

Agenda

Planning Committee

Anderson Room, City Hall 6911 No. 3 Road Tuesday, December 17, 2019 4:00 p.m.

Pg. # ITEM

MINUTES

PLN-5 *Motion to adopt the minutes of the meeting of the Planning Committee held on December 3, 2019.*

NEXT COMMITTEE MEETING DATE

January 8, 2019, (tentative date) at 4:00 p.m. in the Anderson Room

PLANNING AND DEVELOPMENT DIVISION

1. 2019 SUMMARY REPORT – COMMUNITY INFORMATION SESSIONS ON DEVELOPMENT, AFFORDABLE HOUSING, TRANSPORTATION AND SUSTAINABILITY IN THE CITY (File Ref. No. 08-4040-01) (REDMS No. 6343684)

PLN-9

See Page PLN-9 for full report

Designated Speaker: Suzanne Smith

Pg. # ITEM

STAFF RECOMMENDATION

That staff be directed to proceed with the Community Information Session Program for 2020 as described in the Staff Report titled "2019 Summary Report - Community Information Sessions on Development, Affordable Housing, Transportation and Sustainability in the City" from the Director, Development.

AGRICULTURAL LAND RESERVE EXCLUSION APPLICATION BY 2. INC. 14540 **BURROWS ROAD:** JNA HOLDINGS AT AGRICULTURAL LAND RESERVE EXCLUSION APPLICATION BY KARL, LYDIA & ULRICH WACKER AT 14680 BURROWS ROAD; AGRICULTURAL LAND RESERVE AND EXCLUSION **APPLICATION BY SHOREWOOD DEVELOPMENTS LTD. AT 14920 BURROWS ROAD**

(File Ref. No. AG 19-855723; AG 19-855800; AG 19-855911) (REDMS No. 6350060 v. 2)

PLN-36

See Page PLN-36 for full report

Designated Speakers: Barry Konkin & Steven De Sousa

STAFF RECOMMENDATION

- (1) That authorization for JNA Holdings Inc. to forward an Exclusion Application to the Agricultural Land Commission for exclusion of 14540 Burrows Road from the Agricultural Land Reserve be denied.
- (2) That authorization for Karl, Lydia & Ulrich Wacker to forward an Exclusion Application to the Agricultural Land Commission for exclusion of 14680 Burrows Road from the Agricultural Land Reserve be denied.
- (3) That authorization for Shorewood Developments Ltd. to forward an Exclusion Application to the Agricultural Land Commission for exclusion of 14920 Burrows Road from the Agricultural Land Reserve be denied.

Planning Committee Agenda – Tuesday, December 17, 2019

Pg. # ITEM

APPLICATION BY IBI GROUP ARCHITECTS TO AMEND 3. SCHEDULE 2.10 OF OFFICIAL COMMUNITY PLAN BYLAW 7100 CENTRE AREA PLAN), AMEND (CITY THE **RESIDENTIAL/LIMITED COMMERCIAL (RCL3) ZONE, AND** REZONE 5740, 5760, AND 5800 MINORU BOULEVARD FROM **INDUSTRIAL** RETAIL (**IR1**) TO **RESIDENTIAL/LIMITED COMMERCIAL (RCL3)**

(File Ref. No. RZ 18-807640) (REDMS No. 6195106 v.5)

PLN-148

See Page PLN-148 for full report

Designated Speakers: Wayne Craig & Suzanne Carter-Huffman

STAFF RECOMMENDATION

- (1) That Official Community Plan Bylaw 7100, Amendment Bylaw 10050, for amending Schedule 2.10 of Official Community Plan Bylaw 7100 (City Centre Area Plan), Section 2.2 "Jobs and Business" and the "Specific Land Use Map: Lansdowne Village", to encourage office development along the east side of Minoru Boulevard (between Ackroyd Road and Alderbridge Way) and pedestrian-oriented retail uses at grade along Lansdowne Road (between No. 3 Road and Minoru Boulevard), be introduced and given first reading.
- (2) That Official Community Plan Bylaw 7100, Amendment Bylaw 10102, for amending Schedule 2.10 of Official Community Plan Bylaw 7100 (City Centre Area Plan), to facilitate the construction of a high-rise, high density, mixed use development including the designation of a strip of land along the north side of 5740 Minoru Boulevard as City "Park" and the designation of the remainder of 5740, 5760, and 5800 Minoru Boulevard as "Village Centre Bonus" (to permit an additional 1.0 floor area ratio for office use only), be introduced and given first reading.
- (3) That Bylaw 10050 and Bylaw 10102, having been considered in conjunction with:
 - the City's Financial Plan and Capital Program; and
 - the Greater Vancouver Regional District Solid Waste and Liquid Waste Management Plans;

are hereby found to be consistent with said program and plans, in accordance with Section 477(3)(a) of the Local Government Act.

(4) That Bylaw 10050 and Bylaw 10102, having been considered in accordance with OCP Bylaw Preparation Consultation Policy 5043, are hereby found not to require further consultation.

Pg. # ITEM

- (5) That Richmond Zoning Bylaw 8500, Amendment Bylaw 10051, which makes minor amendments to the ''Residential/Limited Commercial (RCL3)'' zone specific to 5740, 5760, and 5800 Minoru Boulevard and rezones 5740, 5760, and 5800 Minoru Boulevard from ''Industrial Retail (IR1)'' to "School and Institution Use (SI)" and ''Residential/Limited Commercial (RCL3)'', be introduced and given first reading.
- 4. APPLICATION BY BENN PANESAR FOR REZONING AT 10931 SEAWARD GATE FROM THE "SINGLE DETACHED (RS1/E)" ZONE TO THE "COMPACT SINGLE DETACHED (RC2)" ZONE (File Ref. No. RZ 19-858458) (REDMS No. 6347906)

PLN-234

See Page PLN-234 for full report

Designated Speakers: Wayne Craig & Jessica Lee

STAFF RECOMMENDATION

That Richmond Zoning Bylaw 8500, Amendment Bylaw 10120, for the rezoning of 10931 Seaward Gate from "Single Detached (RS1/E)" to "Compact Single Detached (RC2)" to facilitate the creation of two new single-family lots with vehicle access from the existing rear lane, be introduced and given first reading.

5. MANAGER'S REPORT

ADJOURNMENT



Planning Committee

Date:	Tuesday, December 3, 2019
Place:	Anderson Room Richmond City Hall
Present:	Councillor Linda McPhail, Chair Councillor Alexa Loo Councillor Carol Day Councillor Bill McNulty Councillor Harold Steves
Also Present:	Councillor Michael Wolfe
Call to Order:	The Chair called the meeting to order at 4:00 p.m.

AGENDA ADDITIONS

It was moved and seconded

That Replacement of Non-Profit and Commercial Space be added to the agenda as Item No. 1A, Williams Road and No. 5 Road Right-of-Way be added as Item No. 1B, Highway to Heaven (No. 5 Road) in the Official Community Plan be added as Item No. 1C, and Richmond School District Notification be added as Item No. 1D.

CARRIED

Minutes

MINUTES

It was moved and seconded That the minutes of the meeting of the Planning Committee held on November 19, 2019, be adopted as circulated.

CARRIED

1.

NEXT COMMITTEE MEETING DATE

December 17, 2019, (tentative date) at 4:00 p.m. in the Anderson Room

PLANNING AND DEVELOPMENT DIVISION

1. AMENDMENTS TO RICHMOND HERITAGE COMMISSION BYLAW 7906

(File Ref. No. 08-4200-01) (REDMS No. 6323024)

It was moved and seconded That Richmond Heritage Commission No. 7906, Amendment Bylaw 10104, be introduced and given first, second and third reading.

CARRIED

1A. **REPLACEMENT OF NON-PROFIT AND COMMERCIAL SPACE** (File Ref. No.)

Discussion took place on replacement space for non-profit organizations and for-profit businesses during development.

In response to queries from Committee, staff noted that (i) various departments are working together to report back on the referral regarding affordable office space for non-profit organizations, (ii) the Townline application was a unique arrangement as the City leased the space to the Richmond Centre for Disability, (iii) staff are currently reviewing a rezoning application that would provide 4500 square feet of office space for City approved non-profit organizations, in collaboration with the developer, (iv) there are strict regulations for the City with regard to for-profit businesses as outlined in the *Community Charter*, (v) office and commercial space is provided in developments for businesses to lease at market rates as part of the planning process, and (vi) most developers will collaborate with existing tenants to ensure adequate space is included in the development.

It was requested that a staff memorandum be provided with regulatory options for assistance to for-profit businesses.

1B. WILLIAMS ROAD AND NO. 5 ROAD RIGHT-OF-WAY (File Ref. No.)

Discussion took place on the Williams Road and No. 5 Road road dedication for future transportation needs.

In response to queries from Committee, staff advised that the Ministry of Transportation does not anticipate a need for an overpass or interchange in this area and the Official Community Plan was amended to remove the Blundell Road interchange.

Discussion further took place on access to the backlands and ownership of the backlands.

As a result of the discussion, the following referral motion was introduced:

It was moved and seconded

That staff provide an update on (i) the future transportation needs of the Williams Road and No. 5 Road intersection, (ii) farm access through the backlands, and (iii) backland ownership.

CARRIED

Opposed: Cllr. Loo

Discussion then took place on the Blundell Road interchange and the backlands policy regarding roads and as result of the discussion, the following **referral motion** was introduced:

It was moved and seconded

That staff (i) re-examine the Official Community Plan amendment to remove the Blundell Road interchange and (ii) examine the north south roadway along the backlands.

CARRIED

1C. HIGHWAY TO HEAVEN (NO. 5 ROAD) IN THE OFFICIAL COMMUNITY PLAN (File Ref. No.)

It was moved and seconded

That staff review the backlands policy for the Highway to Heaven (No. 5 Road) and provide updated wording to ensure that only religious institutions are permitted.

The question on the referral motion was not called as discussion took place on not allowing schools on the backlands and to amend the wording to be more specific.

The question on the referral motion was then called and it was **CARRIED** with Cllr. Loo opposed.

1D. RICHMOND SCHOOL DISTRICT NO. 38 NOTIFICATION

(File Ref. No.)

It was moved and seconded *That:*

(1) staff inform the Richmond School District No. 38 of any plans for rezoning applications involving future private schools in Richmond at the beginning of the planning process; and

(2) the above recommendation be referred to the Council School/Board Liaison Committee.

The question on the referral motion was not called as discussion took place on notifying the School District of any future private schools for feedback.

In reply to queries from Committee, staff noted that (i) the Richmond School District is engaged in the formal process with regard to the Official Community Plan (OCP), (ii) city staff are currently reviewing types of OCP amendments that are referred to the School District, and (iii) under current policy, the School District is notified when an OCP amendment generates additional school population.

The question on the motion was then called and it was CARRIED.

2. MANAGER'S REPORT

None.

ADJOURNMENT

It was moved and seconded *That the meeting adjourn (4:33 p.m.).*

CARRIED

Certified a true and correct copy of the Minutes of the meeting of the Planning Committee of the Council of the City of Richmond held on Tuesday, December 3, 2019.

Councillor Linda McPhail Chair Sarah Goddard Legislative Services Coordinator



Report to Committee

To: Planning Committee

From: Wayne Craig Director, Development
 Date:
 November 18, 2019

 File:
 08-4040-01

Re: 2019 Summary Report - Community Information Sessions on Development, Affordable Housing, Transportation and Sustainability in the City

Staff Recommendation

That staff be directed to proceed with the Community Information Session Program for 2020 as described in the Staff Report titled "2019 Summary Report - Community Information Sessions on Development, Affordable Housing, Transportation and Sustainability in the City" from the Director, Development.

agu (s) Wayne Craig

Director, Development (604-247-4625)

WC:ss Att. 2

REPORT CONCURRENCE				
ROUTED TO:	CONCURRENCE	CONCURRENCE OF GENERAL MANAGER		
Affordable Housing Policy Planning Transportation Sustainability	व व द द	he Eneg		
REVIEWED BY STAFF REPORT / AGENDA REVIEW SUBCOMMITTEE	INITIALS:	APPROVED BY CAO		

Staff Report

Origin

Staff have recently completed the first round of Community Information Sessions that emerged as a result of a Council referral.

On April 8, 2019, the Planning Committee passed the following resolution:

- (1) That staff be directed to proceed with the implementation of the proposed Community Information Session Program as described in the report titled "Community Information Sessions on Development, Affordable Housing, Transportation and Sustainability in the City" from the Director, Development; and
- (2) That staff report back following the last session each year to provide a summary of the events including any feedback received.

Four Community Information Sessions have now been held in different locations in the City to provide information and comment across a range of topics related to planning and development in the City including current and future initiatives. Collectively the information provides the backdrop to the City's efforts to address growth and change in the City. A copy of the display boards (Attachment 1) and a summary of input received (Attachment 2) are attached to the Staff Report for reference.

This Staff Report supports Council's Strategic Plan 2018-2022 Strategy #8 – An Engaged and Informed Community:

8.2 Ensure citizens are well-informed with timely, accurate and easily accessible communication using a variety of methods and tools.

Findings of Fact

The City of Richmond routinely provides information to and consults with the public on development applications and new policies and regulations as they are developed. This is done to comply with *Local Government Act* regulations to inform the public and to seek input on proposed changes.

Community Information Sessions have been added to provide a forum for information sharing and public engagement with the City in a less structured format. The intent is to better inform and engage the community members.

2019 Community Information Sessions

As part of the start-up of the program, four sessions were held in 2019, beginning with three sessions in the Spring and one in the Fall. The sessions were portable and focused on City Hall and Community Centre locations:

2019 Dates and Locations

Community Information Session #1 Wednesday May 2, 2019, 4:00 – 8:00 pm City Hall Atrium

Community Information Session #2 Thursday, May 16, 2019, 4:00 – 8:00 pm East Cambie Community Centre **Community Information Session #3**

Thursday, June 13, 2019, Noon – 4:00 pm West Richmond Community Centre

Community Information Session #4

Thursday, October 24, 2019, 4:00 – 8:00 pm Richmond Cultural Centre

The sessions featured a drop-in Open House format with display boards (Attachment 1) supplemented with handout materials (e.g. bulletins on development and affordable housing). The boards provided information on City plans, policies and initiatives that guide development and how they are being implemented to address growth and change in the community.

Staff from Development Applications, Policy Planning, Affordable Housing, Transportation and Sustainability Departments attended the sessions to engage and respond to questions. This format provided a significant amount of information and an opportunity to speak directly with staff.

Information and materials from the sessions, including a comment form, were also made available on the City's website.

The Community Information Sessions were promoted and advertised in accordance with City policies. This included promotion via the City's website, social media channels and other outlets as appropriate. In addition, posters were featured in various locations: City Hall, the Library and Community Centres around the City. The information was also incorporated into prominent television screen displays at local community centres.

Summary of Input

Community Information Sessions provided information on key topic areas and participants were invited to provide comments. Staff received feedback through discussions with community members, on feedback boards and through a paper comment form (also available online). A summary of input is attached to this report in Attachment 2.

The most frequent questions and comments focused on transportation and related current projects primarily non-City led initiatives (George Massey Crossing, TransLink bus service, Canada Line stations, etc). Second, was affordable housing with a number of attendees inquiring about availability of that form of housing for their own needs. Overall the sessions were well received. Additional comments included a number of one time mentions including provision of space for non-profits, expanding community gardening/farming, expanded use of recycled materials and mention of concern around underground parking and high-rises in the city centre.

Analysis

The sessions attracted 63 attendees across four events in different locations in the City. This modest turnout reflects the challenge associated with hosting events that are primarily information sharing in nature.

On average 16 persons attended each event. Each event was supported by six to eight staff members, representing different topic areas of expertise. This included one administrative staff member and three to four staff from Planning and Development, and one staff member each from Transportation, Affordable Housing and Sustainability.

The cost of hosting the events (materials, refreshment, staff overtime, advertising) was approximately \$7,400 or \$1,850 per event.

The feedback received confirms that the content is of interest to community members but it is not enough of a draw to fill a stand-alone event. Attendees were most interested in transportation and housing related matters. Comments received were varied in focus and scope making them difficult to draw any particular direction from. This may be expected with the wide range of topics that were available for input.

Based on the experience of the first year of Community Information Sessions, staff will look to combine future events with other City efforts resulting in more community members with which to engage and greater exposure to the information.

2020 Community Information Sessions

The program plan for Community Information Sessions is two sessions per year into the future, holding one event approximately every six months. Staff are targeting Quarter 2 and Quarter 4 for events in 2020.

An effort will be made to combine this ongoing effort with other opportunities to seek input from the community on policy change or development e.g. the Community Energy and Emissions Plan update and other similar efforts. This approach of combining efforts is anticipated to have a positive effect on the number of community members that staff can connect with to share information, discuss key issues and capture comments.

Staff will keep Council informed of the proposed line up (schedule and location) for 2020 prior to the sessions.

Financial Impact

The cost for hosting the events has been accommodated through existing departmental budgets.

A maximum of two sessions in each year moving forward can be accommodated within existing budgets. Additional sessions would require additional resources.

Conclusion

This Staff Report provides an annual summary of an ongoing program to engage and inform the public through Community Information Sessions on a range of development, affordable housing, transportation and sustainability topics and initiatives. Dates for 2020 sessions, once available, will be well promoted through City channels and adequate notice provided should Council wish to attend and participate. Materials from these sessions will also be made available on the City's website.

Suzanne Smith Program Coordinator, Development (604-276-4138)

SS:blg

Attachments:

- 1. Display Boards 2019 Community Information Sessions
- 2. Summary of Input 2019 Community Information Sessions

COMMUNITY INFORMATION SESSIONS

Learn more about Planning and Development, Affordable Housing, Transportation & Sustainability in the City

Welcome

The City of Richmond is holding a series of Community Information Sessions to share information about current and future planning and development, affordable housing, sustainability and transportation initiatives.

The topics for the Information Sessions include:

Planning & Development

Through the development of policies and guidelines for new development the City can ensure new growth meets the needs of the growing community in a manner that is sensitive to existing development.

Transportation

In cooperation with TransLink and other agencies the City seeks to improve the transportation network by expanding opportunities for transit, cycling and walking, as well as goods movement.

Affordable Housing

By establishing clear policies and incentives to increase the amount of affordable housing in the city the housing stock can better serve the needs of the diverse and growing community.

Sustainability

The City is taking action to make Richmond a sustainable place to call home, for now and years to come. Efforts include energy efficient buildings, district energy and environmental protection.

Progress in these areas puts the City of Richmond on a path towards its vision of being a place where people live, work and prosper in a welcoming, connected, accessible and vibrant community. This includes consideration of the health of the ecosystem and the long term social and economic wellbeing.





Planning & Development at the City of Richmond

Planning and Development

Richmond's Planning and Development Department is responsible for a range of functions aimed at managing the city's future growth. These functions include:

- Preparing the City's Official Community Plan (OCP) and Area Plans;
- Creating long range land use, urban design and environmental policies (e.g. agricultural, industrial, heritage, environmental, flood management);
- Reviewing all development applications (e.g. rezoning, development permits, development variance permits, subdivisions);
- Supporting the City's Advisory Committees on heritage, agriculture and the environment;
- Coordinating the design and installation of infrastructure improvements (e.g. roads, water, drainage and parks) and collecting Development Cost Charges;
- Developing transportation strategies that meet future travel demand in Richmond;
- The planning and functional design of roads and traffic operation controls including traffic signals;
- · Reviewing and issuing building permits; and
- Administering and enforcing the City's Tree Protection Bylaw.

Provincial Local Government Act

Richmond's powers, duties and functions are enabled by the Province of British Columbia's Local Government Act and the Community Charter. This set of legislation provides the legal framework and foundation for local governments to represent the interests and respond to the needs of their communities.

Community and Stakeholder Engagement

The Planning and Development Department, and other departments in the City, work closely with the community and other external agencies throughout the planning process. Some of the key stakeholders in Richmond include Richmond residents and business owners, the Vancouver Airport Authority, the Port of Vancouver, Metro Vancouver, TransLink, Vancouver Coastal Health, the Agricultural Land Commission and the Ministry of Transportation and Infrastructure.







Richmond Planning Framework and Vision

Official Community Plan (OCP)

Planning in Richmond starts with the OCP. An OCP is the community's long range vision for how it plans to evolve over time. It provides the policy framework for growth in Richmond and describes Richmond in the future as:

A place whose greatest assets include:

- A thriving downtown
- A diversified economy
- Distinct and connected neighbourhoods
- Island shoreline
- Productive agricultural lands

Richmond's OCP functions as a link between the broad concepts of the Metro Vancouver Regional Growth Strategy and the City's objectives.

Future growth in the city is directed towards the City Centre, neighbourhood shopping centres and along Arterial Roads in the community where transit service and proximity to shopping, jobs and services are greater.

Area Plans

Richmond has a number of Area Plans which provide specific details and development considerations for various parts of the city. These include:

City Centre - Steveston - Hamilton - East Cambie

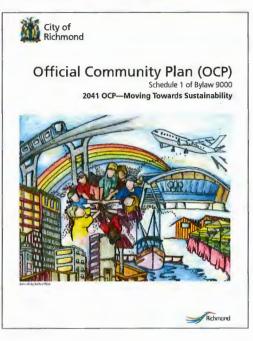
West Cambie - Blundell - Bridgeport - Broadmoor

East Richmond - Shellmont - Thompson

Richmond Zoning Bylaw

Richmond Zoning Bylaw 8500 regulates the use, density, siting, size and height of buildings and the shape and size of land parcels in the city.

By establishing a clear and efficient system of land use regulation, the Zoning Bylaw helps implement the Official Community Plan. Different zones permit different types of development in support of the overall vision.









Planning and Development

The Life of a Development

The City administers the development of property through a number of permits and processes including Rezoning which involves a change in use or density, Development Permits which address form and character, heritage and environmental considerations, and Building Permits which help ensure life and safety. The flowchart to the right provides an example of a development involving these common types of applications.

Community Benefits of Development

Many community benefits have been achieved through requirements and contributions from development in the city including:

- Major new Parks
 - *e.g. Capstan Village Park, Concord Gardens, Middle Arm Waterfront Greenway, Aberdeen Park, the Gardens Agricultural Park, London's Landing
- 9 Child Care Facilities including 7 Child Care Centres and 2 Early Childhood Development Hubs
- Major Facilities—2 Community Centres
- New Office Space
- Affordable Housing Units & Secondary Suites
- Public Art Contributions

In addition to these community wide contributions which contribute to the community's overall well-being and livability, each new development includes frontage improvements and service upgrades including some or all of the following:

- New sidewalks, grass boulevards and trees and often includes irrigation
- Transportation improvements (road improvements signal upgrades, bike lanes)
- Funds toward or construction of utility upgrades to support growth including water, sewer, drainage and roads.







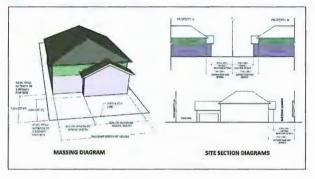
Rezoning Development Flowchart



Planning and Development – Housing

Single Family Building Massing

- The City's Zoning Bylaw regulates the size and shape of homes in the city.
- Two phases of Zoning Bylaw amendments were undertaken in 2015 and 2017 to refine building massing regulations for single family houses.
- Each phase of amendments involved numerous public open houses held by City staff to give residents an opportunity to discuss issues, review options, and provide input.



Short Term Rentals

- In Richmond, residents can offer two types of short term rentals (less than 30 days) in their home:
 - 1. Bed and Breakfasts (B&Bs) which require a City issued licence. This includes residents who host traditional B&Bs as well as those who are simply renting rooms within their home, such as short term vacation rentals.
 - 2. Boarding/lodging involves renting a room in a dwelling and involves no more than two people at a time, and this does not require a licence.
- Short term rental of the entire house or residential unit for less than 30 days is not permitted under any circumstance.

Land Use Contracts

- Land Use Contracts (LUCs) are a form of zoning regulation. The Province enabled municipalities to use LUCs between 1973 and 1979. Unless discharged, LUCs registered on title during such period remain in place today affecting the use and development rights of the affected properties.
- In 2014, new Provincial legislation was enacted which will terminate all LUCs on June 30, 2024. Municipalities also have the ability to terminate LUCs earlier.



• First phase: all Single-Family Land Use Contracts were terminated on November 24, 2016.

PLN - 18

• **Second phase:** it is anticipated that all remaining Land Use Contracts (e.g. multi-family, commercial, etc) will remain until June 30, 2024. Underlying zoning regulations are in the process of being phased in by geographical area and must be established by June 30, 2022.



Planning and Development – Housing

Market Rental Housing Policy

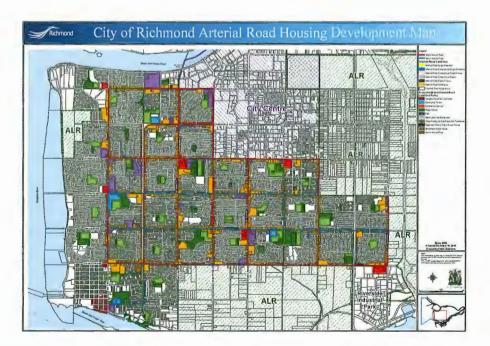
• Following consultation on draft policies, the Market Rental Housing Policy was adopted by Council in September 2018. This policy seeks to protect the supply of existing market rental housing, support tenants at the time of redevelopment and encourage the development of new market rental units. See the board Future Initiatives: Planning and Development for further information.

Demolition Waste Recycling and House Moving and Salvage Program

- On March 14, 2016 Council adopted the Demolition and Recyclable Material Bylaw No. 9516 requiring waste and recyclable materials resulting from demolition work to be sent to an approved waste disposal & recycling facility.
- The City encourages homeowners to participate in its House Moving and Salvage Program in an effort to reduce demolition waste, save on demolition and recycling fees, as well as reuse livable houses.

Arterial Road Land Use Policy

- The City's OCP supports densification along its arterial roads where properties are in close proximity to commercial services, public amenities, schools, and transit service.
- The Arterial Road Land Use Policy supports townhouses, row houses, duplexes, triplexes and coach houses along arterial roads with a goal to minimize traffic disruption by ensuring no net increase in driveways.
- In 2016, the City updated the Arterial Road Land Use Policy and introduced additional housing types (e.g., duplexes, and triplexes), refined the Development Permit Guidelines, and clarified locational guidelines for different types of housing. This update involved several public and stakeholder consultation events.





Policy Planning – Heritage and Environment

Heritage

- The City has an established Heritage Inventory of identified heritage buildings and other resources throughout the community.
- City's 2041 Official Community Plan establishes the Steveston Village Heritage Conservation Area (HCA) to provide long-term protection to the heritage character of Steveston Village.
- The City continues to work with property owners that require a Heritage Alteration Permit to restore and conserve the historic exterior of the building.
- In 2009, the City approved the Steveston Village Heritage Conservation Grant Program to provide financial assistance to property owners for conserving the exterior of identified heritage resources.
- The Sakamoto Guidelines were reincorporated within the Steveston Area Plan to strengthen design guidelines for restoring historic buildings in Steveston Village.

5 History Facts of Richmond

- 1. Richmonds' shoreline has long provided habitat for migrating birds on the Pacific Flyway between the Arctic and South America.
- 2. First Nations people were the first to set up seasonal camps on the land to fish and collect berries.
- 3. The City of Richmond is seven years older than the City of Vancouver.
- 4. The first successful flight in Canada was recorded in 1910 on the Minoru Racetrack.
- 5. More than 60% of Richmond's population are of Chinese or South Asian ancestry.

Environmentally Sensitive Areas (ESA)

- The ESA Development Permit Area in Richmond has been established since 1991, with ESAs designated in the City's Official Community Plan for the protection of the natural environment, its ecosystems and biodiversity.
- Qualified Environmental Professionals are required for all ESA Development Permits (DPs) to accurately verify the location and condition of designated ESAs as well as to recommend detailed protection and restoration options that will satisfy the City's objectives.

Riparian Management Areas (RMA)

- RMAs were established in consultation with the Department of Fisheries and Oceans Canada.
- Setbacks are assigned to minor (5m) and major (15m) designated streams measured perpendicular from top-of-bank that are to remain free from development unless authorized by the City.
- A Construction Environmental Management Plan completed by a Qualified Environmental Professional is required to demonstrate mitigation measures during development.





Policy Planning – Agriculture and Cannabis

Agricultural Policies

- Agriculture is an important part of Richmond's history. Today, close to 40% of the City is within the Agricultural Land Reserve (ALR), contributing to our local and regional economy.
- The City has established a number of regulations for residential use of farmland, including a maximum farm home plate, maximum residential setbacks, maximum house size limits, and restrictions on the number of single family dwellings on each agricultural lot.
- In 2018, to further protect farmland, the City introduced more restrictive regulations on the maximum size of houses within the ALR.
- City staff work closely with the Agricultural Land Commission and the Ministry of Agriculture on policy discussions and data exchanges.



Cannabis Regulation

- In 2018, Provincial legislation and amendments to the Zoning Bylaw would prohibit the production of cannabis in an enclosed building or greenhouse;
- The City has prohibited the retail sale of cannabis;
- Research and development and production of medicinal cannabis is regulated and limited to industrially zoned areas and,
- The City continues to develop and refine policy to regulate this activity.



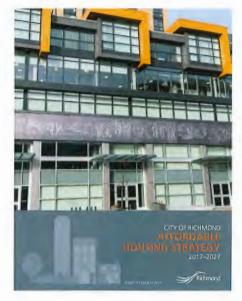




Affordable Housing

Affordable Housing Strategy (AHS)

- The City is committed to supporting the development of the right mix of housing so that all households of different sizes, ages and incomes have access to housing that meets their needs.
- In March 2018, Council adopted the AHS to guide the City's actions to increase the supply of affordable housing over the next 10 years.
- The AHS supports the development of the right mix of housing using a suite of regulatory tools, including:
 - *Housing policy development;
 - *Leasing City owned land to non-profit housing providers;
 - *Affordable housing funding;
 - *Secondary suite requirements in single family developments; and
 - *Inclusionary zoning, which requires developers to build low-end market rental (LEMR) units within apartment developments that have more than 60 residential units.



Homelessness Strategy

- The latest Homelessness Count estimated that at least 70 Richmond residents are experiencing homelessness, an increase of 84% since 2014. Local service providers estimate the number of individuals experiencing homelessness to be closer to 120.
- The City is in the process of updating the Homelessness Needs Assessment and Strategy, which
 will help guide the City's actions in addressing the needs of individuals experiencing or at risk of
 experiencing homelessness.

Richmond House Emergency Shelter

- Renovations on a new emergency shelter are currently underway involving:
 - *30 shelter and short term emergency beds that are accessible and inclusive of men and women.

- *Short term emergency shelter that provides onsite services including meals, laundry, showers and connection to appropriate community supports.
- Anticipated opening is late Spring 2019.
- The City contributed land at 12040 Horseshoe Way, valued at \$6 million.
- The new shelter will be operated by The Salvation Army.



Affordable Housing: Examples

Since 2007, the City has worked in partnership with senior levels of government, the private sector, and non-profit organizations to create more than 2,000 new affordable housing units. The following projects were developed with City funding, land, policy requirements, or in-kind support:

Temporary Supportive Housing

- 40 shelter-rate rental units for residents exiting the emergency shelter system (modular housing).
- Short to medium term housing that includes supportive services to help tenants move towards self sufficiency.
- The City is contributing land at a nominal rate for 5 years.
- Opened in April 2019. It will be operated by RainCity Housing Society.

Atira Apartments at Cadence

- 15 units of shelter-rate housing for single women with children secured through the City's Low End Market Rental Policy
- Medium term housing with on-site programming and subsidized childcare spaces at the neighbouring centre.
- Opened in May 2017. Operated by Atira Women's Resource Society.

Storeys

- 129 affordable rental units for vulnerable households, including those at risk of homelessness.
- Long term housing with a social service hub.
- The City contributed the land at a nominal rate and a total of \$19.4 million towards capital costs, municipal fee and development cost charge waivers.
- Opened September 2017. Operated by a non-profit consortium (Coast Mental Health, SUCCESS, Pathways Clubhouse, Tikva Housing Society, and Turning Point Recovery Society).

Kiwanis Towers

- 296 affordable rental units for low-income seniors.
- The City contributed \$24.1 million towards capital costs, municipal fee and development cost charges waivers.
- Opened in July 2015. Operated by Kiwanis International.











Transportation

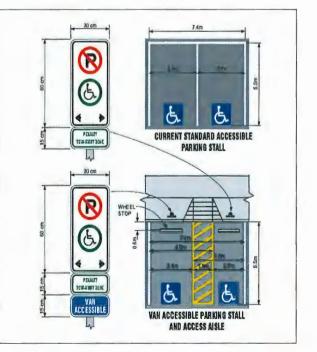
Southwest Area Transport Plan

- TransLink-City partnership to identify transit and infrastructure priorities over the next 10 -15 years for Richmond, South Delta and Tsawwassen First Nation
- Developed 2015 -2018, completed in April 2018.
- Improved transit frequency and reliability for local and regional routes.
- Improved transit service to industrial areas, business parks and growing neighbourhoods.



Accessible Van Parking

- Update of off-street accessible parking space requirements in Zoning Bylaw.
- Amendments accommodate the increased use of side-loading vans for individuals using wheelchairs and similar mobility devices.
- Adopted in September 2018.





Transportation

River Parkway

- Extension and re-alignment of River Road northeast of Gilbert Road.
- Elimination of interim River Road connection next to Dinsmore Bridge
- Improve traffic circulation with continuous viable alternate route to No. 3 Road and existing River Road.
- Facilitate the development of the Middle Arm Waterfront Park.
- Initially comprise two-lane road and protected bike lanes with signalized connection at Leslie Road.
- Construction underway with completion in 2020.

Road Network Plan



Public Bike Share Pilot Program

- Agreement with U-bicycle to operate pilot program at no cost to the City to Spring 2020.
- Currently 39 stations and 80 bicycles mainly in the City Centre, West Richmond and Steveston.





High Collision Prone Intersections

• ICBC-City partnership to undertake a Network Screening Study to identify and prioritize the top 20 high collision prone intersections and determine potential road safety improvements



Recommendations and Next Steps for the Top 20 Intersections

Project	Scope Including, but not limited to the following: • Improved traffic/parking signage • New or refreshed pavement markings • Trimming of foliage to improve sightlines • Traffic signal modifications • Education		
Short-Term Improvements (1)			
Medium-/Long-Term Improvements Enforcement of Speeding and Red Light Running (2)	Provide cameras where speeding is a chronic contributing factor to collisions		
Medium-/Long-Term Improvements Preliminary Design (1)	A detailed intersection safety study and/or design for each of the 20 intersections to confirm the exact scope of infrastructure improvements		
Medium-/Long-Term Improvements Implementation of Infrastructure Related (1)	Including, but not limited to the following: Intersection capacity improvements Addition or lengthening of left-turn lanes Redesign of existing channelized right-turn lanes Completion of pedestrian and cycling connections		

(1) Will be included in the 5 Year (2020-2024) Financial Plan and submitted to Richmond City Council for approval

(2) The red light camera and automated speed enforcement programs are within provincial jurisdiction. The City of Richmond has requested the Minister of Public Safety and Solicitor General to provide cameras at intersections and is working with RCMP to increase speed enforcement in the interim.

PLN

26



Sustainability, Environment & Climate Action

Community Energy & Emissions Plan

• The plan defines 34 actions to reduce energy use and reach City-wide greenhouse gas (GHG) emission reduction by 80% by 2050. The plan provides directions for creating compact and complete communities, encouraging active modes of transportation, and increasing energy efficiency in buildings. Richmond has reduced greenhouse gas emissions by 12% since 2007 despite the same growth in population.

District Energy Utility

 Richmond's Lulu Island District Energy Company is an international leader in district energy systems, which reduce carbon emissions and deliver affordable, reliable heating and cooling for a neighbourhood. Alexandra District Energy Utility project won the International DE Association's Award in 2016.

BC Energy Step Code

• The BC Energy Step Code is a provincial standard that provides an incremental and consistent approach to achieving more energy-efficient buildings in BC. In June 2018, Council adopted the BC Energy Step Code requirements into the City's Building Regulation Bylaw for all residential developments.

Electric Vehicle (EV) Charging

• In 2017, Council adopted new "first in North America" (if not the world) requirements that all new residential buildings will provide energized outlets capable of providing "Level 2" EV charging for all residential parking stalls.

EnergySave Richmond

• Visit www.energy.richmond.ca to learn about training and incentives programs available in Richmond.

Ecological Network Management Strategy

• The Ecological Network is defined as the inter-connected system of natural and semi-natural areas across Richmond's landscape, including terrestrial, marine, and riparian areas. Actions are grouped into four (4)areas: Green Infrastructure & Development, Vegetation, Habitat & Wildlife, Parks & Public Lands, and Stewardship & Collaboration.

Invasive Species Management

- Richmond is a demonstrated leader in invasive species response, and the newly adopted Invasive Species
- ActionPlan formalizes a strategic and risk-based approach to guide and prioritize invasive species management into the future. The Plan sets priorities, establishes a consistent approach, and defines public outreach and engagement commitments.



City Council recently gave staff direction to renew the Community Energy and Emissions Flan to accelerate climate actions in Richmond. Check out www.energy.richmond.ca to find out how you can provide input at upcoming events.













Future Initiatives: Planning and Development

Upcoming Projects

In 2019, staff in the Planning and Development Department will be working on a number of projects, including:

Industrial Land Intensification Initiative (ILII)

Richmond has a long and productive history of industrial activity. The Industrial Land Intensification Initiative commenced in 2018 and will continue to explore how the City's policies and bylaws can support the intensification of industrial lands.

Agricultural Viability Strategy Update

The Richmond Agricultural Viability Strategy (2003) is a longrange strategy to ensure that farming in Richmond remains sustainable. An update to the AVS will be undertaken in consultation with the farming community.

Residential Rental Tenure Zoning

Residential rental tenure zoning is a new power provided by the Province in 2018. It allows cities to create zones that require all or a portion of multi-family buildings to be rental tenure only. Richmond will be considering how this zoning tool may be best used to protect existing rental housing and how it may be used to secure rental units in new developments.

Market Rental Housing Policy Update

Adopted in 2018, Council directed staff to explore how the incentives-based policy could be enhanced and what areas of the city are most in need of market rental housing. Specific incentives examined to date include parking, property tax exemptions, Developmet Cost Charges (DCC) waivers and density bonus.

Heritage Inventory Update (with Heritage Services)

The Heritage Inventory is a database of important heritage resources in Richmond. The inventory, which includes buildings, trees and other special places, was last updated in 2002.













Future Initiatives: Transportation

Capstan Station

- Innovative TransLink-City agreement in 2010 to fund the future station
- Voluntary contributions are collected from developers in the nearby catchment area
- Target amount for construction has been reached
- City working with TransLink to develop a preferred station design

Richmond-Brighouse Bus Mall

- Relocation of Scotiabank and demolition of old site
- City has an active Development Permit application that will facilitate construction
- TransLink anticipates commencing construction in 2019 with operation in 2020

Massey Tunnel Crossing Improvements

- Province of BC to develop a new business case by the end of 2020.
- City is seeking short-term improvements to Steveston Highway interchange.

Mobility Hubs

- Hubs include a mix of travel choices in central location: transit, car-share, bike-share, ride-hailing, EVs.
- Seeking to establish city-wide network.







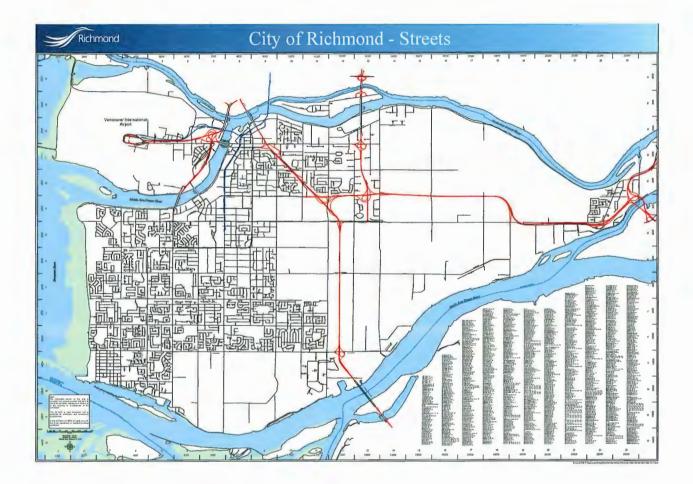




Where do you live?

Tell us about you.

Please take a moment to place a sticker on the property where you live, own or represent. If you do not reside or own land in the area, place your sticky dot in the space below.



30

PLN



Share your thoughts on the City's successes and future initiatives using the sticky notes and pens below.



Further Information

Richmond welcomes your input and participation.

Information Bulletins

The City has Information Bulletins on a wide variety of topics including but not limited to:

- How to make a Development Application
- Tree Protection
- Electric Vehicle Charging Infrastructure Requirements
- Affordable Housing Strategy
- Market Rental Housing Policy
- Child Care Facilities
- Noise Management
- Riparian Management Areas
- Steveston Village Heritage Conservation Area

Copies are available on the nearby table.

They can also be found on the City's webpage at www.richmond.ca

Policy Documents, Guidelines and Application Forms

All of the plans, policies and guidelines noted in these boards are available online on the City's webpage at www.richmond.ca

Opportunities to be Involved

Please watch for opportunities to be engaged in upcoming projects.

- https://www.richmond.ca/plandev/planning2/projects.htm
- communityplanning@richmond.ca
- 604-276-4052

Community Information Sessions 2019 Schedule

Community Information Session #1

Thursday May 2, 2019,4:00- 8:00pm City Hall Atrium 6911 No. 3 Road

Community Information Session #2

Thursday, May 16,2019, 4:00- 8:00pm Cambie Community Centre 12800 Cambie Road

Community Information Session #3

Thursday, June 13, 2019, Noon- 4:00pm West Richmond Community Centre 9180 No. 1 Rd

Community Information Session #4

Thursday, October 24,2019,4:00- 8:00pm Richmond Cultural Centre 7700 Minoru Gate



Input Summary – 2019 Community Information Sessions

The Community Information Sessions Program launched with four events in 2019. Sessions were held in different locations in the City with staff from Planning & Development, Affordable Housing, Transportation and Sustainability on hand for information, discussion and to receive input. Comments were also collected through a formal comment form. All information was also available on the City's website.

The most frequent questions and comments focused on transportation and related current projects primarily non-City led initiatives (George Massey Crossing, TransLink bus service, Canada Line stations, etc). Second was affordable housing with a number of attendees inquiring about availability of that form of housing for their own needs. Overall the sessions were well received. Additional comments included a number of one time mentions including provision of space for non-profits, expanding community gardening/farming, expanded use of recycled materials and mention of concern around underground parking and high-rises in the city centre.

Attendance:

Staff: Development Applications, Policy Planning, Sustainability, Transportation, Affordable Housing

Community Members: 63 people - on average 16 people per event

Event #1 City Hall	Event #2 Cambie Community Centre	Event #3 West Richmond Community Centre	Event #4 Richmond Cultural Centre
18	10	14	21

Common Themes Overall:

- Most mentions/interest:
 - 1. Transportation improved transit (bus and train); improved traffic flow and intersection traffic safety; u-bike support
 - 2. Affordable Housing inquiring to know more; seeking housing of that type.
- Less frequent (1 mention per):
 - o Space for non-profits
 - o Consult with seniors on aspects of affordable living
 - Expanding community gardens/organic farming (via rezoning)
 - Recycled materials paper; recycled plastic for roads
 - Concern for built form highrises in city centre
 - o Concern for underground parking/potential for sinking

Discussions with Staff – common themes:

- Transportation questions about projects featured on the transportation boards. Mainly regarding non-City led initiatives (George Massey Crossing, TransLink bus service, Canada Line stations, etc).
- Affordable Housing inquiring to know more; seeking housing of that type.
- Planning interest in hearing how the planning and approval process works.

Raw Data:

Feedback Board (sticky notes)

- Thank you for the thorough Transportation responses.
- Rezoning for expanding community gardens or increased organic farming.
- You need to hold this meeting 3 times per year.
- I agree, a town hall meeting quarterly and brainstorming discussion with citizen ideas.
- Recycled materials incentives for use of post-recycled materials ie: post-recycled plastic roads.
- City of Richmond using 100% recycled paper for bulletins, etc.
- Space for Non-profits
- What are ways to stop having a neighbours marijuana/smoking smell drifting into my home at a single house to single house level? It is distressing for my family to smell that burnt-wet-manure-like smell.
- Can we have a covered area for exercise in Minoru park when the ice rink is rebuilt. The covered area will be an excellent place for people doing exercise or tai chi in the rain.
- Consult with seniors re: independent affordable living, physical needs e.g. hand held shower heads; accessible tubs etc; parking.
- The City should prioritize the flow of traffic for motorists and not slow it down by adding more traffic lights. We miss the old River Road without the traffic lights.
- More parking is needed for Canada Line riders.
- I don't like polluting.

Comment Forms (paper, none submitted electronically)

- Looking forward to the new developments! Would like to see more information regarding the community plans & shelters! Excited for the U-bike program and thank you guys for all the hard work.
- Helpful Information.
- Thorough displays varied. All City reps informative and friendly. Thank you and well done.
- Please hold this again with a presentation and advertise it well. Thank you.
- More of this and let everyone know.
- Capstan station useless.
- I am still looking forward to use the new Minoru swimming pool. But still you guys did not have the exact date and always postpone. For bus route 414, petition for a frequency ten minute schedule because I indeed Brighouse Station to Olympic Oval. For the affordard, or senior housing should expand more because there has a long waitlist. Most of the applicants wait for more than five to ten years. Also, once the applicants move in,

they will live there for a long time. Maybe put more restriction for person to apply like only for seniors, low-income people or people for disabilities. People had to be update their current situation.

- Comments
 - We need more buses and more sky trains for Richmond BC
 - There are too many high-rise building projects in the City Centre
 - Beware the sinking land for those underground parking like the project of the Richmond Centre
 - o Most of the high-rise buildings windows are unable to fully open in case of fire
 - However, overall, this is one of the best City for anyone to live here!
- Petition for a frequency ten minute schedule for Bus 414 route from Brighouse station to Olympic Oval. The reason current Bus 414 time schedule is 30 mins, it takes too long and it creates difficulties for residents who can manage the time for using the value route of Bus 414. (City Centre Community Centre, Richmond Mental Health Team (Adult), Richmond Mental Health Team (Older Adult), Anne Vogel Clinic, Richmond Mental Health Consumer and Friends' Society, Richmond (Brighouse Branch) Library, Richmond City Hall, Pathways Clubhouse, T&T Supermarket, Oval Village Medical Clinic, Richmond Centre, Olympic Oval. Actually, the public in need (residents, seniors, people with health conditions, people with disabilities, people who have to care for others, etc). It become a transportation source of frustration, and added barrier to fulfill their needs.
- Regarding bus route to Oval, there was one potentially dangerous thing at the moment: past summer I was accompanying a senior to go to Oval. It was during the summer holidays in the weekdays and was at the intersection of Minoru & Westminster. The senior had a weak heart, and we had to stand under the summer sun for nearly half an hour. And after we got on, the driver had to refuse passenger at next stop due to it being a small bus.

On the return trip, we left Oval at bus schedule and got on the bus. The real problem started here: a summer camp leader and roughly 30+ children attempt to board the bus as well, on a vehicle that held 30-ish people and already half full. Not commenting on how appropriate summer camp companies used the public transport service, at that moment the bus driver did not let them board, he'd be leaving 30 children under the sun for who know how long, so he let them on (and I won't fault him for it).

So we had a packed bus with kids seated 3 in every 3 seats and on the back where wheelchairs would be, and all the adults including the bus driver trying their best to make sure things were safe. All because of a long waiting schedule and a small bus.

Plus it was such a chore to get around that area that discourage people from going to Oval. In turn Oval lost revenue and use to justify its continue existence. We might as well not have an Oval...And this could be fix by simply having better transportation there. Not to mention the apartment hub the Oval area is turning into. More buses = less needs for cars (& pollution).



To:	Planning Committee	Date:	December 3, 2019
From:	Barry Konkin Director, Policy Planning	File:	AG 19-855723 AG 19-855800 AG 19-855911
Re:	Agricultural Land Reserve Exclusion Application by JNA Holdings Inc. at 14540 Burrows Road; Agricultural Land Reserve Exclusion Application by Karl, Lydia & Ulrich Wacker at 14680 Burrows Road; and Agricultural Land Reserve Exclusion Application by Shorewood Developments		

Agricultural Land Reserve Exclusion Application by Shorewood Developments Ltd. at 14920 Burrows Road

Staff Recommendation

- 1. That authorization for JNA Holdings Inc. to forward an Exclusion Application to the Agricultural Land Commission for exclusion of 14540 Burrows Road from the Agricultural Land Reserve be denied.
- 2. That authorization for Karl, Lydia & Ulrich Wacker to forward an Exclusion Application to the Agricultural Land Commission for exclusion of 14680 Burrows Road from the Agricultural Land Reserve be denied.
- 3. That authorization for Shorewood Developments Ltd. to forward an Exclusion Application to the Agricultural Land Commission for exclusion of 14920 Burrows Road from the Agricultural Land Reserve be denied.

Barry Konkin

Director, Policy Planning

BK:sds Att. 5

REPORT CONCURRENCE			
ROUTED TO:	CONCURRENCE	CONCURRENCE OF GENERAL MANAGER	
Development Applications	V	the Energ	

Staff Report

Origin

JNA Holdings Inc., Karl, Lydia & Ulrich Wacker, & Shorewood Developments Ltd. have applied to exclude three properties located at 14540, 14680 & 14920 Burrows Road from the Agricultural Land Reserve (ALR). A location map and aerial photograph are provided in Attachment 1. The properties are located in the ALR, zoned "Agriculture (AG1)", designated "Agriculture (AGR)" in the Official Community Plan (OCP) and all three properties contain Environmentally Sensitive Area (ESA). The applicants have submitted individual applications for each property and are not proposing an end use at this time. 14540 and 14920 Burrows Road are currently vacant and 14680 Burrows Road is currently occupied by a single-family dwelling. There are currently no active agricultural uses on any of the three subject properties.

In 1986, the south side of Burrows Road was considered by Council and the Agricultural Land Commission (ALC) for ALR exclusion as part of a block exclusion application by the City. However, exclusion of the south side of Burrows Road from the ALR was denied by the ALC. Council subsequently changed the area's OCP designation to Agriculture. Since then, the City has repeatedly not supported the property owners' request to exclude the properties from the ALR, as it is contrary to the City's OCP's agricultural designation and related policies. More information regarding historical proposals on the subject properties is provided in the "Background" section of this report.

Findings of Fact

A Development Application Data Sheet providing details about the development proposal is attached (Attachment 2).

Surrounding Development

- To the North: Across Burrows Road, light industrial buildings with surface parking and loading on properties zoned "Light Industrial (IL)".
- To the South: An agricultural operation on an approximately 40 acre (16 ha) lot zoned "Agriculture (AG1)".
- To the East: Across Savage Road unopened road allowance, agriculture operations on lots zoned "Agriculture (AG1)".
- To the West: Single-family dwelling on a lot zoned "Agriculture (AG1)", fronting Burrows Road.

Related Policies & Studies

Official Community Plan

The Official Community Plan (OCP) land use designation for the subject is "Agriculture (AGR)", which comprises of those areas of the City where the principal use is agriculture and food production, but may include other land uses as permitted under the *Agricultural Land Commission Act* (ALCA) (i.e. farm uses).

The proposed exclusion applications are inconsistent with the land use designation and are inconsistent with applicable policies in the OCP:

OCP Policy (Section 7.0)	Subject Applications
Maintain the existing ALR boundary and do not support a loss of ALR land unless there is a substantial net benefit to agriculture and the agricultural community is consulted.	 The proposal is to remove the subject properties from the ALR. Removal of the subject properties from the ALR would result in a net loss of total ALR land. No agriculture is proposed and there is no net benefit to agriculture as part of this proposal.
Support the 2040 Metro Vancouver Regional Growth Strategy which includes agricultural designations and policies for protection of agricultural land.	 The subject properties are designated "Agricultural" in the 2040 Metro Vancouver Regional Growth Strategy. The proposal is not consistent with the regional land use designation and does not support agricultural viability. Exclusion from the ALR for urban (non- agricultural) uses would require an amendment to the land use designation.
Continue to encourage the use of ALR land for farming and discourage non-farm uses.	 The purpose of the application is to remove the properties from the ALR in order to pursue land uses other than agriculture (i.e. non-farm uses).

Agricultural Viability Strategy

The Agricultural Viability Strategy (AVS), adopted by Council in 2003, establishes a long-range strategy for improving viability of farmland within the City. The objectives of the AVS include supporting and maintaining the stability and integrity of the ALR boundary, and not supporting a change to the ALR boundary or a loss of ALR land unless there is a substantial net benefit to agriculture. The AVS is currently in the process of being updated, but the principle of maintaining the ALR boundary is a long-standing City policy. Staff note that there are no apparent benefits to agriculture as a result of these applications.

Food Security and Agricultural Advisory Committee

The proposal was reviewed by the Food Security and Agricultural Advisory Committee (FSAAC) at the meeting on October 24, 2019. The Committee acknowledged the existing

condition of the properties presents challenges for an agricultural operation (specifically drainage issues); however, the subject exclusion applications may set a precedent for other small parcels in the ALR. A motion to support the application to proceed to Council was made, but it was defeated. No formal resolution was provided from FSAAC. An excerpt from the October 24, 2019 FSAAC meeting minutes is provided in Attachment 3.

Bill 15 – Agricultural Land Commission Amendment Act

Currently, the *Agricultural Land Commission Act* (ALCA) allows a property owner to make an exclusion application directly to the ALC and City. As per Bill 15, which received Royal Assent on May 30, 2019, individual landowners will no longer be able to submit exclusion applications to the ALC. The changes as per Bill 15 do not have force and effect until the enabling ALR Regulations are adopted (Provincial Government is currently working on these regulations). However, it is anticipated that the changes will include grandfathering provisions for in-stream applications.

Public Consultation

As per the ALR General Regulation, the applicants were required to complete the following in association with the submission of the exclusion applications to the Agricultural Land Commission (ALC):

- Advertise the application on two separate occasions in a newspaper in general circulation in the municipality where the property under application is located;
- Serve a signed copy of notice to all registered owners of land in the ALR that share a common boundary with the property, including owners of ALR property separated by a public road; and
- Installation of exclusion application signage.

The applicant has satisfied these requirements as per the ALR General Regulation.

Staff have received one piece of public correspondence in objection to the proposal and with the following concerns (Attachment 4):

- Removal of the lands from the ALR will impact the market for industrial land;
- The proposal could set a precedent for other properties in the ALR to apply for exclusion; and
- Land in Richmond is well-suited for agriculture.

Background

In 1986, a block exclusion application was made to the ALC by the City to remove seven separate areas from the ALR, including all lots on the south side of Burrows Road, as part of Richmond's first OCP. Five out of the seven areas for ALR exclusion were approved and two areas were denied (south side of Burrows Road and northwest corner of No. 6 Road & Steveston Highway). The northwest corner of No. 6 Road & Steveston Highway was later approved for ALR exclusion in 1988. The City subsequently changed the OCP designation of the Burrows

Road area from "Non-Residential" to "Agriculture". Since then, the City has repeatedly not supported the request for exclusion of the properties from the ALR, as it is contrary to the City's OCP's agricultural designation and related policies.

The property owners on the south side of Burrows Road submitted an exclusion application in 1988 and again in 1997. The 1988 application (LCA 88-000438) was withdrawn by the applicants prior to moving forward to Council for consideration. The 1997 application (AG 97-117852) was to exclude the properties from the ALR in order to pursue industrial uses, which was denied by Council on October 27, 1997, as the proposal was not consistent with the OCP's agricultural objectives and related policies. Both applications did not proceed to the ALC for consideration.

Since 2010, the property owner of 14680 Burrows Road has claimed drainage issues resulting in the settling of and damage to the house on the subject property, with the construction and operation of the private cranberry berms that were built for an adjacent cranberry farm at 2580 No. 6 Road. The City does not issue any permits relating to private berms, provided no additional soil is brought onto the property. In 2017, the property owner of 14680 Burrows Road also claimed the damage was a result of the City's negligence via a letter to Mayor and Council, dated October 23, 2017. Staff from the City's Law, Engineering, Policy Planning, Transportation and Community Bylaws Departments reviewed all available information and collectively concluded that the City is not responsible for the drainage issues identified in the letter.

Analysis

Subject Applications

The purpose of the current subject applications is to exclude 14540, 14680 & 14920 Burrows Road from the ALR. The proposal does not include the other four lots on the south side of Burrows Road (14400, 14300 Burrows Road and 2200 & 2280 No. 6 Road), located to the west of the subject properties. The subject properties are approximately 4.5 acres (1.8 hectares) each, for a total area of approximately 13.76 acres (5.57 hectares). The properties are zoned "Agriculture (AG1)" and designated "Agriculture (AGR)" in the OCP. The difference between the subject exclusion application and previous exclusion applications by the property owners is that this proposal does not specifically request an intended use; however, the intention is to eventually pursue urban uses (non-farm uses).

Technical Reports

The three applications include a number of technical reports (summarized below and provided in Attachment 5) regarding the subject properties:

- Soil and land capability assessment, dated October 31, 2016, provides a review of all existing soil, agricultural capability mapping and detailed site observations, including the following information:
 - Soils are poorly to very poorly drained with water tables at or near the surface for most of the winter and into early spring;

- The unimproved agricultural capability for the majority of the area is Class 4W to 4WD (Class 1 is the highest class and Class 7 is the lowest). The subclass letters attached to the class indicate restrictions, in this case excess water (W) and undesirable soil structure (D);
- o If the land was properly drained, the land capability could be improved to Class 3;
- Potential options to improve agricultural capability include (a) improved drainage using a pumping station and drainage ditch, (b) stripping existing topsoil and filling the site with approximately 1.5 m of fill and re-spreading the topsoil, and (c) fill the site enough to build a greenhouse facility constructed above the winter water table (staff note that a greenhouse with concrete is not permitted without a rezoning application);
- Properties are still permitted to construct a single-family dwelling as per Zoning Bylaw 8500 and ALR Regulation, which allows filling the site (maximum 0.1 hectare area) to meet the flood construction level (3.0 m GSC).
- Assessment of environmentally sensitive areas, dated October 11, 2016 provides information on existing ecosystem conditions through a vegetation survey, wildlife habitat survey, and review of endangered species, including the following information:
 - The subject properties are designated Environmentally Sensitive Area (ESA) as ESA type OLSH (old fields and shrublands);
 - Three vegetative communities exist on the subject properties, including old field habitat/mixed grass, old orchard (with Himalayan blackberries) and hedgerow;
 - The subject properties are dominated by reed canary grass;
 - Old field habitats are known to provided unique and valuable foraging and nesting habitats to a variety of species, including raccoons, coyotes, eastern cotton tail, songbirds and raptors;
 - No species on the federally or provincially listed wildlife species were observed;
 - Staff note that agricultural activities are exempt from ESA regulations (with the submission of an acceptable farm plan). The ESA would need to be addressed as part of any non-agricultural development (i.e. ESA Development Permit).
- Preliminary Hydrology Assessment, dated November 24, 2016 evaluates the hydrogeology and the drainage characteristics of the site, including the following information:
 - The ground surface elevation at the site occurs generally between 0.8 and 1.0 m geodetic. Overall the ground surface is generally flat with no discernible slope;
 - A drainage ditch is present to the immediate north of the site, along the south side of Burrows Road;
 - There are also dikes to the east and south of the site. The dike to the south (on the private cranberry farm) varies between 1.9 and 2.7 m geodetic, and the crest of

the raised dike located immediately east of the site varies between 2.99 and 1.74 m geodetic and is also used for cranberry production;

- The site is poorly drained and is inundated with water during portions of the year, surface water and groundwater cannot flow effectively to surrounding drainages;
- Subsoil drains and a pump station would be required to effectively drain the area if the current ground surface elevations were maintained to direct flow from the site to the Burrows Road ditch or the drainage canal to the east. On-site drainage may also be improved by soil filling at least 1.5 m and providing an approximate 2% slope to the north to allow for gravity drainage (no pumping required) to the Burrows Road ditch.
- Preliminary Geotechnical Investigation, dated July 27, 2016 evaluates soil conditions, including the following information:
 - Surficial layer of topsoil and root mat is underlain by approximately 1.5-2.1 m thick layer of silt and clay. Medium to fine grained sand was encountered below silt and clay.

