

Agenda

City Council

Council Chambers, City Hall 6911 No. 3 Road Tuesday, October 13, 2020 7:00 p.m.

Pg. # ITEM

MINUTES

CNCL-10 1. Motion to adopt the *minutes* of the Regular Council meeting held on September 28, 2020.

AGENDA ADDITIONS & DELETIONS

COMMITTEE OF THE WHOLE

- 2. Motion to resolve into Committee of the Whole to hear delegations on agenda items.
- 3. Delegations from the floor on Agenda items.

PLEASE NOTE THAT FOR LEGAL REASONS, DELEGATIONS ARE NOT PERMITTED ON ZONING OR OCP AMENDMENT BYLAWS WHICH ARE TO BE ADOPTED OR ON DEVELOPMENT PERMITS/DEVELOPMENT VARIANCE PERMITS – ITEM NO. 18.

4. *Motion to rise and report.*

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RATIFICATION OF COMMITTEE ACTION

CONSENT AGENDA

PLEASE NOTE THAT ITEMS APPEARING ON THE CONSENT AGENDA WHICH PRESENT A CONFLICT OF INTEREST FOR COUNCIL MEMBERS MUST BE REMOVED FROM THE CONSENT AGENDA AND CONSIDERED SEPARATELY.

RECOMMENDATIONS FROM COMMITTEE WILL APPEAR ON THE REVISED COUNCIL AGENDA, EITHER ON THE CONSENT AGENDA OR NON-CONSENT AGENDA DEPENDING ON THE OUTCOME AT COMMITTEE.

CONSENT AGENDA HIGHLIGHTS

- Receipt of Committee minutes
- UBCM Community Emergency Preparedness Fund 2020/2021 Application
- Amendments to Official Community Plan Bylaw Preparation Consultation Policy 5043 (Update to Referrals to the Board of Education of School District No. 38 (Richmond)) and New Policy on Independent School Referral to the Board of Education of School District No. 38 (Richmond)
- Mask Wearing in City Buildings
- Deferring the CPI Increase to the Consolidated Fees Bylaw to 2021
- Permissive Property Tax Exemption (2021) Bylaw No. 10196
- Amendments to the Revised Consolidated 5 Year Financial Plan (2020-2024) Bylaw No. 10183
- 5. Motion to adopt Items No. 6 through No. 12 by general consent.

6. COMMITTEE MINUTES

That the minutes of:

(1) the General Purposes Committee meeting held on October 5, 2020; and

Consent Agenda Item

CNCL-17

CNCL-25	(2) the Finance Committee meeting held on October 5, 2020;
	be received for information.

Consent Agenda Item

Consent

Agenda

Item

7. UBCM COMMUNITY EMERGENCY PREPAREDNESS FUND 2020/2021 APPLICATION

(File Ref. No. 10-6060-01) (REDMS No. 6526672)

CNCL-28

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ITEM

See Page CNCL-28 for full report

GENERAL PURPOSES COMMITTEE RECOMMENDATION

- (1) That the Box Culvert Repair project submission to the 2020 Union of BC Municipalities (UBCM) Community Emergency Preparedness Fund for Structural Flood Mitigation be endorsed; and
- (2) That, should the submission be successful, the Chief Administrative Officer and General Manager, Engineering and Public Works be authorized to negotiate and execute the funding agreement with UBCM.
- 8. AMENDMENTS TO OFFICIAL COMMUNITY PLAN BYLAW PREPARATION CONSULTATION POLICY 5043 (UPDATE TO REFERRALS TO THE BOARD OF EDUCATION OF SCHOOL DISTRICT NO. 38 (RICHMOND)) AND NEW POLICY ON INDEPENDENT SCHOOL REFERRAL TO THE BOARD OF EDUCATION OF SCHOOL DISTRICT NO. 38 (RICHMOND) (File Ref. No. 08-4045-00) (REDMS No. 651081, 5374035, 6401251, 6487486)

