. Sidewalks and transit stops for the #246 bus route are provided on both sides of Delbrook Avenue.

### Table 2.1: Existing Street Characteristics

<table>
<thead>
<tr>
<th>STREET</th>
<th>CLASSIFICATION</th>
<th>NUMBER OF TRAVEL Lanes</th>
<th>POSTED SPEED</th>
<th>PARKING FACILITIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>West Windsor Road</td>
<td>Collector</td>
<td>2</td>
<td>50 km/hr</td>
<td>On-street parking on both sides</td>
</tr>
<tr>
<td>Stanley Avenue</td>
<td>Collector</td>
<td>2</td>
<td>50 km/hr</td>
<td>On-street parking on both sides</td>
</tr>
<tr>
<td>West Queens Road</td>
<td>Major Arterial</td>
<td>2</td>
<td>50 km/hr</td>
<td>On-street parking on both sides</td>
</tr>
<tr>
<td>Delbrook Avenue</td>
<td>Minor Arterial</td>
<td>2 - 4</td>
<td>50 km/hr</td>
<td>Angled parking along west side</td>
</tr>
</tbody>
</table>
2.2.2 Study Intersections

Intersections included in the study network are categorized by traffic control types and are summarized in Table 2.2 below. The existing laneing and intersection controls are illustrated in Exhibit 2.2.

Table 2.2: Study Intersections & Controls

<table>
<thead>
<tr>
<th>INTERSECTION</th>
<th>TRAFFIC CONTROL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delbrook Avenue / W Queens Road</td>
<td>Signalized</td>
</tr>
<tr>
<td>Delbrook Avenue / W Windsor Road</td>
<td>Stop Control – Minor Approach with signed &amp; marked</td>
</tr>
<tr>
<td></td>
<td>crosswalk on south approach</td>
</tr>
<tr>
<td>W Queens Road / Stanley Avenue</td>
<td>Stop Control – Minor Approach with signed &amp; marked</td>
</tr>
<tr>
<td></td>
<td>crosswalk on west approach</td>
</tr>
<tr>
<td>Stanley Avenue / W St James Road</td>
<td>Two-Way Stop Control – Minor Approaches</td>
</tr>
<tr>
<td>/ W Windsor Road</td>
<td></td>
</tr>
</tbody>
</table>
2.3 Data Collection

2.3.1 Traffic Data Collection Program 2016

Vehicle traffic, pedestrian, and bicycle counts were conducted by Bunt and DNV on the dates below. Table 2.4 below summarizes the intersection traffic counts that were conducted along with the source and dates of the counts.

Table 2.4: Summary of Available and Counted Traffic Data

<table>
<thead>
<tr>
<th>INTERSECTION</th>
<th>SOURCE</th>
<th>DATE OF COUNT</th>
</tr>
</thead>
<tbody>
<tr>
<td>W Queens Road &amp; Stanley Avenue</td>
<td>DNV</td>
<td>March 1, 2016</td>
</tr>
<tr>
<td>W Queens Road &amp; Delbrook Avenue</td>
<td>DNV</td>
<td>March 7, 2013</td>
</tr>
<tr>
<td>Delbrook Avenue &amp; W Windsor Road</td>
<td>Bunt</td>
<td>March 22, 2016</td>
</tr>
<tr>
<td>W Windsor Road &amp; Stanley Avenue</td>
<td>Bunt</td>
<td>March 22, 2016</td>
</tr>
<tr>
<td>OVERALL STUDY AREA PEAK HOUR</td>
<td>8:9 AM; 4:5PM</td>
<td></td>
</tr>
</tbody>
</table>

The data used to depict existing and background traffic for the West Queens Road/Delbrook Avenue intersection was collected as part of the new William Griffin Community Recreation Centre Transportation Study in 2013. This data was collected under normal weekday and weekend conditions, and was deemed to be an accurate representation of existing conditions due to a marginal net traffic volume growth of 0.2% per year. This rate remains low due to limited development in this existing and mature single-family neighbourhood.

Traffic counts for West Queens Road/Stanley Avenue were collected on the 1st of March, 2016. Counts were conducted by Bunt on March 22nd, 2016 covering the weekday morning (7:00 am to 9:00 am) and afternoon (3:00 pm to 6:00 pm) peak traffic periods at the intersection of Delbrook Avenue/West Windsor Road and West Windsor Road/Stanley Avenue. Due to schedule constraints for this study, the traffic counts for these intersections were conducted during the second week of spring break. It is believed that there is marginal change in traffic volumes during the AM and PM peak periods around the site during spring break, although special spring break programming was in effect at the Delbrook Recreation Community Centre.

Existing weekday peak hour traffic volumes are summarized in Exhibit 2.3.

In total, during the spring break counts, the current Delbrook site generates the following peak traffic volumes:

- AM Peak Hour: 120 vph entering, 72 vph exiting
- PM Peak Hour: 81 vph entering, 112 vph exiting
2.3.2 Peak Hour Traffic Volumes Existing 2018

As directed by the District of North Vancouver, the previous count data from the Delbrook Lands Study in 2016 was utilized for this updated study. Also as directed by DNV Staff, the annual growth from 2016 to 2018 applied a background growth of 1% per annum (compounded) for all movements to achieve a representative 2018 existing peak hour traffic volumes. Exhibit 2.3 summarizes the existing 2018 weekday peak hour traffic volumes.

Table 2.5 presents a summary of the existing two-way peak-hour vehicle movements for the streets in the study area. Please note that the volume balancing discrepancy between Stanley Avenue at West Queens Road and Stanley Avenue at West Windsor Road is due to the undetermined volumes entering or exiting from West Kings Road, in between.

Table 2.5: Existing (2018) Peak Hour Roadway Link Volumes

<table>
<thead>
<tr>
<th>ROAD LINK</th>
<th>PEAK LINK VOLUMES (VEH/HR)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>AM</td>
</tr>
<tr>
<td>W Queens Road (between Delbrook &amp; Stanley)</td>
<td>980</td>
</tr>
<tr>
<td>Delbrook Avenue (between W Queens &amp; W Windsor)</td>
<td>730</td>
</tr>
<tr>
<td>Stanley Avenue (between W Queens &amp; Stanley)</td>
<td>165</td>
</tr>
<tr>
<td>W Windsor Road (between Delbrook &amp; Stanley)</td>
<td>100</td>
</tr>
</tbody>
</table>

2.3.3 ICBC Crash Collision Data

Data on motor vehicle accidents in the study area from 2011-2015 was provided to the DNV by the Insurance Corporation of British Columbia (ICBC). Bunt reviewed the ICBC data for trends or abnormalities that could have a public safety impact.

As expected, the signalized intersection of Delbrook Avenue/West Queens Road had the largest number of collisions of any intersection in the study area. This intersection was found to have the most collisions naturally due to the fact that it experiences the highest total traffic volumes along the corridor. The non-signalized intersections in the study area combined experienced only one quarter of the total number of accidents that occurred at Delbrook Avenue/West Queens Road, and exhibited no discernible trends.

Generally, rear-end collisions accounted for half of the reported accidents. Anecdotal evidence corroborates that the rear-end collisions could be caused by sudden stops or vehicles attempting to change lanes or access driveways. These changes can be further explored in the post-rezoning phase.
Exhibit 2.3
Existing 2018 Peak Hour Vehicle Traffic Volumes
2.4 Existing Operations

2.4.1 Performance Thresholds

The existing operations of study area intersections and access points were assessed using the methods outlined in the 2000 Highway Capacity Manual (HCM), using the Synchro 9.2 analysis software (Build 914). The traffic operations were assessed using the performance measures of Level of Service (LOS) and volume-to-capacity (V/C) ratio.

The LOS rating is based on average vehicle delay and ranges from “A” to “F” based on the quality of operation at the intersection. LOS “A” represents optimal, minimal delay conditions while a LOS “F” represents an over-capacity condition with considerable congestion and/or delay. Delay is calculated in seconds and is based on the average intersection delay per vehicle.

Table 2.7 below summarizes the LOS thresholds for the six Levels of Service, for both signalized and unsignalized intersections.

Table 2.7: Intersection Level of Service Thresholds

<table>
<thead>
<tr>
<th>LEVEL OF SERVICE</th>
<th>AVERAGE CONTROL DELAY PER VEHICLE (SECONDS)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>SIGNALIZED</td>
</tr>
<tr>
<td>A</td>
<td>≤10</td>
</tr>
<tr>
<td>B</td>
<td>&gt;10 and ≤20</td>
</tr>
<tr>
<td>C</td>
<td>&gt;20 and ≤35</td>
</tr>
<tr>
<td>D</td>
<td>&gt;35 and ≤55</td>
</tr>
<tr>
<td>E</td>
<td>&gt;55 and ≤80</td>
</tr>
<tr>
<td>F</td>
<td>&gt;80</td>
</tr>
<tr>
<td></td>
<td>UNSIGNALIZED</td>
</tr>
<tr>
<td></td>
<td>≤10</td>
</tr>
<tr>
<td></td>
<td>&gt;10 and ≤15</td>
</tr>
<tr>
<td></td>
<td>&gt;15 and ≤25</td>
</tr>
<tr>
<td></td>
<td>&gt;25 and ≤35</td>
</tr>
<tr>
<td></td>
<td>&gt;35 and ≤50</td>
</tr>
<tr>
<td></td>
<td>&gt;50</td>
</tr>
</tbody>
</table>

Source: Highway Capacity Manual

The volume-to-capacity (V/C) ratio of an intersection represents ratio between the demand volume and the available capacity. A V/C ratio less than 0.85 indicates that there is sufficient capacity to accommodate demands and generally represents reasonable traffic conditions in suburban settings. A V/C value between 0.85 and 0.95 indicates an intersection is approaching practical capacity; a V/C ratio over 0.95 indicates that traffic demands are close to exceeding the available capacity, resulting in saturated conditions. A V/C ratio over 1.0 indicates a very congested intersection where drivers may have to wait through several signal cycles. In downtown and Town Centre contexts, during peak demand periods, V/C ratios over 0.90 and even 1.0 are common.

As directed by the District of North Vancouver, the performance thresholds that were used to trigger consideration of roadway or traffic control improvements to support roadway or traffic control improvements employed in this study are listed below:
Signalized Intersections:

- Overall intersection Level of Service = LOS D or better;
- Overall intersection V/C ratio = 0.85 or less;
- Individual movement Level of Service = LOS E or better; and,
- Individual movement V/C ratio = 0.90 or less.

Unsignalized Intersections and Roundabouts:

- Individual movement Level of Service = LOS E or better, unless the volume is very low in which case LOS F is acceptable.

In interpreting of the analysis results, note that the HCM methodology reports performance differently for various types of intersection traffic control. In this report, the performance reporting convention is as follows:

- For signalized intersections: HCM 2000 output for overall LOS and V/C as well as individual movement LOS and V/C is reported. 95th Percentile Queues are reported as estimated by Synchro or SimTraffic, the micro-simulation module of the Synchro software;

- For unsignalized two-way stop controlled intersections: HCM 2000 LOS and V/C output is reported just for individual lanes as the HCM methodology does not report overall performance. SimTraffic estimated queues and delays have also been reported, as the HCM 2000 methodology does not directly take into account the gaps afforded by adjacent signalized intersections; and,

- For unsignalized All-way Stop controlled intersections: HCM 2000 unsignalized LOS is reported for the overall intersection as well as by intersection approach LOS. The HCM 2000 methodology does not report an overall V/C ratio for All Way Stop controlled intersections. Degree of Utilization calculated with the HCM 2000 methodology is reported for individual movements in place of V/C, which is not part of the IICM 2000 report.

The performance reporting conventions noted above have been consistently applied throughout this document and the detailed outputs are provided in Appendix B.

2.4.2 Existing Conditions Analysis Assumptions

**Signal Timing:**
The existing conditions analysis is based on existing signal timing plans that the District of North Vancouver staff has provided Bunt for the analysis. The signal timing plan was provided to Bunt by the District on May 7, 2018 for the intersection of West Queens Road and Delbrook Avenue.
**Synchro Parameters**

This section identifies any modifications made to the Synchro models or adjustments and the assumptions carried forward for each model. The assumptions and parameters include the following for the intersection of West Queens Road and Delbrook Avenue:

- Pedestrian calls were included in the model to reflect at least 2 pedestrian calls per hour for each leg;
- Peak Hour Factors (PHF) were kept at the Synchro default of 0.92;
- The signalized intersection was modelled as an actuated uncoordinated signal; and,
- Permitted-protected left turns were modelled for the westbound left-turn and northbound left-turn movements.

**2.4.3 Existing Operational Analysis Results**

Existing operational conditions for the study intersections were assessed using Synchro Software and the HCM 2000 methodology. The results are summarized in Exhibits 2.4 and 2.5 for the AM and PM peak hours, respectively. Detailed Synchro analysis printouts of existing conditions are provided in Appendix B at the end of this report. A discussion regarding an error to the Synchro methodology for lost time calculation is also summarized in Appendix B.

Delbrook Avenue/West Queens Road intersection experiences heavy peak traffic volumes in the eastbound, westbound and northbound directions. The volume-to-capacity (v/c) ratio results in 0.80 and a Level of Service (LOS) C for both AM and PM peak hours. During the two peak hours, the westbound left-turn 95th percentile queue length extends past the 20 metre storage with a queue of 40 metres in the AM and 28 metres in the PM. The southbound left-turn 95th percentile queue length also extends past the 15 metre storage with a queue of 19 metres in the AM. Overall, the highest v/c ratio occurs on the northbound left-turn movement at 0.86 and 0.93 in the AM and PM peak hours, respectively.

The remaining unsignalized intersections operate well within acceptable thresholds. The intersection at Delbrook Avenue/ W Windsor Road, Stanley Avenue/ W Windsor Road and West Queens Road/Stanley Avenue operate within acceptable queues, v/c and LOS.
Exhibit 2.4
Existing AM Peak Hour Performance
3. **FUTURE TRAFFIC CONDITIONS**

3.1 **Proposed Development Plan**

The proposed development includes 1 low-rise building composed of affordable rental residential units and a 17,887 square foot respite care facility. The main driveway access to the site will front West Queens Road on the south side of the site while two second driveways access off Stanley Avenue will allow for one-way traffic circulation with right-in and left-out for the northerly driveway and right-out only for the southerly driveway. The site plan for the development is shown in Exhibit 1.2.

3.2 **Delbrook Lands Potential Land Use Options**

In the previous version of the Delbrook Lands Transportation Study (April 26, 2016), a variety of land use options were contemplated. The potential future uses for the area ranged from expanded park space above, to a combination of the existing community amenity uses and park space, to housing. The original traffic impact assessment assessed four (4) distinct land use options as described in Table 3.1.

<table>
<thead>
<tr>
<th>LAND USE OPTION</th>
<th>LAND USES</th>
<th>SIZE/AREA</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Option 1 - Parkland</td>
<td>parkland</td>
<td>4.3 acres</td>
<td>Includes multi-purpose courts; children’s playground; picnic area; trail networks, natural areas, and no playing fields</td>
</tr>
<tr>
<td>Option 2 - Housing</td>
<td>multi-family residential</td>
<td>300 apartment units</td>
<td>Multi-family dwelling units in multiple 6-storey buildings</td>
</tr>
<tr>
<td>Option 3 - Community Service/Cultural</td>
<td>community services - arts &amp; culture - parkland</td>
<td>~18,700 sq ft day care facilities ~18,700 sq ft arts &amp; culture facility ~3.45 acres parkland</td>
<td>10% of site for community service uses including existing Little Rascals child day care of 85 spaces, plus additional child day care and adult day care of 67 spaces; 10% of site for arts and culture facility (i.e. art gallery or museum); and 80% of site for parkland</td>
</tr>
<tr>
<td>Option 4 - Housing/Parkland</td>
<td>multi-family residential - parkland</td>
<td>28 units (townhouses) ~3.45 acres parkland</td>
<td>20% of site for housing, all townhouses; and 80% of site for parkland</td>
</tr>
</tbody>
</table>

As directed by the District of North Vancouver staff on April 16, 2018, a confirmation for a modified version of Option 3 was decided to be carried forward for this updated traffic impact study. The modified Option 3 land use types and sizes are summarized in Table 3.2 below.