Staff Assessment

Based on the technical reports provided, there are existing drainage issues which would need to be addressed for soil-based farming on the subject properties. The report notes that with improvements to drainage (i.e. drainage ditches, pumping stations or fill) the agricultural capability could be improved to Class 3 (from Class 4W and 4WD). Alternatively, other types of agricultural activities are permitted, such as greenhouses, nurseries or other non-soil bound agriculture (staff note that a greenhouse with concrete is not permitted without a rezoning application). The property owners have not fully attempted to improve the site for active agricultural production due to costs.

Staff do not support the proposal for the following reasons:

- Land is designated for farming: the subject properties are located within the ALR and are designated "Agriculture" in the Metro Vancouver Regional Growth Strategy (RGS) and the City's OCP. Also, the subject properties are located outside the urban containment boundary, which is identified in the RGS and OCP. Prior to urban uses being considered, an application to Metro Vancouver to change the designation would be required. Removing the properties from the ALR is contrary to the objectives of the RGS and OCP to protect these areas from urban development.
- No benefit to agriculture: as per the OCP, existing policies include maintaining the ALR boundary to strengthen the viability of farming operations. The City's Agricultural Viability Strategy (AVS) includes objectives to protect the ALR boundary and not support a change or loss of ALR land unless there is a substantial net benefit to agriculture. No agriculture is being conducted currently and the purpose of these applications is to eventually pursue non-agricultural uses.

• **Protection of farmland is a high priority:** as per the *Agricultural Land Commission Act* (ALCA), the purpose of the ALC is (a) to preserve the ALR, (b) to encourage farming of land within the ALR, and (c) to encourage local governments to enable and accommodate farm use of land within the ALR. This includes ALR land currently used for agriculture, as well as currently unused for farming, but which can be farmed. When considering applications, the ALC considers the agricultural capability of the land with and without improvements, and if an effort to improve the land has been attempted. The subject properties have the potential to be actively farmed with improvements to the land.

Although the subject proposal does not specifically identify an end use, previous exclusion applications on the south side of Burrows Road proposed an industrial end use, due to the industrial adjacency to the north, across Burrows Road. Adding additional industrial land may be potentially contrary the City's Industrial Land Intensification Initiative (ILII), currently under staff review, which aims to strengthen and intensify existing industrial land, rather than expanding into non-industrial areas (specifically agricultural).

The proposal to exclude the properties from the ALR also has the potential to be precedent setting for other parcels in the ALR.

Financial Impact

None.

Conclusion

JNA Holdings Inc., Karl, Lydia & Ulrich Wacker, & Shorewood Developments Ltd. have applied to exclude 14540, 14680 & 14920 Burrows Road from the Agricultural Land Reserve (ALR).

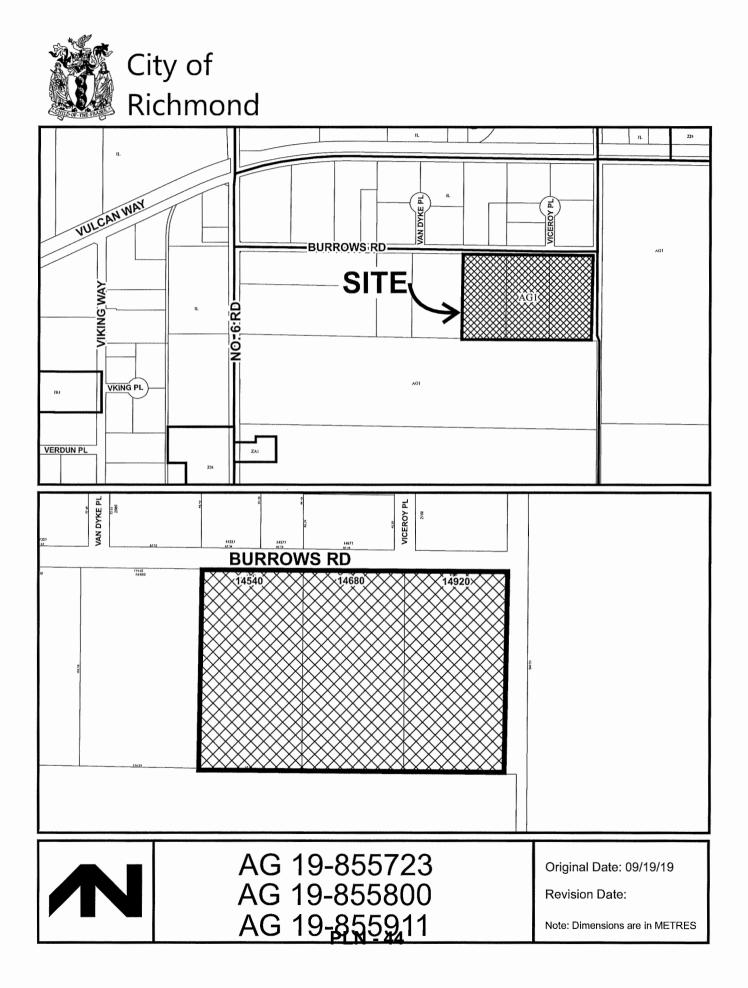
The proposal does not comply with the land use designation or applicable policies contained within the OCP. On this basis, it is recommended that the applications be denied.

Steven De Sousa Planner 1

SDS:cas

Attachment 1: Location Map and Aerial Photo Attachment 2: Development Application Data Sheet Attachment 3: Excerpt from the October 24, 2019 FSAAC Meeting Minutes Attachment 4: Public Correspondence Attachment 5: Technical Reports

ATTACHMENT 1





City of Richmond





AG 19-855723 AG 19-855800 AG 19<u>-8559</u>11

Original Date: 09/19/19

Revision Date:

Note: Dimensions are in METRES



Development Application Data Sheet

Development Applications Department

AG 19-855723, AG 19-855800 & AG 19-855911

14540, 14680 & 14920 Burrows Road Address:

Applicant: JNA Holdings Inc., Karl, Lydia & Ulrich Wacker, & Shorewood Developments Ltd.

Planning Area(s): East Richmond

	Existing	Proposed	
Owner:	14540: JNA Holdings Inc. 14680: Karl, Lydia & Ulrich Wacker 14920: Shorewood Developments Ltd.	No change	
Site Size:	14540: 4.57 acres (1.85 hectares) 14680: 4.59 acres (1.86 hectares) No change 14920: 4.6 acres (1.86 hectares)		
Land Uses:	14540: Vacant 14680: Single-family residential 14920: Vacant	Non-agriculture	
OCP Designation:	Agriculture	Non-agriculture	
Zoning:	"Agriculture (AG1)"	Non-agriculture	
Other Designations:	Agricultural Land Reserve (ALR)	Exclusion from the ALR	

Attachment 2



Development Application Data Sheet

Development Applications Department

AG 19-855723, AG 19-855800 & AG 19-855911

Attachment 2

Address: 14540, 14680 & 14920 Burrows Road

Applicant: JNA Holdings Inc., Karl, Lydia & Ulrich Wacker, & Shorewood Developments Ltd.

Planning Area(s): East Richmond

م المراجع الم	Existing	Proposed	
Owner:14540: JNA Holdings Inc.Owner:14680: Karl, Lydia & Ulrich WackerNo chan14920: Shorewood Developments Ltd.		No change	
Site Size:	14540: 4.57 acres (1.85 hectares) 14680: 4.59 acres (1.86 hectares) 14920: 4.6 acres (1.86 hectares)	7 acres (1.85 hectares) 9 acres (1.86 hectares) No change	
Land Uses:	14540: Vacant 14680: Single-family residential 14920: Vacant	Non-agriculture	
OCP Designation:	Agriculture	Non-agriculture	
Zoning:	"Agriculture (AG1)"	Non-agriculture	
Other Designations:	Agricultural Land Reserve (ALR)	Exclusion from the ALR	

	Bylaw Requirement (AG1)	Proposed	Variance
Buildable Floor Area:	Max. 400 m² (4,305 ft²)	Residential development is not proposed at this time.	None permitted
Farm Home Plate Area:	Max. 1,000 m ² (10,764 ft ²)		None
Single Detached Building – Setback:	Max. 50.0 m		None
Front Yard – Setback:	Min. 6.0 m		None
Interior Side Yard – Setback	Min. 1.2 m on one side and 6.0 m on the other side		None
Rear Yard – Setback	Min. 10.0 m		None
Height	Max. 2 storeys (9.0 m)		None

Excerpt from the Meeting Minutes of the Food Security and Agricultural Advisory Committee (FSAAC)

Thursday, October 24, 2019 – 7:00 p.m. Rm. M.2.002 Richmond City Hall

Agricultural Land Reserve Exclusion Applications at 14540, 14680 & 14920 Burrows Road

Steven De Sousa, Planner 1, introduced the proposed exclusion applications at 14540, 14680 & 14920 Burrows Road and provided the following comments:

- The subject properties are located in the Agricultural Land Reserve (ALR) and zoned "Agriculture (AG1)". The properties are also designated Environmentally Sensitive Area (ESA);
- The purpose of the application is to remove the three subject properties from the ALR;
- In the mid-1980s, the City once considered the area as part of a block exclusion application, however this was denied. Since then, the City has not supported the proposed exclusion from the ALR as it is contrary to the OCP's agricultural designation and related policies;
- OCP policies include maintaining the existing ALR boundary and not supporting a loss of ALR land, unless there is a substantial net benefit to agriculture and the agricultural community is consulted; and
- The applicant has provided a series of technical reports regarding the agricultural capability of the properties.

Colin Fry, Applicants' Agent, provided the following additional comments regarding the proposal:

- The purpose of the application is to allow the Agricultural Land Commission (ALC) to re-assess the agricultural land status of the subject properties;
- The proposal does not include an end use at this time;
- There are significant costs associated with improving the existing condition to be productive agricultural land;
- The City once considered the properties for ALR exclusion through a block exclusion application, however the Burrows Road area was denied by the ALC;
- The current zoning of the properties is "Agriculture (AG1)", which is a reflection of the ALR designation; and
- The request is that the application be forwarded to the ALC in order to assess the agricultural suitability of the subject properties and determine if the designation as agricultural land is still appropriate.

Rod Ast, Property Owner, provided the following additional comments:

- The single-family dwelling on his property built in 1973 has significant damage to the foundation due to the adjacent cranberry bog;
- The adjacent industrial uses have caused safety concerns; and
- The property produced hay until 2010, before losing farm status, due to changing site conditions.

Discussion ensued regarding the adjacent farming operation to the south, tenure and ownership, and the purpose of excluding the properties from the ALR if no end uses are proposed.

As a result of the discussion, the Committee made the following comments:

- The existing condition of the properties presents challenges for an agricultural operation and the costs for improvement are significant;
- The projected financials in the technical reports may not reflect current market conditions; and
- The subject ALR exclusion applications may set a precedent for other small parcels in the ALR.

As a result of the discussion, the Committee made the following motion:

That the Food Security and Agricultural Advisory Committee recommend the Agricultural Land Reserve Exclusion Applications at 14540, 14680 & 14920 Burrows Road proceed to Council for consideration of the application to move forward to the Agricultural Land Commission.

Defeated Opposed: Sarah Drewery, Laura Gillanders, Teresa Murphy Abstained: Steve Easterbrook COMMERCIAL REAL ESTATE SERVICES



1021 West Hastings Street, Suite 2500 Vancouver, BC V6E 0C3

April 18, 2019

City of Richmond 6911 No. 3 Road Richmond, BC V6Y 2C1 Canada

ATTN: Agricultural Planning Department – ALR Exclusion Application 14540 & 14680 Burrows Road

Dear City of Richmond,

There is no need for this land to be removed from the agricultural land reserve. The price of industrial land is based on the existing supply and is trading at record high values. For example, the Versacold property at 3231 No. 6 Road recently sold for \$4.5 million an acre due to the low supply of industrial land in the municipality. If the land on Burrows is removed from the agricultural land reserve, it is not fair to the existing industrial land owners since it will devalue their property while setting precedent for future application for removal from the ALR. An additional example, I recently sold 14291 Burrows Road which transacted for \$8 million (20,000 SF building on 1.1 acres) because there was no alternative supply of available properties.

The argument that the land should be removed because it is not fit for farming is NOT TRUE. Farm land in Richmond is some of the best in BC because the there are very few low temperature days, a consistent supply of water, and the slope allows for good farming as it is on a relatively level grade.

I do not support this land being removed from the agricultural land reserve because it will set a bad precedent and will set an example for future ALR exclusion applications.

Sincerely,

Bruce Richardson

Vice President Industrial Properties Group Direct Line (604) 662-5127 bruce.richarson@cbre.com

Soil and land capability assessment for the property located at 14540 Burrows Road, Richmond, BC

Prepared by:

Due MCZ

Bruce McTavish, MSc, MBA, PAg, RPBio,

&

Elizabeth Kenney MSc, PAg

McTavish Resource & Management Consultants Ltd.

2858 Bayview Street, Surrey, BC, V4A 2Z4

September 28, 2016

Table of Contents

1.0	Introduction	L		
2.0	Methodology1	L		
3.0	Summary of the Soil Observations2	2		
4.0	Agricultural Capability4	ŀ		
5.0	Soil Management	;		
5.1	Site improvement for agriculture6	5		
Refere	nces	,		
Appen	dix I Soil observations	;		
Sam	ple Site 548	\$		
Sam	Sample site 5499			
Sam	Sample Site 550			
Appen	dix II Soil laboratory analysis			

List of Figures

Figure 1 Soil sampling sites	1
Figure 2 Existing soil map	3.
Figure 3 Historical agricultural capability	4

List of Tables

Table 1 Soil series observed on the property	.2
Table 2 Soil properties and drainage characteristics	.3
Table 3 Agricultural capability from historic mapping	.4
Table 4 Agricultural capability based on site observations	
Table 5 Soil managment and crop suitability	6

1.0 Introduction

McTavish Resource & Management Consultants Ltd. was requested by the property owners to conduct a soils and landscape assessment for property located at 14540 Burrows Road, Richmond BC. A field visit was made on May 5, 2016. The objective of the fieldwork was to assess the agricultural capability of the land, determine the soil series and determine agricultural limitations on the property.

2.0 Methodology

Three field investigations were conducted at GPS locations 548, 549 & 550 as seen in Figure 1. At each site an excavator was used to dig the soil to depths of 120-190 cm. For each site the soils were described in terms of profile morphology including horizonation, depths, soil textures, coarse fragments, mottles, and depth to water table. The site landscapes were described in terms of landform, surficial materials, surface stoniness, slope, and soil drainage. The soils observed were identified to soil series and were then compared to the existing soil mapping for the subject property (Figure 2).

The soils were also compared to the existing agricultural capability mapping for the subject property (Figure 3). Two soil samples were collected for chemical analysis. The three surface horizons were composited into one sample for analysis to represent the surface Op. The second soil sample consisted of a composite sample from the underlying subsurface B horizons from the three sample points.



Figure 1 Soil sampling sites

3.0 Summary of the soil observations

The May 5, 2016 soil sampling verified the existing soil mapping to varying degrees. The existing mapping which was done at 1:25,000 scale recognized 2 different soils occurring within the subject area (Figure 2). The existing mapping reports the landscape as gently undulating with slopes between 0.5 and 2%. The surface stoniness class was mapped as S0 Non Stony land. These mapped soils are shallow organic accumulations (15-40 cm thick) overlaying moderately fine to fine textured fluvial and deltaic deposits: Annis (AN) – Peaty Gleysols and soils that have developed from 40-160 cm of mainly well decomposed organic materials which overly moderately fine to fine textured deltaic deposits: Richmond (RC) – Terric Humisols.

All three sample sites fell within the existing soil mapping polygon AN60% -RC 40%/b, SO and were classified as belonging to the Annis soil series (Table 1). No obvious Richmond soil was observed on the subject property although GPS Sites 548 and 549 had surface organic layers that were 40 cm thick in places and could be called Richmond soil series.

Annis soils differ from the Richmond soils in the thickness of the overlying organic materials. None of the three sample sites on the subject property had organic surfaces >40 cm. While GPS Sites 548 and 549 had surface organic layers that were 40 cm thick in places the thickness was not consistently 40 cm or more, but varied to less than 40 cm in places. Therefore soils from Sites 548 & 549 are better classified as Peaty Gleysols belonging to the Annis soil series.

All soils on the property have poor to very poor drainage characteristics that are a function of soil texture, subsoil compaction and location in the regional topography (Table 2).

Soil observation GPS numbers	Soil polygon map unit name	Soil series occurring at the soil observation site
548	AN60%-RC 40%/b,S0	AN/b, SO Annis borderline with Richmond RC/b,SO
549	AN60% -RC 40%/b,S0	AN/b, S0 Annis borderline with Richmond RC <u>/</u> b,S0
550	AN60% -RC 40%/b,S0	AN/b, SO Annis

Table 1 Soil series observed on the property

Soil symbol	symbolANAnnisShallow organic matter accumulations (15-40 cm) that overlie moderately fine to fine textured Fraser River floodplain and deltaic deposits. Surfaces are generally well decomposed humic organic materials. Subsurface 		Soil drainage Poorly to very poorly drained	
AN				
RC			Very poorly drained Water tables at or near surface during most of the winter early spring but recede somewhat during the growing season	

Table 2 Soil properties and drainage characteristics

From Luttmerding 1981



Figure 2 Existing soil map

Luttmerding 1980 Scale 1:25,000

http://www.env.gov.bc.ca/esd/distdata/ecosystems/Soil_Data/SIFT/Soil__AgCap_KML_Files/.



Figure 3 Historical agricultural capability

http://www.env.gov.bc.ca/esd/distdata/ecosystems/Soil Data/SIFT/Soil AgCap KML Files/

4.0 Agricultural capability

The historic mapping of this property indicates that the unimproved agricultural capability is 60% 4WD - 40% O4WL improvable with drainage to 60% 3DW - 40% O3LW (Table 3)

Unimproved agricultural capability	Improved agricultural capability	
60% 4WD - 40% O4WL	60% 3DW - 40% O3LW	

W = Excess water

D = Undesirable soil structure and/or low perviousness

L = Degree of decomposition – permeability for organic soils (O)

Based on the site visit of May 5, 2016 the agricultural capability of the subject property is unimproved 4WD improvable to 3DW by improving drainage (Table 4). The landscape topography is not limiting and there are no limitations due to coarse fragments. At the time of sampling (May 5 – late spring) the water table was at or below 1 metre. The presence of an organic surface layer and mottling in the surface mineral soils indicate that the soils are experiencing water levels at or near the surface during the winter months. The lack of mottles in the lower C horizon (depths ~ 100 cm+) at Site 549 indicates that the soil at depth remains wet or saturated and remains in a reduced state.

PLN - 56

The mineral soils underlying the organic surface horizon are silty clay in texture and are sticky when wet. The deeper C horizons are also more massive in terms of soil structure. The texture and structure of the subsurface and subsoils are consistent with a 3D limitation for undesirable soil structure and/or low perviousness.

Based on interviews with the owner and a review of the Hydrologist's report it is evident that the property has water at the surface and/or the soil is in a saturated condition for the winter and early spring with at least 4 months of the year that the land is not accessible. This corresponds with the soil observations and confirms the unimproved class 4W capability classification for the majority of the site.

"The ground surface is flat with no discernible grades to surface water drainage on any side of the Site. Evidence indicates surface water cannot flow to drainages located on the north and east sides of the Site. There are dykes located up to 2.4 higher than the property on the south and east sides which prevent runoff in these directions."¹

Soil observation GPS numbers	Soil	Unimproved	Improved
548	Annis	4WD	3DW
549	Annis	4WD	3DW
550	Annis	4WD	3DW

Table 4 Agricultural capability based on site observations

5.0 Soil Management

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The soil management considerations and crop suitability are provided in Table 5 based on the observed soil mapping. The soil management groupings of the Fraser Valley Soils and the crop suitability for each management group has been well documented in two reports (Luttmerding, 1984 and Bertrand et Al, 1991). Table 5 draws on these two publications for management and crop suitability as well as on Luttmerding 1981.

McTavish Resource & Management Consultants Ltd.

¹ Active Earth Engineering August 29, 2016. Preliminary Hydrology Assessment 14920, 14680, 14540, 14400, and 14300 Burrows Road, Richmond BC

Table 5 Soil management and crop suitability

Soil name	Soil management considerations from Bertrand et Al 1991 and Luttmerding 1984	Crop suitability from Bertrand et Al 1991 and Luttmerding 1984
Annis	Poor drainage is the main agricultural limitation Underdrains need to be closely spaced due to the moderately to slow perviousness nature of the subsoils Periodic subsoiling to loosen the silty clay subsoils is required to maintain the underdrains efficiency as	Suited crops include pasture and forage crops, blueberries, and annual field crops including: annual legumes, cereals, cole crops, corn, root crops excluding carrots, and shallow rooted annual vegetables
	well as to improve aeration and root distribution Management required to minimize loss of the organic surface layer Liming will generally be required to improve crop production High water tables and variable bearing strengths also make road and building construction difficult and basements impractical	Unsuited crops include nursery and Christmas trees, raspberries, strawberries and tree fruits because even with artificial drainage the soils will still have excessive water for the production of these crops
Richmond	Poor drainage and high water tables especially during the winter are the main agricultural limitations Drainage controls require close spacing Soils tend to be very acidic and require liming Management required to minimize loss of the organic surface layer Exposed soil surfaces are prone to wind and water erosion High watertables and variable bearing strengths also make road and building construction difficult and basements impractical	Suited crops include pasture and forage crops, blueberries, and annual field crops including annual legumes, cereals, cole crops, corn, root crops, and shallow rooted annual vegetables These soils can be productive for intensive vegetable production with adequate water table control Unsuited crops include nursery and Christmas trees, raspberries, strawberries and tree fruits because even with artificial drainage the soils will still have excessive water to allow for the production of these crops

5.1 Site improvement for agriculture

For field agriculture production (other than pasture) to be viable on this property drainage must be improved. This requires the installation of subsurface drainage and having a drainage ditch of adequate depth for the subsurface drains to discharge. At the present time no ditches are available for gravity discharge and the only potential outlet would be to install a pumping station to discharge water into the large drainage channel to the east of the adjacent property. This would require a jointly owned/operated pumping infrastructure and an easement through the two adjacent properties.

A second option is the fill the site; raising the elevation high enough above the water table to improve drainage for production of annual vegetable, forage and/or small berry crops.

References

Bertrand, RA, GA Hughes-Games, DC Nikkel 1991. Soil Management Handbook for the Lower Fraser Valley, 2nd edition. BC Ministry of Agriculture, Fisheries and Food, Abbotsford, BC, 115 pp.

http://www.env.gov.bc.ca/esd/distdata/ecosystems/Soil_Data/SIFT/Soil__AgCap_KML_Files/

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Luttmerding, HA 1980. Soils of The Langley-Vancouver Map Area, Report No. 15 British Columbia Soil Survey, Volume 1, Soil Map Mosaics and Legend, Lower Fraser Valley (Scale 1: 25,000). Assessment and Planning Division, BC Ministry of Environment. Kelowna, BC, 42 pp.

Luttmerding, HA 1981. Soils of the Langley-Vancouver Map Area, Report No. 15 British Columbia Soil Survey, Volume 3, Description of the Soils. Assessment and Planning Division, BC Ministry of Environment. Kelowna, BC, 227 pp.

Luttmerding, HA 1984. Soils of The Langley-Vancouver Map Area, Report No. 15 British Columbia Soil Survey, Volume 5, Agriculture Soil Management Groups. Surveys and Resource Mapping Branch, BC Ministry of Environment. Kelowna, BC. 104 pp.

Soil Classification Working Group. 1998. The Canadian System of Soil Classification, 3rd Ed. Agriculture and Agri-Food Canada Publication 1646, 187 pp. ISBN 0-660-17404-9.

Appendix I Soil observations

The following discussion summarizes the observations made at each of the soil sample sites in terms of soil and landscape properties.

Sample Site 548

SOIL SERIES: Annis (Borderline Richmond)

SOIL CLASSIFICATION: Orthic Gleysol peaty phase (Borderline Terric Humisol)

PARENT MATERIAL: Shallow organic accumulations overlaying moderately fine too fine textured fluvial and deltaic deposits.

DRAINAGE: Poor to very poor

WATERTABLE at TIME of SAMPLING: 100 cm

SURFACE STONINESS: Non Stony

ROOT RESTRICTING LAYER: None.

TOPOGRAPHY: Gently undulating (0.5-2% slopes)

VEGETATION & LAND USE: Reed canary grass

Horizon	.Depth (cm)	Coarse Fragments (% by volume)	Texture	Moisture	Comments
Ор	0-40	0	Humic	moist	Well decomposed organic matter thickness varies from 34-40 cm Borderline with the Richmond soil series: calling Annis as the thickness varies to less than 40 cm
Bg	40-70	0	SiC	moist	Common, fine mottles, some structure, contains plentiful roots
Cg	70-110	0	SiC-SiCL	wet	Common medium prominent mottles, contains plentiful roots



Soil at Site 548

Sample site 549

SOIL SERIES: Annis (borderline Richmond)

SOIL CLASSIFICATION: Orthic Gleysol peaty phase (borderline Terric Humisol)

PARENT MATERIAL: Shallow organic accumulations overlaying moderately fine too fine textured fluvial and deltaic deposits.

DRAINAGE: Poor

WATERTABLE at TIME of SAMPLING: 120 cm

SURFACE STONINESS: Non Stony

ROOT RESTRICTING LAYER: None

TOPOGRAPHY: Gently undulating (0.5-2% slopes)

VEGETATION & LAND USE: Reed canary grass

Profile description Site 549

Horizon	Depth (cm)	Coarse Fragments (% by volume)	Texture	Moisture	Comments
Ор	0-40	0	Humic	moist	Well decomposed organic matter Borderline with the Richmond soil series: calling this soil Annis as the thickness is 40 cm and in places it is less than 40 cm
Bg	40-93	0	SiC	moist	Common, medium mottles, some structure, contains plentiful roots, contains sand pockets
Cg	93-150	0	SiC	wet	No mottles, contains plentiful roots



Soil at Site 549

Sample Site 550

SOIL SERIES: Annis

SOIL CLASSIFICATION: Orthic Gleysol peaty phase

PARENT MATERIAL: Shallow organic accumulations overlaying moderately fine to fine textured fluvial and deltaic deposits.

DRAINAGE: Poor

WATERTABLE at TIME of SAMPLING: 120 cm

SURFACE STONINESS: Non Stony

ROOT RESTRICTING LAYER: None.

TOPOGRAPHY: Gently undulating (0.5-2% slopes)

VEGETATION & LAND USE: Reed canary grass and horsetail

Horizon	Depth (cm)	Coarse Fragments (% by volume)	Texture	Moisture	Comments
Ор	32-0	0	Humic	moist	Well decomposed organic matter
Bg	0-60	0	SiC	moist	Common, medium-fine mottles, contains plentiful roots
Cg	60-120	0	SiC	moist	Few fine-medium distinct mottles, contains roots

PLN - 63

Appendix II Soil laboratory analysis

Chemical analysis – Soil quality laboratory results from selected soil horizons for the composited sample of the three GPS locations

GPS Site #	Horizon	pH 1:2 water	EC (dS/m) saturated	OM % loss on
		extract	paste 1:2	ignition
548	Ор	5,4	0.17	30.4
549	Surface	Acidic *	Non saline	High
550	horizon			
548	В	5.6	0.20	Not
549	Subsurface	Acidic *	Non saline	determined
550	Horizon			

* Soil Reaction Class: The Canadian System of Soil Classification 3rd edition.1998. Soil Classification Working Group. Research Branch, Agriculture and Agri-Food Canada Publication 1646. National research Council, Ottawa, Canada. 187 pages.

Chemical analysis – Nutrient analysis laboratory results from selected soil horizons for the composited sample of the three GPS locations

					N	utrient an	alysis (pp	m)					
GPS Site #	Horizon	N⁵	Ρ	К	5**	Ca	Mg	Fe	Cu	Zn	В	Mn	Cl
548 549 550	Op	<2 D ¹	20 M²	51 D ¹	11 O ³	1520 O ³	142 O ³	250 O [*]	0.8 M²	2.1 O ³	0.2 D ⁱ	0.8 D ¹	4 D ¹
548 549 550	В	<2 D ¹			23 Q ³								

N* nitrate-N

S** sulphate-S

D¹ deficient nutrient status

M² marginal nutrient status

O³ optimum nutrient status

E⁴ excess nutrient status

The chemical data indicate that the soils in the subject property are non saline, are acidic in terms of soil acidity, and are deficient in nitrogen, potassium, boron, manganese, and chlorine. The nutrient levels of phosphorus and copper are marginal, whereas the levels for the other nutrients measured are optimal status.

Soil and land capability assessment for the property located at 14680 Burrows Road, Richmond BC

Prepared by:

Dune M

Bruce McTavish, MSc, MBA, PAg, RPBio

&

Elizabeth Kenney MSc, PAg

McTavish Resource & Management Consultants Ltd. 2858 Bayview Street, Surrey BC, V4A 2Z4

October 31, 2016

Table of Contents

1.0	Introduction	1
2.0	Methodology	1
3.0	Summary of soil observations	2
4.0	Agricultural capability	4
5.0	Soil Management	6
5.1	Site improvement for agriculture	7
Refere	nces	7
Appen	dix I Soil observations	8
Sam	ple Site 542	8
Sam	ple site 543	8
Sam	ple Site 544	9
Appen	dix II Soil chemical analysis1	2

List of Figures

Figure 1	Soil sampling sites	1
Figure 2	Existing soil mapping (Luttmerding 1980 Scale 1:25,000,	3
Figure 3	Existing agricultural capability	4
Figure 4	Vegetation and soil at site 54410	D
Figure 5	Mottles and roots at 80 found at site 54411	1

List of Tables

-

2
3
4
5
6

1.0 Introduction

McTavish Resource & Management Consultants Ltd. was requested by the property owners to conduct a soils and agricultural capability assessment for property located at 14680 Burrows Road, Richmond BC. A field visit was made on May 5, 2016. The objective of the fieldwork was to assess the agricultural capability of the land, determine the soil series and determine agricultural limitations on the property.

2.0 Methodology

Three field investigations were conducted at GPS locations 542, 543 and 544 as seen in Figure 1. At each site an excavator was used to dig the soil to depths of 120-150 cm. For each site the soils were described in terms of profile morphology including horizonation, depths, soil textures, coarse fragments, mottles, and depth to water table. The site landscapes were described in terms of landform, surficial materials, surface stoniness, slope, and soil drainage.

The soils observed were identified to soil series and then compared to the existing soil mapping for the subject property (Figure 2). The soils were also compared to the existing agricultural capability mapping for the subject property (Figure 3).

Two soil samples were collected for chemical analysis. The three surface horizons were composited into one sample for analysis to represent the surface Op. The second soil sample consisted of a composite sample of the underlying subsurface B horizons from the three sample points.



Figure 1 Soil sampling sites

3.0 Summary of soil observations

The May 5, 2016 soil sampling confirmed the existing soil mapping. The existing mapping, which was done at 1: 25,000 scale, recognized 2 different soils occurring within the subject area (Figure 2). The existing mapping reports the landscape as gently undulating with slopes between 0.5 and 2%. The surface stoniness class was mapped as S0 Non Stony land. These mapped soils are shallow organic accumulations (15-40 cm thick) overlying moderately fine to fine textured fluvial and deltaic deposits: Annis (AN) – Peaty Gleysols, and soils that have developed from 40-160 cm of mainly well decomposed organic materials which overlie moderately fine to fine textured deltaic deposits: Richmond (RC) – Terric Humisols.

All three sample sites fell within the existing soil mapping polygon AN 60%-RC 40%/b,S0. GPS Sites 543 and 544 were classified as belonging to the Annis soil series, and GPS Site 542 was classified as belonging to the Richmond soil series. Annis soils differ from Richmond soils in the thickness of the overlying organic materials. One of the three sample sites on the subject property, GPS 542, had organic surfaces >40 cm. The Richmond soil sampled trended towards the Annis soil as the thickness of the organic surface layer was only 45 cm.

Table 1 indicates which landscape unit number and soil polygon the observations occurred in, and Table2 summarizes soil properties and drainage characteristics.

Soil observation GPS numbers	Soil polygon map unit name	Soil series occurring at the soil observation site
542	AN60% -RC 40%/b, S0	RC/b, S0 Richmond
543	AN60% -RC 40%/b, S0	AN/b, SO Annis
544	AN60% -RC 40%/b, S0	AN/b, SO Annis

Table 1 Soil series observed on the property

Soil symbol	Soil name	Soil texture and parent material	Soil drainage	
AN	Annis	Shallow organic matter accumulations (15-40 cm) overlying moderately fine to fine textured Fraser River floodplain and deltaic deposits. Surfaces are generally well decomposed humic organic materials. Subsurface and subsoils are silty clay loam or silty clay. At depths below 1 metre medium or fine sand may occur. These deeper materials maybe saline in the deltaic deposits.	Poorly to very poorly drained	
RC	Richmond	40-160 cm of mainly well decomposed organic materials overlying moderately fine and fine deltaic materials. Surfaces vary from moderately to well decomposed, depending on length of time under cultivation. Subsurface organic materials are well decomposed humic materials. The underlying mineral soil is silt loam to silty clay loam. The mineral soil is often massive and contains the remains of old plant roots and stems. The mineral soil may be saline.	Very poorly drained. Water tables at or near surface during most of the winter and early spring, receding somewhat during the growing season	

Table 2 Soil properties from existing mapping

From Luttmerding 1981



Figure 2 Existing soil mapping (Luttmerding 1980 Scale 1:25,000)

http://www.env.gov.bc.ca/esd/distdata/ecosystems/Soil Data/SIFT/Soil AgCap KML Files/)



Figure 3 Existing agricultural capability

(http://www.env.gov.bc.ca/esd/distdata/ecosystems/Soil Data/SIFT/Soil AgCap KML Files/)

4.0 Agricultural capability

The mapped agricultural capability indicates that the unimproved agricultural capability is 60% 4WD and 40% O4W (Figure 3 and Table 3).

Table 3 Agricultural capability from historic mapping

Unimproved agricultural capability	Improved agricultural capability
60% 4WD - 40% O4WL	60% 3DW - 40% O3LW

W = Excess water

D = Undesirable soil structure and/or low perviousness

L = Degree of decomposition - permeability for organic soils (O)

Based on the site visit of May 5, 2016 the agricultural capability of the subject property is unimproved 4WD improvable to 3DW by improving drainage for the Annis soils (GPS Sites 543 and 544). The agricultural capability of the southern half of the subject property is unimproved O4WL to O5W, improvable to O3LWD by improving drainage.

Based on interviews with the owner, review of the Hydrologist's report for this property and soil observations it is evident that the property has water at the surface and/or the soil is in a saturated condition from the early winter until late spring with up to 7 months of the year that the land is not accessible by farm equipment due to saturated soil conditions.

"The ground surface is flat with no discernible grades to surface water drainage on any side of the Site. Evidence indicates surface water cannot flow to drainages located on the north and east sides of the Site. There are dykes located up to 2.4 higher than the property on the south and east sides which prevent runoff in these directions."¹

Based on an interview with the landowner of 14680 Burrows Road, there has been a significant deterioration in the agricultural capability of the land since the construction of the cranberry bog to the south of the property. The land owner claims that the land has become increasingly wet for longer periods of time. This is verified by the fact that the land had been in continuous cultivation for 40 years and had farm status until 2011². Farm tax status was lost in 2011 due to the constant wet soil conditions resulting in the inability to grow or harvest hay on the property.

The hydrological isolation of the property to the south and east combined with the culvert invert elevations and shallow slope of the Burrow Road ditch results in long term water retention on the subject property. A soil wetness (poor drainage) transition has been observed on this property resulting in the land capability for agricultural classification deteriorating on much of the property from 4W to 5W.

The landscape topography is not limiting and there are no limitations due to coarse fragments. At the time of sampling (May 5 – late spring) the water table was at or below 1 metre. The presence of an organic surface layer and mottling in the surface mineral soils indicate that the soils experience water levels at or near the surface during the winter months.

At Sites 542 and 543 the mineral soils underlying the organic surface horizon are clay in texture and are sticky when wet. The mineral soil at Site 544 was not as fine textured and was silty clay loam. The deeper C horizons are also more massive in terms of soil structure. The texture and structure of the subsurface and subsoils are consistent with a 3D limitation for undesirable soil structure and/or low perviousness.

Soil observation GPS numbers	Soil	Unimproved	Improved
542	Richmond	04WL – 05W	O3LWD
543	Annis	4WD – 5WD	3DW
544	Annis	4WD – 5WD	3WD

Table 4 Agricultural capability based on site observations

² Review of BC Assessment documents 2010, 2011 and 2012.

¹ Active Earth Engineering August 29, 2016. Preliminary Hydrology Assessment 14920, 14680, 14540, 14400, and 14300 Burrows Road, Richmond BC

5.0 Soil Management

The soil management considerations and crop suitability is provided in Table 5 based on the observed soil mapping. The soil management groupings of the Fraser Valley soils and the crop suitability for each management group has been well documented in two reports (Luttmerding, 1984 and Bertrand et Al, 1991). Table 5 draws on these two publications for management and crop suitability as well as on Luttmerding, 1981.

Soil name	Soil management considerations from Bertrand et Al 1991 and Luttmerding 1984	Crop suitability from Bertrand et Al 1991 and Luttmerding 1984
Annis	Poor drainage is the main agricultural limitation Underdrains need to be closely spaced due to the moderately to slow perviousness nature of the subsoils Periodic subsoiling to loosen the silty clay subsoils is required to maintain the underdrains efficiency as well as to improve aeration and root distribution Management required to minimize loss of the organic surface layer Liming will generally be required to improve crop production High water tables and variable bearing strengths also make road and building construction difficult and	Suited crops include pasture and forage crops, blueberries, and annual field crops including: annual legumes, cereals, cole crops, corn, root crops excluding carrots, and shallow rooted annual vegetables Unsuited crops include nursery and Christmas trees, raspberries, strawberries and tree fruits because even with artificial drainage the soils will still have excessive water for the production
Richmond	basements impractical Poor drainage and high water tables especially during the winter are the main agricultural limitations Drainage controls require close spacing Soils tend to be very acidic and require liming Management required to minimize loss of the organic surface layer Exposed soil surfaces are prone to wind and water erosion High water tables and variable bearing strengths also make road and building construction difficult and basements impractical	of these crops Suited crops include pasture and forage crops, blueberries, and annual field crops including annual legumes, cereals, cole crops, corn, root crops, and shallow rooted annual vegetables These soils can be productive for intensive vegetable production with adequate water table control Unsuited crops include nursery and Christmas trees, raspberries, strawberries and tree fruits because even with artificial drainage the soils will still have excessive water to allow for the production of these crops

Table 5 Soil management and crop suitability

5.1 Site improvement for agriculture

For field agriculture production, other than pasture to be viable on this property drainage must be improved. This requires the installation of subsurface drainage and having a drainage ditch of adequate depth for the subsurface drains to discharge. The city ditch on Burrows Road has a slope of approximately 0.05% available for gravity discharge which can not remove water at an adequate rate therefore the only potential drainage solution is to install a pumping station to discharge water into the large drainage channel east of the adjacent property. This would require a jointly owned/operated pumping infrastructure and an easement through the adjacent property.

A second option is the fill the site; raising the elevation high enough above the water table to improve drainage for production of annual vegetable, forage and/or small berry crops.

References

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Soil Classification Working Group. 1998. The Canadian System of Soil Classification, 3rd Ed. Agriculture and Agri-Food Canada Publication 1646, 187 pp. ISBN 0-660-17404-9.

Appendix I Soil observations

The following discussion summarizes the observations made at each of the soil sample sites in terms of soil and landscape properties.

Sample Site 542

SOIL SERIES: Richmond

SOIL CLASSIFICATION: Terric Humisol

PARENT MATERIAL: Well decomposed organic accumulations (40-160 cm thick) overlaying moderately fine to fine textured deltaic deposits.

DRAINAGE: Poor to very poor

WATERTABLE at TIME of SAMPLING: 100 cm

SURFACE STONINESS: Non Stony

ROOT RESTRICTING LAYER: 55 cm massive subsoil

TOPOGRAPHY: Gently undulating (0.5-2% slopes)

VEGETATION & LAND USE: Reed canary grass

Horizon	Depth (cm)	Coarse Fragments (% by volume)	Texture	Comments
Ор	45-0	0	Humic	Well decomposed organic matter containing pockets of sand
Cg1	45-55	0	SiCL	Faint mottles
Cg2	55-155	0	С	Massive: no structure, grey with common mottles water piping in at 100 cm

Sample site 543

SOIL SERIES: Annis

SOIL CLASSIFICATION: Rego Gleysol peaty phase

PARENT MATERIAL: Shallow organic accumulations overlaying moderately fine to fine textured fluvial and deltaic deposits

DRAINAGE: Poor to very poor WATERTABLE at TIME of SAMPLING: 100 cm SURFACE STONINESS: Non Stony ROOT RESTRICTING LAYER: 25 cm massive subsoil TOPOGRAPHY: Gently undulating (0.5-2% slopes) VEGETATION & LAND USE: Reed canary grass

Horizon	Depth (cm)	Coarse Fragments (% by volume)	Texture	Comments
Ор	25-0	0	Humic	Well decomposed organic matter
Cg	0-110	0	С	Massive: no structure, grey with common mottles water piping in at 100 cm

Sample Site 544

SOIL SERIES: Annis

SOIL CLASSIFICATION: Orthic Gleysol peaty phase

PARENT MATERIAL: Shallow organic accumulations overlaying moderately fine to fine textured fluvial and deltaic deposits.

DRAINAGE: Poor

WATERTABLE at TIME of SAMPLING: 136 cm

SURFACE STONINESS: Non Stony

ROOT RESTRICTING LAYER: None

TOPOGRAPHY: Gently undulating (0.5-2% slopes)

VEGETATION & LAND USE: Reed canary grass

Horizon	Depth (cm)	Coarse Fragments (% by volume)	Texture	Moisture	Comments
Ор	17-0	0	Humic	moist	Well decomposed organic matter
Bgj	0-36	0	Medium S	moist	Few, fine faint mottles, medium sand
BCg	36-120	0	SICL	moist	Common, fine-medium prominent mottles, well-structured: prismatic structure, contains sand pockets, clay skins, roots, earthworm present at 75 cm
Cg1	120-130	0	SiCL	moist	
Cg2	130-155	0	SiCL	wet	Water at 136 cm



Figure 4 Vegetation and soil at Site 544



Figure 5 Mottles and roots at 80 cm found at Site 544

Appendix II Soil chemical analysis

Chemical analysis – Soil Quality laboratory results from selected soil horizons for the composited sample of the three GPS locations

GPS Site #	Horizon	рН	EC (dS/m)	OM %
		1:2 water	Saturated	Loss on
		extract	paste 1:2	ignition
542	Ор	5.3	0.15	33.6
543	Surface	Acidic *	Non saline	High
544	horizon			
542	В	6.2	0.08	Not
543	Subsurface	Neutral *	Non saline	determined
544	horizon			

* Soil Reaction Class: The Canadian System of Soil Classification 3rd edition.1998. Soil Classification Working Group. Research Branch, Agriculture and Agri-Food Canada Publication 1646. National Research Council, Ottawa, Canada. 187 pages.

Chemical analysis – Nutrient analysis laboratory results from selected soil horizons for the composited sample of the three GPS locations

					Nutrient a	anaiysis (p	pm)						
GPS Site #	Horizon	N≉	Р	к	S**	Ca	Mg	Fe	Cu	Zn	В	Ma	CI
542 543 544	Ор	<2 D ¹	7 D ¹	39 D ¹	5 M ¹	1860 E ⁴	67 0 ³	194 0 ³	0.8 M ¹	4.9 0 ³	0.2 D ¹	1.0 M ²	5.8 (v1 ²
542 543 544	8	<2 D ¹			3 M ²								

N* nitrate-N

S** sulphate-S

D¹ deficient nutrient status

M² marginal nutrient status

O³ optimum nutrient status

E⁴ excess nutrient status

The chemical data indicate that the soils in the subject property are non-saline, are acidic in the surface layer and neutral in the subsurface in terms of soil acidity, and are deficient in nitrogen, phosphorus, potassium and boron. The nutrient levels of sulphur, copper, manganese, and chlorine are marginal, and there is an excess of calcium, whereas the levels for the other nutrients measured are optimal status.

Soil and land capability assessment for the property located at 14920 Burrows Road, Richmond BC

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Table of Contents

1.0	Introduction	1				
2.0	Methodology	1				
3.0	Summary of soil observations	2				
4.0	Agricultural Capability	3				
5.0	Soil management	5				
5.1	Site improvement for agriculture	6				
Refere	References					
Appen	Appendix I Detailed soil observations					
Sam	Sample Site 545					
Sam	Sample site 5469					
Sam	Sample Site 54711					
Appen	ppendix II Soil laboratory analysis					

List of Figures

Figure 1 Soil sampling sites	1
Figure 2 Existing soil mapping	
Figure 3 Historical agricultural capability mapping	
Figure 4 Drainage cannel directly east of the property	.6

List of Tables

Sump 7

Table 1 Soil series observed on the subject property	3
Table 2 Soil properties from existing mapping	
Table 3 Agricultural capability from historic mapping	5
Table 4 Agricultural capability ratings for each soil observation site	5
Table 5 Soil management and crop suitability	.5
Table 6 Profile description site 545	.8

1.0 Introduction

McTavish Resource & Management Consultants Ltd. was requested by the property owners of 14920 Burrows Road, Richmond BC to conduct a soils and agricultural capability assessment for their property. A field visit took place on May 5, 2016. The objective of the field work was to assess the agricultural capability of the land, determine the soil series and determine agricultural limitations on the property.

2.0 Methodology

Three detailed field investigations were conducted at GPS locations 545, 546 and 547 as seen in Figure 1. At each site an excavator was used to dig the soil to depths of 120-190 cm. For each site the soils were described in terms of profile morphology including: horizonation, depths, soil textures, coarse fragments, mottles, and depth to water table. The site landscapes were described in terms of landform, surficial materials, surface stoniness, slope, and soil drainage. The soils observed were identified to soil series and were then compared to the existing soil mapping for the subject property (See Figure 2).

The soils were also compared to the existing agricultural capability mapping for the subject property (Figure 3). Two soil samples were collected for chemical analysis. The three surface horizons were composited into one sample for analysis to represent the surface Op. The second soil sample consisted of a composite sample from the underlying subsurface B horizons from the three sample points.



Figure 1 Soil sampling sites

3.0 Summary of soil observations

The May 5, 2016 soil sampling verified the existing soil mapping to varying degrees. The existing mapping, which was done at 1:25,000 scale, recognized 2 different soils occurring within the subject area (Figure 3). The existing mapping reports the landscape as gently undulating with slopes between 0.5 and 2%. The surface stoniness class was mapped as SO (non-stony) land. These mapped soils are shallow organic accumulations (15-40 cm thick) overlaying moderately fine to fine textured fluvial and deltaic deposits: AN (Annis) – Peaty Gleysols, and soils that have developed from 40-160 cm of mainly well decomposed organic materials which overlie moderately fine to fine textured deltaic deposits: Richmond (RC) – Terric Humisols.

All three sample sites fell within the existing soil mapping polygon AN 60%, RC 40%/b, SO and were classified as belonging to the Annis soil series (Table 1). No Richmond soil was observed on the subject property.

All soils on the property have poor to very poor drainage characteristics that are a function of soil texture, subsoil compaction, location in the regional topography and dykes up to 2.4 m high on the south and east of the property which prevent surface drainage (Table 2).

Detailed soil logs are provided in Appendix I and soil laboratory results in Appendix II.

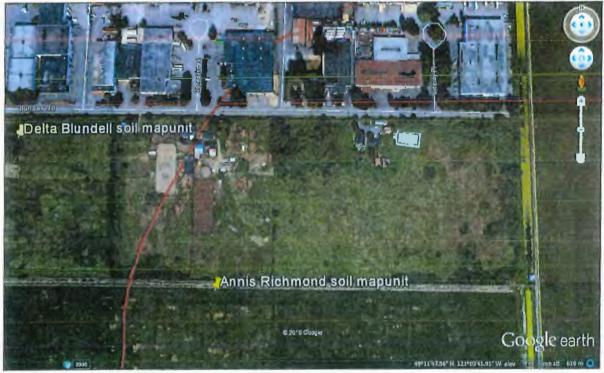


Figure 2 Existing soil mapping

Luttmerding 1980 Scale 1:25,000 http://www.env.gov.bc.ca/esd/distdata/ecosystems/Soil_Data/SIFT/Soil__AgCap_KML_Files/

Soil observation GPS numbers	Soil polygon map unit name	Soil series occurring at the soil observation site
545	AN60% - RC 40%/b, S0	AN/b, SO Annis
546	AN60% - RC 40%/b, S0	AN/b, SO Annis
547	AN60% - RC 40%/b, S0	AN/b, S0 Annis

Table 1 Soil series observed on the subject property

Table 2 Soil properties and drainage characteristics

Soil symbol	Soil name	Soil texture and parent material	Soil drainage
AN	Annis	Shallow organic matter accumulations (15-40 cm) which overlie moderately fine to fine textured Fraser River floodplain and deltaic deposits. Surfaces are generally well decomposed humic organic materials. Subsurface and subsoils are silty clay loam or silty clay. At depths below 1 metre medium or fine sand may occur. These deeper materials may be saline in the deltaic deposits.	Poorly to very poorly drained
RC	Richmond	40-160 cm of mainly well decomposed organic materials overlying moderately fine and fine textured deltaic materials. Surfaces vary from moderately to well decomposed depending on length of time under cultivation. Subsurface organic materials are well decomposed humic materials. The underlying mineral soil is silt loam to silty clay loam. The mineral soil is often massive and contains the remains of old plant roots and stems. The mineral soil may be saline.	Very poorly drained Water tables at or near surface during most of the winter early spring but recede somewhat during the growing season

From Luttmerding 1981

Annis soils differ from the Richmond soils in the thickness of the overlying organic materials. None of the three sample sites on the subject property had organic surfaces >40 cm.

4.0 Agricultural capability

The original agricultural capability mapping indicates that the unimproved agricultural capability rating is 60% 4WD and 40% O4WL as shown in Figure 3 and Table 3.

Based on the site investigations and analysis of results, the agricultural capability of the subject property is unimproved 4WD improvable to 3DW by improving drainage (Table 4).

The landscape topography is not limiting and there are no limitations due to coarse fragments. At the time of sampling (May 5 – late spring) the water table was below 1 metre. The presence of an organic surface layer and mottling in the surface mineral soils indicate that the soils are experiencing water levels at or near the surface during the winter months. The lack of mottles in the lower C horizons

(depths ~ 100 cm+) indicates that the soil at depth remains wet or saturated and remains in a reduced state.

The mineral soils underlying the organic surface horizon are silty clay in texture and are sticky when wet. The deeper C horizons are also more massive in terms of soil structure. The texture and structure of the subsurface and subsoils are consistent with a 3D limitation for undesirable soil structure and/or low perviousness.

Based on interviews with the owner and a review of the Hydrologist's report for this property it is evident that the property has water at the surface and/or the soil is in a saturated condition for the winter and early spring with at least 4 months of the year that the land is not accessible.

"The ground surface is flat with no discernible grades to surface water drainage on any side of the Site. Evidence indicates surface water cannot flow to drainages located on the north and east sides of the Site. There are dykes located up to 2.4 higher than the property on the south and ease sides which prevent runoff in these directions."¹

The interview with the landowner and review of the Hydrologist's report correspond with the soil observations and confirm the unimproved 4W capability classification.



Figure 3 Historical agricultural capability mapping

http://www.env.gov.bc.ca/esd/distdata/ecosystems/Soil Data/SIFT/Soil AgCap KML Files/

McTavish Resource & Management Consultants ltd.

¹ Active Earth Engineering August 29, 2016. Preliminary Hydrology Assessment 14920, 14680, 14540, 14400, and 14300 Burrows Road, Richmond BC

Table 3 Agricultural capability from historic mapping

Unimproved agricultural capability	Improved agricultural capability
60% 4WD – 40% O4WL	60% 3DW – 40% O3LW

W = Excess water

D = Undesirable soil structure and/or low perviousness

L = Degree of decomposition - permeability for organic soils (O)

Table 4	Agricultural	capability	based o	on site (observations
Tuble 1	/ Brountarun	cupuomey	Nubcu o	in ones	observations

Soil observation GPS numbers	Soil	Unimproved	Improved	
545	Annis	4WD	3DW	
546	Annis	4WD	3DW	
547	Annis	4WD	3DW	

5.0 Soil management

Table 8 shows the soil management considerations and crop suitability based on site observations and observed soil mapping. The soil management groupings of the Fraser Valley soils and the crop suitability for each management group have been well documented in two reports (Luttmerding, 1984 and Bertrand et Al, 1991). Table 5 draws on these two publications for management and crop suitability as well as on Luttmerding 1981.

Table 5	Soil management and crop suitability	
---------	--------------------------------------	--

Soil	Soil management considerations from Bertrand et Al	Crop suitability from Bertrand et Al 1991
name	1991 and Luttmerding 1984	and Luttmerding 1984
Annis	Poor drainage is the main agricultural limitation Underdrains need to be closely spaced due to the moderately to slow perviousness nature of the subsoils Periodic subsoiling to loosen the silty clay subsoils is required to maintain the underdrains efficiency as well as to improve aeration and root distribution Management required to minimize loss of the organic surface layer Liming will generally be required to improve crop production High water tables and variable bearing strengths also make road and building construction difficult and basements impractical	Suited crops include pasture and forage crops, blueberries, and annual field crops including: annual legumes, cereals, cole crops, corn, root crops excluding carrots, and shallow rooted annual vegetables Unsuited crops include nursery and Christmas trees, raspberries, strawberries and tree fruits because even with artificial drainage the soils will still have excessive water for the production of these crops

5.1 Site improvement for agriculture

For field agriculture production (other than pasture) to be viable on this property drainage must be improved. This requires the installation of subsurface drainage and having a drainage ditch of adequate depth for the subsurface drains to discharge. At the present time there are no ditches available for gravity discharge and the only potential outlet option would be to install a pumping station to discharge water into the large drainage channel directly to the east of the property.

A second option is the fill the site; raising the elevation high enough above the water table to improve drainage for production of annual vegetable, forage and/or small berry crops.



Figure 4 Drainage channel directly east of the property

References

Bertrand, RA, GA Hughes-Games, DC Nikkel, 1991. Soil Management Handbook for the Lower Fraser Valley, 2nd Edition. BC Ministry of Agriculture, Fisheries and Food, Abbotsford, BC, 115 pp.

http://www.env.gov.bc.ca/esd/distdata/ecosystems/Soil_Data/SIFT/Soil__AgCap_KML_Files/

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Soil Classification Working Group. 1998. The Canadian System of Soil Classification, 3rd Ed. Agriculture and Agri-Food Canada Publication 1646, 187 pp. ISBN 0-660-17404-9.

Appendix I Detailed soil observations

Sample Site 545

SOIL SERIES: Annis

SOIL CLASSIFICATION: Orthic Gleysol peaty phase

PARENT MATERIAL: Shallow organic accumulations overlaying moderately fine to fine textured fluvial and deltaic deposits.

DRAINAGE: Poor

WATERTABLE at TIME of SAMPLING: 150 cm

SURFACE STONINESS: Non stony

ROOT RESTRICTING LAYER: None.

TOPOGRAPHY: Gently undulating (0.5-2% slopes)

VEGETATION & LAND USE: Reed canary grass

Horizon	Depth (cm)	Coarse fragments (% by volume)	Texture	Moisture	Comments
Ор	30-0	0	Humic	moist	Well decomposed organic matter
Bgj	0-9	0	SiCL	moist	Yellow brown colour, few, fine faint mottles, well structured, contains roots
BCg	9-77	0	SiC	moist	Many, fine-medium prominent mottles, well structured, contains roots
Cg1	77-110	0	SiC	moist	Common, medium, prominent mottles, more massive, contains roots
Cg2	110-156	0	Sicl-Sic	wet	No mottles, more massive, contains roots, contains sand lenses along crack faces, water table at 150 cm
Cg3	156-160+	0	SCL	wet	No mottles, more massive, contains few roots

Table 6 Profile description Site 545



Vegetation and soil at Site 545

Sample Site 546

SOIL SERIES: Annis

SOIL CLASSIFICATION: Orthic Gleysol peaty phase

PARENT MATERIAL: Shallow organic accumulations overlaying moderately fine to fine textured fluvial and deltaic deposits.

DRAINAGE: Poor

WATERTABLE at TIME of SAMPLING: 182 cm

SURFACE STONINESS: Non stony

ROOT RESTRICTING LAYER: None.

TOPOGRAPHY: Gently undulating (0.5-2% slopes)

VEGETATION & LAND USE: Reed canary grass

Profile description Site 546

Horizon	Depth (cm)	Coarse fragments (% by volume)	Texture	Moisture	Comments
Ор	22-0	0	Humic	moist	Well decomposed organic matter
Bgj	0-9	0	SL	moist	Yellow brown colour, few, fine faint mottles, contains roots
ll Bgj	9-27	0	SiC	moist	few, fine faint mottles, well structured, sticky, contains plentiful roots, contains organic materials
II BCg	27-54	0	SiC	moist	Common, medium, prominent mottles, contains roots, charcoal and wood debris
III BCg	54-65	0	LS	moist	Common, medium, distinct mottles, contains roots
IV Cg1	65-100	0	SiC	moist	Common, medium, prominent mottles, contains roots, and wood debris, has some structure
IV Cg2	100-160+	0	SiC	wet	contains some roots and sand lenses, no structure - massive



Vegetation and soil at Site 546

Sample Site 547

SOIL SERIES: Annis

SOIL CLASSIFICATION: Orthic Gleysol peaty phase

PARENT MATERIAL: Shallow organic accumulations overlaying moderately fine to fine textured fluvial and deltaic deposits.