File Ref. No. 08-4045-00) (REDMS No. 651081, 53/4035, 6401251, 64

See Page CNCL-31 for full report

GENERAL PURPOSES COMMITTEE RECOMMENDATION

(1) That Council Policy 5043 "OCP Bylaw Preparation Consultation Policy" be amended to update the Board of Education of School District No. 38 (Richmond) referral process to lower the criteria for Richmond Official Community Plan Bylaw 9000 Amendment applications being forwarded to the Board of Education of School District No. 38 from 50 additional school-aged children to 25 additional school-aged children, and undertake minor administrative updates as outlined in the report dated September 14, 2020, from the Director of Policy Planning; and

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			(2) That the new proposed Council Policy "Referrals to the Board of Education of School District No. 38 (Richmond) for Development Applications Involving Independent Schools" be approved to address referring Independent School proposals requiring a development application to the Board of Education of School District No. 38 (Richmond) as outlined in the report dated September 14, 2020, from the Director of Policy Planning.
Consent Agenda Item		9.	MASK WEARING IN CITY BUILDINGS (File Ref. No. 09-5125-01) (REDMS No. 6529829 v. 7)
	CNCL-41		See Page CNCL-41 for full report
			GENERAL PURPOSES COMMITTEE RECOMMENDATION
			That the wearing of masks in City buildings be required as described in Option 3 in the staff report titled, "Mask Wearing in City Buildings," dated September 27, 2020 from the General Manager, Community Services, provided a further exception for children and caregivers in a child care setting as per the BC Centre for Disease Control.
Consent Agenda Item		10.	DEFERRING THE CPI INCREASE TO THE CONSOLIDATED FEES BYLAW TO 2021 (File Ref. No. 03-1240-01) (REDMS No. 6530565)
	CNCL-54		See Page CNCL-54 for full report
			FINANCE COMMITTEE RECOMMENDATION
			That the annual CPI increase to the Consolidated Fees Bylaw be deferred to 2021.
Consent Agenda Item		11.	PERMISSIVE PROPERTY TAX EXEMPTION (2021) BYLAW NO. 10196 (File Ref. No. 03-0925-02-01) (REDMS No. 6488014)
	CNCL-57		See Page CNCL-57 for full report
			FINANCE COMMITTEE RECOMMENDATION
			That Permissive Property Tax Exemption (2021) Bylaw No. 10196 be introduced and given first, second and third readings.

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Consent Agenda Item

12. AMENDMENTS TO THE REVISED CONSOLIDATED 5 YEAR FINANCIAL PLAN (2020-2024) BYLAW NO. 10183 (File Ref. No. 03-0975-01) (REDMS No. 6515307 v. 14, 6515307, 6516649)

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See Page CNCL-62 for full report

FINANCE COMMITTEE RECOMMENDATION

That the Revised Consolidated 5 Year Financial Plan (2020-2024) Bylaw No. 10183, Amendment Bylaw No. 10203, which incorporates and puts into effect the changes as outlined in the staff report titled "Amendments to the Revised Consolidated 5 Year Financial Plan (2020-2024) Bylaw No. 10183" dated September 15, 2020, from the General Manager, Finance and Corporate Services, be introduced and given first, second and third readings.

CONSIDERATION OF MATTERS REMOVED FROM THE CONSENT AGENDA

NON-CONSENT AGENDA ITEMS

GENERAL PURPOSES COMMITTEE Mayor Malcolm D. Brodie, Chair

13. SOIL USE FOR THE PLACEMENT OF FILL APPLICATION FOR THE PROPERTY LOCATED AT 8511 NO. 6 ROAD (JIANG) (File Ref. No. 12-8080-12-01) (REDMS No. 6506278 v. 7)

CNCL-81

See Page CNCL-81 for full report

GENERAL PURPOSES COMMITTEE RECOMMENDATION

Opposed: Cllrs. Au and Wolfe

That the 'Soil Use for the Placement of Fill' application, submitted by Bohan Jiang (the "Applicant"), proposing to deposit soil on the property located at 8511 No. 6 Road for the purpose of remediating the property to develop a blueberry farm, provided that the soil is sourced from Richmond and/or Delta, be authorized for referral to the Agricultural Land Commission (ALC) for the ALC to review and determine the merits of the proposal from an agricultural perspective as the Applicant has satisfied all of the City's current reporting requirements.