<table>
<thead>
<tr>
<th>LAND USE OPTION</th>
<th>LAND USES</th>
<th>SIZE/AREA</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delbrook Lands Study</td>
<td>Day Care</td>
<td>18,731 sq ft</td>
<td>Child day care of 37 spaces</td>
</tr>
<tr>
<td></td>
<td>Parkland</td>
<td>3.87 acres</td>
<td>Parkland space will make up the remaining site area</td>
</tr>
</tbody>
</table>
The new Delbrook Lands Study is proposing for a new child day care facility with 3/ more spaces while keeping the existing Little Rascals facility. The remaining Delbrook Lands will be occupied by a parkland space of 3.87 acres. Ultimately, for this report, the Delbrook Lands Study will be in accordance to Table 3.2 and include the future proposed 600 West Queens Road development which is summarized in Table 3.3 below.

**Table 3.3: Proposed Land Use Breakdown**

<table>
<thead>
<tr>
<th>LAND USE OPTION</th>
<th>LAND USES</th>
<th>SIZE/AREA</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delbrook Lands Study</td>
<td>Day Care</td>
<td>16,751 sq ft</td>
<td>Child day care spaces of 37 spaces</td>
</tr>
<tr>
<td></td>
<td>Parkland</td>
<td>3.87 acres</td>
<td>Parkland space will make up the remaining site area</td>
</tr>
<tr>
<td>600 W Queens Development</td>
<td>Affordable Rental Apartments</td>
<td>80 units</td>
<td>Affordable rental apartments</td>
</tr>
<tr>
<td></td>
<td>Respite Care Facility</td>
<td>17,887 sq ft</td>
<td>Seniors respite care facility</td>
</tr>
</tbody>
</table>

### 3.3 Traffic Forecasts

#### 3.3.1 Background Traffic Forecasts

Background traffic is traffic that would be present on the road network if the site did not redevelop. As discussed with the District of North Vancouver staff, the two study horizon years for this traffic impact study is for the Opening Day 2021 and 2030. DNV also provided direction on the annual growth rate per annum for the two horizon years for this study. It was determined that a background growth rate of 1% per annum (compounded) would be applied for the two horizon years. Therefore, the background growth rate of 1% per annum was applied for all movements of the 4 intersections under study.

Existing site traffic was "stripped off" the road network to create base level "background" volumes. Base level (background weekday peak hour) traffic volumes and are summarized in Exhibit 3.1.
Exhibit 3.1
Opening Day (2021) Background Traffic Forecasts

600 West Queens Rd
June 2018
Exhibit 3.2

Opening Day + 10 (2031) Background Traffic Forecasts
**Future Trip Generation**

As discussed in Section 3.2, the future trip generation will be based on a culmination of the previous Delbrook Land Study with the 600 West Queens development. The rates utilized to estimate the future AM and PM peak trip generation was by referencing the Institute of Transportation Engineers (ITE) rates from the Trip Generation Manual, 10th Edition. Please note that the trip rates below has been updated from the original Delbrook Transportation Study report where the 9th Edition of the Trip Generation Manual was utilized.

**Table 3.1: Peak Hour Vehicle Trip Rates**

<table>
<thead>
<tr>
<th>LAND USE</th>
<th>UNITS</th>
<th>MEASURE RATE</th>
<th>AM PEAK HOUR</th>
<th>PM PEAK HOUR</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>IN</td>
<td>OUT</td>
</tr>
<tr>
<td>Parkland(11)</td>
<td>3.87 acres</td>
<td>acres</td>
<td>2.52</td>
<td>1.98</td>
</tr>
<tr>
<td>Apartment(29)</td>
<td>80 units</td>
<td>unit</td>
<td>0.09</td>
<td>0.27</td>
</tr>
<tr>
<td>Respite Care Centre(30)</td>
<td>17,890 sq ft; 18 beds</td>
<td>square feet</td>
<td>0.40</td>
<td>0.15</td>
</tr>
<tr>
<td>Day Cares(45)</td>
<td>18,731 sq ft; 37 children</td>
<td>children</td>
<td>0.39</td>
<td>0.38</td>
</tr>
</tbody>
</table>

Notes:
1 - Based on ITE 411 (City Park) trip rate.
2 - Based on ITE 221 (Mid-Rise Multi-Family) trip rate.
3 - Based on ITE 620 (Nursing Home) trip rate as the trip rate for a respite care centre does not exist.
4 - Based on trip rates established from existing Delbrook site driveway counts. The rates in the table are generic rates and do not apply specifically to Little Rascals or the adult day care; these trip rates are comparable to the ITE 565 (Day Care Center) trip rates.

**Table 3.2** summarizes the anticipated future site generated vehicle trips for the proposed development based on the above rates.

**Table 3.2: Estimated Peak Hour Site Vehicle Trips**

<table>
<thead>
<tr>
<th>STUDY AREA</th>
<th>LAND USE</th>
<th>AM PEAK HOUR</th>
<th>PM PEAK HOUR</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>IN</td>
<td>OUT</td>
</tr>
<tr>
<td>Delbrook Lands</td>
<td>Parkland(11)</td>
<td>10</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>Day Cares(39)</td>
<td>15</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td><strong>Sub-total</strong></td>
<td>25</td>
<td>22</td>
</tr>
<tr>
<td>600 W Queens Development</td>
<td>Respite Care Centre(30)</td>
<td>7</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Apartment(45)</td>
<td>7</td>
<td>21</td>
</tr>
<tr>
<td></td>
<td><strong>Sub-total</strong></td>
<td>14</td>
<td>24</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td>39</td>
<td>46</td>
</tr>
</tbody>
</table>

Notes:
1 - Based on ITE 411 (City Park) trip rate.
2 - Based on ITE 221 (Mid-Rise Multi-Family) trip rate.
3 - Based on ITE 620 (Nursing Home) trip rate as the trip rate for a respite care centre does not exist.
4 - Based on trip rates established from existing Delbrook site driveway counts. The rates in the table are generic rates and do not apply specifically to Little Rascals or the adult day care; these trip rates are comparable to the ITE 565 (Day Care Center) trip rates.
Based on Tables 3.1 and 3.2, the base AM and PM trip generation of the 600 West Queens development is estimated to be 38 trips (14 inbound and 24 outbound) and 45 trips (25 inbound and 20 outbound), respectively.

The Total AM and PM trip generation for both the 600 West Queens development and the Delbrook Lands study is estimated to be 85 trips (39 inbound and 46 outbound) and 89 trips (48 inbound and 41 outbound), respectively.

**Trip Distribution & Assignment**

The assumed directional distribution of the site traffic, for all four different land uses to the external gates at the study area boundaries was assumed to be similar to the existing traffic patterns in the study area conditions. Table 3.3 summarizes the anticipated directional distribution.

**Table 3.3: Estimated Trip Distribution**

<table>
<thead>
<tr>
<th>ORIGIN/DESTINATION</th>
<th>AM PEAK HOUR</th>
<th></th>
<th>PM PEAK HOUR</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>IN (%)</td>
<td>OUT (%)</td>
<td>IN (%)</td>
<td>OUT (%)</td>
</tr>
<tr>
<td>Delbrook Avenue / North</td>
<td>20%</td>
<td>20%</td>
<td>15%</td>
<td>15%</td>
</tr>
<tr>
<td>Stanley Aveue / North</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>W Windsor Road / East</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>W Queens Road / West</td>
<td>25%</td>
<td>25%</td>
<td>30%</td>
<td>28%</td>
</tr>
<tr>
<td>W Queens Road / East</td>
<td>25%</td>
<td>25%</td>
<td>15%</td>
<td>27%</td>
</tr>
<tr>
<td>Delbrook Avenue / South</td>
<td>30%</td>
<td>30%</td>
<td>40%</td>
<td>30%</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>

The site “net” site generated traffic volumes were assigned to the study area network using engineering judgement informed by existing traffic patterns, logical routings, and the assumed distribution to the external gates. The 600 West Queens development site trip generation is summarized in Exhibit 3.3A independently. Exhibit 3.3B summarizes the entire development as a whole combining the development at 600 West Queens with the Delbrook Land proposal.
A net change based on the additional trips estimated for the future opening day horizon year (2021) and the impact this will have on the background traffic is summarized in Table 3.4 below. This table summarizes the net change in future intersection vehicle volumes with the new site trips combined from the 600 West Queens Development and the Delbrook Lands Study. From the Background 2021 traffic volumes, the estimated trip generation volumes are superimposed to obtain the total traffic volumes. The results below showcase the % change at each of the intersections under the study area.

Table 3.4: Net Change in Future Intersection Vehicle Volumes with New Site Trips

<table>
<thead>
<tr>
<th>INTERSECTION</th>
<th>AM PEAK HOUR VOLUMES</th>
<th>PM PEAK HOUR VOLUMES</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>BACKGROUND 2021</td>
<td>SITE</td>
</tr>
<tr>
<td>W Queens Road &amp; Stanley Avenue</td>
<td>1064</td>
<td>43</td>
</tr>
<tr>
<td>W Queens Road &amp; Delbrook Avenue</td>
<td>2456</td>
<td>63</td>
</tr>
<tr>
<td>Delbrook Avenue &amp; W Windsor Road</td>
<td>730</td>
<td>26</td>
</tr>
<tr>
<td>W Windsor Road &amp; Stanley Avenue</td>
<td>90</td>
<td>11</td>
</tr>
</tbody>
</table>

As shown in Table 3.4, the net change of the traffic from the forecasted opening day (2021) background traffic to the addition of the site generated traffic is modest with most intersections increasing by only 3-4%. The intersection of W Windsor Road/Stanley Avenue will experience a volume increase in the order of 13% and 10% for the AM and PM peak hours respectively solely due to the low traffic volumes currently at this intersection.

3.3.2 Total Traffic

Total traffic forecasts were prepared by superimposing net new site trips onto the forecasted 2021 and 2031 Background traffic volumes previously presented. The Total traffic volumes are illustrated in Exhibit 3.4 and 3.5. Since the purpose for the porte-cochere is directly for pick-up/drop-off trips, the site generated traffic volume for the respite care centre was distributed to both the driveway access into the parkade and the porte-cochere. Due to the marginal increase in site traffic generated by the respite care centre, for conservative measures, the trips generated by the respite care centre were added to both driveways.
3.4 Future Traffic Operations

3.4.1 Future Conditions Analysis Assumptions

The future traffic operations continue to utilize the same assumptions and parameters as the existing base Synchro models for both the AM and PM periods. Optimization of the signal timing cycle length and splits were also conducted as a mitigation measure.

New Cross-Section at West Queens Road/Stanley Avenue

The opening day horizon year is expected to have a different lane configuration at the intersection of West Queens Road/Stanley Avenue. As directed by the District of North Vancouver in the Engineering Development Servicing Review document (February 26, 2018), the applicant is required to design and construct West Queens Road from Stanley Avenue to the west side of the property and include the following elements (from the existing south curb northwards):

- 0.4m gutter width
- 3.3m eastbound travel lane
- 3m left-turn lane
- 3.3m westbound lane
- 1.8m bike lane
- 0.55m C5 curb and gutter
- 1.5m boulevard
- 2m unobstructed concrete sidewalk

From these criteria, a new eastbound left-turn lane is proposed for the intersection of West Queens Road/Stanley Avenue. Therefore, the future horizon years for both Background and Total traffic operations will include a dedicated eastbound left-turn lane. The District also requested that a feasibility study be included to recommend whether dedicated left-turn lanes are required along eastbound West Queens Road traffic to access both the site and Stanley Avenue. This will be discussed in Section 3.4.6.

3.4.2 Future 2021 Background Traffic Operations

The 2021 Background scenario results are summarized in Exhibit 3.6 and 3.7 for the AM and PM peak hours, respectively. Detailed 2021 Background Synchro analysis printouts are provided in Appendix B at the end of the report. Similar to the existing scenario, formula 16-8 from the HCM 2000 manual was referenced to correct the overall intersection v/c calculation.

For the intersection of Delbrook Avenue/West Queens Road, the signal timing plan was optimized for both the splits and the cycle length. For the AM peak hour, the cycle length and splits were optimized to 80 second cycle length. The PM peak hour was also optimized for both the splits and the cycle length which resulted in a 90 second cycle length. The results are still within acceptable thresholds with an overall v/c ratio of 0.84 and 0.79 in the AM and PM peak periods respectively. The LOS for both the AM and PM peak hours remained at LOS C. The westbound left-turn movement continues to experience queuing beyond
the available left-turn storage length of 20 metres. The AM period estimates a 95th percentile queue of 42 metres while the PM period projects a queue of 34 metres. In the AM period, the southbound left-turn anticipates queues extending past the storage length of 15 metres with a queue of 18 metres. The northbound left-turn experiences a slightly elevated v/c with 0.86 and LOS C. All other movements are operating within acceptable thresholds.

The remaining unsignalized intersections operate well within acceptable thresholds. The intersection at Delbrook Avenue/W Windsor Road is forecasted to operate at a LOS A with minimal delays and queues. Stanley Avenue/W Windsor Road operates with minimal delays and queues with an overall intersection operation of LOS A. The intersection at West Queens Road/Stanley Avenue is also operation at acceptable levels.

3.4.3 Future 2031 Background Traffic Operations

The 2031 Background scenario results are summarized in Exhibit 3.8 and 3.9 for the AM and PM peak hours, respectively. Detailed 2031 Background Synchro analysis printouts are provided in Appendix B at the end of the report. Similar to the Background 2021 scenario, formula 16-8 from the HCM 2000 manual was referenced to correct the overall intersection v/c calculation.

For the intersection of Delbrook Avenue/West Queens Road, the signal timing plan was optimized for both the splits and the cycle length. For the AM peak hour, the cycle length and splits was optimized to 90 second cycle length. The PM peak hour was also optimized for both the splits and the cycle length which resulted in a 90 second cycle length. The results show an overall v/c ratio of 0.89 in both the AM and PM peak periods. The LOS for both the AM and PM peak hours remained at LOS C. The westbound left-turn movement continues to experience queuing beyond the available left-turn storage length of 20 metres. The AM period estimates a 95th percentile queue of 60 metres while the PM period projects a queue of 44 metres. In the AM period, the southbound left-turn anticipates queues extending past the storage length of 15 metres with a queue of 23 metres. The northbound left-turn movement experiences a v/c of 0.87 and 0.95 for the AM and PM peak hours respectively. All other movements operate within acceptable thresholds.

The remaining unsignalized intersections operate well within acceptable thresholds. The intersection at Delbrook Avenue/W Windsor Road is forecasted to operate at a LOS A with minimal delays and queues. Stanley Avenue/W Windsor Road operates with minimal delays and queues with an overall intersection operation of LOS A. The intersection at West Queens Road/Stanley Avenue is also operation at acceptable levels. The southbound left-turn 95th percentile queue for West Queens Road/Stanley is roughly 1 vehicle length long for both the AM and PM peak at around 7-8 metres in length.

As presented above, the background traffic growth for the study area causes the intersection of Delbrook Avenue/West Queens to exceed overall intersection v/c threshold. As for individual movements, the background growth rate also pushes the v/c of the northbound left-turn movement past acceptable thresholds. It should be noted that the intersection exceeds acceptable thresholds solely due to the background growth rate that has been applied.
Opening Day (2021) Background AM Peak Hour Performance
Opening Day (2021) Background PM Peak Hour Performance
Opening Day + 10 Years (2031) Background AM Peak Hour Performance
3.4.4 Future 2021 Total Traffic Operations

The 2021 Total scenario results are summarized in Exhibit 3.10 and 3.11 for the AM and PM peak hours, respectively. Detailed 2031 Background Synchro analysis printouts are provided in Appendix B at the end of the report. Similar to the previous scenarios, formula 16-8 from the HCM 2000 manual was referenced to correct the overall intersection v/c calculation.

For the intersection of Delbrook Avenue/West Queens Road, the signal timing plan was optimized for both the splits and the cycle length. For the AM peak hour, the cycle length and splits was optimized to 80 second cycle length. The PM peak hour was also optimized for both the splits and the cycle length which resulted in a 90 second cycle length. The results show an overall v/c ratio of 0.85 and 0.81 in the AM and PM peak periods respectively. The LOS for both the AM and PM peak hours remained at LOS C. The westbound left-turn movement continues to experience queuing beyond the available left-turn storage length of 20 metres. The AM period estimates a 95th percentile queue of 46 metres while the PM period projects a queue of 40 metres. In the AM period, the southbound left-turn anticipates queues extending past the storage length of 15 metres with a queue of 19 metres. The northbound left-turn movement is reaching typical thresholds with a v/c of 0.88, but still within acceptable operations. All other movements operate within acceptable thresholds.