DRAINAGE: Poor

WATERTABLE at TIME of SAMPLING: 120 cm

SURFACE STONINESS: Non Stony

ROOT RESTRICTING LAYER: None.

TOPOGRAPHY: Gently undulating (0.5-2% slopes)

VEGETATION & LAND USE: Reed canary grass

Table 3 Profile description Site 547

Horizon	Depth (c m)	Coarse Fragments (% by volume)	Texture	Moisture	Comments
Ор	28-0	0	Humic	moist	Well decomposed organic matter
Bgj	0-19	0	SiCL	moist	Few, fine faint mottles, well structured, contains roots
BCg	19-96	0	SiC	moist	Common, medium prominent mottles, well structured, contains roots
Cg	96-135	• 0	SiC	wet	No mottles, no structure - massive



Vegetation and soil at Site 547



Water table at Site 547

Appendix II Soil laboratory analysis

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Chemical analysis - Soil quality laboratory results from selected soil horizons for the composited sample of the three GPS locations

GPS Site #	Horizon	Hd	EC (dS/m)	% WO
		1:2 water	saturated	loss on ignition
		extract	paste 1:2	
545	Op	5.5	0.14	52.6
546	Surface	Acidic *	Non saline	High
547	horizon			
545	ß	5.8	0.10	Not determined
546	Subsurface	Acidic *	Non saline	
547	horizon			

* Soil Reaction Class: The Canadian System of Soil Classification 3rd edition. 1998. Soil Classification Working Group. Research Branch, Agriculture and Agri-Food Canada Publication 1646. National Research Council, Ottawa, Canada. 187 pages.

					Nu	trient and	Nutrient analysis (ppm)	(n					
GPS Site #	Horizon	* Z	a	×	**\$\$	പ	Яg	Fe	CL	Zn	۵	Mn	σ
545	dO	2	25	43	з	1570	195	226	0.6	5.1	0.2	1.9	5.1
546		D^1	M^2	D1	M^2	03	õ	03	M^2	0 3	D1	M^2	M ²
547													
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Chemical analysis – Nutrient analysis laboratory results from selected soil horizons for the composited sample of the three GPS locations

N* nitrate-N

S** sulphate-S

D¹ deficient nutrient status

M² marginal nutrient status

O³ optimum nutrient status

McTavish Resource & Management Consultants Itd.

Page 1

The chemical data indicate that the soils in the subject property are non-saline, are acidic in terms of soil pH, and are deficient in nitrogen, potassium and boron. The nutrient levels of copper, manganese, chlorine, and phosphorus are marginal, whereas the levels for the other nutrients measured are optimal.

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Page 2

Raad are not included in the subject application



July 27, 2016

AE Project No. 1148

Pacific Land Group 212 – 12992-76 Avenue, Surrey, B.C., V3W 2V6

ATTENTION: Laura Jones, MCIP, RPP Senior Development Planner

Re: Preliminary Geotechnical Investigation 14920, 14680, 14540, 14400 and 14300 Burrows Road 🤺 Richmond, BC

1.0 INTRODUCTION

This report presents the results of a preliminary geotechnical site assessment conducted by Active Earth Engineering (Active Earth) for the above referenced properties. The purpose of the geotechnical assessment was to evaluate soil conditions in order to provide recommendations in relation to the following:

- Subgrade preparation for building foundations.
- Depth to competent subgrade.
- General geotechnical design recommendations.

Environmental considerations are outside the scope of this geotechnical assessment.

2.0 SITE DESCRIPTION AND PROPOSED DEVELOPMENT

The subject site comprises of five properties, namely 14300, 14400, 14540, 14680 and 14920 located on the south side of Burrows Road, in Richmond. The site is rectangular in shape and measures approximately 400 m east - west by 150 m north - south. The site is bounded by Burrows Road to the north and farm land to the other three sides. Single family dwellings occupy three properties, 14300, 14400 and 14680. Property 14540 was used for stables and 14920 was vacant at the time of site investigation. The site is flat-lying, however, the site and is approximately 0.5-1 m below the Burrows Road.

It is understood that the site will be developed into commercial at grade buildings, with surface parking. Preliminary information reveals that the site would be raised by approximately 2.5 m to bring the site grades at minimum flood construction level. The conceptual building plans were

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PLN - 98

1

not available at the time of writing this report. Once available, these should be forwarded to us so that we may revise this report, if necessary.

3.0 SUBSURFACE INVESTIGATION

The geotechnical investigation consisted of advancing four auger holes (AH1 – AH4) and three electronic Cone Penetration Tests (CPT1-CPT3). The CPT and auger holes were advanced up to 25 and 10 m depths below the existing surface. The approximate locations of these tests are shown on the attached site plan. Track mounted drill rig operated by Ontrack Drilling was utilized for the site investigation. CPT provides a continuous plot of soil strength parameters with depth. Shear wave velocity test was also completed in CPT2. A representative from Active Earth supervised the field work and classified the soils encountered in the auger holes.

The report attachments include a site plan and soil logs. The depths indicated on the logs are related to the ground surface at the time of the investigation.

4.0 SOIL AND GROUNDWATER CONDITIONS

Geological map (GeoMap Vancouver – Robert J.W. Turner and John J. Clauge) indicates that the site is located within a formation of sand and silt belonging to Modern Age sediments. The subsurface conditions encountered were generally consistent with the published geological information and consistent between the augerholes. The following soil conditions were encountered in the order of increasing depth:

- Silt and Clay Surficial layer of topsoil and root mat is underlain by approximately 1.5-2.1 m thick layer of silt and clay. Undrained shear strength (Su) of this deposit as inferred from the CPT was in the order of 50 kPa. Liquid and Plastic Limits of a sample collected were 38% and 25% respectively, indicating that the soils are low plastic; overlying
- SAND Medium to fine grained sand was encountered below silt and clay. The sand was compact and generally becomes dense at 5 m depth. The equivalent Standard Penetration Test (SPT) blows were 20 below 5 m depth. All the augerholes and CPT tests terminated in this layer.

Groundwater: The groundwater table was encountered at an average of 1.2 m depth, on May 1st, 2016. Groundwater typically fluctuates with changes in season, precipitation and land use. Therefore, minor changes in groundwater levels should be expected.

The soil conditions as described above are generalized and are based on the soil investigation. Minor variations in the soil stratigraphy should be expected between the test locations and the areas of the site not investigated.

5.0 DISCUSSION AND RECOMMENDATIONS

5.1 General

Based on the subsurface investigation, the site has competent soil conditions for the proposed development. The buildings will be supported on conventional footings. The existing site grades are at approximate elevation (EL) 1 m and the proposed development would be at flood construction EL of 3 m. Therefore the site will be raised by approximately 2 m. Although the existing surficial 1.5 m thick clays soils are stiff, however, these are moderately compressible under 2 m thick proposed fills. Therefore the fills should be allowed to consolidate the existing clays prior to building construction. A minimum consolidation period of 4 months is recommended. The filling should be completed at least beyond 10 m from the building so that any future fill around the building may not trigger the consolidation again. Similarly, the fill soils should not be stockpiled within 10 m of the existing building. Since the entire site will be occupied by buildings and surface parking. Therefore the fills should be structural fills and compacted under strict quality control, as described in the following section.

Liquefaction analysis of CPT data (collected at three locations) was completed and is attached. The analysis indicates that the dense sands underlying the site are non-liquefiable. However, the surficial approximately 1 m sand will liquefy under the design seismic event and the site is likely to settle 30 mm under the design seismic event. The following sections of the report provide our recommendation in detail.

5.2 Subgrade Preparation

The area of building envelope, sidewalks, parking and driveways should be stripped and cleared of topsoil, organics, loose soils, fill and other deleterious material to expose a non-organic native subgrade consisting of clay. Stripping should be carried out with clean-up bucket of an excavator to minimize disturbance to the subgrade. Stripped subgrade should be reviewed and approved by Active prior to placement of structural fill.

It is recommended that the site preparation (stripping and filling) should be done during the extended dry season.

5.3 Structural Fill

Structural fill is defined as fill placed beneath any load bearing area. Imported structural fill should consist of well-graded, 75 mm minus pit run sand and gravel or other granular material approved by the Geotechnical Engineer. It should be non-organic and clean (less than 8% fines passing 0.075 mm sieve by weight). Structural fill should be placed in maximum 0.3 m lifts. In building envelope and parking areas, it should be compacted to the satisfaction of geotechnical engineer. Typically, the fills are tested for compaction, by proof rolling under a fully loaded truck and observing the rutting under the wheels.

5.4 Foundations

The proposed buildings may be supported on spread and strip footings on the compacted and approved fills. The serviceability bearing resistance of footings depends on the type of fills, and compaction level. Geotechnical Engineer must be retained for each property to provide geotechnical recommendations for a specific building. A Site Class "D" may be used for the seismic design, based on table 4.1.8.4A of the BCBC 2012.

Minimum footing widths should be 0.45 m for strip footings and 0.9 m for pad footings, in accordance with the requirements of the 2012 British Columbia Building Code. Footings should have a minimum embedment of 0.45 m for frost protection and confinement. Footing subgrades should be stripped of water softened or loose soil prior to placing concrete.

Adjacent footings at different elevations should be offset from each other by a distance at least equal to the difference in elevation and the sloped subgrade between the footings should be undisturbed native. In addition, a geotechnical review will be required at the time of form-work. Similarly, the utility excavation bottom should be beyond a 1.5H:1V line projected down from the outer edge of footing to avoid its undermining.

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The subsurface conditions may vary between auger holes. The interpretation of subsurface conditions provided is an opinion and not a certification. Stratigraphic variations in ground conditions are expected due to its historic nature. As such, all explorations involve an inherent uncertainty that some conditions will not be detected, as expected. Environmental considerations are outside the scope of this geotechnical report. Samples obtained from the Site will be retained in our laboratory for 60 days. Should no instructions be received to the contrary, these samples will then be discarded.

This report has been made in accordance with the generally accepted soil and foundation engineering practices. No other warranty expressed or implied is made. If the project does not start with two years of the report date, the report may become invalid and further review may be required.

This report has been prepared for the exclusive use of Pacific Land Group- and their "Approved Users" for specific application to the development mentioned in the report. Active Earth and its employees accept no responsibility to another party for loss or liability incurred as a result of the use of this report. Any use of this report for purposes other than the intended use should be approved in writing by Active Earth. Contractors should rely upon their own explorations for costing purposes.

If you have any questions regarding the contents of this report, or if we can be of further assistance to you on this project, please call any of the undersigned.

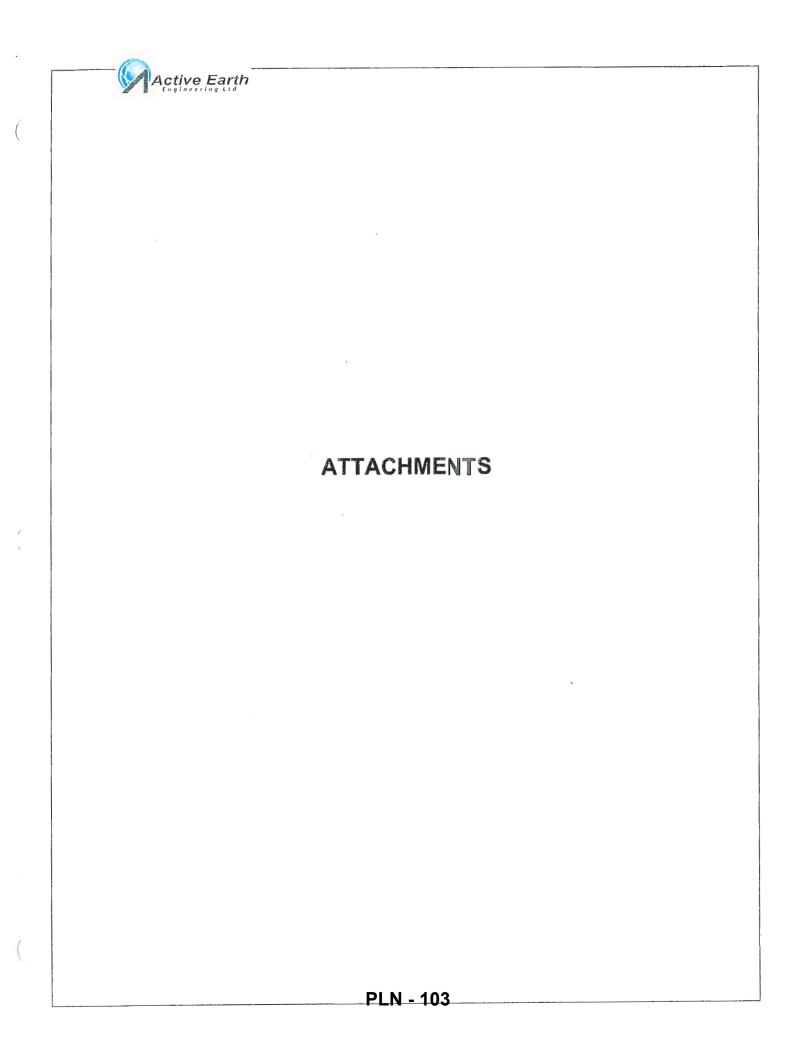
Yours truly, Active Earth Engineering Ltd.

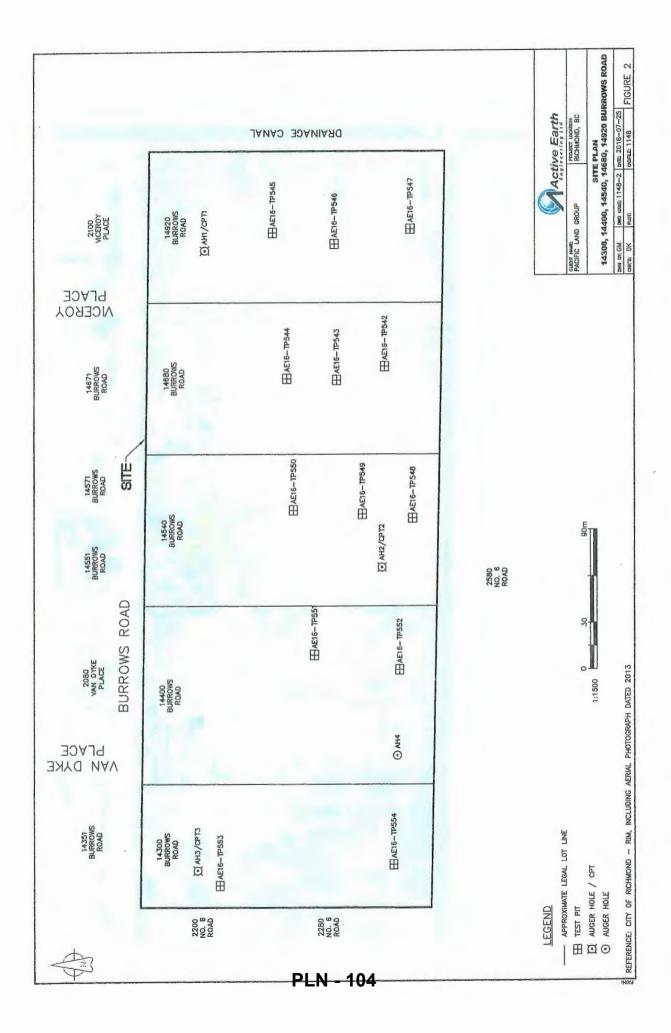


David Kneale, P.Geo. Principal, Project Manager

Attachments: Location Plan Site Plan Borehole Logs CPT Logs Liquefaction Analysis Atterberg Limits

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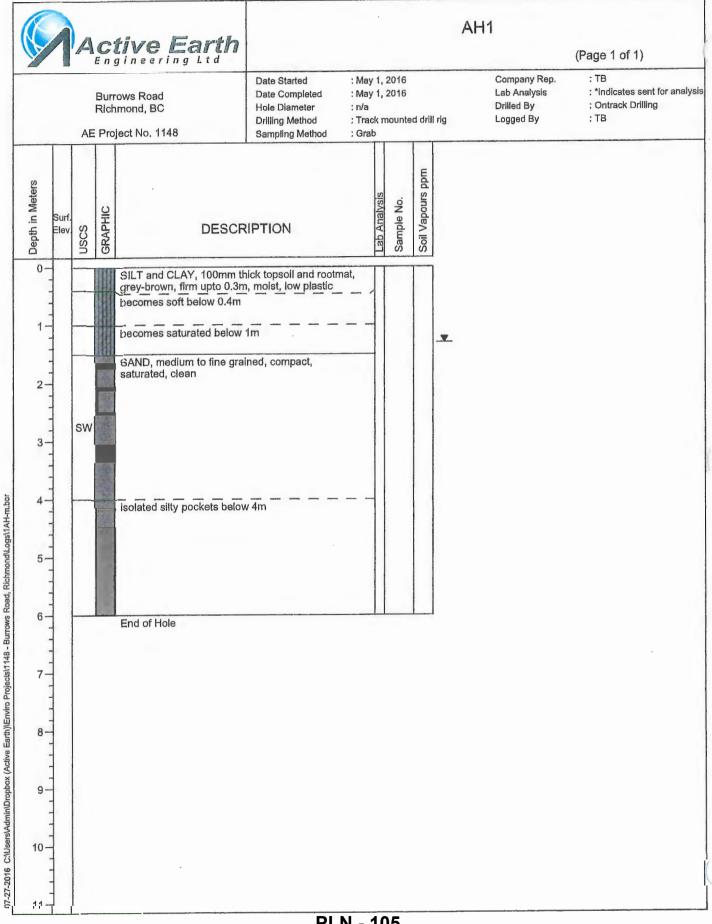




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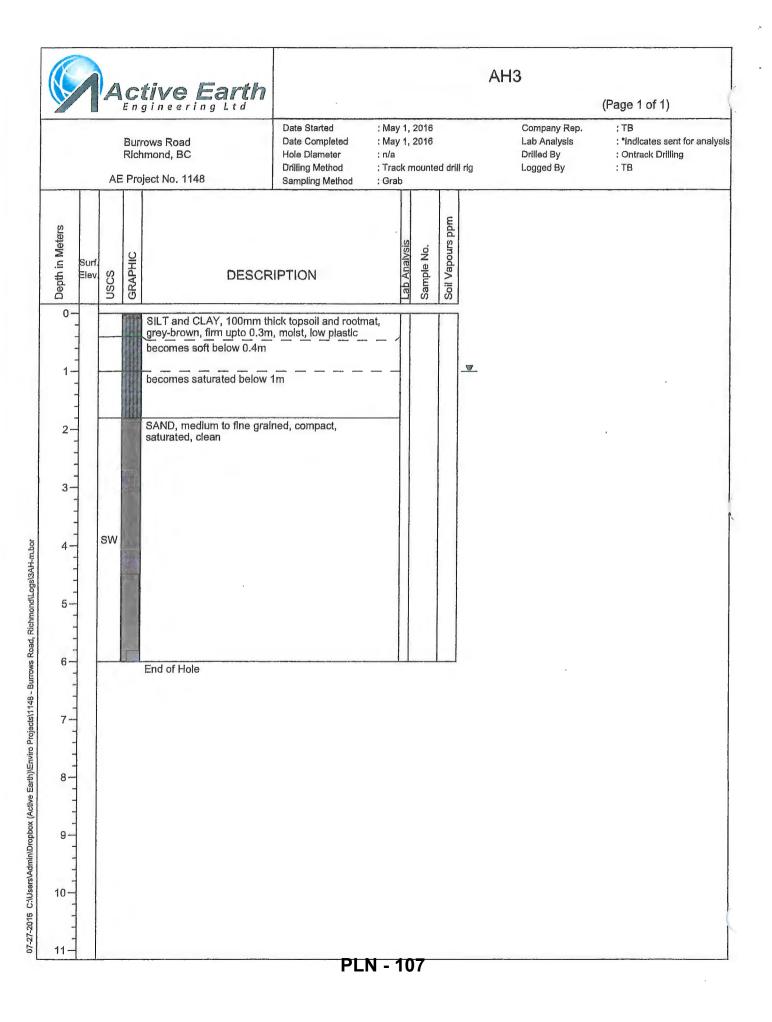
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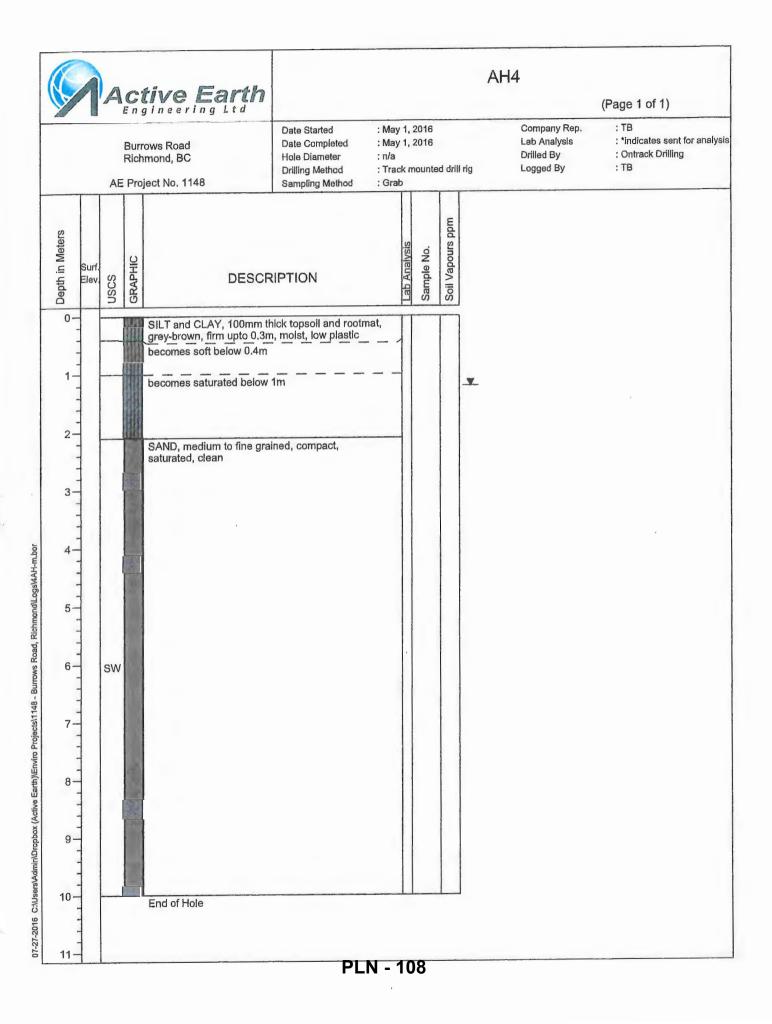
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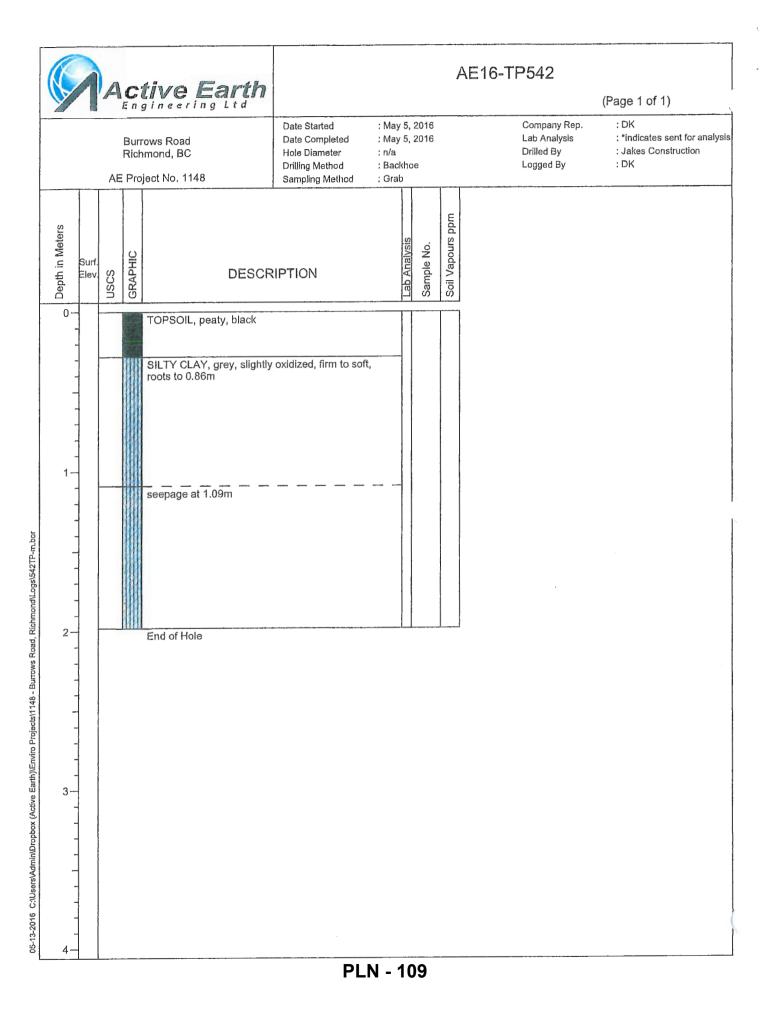
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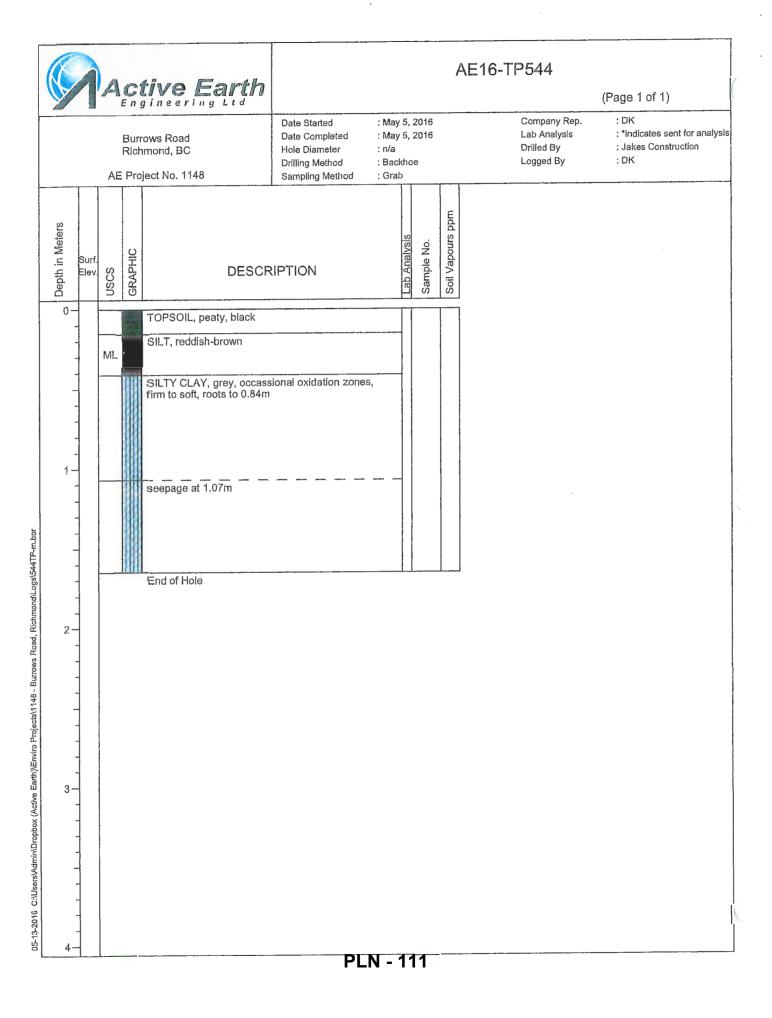


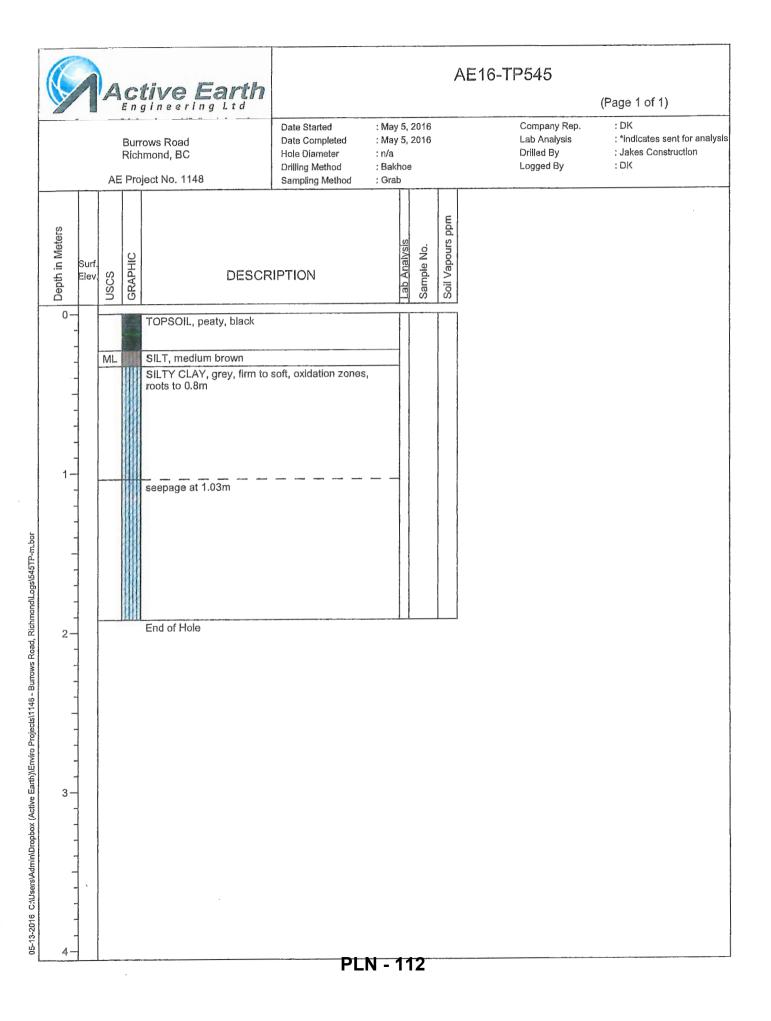


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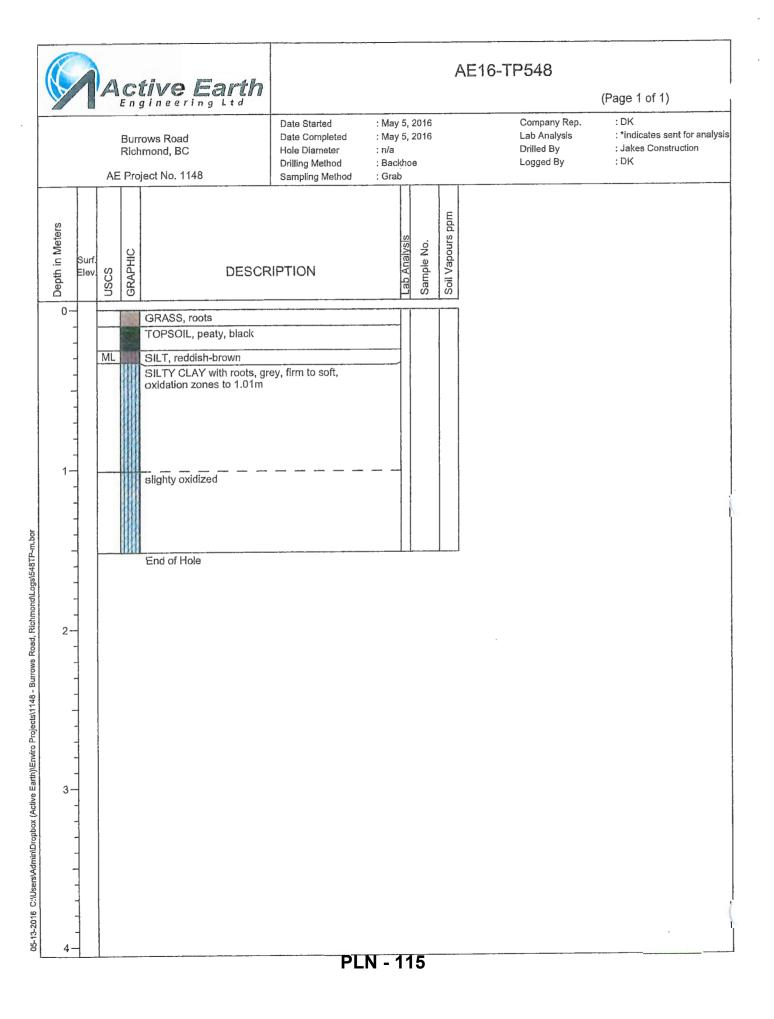


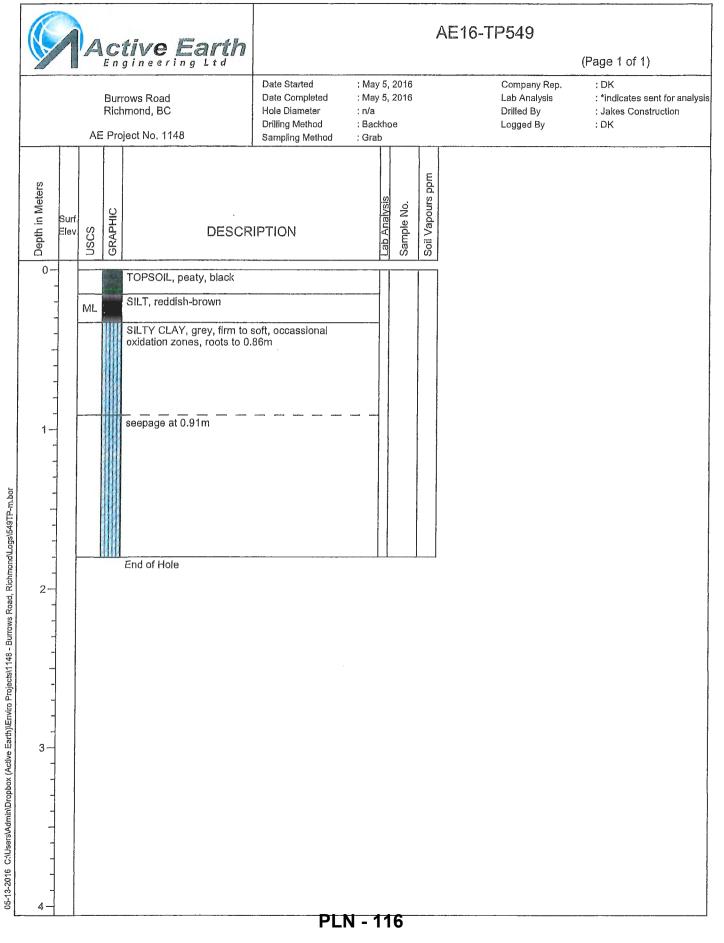
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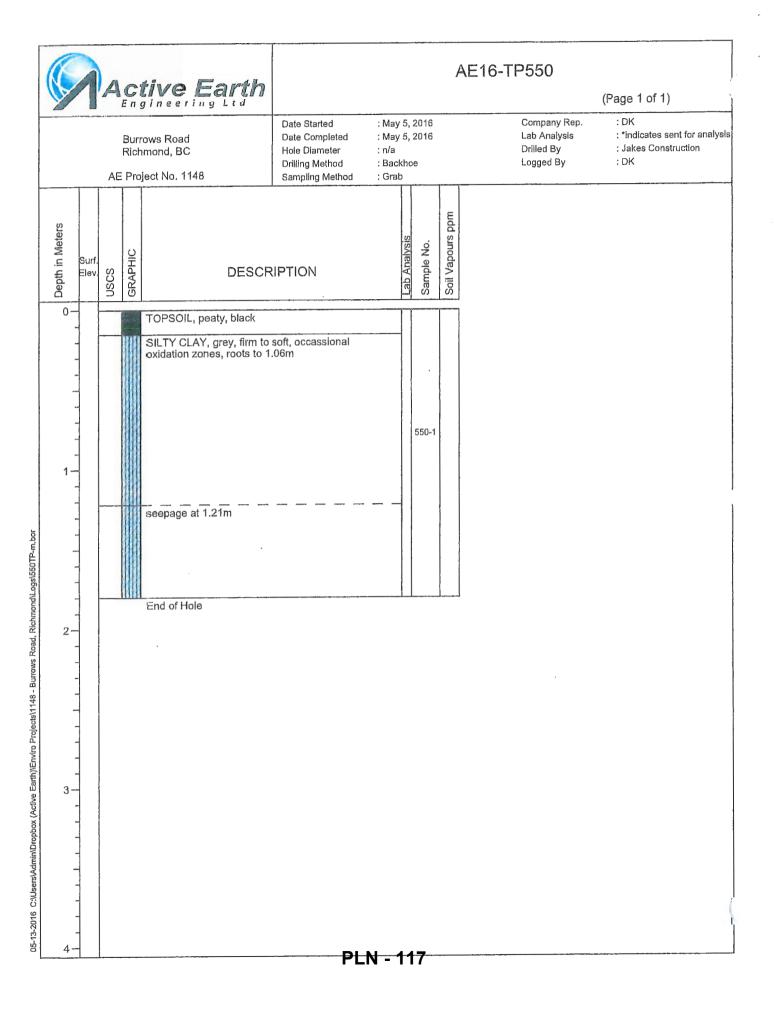
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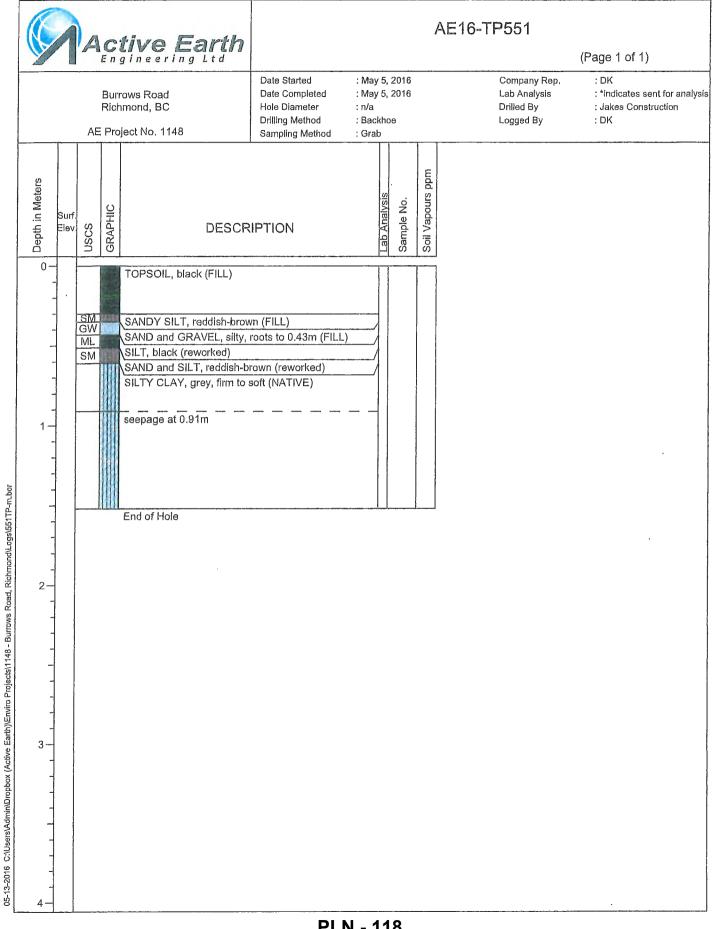
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*Note: 14400 & 14300 Burrows Road are not included in the subject application.

November 24, 2016

AE Project No. 1148

Pacific Land Group 212 – 12992-76 Avenue, Surrey, B.C., V3W 2V6

ATTN: Laura Jones, MCIP, RPP Senior Development Planner

RE: Preliminary Hydrology Assessment 14920, 14680, 14540, 14400 and 14300 Burrows Road, Richmond, BC 🛠

INTRODUCTION

Active Earth Engineering Ltd. (Active Earth) has completed a hydrology study for the abovereferenced project. The location of the property is shown on the attached Location Plan (Figure 1).

The study area comprises five properties, namely 14300, 14400, 14540, 14680 and 14920 Burrows Road, in Richmond, and is collectively referred to as the "Site" in this report.

The purpose of this work is to evaluate the hydrogeology and the drainage characteristics of the Site.

SCOPE OF WORK

The following scope of work was completed:

- 1. Review of well logs using the provincial online WELLS data base (<u>https://a100.gov.bc.ca/pub/wells/public/indexreports.jsp</u>);
- 2. Review of Surficial Geology Map 1486A;
- 3. Review of the Active Earth Engineering Geotechnical Report for the Site;
- 4. A Site visit and inspection/logging of 13 test pits excavated for McTavish Resource Management Consultants Ltd.;
- 5. Review of "Soil and land capability assessment" reports for the properties located at 14920, 14680, 14540, 14400, & 14300 Burrows Road, Richmond, BC, prepared by McTavish Resource Management Consultants Ltd.;
- Review/assessment of a topographic survey completed by South Fraser Land Surveying Ltd;
- 7. Personal communication with City of Richmond Engineering; and
- 8. Completion of this report.

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PLN - 120

DESCRIPTION

The Site is rectangular in shape and measures approximately 400 m east-west by 150 m north-south and is bounded by Burrows Road to the north and farm land on the remaining three sides. The Site boundaries, including the five individual parcels, are shown on the attached Site Plan (Figure 2).

Single family dwellings occupy three of the properties that comprise the Site (14300, 14400 and 14680 Burrows Road). The properties at 14540 and 14920 Burrows Road were vacant at the time of the investigations, and 14440 was used for horse boarding. The ground surface is flat-lying and is generally covered with grasses.

HYDROLOGY ASSESSMENT

Stratigraphy

Surficial Geology Map 1486A refers to the surficial deposits as sandy loam to clay loam 15 to 40 m thick, overlying deltaic and distributary channel fill 10 to 25 m in thickness with interbedded fine to medium sand and minor silt. The following stratigraphy was encountered within the test pits and boreholes:

- 0.15 to 0.30m TOPSOIL; overlying,
- 1.5 to 2.1m Silty CLAY; overlying,
- 2.1 to 25.0 m SAND, medium to fine grained with occasional lenses of silty sand and silty clay.

The locations of the test pits and boreholes are shown on the attached Site Plan (Figure 2), and the logs are included in Appendix A. The stratigraphy encountered within the test pits and boreholes is consistent with the surficial geology mapping of the area.

Groundwater

Groundwater was encountered at an average of 1.0 m depth on May 6, 2016. Groundwater typically fluctuates with changes in season, precipitation, and tidal influences. Discussions with local residents indicate that the property contains standing surface water during the winter wet season.

A search of the BC Water Resource Atlas (BCWRA) revealed there are no groundwater wells in the vicinity of the Site.

Drainage

The ground surface elevation at the Site occurs generally between 0.8 and 1.0 m-geodetic, with the exception of an area at 14400 Burrows Road where the elevation has been raised by soil filling to approximately 1.5 m-geodetic near the centre of the property. Overall, the ground surface is generally flat with no discernible slope. Burrows Road occurs at an approximate elevation between 1.5 and 1.7 m-geodetic and is 0.5 to 0.9 m above the typical Site grades.

A drainage ditch is present to the immediate north of the Site, along the south side of Burrows Road (see Figure 3 – City of Richmond Drainage Plan). The inverts of the drainage ditch along the northern Site boundary range from elevation 0.18 to -0.22 m-geodetic. Water was sporadically present in the ditch at the time of the field work (May 2016), and no flow was identified. This ditch drains to the City of Richmond No. 6 Road Pumping Station, where it is pumped into the Fraser River. The drainage works run approximately 1.3 km in length from the east end of Burrows Road to the pumping station. Discussions with the City of Richmond Engineering Department indicate that the pumping start level at the pumping station varies between 0.13 and -0.22 m-geodetic elevation. The City also noted that the hydraulic grade from the pumping station is approximately 0.05%. As such, the level of water in drainage ditch is calculated to vary between 0.43 and 0.73 m-geodetic elevation (see Figure 4 - Schematic Drainage Section A).

There are dykes to south and east of the Site. The dyke on the south varies between 1.9 and 2.7 m-geodetic in elevation (1.1 to 2.4 m above Site grades). The dyke surrounds a property used for cranberry production.

The crest of the raised dyke located immediately east of the Site varies between 2.99 and 1.74 m-geodetic elevation (0.9 to 2.2 m above Site grades). A drainage canal is present to the east of this dyke, and the adjacent fields to the east are used for cranberry production. The water level in the drainage canal measured in June 2016 was 1.11 m-geodetic elevation, and the high water mark was surveyed at 1.33 m-geodetic elevation (see Figure 4 - Schematic Drainage Section B).

It is noted that the Flood Construction Level for this Site is elevation 3.0 m-geodetic, which represents a freeboard of 0.6 m above the Fraser River 200-year flood level.

CONCLUSIONS

The Site is poorly drained for the following reasons:

- 1. The ground surface is flat with no discernible grades to surface water drainage on any side of the Site.
- There are dykes located up to 2.4m higher than the property on the south and east sides which prevent runoff in these directions. Evidence indicates surface water cannot gravity flow to the existing drainages located along Burrows Road and the east side of the Site.
- 3. According to Mr. Bruce McTavish, M.Sc., the existing vegetation is dominated by reed canary grass and woody species such as Spirea douglasii found in soils that are subject to prolonged saturation.
- 4. The Site is underlain by up to 2m of silty clay. The hydraulic conductivity of this layer is expected to be 1x10⁻⁷ to 1x10⁻⁸ m/sec, which is considered relatively impervious.
- 5. Water levels in the drainage canal along with the low permeability clay soils and insufficient surface grade prevent shallow groundwater and runoff from flowing to the east.

The site is poorly drained and is inundated with water during portions of the year. Surface water and groundwater cannot flow effectively to surrounding drainages.

According to the British Columbia Agricultural Drainage Manual¹, drain depths would be at least 1.2m below the ground surface. This depth would be insufficient to allow for gravity flow to the Burrows Road ditch at the current site grades. As a result pumping would be required to effectively drain the area if the current ground surface elevations were maintained. Pumping would also be required to direct flow to the drainage canal on the east of the property.

Drain spacing on the Site will be dependent on the type of crop, but would likely be less than 5m on center using the existing soil conditions. Drainage along the Burrows Road ditch is controlled by pumping at the No.6 Road Pumping Station, however, the flow in the ditch is impeded to a certain extent by vegetation and the culvert inverts.

Based on the current ground surface elevations, subsoil drains and a pump station would be required to direct flow from the Site to the Burrows Road ditch or the drainage canal..

On-Site drainage may also be improved by soil filling by at least 1.5m and providing an approximate 2% slope to the north to allow for gravity drainage (no pumping required) to the Burrows Road ditch. Pumping would still be required to direct flow to the drainage canal. Subsurface drainage may also be required depending on the consistency of the soil used as fill and reclamation.

It is likely that improvements to the Burrows Road ditch would be required to accept additional flows that would result from improving drainage at the Site.

¹ British Columbia Agricultural Drainage Manual, Ministry of Agriculture, Fisheries and Food, 1997.

CLOSURE

This letter has been prepared by Active Earth Engineering Ltd. exclusively for the Pacific Land Group and their clients and consultants and is intended to provide an assessment of the hydrogeology of the Site. The conclusions made in this report reflect Active Earth's best judgment in light of the information available at the time of testing. Any use which a third party makes of this report, or any reliance on or decisions to be made based on it, are the responsibility of such third parties. Active Earth accepts no responsibility for damages, if any, suffered by a third party as a result of decisions made or actions based on this letter.

Should this report be submitted to the City of Richmond, the City is authorized to rely on the results within the limitations of this report.

The findings and conclusions documented in this report have been prepared for specific application to this and have been developed in a manner consistent with that level of care normally exercised by hydrogeological professionals currently practicing under similar conditions in the area.

Yours Truly,

ACTIVE EARTH ENGINEERING LTD.



David Kneale, P.Geo. Senior Hydrogeologist

Attachments:

Figures

Figure 1	Location Plan
Figure 2	Site Plan
Figure 3	City of Richmond Draimage Plan
Cinumo d	Schemetic Drainage Cross section

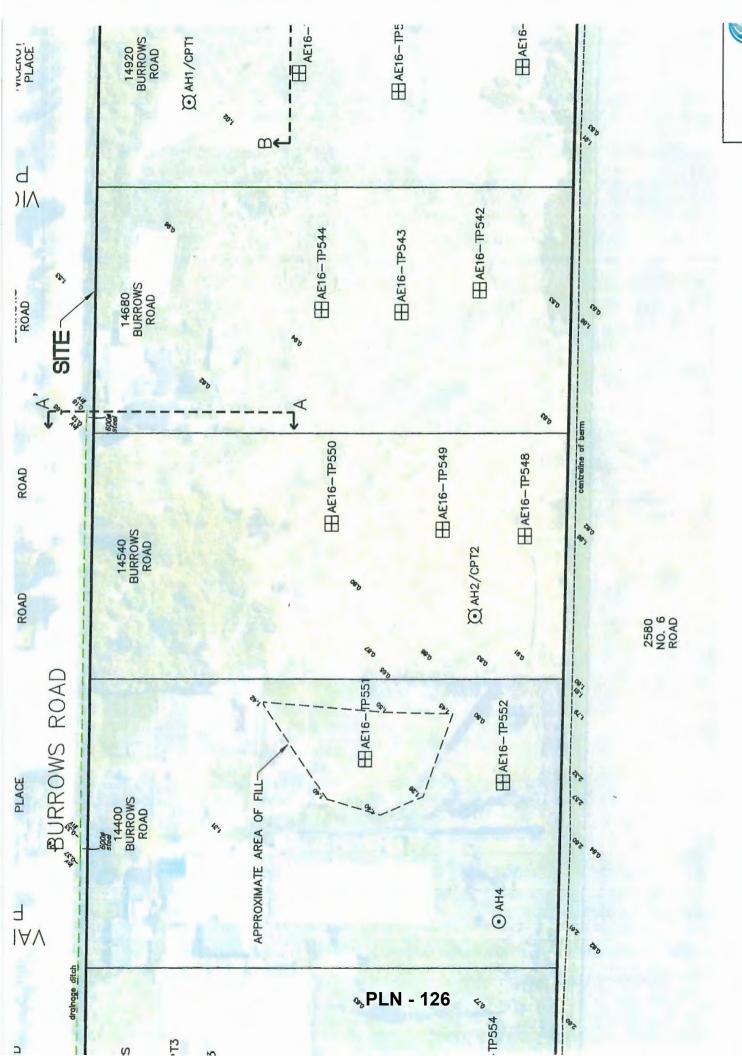
Figure 4 Schematic Drainage Cross-sections

Appendices

Appendix A	Borehole and Test Pit Logs
Appendix B	BC Water Resources Atlas Results

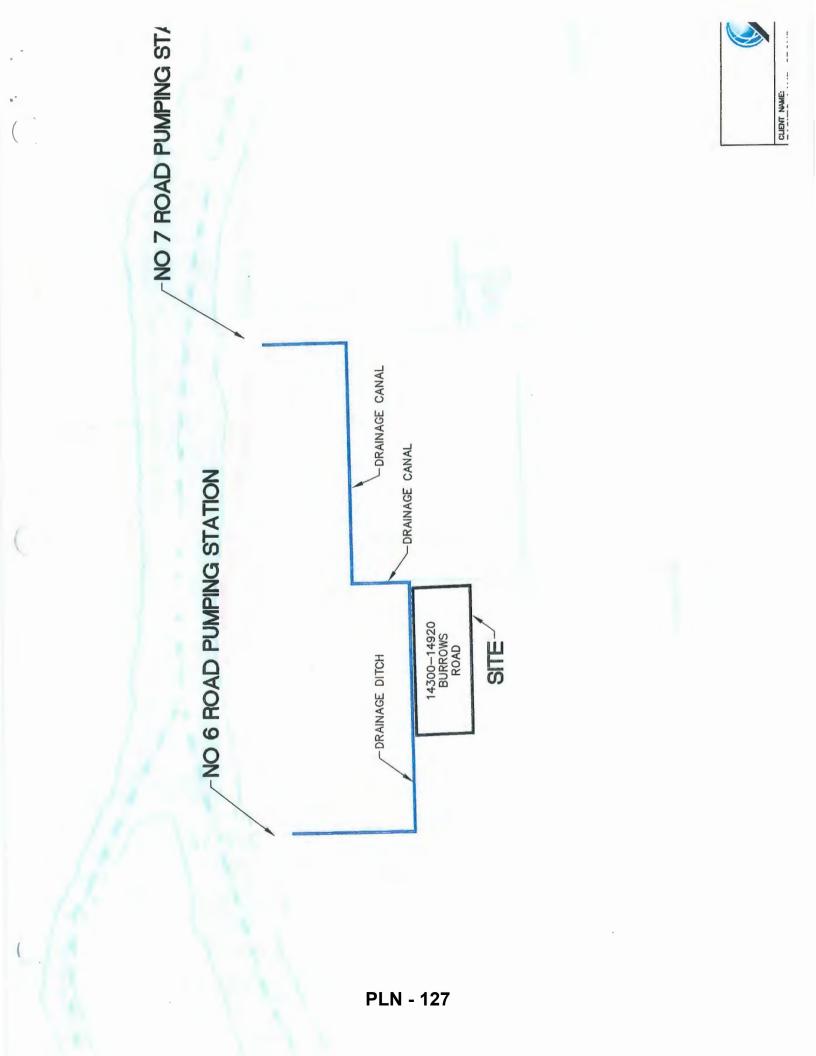


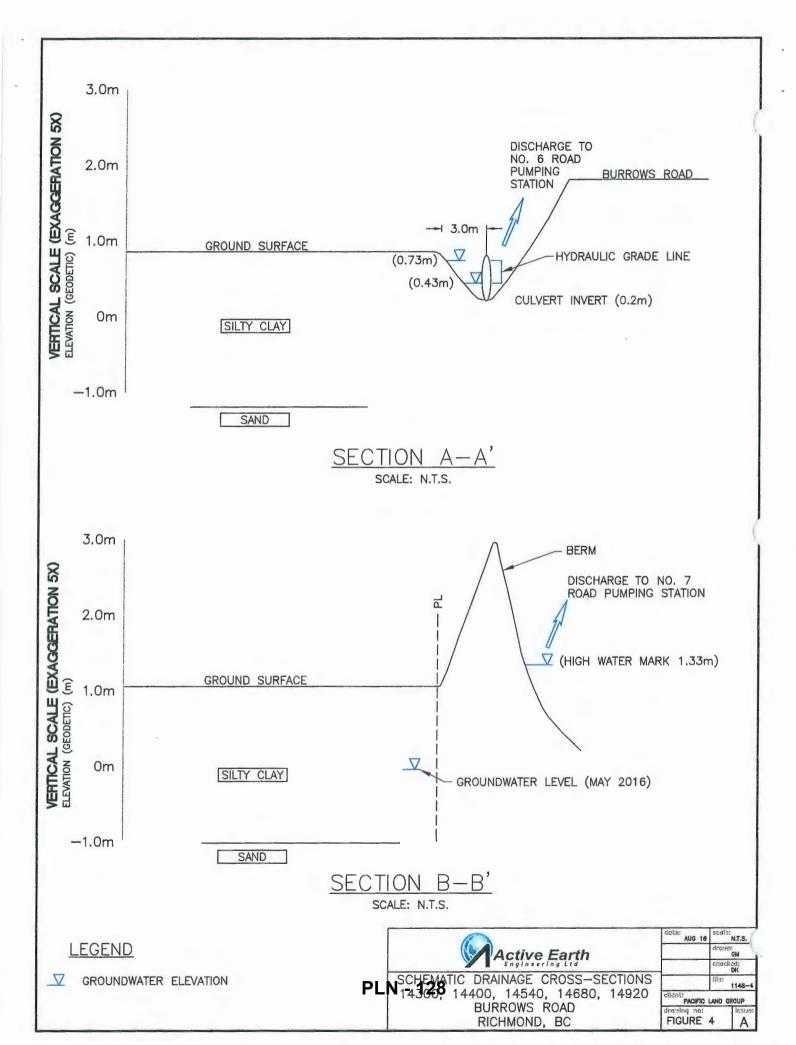
FIGURES



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CLIENT NAME:





Road are not included in the subject application.



June 26, 2017

AE Project No. 1148

Pacific Land Group 212 – 12992-76 Avenue, Surrey, B.C., V3W 2V6

ATTN: Laura Jones, MCIP, RPP Senior Development Planner

RE: Preliminary Drainage Cost Assessment 14920, 14680, 14540, 14400 and 14300 Burrows Road, Richmond, BC 🤺

Drainage Assumptions and Cost Estimate

In accordance with your request, Active Earth Engineering Ltd. (Active Earth) has completed a cost evaluation for the above-referenced project. The following assumptions have been used in this assessment:

- 1. The study area comprises five properties, namely 14300, 14400, 14540, 14680 and 14920 Burrows Road, in Richmond.
- 2. The land would remain for agricultural land use.
- 3. No site filling.
- 4. Each property would be drained by individually with drainage to Burrows Road storm drainage system operated by the City of Richmond.
- 5. As noted in our Preliminary Hydrology Report¹, the hydraulic grade line in the Burrows Road drainage varies between 0.43 to 0.73 masl.
- 6. The native ground surface varied between 0.6 and 1.0 masl.
- 7. The surficial soils are clay-based.
- 8. Agricultural drainage typically varies between 600 and 1000 mm. For the purpose of this evaluation, we have assumed the minimum depth of 600 mm. As such there is insufficient grade for gravity drainage to Burrows Road and pumping will be required.
- 9. No electrical up-grade is required.
- 10. Drains will consist of Big 'O' pipe 4.5m on centre.

¹ Preliminary Hydrology Assessment, 14920, 14680, 14540, 14400 and 14300 Burrows Road, Richmond, BC, Active Earth Engineering Ltd., November, 2016

Fraser Valley Vancouver Victoria Mailing Address: 4510 Saddlehorn Crescent Langley, BC V2Z 1J6 Telephone: 604 312-3891 Facsimile: 604 856-7598 www.activeearth.ca

PLN - 129

June 2017

Active Earth engaged the assistance of WaterTec Irrigation Ltd., who specializes in agricultural drainage and irrigation design. The following presents a summary of the drainage cost estimates for each property. The detailed cost spreadsheet is attached for reference.

Property	Supply and Install Drains and Pumping Equipment
14920 Burrows Road	\$52,815
14680 Burrows Road	\$69,022
14540 Burrows Road	\$69,022
14400 Burrows Road	\$78,538
14300 Burrows Road	\$54,399
Total (not incl GST)	\$323,796

A 14400 & 14300 Burrows Road are not included in the subject application.