14. **REFERRAL RESPONSE: REGULATING FENCING MATERIALS** (File Ref. No. 08-4430-01) (REDMS No. 647103 v. 12, 6404835, 6399777, 6399778, 6360541, 6400503)

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ITEM

See Page CNCL-206 for full report

GENERAL PURPOSES COMMITTEE RECOMMENDATION

Opposed to Parts (1) and (2): Cllrs. Loo and McPhail

Opposed to Part (3): Cllrs. Day, Greene, Steves, and Wolfe

- (1) That Richmond Zoning Bylaw No. 8500, Amendment Bylaw 10122, respecting changes to fence regulations (including the prohibition of masonry as a permitted fence material for lands regulated under Section 14.1 of the Agriculture Zone), be revised as outlined in this report;
- (2) That Richmond Zoning Bylaw No. 8500, Amendment Bylaw 10122, respecting changes to fence regulations (including the prohibition of masonry as a permitted fence material for lands regulated under Section 14.1 of the Agriculture Zone), as revised, be given second reading; and
- (3) That staff be directed to maintain the current bylaw regulations for fence materials including masonry in all zones in urban areas that permit single detached residential uses.

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15. APPLICATION BY KULBINDER DHESI, RAJBINDER AUJLA AND PAULVEER AUJLA FOR REZONING AT 10160 WILLIAMS ROAD FROM THE "SINGLE DETACHED (RS1/E)" ZONE TO THE "COMPACT SINGLE DETACHED (RC2)" ZONE

(File Ref. No. RZ 19-881151) (REDMS No. 6525481 v. 4; 6511125; 6511133)

CNCL-234

See Page CNCL-234 for full report

GENERAL PURPOSES COMMITTEE RECOMMENDATION

Opposed: Cllr. Wolfe

That Richmond Zoning Bylaw 8500, Amendment Bylaw 10206, for the rezoning of 10160 Williams Road from the "Single Detached (RS1/E)" zone to the "Compact Single Detached (RC2)" zone, be introduced and given first reading.

16. APPLICATION BY RAMAN KOONER FOR REZONING AT 3540 LOCKHART ROAD FROM THE "SINGLE DETACHED (RS1/E)" ZONE TO THE "SINGLE DETACHED (RS2/B)" ZONE (File Ref. No. RZ 20-898600) (REDMS No. 6522282 v. 4, 6526719, 6526711)

CNCL-258

See Page CNCL-258 for full report

GENERAL PURPOSES COMMITTEE RECOMMENDATION

Opposed: Cllr. Greene

That Richmond Zoning Bylaw 8500, Amendment Bylaw 10211, for the rezoning of 3540 Lockhart Road from the "Single Detached (RS1/E)" zone to the "Single Detached (RS2/B)" zone, be introduced and given first reading.

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FINANCE COMMITTEE Mayor Malcolm D. Brodie, Chair

17. DEVELOPMENT COST CHARGES IMPOSITION BYLAW ANNUAL INFLATIONARY UPDATE (2020) (Tile B of No. 02 0000 01) (DEDMS No. (412702 rg. 9)

(File Ref. No. 03-0900-01) (REDMS No. 6413783 v. 8)

CNCL-278

See Page CNCL-278 for full report

FINANCE COMMITTEE RECOMMENDATION

Opposed: Cllrs. Day, Greene, Steves and Wolfe

That Option 1 – Keep DCC Rates Unchanged as outlined in the staff report titled "Development Cost Charges Imposition Bylaw Annual Inflationary Update (2020)" dated September 8, 2020 from the Director, Finance be approved by Council.

PUBLIC ANNOUNCEMENTS AND EVENTS

NEW BUSINESS

BYLAWS FOR ADOPTION

CNCL-317 Richmond Zoning Bylaw No. 8500, Amendment Bylaw No. 9969 (13171 and a Portion of 13251 Smallwood Place, ZT 18-835424) Opposed at 1st Reading – Cllrs. Greene and Wolfe. Opposed at 2nd/3rd Readings – Cllrs. Greene and Wolfe. CNCL-319 Richmond Zoning Bylaw No. 8500, Amendment Bylaw No. 10108 (10671 and 10691 Gilmore Crescent, RZ 19-857867) Opposed at 1st Reading – None. Opposed at 2nd/3rd Readings – None.