The remaining unsignalized intersections operate well within acceptable thresholds. The intersection at Delbrook Avenue/W Windsor Road is forecasted to operate at a LOS A with minimal delays and queues. Stanley Avenue/W Windsor Road operates with minimal delays and queues with an overall intersection operation of LOS A. The intersection at West Queens Road/Stanley Avenue is also operation at acceptable levels. The southbound left-turn 95th percentile queue for West Queens Road/Stanley is roughly just over 1 vehicle length long for both the AM and PM peak at around 8-9 metres in length.

For the driveway access from West Queens into the parkade, the access is operating at acceptable thresholds with minimal delays. The southbound left-turn/right-turn movement experience a v/c of 0.07 or lower and a LOS of C with queues of roughly 2 metres expected. These results are favourable and are expected to operate acceptably.

For the driveway access from Stanley Avenue, the porte-cochere is configured as a right-in/left-in for the northerly access with the southerly access configured as right-out only. These two access points of the porte-cochere are expected to operate acceptably as pick-up/drop-off trips are expected to be minimal for both the AM and PM peak hour. Conflicting traffic along Stanley Avenue is also expected to be minimal.

3.4.5 Future 2031 Total Traffic Operations

The 2031 Total scenario results are summarized in Exhibit 3.12 and 3.13 for the AM and PM peak hours, respectively. Detailed 2031 Background Synchro analysis printouts are provided in Appendix B at the end of the report.

For the intersection of Delbrook Avenue/West Queens Road, the signal timing plan was optimized for both the splits and the cycle length. For the AM peak hour, the cycle length and splits was optimized to 90
second cycle length. The PM peak hour was also optimized for both the splits and the cycle length which resulted in a 90 second cycle length. The results show an overall v/c ratio of 0.90 and 0.90 in the AM and PM peak periods respectively. The LOS for both the AM and PM peak hours remained at LOS C. The westbound left-turn movement continues to experience queuing beyond the available left-turn storage length of 20 metres. The AM period estimates a 95th percentile queue of 66 metres while the PM period projects a queue of 52 metres. In the AM period, the southbound left-turn anticipates queues extending past the storage length of 15 metres with a queue of 24 metres. The northbound left-turn movement exceeds operating thresholds for the PM period with a v/c of 0.97 and LOS D. All other movements operate within acceptable thresholds.

The remaining unsignalized intersections operate well within acceptable thresholds. The intersection at Delbrook Avenue/W Windsor Road is forecasted to operate at a LOS A with minimal delays and queues. Stanley Avenue/W Windsor Road operates with minimal delays and queues with an overall intersection operation of LOS A. The intersection at West Queens Road/Stanley Avenue is also operating at acceptable levels. The southbound left-turn 95th percentile queue for West Queens Road/Stanley is roughly just under 2 vehicle length long for the AM peak at around 13 metres in length while the PM peak is roughly 10 metres.

For the driveway access from West Queens into the parkade, the access is operating at acceptable thresholds with minimal delays. The southbound left-turn/right-turn movement experience a v/c of 0.08 or lower and a LOS of C with queues of roughly 2 metres expected. These results are favourable and are expected to operate acceptably.

For the driveway access from Stanley Avenue, the porte-cochere is configured as a right-in/left-in for the northerly access with the southerly access configured as right-out only. These two access points of the porte-cochere are expected to operate acceptably as pick-up/drop-off trips are expected to be minimal for both the AM and PM peak hour. Conflicting traffic along Stanley Avenue are also expected to be minimal.

As discussed in Section 3.4.3, the background growth rate applied to the network triggers the intersection operations to surpass acceptable thresholds. Therefore, it is expected that the background traffic growth to the network is the reason why the intersection along with individual movements exceed acceptable thresholds. Both the Delbrook Lands proposed development and the 600 West Queens development alone is not expected to trigger capacity issues.
Opening Day (2021) Total AM Peak Hour Performance

Exhibit 3.10
Opening Day + 10 Years (2031) Total AM Peak Hour Performance
Exhibit 3.13
Opening Day + 10 Years (2031) Total PM Peak Hour Performance
3.4.6 Feasibility of a Dedicated Left-Turn along West Queens Road

DNV requested for a feasibility test to determine whether dedicated left-turn lanes are required to allow eastbound West Queens Road traffic to access both the site and Stanley Avenue. Due to the modest eastbound left-turn movements from West Queens Road onto Stanley Avenue, a separated eastbound left-turn lane is not necessary for this intersection.

The Synchro models for both Background and Total scenarios have been designed to include an eastbound left-turn bay from West Queens to Stanley. The storage length assumed for the proposed left-turn was 15 metres. As a sensitivity test, two models with and without a dedicated left-turn was compared for the PM Total 2031 scenario. The model with a dedicated left-turn lane, all movements operate at favourable levels. The southbound movement experienced a v/c of 0.31 and a LOS of C. For the model without a dedicated left-turn lane, the southbound movement experiences a v/c of 0.31 and LOS D. The differences between the two are very marginal. Installing a left-turn bay at the intersection of West Queens/Stanley Avenue is not required for capacity reasons and not recommended if the unsignalized pedestrian crossing is retained. The same sensitivity test was conducted for a left-turn bay into the parkade access, due to the close proximity of the proposed eastbound left-turn at Stanley Avenue, the addition of another left-turn is not recommended. The forecasted traffic volume conducting a eastbound left-turn into the site is modest with volumes projected to be less than 25 vehicles per hour in the peak hours.

3.4.7 Summary of Traffic Impacts & Recommended Mitigations

Overall, the unsignalized intersections within the proposed study area are forecasted to be operating within acceptable thresholds. All movements are anticipated to be operating at LOS C or better with minimal delays and queues for both AM and PM peak hours. No immediate mitigation measures are considered necessary for the horizon years under study.

For the driveway access from West Queens Road into the parkade, this access is operating well with minimal delays. The southbound left-turn/right-turn movement experiences v/c of 0.08 or lower and LOS of C or better. Queues are estimated to be roughly 2 metres or less, which is well within the available storage length. These traffic operations are acceptable and no changes are necessary.

The porte-cochere accessed from Stanley Avenue is configured as a right-in/left-in for the northerly access with the southerly access as right-out only. It is forecasted that the operation of this porte-cochere is acceptable. The District requested that the southerly access be right-out only to minimize the level of impact of northbound travelling vehicles along Stanley Avenue. Since the exit driveway is in close proximity to the intersection at Stanley and West Queens, a right-out configuration eliminates queuing and conflicts. It is recommended that the southerly driveway include signage to enforce right-out only movements and no entry from Stanley Avenue.

For the intersection at Delbrook Avenue/West Queens Road, the signal timing plan was optimized for both the splits and cycle length for the AM and PM periods for both Background and Total scenarios for year 2021 and 2031. The Synchro results show that the critical movement includes the northbound left-turn movement and the westbound left-turn movement.
Both these critical movements have a protected-permitted configuration however; their queues do extend past the existing storage provided. A potential mitigation measure is to increase the green time for both the westbound left-turn and northbound left-turn movements. Similarly, the storage length for the westbound left-turn can be increased to at least 50 metres to accommodate for the future demand. The southbound left-turn lane exceeds the existing storage length in the Total 2031 scenario. A potential mitigation measure is to increase the storage length from 15 metres to 25 metres. It should be noted that the queue length required for the northbound left-turn in the PM 2031 horizon year extends beyond 128 metres. This queue extends past the intersection of 28th Street West/Westview Drive to the south. Similarly, the 95th percentile queues for the northbound through movement are expected to be longer than the road link to the south. A mitigation measure for this is to increase the green time for the northbound leg.
4. SITE PLAN DESIGN REVIEW

4.1 Site Access Design

Access to the site is provided at multiple locations. The underground parkade is accessed from West Queens Road, providing parking for residents, residential visitors, and for the respite care centre. Pick-up and drop-off activity for the care centre is accommodated from Stanley Rd via a porte-cochere. The porte-cochere area is designed to be able to accommodate passenger vehicle circulation while a TransLink HandyDart bus is parked.

A review of the driveways yielded the following:

- The exit of the porte-cochere is only 11 metres from the curb return on West Queens Road. The DNV Development Servicing Bylaw 5.14.3(b) states that driveways for Multifamily Developments should be placed “no closer than 15.0 m from the parcel corner nearest the adjoining road”, and the Transportation Association of Canada (TAC) Geometric Design Guide recommends 25 metres of space between driveways and the nearest cross road (for collector roads approaching a stop control at the cross road);
- Due to the steep grades experienced along Stanley Avenue and the proposed design of the porte-cochere, it has been determined that relocating for 15 metres of separation will not be feasible;
- A mitigation measure is to ensure that this southerly access remain as a right-out only and enforced through the use of signage including “no left-turns” or “no entry” signage;
- Ramp slopes entering the parkade are acceptable, neither being too steep nor employing large grade breaks.

4.2 Parking Supply

4.2.1 Vehicle Parking

The District of North Vancouver parking requirements were calculated based on DNV’s Zoning Bylaw (Bylaw 3210). Off-street parking requirements for the two land uses proposed have been calculated based on the most applicable land use type from the Zoning Bylaw; Table 4.1 summarizes the total off-street parking supply required for each of the land uses along with the proposed parking provision and variance.
Table 4.1: Vehicle Parking Supply Requirement & Provision

<table>
<thead>
<tr>
<th>LAND USE</th>
<th>SIZE</th>
<th>BYLAW RATE</th>
<th>BYLAW SUPPLY REQUIREMENT</th>
<th>PARKING PROVIDED</th>
<th>STALL VARIANCE FROM BYLAW</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multiple Unit Residential Building</td>
<td>80 units, 4,659 m²</td>
<td>1 per unit + 1 per 100m² GFA (up to 2 per unit) of which 0.25 per unit visitor</td>
<td>127, of which 20 visitor</td>
<td>70</td>
<td>-57</td>
</tr>
<tr>
<td>Multi-Level Care Facility</td>
<td>18 beds</td>
<td>1 per 2 beds</td>
<td>9</td>
<td>12</td>
<td>+3</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>136</td>
<td>82</td>
<td>-54</td>
</tr>
</tbody>
</table>

Note: "-" means a parking shortage from the District’s Bylaw; "+" means a parking surplus from the District’s Bylaw requirements.

Catalyst plans to provide a total of 82 parking spaces in the underground parkade with 2 additional at-grade spaces accessed from the porte-cochere, intended for short-term parking. A total of 16 spaces out of the 82 are allocated as small car stalls, which translates to about 20% of the total parking provision, falling below the bylaw maximum small car provision of 35%.

**Disabled Parking**

The District’s Accessible Design Policy for Multi-Family Housing governs the provision of disabled stalls for the residential component of the site. Table 4.2 below provided the District’s requirement, which is based on the total number of residential stalls provided on the site.

Table 4.2: District of North Vancouver Residential Disabled Stall Requirements

<table>
<thead>
<tr>
<th>WHERE THE TOTAL NUMBER OF OVERALL REQUIRED PARKING SPACES (UNDER THE ZONING BYLAW) IS:</th>
<th>THEN THE TOTAL NUMBER OF ACCESSIBLE PARKING SPACES TO BE PROVIDED WILL BE:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 - 25</td>
<td>2</td>
</tr>
<tr>
<td>26 - 50</td>
<td>4</td>
</tr>
<tr>
<td>52 - 100</td>
<td>8</td>
</tr>
<tr>
<td>101 - 150</td>
<td>10</td>
</tr>
<tr>
<td>151 - 200</td>
<td>12</td>
</tr>
<tr>
<td>201 - 250</td>
<td>14</td>
</tr>
<tr>
<td>251 - 300</td>
<td>16</td>
</tr>
<tr>
<td>301 - 350</td>
<td>18</td>
</tr>
<tr>
<td>351 - 400</td>
<td>20</td>
</tr>
</tbody>
</table>

Based on the 70 provided residential parking stalls, the total number of parking stalls in the left hand column would be 52-100 stalls, which will require 6 disabled stalls.

For the non-residential uses, the District’s Zoning Bylaw Part 10 would govern the required provision of disabled stalls. The Bylaw requires 1 disabled space for every 100 parking spaces or part thereof provided, if more than 22 stalls are required. As the total number of stalls proposed to be provided for
the respite care centre is fewer than 22 stalls, no disabled stall would be required within the public parking supply for the site.

With the current site plan, there are 5 disabled stalls provided in the underground parkade, four of which are in the secure residential parking area, with the remaining stall in the public parking area that contains stalls both for residential visitors and for the respite care centre. Two additional handicap stalls are located at-grade next to the porte-cochere, bringing the total provision to 7 and meeting the accessible design policy.

As shown in Table 3.1, the residential parking variance proposed is 57 stalls (45% reduction) from the Bylaw requirements. Conversely, 3 extra stalls (33% addition) are provided for the respite care centre at the request of the future occupant, CareBC. The large discrepancy from the residential bylaw rates arises from the lack of a bylaw rate for affordable rental housing. Rationale for this overall reduced parking supply is provided in the subsequent sections.

4.2.2 Parking Rates for Affordable Multifamily Residential Rental Buildings

The UNV Zoning bylaw provides only one parking rate for all types of multifamily housing, which is under the classification, “Multiple Unit Residential Building”. The requirement states “1 space per unit plus 1 space per 100m2 of gross residential floor area (to a maximum of 2 spaces per unit inclusive of 0.25 per dwelling unit designated for visitor parking)”. With the proposed size of the residential units totaling 4,659 m2, this leads to a requirement of 1.59 stalls/unit, inclusive of visitor parking. Catalyst is proposing a rate of 0.88 stalls per unit, as the residential portion of the development is solely affordable non-market rental housing.

Other communities that have studied auto ownership associated with non-market rental housing have found that non-market rental units have lower auto ownership than market rental units, which in turn have lower auto ownership levels than strata units. Figure 4.1 below illustrates the auto ownership levels of residents of approximately 4,000 apartment buildings in a large study conducted on behalf of the City of Toronto, which clearly demonstrates the relationship. It should be noted that Figure 1.4 shows the culmination of all various housing types which include the downtown core, close to subway or frequent transit networks as well as areas outside of the City center. While the proposed development site is not within a frequent transit network (FTN), the purpose of this Toronto study is to show the relationship between rental and strata residential units.
Non-market rental or “targeted” housing units as indicated in the graph were found to have auto ownership levels approximately 30% to 60% lower than market units; the smaller units in particular were found to have 60% fewer vehicles. Therefore, the forecasted residential parking demand for the development is anticipated to be lower than the District’s parking requirement by approximately 30% to 60%. It is also important to note that of the proposed non-market rental apartments, over 70% are expected to be studio of 1 bedroom units. As presented, the smaller the number of bedrooms per unit, the lower the parking demand will be. This indicates that the parking demand for this development should be lower.

In addition to a literature review of parking rates, Bunt completed parking supply and demand surveys at 3 non-market rental developments on the North Shore to gain an understanding of current parking rates. The three sites surveyed were:

-  St. Andrews Place: 95 St. Andrew Ave, North Vancouver
-  Klahanie Park Lodge: 380 Klahanie Court, West Vancouver
-  Creekside Housing Coop: 44-710 W. 15th Street, North Vancouver
The on-site parking and the on-street parking on the block faces fronting the sites were surveyed on Thursday, October 5th, 2017 every 30 minutes between 8:00pm to 11:00pm to capture the weeknight peak residential parking demand. This is generally the peak parking period for residential developments. Table 4.3 and 4.4 below shows the observed parking supply and demand at each location.