CLOSURE

This letter has been prepared by Active Earth Engineering Ltd. exclusively for the Pacific Land Group and their clients and consultants and is intended to provide an assessment of the hydrogeology of the Site. The conclusions made in this report reflect Active Earth's best judgment in light of the information available at the time of testing. Any use which a third party makes of this report, or any reliance on or decisions to be made based on it, are the responsibility of such third parties. Active Earth accepts no responsibility for damages, if any, suffered by a third party as a result of decisions made or actions based on this letter.

The City of Richmond is authorized to rely on the results within the limitations of this report.

The findings and conclusions documented in this report have been prepared for specific application to this and have been developed in a manner consistent with that level of care normally exercised by hydrogeological professionals currently practicing under similar conditions in the area.

Yours Truly,

ACTIVE EARTH ENGINEERING LTD.

Freak

David Kneale, P.Geo. Senior Hydrogeologist Attachments: Detailed Cost Spreadsheet Burrows Road Agricultural Drainage Estimate

June-02-17 Project 1148

Description	Cost \$	Comments
anical/Electrical Costs p	er lot	
5 Hp Sewage pump (500	\$4,390.00	
Control system includes fl	\$650.00	
48" Plastic hdpe sump	\$1,450.00	
12" Valve - Isolation	\$610.00	
6" dischange piping & valv	\$990.00	
Service Crane	\$690.00	
Electrical Supply and Insta	\$4,000.00	estimated
Mechanical Installation	\$3,000.00	estimated
Total	\$15,780.00	

A	 	ا المغد	Mumehan	Unit Coat C	Cula Tatal
Address	item	Unit	Number	Unit Cost \$	Sub-Total
	4" Big O Pipe (4.5m spacing)		0.150		600.077
	Supply and Install	ft	9450	\$4	\$33,075
	4 inch connections w/ cleanouts	each	16	\$15	\$240
14920 Burrows Road	12 inch HDPE header	ft	310	\$12	\$3,720
	Pumping Equipment				
	Supply and Install	each	1	15,780	\$15,780
		ngag tu Saunan tana merentak ti ta Makadha da Makadha		Total	\$52,815
an a					
	4" Big O Pipe (4.5m spacing)				
	Supply and Install	ft	12992	\$4	\$45,472
	4 inch connections w/ cleanouts	each	22	\$15	\$330
14680 Burrows Road	12 inch HDPE header	ħ	620	\$12	\$7,440
	Pumping Equipment				
	Supply and Instali	each	1	15,780	\$15,780
			1	Total	\$69,022
	4" Big O Pipe (4.5m spacing)				
	Supply and Install	ft	12992	\$4	\$45,472
	4 inch connections w/ cleanouts	each	22	\$15	\$330
14540 Burrows Road	12 inch HDPE header	ft	620	\$12	\$7,440
	Pumping Equipment				
	Supply and Install	each	1	15,780	\$15,780
				Total	\$69,022
	4" Big O Pipe (4.5m spacing)				
	Supply and Install	fi	15355	\$4	\$53,743
	4 inch connections w/ cleanouts	each	25	\$15	\$375
14440 Burrows Road	12 inch HDPE header	ft	720	\$12	\$8,640
	Pumping Equipment				
	Supply and Install	each	1	15,780	\$15,780
				Total	\$78,538
			ระสารการให้สายการและระสายความระบาท		
	4" Big O Pipe (4.5m spacing)		4		
	Supply and Install	ft	9450	\$4	\$33,075
	4 inch connections w/ cleanouts	each	16	\$15	\$240
14300 Burrows Road	12 inch HDPE header	ft	442	\$12	\$5,304
	Pumping Equipment				
	Supply and Install	each	1	15,780	\$15,780
		1		S	471 460

Total all Properties \$323,796

\$54,399

Total

Assumptions

Electrical service does not require upgrading

Big 'O' pipe 15 ft on centre

12 inch header at north and south end of each property to make interconnected drainage network

Pump chamber and pump on each property



Road are not included in the subject application.

Agricultural business analysis Small lot agriculture (less than 5 acres) for the properties located at 14920, 14680, 14540, 14400 💉 & 14300 Burrows Road, Richmond, BC

Prepared for:

Pacific Land Resource Group

Prepared by:

Dun MCZ

Bruce McTavish, MSc MBA PAg RPBio McTavish Resource & Management Consultants Ltd. 15300 Croydon Road, Suite 300 Surrey BC V3Z 0Z5 <u>bruce@mctavishconsultants.ca</u>

June 8, 2017

Table of Contents

	ve Summary	
1.0	Introduction	1
2.0	Crop Potential	4
3.0	Projected Income and Expenses	4
3.1	Handpicked blueberries	5
3.2	Mixed vegetables	6
3.3	Forage	6
4.0	Summary	11
Append	lix I Details on cost analysis for blueberries	12

List of Tables

Table 1 Soil management and crop considerations	3
Table 2 Effective farming area for each property	4
Table 3 Projected income per property at year 0 and year 8 at \$1.25/lb	5
Table 4 Projected blueberry profit per acre (includes capital costs)	7
Table 5 Projected income statement for 3.6 acres of blueberries selling price of \$2.00/lb	8
Table 6 Blueberry projected income statement at \$1.25/lb selling price	9
Table 7 Mixed vegetable production gross profit margin per acre	10
Table 8 Summary of projected vegetable farm profit per property	11
Table 9 Estimated Capital Costs	12
Table 10 Estimated Indirect Costs	12
Table 11 Other Indirect Costs	12
Table 12 Projected income statement per acre with blended price of \$1.25 per pound	13

List of Figures

Figure 1 Property location and agricultural capability2

* 14400 & 14300 Burrans Read are not included in the subject appliedtor

Executive Summary

This report provides a financial analysis of developing small lot farm operations of approximately 3 acres each on the land located at 14920, 14680, 14540, 14400 & 14300 Burrows Road, Richmond, BC. The plan assumes that the land is drained and ready for final preparation to plant crops.

This analysis uses projections based on production of a variety of vegetable crops with a mix of sales directly to the public and to local retailers. The pricing per crop is based on the historical average of hand-picked wholesale and hand-picked farm gate retail prices¹.

It is assumed that each parcel will be operated independently and machinery, buildings and other facilities will need to be purchased and/or constructed. The cost projections assume that all product is sold at farm gate to the public, direct retailed as fresh product or sold at farmer's markets. Therefore, cold storage facilities are not costed in the financial scenarios. Based on this assumption the estimated capital costs for each parcel is approximately \$46,000 without accounting for the required drainage improvements.

The agricultural capability of the land (improved 3W and 4WD) restrict the crops that can be grown on these properties. Mixed annual vegetables can be produced, though in some years seeding and planting may be delayed due to wet soil conditions. Blueberries could also be established with improved drainage and planting on raised beds. Hay crops were considered but the small size of the parcels make this option unrealistic.

The projected earnings for blueberry production operations for each property are provided in the following table.

Property	Projected profit year 0	Projected profit year 8
14920 Burrows Road (3.6 acres)	-\$ 62,149.00	\$ 16,000.00
14680 Burrows Road (2.5 acres)	-\$ 59,700.00	\$ 4,421.00
14540 Burrows Road (3.6 acres)	-\$ 62,149.00	\$ 16,000.00
14440 Burrows Road (3.6 acres)	-\$ 62,149.00	\$ 16,000.00
14300 Burrows Road (2.5 acres)	-\$ 59,700.00	\$ 4,421.00

Blueberry before tax profit based on an average selling price of \$1.25/lb

The projected earnings for a mixed vegetable operations for each property are provided in the following table.

Property	Annual projected profit before tax
14920 Burrows Road (3.6 acres)	\$ 20,453.98
14680 Burrows Road (2.5 acres)	\$ 3,598.52
14540 Burrows Road (3.6 acres)	\$ 20,453.98
14440 Burrows Road (3.6 acres)	\$ 20,453.98
14300 Burrows Road (2.5 acres)	\$ 3,598.52

¹ Five Acre Mixed Vegetable Operation (2008) Planning For Profit. BC Ministry of Agriculture.

1.0 Introduction

The following document outlines the start-up costs, operating costs and estimated revenue for small lot agricultural operations for the five properties located at 14920, 14680, 14540, 14400 & 14300 Burrows Road, Richmond, BC (Figure 1). The operational scenario provided is based on each privately-owned property operating as an independent unit.

This report assumes that the drainage for all the properties is improved as described in the McTavish 2016 report and the Active Earth 2016 drainage analysis report. With a significant investment in drainage of approximately \$324,000 most of the land can be improved to class 3DW and O3LW. The 3W classification (with drainage) indicates that the water level will still be near the surface until mid-spring forcing late seeding. Based on site observations there are portions that can only be improved to class 4D due to the shallow compacted clay layer that will restrict roots even with improved drainage.

For the purpose of this report, a mixed vegetable operation and a hand-picked blueberry operation are analyzed. The vegetable crops in this plan are used as examples only and a variety of crops could be produced on this land if the drainage is improved. The revenue and costs for the vegetable farms are based on the BC Ministry of Agriculture Planning for Profit Series for Mixed Vegetables and Berries.² The revenue and costs for the blueberry farming are based on the BC Ministry of Agriculture Planning for Profit Series for Mixed Vegetables and Berries.² The revenue and costs for the blueberry farming are based on the BC Ministry of Agriculture Planning for Profit for Hand-Picked Blueberries.

Start-up costs and operating costs are based on industry averages but may fluctuate from farm to farm. It should also be noted that all expenses in this report have been adjusted based on the Farm Input Price Index³ and the Farm product price index.⁴

Based on the McTavish (2016) report the soils on the properties are mainly Annis and Richmond soil series. Review of soil information, vegetation, hydrologist report and landowner interviews indicate that large portions of the properties observed are borderline unimproved class 5W. The hydrological isolation of the property to the south and east combined with the culvert invert elevations and shallow slope of the Burrow Road ditch results in long-term water retention on the subject properties. A soil wetness (poor drainage) transition has been observed on the subject properties resulting in their land capability for agricultural classification deteriorating from 4W to 5W.

The subsoil on the majority of the properties is a massive grey silty clay that restricts drainage and root development. This results in a 4D classification (root-restricting limitation) in addition to the wetness limitation. This root restricting layer will remain even with improved drainage.

If the land was properly drained, which would require significant improvements in the drainage infrastructure, the land capability could be improved to Class 3W except where the root restricting layer indicates class 4WD

The crops that are suitable for these soils when drained are provided in Table 1.

³ Farm input price Index. <u>http://www5.statcan.gc.ca/cansim/a26?lang=eng&id=3280015</u> Accessed May 2017.

² BC Ministry of Agriculture. 2008. Planning for Profit Five Acre Mixed Vegetable and Berry Operation Full Production.

⁴ Farm product price index. <u>http://www5.statcan.gc.ca/cansim/a26?lang=eng&id=20068</u> Accessed May 2017.



Figure 1 Property location and agricultural capability

Table 1 Soil management and crop considerations

Soil name	Soil management considerations from Bertrand et Al, 1991 and Luttmerding, 1984	Crop suitability from Bertrand et Al, 1991 and Luttmerding, 1984
Annis	Poor drainage is the main agricultural limitation.	Suited crops include pasture and forage crops and blueberries; and annual field crops including annual legumes, cereals, cole crops,
	Underdrains need to be closely spaced due to the moderately to slow perviousness of the subsoils.	corn, root crops excluding carrots, and shallow-rooted annual vegetables.
	Periodic subsoiling will be required to loosen the silty clay subsoils is required to maintain the underdrains' efficiency as well as to improve aeration and root distribution	Unsuited crops include nursery and Christmas trees, raspberries, strawberries and tree fruits because the soils will still have excessive water, even with artificial drainage, to allow for the production of these crops.
	Management required to minimize loss of the organic surface layer.	
	Liming will generally be required to improve crop production.	
	High water tables and variable bearing strengths also make road and building construction difficult and basements impractical.	
Richmond	Poor drainage and high water tables, especially during the winter, are the main agricultural limitations. Drainage controls require close spacing.	Suited crops include pasture and forage crops and blueberries; and annual field crops including annual legumes, cereals, cole crops, corn, root crops, and shallow-rooted annual vegetables.
	Soils tend to be very acidic and liming management is required to minimize loss of the organic surface layer.	With adequate water table control these soils can be productive for intensive vegetable production.
	Exposed soil surfaces are prone to wind and water erosion.	Unsuited crops include nursery and Christmas trees, raspberries, strawberries and tree fruits because the soils will still have excessive
	High water tables and variable bearing strengths also make road and building construction difficult and basements impractical.	because the soils will still have excessive water. even with artificial drainage, to allow for the production of these crops.

7

2.0 Crop Potential

With significant improvements in drainage the properties could support the following crops:

- annual legumes
- blueberries
- cereals
- cole crops
- corn
- perennial forage crops (though first cut may be late due to wet conditions)
- root vegetables (except carrots)
- shallow-rooted annual vegetables (except celery)

Artificial drainage will be required for water table control during the winter and to facilitate earlier cultivation and planting in the spring. The soils on this site will be susceptible to puddling and compaction, and should not be cultivated when wet. Winter cover crops on clean cultivated fields are also beneficial. Subsoil are relatively impervious, therefore subsoiling will improve water infiltration and rooting depth. Even though the water holding capacity of these soils is high, supplemental irrigation is required for optimum crop production during dry summers.

3.0 Projected Income and Expenses

The following section provides financial information on the projected revenue and expenses for the potential crops that could be produced on the subject properties. The financial data is provided on a per-acre basis since each property is a different size. The size of each property and the effective area for farming is provided in Table 2.

Address	Property size (Acres)	Area available for farming (Acres)
14920 Burrows Road	4.6	3.6 (20% reduction for access roads and infrastructure)
14680 Burrows Road	4.6	2.5 (reduced for home footprint, access roads and infrastructure)
14540 Burrows Road	4.6	3.6 (20% reduction for access roads and infrastructure)
14400 Burrows Road	5.37	3.5 (reduced for home footprint, access roads and infrastructure)
14300 Burrows Road	3.7	2.4 (reduced for home footprint, access roads and infrastructure)

Table 2 Effective farming area for each property

3.1 Handpicked blueberries

Table 3 shows the estimated gross margin (gross profit) per acre for hand-picked blueberries. The data is based on Planning for Profit 2007⁵. The estimated capital costs to start a farm, assuming a new farmer with no existing equipment, is approximately \$46,000 as shown in Appendix I. Indirect or administrative costs will vary considerably between operations, and therefore the information on indirect costs provided in Appendix I must be treated with caution. The projections do not incorporate drainage improvement costs.

Revenue for the blueberry model is based on farm gate sales direct to the public at a selling price of \$2.00 per pound. If blueberries are sold into the wholesale market, the price based on 2016 sales data is closer to \$0.70 per pound.

Based on \$2.00 per pound selling price the revenue per acre peaks in year 8 (mature plants) is ~\$16,000 per acre (Table 4). For a 3.6-acre farm with an owner salary allocation of \$10,000 per year starting in year 3, the total profit in year 8 would be ~\$42,500.00 with a negative cash position for 6 years (Table 5). If some of the product is sold wholesale or is sold at a discount to large retail buyers a blended price of \$1.25 per pound is used, resulting in a gross profit per acre would be ~\$6,700 (Table 6).

For a 3.6-acre blueberry farm using a blended selling price of \$1.25 per pound, the profit would peak at year 8 (plant maturity) at \$16,000.00 and the farm would still have an accumulated negative cash position at the end of year 8 (Table 6). The scenario for the smaller farms is worse as the allocation of capital start up costs are spread over a smaller acreage.

Table 2 provides the projected earning at year zero (planting year) and eight years after planting for each property at the blended price of \$1.25 per pound.

Property	Projected profit year 0	Projected profit year 8
14920 Burrows Road (3.6 acres)	-\$ 62,149.00	\$ 16,000.00
14680 Burrows Road (2.5 acres)	-\$ 59,700.00	\$ 4,421.00
14540 Burrows Road (3.6 acres)	-\$ 62,149.00	\$ 16,000.00
14440 Burrows Road (3.6 acres)	-\$ 62,149.00	\$ 16,000.00
14300 Burrows Road (2.5 acres)	-\$ 59,700.00	\$ 4,421.00

Table 3 Projected income per property at year 0 and year 8 at \$1.25/lb

⁵ BC Ministry of Agriculture Planning for Profit Handpicked Blueberries 2007

3.2 Mixed vegetables

To determine 2017 income and expenses for a mixed vegetable farm, the data in the Planning for Profit Mixed Fruit and Vegetables from 2008⁶ has been adjusted by the Farm Input Price Index⁷ and revenue has been adjusted by the Farm Product Price Index.⁸ This model assumes no cold storage and product sold directly to the public through the farm gate or at farmer's markets.

Based on the data provided in Table 7 and the calculation of indirect and capital costs provided in Appendix 2, the projected income statements for each farm are provided in Table 8. The projections include projected revenue based on direct marketing with no cold storage facility, direct costs and indirect costs. The projections assume that the owners pay themselves \$10,000 per year. The projections do not incorporate the cost of drainage infrastructure.

3.3 Forage

Due to the relatively poor improved agricultural capability of this site (3W to 4WD) grass forage would be the most appropriate crop. However, the small size of the land makes it impractical to grow forage as a commercial venture.

⁸ Statistics Canada table 022-0070. http://www5.statcan.gc.ca/cansim/a26?lang=eng&id=20068 Web Accessed May 2017

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Page 6

^{*} BC Ministry of Agriculture. 2008. Planning for Profit, Five Acre Mixed Vegetable Operation: Full Production.

⁷ Statistics Canada table 002-0069 <u>http://www5.statcan.gc.ca/cansim/a26?lang=eng&id=3280015</u> Web Accessed May 2017

Table 4 Projected blueberry profit per acre	orof	it per acre		includes capital costs but not drainage improvement)	Ital	costs but i	not	drainage	E.	proveme	snt)								
Revenue		Year D		Year 1		Year 2		Year 3		Year 4		Year 5		Year 6		Year 7		Year 8	
Harvest lb/acre		0		0		0		4000		7000		10000		11000		12000		13000	
Price		2		2		2		2		2		2		2		2		2	
Revenue/acre		0		0		0		8000		14000		20000		22000		24000		26000	
Total Acres		1		Ч		1		1		1		1		1		1		-1	
Total Revenue		0		0		0	ş	3,000.00	\$ Ļ	8,000.00 \$ 14,000.00 \$	Ş	20,000.00 \$ 22,000.00 \$	\$ 2	22,000.00		24,000.00 \$ 26,000.00	\$ 26	,000.000	
Expenses per 1 Acres																			
Labour expenses	ŝ	391.54	Ŷ	391.54	ŝ	391.54	Ş	391.54 \$	ŝ	391.54	Ş	391.54	Ş	391.54	ŝ	391.54 \$	ŝ	391.54	
Land Lease Costs (\$400/acre)	ŝ	r	Ş	'	ŝ	1	Ş	,	Ŷ	ı	ş	,	Ş	1	ŝ		ŝ	'	
Harvest labour expenses	ŝ	ı	Ş	ı	ŝ	1	Ş	2,733.00	Ş	4,782.00	Ş	6,832.00	Ş	5,636.00	Ş	6,149.00	\$ \$	6,661.00	
One time capital equpment	ŝ	42,100.00																	
Establishment costs	ŝ	1,136.00																	
Other non labour expenses	ŝ	48,336.00	ŝ	1,695.00	ŝ	1,695.00 \$ 1,345.54 \$ 2,101.00 \$ 2,157.00 \$	ŝ	2,101.00	ŝ	2,157.00	ŝ	2,163.00 \$	Ş	2,108.00 \$	ŝ	2,108.00 \$		2,108.00	
Agriculture Input Index applied																			
to non-labour		1.17		1.17		1.17		1.17		1.17		1.17		1.17		1.17		1.17	
Adjusted Expenses		58,177.33		2,378.08		1,968.51	_,	5,586.91		7,701.54		9,758.58		8,498.12		9,011.12	0)	9,523.12	
Gross Profit (including capital)		\$ (58,177.33)	Ş	(2,378.08)	ŝ	(2,378.08) \$ (1,968.51) \$ 2,413.09 \$	Ś	2,413.09		6,298.46 \$	ŝ	10,241.42 \$ 13,501.88	\$	13,501.88	\$	14,988.88	\$ 16	\$ 16,476.88	

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Table 5 Projected income statement for 3.6 acres of blueberries selling price of \$2.00/lb	aten	nent for 3.6	aci	res of blue	berl	ries sellin	g pri	ice of \$2	00.	/lb								
Revenue		Year 0		Year 1		Year 2		Year 3		Year 4		Year 5		Year 6		Year 7	Year 8	5
Harvest Ib/acre		0		0		0		4000		7000		10000		11000		12000	13000	8
Price		2		2		2		2		2		2		2		2		2
Revenue/acre		0		0		0		8000		14000		20000		22000		24000	26000	00
Total Acres		3.6		3.6		3.6		3.6		3.6		3.6		3.6		3.6	,	3.6
Total Revenue		0		0		0	\$ 28	,800.00	ч С	0 \$ 28,800.00 \$ 50,400.00 \$		72,000.00 \$ 79,200.00 \$	ŝ	79,200.00		86,400.00 \$ 93,600.00	\$ 93,600.0	8
Expenses per 1 Acre																		
Labour expenses	Ŷ	1,409.54	ŝ	1,409.54	ŝ	1,409.54 \$ 1,409.54 \$ 1,409.54 \$ 1,409.54	\$ 1	,409.54	ş	1,409.54	Ş	1,409.54 \$ 1,409.54	Ş	1,409.54	ŝ	1,409.54 \$ 1,409.54	\$ 1,409.5	54
Owner salary	Ş	,	Ś	,	Ş	,	\$ 10	,000.000	\$1	\$ 10,000.00 \$ 10,000.00	Ş	10,000.00	ş	\$ 10,000.00	ş	10,000.00	\$ 10,000.00	8
Harvest labour expenses	ŝ	,	Ş	ŧ	Ş		ş	,838.80	\$1	9,838.80 \$ 17,215.20	Ş	24,595.20 \$ 20,289.60	Ś	20,289.60	Ş	22,136.40 \$ 23,979.60	\$ 23,979.6	02
One time capital equpment	ŝ	42,100.00																
Establishment costs	ŝ	4,089.60																
Other non labour expenses	ŝ	48,336.00	Ŷ	6,102.00	Ŷ	6,102.00	ş Ş	,102.00	ŝ	6,102.00	ŝ	6,102.00 \$ 6,102.00 \$ 6,102.00 \$ 6,102.00 \$ 6,102.00 \$ 6,102.00 \$	ŝ	6,102.00	Ş	6,102.00 \$	\$ 6,102.00	8
Agriculture Input Index applied																		
to non-labour		1.17		1.17		1.17		1.17		1.17		1.17		1.17		1.17	1.17	17
Adjusted Expenses		62,148.94		8,561.09		8,561.09	28	28,399.89	m	35,776.29		43,156.29	,	38,850.69		40,697.49	42,540.69	66
Gross Profit (including capital)	ŝ	\$ (62,148.94)	Ŷ	(8,561.09) \$ (8,561.09) \$ 400.11 \$ 14,623.71 \$	\$ \$	8,561.09)	Ŷ	400.11	\$1	4,623.71	ŝ	28,843.71 \$ 40,349.31	ŝ	10,349.31	Ş	45,702.51 \$ 51,059.31	\$ 51,059.3	31
Accumulated cash	ŝ	\$ (62,148.94) -\$	Ŷ	70,710.02	-\$ 7	9,271.11	-\$ 78	,871.00	\$- 0	4,247.29	Ŷ	70,710.02 -\$ 79,271.11 -\$ 78,871.00 -\$ 64,247.29 -\$ 35,403.58 \$ 4,945.74 \$	Ş	4,945.74	ŝ	50,648.25 \$101,707.56	\$ 101,707.!	26

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	Year 7 Year 8	12000 13000	1.25 1.25	15000 16250	3.6 3.6	54,000.00 \$ 58,500.00		1,409.54 \$ 1,409.54	10,000.00 \$ 10,000.00	.40 \$ 23,979.60			6,102.00 \$ 6,102.00		1.17 1.17	.49 42,540.69	13,302.51 \$ 15,959.31	68,151.75 -\$ 52,192.44
	Ye	12	-1	15				1,409.	10,000.	22,136.40					H	40,697.49	13,302	
	10	~	10	~	10	Ş		Ş	Ş	Ś			ŝ				\$	Ŷ
	Year 6	11000	1.25	13750	3.6	\$ 49,500.00		1,409.54 \$ 1,409.54	10,000.00 \$ 10,000.00	24,595.20 \$ 20,289.60			6,102.00 \$ 6,102.00 \$		1.17	38,850.69	1,843.71 \$ 10,649.31	92,103.58 -\$ 81,454.26 -\$
	Year 5	10000	1.25	12500	3.6	45,000.00			10,000.00	24,595.20					1.17	43,156.29		
		_		_	10	ŝ		ŝ	Ş	Ş			ŝ				Ş	Ŷ
	Year 4	7000	1.25	8750	3.6	\$ 31,500.00		\$ 1,409.54	\$ 10,000.00	\$ 17,215.20			\$ 6,102.00		1.17	35,776.29	\$ (4,276.29)	-\$ 93,947.29
۵	Year 3	4000	1.25	5000	3.6	0 \$ 18,000.00 \$ 31,500.00 \$ 45,000.00 \$ 49,500.00 \$		1,409.54 \$ 1,409.54 \$ 1,409.54 \$ 1,409.54 \$	\$ 10,000.00 \$ 10,000.00	\$ 9,838.80 \$ 17,215.20			6,102.00 \$ 6,102.00 \$ 6,102.00 \$ 6,102.00 \$		1.17	28,399.89	\$(10,399.89) \$ (4,276.29) \$	70,710.02 -\$ 79,271.11 -\$ 89,671.00 -\$ 93,947.29 -\$
selling price	Year 2	0	1.25	0	3.6	0		3 1,409.54	1	•			\$ 6,102.00		1.17	8,561.09	(8,561.09) \$ (8,561.09)	\$ 79,271.11
ient at \$1.25/lb selling price	Year 1	0	1.25	0	3.6	0		1,409.54	1	1			6,102.00		1.17	8,561.09	(8,561.09)	
hen								ŝ	ŝ	Ś			Ŷ				ŝ	Ŷ
ome staten	Year O	0	1.25	0	3.6	0		1,409.54	,	r	42,100.00	4,089.60	48,336.00		1.17	62,148.94	\$ (62,148.94)	\$ (62,148.94)
inco								ŝ	Ş	ŝ	Ş	ŝ	Ş				ŝ	Ś
Table 6 Blueberry projected income statem	Revenue	Harvest lb/acre	Price	Revenue/acre	Total Acres	Total Revenue	Expenses per 1 Acre	Labour expenses	Owner salary	Harvest labour expenses	One time capital equpment	Establishment costs	Other non labour expenses	Agriculture Input Index applied	to non-labour	Adjusted Expenses	Gross Profit (including capital)	Accumulated cash

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AREA TOTAL TOTAL FODUC-TION RODUCTION REODUC-TION PRODUCTION PRODUCTION PRODUCTION AREA = Production = Production AREA Sign 5/Sq.ft. 5 Sign EProduction 2,500 0.2636 659.00 0.141 352.50 3,750 0.2636 559.00 0.144.50 Sign 3,750 0.2636 59.00 0.141 352.50 3,750 0.2600 1,908.75 0.144 Sign Sign 3,750 0.2100 525.00 0.144.50 Sign Sign Sign 3,750 0.144.50 0.144 Sign Sign Sign Sign 3,750 0.144.50 0.144 Sign Sign Sign Sign Sign 3,750 0.144 1,206.00 0.149 Sign Sign <t< th=""><th></th><th>PRODUCTION</th><th>ON REVENUE</th><th>REVENUE FOR</th><th>DIRECT</th><th>DIRECT COSTS</th><th>GROSS MARGIN</th><th>GROSS</th></t<>		PRODUCTION	ON REVENUE	REVENUE FOR	DIRECT	DIRECT COSTS	GROSS MARGIN	GROSS
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3,750 0.3852 1,44.50 0.183 68.25 81 2,500 0.2100 525.00 0.128 320.00 82 3,750 0.2100 525.00 0.128 320.00 82 3,750 0.5090 1,908.75 0.149 558.75 8 3,750 0.5090 1,908.75 0.135 573.50 9 3,750 0.7377 2,766.38 0.154 577.50 9 3,750 0.7377 2,766.38 0.155 573.75 9 3,750 0.7377 2,766.38 0.155 573.75 9 3,750 0.7377 2,766.38 0.156 468.00 9 3,750 0.737 0.135 573.75 573.75 9 2,500 0.3124 337.20 0.136 468.00 10 2,500 0.3124 1,05.25 0.134 335.00 11 2,500 0.4421 1,05.25 0.134 335.00	Brussel Sprouts	2,500	0.2636	659.00	0.141	352.50	0.1226	306.50
oil 2,500 0.2100 525,00 0.128 320,00 age 3,750 0.5090 1,908,75 0.149 558,75 age 3,750 0.5090 1,908,75 0.149 558,75 be 4,250 0.5090 0.5737 0.135 573,750 be 3,750 0.7377 2,766,38 0.154 577,50 be 3,750 0.7377 2,766,38 0.154 577,50 be 3,750 0.7377 2,766,38 0.154 577,50 be 3,000 0.3124 937,20 0.136 468,00 be 3,000 0.3124 937,20 0.136 468,00 be 3,000 0.3124 937,20 0.136 335,00 ot 2,500 0.3124 1,105,25 0.134 335,00 be 2,500 0.3424 1,358,50 0.2134 335,00 be 2,500 0.4388 1,358,50 0.2134 335	Beets	3,750	0.3852	1,444.50	0.183	686.25	0.2022	758.25
age 3,750 0.5090 1,908.75 0.149 558.75 acc 4,250 0.4604 1,956.70 0.135 573.75 be 3,750 0.7377 2,766.38 0.135 573.75 be 3,750 0.7377 2,766.38 0.154 577.50 be 3,700 0.7377 2,766.38 0.154 577.50 be 3,000 0.3124 1,206.00 0.280 700.00 be 3,000 0.3124 1,206.00 0.154 577.50 be 3,000 0.3124 1,206.00 0.280 700.00 be 2,500 0.3124 1,206.00 0.280 700.00 be 2,500 0.4421 1,105.25 0.134 335.00 be 2,500 0.4421 1,105.25 0.134 335.00 ch 2,500 0.4421 1,405.25 0.134 335.00 ch 2,500 0.4388 0.0590 0.328 <td< td=""><td>Broccoli</td><td>2,500</td><td>0.2100</td><td>525.00</td><td>0.128</td><td>320.00</td><td>0.0820</td><td>205.00</td></td<>	Broccoli	2,500	0.2100	525.00	0.128	320.00	0.0820	205.00
ce4,2500.46041,956.700.135573.75rs3,7500.73772,766.380.154577.50rs3,7500.73772,766.380.154577.50rs2,5000.48241,206.000.280700.00oes3,0000.3124937.200.156468.00oh2,5000.3124937.200.156468.00oh2,5000.3124937.200.134335.00oh2,5000.44211,105.250.134335.00oh2,5000.44211,358.500.134335.00oh2,5000.43881,097.000.092230.00oh2,5000.43881,097.000.092230.00oh2,5000.43881,097.000.092230.00oh2,5000.43881,097.000.092230.00oh2,5000.43881,097.000.092247.50oh2,5000.16750.134230.001,050.00oh2,5000.16750.183247.50247.50oh2,5000.16750.183247.50247.50oh2,5000.16750.16751,050.001,050.00oh2,5000.16750.1842,750247.50oh2,5000.16750.16750.099247.50oh1,0750.16942,0702,000oh1,0750.0992,0902,000<	Cabbage	3,750	0.5090	1,908.75	0.149	558.75	0.3600	1,350.00
is 3,750 0.7377 2,766.38 0.154 577.50 oes 2,500 0.4824 1,206.00 0.280 700.00 oes 3,000 0.3124 937.20 0.156 468.00 oes 3,000 0.3124 937.20 0.156 468.00 oh 2,500 0.2574 643.50 0.090 225.00 oh 2,500 0.2421 1,105.25 0.134 335.00 oh 2,500 0.4421 1,105.25 0.134 335.00 oh 2,500 0.4421 1,057.00 0.290 255.00 oh 2,500 0.4421 1,057.00 0.134 335.00 oh 2,500 0.4388 1,097.00 0.202 230.00 oh 2,500 0.4388 1,097.00 0.210 1,050.00 oh 2,500 0.4388 0.099 247.50 247.50 h 0.1675 418.75 0.099 247.50 <t< td=""><td>Lettuce</td><td>4,250</td><td>0.4604</td><td>1,956.70</td><td>0.135</td><td>573.75</td><td>0.3254</td><td>1,382.95</td></t<>	Lettuce	4,250	0.4604	1,956.70	0.135	573.75	0.3254	1,382.95
(500) (0.4824) (1,206.00) (0.280) (700.00) (ees) (3,000) (0.3124) (937.20) (0.156) (468.00) (eis) (3,000) (0.3124) (937.20) (0.156) (468.00) (eis) (2,500) (0.3124) (335.00) (225.00) (225.00) (eis) (2,500) (0.4421) (1,105.25) (0.134) (335.00) (eis) (2,500) (0.4421) (1,105.25) (0.134) (335.00) (eis) (2,500) (0.4421) (1,358.50) (0.134) (35.00) (eis) (2,500) (0.4388) (1,097.00) (0.328) (820.00) (b) (1,057.00) (0.328) (0.092) (230.00) (0.092) (1,050.00) (b) (1,097.00) (0.210) (0.210) (1,050.00) (0.1675) (1,075.00) (b) (c) (c) (c) (c) (c) (c) (c) (b) (c) (c) (c) (c)	Onions	3,750	0.7377	2,766.38	0.154	577.50	0.5837	2,188.88
3,000 0.3124 937.20 0.156 468.00 2,500 0.2574 643.50 0.090 225.00 2,500 0.4421 1,105.25 0.134 335.00 2,500 0.4421 1,105.25 0.134 335.00 2,500 0.4421 1,105.25 0.134 335.00 2,500 0.4421 1,358.50 0.328 820.00 2,500 0.4388 1,097.00 0.328 820.00 2,500 0.4388 1,097.00 0.092 230.00 2,500 0.4388 1,097.00 0.092 230.00 2,500 0.4388 1,097.00 0.092 230.00 5,000 0.9694 4,847.00 0.0210 1,050.00 2,500 0.1675 418.75 0.099 247.50 FR 43,500 0.1675 20,873.53 7,144.25 ce 1.18 1.207 1.207	Peas	2,500	0.4824	1,206.00	0.280	700.00	0.2024	506.00
2,500 0.2574 643.50 0.090 225.00 2,500 0.4421 1,105.25 0.134 335.00 2,500 0.5434 1,358.50 0.328 820.00 2,500 0.5434 1,358.50 0.328 820.00 2,500 0.4388 1,097.00 0.092 230.00 2,500 0.4388 1,097.00 0.092 230.00 5,000 0.4388 1,097.00 0.092 230.00 5,000 0.4388 1,097.00 0.092 230.00 5,000 0.4388 1,097.00 0.092 230.00 5,000 0.4388 1,097.00 0.092 247.50 7,500 0.1675 418.75 0.099 247.50 FR 43,500 0.1675 418.75 7,144.25 FR 43,500 1.18 7,144.25	Potatoes	3,000	0.3124	937.20	0.156	468.00	0.1564	469.20
2,500 0.4421 1,105.25 0.134 335.00 2,500 0.5434 1,358.50 0.328 820.00 2,500 0.4388 1,097.00 0.328 820.00 2,500 0.4388 1,097.00 0.092 230.00 2,500 0.4388 1,097.00 0.092 230.00 5,000 0.9694 4,847.00 0.099 1,050.00 2,500 0.1675 418.75 0.099 247.50 PER 43,500 20,873.53 0.099 247.50 ce 1.18 1.207 0.001 0.201	Pumpkin	2,500	0.2574	643.50	060.0	225.00	0.1674	418.50
2,500 0.5434 1,358.50 0.328 820.00 2,500 0.4388 1,097.00 0.092 230.00 5,000 0.9694 4,847.00 0.099 247.50 2,500 0.1675 418.75 0.099 247.50 PER 43,500 0.1675 20,873.53 0.099 247.50 ce 1.18 1.18 1.207 0.001 0.001	Rhubarb	2,500	0.4421	1,105.25	0.134	335.00	0.3081	770.25
2,500 0.4388 1,097.00 0.092 230.00 5,000 0.9694 4,847.00 0.210 1,050.00 2,500 0.1675 418.75 0.099 247.50 PER 43,500 0.1675 418.75 0.099 247.50 ret 2,500 1.18 7,144.25 7,144.25	Spinach	2,500	0.5434	1,358.50	0.328	820.00	0.2154	538.50
5,000 0.9694 4,847.00 0.210 1,050.00 2,500 0.1675 4,847.00 0.210 1,050.00 2,500 0.1675 418.75 0.099 247.50 PER 43,500 0.1675 418.75 0.099 247.50 PER 43,500 0.1675 11.18 7,144.25 ce 1.18 1.207 1.207	Squash	2,500	0.4388	1,097.00	0.092	230.00	0.3468	867.00
2,500 0.1675 418.75 0.099 247.50 PER 43,500 20,873.53 7,144.25 ce 1.18 1.207	Turnips/Rutabaga	5,000	0.9694	4,847.00	0.210	1,050.00	0.7594	3,797.00
PER 43,500 20,873.53 ce 1.18	Zucchini	2,500	0.1675	418.75	660.0	247.50	0.0685	171.25
ce 1.18	TOTAL FOR ALL CROPS PER ACRE	43,500		20,873.53		7,144.25		13,729.28
	Adjustment for farm price index			1.18		1.207		
\$24,630.76	Adjusted Total Per Acre			\$24,630.76		\$8,623.11		\$16,007.65

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PLN - 144

Property	Annual projected profit before tax
14920 Burrows Road (3.6 acres)	\$ 20,453.98
14680 Burrows Road (2.5 acres)	\$ 3,598.52
14540 Burrows Road (3.6 acres)	\$ 20,453.98
14440 Burrows Road (3.6 acres)	\$ 20,453.98
14300 Burrows Road (2.5 acres)	\$ 3,598.52

Table 8 Summary of projected vegetable farm profit per property

4.0 Summary

The poor soil conditions that lead to an improved agricultural capability of 3W to 4WD and the small lot size limit the crop choices on these properties. Based on the analysis in this report, mixed vegetables and/or blueberries could be produced on these properties. Both scenarios require capital investments in buildings and equipment as well as the required drainage improvements.

Appendix I Details on cost analysis for blueberries

Capital Item	Cost
Storage Building and Machine Shed	\$ 17,100.00
Tractor and Implements	\$ 25,000.00
Fencing	\$ 0.00
Irrigation (per acre)	\$ 1,368.00
Posts and trellises	\$ 1,254.00
Cold storage	\$ 0.00
Other	\$ 1,368.00
Total Estimated	\$ 46,090.00

Table 9 Estimated Capital Costs per property

Table 10 Estimated Indirect Costs

Indirect Costs	Cost
Accounting and Legal	\$ 2,000.00
Bank Charges	\$ 500.00
Insurance	\$ 1,500.00
Utilities	\$ 5,000.00
Auto expenses	\$ 1,500.00
Office supplies and postage	\$ 1,000.00
Telephone	\$ 1,500.00
Small tools and Supplies	\$ 3,000.00
WCB, EI CPP	\$ 1,800.00
Total	\$ 17,800.00

Since this is assumed to be a start-up operation there will be additional costs of interest on bank loans, depreciation and salary for the farm owner.

Table 11 Other Indirect Costs

Item	Ca	st
Assume Start Up Loan of \$25,000 with Interest of 6%	\$	1,500.00
Assume operating line of \$20,000 at 8% for 6 Months	\$	800.00
Total Interest	\$	2,300.00
Depreciation at 10%	\$	2,500.00
Owner Salary	·\$	10,000.00

Table 12 Projected income statement per acre with blended price of \$1.25 per pound

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Revenue		Year 0		Year 1		Year 2		Year 3		Year 4		Year 5		Year 6		Year 7		Year 8
Harvest Ib/acre		0		0		0		4000		7000		10000		11000		12000		13000
Price		1.25		1.25		1.25		1.25		1.25		1.25		1.25		1.25		1.25
Revenue/acre		0		0		0		5000		8750		12500		13750		15000		16250
Total Acres		F-1		1		1		1		1		1		1		1		1
Total Revenue		0		0		\$ O		5,000.00 \$		8,750.00 \$		12,500.00 \$ 13,750.00 \$	\$1	3,750.00		15,000.00 \$ 16,250.00	\$ 16,	250.00
Expenses per 1 Acres																		
Labour expenses	ŝ	391.54	ŝ	391.54	Ŷ	391.54	Ŷ	391.54	Ŷ	391.54	Ŷ	391.54	Ŷ	391.54	ŝ	391.54	10	391.54
Land Lease Costs (\$400/acre)	ŝ		Ŷ	ı	Ŷ	·	ŝ	•	Ŷ		ŝ	3	Ŷ	1	ŝ	1	10	ı
Harvest labour expenses	ŝ	ı	ŝ	s	ŝ	I	ŝ	2,733.00	Ŷ	4,782.00	Ŷ	6,832.00	ş	5,636.00	÷	6,149.00	é,	6,661.00
One time capital equpment	ŝ	42,100.00																
Establishment costs	Ŷ	1,136.00																
Other non labour expenses	ŝ	48,336.00	Ŷ	1,695.00	Ş	1,345.54	Ŷ	2,101.00	Ş	1,695.00 \$ 1,345.54 \$ 2,101.00 \$ 2,157.00 \$	Ŷ	2,163.00	Ŷ	2,163.00 \$ 2,108.00 \$	Ş	2,108.00 \$		2,108.00
Agriculture Input Index applied																		
to non-labour		1.17		1.17		1.17		1.17		1.17		1.17		1.17		1.17		1.17
Adjusted Expenses		58,177.33		2,378.08		1,968.51		5,586.91		7,701.54		9,758.58		8,498.12		9,011.12	٥,	9,523.12
Gross Profit (including capital)	ŝ	\$ (58,177.33)	ŝ	(2,378.08)	ŝ	(2,378.08) \$ (1,968.51) \$		(586.91) \$		1,048.46	ŝ	2,741.42	ŝ	5,251.88	ŝ	5,988.88	¢ ô	6,726.88
Accumulated cash	ŝ	\$ (58,177.33) -	Ŷ	60,555.41	÷-	52,523.92	-Ş-	53,110.84	÷-	60,555.41 -\$ 62,523.92 -\$ 63,110.84 -\$ 62,062.38 -\$	Ŷ	59,320.96 -\$ 54,069.07 -\$	ŝ	54,069.07		48,080.19 -\$ 41,353.30	\$ 41,	353.30

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Report to Committee

- To: Planning Committee
- From: Wayne Craig Director of Development

Date: December 2, 2019 File: RZ 18-807640

Re: Application by IBI Group Architects to Amend Schedule 2.10 of Official Community Plan Bylaw 7100 (City Centre Area Plan), Amend the Residential/Limited Commercial (RCL3) Zone, and Rezone 5740, 5760, and 5800 Minoru Boulevard from Industrial Retail (IR1) to Residential/Limited Commercial (RCL3)

Staff Recommendation

- That Official Community Plan Bylaw 7100, Amendment Bylaw 10050, for amending Schedule 2.10 of Official Community Plan Bylaw 7100 (City Centre Area Plan), Section 2.2 "Jobs and Business" and the "Specific Land Use Map: Lansdowne Village", to encourage office development along the east side of Minoru Boulevard (between Ackroyd Road and Alderbridge Way) and pedestrian-oriented retail uses at grade along Lansdowne Road (between No. 3 Road and Minoru Boulevard), be introduced and given first reading.
- 2. That Official Community Plan Bylaw 7100, Amendment Bylaw 10102, for amending Schedule 2.10 of Official Community Plan Bylaw 7100 (City Centre Area Plan), to facilitate the construction of a high-rise, high density, mixed use development including the designation of a strip of land along the north side of 5740 Minoru Boulevard as City "Park" and the designation of the remainder of 5740, 5760, and 5800 Minoru Boulevard as "Village Centre Bonus" (to permit an additional 1.0 floor area ratio for office use only), be introduced and given first reading.
- 2. That Bylaw 10050 and Bylaw 10102, having been considered in conjunction with:
 - the City's Financial Plan and Capital Program; and
 - the Greater Vancouver Regional District Solid Waste and Liquid Waste Management Plans;

are hereby found to be consistent with said program and plans, in accordance with Section 477(3)(a) of the *Local Government Act*.

3. That Bylaw 10050 and Bylaw 10102, having been considered in accordance with OCP Bylaw Preparation Consultation Policy 5043, are hereby found not to require further consultation.

4. That Richmond Zoning Bylaw 8500, Amendment Bylaw 10051, which makes minor amendments to the "Residential/Limited Commercial (RCL3)" zone specific to 5740, 5760, and 5800 Minoru Boulevard and rezones 5740, 5760, and 5800 Minoru Boulevard from "Industrial Retail (IR1)" to "School and Institution Use (SI)" and "Residential/Limited Commercial (RCL3)", be introduced and given first reading.

Wayne Craig Director of Development WC:sch Att.

REPORT CONCURRENCE					
ROUTED TO: Community Social Development Engineering Parks Services Policy Planning Sustainability Transportation	CONCURRENCE	CONCURRENCE OF GENERAL MANAGER			

Staff Report

Origin

IBI Group Architects has applied to the City of Richmond for permission to rezone lands at 5740, 5760, and 5800 Minoru Boulevard, in the City Centre's Lansdowne Village area (Attachments 1, 2, and 3), from "Industrial Retail (IR1)" to "School and Institution Use (SI)" and "Residential/Limited Commercial (RCL3)", and to make amendments to the "Residential/Limited Commercial (RCL3)" zone, to permit the construction of a high-rise, high density, mixed use development including:

- 1. A combined total floor area of 45,103 m² (485,484 ft²) comprised of:
 - a) $15,034 \text{ m}^2$ (161,828 ft²) of office in a single tower;
 - b) $2,327.5 \text{ m}^2 (25,052.7 \text{ ft}^2)$ of ground floor retail; and
 - c) 27,741.1 m² (298,603.0 ft²) of residential uses (380 dwellings), including:
 - 333 market units in a combination of three towers and street-front townhouses; and
 - A stand-alone affordable housing building, constructed to a turnkey level of finish at the developer's sole cost, containing 47 low-end-of-market-rental (LEMR) units (secured with a Housing Agreement), which units shall be managed by a non-profit housing operator and have a habitable floor area equal to at least 10% of the development's total residential floor area (as per the City's Affordable Housing Strategy);
- 2. Affordable replacement non-profit social service agency space, including at least 426 m² (4,582 ft²) of gross leasable space in the form of two tenant units (constructed to a shell level of finish), together with common circulation, parking, and other ancillary spaces (constructed to a turnkey level of finish), all at the developer's sole cost and secured in perpetuity with legal agreements registered on title;
- 3. Transfer of a 7 m (23 ft.) wide strip of land (i.e. 859 m²/9,248 ft²) along the subject site's Lansdowne Road frontage to the City (as fee simple) for use as linear park, at the developer sole cost (i.e. Development Cost Charge credits shall not apply); and
- 4. Off-site works, including utility upgrades, street widening and frontages improvements along three sides of the subject site (including the conversion of an existing lane to a local street along the site's east side), and park construction, will be the subject of the City's standard Servicing Agreement processes, secured with Letters of Credit. Development Cost Charge credits may apply to road and utility works only (i.e. not to park works).

To facilitate the subject development, amendments are proposed to Schedule 2.10 of Official Community Plan Bylaw 7100 (City Centre Area Plan), including changes:

- 1. To encourage office development along the east side of Minoru Boulevard (between Ackroyd Road and Alderbridge Way) and pedestrian-oriented retail uses at grade along Lansdowne Road (between No. 3 Road and Minoru Boulevard); and
- Site-specific changes to the CCAP (i.e. applicable only to the subject site), to designate a 7 m (23 ft.) wide strip of land along the north side of 5740 Minoru Boulevard as City "Park" and designate the remainder of the subject site as "Village Centre Bonus" (to permit an additional 1.0 floor area ratio for office use only).

Findings of Fact

A Development Application Data Sheet providing details about the development proposal is attached (Attachment 4).

Subject Site Existing Housing Profile

There are no existing dwellings on the subject site.

Existing Site Development

The subject site is comprised of three lots occupied by older low-rise industrial-type buildings with surface parking that are currently tenanted with a mix of commercial, education, recreation, automotive, and non-profit social service agency uses.

Surrounding Development

Development surrounding the subject site includes the following:

- To the North: Lansdowne Road, beyond which are 5520, 5560, and 5660 Minoru Boulevard, which are currently occupied by a mix of low-rise automotive, recreation, and light industrial uses and are subject to a rezoning application for a high-rise mixed-use development (RZ 16-744658). In addition, northeast of the subject site is an approved high density (4 FAR), high-rise (47 m /154 ft.) mixed use development, including 365 dwelling in three towers (including 20 affordable housing units), ground floor retail, an office tower, and 557 m² (6,000 ft²) of community amenity space (Towline Ventures Inc. / RZ 17-779262).
- To the South: A property used for car sales and related activities, beyond which are Ackroyd Road and a high-rise mixed use development containing the recently constructed City Centre Community Centre and Trinity Western University.
- To the East: An existing service lane (designated under the CCAP for widening to become a future street), beyond which are a variety of older low-rise commercial and high-rise mixed use buildings with frontages on No. 3 Road.
- To the West: Minoru Boulevard, beyond which is a mix of older low-rise industrial-type buildings tenanted with a mix of light industrial, commercial, recreation, and automotive uses.

Related Policies & Studies

Development of the subject site is affected by the Official Community Plan (OCP), City Centre Area Plan (CCAP), and other City policies (e.g., affordable housing) and studies. An overview of those policies and studies is provided below and in the "Analysis" section of this report

1. <u>OCP Aircraft Noise Sensitive Development (ANSD) Policy</u>: The subject site is located within ANSD "Area 3", which permits consideration of all aircraft noise sensitive land use types provided that the building design satisfies City standards and potential purchasers are made aware of potential noise conditions. Prior to rezoning adoption, a covenant will be registered on title requiring that the developer satisfies all City requirements (e.g., acoustic report and noise mitigation measures).

- 2. <u>NAV Canada Building Height</u>: Transport Canada regulates maximum permitted building heights in City Centre locations that may impact airport operations. The developer has submitted a letter, prepared by a BCLS registered surveyor, confirming that the development's proposed maximum building height of 47 m (154 ft.) GSC complies with all applicable Transport Canada regulations.
- 3. <u>Floodplain Management Implementation Strategy</u>: City Centre buildings are required to comply with Richmond Flood Plain Protection Bylaw 8204. Prior to rezoning adoption, a flood indemnity covenant will be registered on title.

Public Consultation

A rezoning sign has been installed on the subject property. At the time of writing this report, correspondence regarding the subject rezoning application had been received from the following parties:

- 1. The Richmond Society for Community Living (RSCL) and Community Mental Wellness Association of Canada (CMWAC), both of which have been consulted by staff and the developer and have provided correspondence regarding the developer's non-profit social services replacement space proposal described later in this report (Attachments 6 & 7); and
- 2. Robert Grosz, who has written to indicate that he supports the subject rezoning application, but has legal issues with the developer/owner (Attachment 8).

Should the Planning Committee endorse this application and Council grant first reading to the rezoning bylaw, the bylaw will be forwarded to a Public Hearing, where any area resident or interested party will have an opportunity to comment.

Staff have reviewed the proposed OCP and zoning amendments, with respect to the *Local Government Act* and the City's OCP Consultation Policy No. 5043 requirements, and recommend that this report does not require referral to external stakeholders. The table below clarifies this recommendation as it relates to the proposed OCP amendment.

Stakeholder	Referral Comment (No Referral necessary)
BC Land Reserve Co.	No referral necessary because the Land Reserve is not affected.
Richmond School Board	No referral necessary because the proposed amendment will not increase the permitted amount of residential floor area nor increase the projected number of school-age children. (See below)
The Board of Metro Vancouver	No referral necessary because the Regional District is not affected.
The Councils of adjacent Municipalities	No referral necessary because adjacent municipalities are not affected.
First Nations (e.g., Sto:lo, Tsawwassen, Musqueam)	No referral necessary because First Nations are not affected.
TransLink	No referral necessary because the proposed amendment will not result in road network changes.
Port Authorities (Vancouver Port Authority and Steveston Harbour Authority)	No referral necessary because the port is not affected.
Vancouver International Airport Authority (VIAA) (Federal Government Agency)	No referral necessary because the proposed amendment does not affect Transport Canada's maximum permitted building height or the OCP Aircraft Noise Sensitive Development (ANSD) policy.

OCP Consultation Summary

Stakeholder	Referral Comment (No Referral necessary)
Richmond Coastal Health Authority	No referral necessary because the Health Authority is not affected.
Community Groups and Neighbours	No referral necessary, but the public will have an opportunity to comment on the proposed amendment at the Public Hearing.
All relevant Federal and Provincial Government Agencies	No referral necessary because Federal and Provincial Government Agencies are not affected.

Richmond Official Community Plan Bylaw 7100, Amendment Bylaw 10050 and Bylaw 10102, having been considered in accordance with OCP Bylaw Preparation Consultation Policy 5043, are hereby found to not require further consultation.

The public will have an opportunity to comment further on all of the proposed amendments at the Public Hearing. Public notification for the Public Hearing will be provided as per the Local Government Act.

School District

The OCP Bylaw Preparation Consultation Policy 5043, which was adopted by Council and agreed to by School District No. 38 (Richmond), directs that OCP amendments that generate less than 50 additional school aged children (over and above existing OCP population projections) do not need to be referred to the School District. The subject rezoning application's proposed residential development complies with existing CCAP policy. The developer's proposed OCP amendments would permit increased office only (i.e. not residential). As the proposed OCP amendment will not generate any additional children over and above what is anticipated under the current CCAP, the subject rezoning application has not been referred to the School District.

Analysis

The proposed development is consistent with the objectives of the CCAP, which generally designates properties near the Lansdowne Canada Line station as the high density, high-rise, mixed use heart of Lansdowne Village and Lansdowne Road (along the subject site's north side) as a key civic spine and pedestrian/cycling route linking Lansdowne Village with the Oval Village and Richmond Olympic Oval.

Proposed CCAP Amendment

The City Centre Area Plan designates the subject site as "Urban Centre T5 (35 m)", which permits commercial and residential uses to a maximum density of 2.0 FAR and a typical maximum height of 35 m (115 ft.). To facilitate the subject development, amendments are proposed to Schedule 2.10 of Official Community Plan Bylaw 7100 (City Centre Area Plan), including changes:

1. To encourage office development along the east side of Minoru Boulevard (between Ackroyd Road and Alderbridge Way) and pedestrian-oriented retail uses at grade along Lansdowne Road (between No. 3 Road and Minoru Boulevard).

Staff are supportive of the proposed CCAP amendments on the basis that:

 a) Properties along the east side of Minoru Boulevard (between Ackroyd Road and Alderbridge Way) are within a 5-minute walk (i.e. 400 m / 1,312 ft. radius) of the Lansdowne Canada Line station. This makes them a desirable location for higher density, mixed use, transit-oriented development, including office employment uses. Moreover, as demonstrated by recently approved applications, proximity to the Canada Line is a key factor influencing the development of new larger-floorplate office towers on or near the City Centre's No. 3 Road corridor (including office towers proposed or under construction by the International Trade Centre in Bridgeport Village, Pinnacle Living and Yuanheng Holdings in Capstan Village, Bene Development in Aberdeen Village, South Street Development Group and Townline Ventures in Lansdowne Village, and Keltic Development and iFortune in Brighouse Village).

- b) The development of street-fronting pedestrian-oriented retail uses along Lansdowne Road will complement increased office employment in the local area, enhance pedestrian and cycling access to/from the Lansdowne Canada Line station, and contribute towards residential livability.
- Site-specific changes to the CCAP (i.e. applicable only to the subject site), to designate a 7 m (23 ft.) wide strip of land along the north side of 5740 Minoru Boulevard as City "Park" and designate the remainder of the subject site as "Village Centre Bonus" (to permit an additional 1.0 floor area ratio for office use only).

Staff are supportive of the proposed site-specific CCAP amendments on the basis that:

- a) The proposed linear park along the south side of Lansdowne Road (i.e. north side of 5740 Minoru Boulevard) will:
 - Complement the Plan's currently designated linear park along the street's north side and enhance the corridor's role and image as an important civic spine, recreational amenity, and pedestrian/cycling route;
 - Broaden the overall width of the Lansdowne corridor by 7 m (23 ft.), which will improve solar access to public spaces and increase opportunities for tree planting and soft landscape; and
 - Be designed, constructed, and transferred to the City (as fee simple), all to the City's satisfaction and at the developer's sole cost (i.e. not eligible for Development Cost Charge credits); and
- b) The subject site's proposed Village Centre Bonus designation:
 - Is consistent with standard CCAP practice, which permits the Village Centre Bonus in key locations to encourage the development of employment uses and, where appropriate, limits the use of the permitted bonus floor area to office to improve the diversity of downtown employment opportunities; and
 - Will be applied only to the subject site, which will allow the City to consider possible future office-related density bonuses on adjacent properties on a case-by-case basis.

CCAP Office Subdivision Restriction

On June 17, 2019, Council amended the CCAP's Village Centre Bonus to encourage the creation of larger strata and air space parcels for office use in order to better meet the employment and business needs of Richmond's downtown. The subject developer proposes to strata-title the project's office building on a floor-by-floor basis, which is consistent with the size restrictions set out in the CCAP policy. The developer's office tower floorplates are proposed to range in size from 1,105 m² (11,891 ft²) to 1,552 m² (16,701 ft²). Prior to rezoning adoption, a legal agreement will be registered on title to ensure that the office tower can only be subdivided (strata or air space) on a floor-by-floor basis.

Proposed Zoning Bylaw Amendment

The developer proposes to rezone the subject site to "Residential/Limited Commercial (RCL3)", a standard City Centre zone intended for use in village centre locations that provides for a maximum density of 3.0 FAR, including a 1.0 FAR Village Centre Bonus. The developer proposes to amend the RCL3 zone to restrict the use of the Village Centre Bonus on the subject site to office use only and make site-specific density adjustments.

Staff are supportive of the proposed amendments to the RCL3 zone on the basis that:

- 1. Restricting the subject development's use of the Village Centre Bonus to office is consistent with the proposed OCP amendment; and
- 2. The site-specific density adjustment is consistent with CCAP policy, which permits density to be calculated on park and road dedications that are not identified for land acquisition purposes in Richmond's Development Cost Charge (DCC) program.

Zoning Variance

The RCL3 zone, as amended, permits a maximum height of 47 m (154 ft.) geodetic, except in locations, like the subject site, that the CCAP designates for 35 m (115 ft.) maximum. The developer has requested a height variance to permit three of the project's four proposed towers to exceed 35 m (115 ft.), including two residential towers at 37 m (127 ft.) and 42 m (136 ft.) and one office tower at 47 m (154 ft.) geodetic (Attachment 5). The CCAP allows for increased height where the proposed form of development provides for increased public benefit and the additional height does not compromise sun to public spaces or other objectives of the Plan.