DEVELOPMENT PERMIT PANEL

18. RECOMMENDATION

See DPP Plan Package (distributed separately) for full hardcopy plans

CNCL-321

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ITEM

CNCL-345

- (1) That the minutes of the Development Permit Panel meeting held on September 30, 2020, and the Chair's report for the Development Permit Panel meetings held on October 30, 2019 be received for information; and
- (2) That the recommendation of the Panel to authorize the issuance of a Development Permit (DP 18-810720) for the property at 13171 and a portion of 13251 Smallwood Place be endorsed, and the Permit so issued.

ADJOURNMENT



Regular Council

Monday, September 28, 2020

Place:	Council Chambers Richmond City Hall
Present:	Mayor Malcolm D. Brodie Councillor Chak Au Councillor Carol Day (by teleconference) Councillor Kelly Greene (by teleconference) Councillor Alexa Loo Councillor Bill McNulty (by teleconference) Councillor Linda McPhail (by teleconference) Councillor Harold Steves (by teleconference) Councillor Michael Wolfe (by teleconference) Corporate Officer – Claudia Jesson
Call to Order:	Mayor Brodie called the meeting to order at 7:00 p.m.
RES NO. ITEM	

MINUTES

R20/16-1 1. It was moved and seconded *That the minutes of the Regular Council meeting held on September 14,* 2020, be adopted as circulated.

CARRIED

1.

Minutes



Regular Council Monday, September 28, 2020

Mayor Brodie noted that there were no members of the public present in the Council Chambers or pre-registered to participate by phone and therefore motions to resolve into Committee of the Whole to hear delegations from the floor on Agenda items and to rise and report (Items No. 2, 3, and 4) were not necessary.

CONSENT AGENDA

R20/16-2 5. It was moved and seconded *That Items No. 6 through No. 9 be adopted by general consent.*

CARRIED

6. COMMITTEE MINUTES

That the minutes of the General Purposes Committee meeting held on September 21, 2020 be received for information.

ADOPTED ON CONSENT

- 7. **PARKING FEES FOR 8620 AND 8660 BECKWITH ROAD** (File Ref. No. 12-8060-01, 10-6455-05-03) (REDMS No. 6423459 v. 7)
 - (1) That Option 1 as outlined in the staff report titled "Parking Fees for 8620 and 8660 Beckwith Road, dated August 31, 2020, from the General Manager, Community Safety, be approved and implemented; and
 - (2) That the neighbouring businesses be consulted for feedback on the potential impact of enforcement of time-limited street parking.

ADOPTED ON CONSENT



Regular Council Monday, September 28, 2020

8. APPLICATION BY RICHMOND SCHOOL DISTRICT NO. 38 FOR A HERITAGE ALTERATION PERMIT AT 8220 GENERAL CURRIE ROAD (GENERAL CURRIE SCHOOL) (File Ref. No. HA 20-909844) (REDMS No. 6517030)

That a Heritage Alteration Permit be issued that would permit the following work on the General Currie School at 8220 General Currie Road:

- (a) Construction of a wooden accessible ramp;
- (b) Enlargement of the existing stair landing and replacement of the steps;
- (c) Reversing of the door swing to enable access from the ramp; and
- (d) Provision of metal handrails to match those existing.

ADOPTED ON CONSENT

9. APPLICATION BY FIRST ON SITE RESTORATION LTD. FOR A HERITAGE ALTERATION PERMIT AT 3580 MONCTON STREET (HEPWORTH BLOCK)

(File Ref. No. HA 20-890427) (REDMS No. 6518122 v. 3)

That a Heritage Alteration Permit be issued which would permit the following repair work to a small portion of the south elevation of the building located at 3580 Moncton Street to address damage caused by a vehicle accident:

- (a) removal and cleaning of a section of the existing brick façade for reinstallation, and replacement of any non-salvageable brick with new brick to match existing (as verified by City Staff prior to installation);
- (b) repair to the existing concrete window sill to match existing;
- (c) removal and replacement of a portion of the exterior wall wood framing behind the damaged brick due to existing rot; and
- (d) installation of wheel stop curbs for the north-facing parking spaces along the south side of the building.