Table 4.3: Observed Parking Supply at North Shore Non-Market Rental Buildings

<table>
<thead>
<tr>
<th>LOCATION</th>
<th>UNITS</th>
<th>ON SITE PARKING SUPPLY</th>
<th>ON SITE SUPPLY PER UNIT</th>
</tr>
</thead>
<tbody>
<tr>
<td>St. Andrews Place</td>
<td>15</td>
<td>18</td>
<td>1.20</td>
</tr>
<tr>
<td>Klahanie Park Lodge</td>
<td>88</td>
<td>63</td>
<td>0.72</td>
</tr>
<tr>
<td>Creekside Coop</td>
<td>43</td>
<td>65</td>
<td>1.51</td>
</tr>
<tr>
<td>WEIGHTED AVERAGE</td>
<td></td>
<td></td>
<td>1.00</td>
</tr>
</tbody>
</table>

Table 4.4: Observed Parking Demand at North Shore Non-Market Rental Buildings

<table>
<thead>
<tr>
<th>LOCATION</th>
<th>UNITS</th>
<th>ON SITE PARKING DEMAND</th>
<th>ON SITE DEMAND PER UNIT</th>
<th>ON SITE + NEARBY ON STREET PARKING DEMAND</th>
<th>ON SITE + NEARBY ON STREET DEMAND PER UNIT</th>
</tr>
</thead>
<tbody>
<tr>
<td>St. Andrews Place</td>
<td>15</td>
<td>9</td>
<td>0.60</td>
<td>14</td>
<td>0.93</td>
</tr>
<tr>
<td>Klahanie Park Lodge</td>
<td>88</td>
<td>44</td>
<td>0.50</td>
<td>48</td>
<td>0.55</td>
</tr>
<tr>
<td>Creekside Coop</td>
<td>43</td>
<td>46</td>
<td>1.07</td>
<td>62</td>
<td>1.44</td>
</tr>
<tr>
<td>WEIGHTED AVERAGE</td>
<td></td>
<td></td>
<td>0.68</td>
<td></td>
<td>0.85</td>
</tr>
</tbody>
</table>

As Table 4.4 indicates, a weighted average of on-site peak demand of 0.68 stalls/unit (including visitor parking) was observed for the three sites combined. If the nearby on-street parking demand (one side of the street directly fronting the site) was assumed to be associated with the development, the parking demand rate increases to 0.85 stalls/unit. However, it is unlikely all on-street parking fronting the site is associated with the building. Findings from the Metro Vancouver Apartment Parking Study (MVAPS) indicate that about 11% of households within multi-family developments park a vehicle on-street. If the on-site parking demand rate was increased by 11% to account for on-street parking rather than the street parking observed, the rate would be 0.75 stalls/unit.

As the proposed residential parking supply exceeds all metrics calculated from similar nearby buildings, and as the proposed supply rate falls within the expected 30-60% reduction when compared to the strata based bylaw, the proposed 82 parking stalls provided should be sufficient to accommodate the demand.
4.2.3 Parking Rates for Residential Visitor

The development is proposing to provide 9 visitor parking stalls for 80 residential units. Overall, this equates to a rate of 0.11 stalls/unit, while the DNV bylaw requires 0.25 stalls/unit.

The MVAPS surveyed residential visitor parking demand at three apartment buildings and compared visitor parking supply rates for different municipalities. Across the three surveyed sites, the peak visitor parking demand rate observed was 0.06 stalls/unit. Using this data, as well as surveys conducted by Bunt around Metro Vancouver, it is found that a supply rate of 0.10 visitor stalls/unit is acceptable for the vast majority of buildings. Furthermore, in one of Bunt’s studies in Guildford Town Centre, over 50% of the users in designated visitor parking stalls were residents using the visitor parking for short-term convenience parking. It is our view that this may be a common occurrence, leading to higher than required visitor parking rates when such rates are based solely on direct observation.

In general, the findings from previous visitor parking studies completed by Bunt and MVAPS indicate the proposed visitor supply rate of 0.11 stalls/unit is adequate.

4.2.4 Parking Supply Recommendations

In summary, Table 4.5 below utilizes the observed weighted average for the non-market rental housing in the North Shore as extracted from Table 3.4. Utilizing the weighted average of the on-site parking demand and nearby on-street parking demand, a proposed residential parking rate can be justified. Similarly, utilizing the Metro Vancouver Apartment Parking Study for visitor parking demand rates, a proposed visitor parking demand of 0.1 stalls/unit is used. From the weighted average of 0.85 stalls/unit from Table 3.4, a portion equating to 0.1 stalls/unit will be allocated for residential visitor parking with the remaining 0.75 stalls/unit designated for residential parking. The proposed parking provision and recommended parking rates are presented below.

Table 4.5: Vehicle Parking Supply Requirement & Provision

<table>
<thead>
<tr>
<th>LAND USE</th>
<th>DENSITY</th>
<th>BYLAW SUPPLY REQUIREMENT</th>
<th>BUNT PROPOSED PARKING RATE</th>
<th>BUNT PROPOSED PROVISION</th>
<th>PROJECT PROPOSED PARKING</th>
<th>STALL VARIANCE FROM BYLAW</th>
<th>STALL VARIANCE FROM BUNT RATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rental Residential Parking</td>
<td>80 units, 4659 m²</td>
<td>10/</td>
<td>0.15</td>
<td>0</td>
<td>0</td>
<td>-40</td>
<td>+1</td>
</tr>
<tr>
<td>Residential Visitor</td>
<td>80 units, 4659 m²</td>
<td>20</td>
<td>0.11</td>
<td>8</td>
<td>9</td>
<td>-11</td>
<td>+1</td>
</tr>
<tr>
<td>Respite Care Centre</td>
<td>18 beds</td>
<td>9</td>
<td>12/</td>
<td>17</td>
<td>17</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>TOTAL</td>
<td>136</td>
<td>80</td>
<td>82</td>
<td>-54 (-40%)</td>
<td>+2 (+2%)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1 From Metro Vancouver Apartment Parking Study, residential visitor parking demand rates
2 Under the direction from CareBC, the adult respite care centre will require 12 parking spaces for staff and visitor parking
4.2.5 Bicycle Parking

DNV has requested for the provision of a minimum of two secure bicycle storage (Class 1) with level 1 (110v) electric outlets for electric bicycle charge for each residential unit. Providing one Class 1 stall per unit is considered the minimum acceptable rate based on the bylaws of other municipalities in the Lower Mainland and based on demand seen in other residential buildings. The development proposes to supply 1 stall/studio or 1 bedroom and 2 stalls/2 bedroom or 3 bedroom units. A total of 106 secured bicycle storage lockers will be provided. These will be located in a bike room accessible from the secure area of the parkade. As such, the proposed bicycle provision is consistent with comparables from other municipalities within the Lower Mainland.

The Class 2 (short term) parking will be provided in publically accessible areas next to the entrances of both the residential lobby and the care centre lobby. Per the DNV bylaw, 0.2 Class 2 stalls are required per residential unit, amounting to 16 spaces. As each of the two bike racks provided will be able to accommodate 8 bicycles, this requirement is met. These Class 2 spaces should be covered, well-lit and in a visible location with at least one level 1 electric charge station to accommodate future expansion.

4.3 Parking Layout & On-Site Vehicle Circulation

A review of the parking layout and circulation confirms that both the parkade and the porte-cochere allow for adequate operations of passenger vehicles. Exhibit 4.1 shows a passenger vehicle successfully using the porte-cochere and two cars simultaneously entering and exiting the parkade ramp. Exhibits 4.2 and 4.3 confirm adequate operations within the parkade. The tightest turn, entering left into the secure residential parking, is still able to accommodate one large and one small car turning simultaneously. All stalls within the parade are accessible to the type of car they are designed for.

4.4 Service Vehicle Operations

4.4.1 Loading and Service Vehicle

As the proposed development includes a respite care centre, a dedicated loading space is required per the DNV bylaw. It is preferred that a dedicated area be allocated for loading/unloading adjacent to the shipping and receiving doors or the main entry doors of the building. The proposed site plan currently does not have a dedicated loading bay. However, the space allocated for the van parking can be utilized as a time-restricted loading space. DNV expressed that a TAC Light Single-Unit (LSU) truck be manoeuvred on-site as the design loading vehicle. Exhibit 4.4 showcases the manoeuvrability of a LSU truck loading at the site. As shown, the access into the loading bay/van parking is feasible and does not obstruct vehicles circulating through the porte-cochere. It is recommended that the loading space for the respite care centre be shared with the van parking by enforcing a time-restricted loading application.

As it is anticipated that elderly or disabled persons may visit the respite care centre, the porte-cochere was designed to accommodate a TransLink HandyDart bus, which will operate as a private shuttle service for patients. Exhibit 4.5 shows a HandyDart successfully navigating into the porte-cochere, accessing the van parking stall for longer pick-up/drop-off, and exiting back onto West Queens Road.
4.4.2 Waste Management

The garbage and recycling will be conducted using a private waste management company. The garbage/recycling will be removed off-site which would eliminate the need for a DNV commercial garbage truck from having to enter the site. The garbage and recycling room is located in the public area of the underground parkade, immediately to the east of the entrance ramp. Exhibit 4.6 shows a typical jitney vehicle successfully entering the parkade, loading next to the garbage/recycling room, and exiting.
Exhibit: 4.1
P-TAC Level 1 - AutoTURN Analysis

600 West Queens Rd
04-18-0062 June 2018 Scale 1:500 on Letter Prepared by NM

[Based on Drawing 425 170316 SITE PLAN from Integra Architecture dated May 16, 2018]

[Issued for Discussion; not for Construction]
Based on Drawing A-1.000 SITE PLAN SITE PLAN from Ineagra Architecture dated May 16, 2018

TransLink HandyDart

<table>
<thead>
<tr>
<th>Metric</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Width</td>
<td>4.74m</td>
</tr>
<tr>
<td>Length</td>
<td>3.0m</td>
</tr>
</tbody>
</table>

Center of vehicle path
Extents of vehicle path
0.3m vehicle clearance

Exhibit 4.5
HandyDart - AutoTURN Analysis

04-18-0062 June 2018
600 West Queens Rd
Scale 1:500 on Letter Prepared by NM
[Based on Drawing Parking Level Plan from Integra Architecture dated May 16, 2018]

Jitney Truck - Garbage Collection - AutoTURN Analysis

Exhibit 4.6

600 West Queens Rd
04-18-0062 June 2018 Scale 1:250 on Letter Prepared by NM
4.5 Sightline Review

A sight distance assessment was conducted for the two site access driveways that permit exiting traffic, as well as for the redesigned intersection of Stanley Avenue/West Queens Road.

The Transportation Association of Canada Geometric Design Guide for Canadian Roads (TAC Manual – 2017) procedures and specifications on sight distance were used to establish appropriate sight distance requirements at the access location. For this access review, two types of sight distances were investigated: Stopping Sight Distance (SSD), and Intersection Site Distance (ISD). The SSD is the minimum required sight distance per the TAC manual.

The SSD is the distance required for a vehicle travelling at a certain speed to perceive, react, and brake when another vehicle comes into view. The required SSD is based on the grade of the road, deceleration rate, speed of the vehicle, and perception time. It is imperative that SSD be met for safety reasons.

The ISD is the sight distance available for the driver (from the driveway or minor road) accessing the main road. This sight distance determines whether the vehicle from the driveway will have adequate sight distance for them to complete their permitted manoeuvres without significantly affecting vehicles on the main road.

As West Queens Road is an arterial road without nearby traffic control, we have tested both the SSD and ISD for Stanley/West Queens and for the parkade entrance at the signed speed limit of 50km/h. While Stanley Ave also has a speed limit of 50 km/h, it is likely that vehicles will be travelling at slower speeds at the porte-cochere exit due to the proximity of the stop control at W Queen Rd just to the south. As such, we have tested the porte-cochere exit SSD and ISD at both 30km/h and 50km/h.

Travelling eastbound from Delbrook Avenue, West Queens Road ascends at 5.3% grade until Stanley Ave. Continuing past Stanley Ave, the road steepens to a 7.2% ascent. Stanley Avenue approaches Queens Road at 6.3% downwards.

Exhibits 4.6 to 4.13 illustrate the required sight distances for each scenario. A review of each intersection tested is provided below.

**SSD for Parkade Driveway**

Exhibit 4.6 shows that the minimum stopping sight distance required at the parkade driveway differs by direction due to road grade. The sight triangles in both directions pass over a section of boulevard – landscaping in these areas should not exceed 0.6m in height, and street trees in the triangle should be limbed for the first 3m, per DNV specifications. If the sight triangles are kept free of obstructions in the public realm, the 60-70m sight distances can be met.

**SSD for Stanley Avenue @ West Queens Road**

Exhibit 4.7 also shows that the minimum stopping sight distance required to turn onto West Queens Road from Stanley Avenue differs by direction due to road grade. While the eastbound 60m sight distance is easily met, westbound vehicles are obscured by parked cars on the north side of West Queens Road. In
practice, drivers will likely edge the front of their car forward into the bike lane until they have sufficient 75m sight distance to proceed; this is considered an acceptable maneuver. However, sight distance at the intersection would benefit from extending the existing no stopping restriction on the north side of West Queens Road to the east.

**SSD for Porte-Cochere Exit**

*Exhibit 4.8* shows the minimum sight triangles for the porte-cochere exit passing over landscaped boulevard plots. At the parkade driveway, landscaping in these areas should not exceed 0.6m in height, and street trees should be limbed for the first 3m. 30 km/h is considered a reasonable operating speed for the location, as southbound cars on Stanley Ave will be decelerating to the stop control 10m to the south of the driveway, and northbound cars turning from West Queens Road will not have had sufficient space to accelerate appreciably before reaching the porte-cochere driveway. If the public realm is kept clear of obstructions, the 30 km/h sight distance can be met.

*Exhibit 4.9* shows that the 50 km/h stopping sight distance for this location is impossible to meet – sightlines to the south are impeded by private property lines and the porte-cochere columns, while sightlines to the north are still possible with correct boulevard maintenance. This is not considered an issue, as vehicles are not expected to be able to travel at 50 km/h past the porte-cochere exit.

**ISD Review**

*Exhibits 4.10 and 4.11* shows that at the parkade driveway and at the intersection of Stanley Avenue/West Queens Road, the ISD can be similarly met according to the landscaping qualifications provided in the previous paragraphs, assuming drivers make use of the bike lane to lengthen their eastward sightlines. The distances are shorter for right-turn maneuvers based on the TAC guidelines, as drivers have been shown to accept a smaller gap in traffic to complete a right-turn. However, at the porte-cochere exit, even the 30 km/h ISD is not achievable due to buildings and private property located within the sight triangles, shown in *Exhibits 4.12 and 4.13*. This is not expected to be an issue, though. Southbound cars are already slowing as they approach the stop sign, so entering the traffic stream “without significantly affecting vehicles on the main road” is no longer a necessary target. Similarly, northbound vehicles already must adjust their behaviour to make the turn onto Stanley Ave, so there is no “unaffected” traffic stream to avoid perturbing. Visibility obstructions from southerly driveway reinforce the “no left-turn” restriction into the access from Stanley Avenue. Visibility would be limited for oncoming vehicles if one car is at southbound approach.
Exhibit 4.7
50 km/h SSD for Parkade Driveway

04-18-0062 June 2018
Scale 1:750 on Letter Prepared by NM
Exhibit 4.8
50 km/h SSD for Stanley Ave @ W Queens Rd

Based on Drawing A-1.000 SITE PLAN_1SSITE PLAN from Inegra Architecture dated May 16, 2018

[Issued for Discussion; not for Construction]
Exhibit 4.11

50 km/h ISD for Parkade Driveway

[Based on Drawing A-1.000 SITE PLAN_1SITE PLAN from Inegra Architecture dated May 16, 2018]

[Issued for Discussion; not for Construction]
Exhibit 4.12

50 km/h ISD for Stanley Ave @ W Queens Rd

Based on Drawing A-1.000 SITE PLAN_ISSITE PLAN from Inegra Architecture dated May 16, 2018

Issued for Discussion; not for Construction
Exhibit 4.13
30 km/h ISD for Porte-Cochere Exit

[Based on Drawing A-1000 SITE PLAN_1SSITE PLAN from Inegra Architecture dated May 16, 2018]

[Issued for Discussion; not for Construction]
Exhibit 4.14
50 km/h ISD for Porte-Cochere Exit
5. TDM & ACTIVE MODES

5.1 Definition

Transportation Demand Management (TDM) is defined as the “application of strategies and policies to reduce travel demand (specifically that of single-occupancy private vehicles), or to redistribute this demand in space or in time”. A successful TDM program can influence travel behaviour away from Single Occupant Vehicle (SOV) travel during peak periods towards more sustainable modes such as High Occupancy Vehicle (HOV) travel, transit, cycling or walking. The responsibility for implementation of TDM measures can range across many groups, including regional and municipal governments, transit agencies, private developers, residents/resident associations or employers.

5.2 Potential Measures

Tables 5.1 and 5.2 below summarizes possible suites of measures for residential and non-residential land uses. The strategy is identified in the left column, and the measure in the centre column. The right column on the table shows which parties would be responsible for administering and managing the each initiative. While this is a comprehensive listing of all possible measures, the site developer’s potential role in TDM for the site would be limited to those items identified as “Site Developer” on the far right of this table.