Staff are supportive of the proposed height variance on the basis that:

- 1. The proposed building heights do not conflict with Transport Canada requirements (i.e. maximum height of 47 m / 154 ft. geodetic);
- 2. Shadow studies show the increased height to have negligible impact on surrounding public spaces;
- 3. The proposed tower heights are varied to provide visual interest and contribute towards a gradual transition between the designated mid-rise area (i.e. 25 m / 82 ft.) west of the subject site and the designated high-rise area (i.e. 47 m / 154 ft. geodetic) to its east; and
- The proposed height increase enables the developer to increase on-site employment uses (1.0 FAR office) and public open space (City park) without compromising livability or other CCAP objectives.

Prior to rezoning adoption, a Development Permit (DP) application must be processed to the satisfaction of the Director of Development. Through the DP review process, the developer's requested height variance will be considered in greater detail.

Housing

1. <u>Affordable Housing</u>: The CCAP and RCL3 zone require that the subject development provides at least 10% of its total residential floor area in the form of affordable low-end-of-market-rental (LEMR) housing units secured in perpetuity with a Housing Agreement. The developer proposes to provide the required LEMR units in a stand-alone mid-rise affordable housing

building, which will be managed by a non-profit operator. The proposed stand-alone building is located along the subject site's east frontage and shall include, among other things:

- a) At least 2,774 m² (29,860 ft²) of habitable affordable housing dwelling unit floor area, based on 10% of maximum permitted residential floor area (as per City policy), including (as indicated in the table below):
 - 47 LEMR units;
 - 100% Basic Universal Housing (BUH) units (constructed to comply with Zoning Bylaw standards); and
 - 59% (28) family-friendly, 2- and 3-bedroom units.

(Note: Through the Development Permit process, staff will work with the developer to secure a greater proportion of 3-bedroom units.)

LEMR Unit	Min LEMR	Max LEMR	Max Household	Pro	oject Unit T	argets
Types	Unit Area	Unit Rent***	Income**	#	Mix**	BUH*
Bachelor	37 m ² (400 ft ²) /unit	\$811/mo.	\$34,650 or less	2	+/-5%	N/A
1-Bedroom	50 m ² (535 ft ²) /unit	\$975/mo.	\$38,250 or less	17	+/-36%	100%
2-Bedroom	69 m ² (741 ft ²) /unit	\$1,218/mo.	\$46,800 or less	25	+/-53%	100%
3-Bedroom	91 m² (980 ft²) /unit	\$1,480/mo.	\$58,050 or less	3	+/-6%	100%
TOTAL	2,774 m ² (29,860 ft ²)	Varies	Varies	47	100%	100%

* BUH means those units that are designed and constructed to satisfy the Zoning Bylaw's Basic Universal Housing standards. (The Zoning Bylaws permits a floor area exemption of 1.86 m² / 20 ft² per BUH unit.)

** The unit mix will be confirmed to the satisfaction of the City through the Development Permit* process. The recommended unit mix is indicated in the table; however, based on approved design, which may take into account non-profit housing operator input, the unit mix may be varied provided that at least 50% of total affordable housing units are some combination of "family friendly", 2- and 3-bedroom units.

*** Rate shall be adjusted periodically as provided for under adopted City policy.

- b) Lobby and ancillary uses for the exclusive use of the affordable housing occupants.
- c) Indoor and outdoor amenity spaces for the exclusive use of the affordable housing occupants (i.e. not shared with market residents), including:
 - 156 m^2 (1,678 ft²) of indoor amenity space, including 19 m² (205 ft²) for the nonprofit operator's use for administration and program purposes (which is 50% greater than the CCAP minimum requirement of 100 m² / 1,076 ft²); and
 - 331.0 m² (3,562.8 ft²) of outdoor amenity space, including 50% children's play space (which is 17% greater than the CCAP minimum requirement of 282 m² / 3,035 ft²).
- d) 39 resident parking spaces (equipped with electric vehicle charging equipment) for exclusive affordable housing occupant use and shared use of the project's short-term (i.e. hourly) commercial parking for visitors, as required under the Zoning Bylaw, together with 5 additional parking spaces for the exclusive use of visitors to the affordable housing building.
- e) 94 secured "Class 1" bike storage spaces (equipped with electric vehicle charging equipment) for exclusive affordable housing occupant use, as required under the Zoning Bylaw, which shall include 10% over-sized lockers plus a bicycle maintenance and wash facility.

The developer is working with staff to engage a non-profit affordable housing operator. More information will be provided regarding this arrangement at Development Permit stage.

PLN - 156

Staff are supportive of the developer's proposal, which is generally consistent with City policy. Typically, the City would prefer to see the provision of shared amenity spaces for the common use of affordable housing occupants and market residents. However, in the case of the subject development, staff are agreeable to the provision of indoor and outdoor amenity space for the exclusive use of the affordable housing occupants on the basis that the spaces will satisfy all OCP requirements and greater control over the spaces will assist the non-profit housing operator in managing costs (which cost shall not be passed on to tenants as fees). Moreover, the developer's proposal to co-locate the affordable housing building with non-profit social services space (see the Community Amenity Space section of this report) may provide special synergies that could benefit from the non-profit housing operator having full control over the amenity spaces and how they are used.

2. <u>Dwelling Unit Mix</u>: The OCP and CCAP encourage the development of a variety of unit types and sizes supportive of the diverse needs of Richmond's population including, but not limited to, households with children.

Housing Types	Bachelor	1-BR	2-BR	3-BR	Total
 Market Housing 	2 (1%)	139 (41%)	165 (50%)	27 (8%)	333
Affordable Housing	2 (5%)	17 (36%)	25 (53%)	3 (6%)	47
Total	4 (1%)	156 (41%)	190 (50%)	30 (8%)	380

Staff support the developer's proposal for 42% bachelor and 1-bedroom units and 58% family-friendly, 2- and 3-bedroom units (273 units) as indicated in the table below.

3. <u>Accessibility</u>: Richmond's OCP seeks to meet the needs of the city's aging population and people facing mobility challenges by encouraging the development of accessible housing that can be approached, entered, used, and occupied by persons with physical or sensory disabilities.

Staff support the developer's proposal, which is consistent with City policy and will include:

- Barrier-free lobbies, common areas, and amenity spaces;
- Aging-in-place features in all units (e.g., blocking for grab bars, lever handles, etc.); and
- 20% Basic Universal Housing (BUH) units (i.e. 76 of 380 units), including 12% of market units (i.e. 40 of 333 units) and 100% of affordable housing units (i.e. 47 units).

Community Amenity Space

 <u>Village Centre Bonus (VCB)</u>: Under the CCAP and Zoning Bylaw, developments that make use of the density bonus provisions of the Village Centre Bonus (i.e. 1.0 FAR for office) must make a community amenity contribution based on 5% of bonus VCB floor area. Prior to rezoning adoption, the developer proposes to provide a construction-value contribution to Richmond's Leisure Facilities Reserve Fund – City Centre Facility Development Sub-Fund in lieu of constructing community amenity space on-site. The proposed voluntary contribution shall be based on a construction-value amenity transfer rate of \$700/ft² and the amount of amenity transferred off-site (i.e. 5% of the maximum VCB floor area permitted on the subject site under the proposed Residential/Limited Commercial (RCL3) zone), as indicated in the table below.

Use	Maximum Permitted VCB	VCB Community	Construction-Value	Minimum Voluntary
	Bonus Floor Area	Amenity Space Area	Amenity Transfer	Developer Cash
	as per the RCL3 Zone	(5% of Bonus Area)	Contribution Rate	Contribution
TOTAL	15,034 m ² (161,828 ft ²)	752 m² (8,091 ft²)	\$700/ft ²	\$5,663,980 (1)

(1) In the event that the developer contribution is not provided within one year of the rezoning application receiving third reading of Council (Public Hearing), the Construction-Value Amenity Transfer Contribution shall be increased annually thereafter based on the Statistics Canada "Non-Residential Building Construction Price Index" yearly quarter-to-quarter change for Vancouver, where the change is positive.

Staff are supportive of the developer's proposed construction-value cash-in-lieu amenity contribution on the basis that this approach (rather than construction of an on-site amenity) will better meet the downtown's anticipated amenity needs by allowing for the City to direct the developer's contribution to larger amenity projects and key locations.

2. <u>Non-Profit Social Services Space</u>: The CCAP encourages that community social services uses are provided in the downtown to meet the needs of its growing population, but non-profit agencies find it difficult to afford high downtown rents and are being increasingly displaced by new development. At the October 15, 2019 Council meeting, the recommendations of the "Non-Profit Social Services Agency Current and Future Space Needs" report, dated September 20, 2019, from the Director, Community Social Development, were approved, including the following recommendation:

That the City and key stakeholders seek immediate opportunities to prevent the loss of atrisk, high priority social service agencies in Richmond as described in the staff report titled "Non-Profit Social Service Agency Current and Future Space Needs", dated September 20, 2019 from the Director, Community Social Development.

That report identified, among other things, a list of agencies that are subject to insecure tenures (i.e. month-to-month rent), including two agencies occupying a combined total of 426 m^2 (4,582 ft²) of gross leasable space on the subject site:

- Richmond Society for Community Living (RCSL) occupies a 286 m² (3,082 ft²) unit for the purpose of providing programs and services for adults with developmental disabilities; and
- Community Mental Wellness Association of Canada (CMWAC) occupies a 139 m² (1,500 ft²) unit for the purpose of providing culturally appropriate programs and services for people with mental illness and their families.
- a) *Developer's Proposal*: In the absence of any City policy, the developer voluntarily proposes to mitigate the impact of the subject development on the two non-profit social service agencies located on the subject site through the developer's provision, at the developer's sole cost, of:
 - Affordable non-profit social service replacement space, co-located with the development's proposed stand-alone affordable housing building and secured by legal agreement for exclusive use by City-approved non-profit social service agencies. Key features of the developer proposal includes:
 - i) A flexible design that is suitable for use by the RCSL and CMWAC or other City-approved non-profit social service agencies;
 - ii) At least 426 m² (4,582 ft²) of gross leasable space on the development's second floor, in the form of two units sized to meet the current and projected needs of the RCSL and CMWAC (constructed to a shell level of finish);

- iii) A second floor lobby, hallway, and 23 parking spaces secured with a legal agreement for the exclusive use of the non-profit social service agencies (constructed to a turnkey level of finish);
- iv) A ground floor lobby and elevator shared with the tenants of the affordable housing building (constructed to a turnkey level of finish);
- v) Net rental rate capped at 50% of net market rent (i.e. based on comparable commercial spaces in Richmond's City Centre); and
- vi) A legal agreement registered on title to secure the space, rental rates, and related features in perpetuity to the satisfaction of the City.
- Tenant relocation assistance including:
 - i) Three months advance notice of the date when the existing agencies must vacate their current premises;
 - ii) The assistance of a commercial real estate broker to find new spaces for the two existing agencies, which spaces may be temporary or permanent (as determined at the discretion of the individual agency operators); and
 - iii) First right of refusal with respect to occupying the proposed replacement space within the subject development upon completion of construction.
- b) *Non-Profit Consultation*: The RSCL and CMWAC have been consulted by staff and the developer. Both agencies have provided letters of support indicating that they are appreciative of the developer's proposed contribution; however, both have concerns regarding service disruption to their clients and the costs of relocation and tenant improvements (Attachment 6 & 7).
- c) *Zoning Bylaw*: On the basis that the proposed space would be affordable and secured in perpetuity exclusively for City-approved non-profit social services uses (with a legal agreement registered on title), under the Zoning Bylaw, the space would be considered to be "community amenity space". The subject site's proposed zoning district, "Residential/Limited Commercial (RCL3)", permits 0.1 FAR for "community amenity space", which is adequate to accommodate the developer's proposal.

In the absence of a City policy regarding developer obligations with respect to non-profit social services tenants or uses, staff are supportive of the developer's proposed voluntary contribution on the basis that:

- The developer's provision of affordable replacement space will not reduce or otherwise alter the developer's Village Centre Bonus amenity contribution (as described on page 10 of this report);
- The proposed rental rate (i.e. 50% of net market rent) is comparable to the rents that the RSCL and CMWAC pay for their current accommodation on the subject site;
- The replacement space has been designed to meet the needs of the RSCL and CMWAC and, in the event that one or both agencies decide not to locate in the subject development, its central location and design will make it well-suited to other City-approved non-profit social services organizations; and
- Co-location of the non-profit social services replacement space with the developer's proposed stand-alone affordable housing building will provide for potential synergies between the two uses and their operators and occupants.

Transportation

The CCAP requires various road, pedestrian, and cycling network improvements on and around the subject site. The Zoning Bylaw permits parking reductions for City Centre developments that incorporate transportation demand management and other measures to the City's satisfaction. Consistent with these CCAP and Zoning Bylaw requirements, the proposed development provides for a variety of transportation improvements and related features, all at the developer's sole cost, to be secured through a combination of legal agreements registered on title to the satisfaction of the Director of Transportation and the City's standard Servicing Agreement processes (secured with letters of credit). Development Cost Charge (DCC) credits will be applicable to works identified on the City's DCC Program.

Staff support the developer's proposal, which is consistent with City policy and includes:

- 1. Road widening and frontage improvements including:
 - a) Road, sidewalk, bike lane, and related upgrades and landscape features along Lansdowne Road and Minoru Boulevard;
 - b) Conversion of the existing lane along the subject site's east side to a new local street; and
 - c) Limiting vehicle access to a single driveway (on the site's east side) to minimize potential pedestrian and cycling conflicts;
- 2. Parking measures including:
 - a) 145 commercial "public" parking spaces (i.e. 50% of total commercial parking) secured with a covenant on title for short-term use by the general public (e.g., hourly);
 - b) 23 parking spaces secured for the exclusive use of the development's City-approved nonprofit social services agencies; and
 - c) Secured residential visitor parking (i.e. five for each tower and the affordable housing building), together with shared visitor use of the commercial "public" parking;
- 3. Cycling measures including:
 - a) End-of-trip cycling facilities (e.g., showers, change rooms, and related features) colocated with Class 1 (secure) bicycle storage spaces for the use of commercial and nonprofit social services tenants;
 - b) Bike maintenance/wash facilities for residential tenants (i.e. one set for each tower and the affordable housing building); and
 - c) For the affordable housing occupants, increased Class 1 bike storage (2.0 bikes/unit instead of 1.2/unit) including 10% over-sized bike lockers;
- 4. Transit pass programs, including monthly transit (2-zone) passes for one year for 100% of the affordable housing units and \$40,000 for a commercial tenant program; and
- 5. Two on-site parking spaces dedicated for car-share use and equipped with electric vehicle charging infrastructure (located at the parkade entrance for 24/7 public access), together with two car-share vehicles and a 3-year contract with a car-share operator.

<u>Parks</u>

The proposed City-owned linear park along the north side of the subject site will be approximately 859 m² (9,248.4 ft²) in size. In addition, prior to rezoning adoption, a statutory right-of-way will be registered on the subject site (along the south side of the park) to secure on-site publicly-accessible open space for expanded plaza, walkway, and landscape purposes. A conceptual design has been prepared for the linear park and related publicly-accessible areas and is attached to the Rezoning Consideration (Attachment 9). Prior to rezoning adoption, the developer shall enter into a Servicing Agreement for the design and construction of the park and related improvements, at the developer's sole cost, to the satisfaction of the Director, Parks Services and Director of Development. Development Cost Charge (DCC) credits shall not apply.

Tree Retention & Replacement

No bylaw-size trees are currently located on the subject site.

The conversion of the east lane to a new local road along the east side of the subject site requires the removal of an existing landscaped median in Lansdowne Road in order to construct a new intersection with left-turn lanes on Lansdowne Road to City standards. The required works include the relocation of one small City tree (through the Servicing Agreement process) and the removal of seven others. Prior to rezoning adoption, the developer will contribute \$9,100 to the City's Tree Compensation Fund (i.e. \$1,300 per tree) for Richmond's planting of trees elsewhere in the city.

Site Servicing & Frontage Improvements

City policy requires that the developer is responsible for the design and construction of road, water, storm sewer, and sanitary sewer upgrades, together with related public and private utility improvements, arising as a result of the proposed development, as determined to the satisfaction of the City. Prior to rezoning adoption, the developer will enter into standard City Servicing Agreements, secured with a letters of credit, for the design and construction of all required off-site rezoning works, as set out in the attached Rezoning Considerations (Attachment 9). Development Cost Charge (DCC) credits will be applicable to works identified on the City's DCC Program.

Sustainability

The CCAP encourages the coordination of private and City development and infrastructure objectives with the aim of advancing opportunities to implement environmentally responsible buildings, services, and related features. Locations undergoing significant change, such as the subject site, are well suited to this endeavour.

Staff support the developer's proposal, which is consistent with City policy and includes:

- 1. <u>District Energy Utility (DEU)</u>: A City Centre DEU service area bylaw for the subject site will be presented for consideration by Council under a separate report. Prior to rezoning adoption, a standard DEU covenant will be registered on title requiring the developer to design and construct a low carbon energy plant, at the developer's sole cost, and transfer it to the City, together with compatible building and mechanical systems, to facilitate the development's connection to a City District Energy Utility.
- 2. <u>BC Energy Step Code</u>: On July 16, 2018, Council adopted requirements that new buildings be designed and constructed to the BC Energy Step Code. Residential buildings (like the

subject development) that are greater than 6 storeys and include a low carbon energy plant (as discussed above) must comply with "Step 2". Prior to rezoning adoption, through the Development Permit process, the developer will be required to conduct energy modelling and provide a statement to the City confirming that the proposed design can meet the applicable Step Code requirements.

3. <u>Electric Vehicle (EV) Measures</u>: The developer proposes to satisfy Zoning Bylaw requirements with respect to the installation of EV charging equipment for 100% of residential parking spaces (240V) and 10% of Class 1 bike storage spaces (120V). In addition, the developer proposes to equip two dedicated car-share parking spaces with EV charging (240V) infrastructure.

Public Art

The CCAP encourages voluntary developer contributions towards public art and identifies the Lansdowne Road corridor as an "art walk". Prior to rezoning adoption, the developer proposes to make a voluntary cash-in-lieu contribution towards public art based on City-approved developer contribution rates and the maximum buildable floor area permitted under the RCL3 zone (excluding affordable housing and non-profit social services space). The developer's proposal to voluntarily contribute \$319,771 complies with City policy and may be applied, at the direction of Council, to public art and/or related features along the Lansdowne "art walk" or elsewhere in the downtown.

Community Planning

Under the CCAP, the subject rezoning application is required to contribute towards future City community planning studies at a rate of $3.01/m^2$ ($0.28/ft^2$), based on the maximum buildable floor area permitted under the RCL3 zone (excluding affordable housing and non-profit social services space). The developer's proposal to voluntarily contribute 127,574, based on a floor area of $42,329 \text{ m}^2$ ($455,623 \text{ ft}^2$), complies with City policy.

Development Phasing

Prior to rezoning adoption, a restrictive covenant will be registered on title to ensure that completion of the subject development will include the timely completion of community amenities and other features. In brief, the covenant will ensure that:

- 1. Prior to "first occupancy" of a building on the subject site, in whole or in part, the developer must complete all requirements with respect to DEU, non-profit social services spaces, and Servicing Agreement (transportation, engineering, and parks) works;
- 2. Prior to occupancy of any <u>commercial</u> uses on the subject site, in whole or in part, the developer must complete the "first occupancy" requirements, together with all public parking, non-residential bike features, car-share, transit pass program, and related requirements; and
- 3. Prior to occupancy of any <u>residential</u> uses on the subject site, in whole or in part, the developer must complete the "first occupancy" requirements, together with all affordable housing, public and visitor parking, EV charging, and related requirements.

Built Form & Architectural Character

The developer proposes to construct a high-rise, high density, mixed use development within a 5minute walk (400 m/1,312 ft.) of the Lansdowne Canada Line station, the City Centre Community Centre, and existing/future park and amenities. The proposed development accommodates all City requirements with respect to transportation and public open space improvements and the built form, which combines articulated streetwall building elements and towers, generally conforms to the CCAP's Development Permit Guidelines. More specifically, the development has successfully demonstrated:

- 1. A strong urban concept contributing towards a high-density, high-amenity, mixed-use, transit-oriented environment, comprising pedestrian-oriented commercial, an office tower, non-profit social services space, a stand-alone affordable housing building, and a variety of dwelling types (including 58% family-friendly, 2- and 3-bedroom units);
- 2. Variations in massing contributing towards streetscape interest, solar access to the Lansdowne Road linear park corridor and usable rooftops, and upper- and mid-level views across the site for residents and neighbours;
- 3. An articulated building typology with a distinct identity and features contributing to a sense of human scale and pedestrian interest; and
- 4. Sensitivity to future development south of the subject site by setting towers back a minimum of 17.5 m (57 ft.) from the common property line (i.e. 50% of the area's recommended 35 m / 115 ft. minimum tower separation).

Prior to rezoning adoption, the developer will register a legal agreement on title to the subject site requiring that the proposed development is designed and constructed in a manner that mitigates potential development impacts including, among other things, view obstruction, noise or nuisance associated with retail and restaurant activities, shading, reduced privacy, and related issues that may arise as a result of development on the lands and/or future development on surrounding properties.

Development Permit (DP) approval, to the satisfaction of the Director of Development, will be required prior to rezoning adoption. At DP stage, additional design development is encouraged with respect to, among other things, the following items:

- a) <u>Tower Form (Zoning Variance)</u>: Design development is encouraged to refine the form and character of the project's towers taking into account skyline interest, shadowing, adjacencies, and potential height variances.
- b) <u>Office Streetscape</u>: Opportunities must be explored to create a distinctive, high amenity image that complements the emerging character and quality of the Lansdowne Road corridor and surrounding residential, employment, and community uses.
- c) <u>Park Interface</u>: Opportunities must be explored to contribute towards a distinctive, high amenity public realm, particularly with respect to the park's interface with the office building and fronting retail uses, the programming and animation of the park, plaza, and walkway, and image of the Lansdowne Road corridor as a dynamic, visually-engaging civic and recreation spine and art walk.
- d) <u>Stand-Alone Affordable Housing Building</u>: Design development is required to take into account input from a non-profit operator.

- e) <u>Non-Profit Social Services Space</u>: Design development is required to maximize the ability of the proposed facility to meet the needs of potential tenants and explore opportunities for synergy with the affordable housing building and its potential operator.
- f) <u>Common Amenity Spaces</u>: All indoor and outdoor common amenity spaces must meet or exceed OCP and CCAP DP Guidelines rates. More information is required with respect to the programming, design, and landscaping of these spaces to ensure they satisfy City objectives.
- g) <u>Accessibility:</u> Through the DP process the design and distribution of accessible units and common spaces and uses must be refined.
- h) <u>Sustainability</u>: The developer must undertake energy modelling (to confirm that the proposed design can meet the applicable Step Code requirements) and undertake design development to ensure that enhanced building performance is coordinated with a high standard of architectural quality and expression.
- i) <u>Electric Vehicle (EV) Measures</u>: In addition to the developer's proposed EV charging measures for car-share use, residential parking, and Class 1 bicycle storage, through the DP process consideration will be given to EV charging measures for commercial parking.
- j) <u>Emergency Services</u>: Fire Department requirements identified at the rezoning stage must be confirmed and refined through the DP design and approval processes (e.g., Fire Department response points, addressing plan, etc.).
- k) <u>Crime Prevention through Environmental Design (CPTED</u>): The City has adopted policies intended to minimize opportunities for crime and promote a sense of security. A CPTED checklist and plans demonstrating surveillance, defensible space, and related measures must be finalized through the DP process.
- Parking, Loading & Waste Management: The development proposal is consistent with the Zoning Bylaw and related City requirements. The design of vehicle parking and circulation, truck manoeuvring, waste management activities, and related features and spaces must be finalized through the DP process.

Existing Legal Encumbrances

Development of the subject site is not encumbered by existing legal agreements on title.

Financial Impact or Economic Impact

As a result of the proposed development, the City will take ownership of developer contributed assets such as road works, waterworks, storm sewers, sanitary sewers, street lights, street trees, and traffic signals. The anticipated operating budget impact for the ongoing maintenance of these assets is \$11,000. This will be considered as part of the 2021 Operating budget.

Conclusion

IBI Group Architects has applied to the City of Richmond for permission to rezone lands at 5740, 5760, and 5800 Minoru Boulevard from "Industrial Retail (IR1)" to "School and Institution Use (SI)" and "Residential/Limited Commercial (RCL3)" to permit the development of a 44,844 m² (482,700 ft²) mixed use project comprising an office tower, ground floor retail, and 380 dwellings including a 47-unit stand-alone affordable housing building (secured in

perpetuity with a Housing Agreement), affordable non-profit social service agency space (secured in perpetuity with legal agreements), and a new City-owned 859 m^2 (0.2 acres) linear park along the south side of Lansdowne Road.

Proposed amendments to the City Centre Area Plan and "Residential/Limited Commercial (RCL3)" zone would permit an additional 1.0 floor area ratio (Village Centre Bonus) for office use only on the subject site and designate the proposed City-owned park space as "Park".

Off-site works, including utility upgrades, street widening and frontages improvements along three sides of the site, and park construction, will be the subject of the City's standard Servicing Agreement processes (secured with Letters of Credit).

An analysis of the developer's proposal shows it to be consistent with the CCAP's development, livability, sustainability, and urban design objectives. On this basis, it is recommended that Official Community Plan Amendment Bylaw 10050 and Richmond Zoning Bylaw 8500, Amendment Bylaw 10051 be introduced and given first reading.

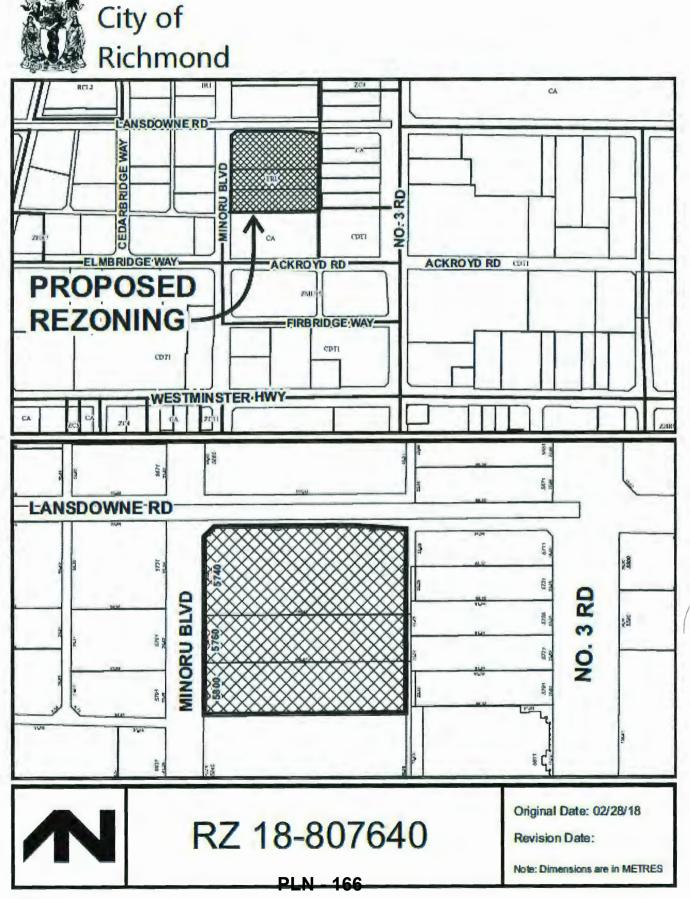
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Suzanne Carter-Huffman Senior Planner / Urban Design

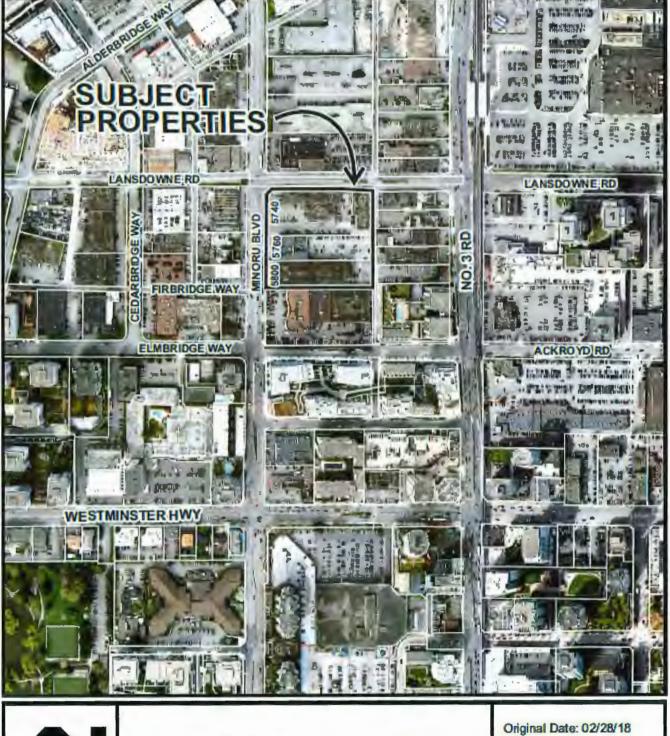
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Attachments:

- 1) Location Map
- 2) Aerial Photograph
- 3) Existing City Centre Area Plan Specific Land Use Map: Lansdowne Village
- 4) Development Application Data Sheet
- 5) Conceptual Development Plans
- 6) Letter Richmond Society for Community Living (RSCL)
- 7) Letter Community Mental Wellness Association of Canada (CMWAC)
- 8) Letter Robert Grosz
- 9) Rezoning Considerations







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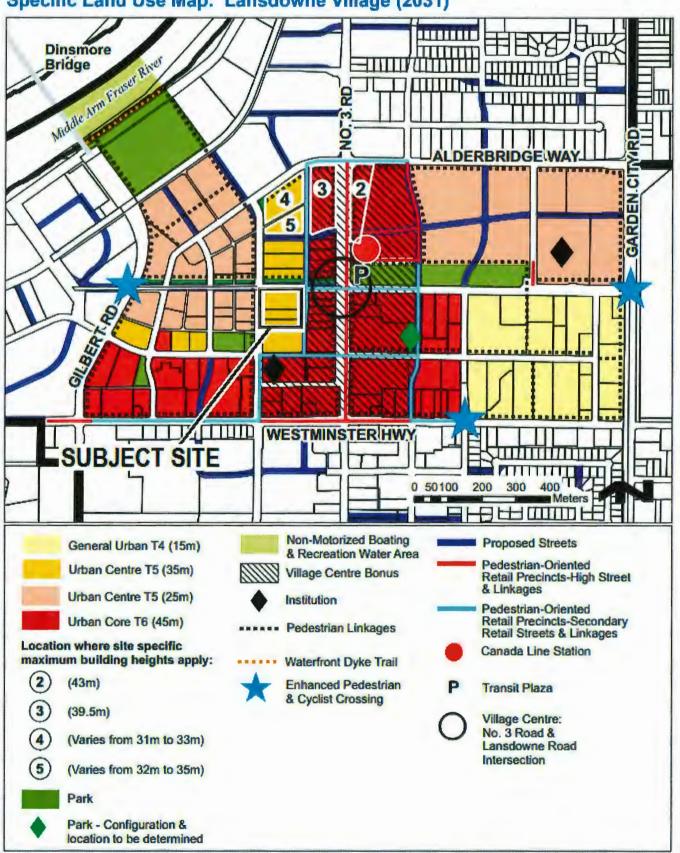
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Note: Dimensions are in METRES

RZ 18-807640

ATTACHMENT 3

EXISTING City Centre Area Plan - Specific Land Use Map: Lansdowne Village



Specific Land Use Map: Lansdowne Village (2031)

Maximum building height may be subject to established Airport Zoning Regulations in certain areas. PLN - 168



ATTACHMENT 4

Development Application Data Sheet Development Applications Department

RZ 18-807640

Address:	5740, 5760, and 5800 Minoru Boulevard
Applicant:	IBI Group Architects
Planning Area	(s): City Centre (Lansdowne Village)

	Existing		e Pro	oposed		
Owner	Minoru View Homes Ltd.	No change				
Site Size	• 15,604.2 m ² (167,962.2 ft ²)	 Road & Park Contributions: Density-Eligible Park: 859.2 m² (9,248.4 ft²) Density-Eligible Road: 1,210.3 m² (13,027.6 ft²) Other Road: 569.9 m² (6,134.4 ft²) Net Site: 12,964.8 m² (139,551.9 ft²) 				
Land Uses	 Commercial, recreation & light industry 	Office, pedestrian-oriented commercial & multi-family residential				
OCP Designation	Mixed Use	• Mixed Use				
City Centre Area Plan (CCAP) Designation	 Urban Centre T5 (35 m) (2 FAR) Pedestrian-Oriented Retail Precinct – Secondary Retail Streets & Linkages Proposed Streets 	 As per the existing CCAP, PLUS: Village Centre Bonus (office only) (1.0 FAR) Park Pedestrian-Oriented Retail Precinct – High Street & Linkages 				
Zoning	Industrial Retail (IR1)	Residential/Limited Commercial (RCL3)				
Number of Units	• N/A	 380 units, including: 333 Market Units 47 Affordable Housing 				
		Housing Types	Bachelor	1-BR	2-BR	3-BR
	• N/A	Market Units (333)	2 (1%)	139 (41%)	165 (50%)	27 (8%)
Unit Mix		• Affordable H. (47)	2 (5%)	17 (36%)	25 (53%)	3 (6%)
		Total (380 Units)	4 (1%)	156 (41%)	190 (50%)	30 (8%)
		Note: 3-BR Market Units include 10 townhouses & 17 apartments				
Affordable Housing: Low- End-of-Market- Rental (LEMR)	• N/A	• At least 2,774.1 m ² (29,860.3 ft ²) of habitable unit area: (i.e. 10% of total proposed residential floor area), together with common space and related uses/spaces (e.g., lobby and parking), secured in perpetuity as a Affordable Housing Stand-Alone Building (co-located with Affordable Non-Profit Social Service Agency Replacement Space)				
Basic Universal Housing (BUH)	• N/A	 At least 20% of total units (76 units), including: 12% Market Units (40 units) 100% Affordable Housing (47 units) 				
Non-Profit Social Services Agency	 425.7 m² (4,582 ft²) GLA 2 tenants (month-to-month rent) 	 Community Amenity Space: At least 425.7 m² (4,582.0 ft²) GLA, together with common space and related uses/spaces (e.g., lobby and parking), secured in perpetuity as Affordable Non-Profit Social Service Agency Replacement Space (co-located with the Affordable Housing Stand-Alone Building) 				
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RZ 18-807640

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	RCL3 Bylaw Requirement	Proposed	Variance
Floor Area Ratio (FAR)	 Adjusted for density-eligible road & park contributions: Max. 3.479 FAR, including: Base (including AH): 2.319 FAR VCB (Office only): 1.160 FAR Additional density: Community amenity space: 0.1 FAR max. 	 Max. 3.479 FAR, including: Base (including AH): 2.319 FAR VCB (Office only): 1.160 FAR Additional density: Community amenity space: At least 0.3 FAR for GLA, plus common space and related uses/spaces. 	None permitted
Buildable Floor Area*	 Max. 45,102.9 m² (485,483.6 ft²), including: Base (Residential & Retail): Max. 30,068.6 m² (323,655.7 ft²) VCB (Office only): Max. 15,034.3 m² (161,827.9 ft²) Additional floor area: Community amenity space: 1,296.5 m² (13,955.2 ft²) max. 	 Max. 45,102.9 m² (485,483.6 ft²), including: Residential: 27,741.1 m² (298,603.0 ft²) Commercial: 17,361.8 m² (186,880.6 ft²) a) Retail: 2,327.5 m² (25,052.7 ft²) b) Office: 15,034.3 m² (161,827.9 ft²) Additional floor area: Community amenity space: 480.8 m² (5,175.0 ft²), including at least 425.7 m² (4,582.0 ft²) GLA, plus common spaces/uses (e.g., 2nd floor lobby) 	None permitted
Lot Coverage	 For buildings & landscaped roofs over parking: Max. 90% 	• 90%	None
Lot Size	 Area: 4,000.0 m² (43,055.6 ft²) Width: 45.0 m (147.6 ft.) Depth: 40.0 m (131.2 ft.) 	 Area: 12,964.8 m² (139,551.9 ft²) Width: 126.3 m (414.4 ft.) Depth: 118.5 m (388.8 ft.) 	None
Setbacks	 Front & Exterior Side Yards: Min. 6.0 m (19.7 ft.), but may be reduced to 3.0 m (9.8 ft.) with a proper interface (subject to City approval via a Development Permit process) Interior Side Yards: Nil 	 Front & Exterior Side Yards: Min. 3.0 m (9.8 ft.) (subject to City approval via a Development Permit process) Interior Side Yards: Nil 	None
Height	 CCAP typical max.: 35.0 m (114.8 ft.) measured to finished grade 	 Office tower: 45 m (147.6 ft.) measured to finished grade (47 m geodetic) Residential (measured to finished grade): Tower A: 35.0 m (114.8 ft.) Tower B: 38.6 m (126.6 ft.) Tower C: 41.5 m (136.2 ft.) 	Height variance of 3.1 m, 6.5 m & 10.0 m
Parking – TOTAL	 Total: 672 spaces, including - Commercial: 290 Non-Profit Social Services: 23 Residents & Visitors: 359 	 Total: 721 spaces, including - Commercial: 290 Non-Profit Social Services: 23 Residents & Visitors: 408 	None
Parking – Non-Residential	 Total: 313 spaces Commercial: 322 spaces LESS 10% TDM = 290 spaces, including: Retail/Office (1st & 2nd floors): 4,052.5 m² (43,620.8 ft²) @ 3.75/100 m² GLA = 152 sp. Office (above 2nd floor) 13,309.5 m² (143,262 ft²) @ 1.275/100 m² GLA = 170 spaces Non-Profit Social Services: 23 spaces, including (estimated distribution based on existing operations): CMWAC: 8 spaces RSCL: 15 spaces 	 Total: 313 spaces Commercial: 290, including - 50% Public: 145 spaces secured via a legal agreement on title for shared use by the general public (including residential & Non-Profit Social Services guests) 50% Assignable: 145 spaces that may be sold, leased or otherwise assigned for exclusive use by specific people, tenants or businesses Non-Profit Social Services: 23 spaces for exclusive use of the Non-Profit Social Services tenants & their guests 	None

RZ 18-807640

	RCL3 Bylaw Requirement	Proposed	Variance
Parking – Residential	 Total: 359 spaces Residents: 339 spaces Market Units: 333 units @ 1.0/unit = 333 LESS 10% TDM = 300 spaces Affordable Housing: 47 units @ 0.9/unit = 43 LESS 10% TDM = 39 spaces Visitors: 20 spaces 380 units @ 0.2/unit = 76 LESS 56 shared with commercial Public parking = 20 spaces 	 Total: 408, including: Market Units: 349 spaces Affordable Housing: 39 spaces Visitor Parking: 20 spaces, including 5 spaces assigned for the exclusive use of each tower & 5 spaces assigned for the exclusive use of the Affordable Housing Building 	None
Class 1 Bike Storage – TOTAL	 Total: 556 spaces, including - Non-Residential: 45 (estimate) Residents: 511 	 Total: 556 spaces, including - Non-Residential: 45 (estimate) Residents: 511 	None
Class 1 Bike Storage – Non-Residential	 (16,450.0 m² – 100 m²) @ 0.27 / 100 m²GLA = 45 secured bike spaces based on estimated GLA of commercial & Non-Profit Social Services uses 	 Total (estimate): 45 bike spaces for shared use by commercial & Non-Profit Social Services tenants (estimate) 	None
Class 1 Bike Storage – Residential	 Total: 511 secured bike spaces, including: Market Units: 333 units @ 1.25/unit = 417 Affordable Housing: 47 units @ 2.0/unit = 94, including 10% over-size lockers for family bike storage (e.g., bike trailers), electricassist vehicles (e.g., mopeds), and similar equipment/uses 	 Total:511, including: Market Units: 417 Affordable Housing: 94, including 10% over- size lockers 	None
Class 2 Bike Storage	 Total: 142, including: Non-Residential: (16,450.0 m² –100 m²) @ 0.4/100 m² GLA = 66 based on estimated GLA of commercial & Non-Profit Social Services uses Residential: 380 units @ 0.2/unit = 76 	 Total: 142 (located outdoors around the perimeter of the building for general public use) 	None
Residential Amenity Space – Indoor	 Total: Min. 785.0 m² (8,449.7 ft²), including: Market Units: 333 units @ 2.0 m² / unit = 666.0 m² (7,168.8 ft²) Affordable Housing: 119 m² (1,280.9 ft²), including 100.0 m² (1,076.4 ft²) plus 19.0 m² (204.5 ft²) for the operator's use for administration and programs 	 Total: 785.0 m² (8,449.7 ft²), including:: Market Units: 666.0 m² (7,168.8 ft²) for exclusive market resident use Affordable Housing: 155.9 m² (1,678.1 ft²) for exclusive affordable housing occupant use, including 19.0 m² (204.5 ft²) for the operator's use for administration and programs 	None
Residential Amenity Space – Outdoor (OCP)	 Total: Min. 749.0 m² (8,062.2 ft²), including: Market Units: 333 units @ 6.0 m² (64.6 ft²) /unit = 1,998.0 m² (21,506.3 ft²) Affordable Housing: 47 units @ 6.0 m² (64.6 ft²) /unit = 282.0 m² (3.035.4 ft²) Note: For each use, 50% of outdoor amenity space shall be designed as children's play space (to a maximum of 600 m²) 	 Total: 3,224.0 m² (34,703.3 ft²), including: Market Units: 2,893.0 m² (31,140.5 ft²) for exclusive market resident use Affordable Housing: 331.0 m² (3,562.8 ft²) for exclusive affordable housing occupant use Note: For each use, 50% of outdoor amenity space shall be designed as children's play space (to a maximum of 600 m²) 	None
Additional Landscape Space (CCAP)	• 10% of net site area = 1,296.5 m ² (13,955.2 ft ²)	• 1,296.5 m ² (13,955.2 ft ²)	None

Tree replacement compensation is required for the removal of City trees within Lansdowne Road. (There are no existing Other: bylaw-size trees on the subject site.)

* Preliminary estimate (exclusive of parking garage). The exact building size shall be determined through Zoning Bylaw compliance review at Building Permit stage

ATTACHMENT 5 Conceptual Development Plans



IBI

5740, 5760, 5800 Minoru Blvd., Richmond OCT 22, 301

3D VISUALIZATION - Minoru / Lansdowne Corner

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3D VISUALIZATION - AERIAL NORTH WEST

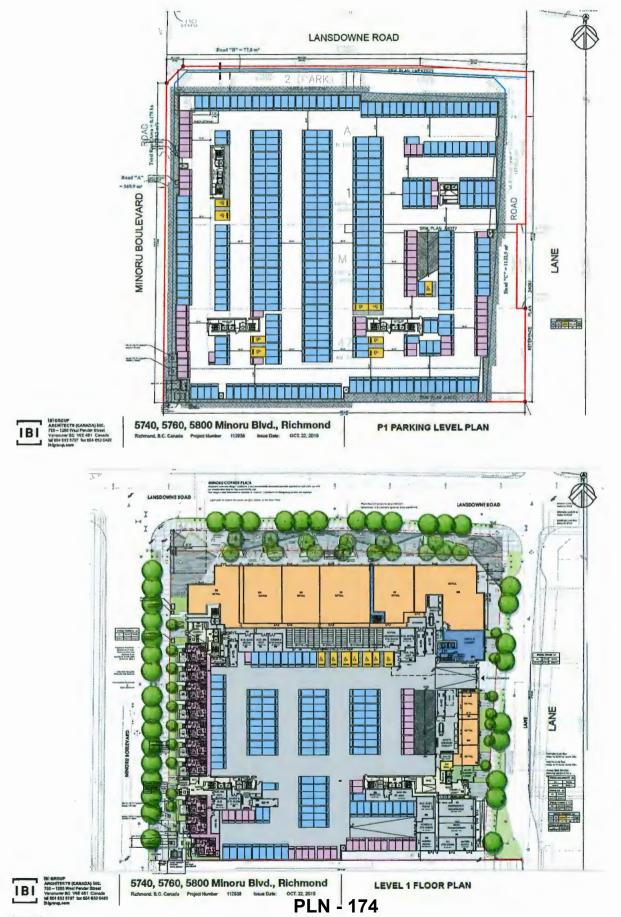


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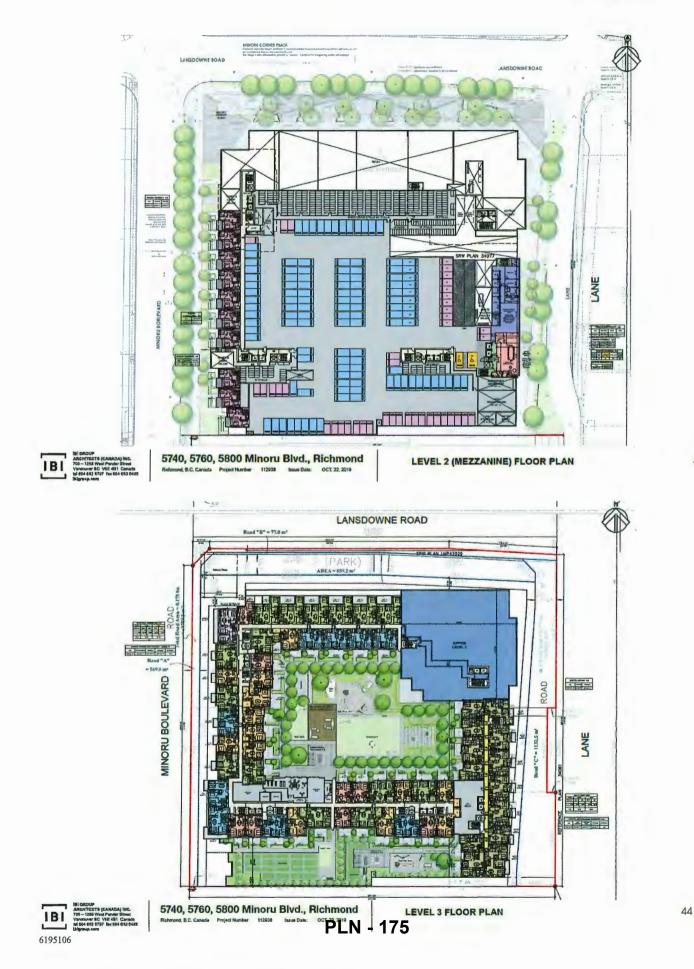
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3D VISUALIZATION - EAST LANE VIEW



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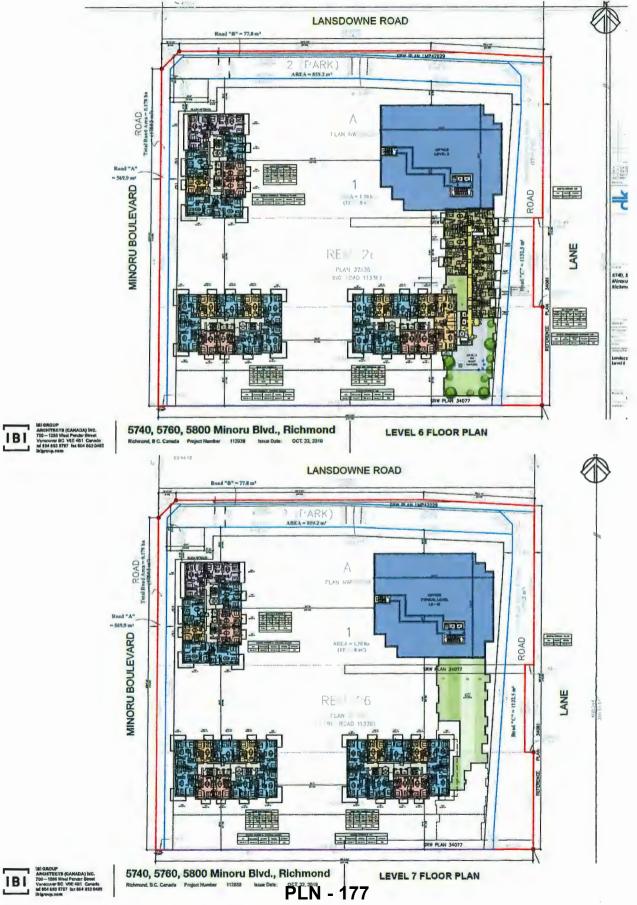


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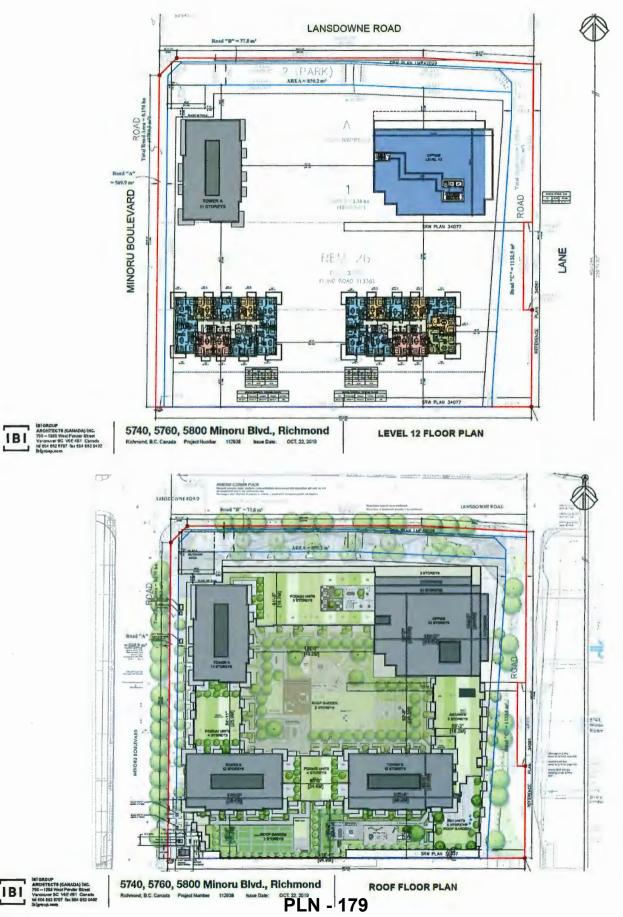
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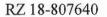
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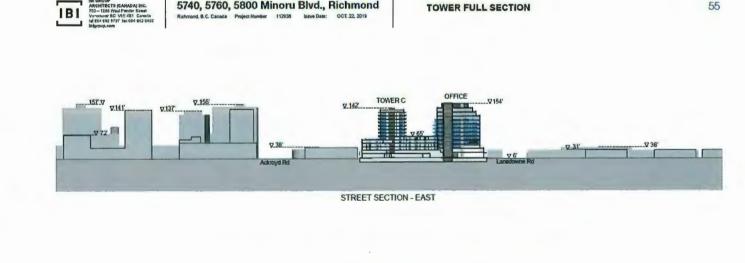
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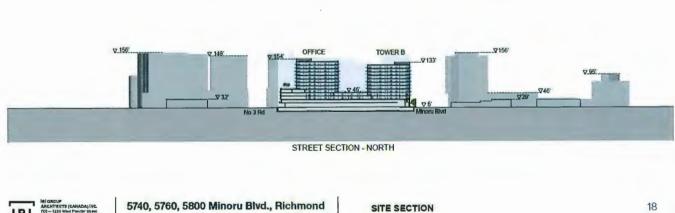
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WEST ELEVATION

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SOUTH ELEVATION

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5740, 5760, 5800 Minoru Blvd., Richmond Richmond, B.C. Canada Project Number 112938 Issue Date: OCT. 22, 2019

NORTH ELEVATION

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Letter – Richmond Society for Community Living (RSCL)



Seeing beyond disability... ... to ability

October 31, 2019

City of Richmond Attention: Lesley Sherlock, Social Planner 6911 No. 3 Road Richmond BC V6Y 2C1

Re: Thind Properties Development 5740, 5760, 5800 Minoru Blvd. Richmond

Dear Lesley:

I am writing to you to communicate the Richmond Society for Community Living's (RSCL) opinion regarding the proposal to build a replacement program space for one of our Community Inclusion Programs (i.e. Quantum) in the Thind Properties Development at the corner of Minoru Boulevard and Lansdowne. As you are aware, RSCL had three separate programs located in the buildings on this property. These three programs serve over 70 people with an intellectual disability five days a week. The Thind Properties Development proposal will accommodate one of our three programs. As a result of the development application for this property, we have already relocated the other two programs. These programs were moved in September 2019 to Ironwood (outside City Centre) due to the cost and availability of space in City Centre. The cost of renovating and moving the two programs to the new location was substantial and will impact service.

With respect to the proposal to build a program space for one of our programs in the new development, we are pleased that an option has been developed that recognizes the impact and displacement of our program in City Centre. In the absence of a clear City policy to address this growing problem, we are pleased that the developer has agreed to accommodate us in the new development. Moreover, the agreement to lease the space for 50% of current market rates (not including operating costs) will allow us to have a presence in City Centre in the future.

Although the proposal is a positive development, it will not address all our challenges. Specifically;

- We have already incurred the costs of relocating two other programs from this location to Ironwood;
- We will have to find and relocate the third program to a temporary location for at least three years and
 incur the cost of this relocation;
- The proposed space does not include Tenant Improvement (TI) costs and therefore, we will have to incur the costs of all the leasehold improvements to the space once it is built;
- The disruption and impact on the people in receipt of service and their families will be significant.

In summary, we applaud the efforts of City staff and the developer to try and accommodate us in the new development. However, the proposal will not address all our concerns related to the development of this property. Furthermore, we believe a comprehensive strategy and City policy is required to address the displacement of social agencies and services in the City Centre as a result of development.

Sincerely,

Janice Barr Executive Director

CC: Melanie Arnis, Chair, RSCL Board of Director

#170 - 7000 Minoru Blvd, Richmond, B.C. V6Y 3Z5 Office: 604-279-7040 | Fax: 604-279-7048 | Email: info@rscl.org | www.rscl.org

PLN - 183

ATTACHMENT 7

Letter - Community Mental Wellness Association of Canada (CMWAC)



November 5th, 2019

Suzanne Carter-Huffman Senior Planner/Urban Design Planning & Development City of Richmond 6911 NO. 3 Road Richmond, BC V6Y 2C1

Dear, Suzanne,

Thank you for your recent plans for non-profit space in the new building and for your inclusion of CMWAC in your plan.

After meetings with you we are very appreciative that our needs and concerns have been mostly addressed in your plan, which you have tried to tailor to our requirements as follows:

- 1. Administration office
- 2. Consultation room
- Conference room / multi-purpose room where we can hold health conferences, workshops, meetings and other activities
- 5. Space: At least 1,500 sq.ft.

The maximum rent we can currently afford for the space is \$1500.00.

To ensure a smooth transition we need an affordable temporary accommodation for the Association before the building is demolished.

Lastly, we would like to thank you again for considering our needs in your development plan. and it is hoped that the above could be included.

Sincerely yours,

Ahlay Chin, Executive Director/Founder Community Mental Wellness Association of Canada Cc: Lesley Sherlock CMWAC Board

ATTACHMENT 8 Letter – Robert Grosz (Attachments on file)

ROBERT W.G. GROSZ, J.D.

1012-13325 102A Avenue Surrey, BC Canada V3T 0J5

robgrosz@yahoo.com | robgrosz@gmail.com | robertgrosz@hotmail.com 604-500-0794

Monday, July 15, 2019

scarter@richmond.ca

Ms. Suzanne Carter-Huffman Senior Planner City of Richmond 6911 No. 3 Road Richmond, BC V6Y 2C1

Dear Ms. Carter-Huffmann,

RE: 5740, 5760 & 5800 Minoru Blvd. Richmond, Rezoning Application 18-807640

Regarding the above-noted rezoning application and further to our conversation this moming in which I asked to be added to the roster for notice of the forthcoming Public Hearing and Planning Committee Hearing, I hereby put the City of Richmond on notice of my intention to make a submission not regarding the merits of the application which I believe admirably speaks for itself based on the documents in the public file that I have reviewed, but rather on my request that the financial interests of all persons with rights to the three parcels at issue be adequately protected.

I am the former designated paralegal of Ms. Hong Chen *aka* Hong Guo, the widely reported Richmond lawyer who was intimately involved in the assembly of the three parcels beginning in 2010 or thereabouts and through their purported sale to Minoru View Homes Ltd., which is now on title as owner. However the rezoning applicant was Vancouver Soho Holding Ltd. which purportedly sold the parcels. Ms. Guo (Chen)'s Guo Law Corporation suffered the theft of over \$7.5 million from its clients' trust account in early 2016 before I began working for it. The theft caused it to become insolvent, so it is under bankruptcy protection (SCBC Vancouver B170021). I am a creditor of it long with others whose existing or anticipated claims are about \$7.5 million. Without providing particulars, suffice it to say I think the theft proximately related to the parcels. Accordingly, all the creditors presumably have an equitable if not legal interest in the parcels, despite the fact that there has not yet been legal notice of those rights filed on the respective titles.

However there were Certificates of Pending Litigation filed on all three parcels on June 22, 2016 which were briefly lifted by court order on October 3, 2017, refiled on November 17, 2017, and released on April 3, 2018. Copies of the Certificates, Order, and Charge Release are attached. These Certificates were issued pursuant to claims of shareholder oppression and fraud in the civil matter of Kai Ming Yu et al v. Zhong Ping Xu et al (SCBC Vancouver S165682/S187297). Moreover, on March 14, 2019 a court order was made authorizing distribution of \$10 million from the trust account of Mr. Marvin Lithwick, lawyer, purportedly holding the proceeds of the sale of the parcels (from Vancouver Soho to Minoru View Homes) to the petitioners/plaintiffs and respondents/defendants in the amount of \$5 million to each side. A copy of the order is attached. Also attached is a copy of the Form B regarding a mortgage of up to \$42.7 million on the parcels.

ROBERT W.G. GROSZ, J.D.

Ms. Suzanne Carter-Huffman City of Richmond

RE: 5740, 5760 & 5800 Minoru Blvd, Richmond, Rezoning Application 18-807640

Monday, July 15, 2019

On July 5, 2019 I requested from the lawyer for Minoru View Homes, Mr. Aneez N. Devji, proof that the full consideration of \$59.8 million was paid as reflected by the attached Title Searches. However Mr. Devji declined to reply to my letter. Therefore on July 12, 2019 I briefly met with Mr. Jeffrey Lowe, QC, Managing Partner of Richards Buell Sutton LLP, and Mr. Devji, at which time Mr. Lowe advised me, *inter alia*, that his firm was acting in accordance with instructions from its clients and would not respond to any more communications from me, but that his firm has not participated in, aided, or abetted any fraudulent activities or transactions in its 144 year history and it is not going to do so in the future. The latter was comforting to hear. However the issue of proof that the full consideration was paid is still very alive. The lawyer who released the Certificates, Mr. Jeffrey Wittmann, of Wiebe Wittmann El-Khatib LLP acting on behalf of the petitioners/plaintiffs, was replaced by Mr. Glen Forrester of Forrester & Company. Furthermore, its clients have engaged a forensic accountant who is taking instructions from Mr. Forrester, and the issue of whether the full consideration was paid is being investigated. But I think it was not.