ADOPTED ON CONSENT



Regular Council Monday, September 28, 2020

NON-CONSENT AGENDA ITEMS

GENERAL PURPOSES COMMITTEE Mayor Malcolm D. Brodie, Chair

10. **REVISED PUBLIC ART PROGRAM POLICY** (File Ref. No. 11-7000-09-00, 01-0095-20-8703) (REDMS No. 6489154 v. 4, 6475381, 6493977, 6517340, 6517225, 6475797, 6475796)

R20/16-3 It was moved and seconded That Option 3, revised to reflect a cumulative budget of \$250,000 or greater than, as set out in Table 1 of the staff report titled "Revised Public Art Program Policy" dated August 20, 2020 from the Director, Arts, Culture and Heritage Services, be approved as the preferred option for the approval of the Terms of Reference for public art on private property and Policy 8703 – Public Art Program be revised accordingly.

> CARRIED Opposed: Cllrs. Loo

McPhail

Discussion took place on the discrepancy between City and private developer contributions toward public art and as a result the following **referral motion** was introduced:

R20/16-4 It was moved and seconded *That staff review section 5.3.1 (City contribution) and section 6.3.1 (private sector contribution) of Policy 8703 – Public Art Program and report back on options.*

> CARRIED Opposed: Cllrs. Loo McPhail





Regular Council Monday, September 28, 2020

11. **ROBERTS BANK TERMINAL 2 EXPANSION PROJECT UPDATE** (File Ref. No. 10-6125-30-004) (REDMS No. 6466120 v. 4, 6467710, 6467692, 6526394)

R20/16-5 It was moved and seconded That, as described in the staff report titled "Roberts Bank Terminal 2 Expansion Project Update," dated September 8, 2020 from the Director, Sustainability and District Energy:

- (1) Letters be sent to the Prime Minister, Federal Minister of Environment and Climate Change, Premier of BC, Provincial Minister of Environment and Climate Change Strategy, the Provincial Minister of Transportation and Infrastructure, federal and provincial Leaders of the Opposition, local MPs, local MLAs, and Metro Vancouver municipalities requesting that the Roberts Bank Terminal 2 Expansion Project not proceed; and
- (2) That staff be directed to work with the BC Environmental Assessment Office to develop provincial assessment conditions that protect the interests of the community, should the Roberts Bank Terminal 2 Expansion Project be approved.

The question on Resolution R20/16-5 was not called as the Chair clarified that letters to the Premier and provincial ministers would be sent following the BC election.

In reply to comments from Council, Chad Paulin, Manager, Environment, commented on a future opportunity for the City to submit comments, and noted that staff would request that a consultative forum be held in Richmond.

The question on Resolution R20/16-5 was then called and it was **CARRIED** with Cllrs. Loo and McPhail opposed.

PUBLIC ANNOUNCEMENT

Mayor Brodie announced that Councillor Bill McNulty has been appointed to the Board of Emergency Communications for Southwest British Columbia (E-COMM), until the Annual General Meeting of E-COMM in 2021.



Regular Council Monday, September 28, 2020

BYLAWS FOR ADOPTION

R20/16-6 It was moved and seconded *That City Centre District Energy Utility Bylaw No. 9895 Amendment Bylaw No. 10187 be adopted.*

CARRIED

R20/16-7 It was moved and seconded That Richmond Zoning Bylaw No. 8500, Amendment Bylaw No. 10189 (3399 Corvette Way and 3311 and 3331 No. 3 Road, ZT 19-872212) be adopted.

> CARRIED Opposed: Cllr. Wolfe

DEVELOPMENT PERMIT PANEL

- R20/16-8 12. It was moved and seconded
 - (1) That the minutes of the Development Permit Panel meeting held on September 16, 2020, and the Chair's report for the Development Permit Panel meetings held on July 24, 2019, December 11, 2019, and September 16, 2020, be received for information; and
 - (2) That the recommendations of the Panel to authorize the issuance of:
 - (a) a Development Permit (DP 17-775868) for the property at 8140 No. 2 Road;
 - (b) a Development Permit (DP 18-818671) for the property at 4693, 4720, 4740 Vanguard Road and Road Parcel Richmond Key 20909; and
 - (c) a Development Variance Permit (DV 20-896703) for the property at 2151, 2511, 2611, 2651 No. 7 Road and PID 001 928-899;

be endorsed, and the Permits so issued.