Table 5.1: Potential TDM Strategies Summary Table: Residential

<table>
<thead>
<tr>
<th>STRATEGY</th>
<th>MEASURE</th>
<th>RESPONSIBILITY FOR IMPLEMENTATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>TDM Site Coordinator &amp; Monitoring Program</td>
<td>Appoint a Site TDM Coordinator, responsible for developing, implementing and maintaining TDM program</td>
<td>Site Developer/Operator</td>
</tr>
<tr>
<td></td>
<td>Establish mode split targets, monitoring methods and surveys and reporting</td>
<td>Site Operator/Strata</td>
</tr>
<tr>
<td>Marketing &amp; Promotion</td>
<td>Prepare marketing materials to attract residents who want a car free lifestyle</td>
<td>Site Developer</td>
</tr>
<tr>
<td></td>
<td>Provide a Welcome Brochure, with an information package on transportation alternatives, that is issued to all new residents and posted in common areas</td>
<td>Site Developer/Site Operator</td>
</tr>
<tr>
<td>Cycling Infrastructure Improvements</td>
<td>Provide cycling facilities leading to, adjacent to and on the site</td>
<td>Site Developer, Municipality</td>
</tr>
<tr>
<td></td>
<td>Provide safe, marked cycling crossings at intersections, with push button activation at signals</td>
<td>Municipality</td>
</tr>
<tr>
<td>Cycling Access</td>
<td>Provide a shared bicycle program</td>
<td>Site Developer/Operator</td>
</tr>
<tr>
<td>Cycling Amenities</td>
<td>Provide bicycle maps and way finding signage through site</td>
<td>Site Developer</td>
</tr>
<tr>
<td></td>
<td>Provide a bicycle repair station</td>
<td>Site Developer</td>
</tr>
<tr>
<td>End of Trip Cycling Facilities</td>
<td>Provide long term secure and convenient bicycle storage facilities for residents</td>
<td>Site Developer</td>
</tr>
<tr>
<td></td>
<td>Provide a common maintenance area for bicycle maintenance serving residents</td>
<td>Site Developer</td>
</tr>
<tr>
<td></td>
<td>Provide short term bicycle rack parking at all building entrances (well lit and protected, within view of lobbies for residential)</td>
<td>Site Developer</td>
</tr>
</tbody>
</table>

1 http://ops.fhwa.dot.gov/tdm/index.htm FHWA Travel Demand Management home page
<table>
<thead>
<tr>
<th>STRATEGY</th>
<th>MEASURE</th>
<th>RESPONSIBILITY FOR IMPLEMENTATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pedestrian Infrastructure</td>
<td>Provide an off-street pathway system to minimize walking distances; provide sidewalks on both sides of all site and site fronting streets with boulevard improvements to buffer pedestrians from moving traffic</td>
<td>Site Developer</td>
</tr>
<tr>
<td>Improvements</td>
<td>Provide new protected pedestrian crossing opportunities and pushbuttons</td>
<td>Site Developer</td>
</tr>
<tr>
<td>Pedestrian Amenities</td>
<td>Provide amenities such as benches, fountains, etc. on the site and along the site frontages</td>
<td>Site Developer/Municipality</td>
</tr>
<tr>
<td>Rideshare Programs</td>
<td>Support resident use of available regional ride share programs</td>
<td>Site Developer/Operator, partnering with regional programs</td>
</tr>
<tr>
<td>Car Share</td>
<td>Provide Car Share vehicles and stalls for residents</td>
<td>Site Developer</td>
</tr>
<tr>
<td></td>
<td>Provide Car Share stalls in publicly accessible area for site visitors and the neighbourhood</td>
<td>Site Developer</td>
</tr>
<tr>
<td></td>
<td>Provide initial Car Share membership fee for each unit</td>
<td>Site Developer</td>
</tr>
<tr>
<td>Transit</td>
<td>Provide funding for improvements to adjacent bus stops, such as benches and shelters at existing bus stops adjacent to site</td>
<td>Site Developer</td>
</tr>
<tr>
<td></td>
<td>Provide subsidized transit passes to new residents upon move-in</td>
<td>Site Developer/Operator</td>
</tr>
<tr>
<td></td>
<td>Provide a private shuttle service for residents to nearby key destinations</td>
<td>Site Developer/Operator</td>
</tr>
<tr>
<td>Parking Management</td>
<td>Require residents to pay for parking (note, this is only feasible for rental units and should be combined with measure below or it won’t be that effective)</td>
<td>Municipality</td>
</tr>
<tr>
<td></td>
<td>Install pay parking on-street or in public parking lots to discourage off-site parking to avoid on-site parking fees</td>
<td>Site Developer</td>
</tr>
<tr>
<td></td>
<td>Restrict parking supply: provide lower than bylaw supply rates</td>
<td>Site Developer</td>
</tr>
<tr>
<td></td>
<td>Unbundle Parking with Parking Rental Program</td>
<td>Site Developer</td>
</tr>
</tbody>
</table>

5.3 **Recommended TDM Measures for Site**

The following is Bunt’s recommended TDM plan to reduce auto ownership levels at the proposed site.

**Marketing Materials & Transportation Information**

Travel patterns are most pliable when residents move from one location to another. Therefore, site developers/rental companies can play a significant role in changing people’s travel behaviours, through marketing materials to potential buyers/renters and through provision of information packages to new residents which stress the attractiveness and ease of alternative travel modes. In marketing materials to potential residents, clear and simple messages such as cost savings and health benefits (within the context of life style choice and urban living), along with practical information about local transit services, walking and cycle routes to key locations, carpooling and car-sharing services, would help attract residents who want to live a car-free lifestyle.
For residents who are moving in, a Transportation Information Package should be provided on move-in day. The package should include:

- A map showing amenities and shopping opportunities within a typical walking catchment of 800m;
- A map showing local cycling and transit routes with key destinations and travel times by different modes;
- Information about bicycle safety and local bicycle shops and repair facilities;
- Information pertaining to on-site car share provisions, car share membership sign up and procedures;
- Information pertaining to available bicycle and vehicle parking;
- Information on regional ride-share organizations, such as Evo Car Share, Modo; and,
- A list of websites and apps that can aid in the use of alternative transportation such as transit apps.

**Pedestrian Improvements**

Walking is a realistic form of travel for most people, especially over short distances with many people willing to walk at least 5-minutes or 400m for short trips.

The distance that a person is willing to walk is often related to the purpose of the journey, but is also influenced by factors such as urban form, traffic, safety, personal fitness, car ownership, and parking availability.

A person’s willingness to cycle is based on a number of lifestyle factors, including health benefits, cost savings (compared to automobile use and parking) and convenience. Infrastructure also plays an important role through the safety of routes, presence or absence of steep gradients, availability of cycle storage facilities, etc. Cycling is a realistic transportation option for most people over short to medium distances, i.e. up to 8 kilometres, or a 30-35 minute cycle.

Catalyst has committed to providing new pedestrian and cyclist facilities on and around the site. These new facilities will improve the pedestrian and cyclist experience, and can encourage and support the use of these sustainable modes of transportation. These improvements also include the provision of improved landscaping/streetscape, lighting and seating areas for pedestrians.

**Parking Management**

A parking strategy that may result in a more realistic parking demand is by implementing unbundled parking. This strategy rents/sells parking spaces separately rather than automatically included in the rent or purchase price of the residential unit. Owners/tenants will now have the ability to purchase/rent only as much parking as they need. This provides potential owners the incentive to save money by not having to automatically pay for their parking stall. Catalyst proposes to implement a monthly parking rental for all residents to reduce the total amount of parking demand for the building.
**Car Share Stall**

Car-sharing services have developed significantly in the last 10-15 years (and increasingly in the past 2-3 years in Vancouver). These services allow people to have short term access to a shared vehicle located on or close to their site, without having to buy or maintain their own vehicle. Members usually pay a small monthly administration fee to cover some of the fixed costs of the car and then a “pay as you go” approach is adopted as members pay by the hour and mile when they use a vehicle. Each shared car has been shown to remove between 3 – 11 private vehicles from the street system, and number of vehicles owned per household was shown to drop when a car sharing membership was acquired.

There are two types of car sharing services – “A to B” type services such as Car2Go and Evo, and “A to B to A” type services such as Modo and Zipcar. In the former case, car share members can use vehicles from one origin to one destination and do not have to return these vehicles to the trip origin. The car share company repositions the cars regularly to respond to origin demand patterns. In the latter case, the vehicle’s “home” position remains constant, and car share members must return the vehicles to their origin when they have finished using it. The two car share models are directed towards different users, and can complement each other when used at the same site.

Catalyst is proposing to partner with a car share program to provide 1 dedicated car share stall to service the building. It is expected that a car share program will help support the proposed parking supply rates for the site and potentially reduce parking demand.

---

6. CONCLUSIONS & RECOMMENDATIONS

6.1 Conclusions

6.1.1 Proposed Development

- Catalyst Community Development Society is proposing to construct a 5-storey mixed-use development consisting of 80 units of affordable non-market rental housing and 17,887 square feet of ground floor respite adult care at 600 West Queens Road in the District of North Vancouver.

6.1.2 Existing Conditions

- The site is currently occupied by a surface parking lot that used to service the previous Delbrook Community Centre that has since been relocated and combined with the William Griffin Community Centre to the west of the site;

- The current cycling and pedestrian facilities are available but are lacking with no formal protected cycling facilities and only some designated on-street cycling routes. Pedestrian crosswalks are present at the intersection of Delbrooke/W Windsor, Stanley/W Queens and Delbrook/W Queens;

- The site is served by two different bus routes, Route 232 and 246 which are within 200 metres from the site with headways ranging between 15 and 30 minutes during different times of the day;

- ICBC Crash Collision Data was analyzed for trends or abnormalities that could have a public safety impact; as expected, the signalized intersection of Delbrook/W Queens has the largest number of collisions. Generally, the 3 non-signalized intersections in the study area make up less than a quarter of the total accidents that occurred at the Delbrook/W Queens intersection. Collisions that were reported was predominantly due to rear-end collisions.

- Existing operations at Delbrook/W Queens have the heaviest traffic in the eastbound, westbound and northbound directions. The overall v/c ratio is 0.89 with a LOS of C for both AM and PM peak hours. The westbound left-turn queue length extends past the storage with queues of 40 metres; and,

- The unsignalized intersections operate well within acceptable thresholds with LOS A and minimal delays and queues.

6.1.3 Site Trip Generation

- The District of North Vancouver requested to combine the development at 600 W Queens with the original Delbrook Lands Transportation Study. The combined land use includes the proposed site and the Delbrook Lands Study which includes 18,731 square feet of day care space (enough for 37 children) and a parkland of 3.87 acres;
• The proposed site generated trips for the Catalyst development during the AM and PM peak hour is forecasted to be 38 trips (14 inbound and 24 outbound) and 45 trips (25 inbound and 20 outbound) respectively. This translates to roughly 1 additional trip every two minutes in the AM and PM peak hours.

• The total AM and PM trip generation including the Delbrook Lands Study during the AM and PM peak hour is forecasted to be 85 trips and 89 trips respectively. This translates to about 1 additional trip every 40 seconds.

6.1.4 Traffic Operations

• Under direction from DNV, a new eastbound left-turn lane is proposed for the intersection of West Queens Road/Stanley Avenue therefore, the future horizon years for both Background and Total traffic operations will include a dedicated eastbound left-turn lane.

• Future 2021 Background traffic operations for the intersection of Delbrook Avenue/West Queens Road were optimized both the splits and cycle length to a cycle length of 80 seconds. The overall intersection is expected to operate at v/c of 0.84 and 0.79 in the AM and PM peak periods respectively. The westbound left-turn queue experiences queuing beyond the 20 metre storage length with queues of 42 metres in the AM and 34 metres in the PM period. All unsignalized intersections operate well within acceptable thresholds.

• Future 2031 Background traffic operations for the intersection of Delbrook Avenue/West Queens Road were optimized for both the splits and cycle length. AM peak hour optimized for 90 seconds and PM was also optimized for 90 second cycle length. The results of the optimization are expected to operate at a v/c of 0.89 in both the AM and PM peak periods. The westbound left-turn queue extends beyond the 20 metre storage length with 60 metre queues for the AM and 44 metre queues in the PM. The northbound left-turn experiences a v/c of 0.87 and 0.95 for the AM and PM peak hours respectively. The unsignalized intersections operate well within acceptable thresholds.

• The background traffic growth for the study area causes the intersection of Delbrook Avenue/West Queens Road to exceed overall intersection v/c thresholds. As for individual movements, the background growth rate also pushes the v/c of the northbound left-turn movement past acceptable thresholds. It should be noted that these over capacities are triggered due to the background growth rate, and not traffic generated by the entire development.

• Future 2021 Total traffic operations for the intersection of Delbrook Avenue/West Queens Road were optimized for both splits and cycle length for a cycle length of 80 seconds in the AM and 90 seconds in the PM. The unsignalized intersections operate well within acceptable thresholds including the driveway access from West Queens into the parkade and the porte-cochere access off Stanley Avenue.

• Future 2031 Total traffic operations for the intersection of Delbrook Avenue/West Queens Road were optimized for both splits and cycle length for a cycle length of 90 seconds in the AM and 90 seconds
in the PM. The unsignalized intersection operate well within acceptable thresholds including both
driveway accesses into the site;

- A feasibility test to determine whether a dedicated left-turn lane is required to allow for eastbound
West Queens Road traffic to access the site and Stanley Avenue; due to modest eastbound left-turn
movements into the site from West Queens Road, a separated eastbound left-turn lane was proved not
necessary. Similarly, due to the forecasted low eastbound left-turn movement from West Queens to
Stanley Avenue, a separated left-turn was also proved not necessary.

### 6.1.5 Parking and Loading Review

- The District of North Vancouver Zoning Bylaw requires a supply of 127 residential parking spaces, of
which 20 are allocated for visitors and 9 spaces for the respite care centre;

- Catalyst plans to provide a total of 82 parking spaces in the underground parkade with 2 additional at-
grade spaces access from the porte-cochere, intended for short-term parking;

- A total of 16 spaces out of the 02 allocated underground are small car stalls, which translates to about
20% of the total parking provision;

- The disability parking stall requirement according to the District’s Accessible Design Policy for Multi-
Family Housing requires 6 disabled stalls;

- A total of 5 disabled stalls are provided in the underground parkade, four of which are in the secure
residential parking area, with the remaining stall in the public parking area that contains stalls both
for residential visitors and for the respite care centre, two additional disabled stalls are located at-
grade next to the porte-cochere;

- Catalyst is proposing a rate of 0.88 stalls per unit, as the residential portion of the development is
solely affordable non-market rental housing;

- Other comparisons from observed parking demand within the North Shore for non-market rental
buildings indicate a weighted average of on-site peak demand of 0.85 stalls per unit, inclusive of
visitor parking;

- 9 visitor parking spaces will be provided for the development which equates to a rate of 0.11 stalls per
unit, which is similar to various MVAPS surveyed residential visitor parking demand for three different
apartment buildings. The observed demand rate was around 0.06 stalls per unit;

- Bunt’s proposed parking provision totals 60 residential spaces, 8 visitor spaces and 12 respite care
centre spaces for a total of 80 parking spaces;

- Catalyst is proposing to provide 61 residential parking spaces, 9 residential visitor spaces and 12
respite care centre spaces for a total of 82 parking spaces. According to both literature and Bunt
collected comparables, the proposed parking provision is consistent with best parking practices and in some instances, exceed the anticipated parking demand; and,

- The minimum secured bicycle parking (Class 1) requirement from the District is 2 stalls/unit. However, providing one Class 1 stall per unit is considered the minimum acceptable rate based on the bylaws of other municipalities. Therefore, the proposed provision of 106 secured (Class 1) bicycle storage lockers is consistent with best practices. These spaces will be located in a bicycle room accessible from the secure area of the underground parkade.

6.1.6 Site Access Design Review
- Access to the underground parkade is accessed from West Queens Road, providing access for residents, residential visitors and respite care centre staff, patients and visitors;
- Pick-up/drop-off activity for the care centre is accommodated from Stanley Avenue via a porte-cochere that can also accommodate a Translink HandyDart bus;
- A dedicated loading bay has not been finalized however, there is adequate space for loading with a LSU truck to take place in the van parking area of the porte-cochere, this space will need to be a time-restricted loading space;
- Garbage/recycling will be conducted by a private waste management company which will remove the waste off-site and eliminate the need for a DNV commercial garbage truck from having to enter the site; typically, a standard jitney vehicle will access the site;
- Stopping sight distance for the parkade driveway is expected to be met as long as landscaping in these areas do not exceed 0.6m in height;
- Stopping sight distance for the intersection at Stanley Avenue/West Queens Road requires 60m sight distance to the eastbound direction and is easily met. Westbound vehicles are obscured by parked cars on the north side of West Queens Road so a restriction on parking is recommended; and,
- Stopping sight distance for the porte-cochere exit at a design speed of 30 km/h can be met due to the low speeds anticipated at this section along Stanley Avenue.