I think that the purported sale was actually a non arms-length transfer whereby Vancouver Soho and Minoru View Homes obtained mortgage financing (probably from China) that is managed by Trez Capital Limited Partnership, and from this the previous mortgages were retired, overdue city taxes and legal fees paid, \$10 million was distributed under authority of the court as noted above, and the remainder is being used to fund the rezoning application costs of the IBI Group. If this is correct, but I hasten to note that I have no proof that it is, and the full consideration was not paid, then transfer of title to the parcels may have violated the Fraudulent Conveyance Act.

I intend to promptly apply for leave to bring a derivative action against the Guo Law Corporation and be appointed as its Receiver, dismiss the Trustee appointed by the bankruptcy court, and take such steps as the court approves to defend claims against it, pursue claims by it, liquidate real properties hypothecated for it, and take such steps as necessary to make whole all of its creditors.

In conclusion, I support the rezoning application and wish to see it gain prompt approval, but I first request the City of Richmond take such steps as necessary to obtain proof from the lawyers both for Vancouver Soho and Minoru View Homes that the full \$59.8 million consideration was paid and that the remainder of the \$58.8 million in sale proceeds is held in trust by Mr. Lithwick. I further request that the findings of the City of Richmond in this regard be publicly disclosed.

Yours truly,

tere

Robert W.G. Grosz, J.D.

Attachments: as stated above.

2

ATTACHMENT 9



Rezoning Considerations

Development Applications Department 6911 No. 3 Road, Richmond, BC V6Y 2C1

Address: 5740, 5760, and 5800 Minoru Boulevard

File No.: RZ 18-807640

Prior to final adoption of Richmond OCP Amendment Bylaw No. 10102 and Zoning Amendment Bylaw No. 10051, the developer/owner is required to complete the following:

1. <u>NAV Canada Building Height</u>: Submit a letter of confirmation from a registered surveyor assuring that the proposed building heights are in compliance with Transport Canada regulations.

(Note: This consideration has been satisfied. REDMS #6158501)

- 2. <u>Site Contamination</u> (Dedicated and/or Transferred Land): Prior to rezoning bylaw adoption, submission to the City of sufficient information and/or other assurances satisfactory to the City in its sole discretion to support the City's acceptance of the proposed dedicated or transferred land. Such assurances could include one or more of the following:
 - 2.1. A contaminated sites legal instrument (e.g. Certificate of Compliance (COC) or Final Site Determination (FSD) showing no contamination in the dedication lands);
 - 2.2. Evidence satisfactory to the City, in its sole discretion, that the lands to be dedicated to the City are in a satisfactory state from an environmental perspective; and
 - 2.3. The registration of a legal agreement on the title to the Lands which provides that:
 - 2.3.1. No occupancy of any building on the Lands shall be granted until such time that the Owner/Developer has satisfied the City in its sole discretion that the lands to be dedicated to the City are in a satisfactory state from an environmental perspective and a contaminated sites legal instrument has been obtained for the proposed dedication lands; and
 - 2.3.2. The Owner/Developer shall release and indemnify the City from and against any and all claims or actions that may arise in connection with those portions of the lands being dedicated to the City being contaminated in whole or in part.
- 3. <u>Subdivision</u>: Registration of a subdivision plan to the satisfaction of the City.

Prior to the registration of the Subdivision Plan, the following conditions shall be satisfied:

- 3.1. <u>City Road</u>: Dedication of at least 1,780.2 m² (19,162.0 ft²) for road and related purposes, as per the Preliminary Subdivision Plan (Schedule A), including at least:
 - 3.1.1. 569.9 m² (6,134.4 ft²) for road widening along the south side of Lansdowne Road and the east side of Minoru Boulevard (for which Development Cost Charge/DCC credits <u>shall</u> apply); and
 - 3.1.2. 1,210.3 m² (13,027.6 ft²) for sidewalk widening along the south side of Lansdowne Road and lane widening for the purpose of establishing a new minor street along the subject site's east side (for which Development Cost Charge/DCC credits shall <u>not</u> apply).
- 3.2. <u>City-Owned Park</u>: Transfer of at least 859.2 m² (9,248.4 ft²) to the City as fee simple for park and related purposes, as indicated on the Preliminary Subdivision Plan (**Schedule A**). The primary business terms of the required land transfers shall be to the satisfaction of the Manager, Real Estate Services, the City Solicitor, and the Director of Development. All costs associated with the land transfer shall be borne by the developer/owner. (<u>Note</u>: Development Cost Charge/DCC credits shall <u>not</u> apply.)
- 3.3. <u>Lot Consolidation</u>: The creation of one (1) lot for development purposes with an area of approximately $12,964.8 \text{ m}^2 (139,551.9 \text{ ft}^2)$, as per the Preliminary Subdivision Plan (Schedule A).

PLN - 187

Initial: _____

- Statutory Right-of-Way (SRW) City-Owned Park Enhancement Area: Registration on title of a restrictive 3.4. covenant and SRW agreement for public access, open space, and related purposes with respect to an irregular strip of land along the entire north edge of the subject site, comprised of a rectangular "plaza expansion" area adjacent to Minoru Boulevard, measuring approximately 8.0 m (26.3 ft.) deep and 13.0 m (42.7 ft.) wide, and a "linear park expansion" area, measuring at least 3.0 m (9.8 ft.) deep at its west end and tapering towards the east, as generally indicated in the Preliminary Statutory Right-of-Way Plan (Schedule B). The SRW area shall be designed, constructed, and maintained at the sole cost of the developer/owner for the purpose of providing for the seamless expansion of the proposed City-Owned Park (e.g., public plaza, landscape features, and related furnishings and infrastructure), as determined to the satisfaction of the City. Prior to adoption of the OCP and Zoning Amendment Bylaws, the agreement shall be registered as a blanket SRW (accompanied by a sketch plan) and shall include provisions for a replacement agreement at Development Permit*, Building Permit*, and/or occupancy, as determined to the satisfaction of the City, at the developer/owner's cost, for the purpose of accurately reflecting the City-approved permits and replacing the sketch plan with a survey plan (which may be volumetric). The specific location, configuration, design, and related terms of the agreement shall be confirmed through the development's Development Permit*, Servicing Agreement*, and/or other City approval processes, to the satisfaction of the City, taking into account the following items.
 - 3.4.1. The right-of-way shall provide for:
 - a) 24 hour-a-day, year-round, universally accessible, public access in the form of paved walkway(s) and related landscape features, which may include, but may not be limited to, lighting, furnishings, street trees and planting, decorative paving, and storm water management measures, to the satisfaction of the City;
 - b) Public art;
 - c) Public access to/from fronting uses/spaces including, among other things, fronting on-site commercial units;
 - d) Emergency and service vehicle access, City bylaw enforcement, and related or similar Cityauthorized activities; and
 - e) City utilities including, but not limited to, streetlights, traffic control infrastructure (e.g., signals, detector loops, and equipment kiosks), and related or similar features.
 - 2.3.1. Encroachments shall <u>only</u> be permitted within the "plaza expansion" portion of the SRW area (i.e. <u>not</u> within the "linear park expansion" portion) and shall satisfy the following requirements, as determined to the City's satisfaction:
 - a) Encroachments shall not conflict with the design, construction, operation, or intended quality or public amenity of the SRW area (e.g., tree planting, accessible grades, underground utilities);
 - b) Permanent encroachments shall be approved by the City through the Development Permit*, Servicing Agreement*, and/or other City approval processes, as applicable, and shall be limited to:
 - A parking structure concealed below the finished grade of the SRW area;
 - Weather protection, architectural appurtenances, and building projections, located at least 2.5 m (8.2 ft.) clear above the finished grade of the SRW area; and
 - Commercial signage, provided that it is integrated into the permitted permanent encroachments described above and is located at least 2.5 m (8.2 ft.) clear above the finished grade of the SRW area; and
 - c) Temporary encroachments shall be limited to:
 - Movable furnishings, planters, displays, and similar features (but excluding sandwich boards and other commercial signage);
 - Commercial business operations limited to temporary food service vendors (fresh and/or prepared foods) in the form of food carts and/or knock-down units (operating independently or in coordination with fronting on-site commercial uses/units), provided that they occupy a maximum combined total area of 20.0 m² (215.3 ft²); and
 - Outdoor dining and related furnishings associated with temporary food service vendors (described above) and/or fronting on-site commercial uses/units, provided that

PLN - 188

such outdoor dining is not fenced, roofed, or otherwise arranged to restrict casual or free public access through and around the area occupied by the outdoor dining.

<u>Note</u>: Outdoor dining area designated for the exclusive use of a specific on-site commercial use/unit or temporary food service vendor shall not be considered a "temporary encroachment" and will not be permitted within the SRW area.

- 3.4.2. Design and construction of the SRW area shall be the subject of a Servicing Agreement* and Development Permit*, which shall be undertaken at the sole cost and responsibility of the developer/owner, as determined to the satisfaction of the City. Among other things, works essential for public access within the required SRW area are to be included in the Servicing Agreement* and the design of the SRW area must be prepared in accordance with good engineering practice with the objective of optimizing public safety. After completion of the SRW works, the owner is required to provide a certificate of inspection for the works or equivalent, prepared and sealed by the owner's engineer, architect, and/or landscape architect, as determined to the City's satisfaction, in a form and content acceptable to the City, certifying that the works have been constructed and completed in accordance with the accepted design.
- 3.4.3. Maintenance of and liability with respect to the SRW area shall be at the sole cost and responsibility of the owner, except for City utilities, City park improvements, and/or other features that are identified, to the City's satisfaction, through the Servicing Agreement* for maintenance by the City following the expiry of the Servicing Agreement* maintenance period.
- 3.4.4. The owner shall be permitted to close public access to the "plaza expansion" portion of the SRW area (i.e. <u>not</u> the "linear park expansion" portion), in whole or in part, to facilitate maintenance, repairs, or construction of the SRW area or the fronting uses, provided that adequate public access is maintained and the duration of the closure is limited, as either determined to the City's satisfaction through the Development Permit* and specified in the SRW agreement(s) or approved by the City in writing in advance of any such closure.
- 3.4.5. "No development" shall be permitted on the subject site, restricting Development Permit* issuance for any building on the subject site, in whole or in part, unless the permit includes the design of the SRW area, to the City's satisfaction.
- 3.4.6. No Building Permit* shall be issued for a building on the subject site, in whole or in part (excluding parking located below the finished grade of the SRW area indicated in the approved Servicing Agreement*), unless the permit includes the design of the SRW area, to the City's satisfaction.
- 3.4.7. "No occupancy" of the development shall be permitted, in whole or in part, unless the development is completed in accordance with a City-approved Occupancy Staging Plan.
- 4. <u>Other Rights-of-Ways, Indemnifications, Releases & Agreements</u>: As determined to the sole satisfaction of the City via the Servicing Agreement*, Development Permit*, development approval, and/or Building Permit* processes.
- 5. Aircraft Noise: Registration on title of a standard City of Richmond (mixed use) aircraft noise sensitive use covenant.
- 6. <u>Flood Construction</u>: Registration on title of a standard City of Richmond ("Area A") flood indemnity covenant.
- 7. <u>View and Other Development Impacts</u>: Registration on title of a restrictive covenant and/or alternative legal agreement, to the satisfaction of the City, requiring that the proposed development must be designed and constructed in a manner that mitigates potential development impacts including without limitation view obstruction, increased shading, increased overlook, reduced privacy, increased ambient noise, increased ambient night-time light, and increased public use of fronting streets, sidewalks, and open spaces caused by or experienced as a result of, in whole or in part, development on the lands and future development on or the use of surrounding properties. In particular, as the proposed development is mixed use, the covenant shall notify residential tenants of potential noise and/or nuisance that may arise due to proximity to retail, restaurant, and other commercial uses and activities. The owner shall provide written notification of potential view and development impacts to all initial purchasers through the disclosure statement, and erect signage in the initial sales centre advising purchasers of the potential for such impacts. The legal agreement shall include a Report prepared by an appropriate registered professional, which demonstrates that adequate development impact mitigation measures with be the propriated into the building's design and construction

and, prior to Development Permit* and Building Permit* issuance, the owner shall submit letters of assurance prepared by an appropriate registered professional confirming that the building has been designed in conformance with the Report.

8. <u>Tree Removal</u>: The City's acceptance of the developer's voluntary contribution to the City's Tree Compensation Fund (Account # 2336-10-000-00000) for the planting of replacement trees within the City, as indicated in the table below.

TABLE 1	

Use	No. of City Trees Proposed	Min. Developer Contribution	Min. Developer
	for Removal	Rate	Contribution
TOTAL	7 (Lansdowne Road median removal)	\$1,300/tree	\$9,100 (1)

(1) In the event that the developer contribution is not provided within one year of the rezoning application receiving third reading of Council (Public Hearing), the Minimum Developer Contribution Rate shall be revised to comply with the City contribution rate in effect at the time of rezoning bylaw adoption, where the change is positive.

<u>Note</u>: In addition to the above, through the required Servicing Agreement*, the developer shall be required, at the developer's sole cost, to remove a small existing City tree from the Lansdowne Road median (Chamaecyparis obtuse) and relocate it elsewhere in Richmond, as determined to the satisfaction of the Director, Parks Services.

9. <u>Public Art</u>: The City's acceptance of the developer's voluntary cash-in-lieu contribution towards public art (i.e. 15% to Public Art Provision Account # 7500-10-000-90337-0000 and 85% to Account # 7600-80-000-90173-0000), as indicated in the table below.

Use	Max. Permitted Floor Area Under RCL3 Zone	Affordable Housing Dwelling Unit Exemption (1)	Min. Developer Contribution Rate (2)	Min. Developer Contribution
Residential	27,741.1 m ² (298,603.0 ft ²)	2,774.1 m ² (29,860.3 ft ²)	\$0.87/ft ²	\$233,806.15
Retail	2,327.6 m ² (25,052.7 ft ²)	Nil	\$0.46/ft ²	\$11,524.24
Office (VCB)	15,034.3 m ² (161,827.9 ft ²)	Nil	\$0.46/ft ²	\$74,440.83
TOTAL	45,102.9 m² (485,483.6 ft²)	2,774.1 m ² (29,860.3 ft ²)	Varies	\$319,771.22 (3)

TABLE 2

(1) As per City policy, floor area excludes the habitable floor area of the development's proposed affordable housing units.

(2) The Council-approved contribution rates in effect at the time of writing these Rezoning Considerations.

- (3) The actual value of the developer contribution shall be confirmed and updated, as necessary, based on the floor areas approved through the Development Permit. In addition, in the event that the developer contribution is not provided within one year of the rezoning application receiving third reading of Council (Public Hearing), the Minimum Developer Contribution Rate shall be revised to comply with the Council-approved contribution rates in effect at the time of rezoning bylaw adoption, where the change is positive.
- 10. <u>Community Planning</u>: The City's acceptance of the developer's voluntary contribution towards future City community planning initiatives (CC-Community Planning and Engineering Account # 3132-10-520-00000-0000), as set out in the City Centre Area Plan, as indicated in the table below.

TABLE 3

Use	Max. Permitted Floor	Affordable Housing	Min. Developer	Min. Developer
	Area Under RCL3 Zone	Dwelling Unit Exemption (1)	Contribution Rate (2)	Contribution
TOTAL	45,102.9 m² (485,483.6 ft²)	2,774.1 m ² (29,860.3 ft ²)	\$0.28/ft ²	\$127,574.52 (3)

(1) As per City policy, floor area excludes the habitable floor area of the development's proposed affordable housing units.

The Council-approved contribution rates in effect at the time of writing these Rezoning Considerations.
 In the event that the developer contribution is not provided within one year of the rezoning application rates in the time of writing these Rezoning applications.

(3) In the event that the developer contribution is not provided within one year of the rezoning application receiving third reading of Council (Public Hearing), the Minimum Developer Contribution Rate shall be revised to comply with the Council-approved contribution rate in effect at the time of rezoning bylaw adoption, where the change is positive.

- 11. <u>Village Centre (Office-Only) Bonus (VCB)</u>: The City's acceptance of the developer's voluntary contribution and legal agreement(s) registered on title to the lot, to the satisfaction of the City, for the purpose of satisfying OCP, Zoning Bylaw, and related City requirements with the respect to the developer's proposed bonus office density, including:
 - 11.1. <u>Amenity Contribution</u>: Submission of a voluntary developer cash contribution, in the amount of \$5,663,980, to Richmond's Leisure Facilities Reserve Fund City Centre Facility Development Sub-Fund, in lieu of constructing community amenity space on-site, as determined based on a construction-value amenity transfer rate of \$700/ft² and an amount of amenity transferred off-site based on 5% of the maximum VCB buildable floor area permitted on the subject site under the proposed Residential/Limited Commercial (RCL3) zone, as indicated in the table below.

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Use	Maximum Permitted VCB Bonus Floor Area	VCB Community Amenity Space Area	Construction-Value Amenity Transfer	Minimum Voluntary Developer Cash
	as per the RCL Zone	(5% of Bonus Area)	Contribution Rate	Contribution
TOTAL	15,034.3 m ² (161,827.9 ft ²)	751.7 m ² (8,091.4 ft ²)	\$700.00/ft ²	\$5,663,980.00 (1)

- (1) In the event that the developer contribution is not provided within one year of the rezoning application receiving third reading of Council (Public Hearing), the Construction-Value Amenity Transfer Contribution shall be increased annually thereafter based on the Statistics Canada "Non-Residential Building Construction Price Index" yearly quarter-to-quarter change for Vancouver, where the change is positive..
- 11.2. <u>Office Subdivision Restriction</u>: Registration on title of a restrictive covenant or alternative legal agreement, to the satisfaction of the City, to require that the subdivision of any Village Centre Bonus floor area within the building that is used for office shall not exceed one strata lot or air space parcel per storey of the building.
- 11.3. <u>Commercial Parking</u>: Registration on title of a restrictive covenant and/or alternative legal agreement, to the satisfaction of the City, for the purpose of restricting the use of parking provided on-site in respect to non-residential uses and providing for the shared use of that parking with visitors to the subject development's market residential uses and Affordable Housing Stand-Alone Building. More specifically, Commercial Parking requirements for the subject development shall include the following.
 - 11.3.1. Commercial Parking shall mean any parking spaces needed to satisfy Zoning Bylaw or other transportation requirements, as determined to the satisfaction of the City through the rezoning and/or an approved Development Permit*, including spaces required for the use of:
 - a) The general public;
 - b) Businesses and tenants on the lot, together with their employees, visitors, customers, and guests; and
 - c) Residential visitors.
 - 11.3.2. Commercial Parking shall include:
 - a) No less than 50% Public Parking spaces, which spaces shall be designated by the owner/operator exclusively for short-term parking (e.g., drop-off/pick-up or hourly) by the general public; and
 - b) No more than 50% Assignable Parking spaces, which spaces may be designated, sold, leased, reserved, signed, or otherwise assigned by the owner/operator for the exclusive use of employees or specific persons or businesses.
 - 11.3.3. Public Parking spaces shall:
 - a) Include at least 85% of the commercial parking spaces located at the entry level of the lot's parking structure or as otherwise determined to the satisfaction of the Director of Transportation; and
 - b) Be available for use 365 days per year for a daily duration equal to or greater than the operating hours of transit services within 400 m (5 minute walk) of the lot, businesses located on the lot, or as otherwise determined by the City.

- 11.3.4. Visitors to the subject development's market housing and affordable housing units/tenants and Non-Profit Social Service uses shall have shared use of the Public Parking on the same terms as members of the general public.
- 11.3.5. Commercial Parking shall not include tandem parking.
- 11.3.6. Commercial Parking (both Public Parking and Assignable Parking) must include a proportional number of handicapped parking spaces and small car parking spaces in compliance with the Zoning Bylaw or as otherwise determined to the satisfaction of the Director of Transportation.
- 11.3.7. "No development" shall be permitted on the lot, restricting Development Permit* issuance for a building on the lot, in whole or in part, unless the permit provides for the required Commercial (Public and Assignable) Parking and related features to the satisfaction of the City.
- 11.3.8. No Building Permit* shall be issued for a building on the lot, in whole or in part (excluding parking intended as an ancillary use to non-parking uses), unless the permit provides for the required Commercial (Public and Assignable) Parking and a letter of confirmation is submitted by the architect assuring that the facilities satisfy the City's objectives.
- 11.3.9. "No occupancy" of the development shall be permitted, in whole or in part, unless the development is completed in accordance with a City-approved Occupancy Staging Plan.
- 11.4. <u>Non-Residential Tenant Cycling Facilities</u>: Registration on title of a restrictive covenant and/or alternative legal agreement, to the satisfaction of the City, for the purpose of requiring that the developer/owner provides, installs, and maintains cycling facilities for the exclusive use of the development's non-residential tenants (including Non-Profit Social Service use tenants), to the satisfaction of the City as determined via the Development Permit* review and approval processes. More specifically:
 - 11.4.1. The developer/owner shall, at its sole cost, design, install, and maintain cycling facilities on the lot for the shared use of the development's non-residential tenants (including Non-Profit Social Service use tenants), including:
 - a) End-of-trip cycling facilities in the form of a handicapped-accessible suite of rooms designed to accommodate use by four or more people (of the same or different genders) at one time, as determined to the City's satisfaction through the Development Permit* review and approval process, including at least two (2) shower/change cubicles with doors, two (2) change cubicles with doors, two (2) toilet cubicles with doors, two (2) wash basins, and a common change room with a bench(s), grooming station (i.e. mirror, counter, and electrical outlets), and lockers;
 - b) A maintenance facility in the form of a bike repair and maintenance station comprising a footactivated pump, repair stand with integrated tools, and a bike wash; and
 - c) EV-equipped storage facilities in the form of "Class 1" bike storage spaces for the commercial tenants of the building, as per the Zoning Bylaw, which storage must include 120V energized (duplex) outlets for the shared use of cyclists at a rate of 1 energized (duplex) outlet for each 10 bike storage spaces or portion thereof in each bike storage room (which energized outlets shall be located to facilitate shared use by bikes in the storage room);
 - 11.4.2. For ease of use and security, the required cycling facilities shall be clustered together on the building's ground floor and provide for convenient and safe access to/from the office tower's elevator/stair core, unless an alternative location is approved, at the sole discretion of the Director of Transportation, through the Development Permit* review and approval processes;
 - 11.4.3. "No development" shall be permitted on the lot, restricting Development Permit* issuance for any building on the lot, in whole or in part, unless the permit provides for the required cycling facilities to the satisfaction of the City;
 - 11.4.4. No Building Permit* shall be issued for a building on the lot, in whole or in part (excluding parking intended as an ancillary use to non-parking uses), unless the permit provides for the required cycling facilities to the satisfaction of the City and a letter of confirmation is submitted by the architect assuring that the design of the facilities satisfies all applicable City's requirements; and

PLN - 192

- 11.4.5. "No occupancy" of the development shall be permitted, in whole or in part, unless the development is completed in accordance with a City-approved Occupancy Staging Plan.
- 11.5. <u>Commercial Tenant Transit Pass Program</u>: Registration on title of a restrictive covenant and/or alternative legal agreement, to the satisfaction of the City, for the purpose of securing the developer/owner's commitment towards implementing, at the developer/owner's sole cost, a coordinated strategy providing transit passes for commercial tenants (valued at \$40,000). "No occupancy" of the development shall be permitted, in whole or in part, unless the development is completed in accordance with a City-approved Occupancy Staging Plan.
- 11.6. <u>Car-Share Measures</u>: Registration on title of a restrictive covenant and/or alternative legal agreement, to the satisfaction of the City, for the purpose of securing the developer/owner's commitment towards implementing, at the developer/owner's sole cost, a car-share strategy comprised of designated car-share parking spaces, car-share vehicles, and contractual arrangements with a car-share operator, all to the satisfaction of the City.
 - 11.6.1. The car-share parking facility shall provide for the following:
 - a) Two (2) car-share parking spaces located together on the ground floor of the building where they will be secure, universally-accessible, and provide for safe and convenient 24/7 public pedestrian and vehicle access, as determined to the City's satisfaction;
 - b) Operating electric vehicle (EV) quick-charge (240 V) charging stations for the exclusive use of and simultaneous charging of the car-share vehicles parked in the required car-share spaces; and
 - c) Pedestrian and vehicle access, signage, lighting, and other features necessary to the operation of the car-share facility and vehicles as determined to the satisfaction of the City.
 - 11.6.2. The required car-share spaces shall be provided by the developer/owner in addition to that parking provided to satisfy Zoning Bylaw parking requirements with respect to residential and commercial uses on the lot.
 - 11.6.3. Users of the car-share spaces shall not be subject to parking fees or EV charging fees, except as otherwise determined at the sole discretion of the City.
 - 11.6.4. The developer/owner shall, to the City's satisfaction, enter into a contract with a car-share operator for the operation of the car-share parking facility for a minimum term of three (3) years, which contract shall require, among other things, that:
 - a) The developer/owner provides two (2) car-share cars at no cost to the operator;
 - b) The car-share cars shall be electric vehicles, unless otherwise determined to the satisfaction of the car-share operator and the City; and
 - c) The required car-share parking facility and vehicles will be 100% available for use upon the required occupancy of the car-share parking facility as set out in a City-approved Occupancy Staging Plan.
 - 11.6.5. "No development" shall be permitted on the subject site, restricting Development Permit* issuance for a building on the subject site, in whole or in part, unless the developer, to the City's satisfaction:
 - a) Designs the subject site to provide for the required car-share parking facility to the City's satisfaction;
 - b) Secures the car-share parking facility via a statutory right-of-way(s) and easement(s) registered on title and/or other legal agreements, as determined to the City's satisfaction;
 - c) Provides a Letter of Credit (LOC) to the City to secure the developer's commitment to the provision of two (2) car-share vehicles, the value of which shall be the estimated retail value of the two (2) car-share cars at the time of purchase or as otherwise determined to the satisfaction of the Director of Transportation and Director of Development; and
 - d) Registers legal agreement(s) on title requiring that, unless otherwise agreed to in advance by the City, in the event that the car-share parking facility is not operated for car-share purposes as intended via the subject rezoning application (e.g., the operator's contract is terminated or expires), control of the car-share facility shall be transferred to the City, at no cost to the City, and the City at its sole discretion, without penalty or cost, shall determine how the facility shall be used going Norwar93

- 11.6.6. No Building Permit* shall be issued for a building on the subject site, in whole or in part (excluding parking intended as an ancillary use to non-parking uses), until the developer provides for the required car-share parking facility to the City's satisfaction and a letter of confirmation is submitted by the architect assuring that the design of the facility satisfies all applicable City's requirements.
- 11.6.7. "No occupancy" of the development shall be permitted, in whole or in part, unless the development is completed in accordance with a City-approved Occupancy Staging Plan.

12. Residential Requirements:

- 12.1. <u>Maximum Residential Floor Area</u>: Registration on title of a restrictive covenant and/or alternative legal agreement, to the satisfaction of the City, for the purpose of restricting the maximum buildable residential floor area (including affordable housing and market strata) on the subject site to 27,741.1 m² (298,603.0 ft²), exclusive of residential indoor amenity space and standard Zoning Bylaw floor area exclusions (e.g., parking and elevator/stair cores).
- Affordable Housing: The City's acceptance of the developer/owner's offer to voluntarily contribute 12.2. affordable housing, in the form of low-end market rental (LEMR) units, constructed to a turnkey level of finish on the subject site at the sole cost of the developer, the terms of which voluntary contribution shall include, but will not be limited to, the registration of the City's standard Housing Agreement and Covenant on title to secure the affordable housing units. The form of the Housing Agreements and Covenant shall be agreed to by the developer and the City prior to final adoption of the subject rezoning application; after which time, only the Housing Covenant may be amended or replaced and any such changes will only be permitted for the purpose of accurately reflecting the specifics of the Development Permit* for the subject site and other non-materials changes resulting thereof and made necessary by the Development Permit* approval requirements, as determined to the satisfaction of the Director of Development and Director of Community Social Development. The terms of the Housing Agreement and Covenant shall indicate that they apply in perpetuity and provide for, but will not be limited to, the requirements set out in the Affordable Housing Stand-Alone Building Terms of Reference (Schedule C). "No occupancy" of the development shall be permitted, in whole or in part, unless the development is completed in accordance with a City-approved Occupancy Staging Plan.
- 12.3. <u>Market Resident Cycling Facilities</u>: Registration on title of a restrictive covenant and/or alternative legal agreement, to the satisfaction of the City, for the purpose of requiring that the developer/owner provides, installs, and maintains bike maintenance facilities and "Class 1" bike storage on-site for the use of the occupants of the subject development's market residential units (i.e. not the affordable housing units), which measures shall generally be clustered together adjacent to each of the market residential housing's 3 elevator/stair cores, as determined to the satisfaction of the City through the Development Permit* review and approval processes. More specifically:
 - 12.3.1. The developer/owner shall, at its sole cost, design, install, and maintain cycling facilities on the lot for the shared use of the development's market residential tenants (i.e. not shared with the Affordable Housing Stand-Alone Building occupants), including:
 - a) Bike repair and maintenance facilities, at a rate of 1 per elevator/stair core (i.e. 3 in total), each of which shall comprise a foot-activated pump, repair stand with integrated tools, and a bike wash; and
 - b) EV-equipped storage facilities in the form of "Class 1" bike storage spaces for the market residential tenants of the building, at a rate of 1.25 bike spaces/unit (as per the Zoning Bylaw), which bike storage must include 120V energized (duplex) outlets for the shared use of cyclists at a rate of 1 energized (duplex) outlet for each 10 bike storage spaces or portion thereof in each bike storage room (which energized outlets shall be located to facilitate shared use by bikes in the storage room).
 - 12.3.2. "No development" shall be permitted on the lot, restricting Development Permit* issuance for any building on the lot, in whole or in part, unless the permit provides for the required cycling facilities to the satisfaction of the City;

PLN - 194

- 12.3.3. No Building Permit* shall be issued for a building on the lot, in whole or in part (excluding parking intended as an ancillary use to non-parking uses), unless the permit provides for the required cycling facilities to the satisfaction of the City and a letter of confirmation is submitted by the architect assuring that the design of the facilities satisfies all applicable City's requirements; and
- 12.3.4. "No occupancy" of the development shall be permitted, in whole or in part, unless the development is completed in accordance with a City-approved Occupancy Staging Plan.
- 12.4. <u>Residential Visitor Parking</u>: Registration on title of a restrictive covenant and/or alternative legal agreement, to the satisfaction of the City, for the purpose of requiring that the developer/owner provides, installs (including appropriate signage), and maintains 20 designated parking spaces for the use of visitors to the subject development's market housing and affordable housing units/tenants on the basis of:

12.4.1. 5 spaces for the exclusive use of each market residential tower (i.e. 15 in total); and

12.4.2. 5 spaces for the exclusive use of the Affordable Housing Stand-Alone Building.

In addition, as indicated with respect to the required "Commercial Parking" covenant, visitors to the subject development's market housing and affordable housing units/tenants shall have shared use of the Public Parking on the same terms as members of the general public.

Note: Compliance with this section and the "Commercial Parking" covenant shall be understood to fully satisfy the subject development's visitor parking requirements with respect to the Zoning Bylaw.

13. Non-Profit Social Service Agency Accommodation Measures: The City's acceptance of the developer's offer to voluntarily contribute affordable community amenity space for operation by non-profit social service agencies, together with tenant relocation assistance, as determined to the satisfaction of the City. The terms of the developer's contribution shall include, but shall not be limited to, the developer's design and construction (to a shell level of finish, at the developer's sole cost) of at least 425.7 m² (4,582.0 ft²) of gross leasable space on the east side of subject site (co-located with the Affordable Housing Stand-Alone Building), together with related uses/spaces (e.g., lobby, circulation, parking), to the satisfaction of the City. The form of the legal agreements securing the developer's commitment shall be agreed to by the developer and the City prior to final adoption of the subject rezoning application; after which time, the agreement(s) may only be amended or replaced for the purpose of accurately reflecting the specifics of the Development Permit* for the subject site and other non-materials changes resulting thereof and made necessary by the Development Permit* approval requirements, as determined to the satisfaction of the Director of Development and Director of Community Social Development. The terms of the legal agreements shall indicate that they apply in perpetuity and provide for, but will not be limited to, the requirements set out in the Non-Profit Social Service Agency Accommodation Measures Terms of Reference. "No occupancy" of the development shall be permitted, in whole or in part, unless the development is completed in accordance with a Cityapproved Occupancy Staging Plan.

<u>Note</u>: For the purposes of calculating maximum permitted floor area under the Zoning Bylaw, the non-profit social service agency tenant units, circulation intended for the exclusive use of the non-profit social service agency tenants and their visitors, and any lobby and/or vertical circulation shared by the non-profit social service agency tenants and the occupants of the Affordable Housing Stand-Alone Building shall be treated as "community amenity space" to a maximum of 0.1 FAR, as permitted under the Residential/Limited Commercial (RCL3) zone.

- 14. <u>Driveway Crossings</u>: Registration on title of a restrictive covenant and/or alternative legal agreement, to the satisfaction of the City, to ensure that all vehicle access to the subject site shall be from the new City Road along the east side of the subject site (i.e. not from Minoru Boulevard).
- 15. <u>Tandem Parking</u>: Registration on title of a restrictive covenant and/or alternative legal agreement, to the satisfaction of the City, to ensure that:
 - 15.1. <u>Resident Parking</u>: Where two parking spaces are provided in a tandem arrangement for the use of resident parking (excluding Affordable Housing Stand-Alone Building parking), as per the Zoning Bylaw, both parking spaces must be assigned to the same dwelling unit; and
 - 15.2. <u>Elsewhere</u>: Tandem parking shall be prohibited for all other purposes including, but not limited to, parking for the Affordable Housing Stand-Alone Burlin occups is and Commercial (Public and Assignable) Parking.

- 16.1. No Building Permit* will be issued for a building on the subject site unless the building is designed with the capability to connect to and be serviced by a DEU and the owner has provided an energy modelling report satisfactory to the Director of Engineering;
- 16.2. If a low carbon energy plant district energy utility (LCDEU) service area bylaw which applies to the site has been adopted by Council prior to the issuance of the development permit for the subject site, no Building Permit* will be issued for a building on the subject site unless:
 - 16.2.1. The owner designs, to the satisfaction of the City and the City's DEU service provider, Lulu Island Energy Company Ltd. (LIEC), a low carbon energy plant to be constructed and installed on the site, with the capability to connect to and be serviced by a DEU; and
 - 16.2.2. The owner enters into an asset transfer agreement with the City and/or the City's DEU service provider on terms and conditions satisfactory to the City to transfer ownership of the low carbon energy plant to the City or as directed by the City, including to the City's DEU service provider, at no cost to the City or City's DEU service provider, LIEC, on a date prior to final building inspection permitting occupancy of the first building on the site. Such restrictive covenant and/or asset transfer agreement shall include a warranty from the owner with respect to the on-site DEU works (including the low carbon energy plant) and the provision by the owner of both warranty and deficiency security, all on terms and conditions satisfactory to the City;
- 16.3. The owner agrees that the building(s) will connect to a DEU when a DEU is in operation, unless otherwise directed by the City and the City's DEU service provider, LIEC.
- 16.4. If a DEU is available for connection and the City has directed the owner to connect, no final building inspection permitting occupancy of a building will be granted unless, and until:
 - 16.4.1. The building is connected to the DEU;
 - 16.4.2. The owner enters into a Service Provider Agreement for that building with the City and/or the City's DEU service provider, LIEC, executed prior to depositing any Strata Plan with LTO and on terms and conditions satisfactory to the City; and
 - 16.4.3. Prior to subdivision (including Air Space parcel subdivision and Strata Plan filing), the owner grants or acquires, and registers, all Statutory Right-of-Way(s) and/or easements necessary for supplying the DEU services to the building.
- 16.5. If a DEU is not available for connection, but a LCDEU service area bylaw which applies to the site has been adopted by Council prior to the issuance of the development permit for the subject site, no final building inspection permitting occupancy of a building will be granted unless and until:
 - 16.5.1. The City receives a professional engineer's certificate stating that the building has the capability to connect to and be serviced by a DEU;
 - 16.5.2. The building is connected to a low carbon energy plant supplied and installed by the owner, at the owner's sole cost, to provide heating, cooling and domestic hot water heating to the building(s), which energy plant will be designed, constructed and installed on the subject site to the satisfaction of the City and the City's service provider, LIEC;
 - 16.5.3. The owner transfers ownership of the low carbon energy plant on the subject site, to the City or as directed by the City, including to the City's DEU service provider, LIEC, at no cost to the City or City's DEU service provider, on terms and conditions satisfactory to the City;
 - 16.5.4. Prior to depositing a Strata Plan, the owner enters into a Service Provider Agreement for the building with the City and/or the City's DEU service provider, LIEC, on terms and conditions satisfactory to the City; and

PLN - 196

- 16.5.5. Prior to subdivision (including Air Space parcel subdivision and Strata Plan filing), the owner grants or acquires, and registers, all additional Covenants, Statutory Right-of-Way(s) and/or easements necessary for supplying the services to the building and the operation of the low carbon energy plant by the City and/or the City's DEU service provider, LIEC.
- 16.6. If a DEU is not available for connection, and a LCDEU service area bylaw which applies to the site has not been adopted by Council prior to the issuance of the development permit for the subject site, no final building inspection permitting occupancy of a building will be granted until:
 - 16.6.1. The City receives a professional engineer's certificate stating that the building has the capability to connect to and be serviced by a DEU; and
 - 16.6.2. The owner grants or acquires any additional Statutory Right-of-Way(s) and/or easements necessary for supplying DEU services to the building, registered prior to subdivision (including Air Space parcel subdivision and strata plan filing).
- 17. Occupancy Staging Agreement: Registration on title of a restrictive covenant and/or alternative legal agreement, to the satisfaction of the City, securing that should the developer/owner request that occupancy of the building proceeds in stages (e.g., tower-by-tower), that "no occupancy" shall be permitted of any portion of the building, in whole or in part (excluding parking intended as an ancillary use to non-parking uses), unless the developer/owner satisfies the following:
 - 17.1. Prior to first occupancy of the building on the subject site, in whole or in part (exclusive of any provisional occupancy permitted exclusively for construction and/or tenant improvement purposes), the developer/owner shall:
 - 17.1.1. Complete the prior-to-first-occupancy requirements to the satisfaction of the Director of Development, Director of Transportation, Director, Parks Services, and Director of Engineering including:
 - a) All District Energy Utility requirements;
 - b) All Affordable Non-Profit Social Service Agency Replacement Space ("Replacement Space") requirements (including, but not limited to tenant improvements and parking); and
 - c) All engineering, transportation, and parks works subject to a Servicing Agreement* including, but not limited to, the Minoru Corner Plaza Expansion (SRW). (Note: For off-site works and improvements within SRW areas, completion to the City's satisfaction shall mean, among other things, that the works have received a Certificate of Completion, final Building Permit* inspection granting occupancy, or alternate City approval(s), as determined to be applicable at the sole discretion of the City.)
 - 17.1.2. Submit a letter prepared by the architect confirming that all prior-to-first-occupancy requirements are complete.
 - 17.2. Prior to occupancy of any <u>commercial</u> uses on the subject site, in whole or in part (exclusive of any provisional occupancy permitted exclusively for construction and/or tenant improvement purposes), the developer/owner shall complete the following to the satisfaction of the Director of Development and Director of Transportation and receive, as applicable, a Certificate of Completion and/or final Building Permit* inspection granting occupancy for those features:
 - 17.2.1. 100% of the prior-to-first-occupancy requirements;
 - 17.2.2. 100% of the Public Parking portion of the development's required Commercial Parking spaces;
 - 17.2.3. 100% of the Non-Residential Tenant Cycling Facilities;
 - 17.2.4. 100% of the Car-Share Measures, including the developer/owner's required contract with a car-share operator;
 - 17.2.5. A proportional share of the Assignable Parking portion of the development's required Commercial Parking spaces;

PLN - 197

- 17.2.6. A proportional share of EV charging infrastructure for vehicles and bikes, loading and waste management facilities, and other features as required to satisfy the Zoning Bylaw and Development Permit*;
- 17.2.7. Implementation, to the City's satisfaction, of the required Commercial Tenant Transit Pass Program (as secured by legal agreement registered on title to the lot); and
- 17.2.8. Submission of a letter prepared by the architect confirming that all applicable prior-to-<u>commercial</u> occupancy-requirements are complete.
- 17.3. Prior to occupancy of any <u>residential</u> uses on the subject site, in whole or in part (exclusive of any provisional occupancy permitted exclusively for construction activities and/or tenant improvement purposes), the developer/owner shall complete the following to the satisfaction of the Director of Development, Director of Transportation, and Manager of Community Social Development and receive as applicable, a Certificate of Completion and/or final Building Permit* inspection granting occupancy for those features:
 - 17.3.1. 100% of the prior-to-first-occupancy requirements;
 - 17.3.2. 100% of the Affordable Housing Stand-Alone Building and all related features/requirements (e.g., Basic Universal Housing units, parking, cycling facilities, and related EV charging infrastructure, indoor and outdoor amenity spaces, and waste management facilities), together with implementation, to the City's satisfaction, of the required Affordable Housing Transit Pass Program (as secured by legal agreement registered on title to the lot);
 - 17.3.3. 100% of the development's required Residential Visitor Parking spaces for the use of visitors to the market housing and affordable housing units/tenants;
 - 17.3.4. 100% of the Public Parking portion of the development's required Commercial Parking spaces;
 - 17.3.5. A proportional share of residential parking, residential cycling facilities, and related EV charging infrastructure, indoor and outdoor amenity spaces, loading and waste management facilities, and other features as required to satisfy the Zoning Bylaw and Development Permit*; and
 - 17.3.6. Submission of a letter prepared by the architect confirming that all applicable prior-to-<u>residential</u> occupancy-requirements are complete.
- 17.4. Related Permits Holds:

<u>Note</u>: For clarity, the following restrictions are NOT intended to apply to tenant improvements undertaken with respect to the existing building or construction activity required with respect to tenant improvements to commercial units in the subject development, as determined at the City's discretion.

- 17.4.1. "No development" shall be permitted on the subject site, restricting Development Permit* issuance for any building on the subject site, unless the permit includes the entirety of the subject development.
- 17.4.2. No Building Permit* shall be issued for a building on the subject site unless the permit, which may be issued in parts (e.g., partial permit issuance for foundation works), includes the entirety of the subject development and a letter of confirmation is submitted by the architect assuring that the design of the building and related features satisfies all applicable City's requirements.
- 17.4.3. "No occupancy" shall be permitted of a building on the lot, in whole or in part (exclusive of any provisional occupancy permitted exclusively for construction activities and/or tenant improvement purposes), unless the building and related features are completed in accordance with the City-approved Occupancy Staging Plan (which may be amended subject to an approved Development Permit) to the satisfaction of the City and a letter of confirmation is submitted by the architect assuring that the building and related features satisfy all applicable City's requirements.
- 18. <u>Development Permit*</u>: The submission and processing of a Development Permit* for the entirety of the subject development to a level deemed acceptable by the Director of Development.

PLN - 198

Servicing Agreement* works shall include, but may not be limited to, the following:

- 19.1. <u>Engineering Servicing Agreement* Requirements</u>: The developer shall be responsible for the design and construction of water, storm sewer, sanitary sewer, frontage improvements, and general engineering works to the satisfaction of the Director of Engineering, which works shall include, but may not be limited to, those set out in **Schedule E.** (Development Cost Charge (DCC) credits may apply.)
- 19.2. <u>Transportation Servicing Agreement* Requirements</u>: The developer shall be responsible for the design and construction of road and related improvements, to the satisfaction of the Director of Transportation, which works shall include, but may not be limited to, those set out in **Schedule F**, **Schedule G**, and **Schedule H**. (Development Cost Charge (DCC) credits may apply.)
- 19.3. <u>Parks Servicing Agreement* Requirements</u>: The developer shall be responsible for the design and construction of park and related improvements, to the satisfaction of the Director, Parks (Services) and Director of Development, which works shall include, but may not be limited to, those set out in Schedule I. (Development Cost Charge (DCC) credits shall <u>not</u> apply.)

Prior to a Development Permit^{*} being forwarded to the Development Permit Panel for consideration, among other things the developer/owner must complete the following requirements:

- 1. Submission of a letter prepared by a BCLS registered surveyor confirming that information submitted prior to Council consideration of the rezoning application remains up to date with respect to building height compliance with Transport Canada regulations.
- 2. Submission of an acoustical and mechanical report and recommendations prepared by an appropriate registered professional, which demonstrates that the interior noise levels and noise mitigation standards comply with the City's Official Community Plan and Noise Bylaw requirements. The standard required for air conditioning systems and their alternatives (e.g. ground source heat pumps, heat exchangers and acoustic ducting) is the ASHRAE 55-2004 "Thermal Environmental Conditions for Human Occupancy" standard and subsequent updates as they may occur. Maximum interior noise levels (decibels) within the dwelling units must achieve CMHC standards follows:

Portions of Dwelling Units	Noise Levels (decibels)
Bedrooms	35 decibels
Living, dining, recreation rooms	40 decibels
Kitchen, bathrooms, hallways, and utility rooms	45 decibels

- 3. Richmond Fire Department (RFD) review, which may include, but may not be limited to:
 - Addressing (e.g., visible from the street, contrasting colours);
 - Fire hydrant measurements (e.g., principle entrance, RFD connection);
 - Fire panel (e.g., operation sequence, stages, elevator operation);
 - RFD connection (e.g., inter-connected, connections at amenities, podium roof, other accessible rooftops and open spaces);
 - Fire ratings (e.g., podium);
 - RFD access route measurements (e.g., widths, lengths, dead ends);
 - Smoke control measures (e.g., vestibules, stairwells, kitchens);
 - Tank permits (e.g., emergency generator);

PLN - 199

- Emergency generator (e.g., power) and the spaces serviced (e.g., firefighter elevator, annunciator panel, emergency lights);
- Designated firefighter elevator;
- Firefighter voice communication;
- Fire extinguisher installation areas (e.g., measurements); and
- Alarm-activated front door release.

Prior to Building Permit issuance, among other things the developer/owner must complete the following requirements:

- Submission of a Construction Parking and Traffic Management Plan to the Transportation Department. Management
 Plan shall include location for parking for services, deliveries, workers, loading, application for any lane closures, and
 proper construction traffic controls as per Traffic Control Manual for works on Roadways (by Ministry of
 Transportation) and MMCD Traffic Regulation Section 01570.
- 2. Incorporation of accessibility measures in Building Permit* plans in compliance with the approved rezoning and/or Development Permit*.
- 3. Receipt of a Building Permit* for any construction hoarding. If construction hoarding is required to temporarily occupy a public street, the air space above a public street, or any part thereof, additional City approvals and associated fees may be required as part of the Building Permit*. For additional information, contact the Building Approvals Department at 604-276-4285.

Note:

- The asterisk (*) indicates that a separate application is required.
- Where the Director of Development deems appropriate, the preceding agreements are to be drawn not only as personal covenants
 of the property owner but also as covenants pursuant to Section 219 of the Land Title Act.

All agreements to be registered in the Land Title Office shall have priority over all such liens, charges and encumbrances as is considered advisable by the Director of Development. All agreements to be registered in the Land Title Office shall, unless the Director of Development determines otherwise, be fully registered in the Land Title Office prior to enactment of the appropriate bylaw.

The preceding agreements shall provide security to the City including indemnities, warranties, equitable/rent charges, letters of credit and withholding permits, as deemed necessary or advisable by the Director of Development. All agreements shall be in a form and content satisfactory to the Director of Development.

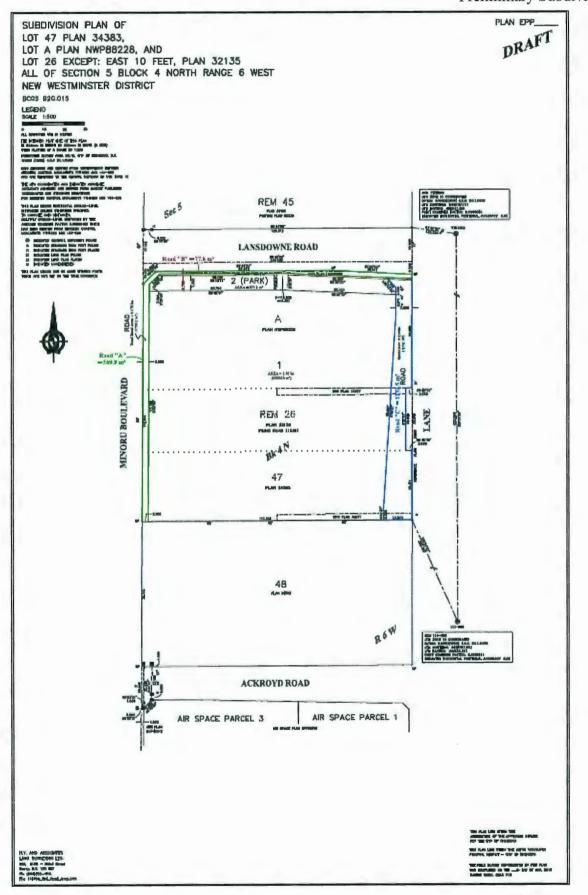
- Additional legal agreements, as determined via the subject development's Servicing Agreement(s) and/or Development Permit(s), and/or Building Permit(s) to the satisfaction of the Director of Engineering may be required including, but not limited to, site investigation, testing, monitoring, site preparation, de-watering, drilling, underpinning, anchoring, shoring, piling, pre-loading, ground densification or other activities that may result in settlement, displacement, subsidence, damage or nuisance to City and private utility infrastructure.
- Applicants for all City Permits are required to comply at all times with the conditions of the Provincial Wildlife Act and Federal Migratory Birds Convention Act, which contain prohibitions on the removal or disturbance of both birds and their nests. Issuance of Municipal permits does not give an individual authority to contravene these legislations. The City of Richmond recommends that where significant trees or vegetation exists on site, the services of a Qualified Environmental Professional (QEP) be secured to perform a survey and ensure that development activities are in compliance with all relevant legislation.

Signed copy on file

Signed

Date

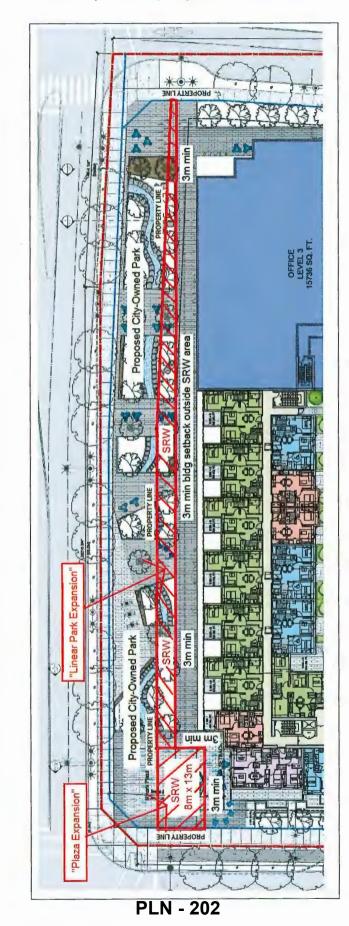
Schedule A Preliminary Subdivision Plan



PLN - 201

Schedule B

Preliminary Statutory Right-of-Way Plan (City-Owned Park Enhancement Area)



Initial: ____

RZ 18-807640 Affordable Housing Stand-Alone Building Terms of Reference

Prior to final adoption of Richmond OCP Amendment Bylaw No. 10050 and Bylaw No. 10102 and Zoning Amendment Bylaw No. 10051, the developer/owner is required to complete the following:

<u>Affordable Housing</u>: The City's acceptance of the developer/owner's offer to voluntarily contribute affordable housing, in the form of low-end market rental (LEMR) units, constructed to a turnkey level of finish on the subject site at the sole cost of the developer, the terms of which voluntary contribution shall include, but will not be limited to, the registration of the City's standard Housing Agreement and Covenant on title to secure the affordable housing units. The form of the Housing Agreements and Covenant shall be agreed to by the developer and the City prior to final adoption of the subject rezoning application; after which time, only the Housing Covenant may be amended or replaced and any such changes will only be permitted for the purpose of accurately reflecting the specifics of the Development Permit* for the subject site and other non-materials changes resulting thereof and made necessary by the Development Permit* approval requirements, as determined to the satisfaction of the Director of Development and Director of Community Social Development. The terms of the Housing Agreement and Covenant shall indicate that they apply in perpetuity and provide for, but will not be limited to, the requirements set out in the Affordable Housing Stand-Alone Building Terms of Reference. "No occupancy" of the development shall be permitted, in whole or in part, unless the development is completed in accordance with a City-approved Occupancy Staging Plan.

- 1. *Stand-Alone Building & Not-for-Profit Operator*: The developer/owner have indicated to the City that they plan to pursue an agreement with a not-for-profit organization to manage the development's required LEMR units. To support this partnership, the City is willing to accept clustering of the required LEMR units in the form of a stand-alone building, together with the clustering of other building features intended for the exclusive use of the affordable housing occupants (e.g., parking, Class 1 bike storage, indoor and outdoor amenity spaces, and waste management features).
 - a) The affordable housing shall occupy one (1) stand-alone building fronting the new City Road along the east frontage of the subject site;
 - b) The stand-alone building shall be integrated with the development's underground parking structure, roof deck, and related features, but will be designed to function as an independent building that does not share common circulation (e.g., lobbies, hallways, elevators, and stairs), emergency exit routes, or indoor/outdoor residential amenity spaces with the market-residential or commercial uses on the subject site; and
 - c) The "stand-alone" affordable housing building shall be located within an Air Space Parcel approved by the City. Legal agreements shall be registered on title, to the satisfaction of the City, to ensure that the affordable housing building occupants, not-for-profit operator, guests, and designates have adequate access to and enjoyment of facilities intended for their exclusive use (e.g., parking, "Class 1" bike storage, indoor/outdoor amenity spaces, waste management facilities, and related spaces and uses) and shared use with other occupants (residential and commercial) of the development (e.g., driveways, loading, waste management facilities, and related spaces and uses), as determined to the City's satisfaction through the Development Permit*. Use of any such exclusive or shared facilities shall result in no additional charge to the affordable housing building occupants (i.e. no monthly rents or other user fees shall apply for casual, shared, or other use). In the event that any exclusive or shared facilities are not part of the Air Space Parcel (e.g., parking) and the not-for-profit operator is subject to additional charges for the use of such facilities, any such charges may not exceed the rates charges to other users on the lot for access to/use of similar uses and spaces, as determined to the City's satisfaction.
- 2. *Minimum Required Floor Area*: The required minimum floor area of the affordable housing building, exclusive of parking, bike storage, and ancillary uses not intended for the exclusive use of the affordable housing occupants, shall comprise the combined total area of the following ,as determined to the satisfaction of the Director of Development and Director of Community Social Services and set out in an approved Development Permit*:

PLN - 203

- a) At least 2,774.1 m² (29,860.3 ft²) of habitable affordable housing dwelling unit floor area, based on 10% of the maximum residential floor area permitted on the subject site (as per the Maximum Residential Floor Area agreement required to be registered on title to the lot);
- b) Circulation (e.g., lobbies, hallways, elevators, and stairs) intended for the exclusive use of the affordable housing occupants;
- c) Indoor amenity space within and around the affordable housing building, designed and secured for the exclusive use of the affordable housing occupants, the size of which space shall comply at a minimum with standard City OCP and City Centre Area Plan (CCAP) policy as applicable to a "stand alone" building without access to amenities shared with another building; and
- d) All walls, mechanical, electrical, and similar spaces required to facilitate the developer/owner's provision of the proposed "stand alone" affordable housing building on the lot.
- 3. Housing Requirements: The developer/owner shall, as generally indicated in the table below:
 - a) Ensure that the types, sizes, rental rates, and occupant income restrictions for the affordable housing units are in accordance with the City's Affordable Housing Strategy and guidelines for Low End Market Rental (LEMR) housing, unless otherwise agreed to by the Director of Development and Director, Community Social Development; and
 - b) Achieve the Project Targets for unit mix and Basic Universal Housing (BUH) standard compliance or as otherwise determined to the satisfaction of the Director, Community Social Development through an approved Development Permit*.

Unit	Minimum Unit Maximum Monthl		Total Maximum	Project Unit Targets	
Types	Area	LEMR Unit Rent***	Household Income**	Unit Mix**	BUH Units*
Bachelor	37 m ² (400 ft ²)	\$811	\$34,650 or less	+/-5% (2)	N/A
1-Bedroom	50 m ² (535 ft ²)	\$975	\$38,250 or less	+/-36% (17)	100%
2-Bedroom	69 m ² (741 ft ²)	\$1,218	\$46,800 or less	+/-53% (25)	100%
3-Bedroom	91 m ² (980 ft ²)	\$1,480	\$58,050 or less	+/-6% (3)	100%
TOTAL	Varies	Varies	Varies	100% (47)	100%

- BUH units mean those units that are designed and constructed to satisfy the Zoning Bylaw's Basic Universal Housing standards. (NOTE: The Zoning Bylaws permits a floor area exemption of 1.86 m² / 20 ft² per BUH unit.)
- ** The unit mix will be confirmed to the satisfaction of the City through the Development Permit* process. The recommended unit mix is indicated in the table; however, based on approved design, which may take into account non-profit housing operator input, the unit mix may be varied provided that at least 50% of total affordable housing units are some combination of "family friendly", 2- and 3-bedroom units.
- *** Rate shall be adjusted periodically as provided for under adopted City policy.
- c) Occupants of the affordable housing units shall, to the satisfaction of the City (as determined prior to Development Permit* approval), enjoy full and unlimited access to and use of all on-site indoor and outdoor amenity spaces provided with respect to the affordable housing building as per OCP, City Centre Area Plan, and Development Permit* requirements, at no additional charge to the affordable housing tenants (i.e. no monthly rents or other fees shall apply for the casual, shared, or exclusive use of any amenities).