CARRIED



Regular Council Monday, September 28, 2020

ADJOURNMENT

R20/16-9 It was moved and seconded *That the meeting adjourn (7:40 p.m.).*

CARRIED

Certified a true and correct copy of the Minutes of the Regular meeting of the Council of the City of Richmond held on Monday, September 28, 2020.

Mayor (Malcolm D. Brodie)

Corporate Officer (Claudia Jesson)



General Purposes Committee

Date:	Monday, October 5, 2020
Place:	Council Chambers Richmond City Hall
Present:	Mayor Malcolm D. Brodie, Chair Councillor Chak Au Councillor Carol Day (by teleconference) Councillor Kelly Greene (by teleconference) Councillor Alexa Loo Councillor Bill McNulty (by teleconference) Councillor Linda McPhail (by teleconference) Councillor Harold Steves (by teleconference) Councillor Michael Wolfe (by teleconference)
Call to Order:	The Chair called the meeting to order at 4:00 p.m.

MINUTES

It was moved and seconded That the minutes of the meeting of the General Purposes Committee held on September 21, 2020, be adopted as circulated.

CARRIED

COUNCILLOR KELLY GREENE

1. WOMEN'S ADVISORY COMMITTEE (File Ref. No.:)

It was moved and seconded

For staff to investigate and report back on the creation of a Women's Advisory Committee; and evaluate the additional strategy recommendations of the FCM Run, Win and Lead framework and report back.

CARRIED

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ENGINEERING AND PUBLIC WORKS DIVISION

2. UBCM COMMUNITY EMERGENCY PREPAREDNESS FUND 2020/2021 APPLICATION

(File Ref. No. 10-6060-01) (REDMS No. 6526672)

It was moved and seconded

- (1) That the Box Culvert Repair project submission to the 2020 Union of BC Municipalities (UBCM) Community Emergency Preparedness Fund for Structural Flood Mitigation be endorsed; and
- (2) That, should the submission be successful, the Chief Administrative Officer and General Manager, Engineering and Public Works be authorized to negotiate and execute the funding agreement with UBCM.

CARRIED

COMMUNITY SAFETY DIVISION

3. SOIL USE FOR THE PLACEMENT OF FILL APPLICATION FOR THE PROPERTY LOCATED AT 8511 NO. 6 ROAD (JIANG) (File Ref. No. 12-8080-12-01) (REDMS No. 6506278 v. 7)

By teleconference, Barry Mah, Westwood Topsoil Ltd., agent representing the property owner, provided background information regarding the subject site, and noted that (i) the owner has agreed to do whatever it takes to bring the soil back to farmable conditions, (ii) the application has been ongoing for approximately eight years, (iii) various professional analyses have been completed, and (iv) the owner has proposed to provide a \$30,000 bond to the City for implementation of the Farm Plan.

In reply to queries from Committee, Mr. Mah and Thomas Elliot, Agrologist (by teleconference), provided the following information:

- the applicant is agreeable to a minimum 10-year lease between the property owner and the farm operator;
- it is challenging to assure that the soil deposited on the subject site will be sourced from Richmond as there are few opportunities to obtain it locally;
- the removal of the wood waste from the subject site would be a big undertaking and therefore, if the City were to require its removal, there is no certainty that the soil remediation of the subject site would proceed;

- the disruption of the wood waste may lead to the generation of leachate and would damage the anaerobic state of the soil, thereby having a greater negative impact on the subject site; and
- as contractor for the applicant, Westwood Topsoil Ltd. works closely with source sites to ensure soil quality.

In reply to queries from Committee, Carli Williams, Manager, Business Licence and Bylaws, advised that if approved, the permit requirements will mirror that of previous soil deposit permits (notably the Kavanagh soil deposit permit) whereby an on-site monitor will be required to inspect each load of soil prior to deposition on the subject site and maintain an accurate daily log of trucks depositing soil on the site. Ms. Williams then spoke to performance bonds, noting that the City does not have the authority to require such bond to ensure that all required mitigation and monitoring measures are completed; therefore the proposed \$30,000 bond for the implementation of the Farm Plan is at the applicant's discretion.

Discussion took place and Committee commented on future soil deposit permits and the need to know where soil to be deposited is sourced.