6.1.7 Transportation Demand Management
- The following recommended TDM measures are anticipated to decrease auto ownership to acceptable parking supply levels:
  - Catalyst to provide 1 car share stall for the use of the building;
  - Catalyst to provide new residents with travel planning information, brochures and marketing information to inform them of alternative modes of transportation;
- Pedestrian improvements and cycling facilities will be created around the site to improve pedestrian/cyclist experience; and,

- Parking for residents/tenants will be rented out on a monthly basis to manage the parking demand for the building.

6.2 Recommendations

- Unsignalized intersections within proposed study area are forecasted to be operating within acceptable thresholds with no immediate mitigation measures necessary for the horizon years;

- The porte-cochere accessed from Stanley Avenue is configured as a right-in/left-in for the northerly access with the southerly access as right-out only; due to the right-out driveway’s close proximity to the intersection at Stanley and West Queens, it is recommended that the southerly driveway include signage to enforce right-out only movements and no entry from Stanley Avenue;

- For the intersection at Delbrook Avenue/West Queens Road, the signal timing plan is recommended to be optimized for both the splits and cycle length for the AM and PM periods for both background and Total scenarios for year 2021 and 2031;

- Potential mitigation measures to reduce the v/c and improve the LOS for the northbound left-turn and westbound left-turn movement is to increase the green time and also increase the storage length;

- The storage length for the westbound left-turn can be increased to 50 metres to accommodate for the future, note that this increase in storage is due to an existing situation and not as a result of the development;

- The southbound left-turn storage is recommended to be increased from a storage length of 15 metres to 25 metres, note that this increase in storage is due to an existing situation;

- Increasing the green time for the northbound left-turn phase will also help alleviate the queuing and operations of this movement;

- Bunt recommends optimizing the cycle length and signal timing plans accordingly for the AM and PM peak hours;

- Stopping sight distance for the parkade driveway can be met if sight triangles are kept free of obstructions in the public realm, where the landscaping should not exceed 0.6m in height and street trees should be limbed for the first 3 metres; and,

- Stopping sight distance for Stanley Avenue/West Queens can be easily met for the eastbound direction but the westbound direction is obscured by parked cars on the north side of West Queens; recommended to extend the existing no stopping restriction on the north side of West Queens Road to the east.
A Guidelines for Commercial and Mixed-Use Buildings

Shopping streets tend to be the focal point of the community... (and) new development should seek to enhance and animate the public realm.

1. Public Realm and Streetscape Elements

Discussion:

Most medium and higher density residential, commercial or mixed-use buildings are located in highly visible and active locations such as shopping streets within the Town or Village Centres or along major thoroughfares. Shopping streets tend to be the focal point of the community, places where neighbours meet, and as such there needs to be a variety of places available to sit and chat. Opportunities to meet and socialize exist in both the public realm, for example seating areas or benches, and on private property with courts and plazas. These public and quasi-public spaces provide opportunities for merchandise display, café seating areas, landscaping, informal gathering, public art, and access to premises, and should be designed to be accessible and comfortable to all users.

New development should seek to enhance and animate the public realm. Buildings should be oriented to and relate to the street grid. Where a development includes multiple buildings, they should be grouped in such a way as to form usable open spaces for the enjoyment of residents and visitors.

Streets that are well defined or “enclosed” by street trees and building façades are more interesting and comfortable for pedestrians than those that are not. Heights of buildings and their setbacks from the property line should be considered in relation to the width of the street and the distance to the building face directly across the street.
Traditional shopping streets are characterized by closely-spaced small shops whereas contemporary retail practice often includes larger formats with only one entrance and blank walls. This has a deadening effect on the public realm. Building façades should be designed in ways that express individual storefront identity. Street trees and planting also improve the character, aesthetics and enjoyment of the pedestrian, bicycle and vehicular realms of the streetscape.

**A1.1 Unified Streetscape:** Within a given area, a unified streetscape concept for building sites, public open spaces, landscaping elements and universally accessible street furniture (benches, bike racks etc.) should be achieved (see Figure 1).

**A1.2: Accessible Pedestrian Routes:** Ensure pedestrian routes are smooth, level and clear of encumbrances to ensure direct passage for those with visual impairments or who require mobility aids.

**A1.3: Corner Treatment:** On shopping streets corner bulges or plazas should be considered at the crossroads of important streets depending on location of adjacent bus stops and type of pedestrian crossing (see Figure 2).

**A1.4: Designing for Transit Ridership:** Where a bus stop is located adjacent to a building that has a lobby, the lobby should be designed to provide direct sight lines to enhance the safety and comfort of transit riders. When appropriate, developers should consider designing the bus shelter so that it is coordinated with the building design or by providing awnings or canopies that are of sufficient height and width to directly shelter transit riders.

**A1.5: Midblock Plazas:** Where a development frontage exceeds 90 metres and there is sun exposure, provision of plazas or courts preferably in a central location is encouraged (see Figures 3 and 4 and A1.10).

**A1.6: Corner Storefronts:** On corner sites, commercial storefront entries should “turn the corner” to address the adjacent street in a pedestrian-friendly way. Both frontages should be designed as building “fronts” and the buildings should address the corner with strong massing (see Figures 5 and 6).
A1.7: Commercial Setback: On both front and flanking streets a 4 metre minimum distance from the curb face to the building façade, which may be a combination of public and private property, is encouraged for commercial and commercial/mixed-use developments to accommodate sidewalks, street furniture and utilities (see Figure 7).

A1.8: Enclosure: In order to define and enclose the road space, a strong streetwall is encouraged with a 2 or 3 storey massing at the street side(s) of the building, depending on the desired character of the area, and a step back at the third or fourth floor (see Figures 8 and 9).

A1.9: Unique Building Identity: On shopping streets, the building format should reflect a 10 metre storefront pattern. Building façades should be designed with variations in materials, colour, fenestration and roof forms to express individual storefront or dwelling unit identity (see Figure 10).

A1.10: Breaks in Streetwall: Buildings exceeding 45 metres in length should provide a significant break in the street façade to diminish the visual impact of excessive length (see Figure 11 and A1.5).

A1.11: Storefronts: In order to enliven shopping street environments, larger outlets should be lined at the sidewalk by smaller outlets with their own entries and identity. A rhythm of storefronts from 5 to 10 metres is most appropriate (see Figure 12).
2. Site Planning Elements

Discussion:

Site planning includes pedestrian and vehicle access; landscaping and open space provision; services and utilities; and parking and loading. Good site planning is essential to the optimal functioning of a development and needs to coordinate with public realm objectives and building design. Good site planning also takes advantage of unique natural features, topography and adjacencies to provide opportunities for useable open space, play and urban agriculture.

Outdoor spaces which are defined by trees and landscaping of private and common open space are essential for residential livability and should be provided in all residential and mixed-use developments. Landscaping also provides a means of transitioning from private property to the public realm and to neighbouring properties and, if coordinated, provides design continuity within a given local area. Finally, trees and landscaping provide aesthetic, environmental and health benefits, frame outdoor spaces, soften the appearance of paved areas and help to integrate buildings with their setting.

Vehicle parking and loading areas should look and feel subordinate to the intended use of a property and should be designed to have limited impact on neighbouring development and the local streetscape. Primary vehicular access to property should be from the rear lane or, where no lane exists, from flanking streets. Vehicle access from the front street is strongly discouraged. Generally, parking should be underground but where surface parking is unavoidable it should be designed as a court at the rear of the property, with suitable paving, tree planting and landscape treatment. Pedestrian access from parking areas to building entrances or lobbies should be safe, accessible, convenient and as direct as possible.
A2.1: Sustainable Landscape Design: Sustainable landscape design should incorporate best practices for tree planting, rainwater management, pedestrian way-finding and lighting, accessibility and feature native and drought tolerant species to provide environmental, health benefits and visual and sensory interest through the seasons. Sustainable landscape design should be coordinated with building design, site servicing, utility placement and neighbourhood objectives such as streetscape improvements (see Figure 13).

A2.2: Semi-Private Space: A minimum of 4.5 square metres of useable, accessible private or semi-private outdoor space accessed directly from the dwelling unit should be provided for each dwelling unit. This may take the form of patios, balconies or rooftop decks (see Figure 14).

A2.3: Common Open Space: Common open space should be conveniently accessible to residents; have sun exposure; wind protection; landscaping; play opportunities; and be visible from dwelling units (see Figures 14, 15 and 16).

A2.4: Pedestrian Pathways and Wheelchair Access: Pedestrian pathways should be direct, accessible, barrier-free and safely routed from parking areas to storefronts and building lobbies. These routes should have a minimum clear width of 2 metres and be at or near the centre of the building (see Figures 17, 18, 19 and 20).

A2.5: Parking Structure Entrances: Driveway access across sidewalks on shopping streets is not permitted where access from a lane or flanking street is possible. Vehicular entrances to parking structures and loading areas should be unobtrusive, architecturally integrated and screened from view from nearby properties and sidewalks with landscaping, trellises or through other means (see Figure 21).
A2.6: Partially Above Grade Parking Structures: If parking structures must be partially above grade, exposed walls should be faced with attractive and durable materials and/or screened with planting, but in no case should more than 1 metre of a parking structure wall be exposed (see Figure 22).

A2.7: Surface Parking: Surface parking, where permitted, should be screened from view from adjacent properties, public areas and streets with trees, landscaping and architectural elements designed as integral parts of buildings such as overhangs, trellises and planters (see Figure 23).
A2.8: Oil and Grit Separators: Oil and grit separators are required in all parking and loading areas and should be located so as not to interfere with pedestrian pathways and wheelchair access.

A2.9: Utility and Service installations: Utility installations, communication equipment, and garbage and recycling facilities should be sited so as to be accessible to service vehicles but not interfere with pedestrian access and screened from view to be as unobtrusive as possible (see Figure 24). Garbage and recycling facilities should be sited to permit use by all residents.

3. Building Form and Architectural Elements

Discussion:

New development in the District will typically be infill development, where acknowledgement of local scale and context is important. New development is likely to be more dense than earlier development because of changing economic conditions. Where this is the case, new development should acknowledge the existing fabric of the area, especially adjacent buildings and buildings across the street, and reflect long-term objectives for the area. At the same time, some variety between buildings in terms of their architectural styling and the palette of materials, textures and colours is encouraged to contribute interest and avoid monotony or repetitive building design, especially for redevelopment along major corridors.

Fenestration (windows and other openings) is a primary element of architectural expression and character. Fenestration also allows natural daylight to penetrate and is a critical consideration in heat loss and gain. Transparency provided by building fenestration is essential to animate shopping streets and to provide surveillance (eyes on the street). Blank walls are strongly discouraged on both fronting and flanking street elevations.

Weather protection provides pedestrian comfort on shopping streets. Structural canopies, fabric awnings and building extensions that are either too shallow or too high off the ground should be avoided. In addition, means of weather protection are important elements in the exterior “face” and streetscape character of buildings, and so should be fully integrated into the overall architectural expression of the building, rather than appearing simply “tacked on”.
Outdoor and building lighting is essential for wayfinding and for safety and security at night. But lighting can also be a source of irritation if it is intrusive or stark. Hence it is imperative that all sources of outdoor lighting be considered and planned in advance, at the time of development permit application.

In order to avoid appearing as an afterthought, balconies should be designed as integral parts of buildings. The most successful way to achieve integration is when balconies are partly recessed into the building façades. Enclosed balconies should be avoided, as these limit views and daylight access and increase the visual bulk of buildings.

Roofs are character-defining elements of buildings. Whether roofs are steeply or gently pitched or flat makes a difference to the sense of “fit” in the immediate context and to their impact on views. Elevator penthouses and mechanical equipment on roofs can be highly visible from nearby residences and should be designed carefully.

Visual and acoustical privacy and access to natural light and air are essential elements of livability. This is particularly true in multi-family and mixed-use developments where window exposure may be limited. The design of ground-oriented multi-family development should include consideration of privacy both within the development, and for adjacent dwelling units.

**A3.1: Variation in Building Design:** There should be subtle design variation between neighbouring buildings to avoid a repetitive appearance.

**A3.2: Scale:** New and taller development should relate and harmonize with the height and scale of neighbouring buildings by incorporating transitional setbacks, building forms and heights (see Figures 25 and 26).
A3.3: **Setbacks:** Front setbacks should relate to, and harmonize with (but not necessarily equal), setbacks of existing adjacent development (see Figure 27).

A3.4: **Level Transition from Sidewalk:** On sloping sites, ground floor slabs should be stepped so that there is a level transition between the sidewalk and the building lobby or storefront entry. Similarly, rooflines should follow the slope of the site (see Figure 28).

A3.5: **Minimize Blank Facades:** The width of blank walls should generally be limited to a maximum of 10% of the linear dimension of a building façade facing a street (see Figure 29).

A3.6: **Endwalls:** Exposed endwalls of buildings should be designed and finished to be aesthetically pleasing. Material and texture choices, art, mosaics and green walls are encouraged for this purpose (see Figure 30).

A3.7: **Building Materials and Transitions:** Building and structures should be faced with substantial and durable materials such as masonry, stone, ceramic tile, fibre-cement siding, metal and wood. Changes of exterior materials, colours and textures should occur at interior corners and offsets, not in the same horizontal or vertical plane. Detailing should be ample to avoid a “wallpaper” look (see Figures 31 and 32).
A3.8: Colours and Finishes: Bright and jarring colours and heavy swirling texture stucco patterns are discouraged.

A3.9: Transparent Fronts: Viewing into storefronts and lobbies is encouraged, and should not be obscured by reflective glazing, or window signs (see Figure 33).

A3.10: Solar Orientation: Building massing, windows and openings should capitalize on the solar orientation of the building (see Figure 34).

A3.11: Balconies: Balconies facing streets should be recessed into the main building façade. Guardrails should be transparent to maximize exposure to sunlight for each unit (see Figure 34).
A3.12: **Weather Protection:** Commercial and mixed-use buildings should provide weather protection along the entire street frontage and particularly in the vicinity of a transit stop (see Figure 35).

A3.13: **Canopies and Awnings:** Use of transparent, structural canopies or three or four-point fabric awnings is recommended. Canopies and awnings should have a minimum horizontal projection of 2 metres and vertical clearance over the sidewalk should not exceed 3 metres (see Figures 35 and 36).

A3.14: **Integration of Awning and Canopy Design:** Canopies and awnings should be architecturally integrated with the structure and fenestration of buildings and structures (see Figure 36).

A3.15: **Minimum Awning Clearance:** On sloping sidewalks, canopies or awnings should not be continuously horizontal. Instead, they should follow the contours of the land while maintaining a minimum clearance (see Figure 37).

A3.16: **Signage and Lighting:** Signage and lighting should be fully considered and integrated with the building design (see Figure 38).

A3.17: **Rooftop Equipment:** The size, placement and treatment of rooftop mechanical equipment and the installation of telecommunication facilities should be fully considered and integrated design elements of a building. They should be located and screened to minimize their visual impact and reduce impacts on views from surrounding properties (see Figure 39).
A3.18: Height of Elevator Penthouses and Roof Access Stairs: Elevator penthouses, roof decks and roof access stairs should be kept as low as possible in height and be sited to minimize overlook and view impacts.

A3.19: Noise Levels: Building designs should demonstrate that the A-weighted 24-hour equivalent LEQ sound level (the average sound level over the period of the measurement) in those portions of the dwelling listed below do not exceed the noise levels expressed in decibels set opposite such portions of the dwelling units. Example techniques include use of triple glazing, improved insulation etc.

<table>
<thead>
<tr>
<th>PORTION OF DWELLING UNIT</th>
<th>NOISE LEVEL (DECIBELS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>bedrooms</td>
<td>35</td>
</tr>
<tr>
<td>living, dining, recreation rooms</td>
<td>40</td>
</tr>
<tr>
<td>kitchen, bathrooms, hallways</td>
<td>45</td>
</tr>
</tbody>
</table>

A3.20: Window Placement: Windows should be offset to protect privacy. Spatial arrangements and other techniques, such as screening between adjoining balconies or private outdoor spaces, is encouraged. In courtyard developments, the distance between facing windows should be no less than 9 metres (see Figures 40 and 41).