4. Transportation Requirements:

- a) <u>Transportation Demand Management (TDM) Measures</u>: Among other things, the terms of the Housing Covenant (or an alternative legal agreement if so determined by the City) shall secure various TDM measures for the purpose of satisfying Zoning Bylaw (TDM) requirements permitting affordable housing parking reductions of up to 10%, including:
 - i. <u>Affordable Housing Cycling Facilities</u>: The developer/owner's provision of bike-related measures for the exclusive use of the occupants of the Affordable Housing Stand-Alone Building, which measures shall be clustered together adjacent to the Affordable Housing Stand-Alone Building's elevator/stair **PLN - 204**

core, as determined to the satisfaction of the City through the Development Permit* review and approval processes, including:

- EV-equipped "Class 1" bike storage spaces at a rate of 2.0 bikes/affordable housing unit (i.e. increased from the Zoning Bylaw rate of 1.25 bikes/unit), which bike storage must include 120V energized (duplex) outlets for the shared use of cyclists at a rate of 1 energized (duplex) outlet for each 10 bike storage spaces or portion thereof in each bike storage room (which energized outlets shall be located to facilitate shared use by bikes in the storage room);
- 10% of the required "Class 1" bike storage in the form of over-size lockers for family bike storage (e.g., bike trailers), electric-assist vehicles (e.g., mopeds), and similar equipment/uses; and
- A bike repair and maintenance facility comprised of a foot-activated pump, repair stand with integrated tools, and a bike wash.
- ii. <u>Affordable Housing Transit Pass Program</u>: The developer/owner's implementation, at the developer/owner's sole cost, of a coordinated strategy providing for monthly transit (2-zone) passes for 1 year for 100% of the affordable housing units.
- b) <u>Transportation Features</u>: On-site parking, "Class 1" bike storage, and related electric vehicle (EV) charging stations shall be provided for the use of affordable housing occupants as per the OCP, Zoning Bylaw, and approved Development Permit* at no additional charge to the affordable housing tenants (i.e. no monthly rents or other fees shall apply for the casual, shared, or exclusive use of the parking spaces, bike storage, EV charging stations, or related facilities by affordable housing tenants), which features may be secured via legal agreement(s) on title prior to Development Permit* issuance or as otherwise determined to the satisfaction of the City. (For clarity, those occupants of the affordable units who utilize the vehicle EV charging stations may be required to pay for the cost of their utility usage, but not for their use of the EV charging equipment or associated parking.)

Features	Min. Rate Min. Number		Min. Energized Outlets
Vehicle Parking	(0.9 spaces/unit – 10%) x 47 units (secured for exclusive use) 39 spaces		100% of spaces (1)
Visitor Parking	5 spaces (secured for exclusiv plus visitors shall have shared use of Co Parking Spaces on the same terms as th	N/A	
Class 1 (Secured) Bike Storage	2.0 spaces/unit x 47 units, including 10% over-size lockers for family bike storage (e.g., bike trailers), electric-assist vehicles (e.g., mopeds), and similar equipment/uses (secured for exclusive use)		1 per each 10 bikes or portion thereof in a bike storage room (which Energized Outlet shall be located to facilitate shared use by bikes in the storage room).
Bike Maintenance 1 Facility (3) 1 Facility (secured for exclusive use) 1 Facility		N/A	

- (2) Vehicle Parking Energized Outlet shall mean all the wiring, electrical equipment, and related infrastructure necessary to provide Level 2 charging or higher to an electric vehicle, as per the Zoning Bylaw
- (3) Class 1 (Secured) Bike Storage Energized Outlet shall mean an operational 120V duplex outlet for the charging of an electric bicycle and all the wiring, electrical equipment, and related infrastructure necessary to provide the required electricity for the operation of such an outlet.
- (4) Bike Maintenance facility shall mean a bike repair and maintenance station comprising a foot-activated pump, repair stand with integrated tools, and a bike wash.

NOTE: For ease of use and security, the required Class 1 (Secured) Bike Storage and Bike Maintenance Facility shall be clustered together and have convenient and safe access to the Affordable Housing building's elevator/stair core.

5. **Building Features**: The affordable housing units, related uses (e.g., parking, garbage/recycling, hallways, amenities, lobbies), and associated landscaped areas shall be completed, to a turnkey level of finish, at the sole cost of the developer, to the satisfaction of the Director of Development and Director, Community Social Development. Building features shall include, but may not be limited to the following items.

PLN - 205

- a) Indoor amenity space shall be provided within and around the affordable housing building; which spaces shall be designed and secured for the exclusive use of the affordable housing occupants and satisfy standard City OCP and City Centre Area Plan (CCAP) policies with respect to minimum amenity size, which for clarity shall:
 - i. Be calculated based on a rate of at least 100 m^2 (1,076 ft²) or 2.0 m² (21.5 ft²) per affordable housing unit, whichever is greater, for some combination of social, recreational, cultural, and/or educational purposes; and
 - ii. In addition to the above, include at least $19 \text{ m}^2 (200 \text{ ft}^2)$ for use as administrative (e.g., office) space for the use of the not-for-profit housing operator.
- b) Outdoor residential amenity space shall be provided for the shared recreational and social use of the affordable housing occupants at a rate of at least 6 m² (65 ft²) per affordable housing unit, in compliance with standard City OCP and City Centre Area Plan (CCAP) policies, together with additional landscaped space made necessary by the developer's proposed "stand-alone" affordable housing building including, as applicable and to the satisfaction of the City, landscaped areas required for access to/from/around the outdoor amenity and to buffer it from sensitive neighbouring uses.
- c) The affordable housing building, including its housing units and common areas (e.g., circulation, lobbies, indoor/outdoor amenity spaces, parking, bike storage, and waste management areas), shall be accessible to people with disabilities, in compliance with the BC Building Code or as otherwise determined to the satisfaction of the Director of Community Social Development and Manager of Building Approvals.
- d) The affordable housing building, including their common areas and housing units, shall be equipped with an audio/visual alarm systems.

6. Prior-to Requirements:

- a) "No development" shall be permitted on the subject site, restricting Development Permit* issuance for a building on the site, in whole or in part, until the developer, to the City's satisfaction:
 - i. Submits, for consideration by the City, a memorandum of understanding with a not-for-profit operator demonstrating, among other things, support for the developer's proposed clustered affordable housing unit arrangement and unit mix on the lot;
 - ii. Designs the lot to provide for the affordable housing units and required ancillary spaces and uses comprising the developer's proposed "stand-alone" affordable housing building (e.g., Basic Universal Housing units, parking, cycling facilities, and related EV charging infrastructure, indoor and outdoor amenity spaces, and waste management facilities);
 - iii. Amends or replaces the Housing Covenant to accurately reflect the specifics of the affordable housing units and ancillary spaces and uses as per the approved Development Permit*; and
 - iv. As required, registers additional legal agreements on title to the site to facilitate the detailed design, construction, operation, and/or management of the affordable housing units and/or ancillary spaces and uses (e.g., parking) as determined by the City via the Development Permit* review and approval processes.
- b) No Building Permit* shall be issued for a building on the subject site, in whole or in part (excluding parking intended as an ancillary use to non-parking uses), unless:
 - i. The developer provides for the required affordable housing units and ancillary spaces and uses comprising the proposed "stand-alone" affordable housing building (e.g., Basic Universal Housing units, parking, cycling facilities, and related EV charging infrastructure, indoor and outdoor amenity spaces, and waste management facilities) in the permit;
 - ii. The detailed design shall of the "stand-alone" affordable housing building and all related spaces and features are satisfactory to the Director of Development and Director, Community and Social Development in their sole discretion; and
 - iii. A letter of confirmation is submitted by the architect assuring that the design of the facilities satisfies all applicable City requirements.
- c) As set out in the Occupancy Staging Plan requirements, prior to occupancy of any <u>residential</u> use on the subject site, in whole or in part (exclusive of any provisional occupancy permitted exclusively for construction and/or tenant improvement purposes), the development of any provisional set of the subject state of the subject of

- i. Complete the required affordable housing units and ancillary spaces and uses comprising the developer's proposed stand-alone affordable housing building (e.g., Basic Universal Housing units, parking, cycling facilities, and related EV charging infrastructure, indoor and outdoor amenity spaces, and waste management facilities) to the satisfaction of the City; and
- ii. Implement the required Affordable Housing Transit Pass Program to the satisfaction of the City (as secured by legal agreement registered on title to the lot).

RZ 18-807640 Non-Profit Social Service Agency Accommodation Measures Terms of Reference

Prior to final adoption of Richmond OCP Amendment Bylaw No. 10050 and Bylaw No. 10102 and Zoning Amendment Bylaw No. 10051, the developer/owner is required to complete the following:

<u>Non-Profit Social Service Agency Accommodation Measures</u>: The City's acceptance of the developer's offer to voluntarily contribute affordable community amenity space for operation by non-profit social service agencies, together with tenant relocation assistance, as determined to the satisfaction of the City. The terms of the developer's contribution shall include, but shall not be limited to, the developer's design and construction (to a shell level of finish typical of commercial/office lease industry standards, at the developer's sole cost) of at least 425.7 m² (4,582.0 ft²) of gross leasable space on the east side of subject site (co-located with the Affordable Housing Stand-Alone Building), together with related uses/spaces (e.g., lobby, circulation, parking), to the satisfaction of the City. The form of the legal agreements securing the developer's commitment shall be agreed to by the developer and the City prior to final adoption of the subject rezoning application; after which time, the agreement(s) may only be amended or replaced for the purpose of accurately reflecting the specifics of the Development Permit* for the subject site and other non-materials changes resulting thereof and made necessary by the Development Permit* approval requirements, as determined to the satisfaction of the Director of Development and Director of Community Social Development. The terms of the legal agreements shall indicate that they apply in perpetuity and provide for, but will not be limited to, the requirements set out in the Non-Profit Social Service Agency Accommodation Measures Terms of Reference. "No occupancy" of the development shall be permitted, in whole or in part, unless the development is completed in accordance with a City-approved Occupancy Staging Plan.

<u>Note</u>: For the purposes of calculating maximum permitted floor area under the Zoning Bylaw, the non-profit social service agency tenant units, circulation intended for the exclusive use of the non-profit social service agency tenants and their visitors, and any lobby and/or vertical circulation shared by the non-profit social service agency tenants and the occupants of the Affordable Housing Stand-Alone Building shall be treated as "community amenity space" to a maximum of 0.1 FAR, as permitted under the Residential/Limited Commercial (RCL3) zone.

- A. *Intent*: To mitigate the impact of the subject development on two non-profit social service agencies currently located on the subject site through the developer/owner's provision, at the developer/owner's sole cost, of:
 - 1. Affordable Non-Profit Social Service Agency Replacement Space ("Replacement Space") on the subject site; and
 - 2. Tenant Relocation Assistance (as described in Section C).

Prior to adoption of the Rezoning Bylaw, legal agreements must be registered on title, to the City's satisfaction, to provide for the following Non-Profit Social Service Agency Accommodation Measures.

B. Affordable Non-Profit Social Service Agency Replacement Space ("Replacement Space"):

- 3. <u>Minimum Required Floor Area</u>: As determined to the satisfaction of the City through an approved Development Permit* application, the minimum floor area of the Affordable Non-Profit Social Service Agency Replacement Space ("Replacement Space") shall include:
 - a) At least 425.7 m² (4,582.0 ft²) of gross leasable space in the form of non-profit social service agency tenant units capable of accommodating program spaces, administration, and ancillary spaces/uses (e.g., private washrooms);
 - b) Spaces/uses intended for shared use by the non-profit social service agency tenants and their visitors (e.g., circulation and common washrooms);
 - c) Any lobby and/or vertical circulation shared by the non-profit social service agency tenants and the occupants of the Affordable Housing Stand-Alone Building; and
 - d) Ancillary uses/spaces (e.g., parking, loading, secure bicycle storage, and waste management) required to satisfy the Official Community Plan (OCP), Zoning Bylaw, and/or other City policies, objectives, or guidelines.

PLN - 208

- 4. <u>Location</u>: The Replacement Space shall be co-located with the Affordable Housing Stand-Alone Building on the east side of subject site, which co-located arrangement may include, but may not be limited to the following, as determined to the satisfaction of the City through an approved Development Permit* application:
 - a) Above the second storey, spaces/uses secured for the exclusive use of the occupants of Affordable Housing Stand-Alone Building;
 - b) At the second storey, non-profit social service agency tenant units, together with an elevator lobby and related circulation, spaces, and uses for the exclusive use of the non-profit social service agency tenants and their visitors, the design of which shall, among other things, provide for convenient, universally-accessible, and safe public access to/from the parking structure and take into account the needs of people with mobility issues and wheelchairs with attendants;
 - c) At the ground floor, a universally accessible lobby (the design of which must take into account the needs of people with mobility issues and wheelchairs with attendants) for shared use by the occupants of the Affordable Housing Stand-Alone Building, non-profit social service agency tenants, and visitors, which lobby shall provide direct access to the fronting street and a shared elevator/stair providing for:
 - i. Above the second storey, 24/7 access for the exclusive use of the Affordable Housing Stand-Alone Building occupants and their visitors; and
 - ii. At the ground and second storeys, unrestricted public access during regular business hours and secure access for non-profit social service agency tenants and Affordable Housing Stand-Alone Building occupants outside of regular business hours; and
 - d) Within the development's parkade structure, parking, loading, waste management facilities, bike storage and end-of-trip cycling facilities, and related uses/spaces for the use of the non-profit social service agency tenants (on a shared and/or exclusive basis, as determined to the City's satisfaction through an approved Development Permit* application).
- 5. <u>Parking, Loading & Waste Management Requirements</u>: As determined to the satisfaction of the City through an approved Development Permit* application, the subject development shall include, but may not be limited to:
 - a) At least 23 parking spaces for the exclusive use of the non-profit social service agency tenants (including applicable signage), which parking shall:
 - i. Be clustered together on the first parking level above the ground floor and located to provide for convenient/direct and safe public access to/from the Replacement Space's second floor lobby (the design of which must take into account people with mobility issues and wheelchairs with attendants);
 - ii. Include at least 1 Accessible Space and 1 Van-Accessible Space;
 - iii. Not include more than 12 small car spaces;
 - For at least 12 of the 23 spaces (including some combination of accessible, standard, and small car spaces), energized electric vehicle (EV) charging equipment (i.e. including all the wiring, electrical equipment, and related infrastructure necessary to provide Level 2 charging or higher to an electric vehicle, as per the Zoning Bylaw);
 - b) Bike storage provided in accordance with Zoning Bylaw requirements for retail/office uses, including:
 - i. Class 1 (secured) bike storage equipped with energized EV charging equipment (i.e. operational 120V duplex outlets and all the wiring and related infrastructure necessary to provide their operation) for the exclusive use of the non-profit social service tenants, which bike storage should be co-located with the Non-Residential Tenant Cycling Facilities "End-of-Trip Facilities"; and
 - ii. Class 2 (unsecured/public) for public use;
 - c) Shared use (secured by legal agreement) of the development's:
 - i. Non-Residential Tenant Cycling Facilities "End-of-Trip Facilities";
 - ii. Retail/office loading facilities; and
 - iii. Retail/office waste management facilities; and
 - d) Designated (i.e. marked with signage) short-term curb-side parking along the fronting street for exclusive use as a public passenger drop-off/pick-up zone for taxis, Handi Dart, and private vehicles (i.e. NOT for the exclusive use of the non-profit social service agency tenants).
- 6. <u>Tenant Eligibility</u>: As determined to the satisfaction of the City, all eligible tenants of the Replacement Space must be verifiable non-profit social services agencies that provide Richmond-serving programs. As determined at the City's discretion, preference may be given to agencies that, among other things:
 - a) Are exclusively Richmond-based; PLN 209

- b) Provide services aimed at addressing one or more City priorities (e.g., recognized local needs);
- c) Support City objectives for inclusiveness, community building, and livability of Richmond and its downtown; and/or
- d) Demonstrate opportunities for synergy with the operator and/or tenants of the Affordable Housing Stand-Alone Building.
- 7. <u>Rental Terms</u>: Rental rates and terms shall be approved by the City with the aim of ensuring that the Replacement Space shall:
 - a) Be secured in perpetuity for exclusive use as "affordable" space for non-profit social service programs, operations, and related activities/uses conducted by eligible tenants that have been pre-qualified by the developer/owner and approved by the Director of Community Social Development or their alternate.
 - b) Be subject to maximum rental rates such that:
 - i. The net rent applicable to the gross leasable area of the non-profit social service tenant units shall not exceed 50% of net market rent (i.e. based on comparable commercial spaces in Richmond's City Centre);
 - ii. An applicable base rent, together with a mechanism for periodic rent increases (i.e. every 5 years), shall be determined to the satisfaction of the City, together with an obligation to deliver to the City annual statutory declarations as to the tenant(s) and current net rent;
 - iii. The tenants of the non-profit social service tenant units shall not be subject to additional rents or other fees with respect to their casual, shared, or exclusive use of:
 - common spaces shared among the non-profit social service tenants, with the Affordable Housing Stand-Alone Building occupants, and/or with other tenants of the development (e.g., loading and waste management facilities);
 - parking provided as part of the developer/owner's Assignable Commercial Parking Spaces (secured by legal agreement), except for electrical costs with respect to the tenants' use of the EV charging equipment; or
 - Class 1 (secured) bike storage provided for the exclusive use of the non-profit social service tenants, except for electrical costs with respect to the tenants' use of the EV charging equipment.
- 8. <u>Developer/Owner Responsibility</u>: The developer/owner will be responsible (at the sole cost of the developer/owner) for the following:
 - a) Design and construction of the Replacement Space, at the developer's cost, as determined to the satisfaction of the City through an approved Development Permit* and Building Permit*, including:
 - i) At least 425.7 m^2 (4,582.0 ft²) of gross leasable space in the form of non-profit social service agency tenant units, which spaces shall be constructed to a shell level of finish typical of commercial/office lease industry standards (which, for clarity, shall include, among other things, plumbing rough-ins for two accessible washrooms and a kitchen/kitchenette in each of the two tenant units); and
 - Spaces/uses intended for shared use by the non-profit social service agency tenants and their visitors (e.g., circulation and common washrooms), any lobby and/or vertical circulation shared by the nonprofit social service agency tenants and the occupants of the Affordable Housing Stand-Alone Building, and ancillary uses/spaces (e.g., parking, loading, secure bicycle storage, and waste management) required to satisfy the Official Community Plan (OCP), Zoning Bylaw, and/or other City policies, objectives, or guidelines, which spaces shall be constructed to a turnkey level of finish;
 - b) Pre-qualifying of potential tenants for review and selection by the City;
 - c) Renting of the Replacement Space to eligible, City-approved tenants; and
 - d) Maintenance of the Replacement Space and related uses/spaces in good repair (exclusive of tenant improvements).
- 9. <u>City Responsibility</u>: The Director of Community Social Development or their alternate will be responsible for:
 - a) Defining the Replacement Space tenant eligibility criteria and, as determined to be necessary by the City in its sole discretion, updating the criteria on a periodic basis;
 - b) Setting the Council-approved rental rates for the Replacement Space and reviewing and updating the rates on a periodic basis (e.g., once every five years) as required to the City's satisfaction; and

PLN - 210

c) Approving tenants from a list of applicants that are pre-qualified by the developer/owner based on Cityapproved Replacement Space eligibility criteria. (Selection will be done via a selection panel or as otherwise determined to the sole satisfaction of the City.)

10. Tenure:

- a) *Ownership*: Developer-owned; however, the Replacement Space may be sold to an alternate owner, provided that the Replacement Space is sold as a single unit and all rights (e.g., parking, waste facilities, access, rental terms) are transferred with the Replacement Space, to the satisfaction of the City.
- b) *Legal*: Prior to adoption of the Rezoning Bylaw, legal agreements must be registered on title, to the City's satisfaction, to:
 - i. Secure the Replacement Space in perpetuity (including uses/spaces shared with the Affordable Housing Stand-Alone Building) for exclusive use as "affordable" space for non-profit social service programs, operations, and related activities/uses conducted by eligible tenants (pre-qualified by the developer/owner and approved by the Director of Community Social Development or their alternate);
 - ii. Secure easement(s) and/or alternate agreements as required with respect to parking, shared use of loading and access, rental terms, maintenance, and other considerations; and
 - iii. Provide for "no development", "no build", and "no occupancy" covenants, an option for the City to purchase (at a nominal charge), and other measures as the City determines to be necessary.
- c) Subdivision: Air Space Parcel (ASP)
- C. *Tenant Relocation Assistance*: The developer/owner shall, at the developer's sole cost and to the satisfaction of the City, provide relocation assistance to the two non-profit social service agencies currently located on the subject site including:
 - 1. Three months advance notice of the date when the agencies' current premises must be vacated;
 - 2. Assistance of a commercial real estate broker to find new spaces for the two agencies, which spaces may be temporary or permanent (as determined at the discretion of the individual agency operators); and
 - 3. First right of refusal with respect to relocating to the tenant units within the on-site Replacement Space.

D. Prior-to Requirements:

- 1. "No development" shall be permitted on the subject site, restricting Development Permit* issuance for any building on the subject site, in whole or in part, unless the developer designs the on-site Replacement Space to the satisfaction of the City.
- 2. No Building Permit* shall be issued for a building on the subject site, in whole or in part (excluding parking intended as an ancillary use to non-parking uses), unless:
 - a) The required on-site Replacement Space is incorporated in the Building Permit* drawings/specifications to the satisfaction of the Director of Development, Director of Transportation, and Director of Community Social Development; and
 - b) The developer/owner has provided for the required Tenant Relocation Assistance to the satisfaction of the Director of Community Social Development.
- 3. As set out in the Occupancy Staging Plan requirements, prior to first occupancy of the building on the subject site, in whole or in part (exclusive of any provisional occupancy permitted exclusively for construction and/or tenant improvement purposes), the developer/owner shall complete the required on-site Replacement Space to the satisfaction of the Director of Development, Director of Transportation, and Director of Community Social Development.

Non-Profit Social Service Replacement Space: Conceptual Layout

GROUND FLOOR (Lobby shared with the Affordable Housing Stand-Alone Building)

SECOND FLOOR (Non-Profit Social Service tenant units, 2nd floor lobby & designated parking spaces)



PLN - 212

RZ 18-807640

Engineering Servicing Agreement Requirements:

A servicing agreement is required to design and construct the following works.

1. Water Works:

- a. Using the OCP Model, there is 435.0 L/s of water available at a 20 psi residual at the Minoru Boulevard frontage, 320.0 L/s of water available at a 20 psi residual at the new north-south road frontage, 359.0 L/s of water available at a 20 psi residual at the Lansdowne Road frontage. Based on your proposed development, your site requires a minimum fire flow of 220 L/s.
- b. At Developer's cost, the Developer is required to:
 - i. Submit Fire Underwriter Survey (FUS) or International Organization for Standardization (ISO) fire flow calculations to confirm development has adequate fire flow for onsite fire protection. Calculations must be signed and sealed by a Professional Engineer and be based on Building Permit Stage Building designs.
 - ii. Install approximately 125 m of new 300 mm water main in the new north-south road, complete with hydrants and a blow-off at the south end per City specifications.
 - iii. Install approximately 125 m of new 300 mm water main along Minoru Boulevard from Lansdowne Road to the south property line of the development site. At both Lansdowne Road and the south property line, the water main is to tie-in the existing water mains on both the east and west side of Minoru Boulevard.
 - iv. Remove the existing water main on the east side of Minoru Boulevard along the development frontage.v. Fill and abandon the existing water main on the west side of Minoru Boulevard along the development
 - frontage.
 vi. Review hydrant spacing on all existing and new road frontages and provide fire hydrants as required to meet City spacing requirements for commercial land use. Fire department approval is required for all fire hydrant installations and relocations.
 - vii. Provide a right-of-way for the water meter and meter chamber, at no cost to the City. Exact right-of-way dimensions to be finalized during the servicing agreement process.
- c. At Developer's cost, the City is to:
 - i. Cut, cap, and remove all existing water service connections and meters to the development site.
 - ii. Reconnect all existing water service connections and hydrant leads to the new water main.
 - iii. Install one new water service connection, meter to be located onsite in a right of way.
 - iv. Complete all tie-ins for the proposed works to existing City infrastructure.

2. Storm Sewer Works:

- a. At Developer's cost, the Developer is required to:
 - i. Perform a capacity analysis to size the proposed storm sewers and drainage conveyances in Minoru Boulevard and the new north-south road. The analysis shall consider both the existing condition and the 2041 OCP condition, and include runoff from the future roads proposed in the OCP. Storm sewers shall be interconnected where possible. Minimum pipe size shall be 600 mm.
 - ii. Install approximately 130 m of new storm sewer in Minoru Boulevard, sized via the required capacity analysis. The new storm sewer shall tie in to the existing storm sewer in the lane south of 5791 Minoru Boulevard, and to the box culvert in Lansdowne Road to the north.
 - iii. Remove the existing storm sewer on the east side of Minoru Boulevard along the development frontage.
 - iv. Fill and abandon the existing storm sewer on the west of Minoru Boulevard along the development frontage.
 - v. Install approximately 130 m of new storm sewer in the new north-south street, sized via the required capacity analysis. The new storm sewer shall tie in to the existing lane drainage to the south of the development site, and to the box culvert in Lansdowne Road to the north.
 - vi. Confirm that the existing temporary storm service in the lane (new north-south road) has been removed. If not, remove.
 - vii. Install one new storm service connection, complete with inspection chamber. Inspection chamber to be located in a right-of-way onsite.
 - viii. Provide an erosion and sediment control plan for all on-site and off-site works, to be reviewed as part of the servicing agreement.

PLN - 213

- b. At Developer's cost, the City is to:
 - i. Cut and cap all existing storm service connections to the development site and remove inspection chambers.
 - ii. Reconnect all existing storm connections, catch basins, and lawn basins to the proposed storm sewers.
 - iii. Complete all tie-ins for the proposed works to existing City infrastructure.

3. Sanitary Sewer Works

- a. At Developer's cost, the Developer is required to:
 - i. Ensure that 5840 Minoru Boulevard has uninterrupted sanitary service during and after site preparation and building construction.
 - ii. Discharge the sanitary sewer right-of-way at the common property line of 5760 & 5740 Minoru Boulevard (plan number 34077) after removal of the existing sanitary connection.
- b. At Developer's cost, the City is to:
 - i. Install one new sanitary service connection, complete with inspection chamber. Inspection chamber to be located in a right-of-way onsite.
 - ii. Cut and cap all existing service connections serving the development site, and remove inspection chambers. Note: the existing sanitary connection at the common property line of 5760 & 5740 Minoru Boulevard must be removed and capped at the main prior to start of the site preparation works.

4. Frontage Improvements:

- a. The Developer is required to:
 - i. Provide street lighting along all road frontages according to the following street light types:
 - a) City Streets
 - a. Lansdowne Road (South side of street)
 - i. **IMPORTANT**: The following streetlight type shall apply to all 4 corners @ the Lansdowne/Minoru intersection & all 4 corners @ the Lansdowne/New North-South intersection
 - ii. Pole colour: Grey
 - Roadway lighting @ back of curb: <u>Type 7</u> (LED) INCLUDING 1 street luminaire, banner arms, and 1 duplex receptacle, but EXCLUDING any pedestrian luminaires, flower basket holders, or irrigation.
 - iv. Pedestrian lighting @ buffer strip between sidewalk and off-street bike path: <u>Type 8</u> (LED) INCLUDING 2 pedestrian luminaires and 1 duplex receptacle, but EXCLUDING any banner arms, flower basket holders, or irrigation. (<u>NOTE</u>: "Pedestrian luminaires" are intended to light the sidewalk and off-street bike path. Luminaire arms must be set perpendicular to the direction of travel.)
 - b. New North-South Street @ City-owned lane widening along site's east side (West side of street)
 - <u>IMPORTANT</u>: The streetlight type shall transition north of the Ackroyd/ New North-South Street intersection. For clarity, all 4 corners @ the Ackroyd/ New North-South Street intersection shall be (blue) <u>City Centre Type</u>; HOWEVER, north of the intersection shall be (grey) <u>Type 7</u>.
 - ii. Pole colour: Grey
 - Roadway lighting @ back of curb: <u>Type 7</u> (LED) INCLUDING 1 street luminaire, banner arms, and 1 duplex receptacle, but EXCLUDING any pedestrian luminaires, flower basket holders, or irrigation.
 - c. Minoru Boulevard (East side of street)
 - i. <u>IMPORTANT</u>: The streetlight type shall transition north of the Ackroyd/ Minoru intersection. For clarity, all 4 corners @ the Ackroyd/ Minoru intersection shall be (blue) <u>City Centre Type</u>; HOWEVER, north of the intersection shall be (grey) <u>Type 7 & Type 8</u>.
 - ii. Pole colour: Grey
 - Roadway lighting @ back of curb: Type 7 (LED) INCLUDING 1 street luminaire, banner arms, and 1 duplex receptacle, but EXCLUDING any pedestrian luminaires, flower basket holders, or irrigation.
 - iv. Pedestrian lighting @ buffer strip between sidewalk and off-street bike path: Type 8 (LED) INCLUDING 2 pedestrian luminaires and 1 duplex receptacle, but EXCLUDING any banner arms, flower basket hore ion ion (NOTE: "Pedestrian luminaires" are intended to

light the sidewalk and off-street bike path. Luminaire arms must be set perpendicular to the direction of travel.)

- v. <u>NOTE</u>: Staff must confirm if the Minoru cross-section will include an off-street bike path. Streetlight requirements may change if an on-street bike lane is required.
- b) Off-Street Publicly-Accessible Walkways & Opens Spaces
 - a. Lansdowne Road (South side of the park) (City owned & City maintained)
 - i. Pole colour: Grey
 - ii. Pedestrian lighting within the park: <u>Type 8</u> (LED) INCLUDING 1 pedestrian luminaire and 1 duplex receptacle, but EXCLUDING any banner arms, flower basket holders, or irrigation.
- ii. Coordinate with BC Hydro, Telus and other private communication service providers:
 - a) To underground the overhead lines and poles along the new north-south road. All above-ground boxes required to facilitate undergrounding shall be located onsite (as in, not within the public realm).
 - b) To pre-duct for future hydro, telephone and cable utilities along all road frontages.
 - c) To locate/relocate all proposed/existing underground structures (e.g. junction boxes, pull boxes, service boxes, etc.) outside of bike paths and sidewalks.
 - Before relocating/modifying any of the existing power poles and/or guy wires within the property frontages.
 - e) To locate/relocate all above ground utility cabinets and kiosks required to service the proposed development and undergrounding works, and all existing above ground utility cabinets and kiosks located along the development's frontages, within the developments site (see list below for examples). A functional plan showing conceptual locations for such infrastructure shall be included in the development process design review. Please coordinate with the respective private utility companies and the project's lighting and traffic signal consultants to confirm the requirements (e.g., statutory right-of-way dimensions) and the locations for the aboveground structures. If a private utility company does not require an aboveground structure, that company shall confirm this via a letter to be submitted to the City. The following are examples of statutory right-of-ways that shall be shown on the functional plan and registered prior to SA design approval:
 - BC Hydro PMT 4.0 x 5.0 m
 - BC Hydro LPT 3.5 x 3.5 m
 - Street light kiosk 1.5 x 1.5 m
 - Traffic signal kiosk 1.0 x 1.0 m
 - Traffic signal UPS 2.0 x 1.5 m
 - Shaw cable kiosk 1.0 x 1.0 m
 - Telus FDH cabinet 1.1 x 1.0 m

5. General Items:

- a. The Developer is required to:
 - i. Provide, prior to start of site preparation works or within the first servicing agreement submission, whichever comes first, a geotechnical assessment of preload and soil preparation impacts on the existing utilities fronting the development site and provide mitigation recommendations. Particularly, the developer is required to confirm that there will be no impact to the existing asbestos cement (AC) storm sewer and water mains fronting the development site; if there is the potential for impact, then the developer may be required to replace these utilities prior to commencing site preparation activities. Note: the developer is required to upgrade these utilities regardless of whether or not there is impact it is only the timing of the replacement that will depend on whether there is impact due to the site preparation works.
 - ii. Provide a video inspection report of the existing storm and sanitary sewers along the development's frontages prior to start of site preparation works or within the first servicing agreement submission, whichever comes first. A follow-up video inspection report after site preparation works are complete (i.e. pre-load removal, completion of dewatering, etc.) is required to assess the condition of the existing utilities and provide recommendations. Any utilities damaged by the pre-load, de-watering, or other development-related activity shall be replaced at the Developer's cost.
 - iii. Monitor the settlement at the adjacent utilities and structures during pre-loading, dewatering, and soil preparation works per a geotechnical engineer's recommendations, and report the settlement amounts to the City for approval.
 - iv. Conduct pre- and post-preload elevation surveys of all surrounding roads, utilities, and structures. Any damage, nuisance, or other impact to be repaired at the developer's cost. The post-preload elevation survey shall be incorporated within the permissing pagement design.

- v. Submit a proposed strategy at the building permit stage for managing excavation de-watering. Note that the City's preference is to manage construction water onsite or by removing and disposing at an appropriate facility. If this is not feasible due to volume of de-watering, the Developer will be required to apply to Metro Vancouver for a permit to discharge into the sanitary sewer system. If the sanitary sewer does not have adequate capacity to receive the volume of construction water, the Developer will be required to enter into a de-watering agreement with the City to discharge treated construction water to the storm sewer system.
- vi. Not encroach into City rights-of-ways with any proposed trees, retaining walls, or other non-removable structures.
- vii. Coordinate the servicing agreement design for this development with the servicing agreement(s) for the adjacent development(s), both existing and in-stream. The developer's civil engineer shall submit a signed and sealed letter with each servicing agreement submission confirming that they have coordinated with civil engineer(s) of the adjacent project(s) and that the servicing agreement designs are consistent. The City will not accept the 1st submission if it is not coordinated with the adjacent developments. The coordination letter should cover, but not be limited to, the following:
 - (a) Corridors for City utilities (existing and proposed water, storm sewer, sanitary and DEU) and private utilities.
 - (b) Pipe sizes, material and slopes.
 - (c) Location of manholes and fire hydrants.
 - (d) Road grades, high points and low points.
 - (e) Alignment of ultimate and interim curbs.
 - (f) Proposed street lights design.
- viii. Enter into, if required, additional legal agreements, as determined via the subject development's Servicing Agreement(s) and/or Development Permit(s), and/or Building Permit(s) to the satisfaction of the Director of Engineering, including, but not limited to, site investigation, testing, monitoring, site preparation, dewatering, drilling, underpinning, anchoring, shoring, piling, pre-loading, ground densification or other activities that may result in settlement, displacement, subsidence, damage or nuisance to City and private utility infrastructure.

RZ 18-807640 Transportation Servicing Agreement* Requirements

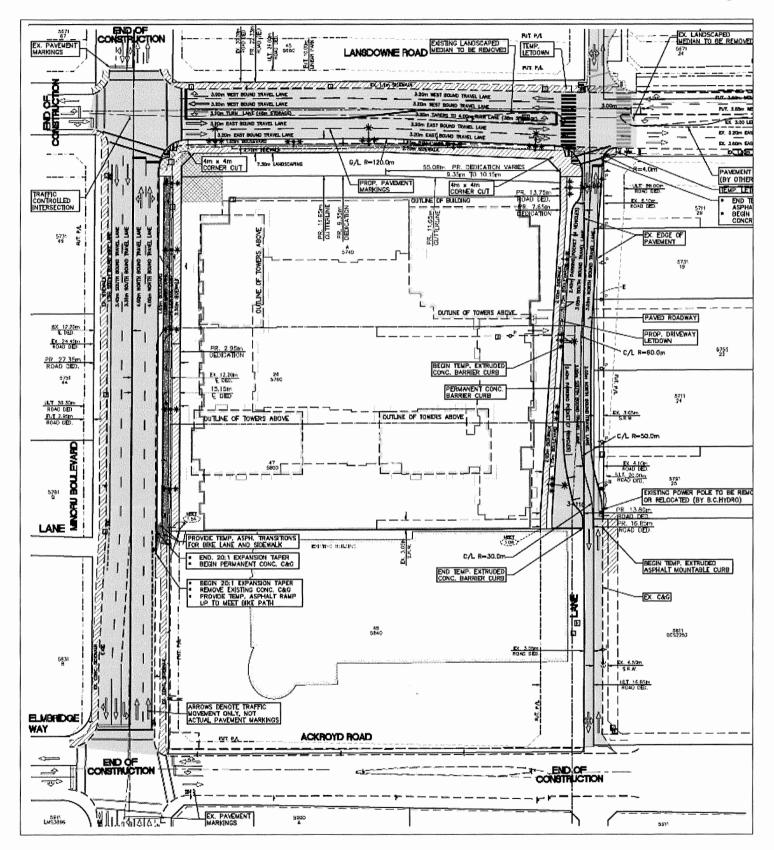
The developer shall be responsible for the design and construction of road and related improvements, to the satisfaction of the Director of Transportation, which works shall include, but may not be limited to, those set out in **Schedule G**.

- <u>Road Works</u>: At a minimum, the developer will be responsible for the design and construction of the following frontage works to the satisfaction of the Director of Transportation, as generally illustrated in the Functional Road Plan Interim (Schedule G). Note that, among other things, the design and construction of the required road improvements shall take into account the Functional Road Plan Ultimate (Schedule H).
 - 1.1. Along the Minoru Road frontage: Road widening to include (from the new property line to west):2.5m wide sidewalk, 1.0m wide lighting strip/buffer, 2.0m wide off-street bike path, 1.5m wide boulevard, 0.15m wide curb and gutter, and pavement widening to tie to existing
 - 1.2. Along the eastern site frontage: Road widening to include (from the new property line to east):2.0m wide sidewalk, 1.6m wide boulevard, 0.15m wide curb and gutter, pavement widening (existing curb / road edge along the east side of the lane remains where it is)
 - 1.3. Along the Lansdowne Road frontage: Road widening to include (from the new property line to north): 2.7m wide sidewalk, 1.5m wide boulevard, 0.15m wide curb and gutter, and pavement widening. (Existing landscaped raised median, between Minoru Boulevard and No 3 Road, be removed and converted to accommodate left-turn lane.)
 - 1.4. Intersection upgrades:
 - a) Upgrade of the existing traffic signal at the Minoru Boulevard/Lansdowne Road intersection (to accommodate the required road widening noted above), which shall include, but may not limited to the following: Upgrade and/or replace signal pole, controller, base and hardware, pole base, detection, conduits (electrical & communications), signal indications, communications cable, electrical wiring, service conductors, traffic cameras, APS (Accessible Pedestrian Signals) and illuminated street name sign(s); and
 - b) Pre-ducting for a future special crosswalk on Minoru Boulevard, approximately mid-point between Lansdowne Road and Elmbridge Way.
- 2. <u>City Tree Removal & Relocation</u>: Through the required Servicing Agreement* (road works), the developer shall be required, at the developer's sole cost, to remove a small existing City tree from the Lansdowne Road median (Chamaecyparis obtuse) and relocate it elsewhere in Richmond, as determined to the satisfaction of the Director, Parks Services.

(<u>Note</u>: Required compensation for the developer's removal of 7 additional trees from the Lansdowne Road median is addressed elsewhere in these Rezoning Considerations.)

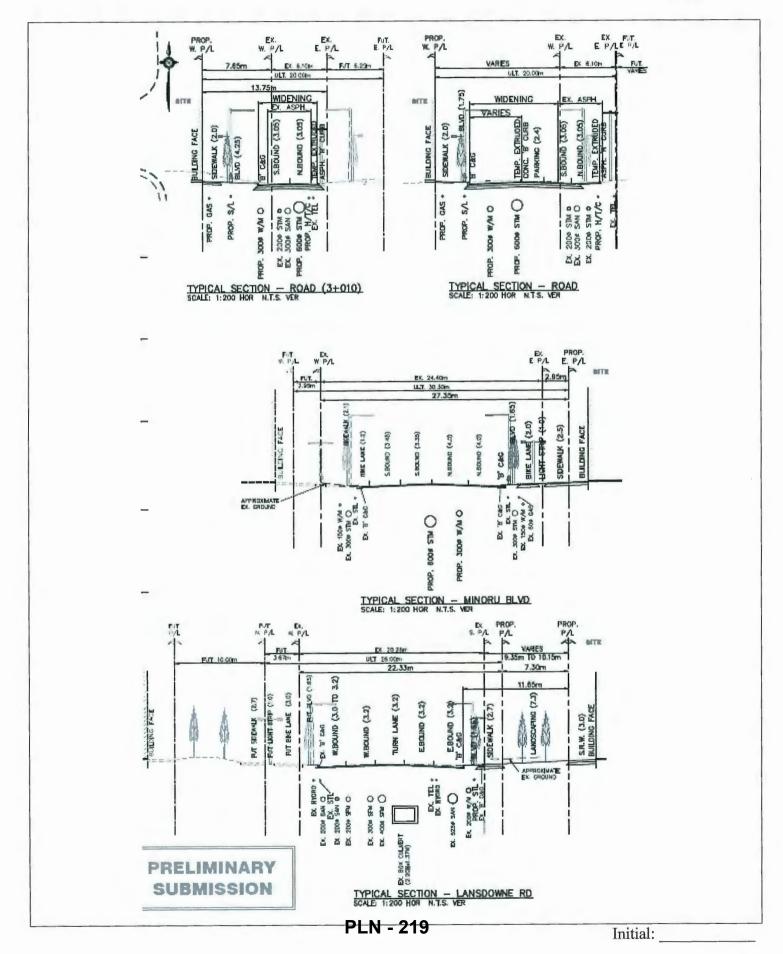
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Schedule G Functional Road Plan – Interim (Excerpt)

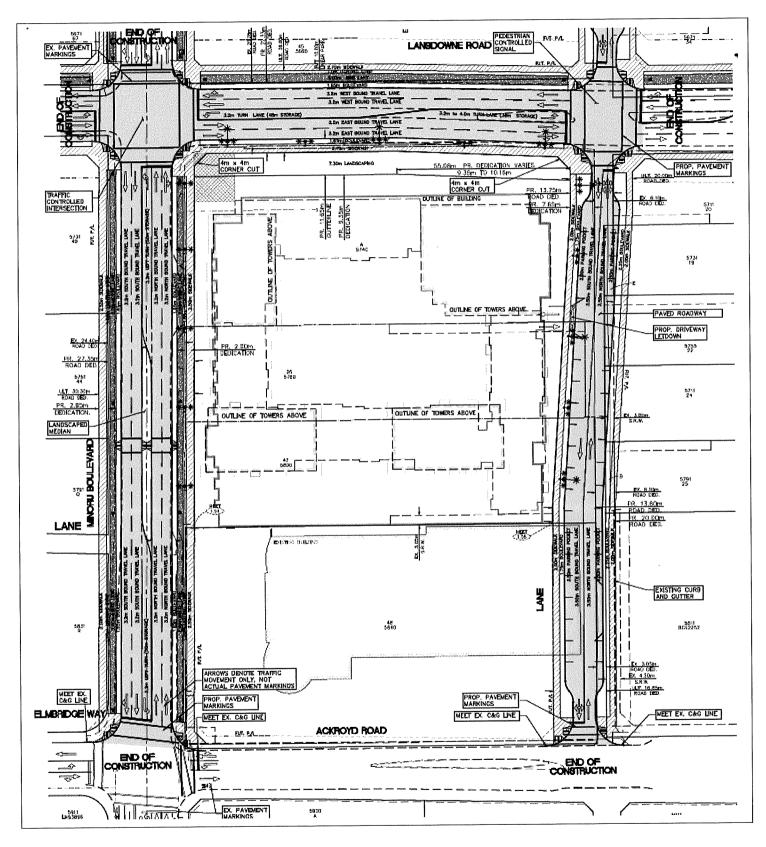


PLN - 218

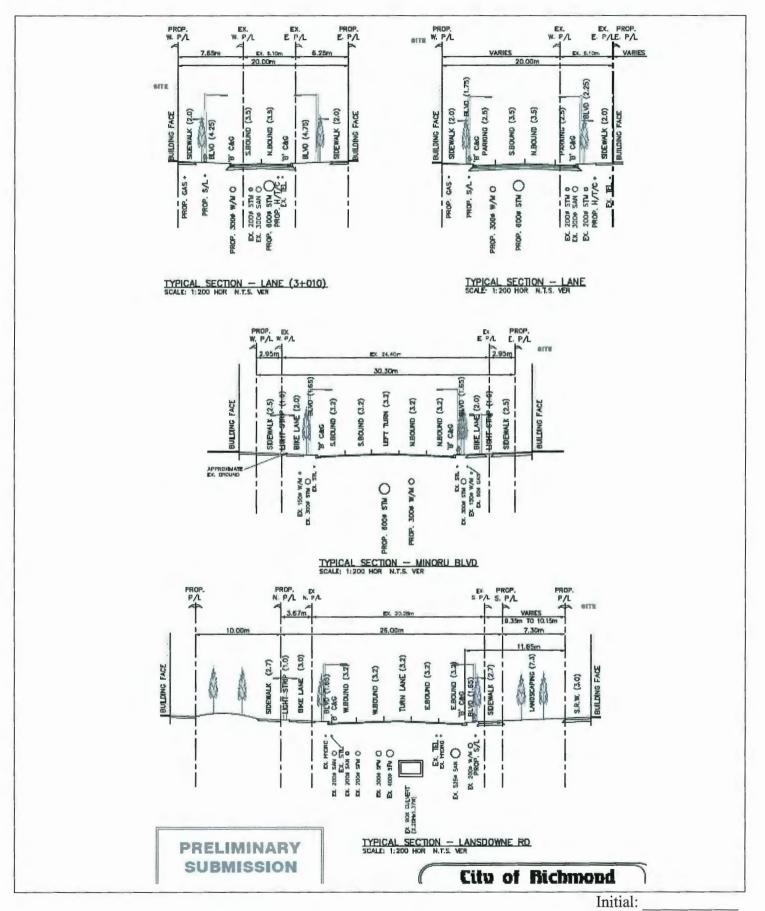
Schedule G



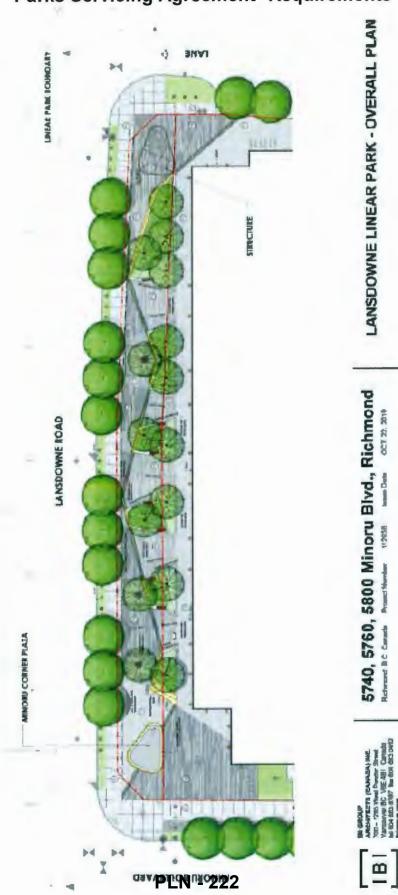
Schedule H Functional Road Plan – Ultimate (Excerpt)



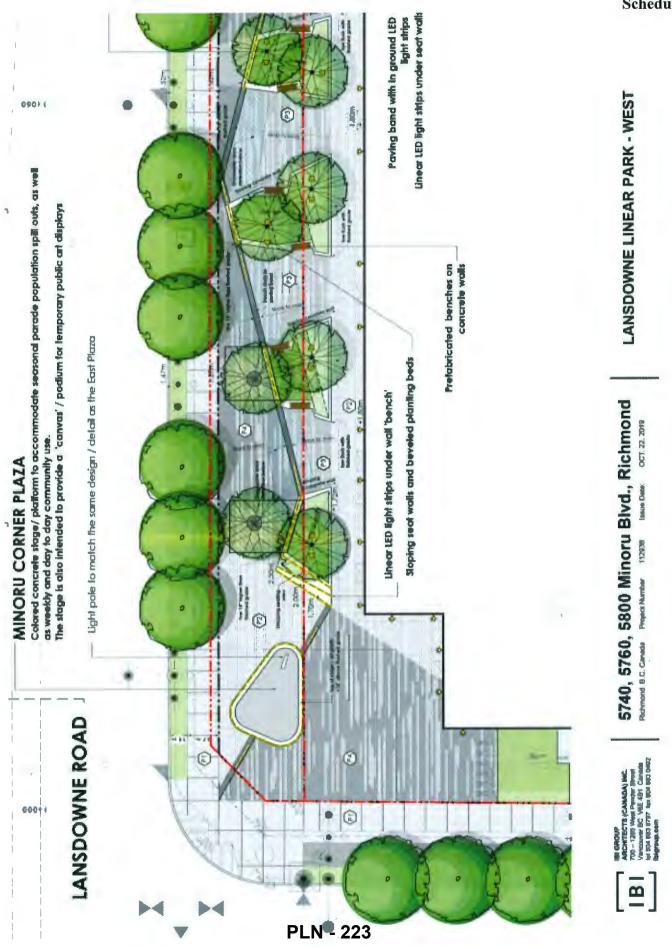
Schedule H



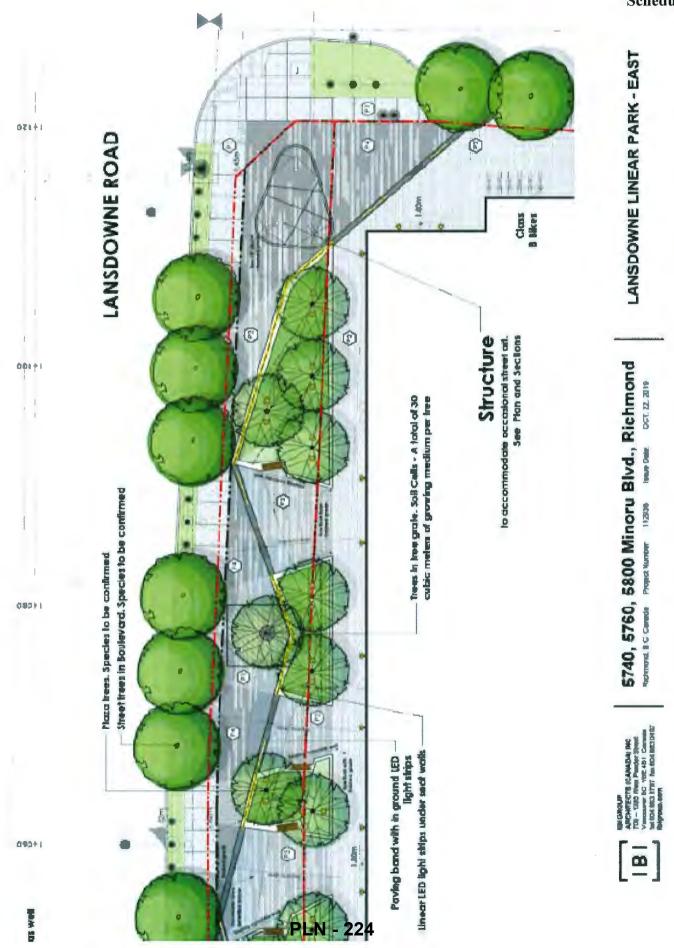
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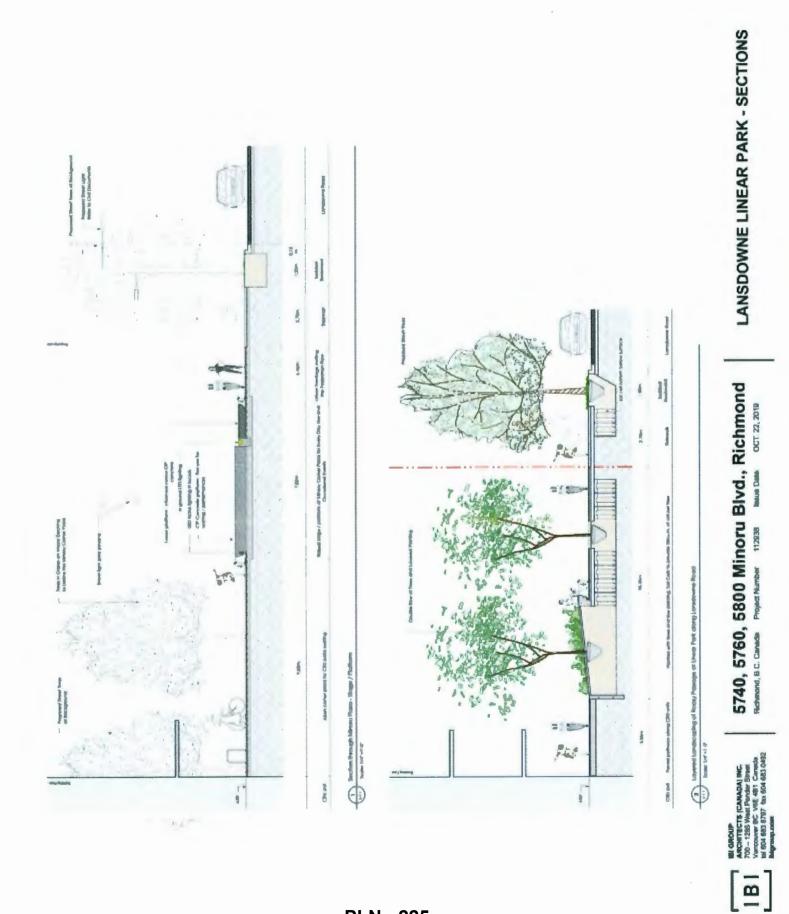
RZ 18-807640
Parks Servicing Agreement* Requirements



Schedule I

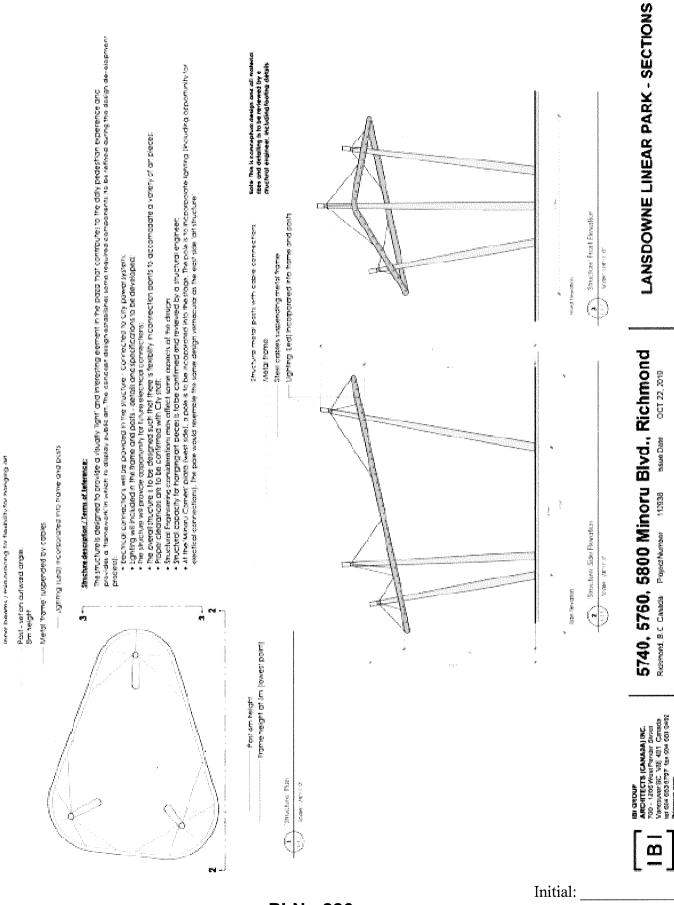


Schedule I



Schedule I

PLN - 225



PLN - 226

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Bylaw 10050



Richmond Official Community Plan Bylaw 7100 Amendment Bylaw 10050 (RZ 18-807640) 5740, 5760, and 5800 Minoru Boulevard

The Council of the City of Richmond, in open meeting assembled, enacts as follows:

- 1. Richmond Official Community Plan Bylaw 7100, Schedule 2.10 (City Centre Area Plan), as amended, is further amended by:
 - 1.1. In section 2.2 Jobs & Business:
 - a) designating the properties located along the east side of Minoru Boulevard, between Ackroyd Road and Alderbridge Way, as:
 - i. "Key Mixed-Uses Areas & Commercial Reserve" on the "Jobs & Business Concept Map" on page 2-13;
 - ii. "Mixed-Use Core" on the "Key Commercial Areas Map" on page 2-17; and
 - iii. "Mixed Use" on the "Key Office-Friendly Areas Map" on page 2-18 and revise the last line of the table below the map as follows:

Designation	Maximum Permitted	Typical Maximum	Maximum Floorplate Above
	Density	Building Height	25 m (82 ft.)
Mixed Use	2 – 3 FAR, plus Village Centre Bonus where applicable	35 – 45 m (115 – 148 ft.)	650 m² (6,997 ft²), but larger floorplates may be permitted for office buildings

- b) designating Lansdowne Road between No. 3 Road and the west side of Minoru Boulevard as "Retail High Streets & Linkages" on the "Pedestrian-Oriented Retail Precincts Map" on page 2-20;
- 1.2. On the "Specific Land Use Map: Lansdowne Village", designating Lansdowne Road between No. 3 Road and the west side of Minoru Boulevard as "Pedestrian-Oriented Retail Precincts High Streets & Linkages"; and
- 1.3. Making minor text and graphic revisions as necessary to accommodate the identified bylaw amendments and ensure consistency throughout the Plan.

APPROVED

by

APPROVED by Manager or Solicitor

2. This Bylaw may be cited as "Richmond Official Community Plan Bylaw 7100, Amendment Bylaw 10050".

FIRST READING

PUBLIC HEARING

SECOND READING

THIRD READING

ADOPTED

CORPORATE OFFICER

MAYOR



Richmond Official Community Plan Bylaw 7100 Amendment Bylaw 10102 (RZ 18-807640) 5740, 5760, and 5800 Minoru Boulevard

The Council of the City of Richmond, in open meeting assembled, enacts as follows:

- 1. Richmond Official Community Plan Bylaw 7100, Schedule 2.10 (City Centre Area Plan), as amended, is further amended by:
 - 1.1. On the "Generalized Land Use Map (2031)" and "Overlay Boundary Village Centre Bonus Map (2031)", designating the following area as "Village Centre Bonus":

That area shown cross-hatched and indicated as "B" on "Schedule A attached to and forming part of Bylaw No. 10102";

- 1.2. On the "Specific Land Use Map: Lansdowne Village":
 - a) designating the following area as "Park":

That area shown cross-hatched and indicated as "A" on "Schedule A attached to and forming part of Bylaw No. 10102"; and

b) designating the following area as "Village Centre Bonus":

That area shown cross-hatched and indicated as "B" on "Schedule A attached to and forming part of Bylaw No. 10102"; and

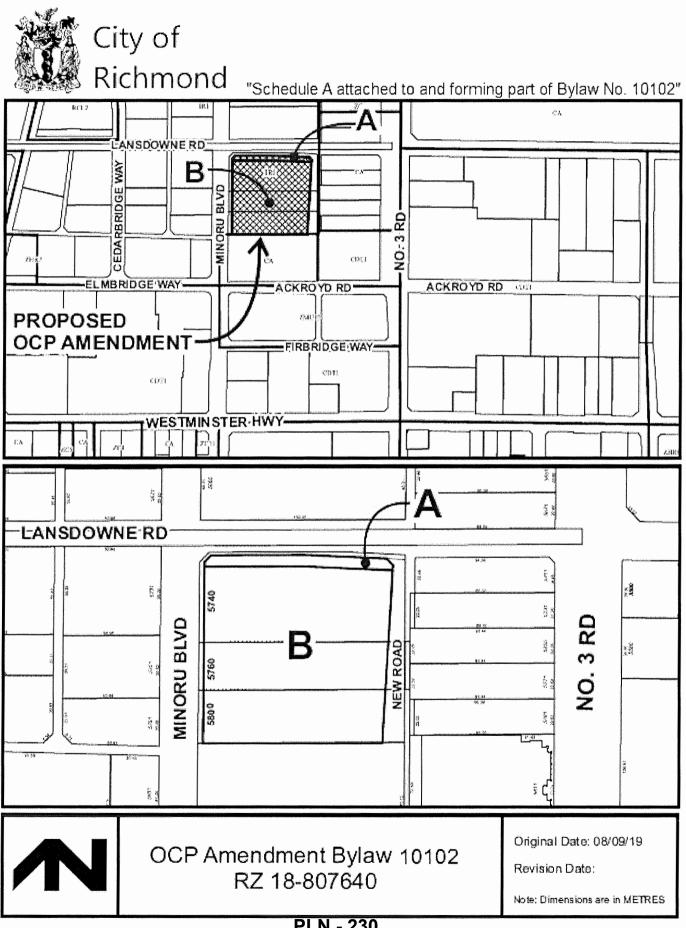
1.3. In the "Specific Land Use Map: Lansdowne Village – Detailed Transect Descriptions", with respect to "Urban Centre (T5)", inserting a new bullet below "Additional density, where applicable" as follows:

"Village Centre Bonus: 1.0 for the provision of office only".