It was moved and seconded

That the 'Soil Use for the Placement of Fill' application, submitted by Bohan Jiang (the "Applicant"), proposing to deposit soil on the property located at 8511 No. 6 Road for the purpose of remediating the property to develop a blueberry farm, be authorized for referral to the Agricultural Land Commission (ALC) for the ALC to review and determine the merits of the proposal from an agricultural perspective as the Applicant has satisfied all of the City's current reporting requirements.

The question on the motion was not called as discussion took place and Committee commented on (i) the need to know where soil is sourced from prior to Council consideration of soil deposit permits, (ii) the preference to require that soils be sourced solely from Richmond and/or Delta, and (iii) the need to apply soil permit requirements consistently.

In reply to a further query from Committee, Mr. Elliot and Mr. Mah stated that the availability of suitable top soil from Richmond and/or Delta is limited and thus it would be challenging to assure this; moreover, the anticipated twoyear timeline to complete the project would likely be exceeded if soils deposited were required to be from Richmond and/or Delta. As a result of the discussion, the following **amendment motion** was introduced:

It was moved and seconded

That the main motion be amended to add "provided that the soil is sourced from Richmond and/or Delta."

CARRIED Opposed: Cllrs. Au Loo McPhail

The question on the main motion, as amended to read as follows:

"That the 'Soil Use for the Placement of Fill' application, submitted by Bohan Jiang (the "Applicant"), proposing to deposit soil on the property located at 8511 No. 6 Road for the purpose of remediating the property to develop a blueberry farm, provided that the soil is sourced from Richmond and/or Delta, be authorized for referral to the Agricultural Land Commission (ALC) for the ALC to review and determine the merits of the proposal from an agricultural perspective as the Applicant has satisfied all of the City's current reporting requirements."

was then called and it was **CARRIED** with Cllrs. Au and Wolfe opposed.

The Chair requested that staff provide information regarding permit conditions imposed on previous applications, notably a site on Westminster Highway being referred to as the "Kavanagh guidelines." In addition, staff was requested to advise on the process for an applicant if soil for deposit cannot be sourced from Richmond and/or Delta.

PLANNING AND DEVELOPMENT DIVISION

4. AMENDMENTS TO OFFICIAL COMMUNITY PLAN BYLAW PREPARATION CONSULTATION POLICY 5043 (UPDATE TO REFERRALS TO THE BOARD OF EDUCATION OF SCHOOL DISTRICT NO. 38 (RICHMOND)) AND NEW POLICY ON INDEPENDENT SCHOOL REFERRAL TO THE BOARD OF EDUCATION OF SCHOOL DISTRICT NO. 38 (RICHMOND) (File Ref. No. 08-4045-00) (REDMS No. 6510818; 5374035; 6401251; 6487486) It was moved and seconded

- (1) That Council Policy 5043 "OCP Bylaw Preparation Consultation Policy" be amended to update the Board of Education of School District No. 38 (Richmond) referral process to lower the criteria for Richmond Official Community Plan Bylaw 9000 Amendment applications being forwarded to the Board of Education of School District No. 38 from 50 additional school-aged children to 25 additional school-aged children, and undertake minor administrative updates as outlined in the report dated September 14, 2020, from the Director of Policy Planning; and
- (2) That the new proposed Council Policy "Referrals to the Board of Education of School District No. 38 (Richmond) for Development Applications Involving Independent Schools" be approved to address referring Independent School proposals requiring a development application to the Board of Education of School District No. 38 (Richmond) as outlined in the report dated September 14, 2020, from the Director of Policy Planning.

CARRIED

5. **REFERRAL RESPONSE: REGULATING FENCING MATERIALS** (File Ref. No. 08-4430-01) (REDMS No. 647103 v. 12; 6404835; 6399777; 6399778; 6360541; 6400503)

In reply to queries from Committee, Barry Konkin, Director, Policy Planning and James Cooper, Director, Building Approvals (by teleconference) provided the following information:

- an amendment to Building Regulation Bylaw No. 7230 that would require a Building Permit application for all fences and elements requiring a concrete foundation would help ensure that fences – including masonry – are well built and constructed properly in all zones in urban areas; and
- dilapidated fences that encroach on City property can be remedied through the City's bylaws, whereas such fences between two private properties are a civil matter between property owners.