A3.21: Layered Landscaping: Layered landscaping treatments and slightly elevated overlook of the public realm are encouraged to improve residential livability. However, changes in elevation should not exceed 1.5 metres (see Figure 42).
Multi-Family development must fit the neighbourhood context, enhance the public realm and provide on-site amenities.

Discussion:

This section provides design guidelines for low-rise, mid-rise and high-rise multi-family residential buildings. The intent is to ensure that all new development enhances the community through design that is neighbourly, is in context with the surrounding area, enhances the public realm and provides appropriate on-site amenities for residents.

For the purposes of these guidelines low-rise is defined as six or fewer storeys; “mid-rise” as under twelve storeys and “high rise” as twelve or more storeys. The first three sections of the guidelines apply to all forms of multi-family development while the last section is pertinent to mid-rise and high-rise buildings only.
1. Site Planning

**B1.1: Context:** New development should fit the neighbourhood context. Consideration should be given to the local topography, vegetation and environmental features and to the established character of the built form including heritage buildings and local choices of colours, architectural styling and building materials (see Figure 43).

**B1.2: Connectivity:** The siting of new development should take into consideration how to enhance the pedestrian, bicycle and vehicle connections in the area, particularly those that lead to key destinations (see Figure 44).

**B1.3: Solar Orientation:** When siting development, careful consideration should be given to maximizing the benefits of sunshine exposure to public open spaces, and to minimizing the impacts of shading on adjacent properties (see Figure 45). To this end, applications should be accompanied by a shadow analysis that illustrates the impacts on March 21st, June 21st, and September 21st (spring and fall equinox and summer solstice) at 10 am, 12 noon, 2pm and 6pm (see Figure 45). (For high rises, also see related guideline B 4.4 Solar Orientation.)
**B1.4: Building Separation and Overlook:** In order to maintain privacy between residential units, window placement in buildings within 9 metres (30 feet) of each other, or in courtyards, should be offset, not directly facing (see Figure 46).

**B1.5: Hierarchy of Public and Private Space:** In considering the connections through a development site, the adjacencies to public spaces and public streets, the project must define those spaces that are entirely public, and those which are semi-private and private, and design them accordingly.

**B1.6: Common Outdoor Space:** Residential developments should consider providing communal outdoor space that is conveniently accessible and in a visible, sunny location with suitable wind protection (see figure 47).

Larger residential projects should also consider providing:

- play structures;
- garden plots;
- dog walk areas; and
- social gathering areas.
2. Public Realm and Streetscape Elements

B2.1 Unified Streetscape: Within a neighbourhood, a unified streetscape concept for public open spaces, landscaping elements and street furniture (benches, bike racks etc.) should be achieved in order to complement and enhance the neighbourhood’s character (see Figure 48).

B2.2: Corner Sites: On corner sites, both frontages should be designed to face the street and the building should address the corner with strong massing (see Figure 49).

Where two intersecting streets have different architectural character (building heights, setbacks and key architectural elements) the building on the corner should make an effort to address both situations as it turns the corner (see Figure 50).

B2.3: Maximum Building Width: In order to create an interesting streetscape, large sites should be broken into multiple buildings. Low or mid-rise buildings should not exceed 45 m in length or width and high-rise buildings should not exceed 30 m in length or width (see Figure 51).
B2.4: Accessible Pedestrian Routes: Pedestrian routes should be smooth, level and clear of encumbrances to ensure direct passage for those with visual impairments or who require mobility aids.

B2.5: Sustainable Landscape Design: Landscape design should be coordinated with building design, site servicing, utility placement and neighbourhood streetscape objectives and should incorporate:

- rainwater management;
- pedestrian way-finding and lighting;
- accessibility design features;
- the right space for the right tree;
- the use of appropriate native species;
- the consideration of species that do not require irrigation after they are established;
- species that provide visual and sensory interest throughout the seasons; and
- consideration of long term maintenance.

B2.6: Building Setback to the Street: To ensure there is sufficient room for a pleasant streetscape building facades should be setback a minimum distance of 4 metres (13 feet) from the ultimate curb face. The setback may be a combination of public and private property, and should be deep enough to accommodate a sidewalk, street trees, street furniture, utilities and semi-private outdoor space. To ensure buildings relate to the street and help “frame” the street buildings should be set back no more than 10 metres (33 feet) from the curb, with the expectation that there is approximately 4 metres from curb edge to property line and up to 6 metres to accommodate front patios and stoops in front of the main building face (see Figure 52).

B2.7: Integrated Streetscape and Parkade: Where an underground parkade will be close to street trees, it should be either stepped back or stepped down, to ensure the street trees and boulevard landscaping have sufficient growing medium to thrive (see figure 53).
B2.8: Partially Above Grade Parking Structures: If parking structures must be partially above grade, exposed walls should be faced with attractive and durable materials and/or screened with planting. Parkades should not be more than 1 metre (3 feet) above grade (see Figure 54).

B2.9: Parking Structure Entrances: Vehicular entrances to parking structures should be unobtrusive, architecturally integrated and screened from view with landscaping, trellises or through other means (see Figure 55).

B2.10: Designing for Transit Ridership: Where there is an adjacent bus stop, lobbies should be designed to provide direct access and clear sight lines to enhance the safety and comfort of transit riders. Where appropriate, developers should consider designing the bus shelter so that it is coordinated with the building design.

3. Building Form And Architectural Elements

B3.1: Variation in Building Design: There should be subtle design variation between neighbouring buildings to avoid repetition while maintaining a harmony to the streetscape.

B3.2: Scale: New development should relate to, and harmonize with, the height and scale of neighbouring buildings by incorporating complementary building forms and transitional heights (see Figures 56 & 57).
B3.5: Setbacks: Street-front setbacks should relate to, and harmonize with (but not necessarily equal), setbacks of existing adjacent development (see Figure 58).

B3.3: Legibility: Design of new development should ensure the identity, function and access to the building is easily understood (see Figure 59).

B3.4: Unit Identity and Relationship to the Street: Buildings should be designed to provide a rhythm to the street frontage. Ground level units are encouraged to have front doors on the street, and designs that celebrate the unit identity. To add to the “eyes on the street” unit layouts that provide living space that overlooks the street are encouraged (see Figure 60).

B3.6: Stepping down a slope: On sloping sites, building roof lines should step down the slope in keeping with the topography (see Figure 61).
**B3.7: Endwalls:** Where there is an exposed end-wall, it should be designed and finished to be aesthetically pleasing. Material and texture choices, art, mosaics and green walls are encouraged for this purpose and key architectural elements like cornices, or colour bands should extend around the corner of the building onto the blank face of the wall (see Figure 62).

**B3.8: Building Materials and Transitions:** Building and structures should be faced with substantial and durable materials such as masonry, stone, ceramic tile, fibre-cement siding, metal and wood. Changes of exterior materials, colours and textures should occur at interior corners and offsets, not in the same horizontal or vertical plane. Detailing should be ample to avoid a “wallpaper” look (see Figure 63).
B3.9: Transparent Fronts: Viewing into and out of lobbies is encouraged, especially where lobbies overlook passenger drop off areas or bus stops (see Figure 64).

B3.10: Weather Protection: Weather protection that is architecturally integrated with the building design should be provided at the front doors and lobby entrances (See also B2.10, Designing for Transit Ridership).

B3.11: Lighting: Lighting should be fully considered and integrated with the building design.

B3.12: Signage on a Residential Building: Where live/work units or home based businesses are anticipated, the potential for signage should be considered and integrated with the building design in a manner that does not diminish the residential character of the building (see Figure 65).

B3.13: Adaptable Design: All new development should follow the District’s adaptable design standards for designing buildings and units to ensure a supply of adaptable and accessible units is developed.

B3.14: Private Outdoor Space: Private or semi-private outdoor space should be provided for each dwelling unit in the form of patios, balconies or rooftop decks that allow for outdoor seating. The minimum dimensions should be 1.8 m x 2.5 m with a minimum area of 4.5 m² (48 sq. ft) (see Figure 66).
**B3.15: Balconies:** Balconies facing streets should be recessed into the main building façade. Guardrails should be transparent to maximize exposure to sunlight for each unit (see Figure 67).

**B3.16: Privacy of New Units:** New development should recognize the contribution to livability that privacy provides, and design windows, patios and balconies accordingly (see Figure 68).

**B3.17: Layered Landscaping:** Layered landscaping treatments and slightly elevated overlook of the public realm are encouraged to improve residential livability. However, changes in elevation should not exceed 1.5 metres (see Figure 69).

**B3.18: Surface Parking:** Surface parking, where permitted, should be screened from view with trees, landscaping and architectural elements such as overhangs, trellises and planters (see Figure 70).
**B3.19: Rooftops:** Recognizing that rooftops are often visible, mechanical and utility equipment should be screened and integrated into the design and opportunities for rooftop gardens should be explored (see Figure 71).

**B3.20: Height of Elevator Penthouses and Roof Access Stairs:** Elevator penthouses, roof decks and roof access stairs should be kept as low as possible in height and be sited to minimize overlook and view impacts.

**B3.21: Noise Levels:** Building designs should demonstrate that the A-weighted 24-hour equivalent LEQ sound level (the average sound level over the period of the measurement) in those portions of the dwelling listed below do not exceed the noise levels expressed in decibels set opposite such portions of the dwelling units. Example techniques include the use of triple glazing, or improved insulation.

<table>
<thead>
<tr>
<th>PORTION OF DWELLING UNIT</th>
<th>NOISE LEVEL (DECIBELS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>bedrooms</td>
<td>35</td>
</tr>
<tr>
<td>living, dining, recreation rooms</td>
<td>40</td>
</tr>
<tr>
<td>kitchen, bathrooms, hallways</td>
<td>45</td>
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</tbody>
</table>

**B3.22: Rainwater Run-off:** In accordance with the Development Services Bylaw and environmental requirements, oil and grit separators are required in all parking and loading areas and should be located so as not to interfere with pedestrian pathways and wheelchair access.
B3.23: Utility and Service installations: New development should be designed to carefully integrate utility installations, communication equipment and garbage, compost and recycling areas into the overall design of the project. These services should:

- be as unobtrusive as possible;
- be easy and safe for residents to use;
- be easy to service;
- be easy to keep clean;
- be animal proof; and
- be situated to minimize their impacts on neighbours. (see Figure 72 & 73).

4. Mid and High Rise Residential Tower Guidelines

In addition to the preceding general residential guidelines that apply to all residential development, tower elements including mid rise towers (6-12 storeys in height) and high rise towers (12 storeys and taller) should also comply with the following guidelines:

B4.1 Minimum Lot Frontage: It is recommended that development sites for towers have a minimum frontage of 60 metres (200 feet).
**B4.2 Maximum Building Frontage:** Further to section B2.3 Maximum Building Width, mid and high rise buildings should not have tower frontages in excess of 30 metres (98.5 feet) (see Figure 74).

**B4.3 Building Separation:** In order to minimize overlook between residential units, there should be a minimum separation between high rise buildings of at least 30 metres (98.5 feet) (see Figure 75).

**B4.4: Solar Orientation:** Further to section B1.3 Solar Orientation, which also highlights the need to maximize the benefits of sunshine and minimize the impacts of overshadowing, where towers are proposed that have a long side, that long side is encouraged to have a north-south orientation to reduce the impacts of shading on adjacent areas (see Figure 76).

It is also important for towers to reduce the potential for heat gain on southern and western exposures to both ensure units are liveable and reduce energy consumption. This may result in southern and western elevations having different but complementary treatments that may include: reduced glazing, larger balconies, louvers, and cross ventilation.
**B4.5: Maximum Building Footprint:** In order to ensure towers have a slim appearance, the total building footprint for a tower should not exceed 800 square metres (8,600 square feet).

**B4.6: Articulation of the Floor-plate/Building Footprint:** In addition to B4.5 above, where any portion of a tower footprint exceeds 25 metres x 25 metres (80 x 80 feet), the overall footprint should be articulated, or stepped.

**B4.7: Vertical Elements:** Architectural elements should connect across the vertical length of the building from top to bottom and towers should connect to the ground plane, and not be completely hidden behind low rise, or town house units (see Figure 77).

**B4.8: High Rise – Corner Treatment:** Where high rise towers are located at the corner, deeper setbacks from the sidewalk should be considered (see Figure 78).

**B4.9: Articulation of the Building:** Sculptural elements, banding, building articulation, use of materials and stepping back of portions of the building should be considered to lessen the appearance of bulk and add visual interest. (See Figure 79)
B4.10: Sculpting the Top of the Tower: To ensure buildings have a slim appearance at the skyline, consideration should be given to stepping back the size of the floor-plate of the top 4 stories, so that the upper most storey has a maximum size of 600 square metres (6,460 square feet) (see Figure 79).

B4.11: Balconies: While the inclusion of balconies in high rise development is both desirable and required, it is important that balconies are not so large that they significantly add bulk to the look of the building, and therefore it is recommended that in total balconies do not exceed 10% of the building’s footprint.

Consideration of insetting the balconies to offset their bulk and ensure they are well integrated into the building is encouraged (see Figure 80).
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### Project Data

**Project No.:** 17-45  
**Date:** 30-Aug-2018

#### Site Area

- **Site Area:** 0.34 Acres  
- **Site Area (建成):** 0.34 Acres  
- **Square Footage:** 2,112 sq. ft.

#### Building Area

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<th>Non-Core Area</th>
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<td>78,633 sq. ft.</td>
<td>69,091 sq. ft.</td>
<td>9,542 sq. ft.</td>
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#### Floor Area Ratios

- **R2:** 2.0  
- **R3:** 3.0  
- **R4:** 4.0

#### Building Type

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<tr>
<td>公共设施</td>
<td>公园</td>
<td>公寓</td>
<td>公寓</td>
</tr>
</tbody>
</table>

#### Parking Spaces

- **Total Parking Spaces:** 84 spaces
- **Resident Parking:** 56 spaces
- **Visitor Parking:** 18 spaces
- **Surface Parking:** 10 spaces

#### Bicycle Spaces

- **Bicycle Spaces:** 14 spaces
- **Bicycle Spaces Per Unit:** 16.0 spaces

#### Building Size

- **Number of Stories:** 5
- **Size:** 53,000 sq. ft.

#### Building Setback

- **Front Setback:** 22.0 ft. (6.7 m)
- **Side Setback:** 22.0 ft. (6.7 m)
- **Rear Setback:** 22.0 ft. (6.7 m)
- **Side Lot Line Setback:** 150 ft. (45.7 m)
- **Rear Lot Line Setback:** 150 ft. (45.7 m)

#### Mechanical and Electrical

- **Total Water Demand:** 4,083 gpm
- **Total Heating Demand:** 3,273 MMBtu

#### Accessible Design

- **Percentage of Units:** 27.0%
PROJECT:
600 W QUEENS ROAD
NORTH VANCOUVER, BC

CLIENT:
CATALYST COMMUNITY
DEVELOPMENTS SOCIETY

2018-05-15
ISSUED FOR REZONING
1.0 INTRODUCTION

We understand that the Catalyst Community Development Society is considering the above referenced property for the development of a respite care home. Based on the preliminary design information provided, the development is expected to consist of 5 storeys above grade over 1 level of underground parking. No structural loads have been provided at this time, however, we anticipate column loads in the range of 1,000 to 3,000 kN and lowest level slab on grade loading of about 8 kPa.

This report presents the results of our field investigation and makes geotechnical recommendations for the design and construction of the proposed development. This report was prepared exclusively for the Catalyst Community Development Society, for their use and for the use of others on their design and construction team. We assume that the District of North Vancouver would rely on the report during their permit review process.

2.0 SITE DESCRIPTION

The proposed development site is located on the north side of West Queens Road in North Vancouver, BC. The site is bound by West Queens Road to the south, Stanley Avenue to the east, the Delbrook Community Recreation Centre to the north and a community services centre to the west. The site is currently a paved parking lot for the adjacent recreation centre. The site slopes downward from north-east to south-west, with a grade difference of 6 m over a horizontal distance of 90 m. The site has an approximate area of 2,600 m².

The location of the site relative to the surrounding improvements is shown on our Drawing No. 15368-01, following the text of this report.