2. This Bylaw may be cited as "Richmond Official Community Plan Bylaw 7100, Amendment Bylaw 10102".

	RICHMOND
FIRST READING	 APPROVED by
PUBLIC HEARING	 400001/50
SECOND READING	 APPROVED by Manager or Solicitor
THIRD READING	
OTHER CONDITIONS SATISFIED	
ADOPTED	

CORPORATE OFFICER

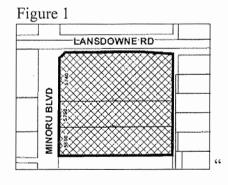




Richmond Zoning Bylaw 8500 Amendment Bylaw 10051 (RZ 18-807640) 5740, 5760, and 5800 Minoru Boulevard

The Council of the City of Richmond, in open meeting assembled, enacts as follows:

- 1. Richmond Zoning Bylaw 8500, as amended, is further amended by:
 - 1.1. replacing section 9.4.4.5(b) with the following:
 - "b) the owner uses the additional 1.0 density bonus floor area ratio only for non-residential purposes, which non-residential purposes shall provide, in whole or in part, for convenience retail uses (e.g., large format grocery store; drug store), minor health services, pedestrian-oriented general retail, or other uses important to the viability of the Village Centre and as determined to the satisfaction of the City, except in specific areas identified in the City Centre Area Plan where the Village Centre Bonus 1.0 density bonus floor area ratio is only permitted to be used for office;"
 - 1.2. inserting section 9.4.4.8 as follows:
 - "8. For the net site area of the site located within the City Centre shown on Figure 1 below, notwithstanding Section 9.4.4.3, the maximum floor area ratio for the RCL3 zone shall be 2.319 and, notwithstanding Section 9.4.4.5, the maximum floor area ratio for the RCL3 zone shall be 1.160, provided that the owner:
 - a) complies with the conditions set out in Section 9.4.4.3 and Section 9.4.4.5 and uses the permitted Village Centre Bonus 1.0 **density bonus floor area ratio** only for **office**; and
 - b) dedicates not less than 1,210.3 m^2 of the **site** as **road** and transfers not less than 859.2 m^2 of the **site** to the **City** as fee simple for **park** purposes.



- 1.3. replacing section 9.4.6.1(b) with the following:
 - "b) no parking or loading areas are located along the public road."

- 1.4. replacing section 9.4.7.1 with the following:
 - "1. The maximum **height** for **buildings** zoned RCL1, RCL3, and RCL5 is 47.0 m geodetic, except in specific areas identified in the **City Centre** Area Plan where the specified maximum permitted **height** for **buildings** is lower."
- 1.5. replacing section 9.4.11.2 with the following:
 - "2. For the RCL3 zone and RCL5 zone only, congregate housing and apartment housing must not be located on the first storey of the building, exclusive of common lobbies, along road frontages identified in the City Centre Area Plan as Pedestrian-Oriented Retail Precincts."
- 2. The Zoning Map of the City of Richmond, which accompanies and forms part of Richmond Zoning Bylaw 8500, is amended by repealing the existing zoning designation of the following area and by designating it:

2.1. "SCHOOL & INSTITUTION USE (SI)"

That area shown cross-hatched and indicated as "A" on "Schedule A attached to and forming part of Bylaw 10051"

2.2. "RESIDENTIAL/LIMITED COMMERCIAL (RCL3)"

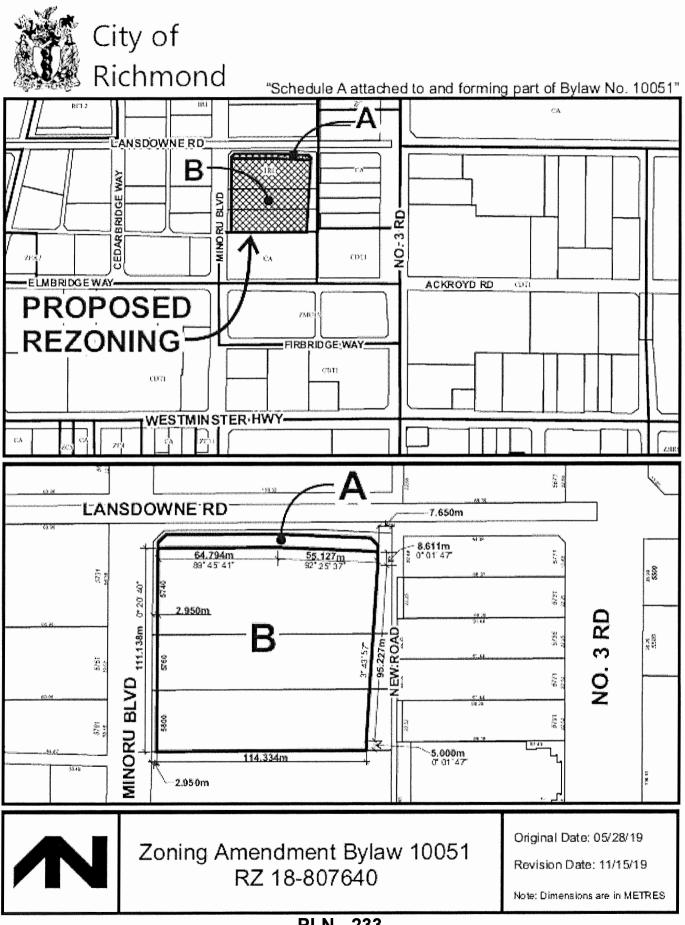
That area shown cross-hatched and indicated as "B" on "Schedule A attached to and forming part of Bylaw 10051"

3. This Bylaw may be cited as "Richmond Zoning Bylaw 8500, Amendment Bylaw 10051".

FIRST READING	 CITY OF RICHMOND
A PUBLIC HEARING WAS HELD ON	 by
SECOND READING	 APPROVED by Director
THIRD READING	 or Solicitor
OTHER CONDITIONS SATISFIED	
ADOPTED	

MAYOR

CORPORATE OFFICER





То:	Planning Committee	Dat
From:	Wayne Craig Director, Development	File

Date: December 3, 2019 File: RZ 19-858458

Re: Application by Benn Panesar for Rezoning at 10931 Seaward Gate from the "Single Detached (RS1/E)" zone to the "Compact Single Detached (RC2)" zone

Staff Recommendation

That Richmond Zoning Bylaw 8500, Amendment Bylaw 10120, for the rezoning of 10931 Seaward Gate from "Single Detached (RS1/E)" to "Compact Single Detached (RC2)" to facilitate the creation of two new single-family lots with vehicle access from the existing rear lane, be introduced and given first reading.

:IN Wayne Craig Director, Development (604 - 247 - 4625)

WC:jl Att. 7

REPORT CONCURRENCE			
ROUTED TO:	CONCURRENCE	CONCURRENCE OF GENERAL MANAGER	
Affordable Housing		he Energ	

Staff Report

Origin

Benn Panesar has applied to the City of Richmond for permission to rezone the property at 10931 Seaward Gate from the "Single Detached (RS1/E)" zone to the "Compact Single Detached (RC2)" zone, to permit the property to be subdivided to create two single-family lots, with vehicle access from the existing rear lane. A location map and aerial photograph is provided in Attachment 1. The proposed subdivision plan is shown in Attachment 2.

Findings of Fact

A Development Application Data Sheet providing details about the development proposal is provided in Attachment 3.

Subject Site Existing Housing Profile

There is an existing single-family dwelling on the property, which is proposed to be demolished. The applicant has indicated that the single-family dwelling is currently rented and does not contain a secondary suite.

Surrounding Development

Development immediately surrounding the subject site is as follows

To the North:	Across the lane, a single-family dwelling on a lot zoned "Single Detached (RS1/E)" fronting Seahurst Road.
To the South:	Across Steveston Highway, a Greater Vancouver Transportation Authority (TransLink) bus terminal on a lot zoned "Light Industrial (IL)" and "Industrial Business Park (IB1)".
To the East:	Across Seaward Gate, a single-family dwelling on a lot zoned "Single Detached (RS1/E)" fronting Seaward Gate.
To the West:	A single-family dwelling on a lot zoned "Single Detached (RS1/E)" fronting Steveston Highway.

Related Policies & Studies

Official Community Plan (OCP) Designation

The 2041 OCP land use designation for the subject site is "Neighbourhood Residential", which provides for single-family, two-family, and multiple family housing. The proposed rezoning and future subdivision are consistent with this designation.

Arterial Road Land Use Policy

The Arterial Road Land Use Policy in the OCP identifies the subject site for redevelopment as "Arterial Road Compact Lot Single Detached". This policy requires all compact lot developments to be accessed from the rear lane only. The proposed rezoning and future subdivision are consistent with this designation.

Single-Family Lot Size Policy 5434

The subject property is located within the area governed by Single-Family Lot Size Policy 5434, which was adopted by City Council on February 19, 1990, and subsequently amended in 1991 and 2006 (Attachment 4). This Policy permits properties on specific sections of Williams Road, No. 5 Road, and Steveston Highway to be rezoned and subdivided in accordance with the provisions of the "Single Family Housing District (R1/0.6)" zone and "Coach House District (R/9)" zone in Richmond Zoning Bylaw 5300, which is equivalent to the "Compact Single Detached (RC2)" zone or the "Coach House (RCH1)" zone in Richmond Zoning Bylaw 8500, provided that vehicle access is from the rear lane only. The proposed rezoning and subdivision would comply with the "Compact Single Detached (RC2)" zone requirements and are consistent with this Policy.

Floodplain Management Implementation Strategy

The proposed redevelopment must meet the requirements of the Richmond Flood Plain Designation and Protection Bylaw 8204. Registration of a flood indemnity covenant on Title is required prior to final adoption of the rezoning bylaw.

Public Consultation

Two rezoning signs have been installed on the subject property; one sign is facing Steveston Highway and the second sign is facing Seaward Gate. Staff have not received any comments from the public about the rezoning application in response to the placement of the rezoning signs on the property.

Should the Planning Committee endorse this application and Council grant first reading to the rezoning bylaw, the bylaw will be forwarded to a Public Hearing, where any area resident or interested party will have an opportunity to comment. Public notification for the Public Hearing will be provided as per the *Local Government Act*.

Analysis

Transportation and Site Access

Current vehicle access is from Seaward Gate. Vehicle access to both proposed lots is to be from the existing rear lane, with no access permitted from Steveston Highway, in accordance with Residential Lot (Vehicular) Access Regulation Bylaw No. 7222. The required parking space for each secondary suite will be provided on the driveway.

Prior to final adoption of the rezoning bylaw, the applicant is required to complete the following:

- provide a 4 m x 4 m corner cut road dedication on the southeast corner of the subject site;
- provide a 3 m x 3 m corner cut statutory right-of-way at the northeast corner of the subject site;
- register a restrictive covenant on Title for proposed Lot 2 (corner lot) at Subdivision stage to ensure that vehicle access will be from the existing rear lane;
- provide a \$5,880 contribution towards the installation of intersection LED street light luminaires for the existing pedestrian signal at the intersection of Steveston Highway and Seaward Gate; and
- construct the required frontage improvements as identified in the Site Servicing and Frontage Improvements section of this report.

Tree Retention and Replacement

The applicant has submitted a Certified Arborist's Report, which identifies on-site and off-site tree species, assesses tree structure and condition, and provides recommendations on tree retention and removal relative to the proposed development. The Report assesses three bylaw-sized trees located on the subject property, and two hedges that are located on City property (Attachment 5).

The City's Tree Preservation Coordinator has reviewed the Arborist's Report and concurs with the Arborist's findings, with the following comments:

- One tree (tag # 3) is a mature pear tree in fair-good condition and is located outside the proposed building envelope. Retain and protect as per City of Richmond Tree Protection Information Bulletin Tree-03.
- One tree (tag # 4) is a mature plum tree in poor condition and is located outside the proposed building envelope. Staff inspected the tree and confirmed winter shoot moth damage to the canopy and black knot in the upper branches which would limit the long term viability of the tree. Remove and replace.
- One tree (tag # 5) is a mature cherry tree in good condition. This tree will be in direct conflict with the proposed dwelling. Remove and replace.
- Replacement trees should be specified at 2:1 as per the OCP.

The City Parks staff have reviewed the Arborist's Report and support the Arborist's findings, with the following comment:

• Two hedges (tag # 1 and 2) located on City property are in fair condition and good health. The hedges have been left to grow without maintenance, and invasive weeds are starting to overtake the hedges. Due to conflicts with the construction of the frontage improvements, removal is recommended. Compensation is not required for the hedges.

Tree Protection

One tree (tag # 3) is to be retained and protected. The applicant has submitted a Tree Management Plan showing the tree to be retained and the measures taken to protect it during development stage (Attachment 5). To ensure that the tree identified for retention is protected at development stage, the applicant is required to complete the following:

- No grade changes are to occur within the tree protection zone. For this reason, the applicant is required to construct a floating porch (i.e., no concrete foundation within the tree protection zone) and a cantilevered second floor balcony, as shown in the conceptual plans provided in Attachment 6.
- Prior to final adoption of the rezoning bylaw, submission to the City of a contract with a Certified Arborist for the supervision of all works conducted within or in close proximity to tree protection zones. The contract must include the scope of work required, the number of proposed monitoring inspections at specified stages of construction, any special measures required to ensure tree protection, and a provision for the arborist to submit a post-construction impact assessment to the City for review.
- Prior to demolition of the existing dwelling on the subject site, installation of tree protection fencing around all trees to be retained. Tree protection fencing must be installed to City standard in accordance with the City's Tree Protection Information Bulletin Tree-03 prior to any works being conducted on-site, and remain in place until construction and landscaping on-site is complete.
- Prior to final adoption of the rezoning bylaw or demolition of the existing dwelling, whichever is first, submission of a Tree Survival Security to the City in the amount of \$10,000 for the one tree to be retained.

Tree Replacement

The applicant wishes to remove two on-site trees (tag # 4 and 5). The 2:1 replacement ratio would require a total of four replacement trees. Consistent with the landscaping requirements contained in Richmond Zoning Bylaw 8500 and the Arterial Road Land Use Policy, the applicant has proposed to plant four replacement trees in the development; one on proposed Lot 1 and three on proposed Lot 2 (corner lot).

The required replacement trees are to be of the following minimum sizes, based on the size of the trees being removed as per Tree Protection Bylaw No. 8057:

No. of Replacement Trees	Minimum Caliper of Deciduous Replacement Tree	Minimum Height of Coniferous Replacement Tree
2	10 cm	5 m
2	11 cm	6 m

To ensure the four replacement trees are planted on-site at development stage and the front yards of the subject site are enhanced consistent with the landscape guidelines of the Arterial Road Land Use Policy, the applicant will provide a Landscape Plan prepared by a Registered Landscape Architect and a Landscape Security based on 100% of the cost estimate provided by the Landscape Architect (which includes \$2,000 for the four replacement trees), prior to final adoption of the rezoning bylaw.

Securities will not be released until a landscaping inspection has been passed by City staff after construction and landscaping has been completed. The City may retain a portion of the security for a one year maintenance period from the date of the landscape inspection.

Built Form, Architectural Character & Landscaping

The applicant has submitted conceptual plans showing the proposed floor plans and architectural elevations for the proposed building on each proposed lot to demonstrate tree retention and the design of the corner lot dwelling (proposed Lot 2) at the intersection of Steveston Highway and Seaward Gate (Attachment 6).

The applicant has proposed a secondary suite on top of the attached garage on the second floor of each dwelling, each with a covered porch facing the side yard and direct access to the yard via exterior stairs. The front entrance to the principal dwelling on the corner lot (proposed Lot 2) is proposed to be on an angle to address both Steveston Highway and Seaward Gate.

Prior to final adoption of the rezoning bylaw, the applicant is required to register a legal agreement on Title to ensure that the Building Permit application and ensuing development of both lots are consistent with the submitted conceptual plans (Attachment 6), to the satisfaction of the Director of Development. Building Permit plans must comply with all City regulations and staff will ensure that the plans are generally consistent with the registered legal agreement.

Affordable Housing Strategy

Consistent with the City's Affordable Housing Strategy, the applicant has proposed to provide a secondary suite in each of the single-family dwellings proposed at the subject site, for a total of two suites. Each secondary suite will contain a single bedroom, with minimum suite sizes of 37 m^2 (399 ft²) for proposed Lot 1 and 39 m² (420 ft²) for proposed Lot 2.

Prior to final adoption of the rezoning bylaw, the applicant must register a legal agreement on Title to ensure that no final Building Permit inspection is granted until a one-bedroom secondary suite is constructed on both of the two future lots, to the satisfaction of the City in accordance with the BC Building Code and the City's Zoning Bylaw.

Site Servicing and Frontage Improvements

Prior to subdivision approval, the applicant is required to enter into a Servicing Agreement for the design and construction of required transportation and engineering infrastructure and frontage improvements, as described in Attachment 7. Frontage improvements include, but are not limited to, the following:

- Seaward Gate: construct a new 1.5 m concrete sidewalk and treed/grassed boulevard.
- Steveston Highway: construct a new 1.5 m concrete sidewalk and treed/grassed boulevard.

- Upgrade the Steveston Highway/Seaward Gate westbound bus stop to meet the TransLink Accessible Bus Stop Design Standards, including construction of a new concrete bus pad.
- Upgrade the rear lane to City standards, including installation of lighting and roll-over curbs, and reconstruction of the lane entry from Seaward Gate.

Financial Impact

The rezoning application results in an insignificant Operational Budget Impact (OBI) for off-site City infrastructure (such as roadworks, waterworks, storm sewers, sanitary sewers, street lights, street trees and traffic signals).

Conclusion

The purpose of this rezoning application is to rezone the property at 10931 Seaward Gate from the "Single Detached (RS1/E)" zone to the "Compact Single Detached (RC2)" zone to permit the property to be subdivided to create two single-family lots, with vehicle access from the existing rear lane.

This rezoning application complies with the land use designations and applicable policies contained within the OCP for the subject site.

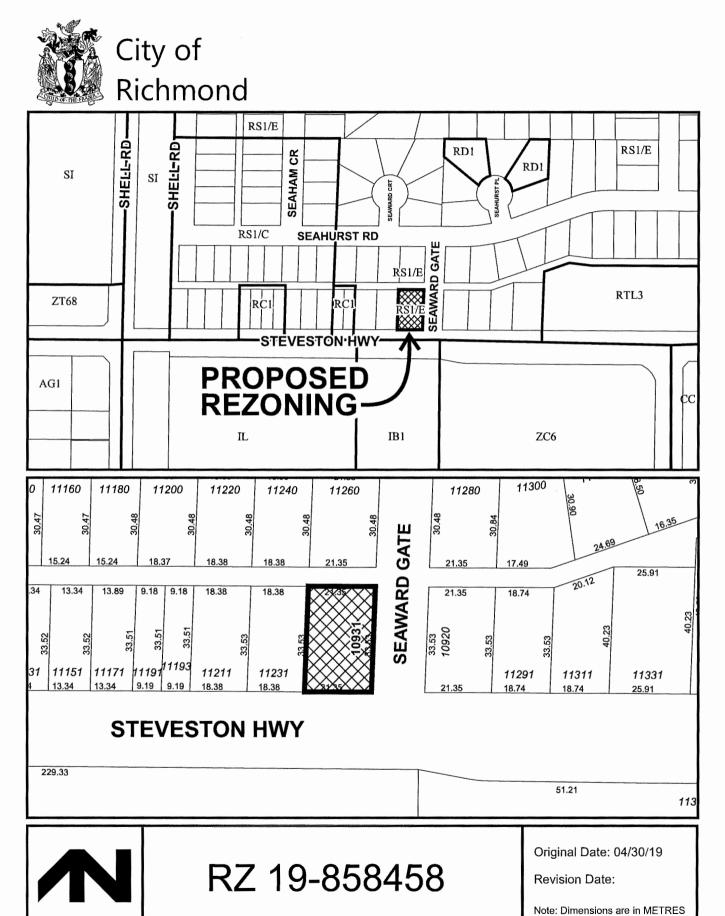
The list of rezoning considerations is included in Attachment 7, which has been agreed to by the applicant (signed concurrence on file).

It is recommended that Richmond Zoning Bylaw 8500, Amendment Bylaw 10120 be introduced and given first reading.

Jessica Lee Planning Technician

JL:cas

Attachment 1: Location Map Attachment 2: Proposed Subdivision Plan Attachment 3: Development Application Data Sheet Attachment 4: Single-Family Lot Size Policy 5434 Attachment 5: Tree Management Plan Attachment 6: Conceptual Floor Plans and Building Elevations Attachment 7: Rezoning Considerations





City of Richmond



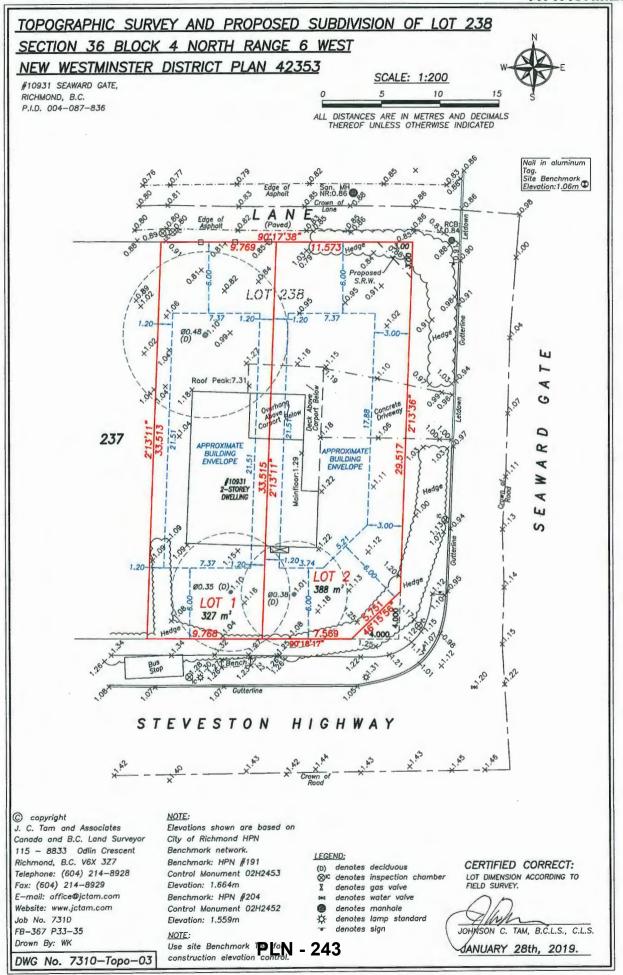
RZ 19-858458

Original Date: 04/30/19

Revision Date:

Note: Dimensions are in METRES

ATTACHMENT 2





Development Application Data Sheet

Development Applications Department

RZ 19-858458

Address: 10931 Seaward Gate

Applicant: Benn Panesar

Planning Area(s): Shellmont

	Existing	Proposed	
Owner:	Owner: Jaskaran S. Bilkhu Sarbjit K. Dadral		
Site Size (m ²):	715 m ² (7,696.2 ft ²)	Lot 1: 327 m ² (3,519.8 ft ²) Lot 2: 388 m ² (4,176.4 ft ²)	
Land Uses:	Single-family residential No change		
OCP Designation: Neighbourhood Residential No ch		No change	
702 Policy Designation:	Compact Single Detached (RC2) or Coach Houses (RCH1) No change		
Zoning:	Single Detached (RS1/E)	Compact Single Detached (RC2)	
Other Designations: Arterial Road Compact Single No change		No change	

Proposed Lots	Bylaw Requirement		Proposed		Variance
Floor Area Ratio:	Max. 0.6 for lot area up to 464.5 m ² plus 0.3 for remainder		Max. 0.6 for lot area up to 464.5 m ² plus 0.3 for remainder		None permitted
Buildable Floor Area (m ²):*	Lot 1: Max. 196.2 m ² (2,112 ft ²) Lot 2: Max. 232.8 m ² (2,506 ft ²)		Lot 1: Max. 196.2 m² (2,112 ft²) Lot 2: Max. 232.8 m² (2,506 ft²)		None permitted
Lot Coverage (% of lot area):	Building: Max. 50% Non-porous: Max. 70% Landscaping: Min. 20%		Building: Max. 50% Non-porous: Max. 70% Landscaping: Min. 20%		None
Lot Size:	270 m²		Lot 1: 327 m² Lot 2: 388 m²		None
Lot Dimensions (m):	Lot 1 Width: 9.0 m Depth: 24.0 m	Lot 2 Width: 11.0 m Depth: 24.0 m	Lot 1 Width: 9.8 m Depth: 33.5 m	Lot 2 Width: 11.6 m Depth: 33.5 m	None
Setbacks (m):	Front: Min. 6.0 m Rear: Min. 6.0 m Interior Side: Min. 1.2 m Exterior Side: Min. 3.0 m		Front: Min. 6.0 m Rear: Min. 6.0 m Interior Side: Min. 1.2 m Exterior Side: Min. 3.0 m		None
Height (m):	Max. 2 ½ storeys		Max. 2 ½ storeys		None
Private Outdoor Space:	Min. 20.0 m ²		Min. 20.0 m ²		None

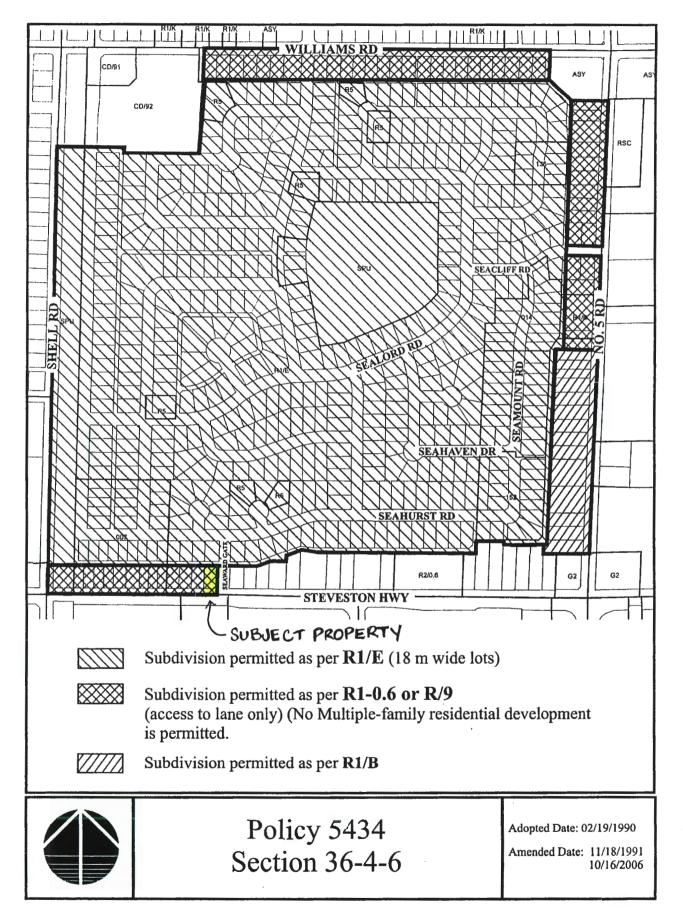
* Preliminary estimate; not inclusive of garage; exact building size to be determined through zoning bylaw compliance review at Building Permit stage.

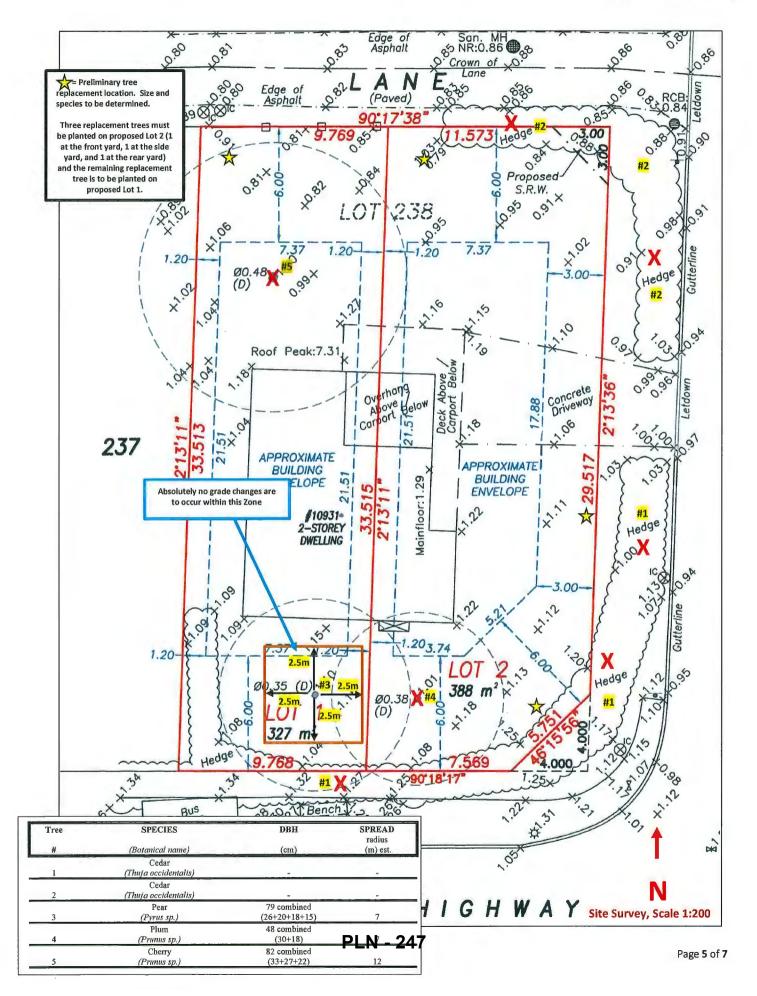


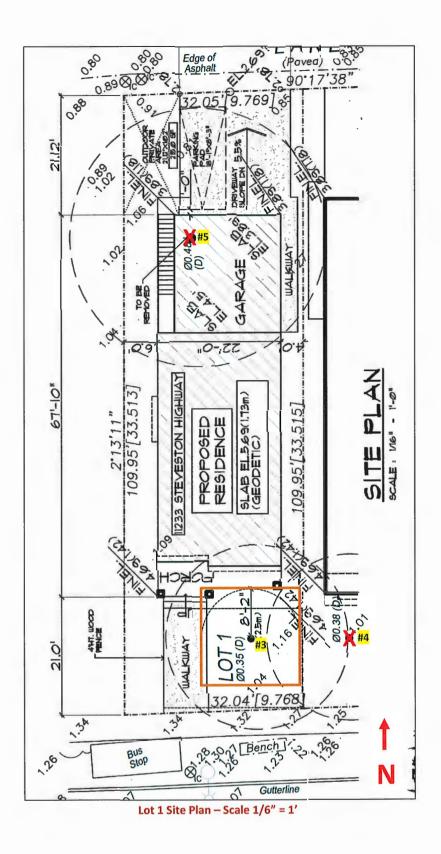
City of Richmond

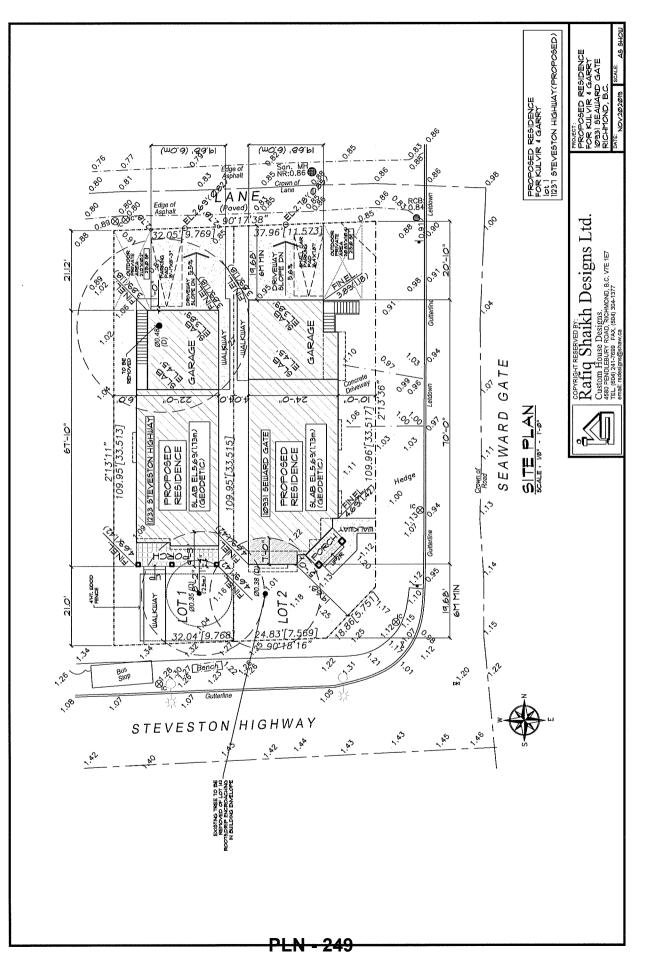
Policy Manual

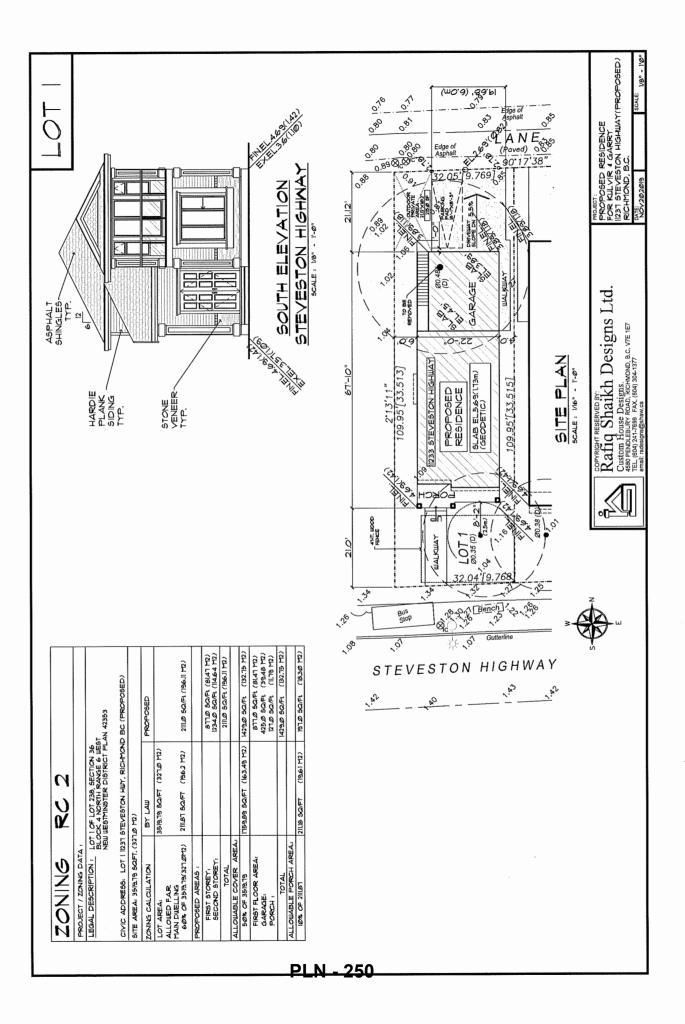
Page 1 of 2	Adopted by Council: February 19, 1990 Amended by Council: November 18, 1991 Amended by Council: October 16, 2006	POLICY 5434
File Ref:	SINGLE-FAMILY LOT SIZE POLICY IN QUARTER-S	ECTION 36-4-6
POLICY 5434	l:	
	policy establishes lot sizes in a portion of Section 36-4-6, w Highway, Shell Road, No. 5 Road, and Williams Road:	vithin the area bounded
	 That properties within the area bounded by Shell Road Road, and Steveston Highway, in a portion of Section subdivide in accordance with the provisions of Single- (R1/E), with the exception that: 	36-4-6, be permitted to
	 a) Properties fronting on Williams Road from She properties fronting on Steveston Highway for Shell Road, and properties fronting on No. Road to approximately 135 m south of Seach subdivide in accordance with the provisions of District (R1-0.6) or Coach House District (R/9 accesses are to the existing rear laneway residential development shall <u>not</u> be permitted 	om Seaward Gate to 5 Road from Williams iff Road to rezone and Single-Family Housing) provided that vehicle / only. Multiple-family
	b) Properties fronting on No. 5 Road from S approximately 135 m south of Seacliff Road be in accordance with the provisions of Single-F Subdivision Area B (R1/B) provided that vehic existing rear laneway only.	permitted to subdivide amily Housing District,
	 This policy, as shown on the accompanying plan, is to the disposition of future rezoning applications in this a less than five years, unless changed by the amending in the Zoning and Development Bylaw. 	area, for a period of not

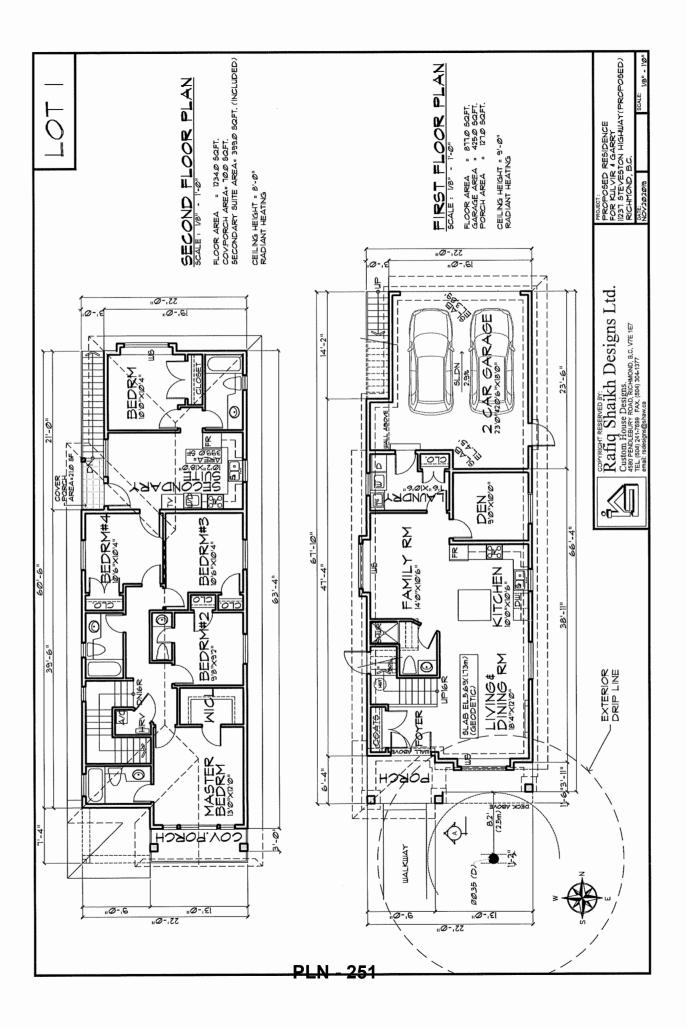


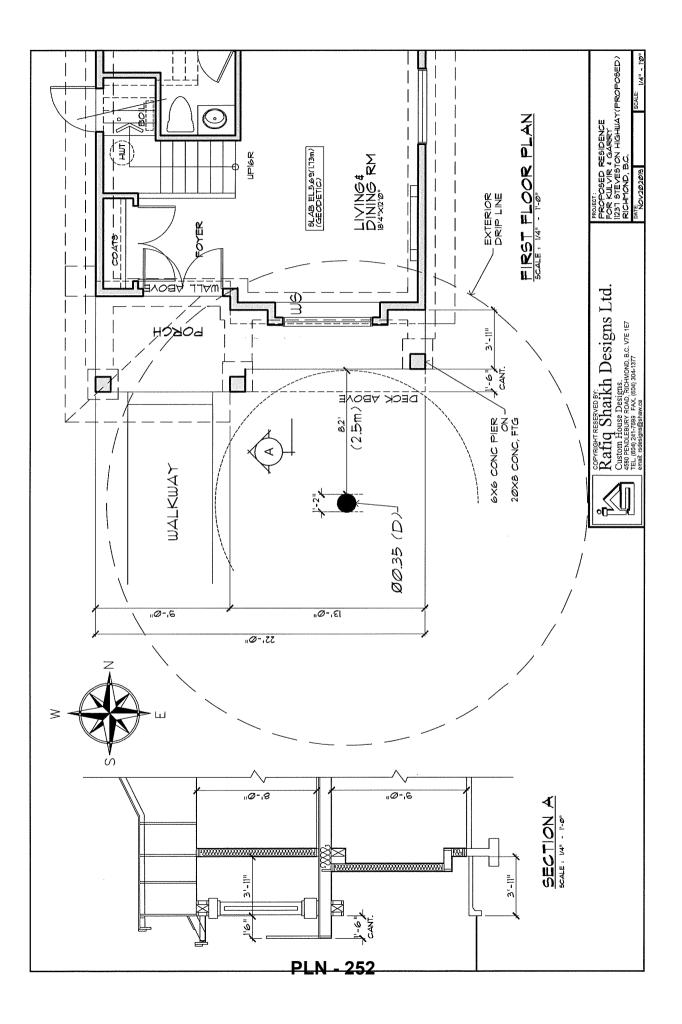


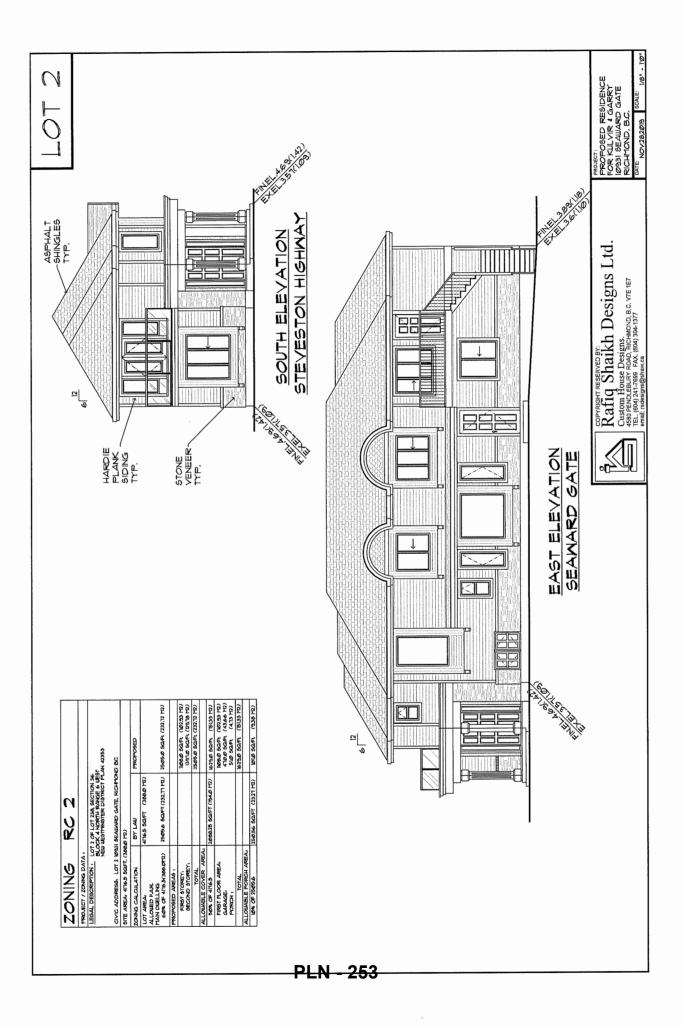


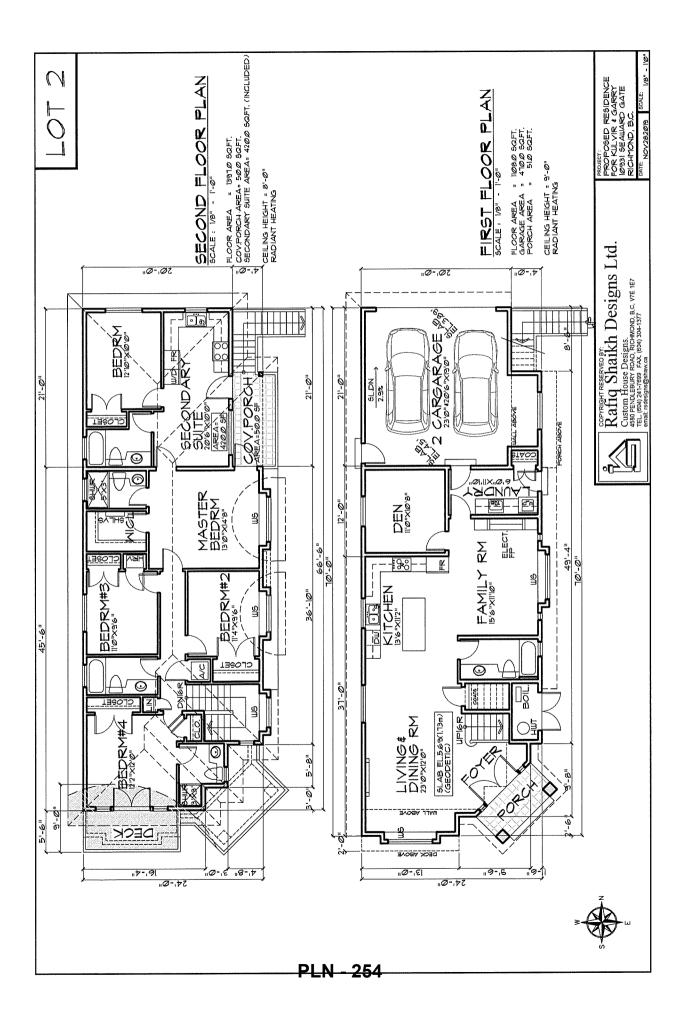














Rezoning Considerations

Development Applications Department 6911 No. 3 Road, Richmond, BC V6Y 2C1

Address: 10931 Seaward Gate

File No.: RZ 19-858458

Prior to final adoption of Richmond Zoning Bylaw 8500, Amendment Bylaw 10120, the developer is required to complete the following:

- 1. Road dedication of 4.0 by 4.0 m corner cut at the southeast corner of the subject site.
- 2. Statutory right-of-way (SRW) of 3.0 x 3.0 m corner cut at the northeast corner of the subject site.
- 3. Submission of a Landscape Plan, prepared by a Registered Landscape Architect, to the satisfaction of the Director of Development, and deposit of a Landscaping Security based on 100% of the cost estimate provided by the Landscape Architect, including \$2,000 for the four replacement trees, all hard and soft materials, installation and a 10% contingency. The Landscape Plan should:
 - comply with the guidelines of the OCP's Arterial Road Policy and should not include hedges along the front property line;
 - include a mix of coniferous and deciduous trees;
 - include the dimensions of tree protection fencing as illustrated on the Tree Retention Plan attached to this report; and
 - include the four required replacement trees with the following minimum sizes:

No. of Replacement Trees Minimum Caliper of Deciduous Tree		or	Minimum Height of Coniferous Tree	
	2	2 10 cm 5		5 m
	2	11 cm		6 m

If required replacement trees cannot be accommodated on-site, a cash-in-lieu contribution in the amount of \$500/tree to the City's Tree Compensation Fund for off-site planting is required.

- 4. Submission of a Contract entered into between the applicant and a Certified Arborist for supervision of any on-site works conducted within the tree protection zone of the trees to be retained. The Contract should include the scope of work to be undertaken, including: the proposed number of site monitoring inspections, and a provision for the Arborist to submit a post-construction assessment report to the City for review.
- 5. Submission of a Tree Survival Security to the City in the amount of \$10,000 for the one tree to be retained (tag # 3).
- 6. Registration of a flood indemnity covenant on Title.
- 7. Registration of a legal agreement on Title, ensuring that the Building Permit application and ensuing development of each lot is generally consistent with the submitted conceptual plans, to the satisfaction of the Director of Development.
- 8. Contribution of \$5,880 to go towards the upgrade of the existing pedestrian signal at the Steveston Highway and Seaward Gate intersection.
- 9. Registration of a legal agreement on Title to ensure that no final Building Permit inspection is granted until a onebedroom secondary suite is constructed on each of the two future lots, to the satisfaction of the City in accordance with the BC Building Code and the City's Zoning Bylaw.

At Demolition Permit* stage, the developer must complete the following requirements:

1. Installation of tree protection fencing around all trees to be retained. Tree protection fencing must be installed to City standard in accordance with the City's Tree Protection Information Bulletin Tree-03 prior to any works being conducted on-site, and must remain in place until construction and landscaping on-site is completed.

At Subdivision* stage, the developer must complete the following requirements:

- 1. Registration of a legal agreement on Title ensuring that the only means of vehicle access to proposed Lot 2 (eastern most lot) is from the existing rear lane.
- 2. Payment of property taxes up to the current year, Development Cost Charges (City and Metro Vancouver), School Site Acquisition Charge, Address Assignment Fees, and the costs associated with the completion of the required servicing works and frontage improvements.
- 3. Enter into a Servicing Agreement* for the design and construction of engineering infrastructure and frontage improvements. Works include, but may not be limited to, the following:

Water Works

- Using the OCP Model, there is 789 L/s of water available at a 20 psi residual at the Steveston Highway frontage. Based on your proposed development, your site requires a minimum fire flow of 95 L/s.
- At Developer's cost, the Developer is required to:
 - Submit Fire Underwriter Survey (FUS) or International Organization for Standardization (ISO) fire flow calculations to confirm development has adequate fire flow for onsite fire protection. Calculations must be signed and sealed by a Professional Engineer and be based on Building Permit Stage building designs.
 - Review hydrant spacing on all road frontages and install new fire hydrants as required to meet City spacing requirements for the proposed land use.
- At Developer's cost, the City will:
 - Cut, cap, and remove the existing water service connection.
 - Install two new water service connections, complete with meters, to serve the newly subdivided lots.

Storm Sewer Works

- At Developer's cost, the Developer is required to:
 - Upgrade the existing 250 mm storm sewer along the development frontage to 600 mm, from manhole STMH3083 to manhole STMH116150. Note: upgrades are typically done from manhole to manhole. Manhole STMH3083 will need to be upgraded to 1200 mm diameter to accommodate the proposed 600 mm storm sewer. If the storm sewer construction results in damage to or undermining of the adjacent AC water main, then replacement of the damaged or undermined portion of the water main will be required at the developer's cost.
 - Reconnect all existing storm connections and catch basins to the proposed storm sewer.
 - Provide an erosion and sediment control plan for all on-site and off-site works, to be reviewed as part of the servicing agreement design.
 - Check the existing storm service connections and confirm the material and condition of the inspection chambers and pipes. If deemed acceptable by the City, the existing service connection may be retained. In the case that the service connection is not in a condition to be re-used, the service connection shall be replaced, as described below.
 - If the existing storm connections are not in a condition to be reused:
 - Install a new storm connection complete with inspection chamber and dual service leads at the common property line of the newly subdivided lots.
 - Cap the southwestern connection at the inspection chamber. The inspection chamber shall be retained to serve 11231 Steveston Highway.
 - Cap and remove the southeastern connection and inspection chamber.
- At the developer's cost, the City will:
 - Complete all tie-ins for the proposed Works to 256 ing City infrastructure.

Sanitary Sewer Works

- At Developer's cost, the Developer is required to:
 - Check the existing sanitary service connection and confirm the material and condition of the inspection chamber and pipes. If deemed acceptable by the City, the existing service connection may be retained. In the case that the service connection is not in a condition to be re-used, the service connection shall be replaced by the City, at the Developer's cost, as described below.
- At Developer's cost, the City will:
 - If the existing sanitary connection is not in a condition to be reused:
 - Cap the existing connection at the inspection chamber. The inspection chamber shall be retained to serve 11231 Steveston Highway.
 - Install a new sanitary connection complete with inspection chamber and dual service leads at the common property line of the newly subdivided lots.
 - If the existing sanitary connection is adequate:
 - Retain the existing sanitary connection to serve the new western lot.
 - Install a new sanitary connection, complete with inspection chamber, off of the existing sanitary manhole to serve the new eastern lot.

Frontage Improvements

- At Developer's cost, the Developer is required to:
 - Coordinate with BC Hydro, Telus and other private communication service providers:
 - Before relocating/modifying any of the existing power poles and/or guy wires within the property frontages.
 - To determine if above ground structures are required and coordinate their locations on-site (e.g. Vista, PMT, LPT, Shaw cabinets, Telus Kiosks, etc).
 - Upgrade the rear lane along the development frontage to City standards, including concrete curb and gutter, asphalt, drainage, and street lighting.
 - Provide street lighting along Seaward Gate.
 - Review street lighting levels along Steveston Highway, and upgrade as required.
 - Complete other frontage improvements as per Transportation's requirements, which include, but are not limited to, the following:
 - Steveston Highway: Along the entire frontage of both developments, maintain the existing 0.15 wide curb and construct a new 1.5 m wide sidewalk at the property line and a new 1.5 m wide treed/grass boulevard between the new sidewalk and the curb.
 - Seaward Gate: Along the entire frontage, maintain the existing 0.15 wide curb and construct a new 1.5 m wide sidewalk at the property line and a new 1.5 m wide treed/grass boulevard between the new sidewalk and the curb.
 - Removal of the existing driveway off Seaward Gate.
 - Vehicular access to be restricted to the rear lane along the north side of the subject site.
 - Lane: Upgrade the rear lane along the development frontage to City standards, including 5.1 m wide pavement, rollover curb on both sides of the lane, lighting on one side, and standard driveway let-down at the lane entrance at Seaward Gate.
 - Coordinate with Pattison Outdoor and City Traffic Operations staff to construct a concrete bus pad (3.0 m x 9.0 m) at the Steveston Highway/Seaward Gate westbound bus stop (Bust Stop ID #58045) to meet the TransLink Accessible Bus Stop Design Standards.
 - Ensure on-site parking meets the Zoning Bylaw requirements.

General Items

- At Developer's cost, the Developer is required to:
 - Coordinate the servicing agreement design for this development with the servicing agreement(s) for the adjacent development(s), both existing and in-stream. The developer's civil engineer shall submit a signed and sealed letter with each servicing agreement submission confirming that they have coordinated with civil engineer(s) of the adjacent project(s) and that the servicing agreement designs are consistent. The City will not accept the 1st submission if it is not coordinated with the adjacent developments. The coordination letter should cover, but not be limited to, the following:
 - Corridors for City utilities (existing and proposed water, storm sewer, sanitary and DEU) and private utilities.
 - Pipe sizes, material and slopes.
 - Location of manholes and fire hydrants.
 - Road grades, high points and low points.
 - Alignment of ultimate and interim curbs.
 - Proposed street lights design.
 - Enter into, if required, additional legal agreements, as determined via the subject development's Servicing Agreement(s) and/or Development Permit(s), and/or Building Permit(s) to the satisfaction of the Director of Engineering, including, but not limited to, site investigation, testing, monitoring, site preparation, de-watering, drilling, underpinning, anchoring, shoring, piling, pre-loading, ground densification or other activities that may result in settlement, displacement, subsidence, damage or nuisance to City and private utility infrastructure.

Prior to Building Permit Issuance, the developer must complete the following requirements:

- 1. Submission of a Construction Parking and Traffic Management Plan to the Transportation Department. Management Plan shall include location for parking for services, deliveries, workers, loading, application for any lane closures, and proper construction traffic controls as per Traffic Control Manual for works on Roadways (by Ministry of Transportation) and MMCD Traffic Regulation Section 01570.
- 2. Obtain a Building Permit (BP) for any construction hoarding. If construction hoarding is required to temporarily occupy a public street, the air space above a public street, or any part thereof, additional City approvals and associated fees may be required as part of the Building Permit. For additional information, contact the Building Approvals Department at 604-276-4285.

Note:

- * This requires a separate application.
- Where the Director of Development deems appropriate, the preceding agreements are to be drawn not only as personal covenants of the property owner but also as covenants pursuant to Section 219 of the Land Title Act.

All agreements to be registered in the Land Title Office shall have priority over all such liens, charges and encumbrances as is considered advisable by the Director of Development. All agreements to be registered in the Land Title Office shall, unless the Director of Development determines otherwise, be fully registered in the Land Title Office prior to enactment of the appropriate bylaw.

The preceding agreements shall provide security to the City including indemnities, warranties, equitable/rent charges, letters of credit and withholding permits, as deemed necessary or advisable by the Director of Development. All agreements shall be in a form and content satisfactory to the Director of Development.

Additional legal agreements, as determined via the subject development's Servicing Agreement(s) and/or Development Permit(s), and/or Building Permit(s) to the satisfaction of the Director of Engineering may be required including, but not limited to, site investigation, testing, monitoring, site preparation, de-watering, drilling, underpinning, anchoring, shoring, piling, pre-loading, ground densification or other activities that may result in settlement, displacement, subsidence, damage or nuisance to City and private utility infrastructure.

• Applicants for all City Permits are required to comply at all times with the conditions of the Provincial *Wildlife Act* and Federal *Migratory Birds Convention Act*, which contain prohibitions on the removal or disturbance of both birds and their nests. Issuance of Municipal permits does not give an individual authority to contravene these legislations. The City of Richmond recommends that where significant trees or vegetation exists on site, the services of a Qualified Environmental Professional (QEP) be secured to perform a survey and ensure that development activities are in compliance with all relevant legislation.

[Signed copy on file]

Signed

Date



Richmond Zoning Bylaw 8500 Amendment Bylaw 10120 (RZ 19-858458) 10931 Seaward Gate

The Council of the City of Richmond, in open meeting assembled, enacts as follows:

1. The Zoning Map of the City of Richmond, which accompanies and forms part of Richmond Zoning Bylaw 8500, is amended by repealing the existing zoning designation of the following area and by designating it "COMPACT SINGLE DETACHED (RC2)".

P.I.D. 004-087-836 Lot 238 Section 36 Block 4 North Range 6 West New Westminster District Plan 42353

2. This Bylaw may be cited as "Richmond Zoning Bylaw 8500, Amendment Bylaw 10120".

FIRST READING PUBLIC HEARING

SECOND READING

THIRD READING

ADOPTED

 CITY OF RICHMOND
 APPROVED by
 APPROVED by Director or Solicitor

MAYOR

CORPORATE OFFICER