3.0 FIELD INVESTIGATION

GeoPacific Consultants Ltd. conducted a site investigation on October 19th, 2017, using the subcontracted services of Uniwide Drilling of Prince George, BC. The site investigation comprised of four augured test holes, supplemented by two Dynamic Cone Penetration Test (DCPT) soundings to assist in characterizing the relative density of the soil.

The augured test holes were advanced to depths of 3.7 to 7.6 metres below current local grades. The soils were logged in the field and samples were collected for laboratory analysis. The test hole logs are included as Figures A.01 to A.04 in Appendix A.

The test holes were located and logged by a member of our geotechnical staff and were backfilled immediately after the completion of logging, sampling, and testing in accordance with provincial
abandonment requirements. The results of the test holes and DCPT soundings are included in Appendix A following the text of this report.

The approximate locations of the test holes are shown on our attached Drawing No. 15368-01, following the text of this report.

4.0 SUBSURFACE CONDITIONS

4.1 Soil Conditions

The soil classification used herein is based on the “Unified Soil Classification System”, except as otherwise noted.

According to the Geological Survey of Canada Map 1484A, the region under investigation is described to be underlain by Vashon Drift and Capilano Sediments. The glacial drift is described as lodgment and minor flow till, lenses and interbeds of substratified glaciofluvial sand to gravel, and lenses and interbeds of glaciolaeric laminated stony silt. This is described to be overlying bedrock at depths of more than 10m below the ground surface.

In general, the soil profile noted from the surface downwards at our test holes consists of up to 70 mm of asphalt, followed by 0.2 m of sand and gravel road base. At all test holes this road base layer was underlain by compact to dense, sand and gravel to depths of 0.6 to 2.1 m depth. This was followed by very dense cobbley, sand and gravel to silty sand and gravel (glacial till). The glacial till was described as grey, dry to moist, and was observed to contain a large proportion of sub-angular to sub-rounded gravel. This glacial till layer was found to extend to the termination depths of all test holes.

TH17-03 was refused at a depth of 3.7 metres below grade due to the presence of a boulder within the dense glacial till.

For a detailed description of the soil conditions refer to our test hole logs in Appendix A, following the text of this report.

4.2 Groundwater Conditions

The static groundwater table was not observed at our test holes, and it is expected to be well below the development grades. However, some perched groundwater was noted in all test holes due to recent rainfall, and should be expected above the impermeable glacial till contact during wetter winter and spring months of the year. For long term groundwater monitoring, a standpipe piezometer was installed at TH17-02.

5.0 DISCUSSION

5.1 General Comments

We understand that it is proposed to re-develop the site with a care home and non-market housing development. Based on the preliminary design information provided, the buildings will be up to 5 levels above grade, with one level below grade for parking. We anticipate that the parking level and first level are to be constructed of reinforced concrete, with the upper 4 levels utilizing wood framed construction. We expect loading induced by the development to be moderate with loading of up to 1,000 to 3,000 kN on columns and 150 kN per linear metre on walls. Based on the topography, we anticipate that the parking will be up to 6 metres below grade at the north east corner of the site, and will be at grade at the south west corner of the site.
Based on the anticipated footing elevations and observed soil conditions on the site, we expect the proposed structures may be founded on conventional strip and pad foundations bearing on the dense glacial till noted at our test hole locations.

We confirm, from a geotechnical point of view, that the proposed development is feasible provided that the recommendations outlined in the following sections are incorporated into the overall design and construction.

5.2 Temporary Excavations

We expect that excavations would be sloped where possible. However, where existing properties, structures, and/or utilities are in close proximity to the development we expect that shoring may be required. Based on the soil conditions present on-site we expect that reinforced shotcrete shoring employing pretensioned soil anchors may be used to support vertical excavations.

It is expected that the parkade is to extend near the existing building at the north side of the site. We anticipate that shoring and underpinning will be required at the north side due to the depth of the excavation contemplated and the proximity to the existing community centre. Our temporary excavation and shoring recommendations are provided in Section 6.6.

6.0 RECOMMENDATIONS

6.1 Site Preparation

We expect that the depth of stripping at this site will be dictated by the proposed parkade elevations rather than the conditions of the soils present on site. Prior to construction of new foundations or floor slabs all topsoil, organic materials, debris, fills, and loose or otherwise disturbed soils must be removed from the construction area to expose a subgrade of very dense glacial till.

The excavation should be graded to direct surface water to perimeter sumps and pumps. Any loosened or otherwise disturbed portions of the subgrade should be replaced with lean mix concrete with a minimum compressive strength of 5 MPa for foundations founded on dense weathered glacial till. Grade reinstatement beneath the floor slabs and any non-structural walls can be done using engineered fill. In the context of this report, “Engineered Fill” is generally defined as clean sand and gravel containing silts and clays less than 5% by weight, compacted in 300 mm loose lifts to a minimum of 98% of the ASTM D698 (Standard Proctor) maximum dry density at a moisture content that is within 2% of optimum for compaction.

The glacial till subgrade may be sensitive to changes in moisture content. Therefore, the excavation subgrade should be graded to prevent the ponding of water at footing locations. Any water softened subgrade must be excavated to expose a subgrade of undisturbed very dense glacial till.

The geotechnical engineer shall be contacted for the review of stripping and engineered fill placement and compaction.

6.2 Foundations and Bearing Capacity

Based on the anticipated footing depth and the test hole information, we envisage that the new building foundations will be constructed on a dense weathered glacial till subgrade.

We recommend that foundations placed on a subgrade of dense weathered glacial till may be designed using a serviceability limit state (SLS) bearing pressure of 500 kPa, and a factored ultimate limit state (ULS)

CONSULTING GEOENGINEERS
bearing pressure of 750 kPa for use under short term transient loading such as those induced by wind or earthquakes.

Foundations which are placed on “Engineered Fill” as described in Section 6.1 may be designed using a serviceability limit state (SLS) bearing pressure of 120 kPa, and a factored ultimate limit state (ULS) bearing pressure of 180 kPa for strip and pad footings.

We expect that the settlement of footings designed as recommended should be within the normally acceptable limits of 25 mm total and 2 mm per m differential.

Irrespective of bearing pressures, footings should not be less than 450 mm in width for strip foundations and not less than 600 mm in width for square or rectangular foundations. Foundations should also be buried a minimum of 460 mm below the surface for frost protection.

Adjacent foundations constructed at differing elevations should be offset from each other by a minimum distance of twice the difference in elevation 2:1 (H:V). For example, two foundations separated by 1.0 m in elevation should be offset horizontally from each other by a minimum distance of 2.0 m as measured from the inside edges of those foundations. Foundations constructed within 2:1 (H:V) of each other may impose additional vertical and horizontal forces on lower foundations, columns, and/or foundation walls. GeoPacific should review foundation layouts which do not achieve the minimum 2:1 (H:V) offset.

*Foundation subgrades of all buildings must be reviewed by a geotechnical engineer prior to footing construction.*

### 6.3 Seismic Design of Foundations

The subgrade conditions underlying the site may be classified as Site Class C as defined in Table 4.1.8.4.A of the 2012 BC Building Code (BCBC). Peak ground accelerations on firm ground for the approximate site location is 0.427 g (National Resources Canada, Site Coordinates: 49.337 degrees North, 123.086 degrees West).

We did not encounter any soils considered to be prone to liquefaction or strain softening during cyclic loading caused by the design earthquake defined in the 2012 BCBC.

### 6.4 Slab-On-Grade Floors Preparation

In order to provide suitable support for slab-on-grade floors we recommend that any fill placed under the slab should be “engineered fill” as described in Section 6.1 above.

The floor slab should be underlain by a minimum of 150 mm of 19 mm clear crushed gravel fill to inhibit upward migration of moisture beneath the slab. The crushed gravel fill should be compacted to a minimum of 98% of the ASTM D1557 (Modified Proctor) maximum dry density at a moisture content that is within 2% of optimum for compaction. A moisture barrier should be installed directly beneath the slab directly above the free draining granular material. The under slab fill should be hydraulically connected to the perimeter drainage system to facilitate the removal of any water which accumulates under the slab. This is typically accomplished by providing weep holes through the foundation wall, above the level of the footing.

*Compaction of the slab-on-grade fill must be reviewed by the geotechnical engineer.*
6.5 Foundation Drainage

A perimeter drainage system will be required for the below grade structure to prevent the development of water pressure on the foundation walls and the parkade slab under normal conditions. All drains should be designed to prevent the migration of fines and should be hydraulically connected to the under slab fill to ensure that water pressures cannot develop beneath the slab. Large groundwater flows are not expected and we suggest that the perimeter drainage system be preliminarily designed for a groundwater inflow rate of 50 litres/minute for the entire parkade structure. Actual groundwater flows during construction can be confirmed at the end of the subgrade preparation.

6.6 Temporary Excavations and Shoring

We expect that any excavation would be sloped where possible. We would expect that slopes covered in poly sheeting and cut to 3H:4V can be constructed in the glacial till. Temporary cut slopes should be limited to 1H:1V in the surficial fills and sand and gravel, and should also be covered in poly sheeting. However, if the site is developed to property lines, then vertical shored cuts will be required.

Where open cuts are not feasible, temporary shoring may be required to facilitate excavations to foundation elevations. In order to achieve excavation depths in close proximity to property lines, it is our opinion that vertical cuts may be supported with the use of a shotcrete membrane tied back with post-tensioned soil anchors. Testing of all soil anchors will be required to ensure that each safely meets its required design capacity.

Some excavation induced ground movements are unavoidable and should be expected. Excavation movements are typically and primarily caused by elastic relaxation of the ground as the excavation proceeds and weight is removed from the site. Movements can also be dictated by the type of shoring equipment employed and the quality of the work undertaken by the shoring contractor. Given the depth of the excavation contemplated for this project, total accumulated horizontal and vertical ground movements are expected in the order of 10 mm at the excavation face, decreasing to half that within 3 m away from the excavation face. This magnitude of excavation induced ground movement is normally tolerable for in-ground services on municipal property as well as adjacent buildings.

GeoPacific can provide an excavation/shoring design upon request. Installation of anchored shotcrete shoring must be reviewed by the geotechnical engineer.

Light to moderate perched groundwater flows should be expected from the surficial soils overlying the low permeability glacial till. Temporary light to moderate seepage should be expected from any sand to gravelly sand seams present within the glacial till until they drain. We expect that inflows may be handled with sumps and sump pumps.

Boulders may be encountered during excavation. Large boulders may require splitting or blasting to facilitate removal from the site.

Temporary cut slopes in excess of 1.2 metres in height require review by a professional engineer in accordance with Worker’s Compensation Board guidelines.

6.7 Lateral Pressure on Foundation Walls

Earth pressures against the foundation walls are dependent on factors such as available lateral restraint along the wall, surcharge loads, backfill materials, compaction of the backfill and drainage conditions. We recommend that the foundation walls be designed to resist the following lateral earth pressures:
Static: Triangular soil pressure distribution of 5H kPa, where H is equal to the total wall height in metres.

Seismic: Inverted triangular soil pressure distribution of 2.5H kPa, where H is equal to the total wall height in metres

The preceding loading recommendations assumes that the synthetic drainage material provides a drained cavity around the perimeter of the foundation. We expect that the perimeter drainage system will be hydraulically connected to the synthetic drainage material and sufficiently lower the groundwater level such that hydrostatic pressures against the foundation walls are eliminated.

Any additional surcharge loads not specifically described herein should be added to the earth pressure given. All earth pressures are based upon unfactored soil parameters and are assumed to be unfactored loads.

The geotechnical engineer should be contacted for the review of all backfill materials and procedures.

6.8 Utility Installation

Site utilities will be required beneath the slabs-on-grade. The design of these systems must consider the locations and elevations of the foundations. The service trenches and excavations required for the installation of the underground pipes, vaults and/or manholes must be located outside of a 1.5:1 (H:V) slope measured downward from the edge of adjacent foundations.

All excavations and trenches must conform to the latest Occupational Health and Safety Regulation supplied by the Worker Compensation Board of British Columbia. Any excavation in excess of 1.2 m in depth requiring worker entry must be reviewed by a professional geotechnical engineer.

All excavations and trenching must conform to the latest WorkSafeBC requirements.

7.0 FIELD REVIEWS

As required for Municipal “Letters of Assurance”, GeoPacific Consultants Ltd. will carry out sufficient field reviews during construction to ensure that the Geotechnical Design recommendations presented in this report have been adequately communicated to the design team and the contractors implementing the design. These field reviews are not carried out for the benefit of the contractors and therefore do not in any way effect the contractors’ obligations to perform under the terms of his/her contract.

It is the contractors’ responsibility to advise GeoPacific Consultants Ltd. (a minimum of 48 hours in advance) that a field review is required. Geotechnical field reviews are normally required at the time of the following:

1. Stripping - Review of stripping depth to suitable subgrade materials
2. Excavation - Review of excavations in excess of 1.2 m depth
3. Foundation - Review of foundation subgrades
4. Slab-on-grade - Review of slab-on-grade subgrades
5. Shoring - Review of anchored shotcrete shoring installation and removal as required

It is critical that these reviews are carried out to ensure that our intentions have been adequately
communicated. It is also critical that contractors working on the site view this document in advance of any work being carried out so that they become familiarized with the sensitive aspects of the works proposed. It is the responsibility of the developer to notify GeoPacific Consultants Ltd. when conditions or situations not outlined in this document are encountered.

8.0 CLOSURE

This report has been prepared exclusively for our client for the purpose of providing geotechnical recommendations for the design and construction of the proposed development. The report remains the property of GeoPacific Consultants Ltd. and unauthorized use of, or duplication of this report is prohibited.

We are pleased to be of assistance to you on this project and we trust that our comments and recommendations are both helpful and sufficient for your current purposes. If you would like further details or would like clarification of any of the above, please do not hesitate to call.

For:
GeoPacific Consultants Ltd.

Daniel Kokan, B.A.Sc., E.I.T.
Geotechnical Engineer-in-Training

Matt Kokan, M.A.Sc., P.Eng.
Principal

OCT 3 1 2017

File: 15368
Delbrook Respite Care Home- 600 W Queens Road, North Vancouver, BC

CONSULTING GEOTECHNICAL ENGINEERS
APPENDIX A – TEST HOLE LOGS
### Test Hole Log: TH17-01

**File:** 15368  
**Project:** Delbrook Care Home  
**Client:** Catalyst Community Development Society  
**Site Location:** 600 W Queens Road, North Vancouver, BC

#### INFERRED PROFILE

<table>
<thead>
<tr>
<th>Depth (m)</th>
<th>Symbol</th>
<th>Soil Description</th>
<th>Depth (m/Elev (m))</th>
<th>Moisture Content (%)</th>
<th>DCPT (blows per foot)</th>
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Logged: DK  
Method: Solid Stem Auger  
Date: 10/20/2017  
Datum: Ground Surface  
Figure Number: A.01  
Page: 1 of 1
# Test Hole Log: TH17-02

**File:** 15368  
**Project:** Delbrook Care Home  
**Client:** Catalyst Community Development Society  
**Site Location:** 600 W Queens Road, North Vancouver, BC

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## Inferred Profile

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<td>4.5</td>
<td>Silty Sand and Gravel</td>
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**Logged:** DK  
**Method:** Solid Stem Auger  
**Date:** 10/20/2017  
**Datum:** Ground Surface  
**Figure Number:** A.02  
**Page:** 1 of 1
**Test Hole Log: TH17-03**

**File:** 15368

**Project:** Delbrook Care Home

**Client:** Catalyst Community Development Society

**Site Location:** 600 W Queens Road, North Vancouver, BC

<table>
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<tr>
<th>Depth (m/Elev (m))</th>
<th>Soil Description</th>
<th>Moisture Content (%)</th>
<th>DCPT</th>
<th>Groundwater / Well</th>
<th>Remarks</th>
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Logged: DK

Method: Solid Stem Auger

Date: 10/20/2017

Datum: Ground Surface

Figure Number: A.03

Page: 1 of 1
## Test Hole Log: TH17-04

**File:** 15368  
**Project:** Delbrook Care Home  
**Client:** Catalyst Community Development Society  
**Site Location:** 600 W Queens Road, North Vancouver, BC

### INFERRED PROFILE

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<th>Soil Description</th>
<th>Moisture Content (%)</th>
<th>DCPT (blows per foot)</th>
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Logged: DK  
Method: Solid Stem Auger  
Date: 10/20/2017  
Datum: Ground Surface  
Figure Number: A.04  
Page: 1 of 1