It was moved and seconded

(1) That Richmond Zoning Bylaw No. 8500, Amendment Bylaw 10122, respecting changes to fence regulations (including the prohibition of masonry as a permitted fence material for lands regulated under Section 14.1 of the Agriculture Zone), be revised as outlined in this report;

- (2) That Richmond Zoning Bylaw No. 8500, Amendment Bylaw 10122, respecting changes to fence regulations (including the prohibition of masonry as a permitted fence material for lands regulated under Section 14.1 of the Agriculture Zone), as revised, be given second reading; and
- (3) That staff be directed to maintain the current bylaw regulations for fence materials including masonry in all zones in urban areas that permit single detached residential uses.

The question on the motion was not called as in reply to queries from Committee, staff advised that (i) agricultural property owners and the Food Security and Agricultural Advisory Committee were not consulted regarding this matter, (ii) a typical wood fence requiring a small concrete footing would not require a building permit, and (iii) if a homeowner is committed to a particular style of fence, they may apply for one through the Development Variance Permit process.

The question on Parts (1) and (2) of the motion was then called and it was **CARRIED** with Cllrs. Loo and McPhail opposed.

The question on Part (3) of the motion was then called and it was **CARRIED** with Cllrs. Day, Greene, Steves, and Wolfe opposed.

6. APPLICATION BY KULBINDER DHESI, RAJBINDER AUJLA AND PAULVEER AUJLA FOR REZONING AT 10160 WILLIAMS ROAD FROM THE "SINGLE DETACHED (RS1/E)" ZONE TO THE "COMPACT SINGLE DETACHED (RC2)" ZONE (File Ref. No. RZ 19-881151) (REDMS No. 6525481 v. 4; 6511125; 6511133)

It was moved and seconded

That Richmond Zoning Bylaw 8500, Amendment Bylaw 10206, for the rezoning of 10160 Williams Road from the "Single Detached (RS1/E)" zone to the "Compact Single Detached (RC2)" zone, be introduced and given first reading.

CARRIED Opposed: Cllr. Wolfe

7. APPLICATION BY RAMAN KOONER FOR REZONING AT 3540 LOCKHART ROAD FROM THE "SINGLE DETACHED (RS1/E)" ZONE TO THE "SINGLE DETACHED (RS2/B)" ZONE (File Ref. No. RZ 20-898600) (REDMS No. 6522282 v. 4; 6526719; 6526711)

It was moved and seconded

That Richmond Zoning Bylaw 8500, Amendment Bylaw 10211, for the rezoning of 3540 Lockhart Road from the "Single Detached (RS1/E)" zone to the "Single Detached (RS2/B)" zone, be introduced and given first reading.

CARRIED Opposed: Cllr. Greene

Discussion took place on the demolition of two-unit dwellings as it relates to secondary suites and in response to Committee comments, Wayne Craig, Director, Development, advised that the subject site is zoned for a singlefamily home and not a two-unit dwelling; he provided background information and remarked that if a two-unit dwelling were to be constructed, a rezoning application would be required.

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

It was moved and seconded

That staff investigate how to make non-conforming two-unit dwellings compliant where they already exist and report back.

CARRIED Opposed: Cllr. Loo

COMMUNITY SERVICES DIVISION

8. MASK WEARING IN CITY BUILDINGS

(File Ref. No. 09-5125-01) (REDMS No. 6529829 v. 7)

Serena Lusk, General Manager, Community Services, referenced exceptions listed in Option 3 – Semi-Restricted Mark Use Requirements as described in Option 3 in the staff report titled, "Mask Wearing in City Buildings," dated September 27, 2020, noting that an additional exception for children and caregivers in a childcare setting as per the BC Centre for Disease Control be added.

As a result, the following **motion** was introduced:

It was moved and seconded

That the wearing of masks in City buildings be required as described in Option 3 in the staff report titled, "Mask Wearing in City Buildings," dated September 27, 2020 from the General Manager, Community Services, provided a further exception for children and caregivers in a child care setting as per the BC Centre for Disease Control.

In reply to queries from Committee, Ms. Lusk advised that (i) staff training will be provided, (ii) as per Option 3, refusal of service for non-compliance is recommended for those that do not fall under an exception category, however every opportunity to comply will be provided prior to refusal of service, and (iii) it is best practice to request that members of the public provide their own mask but a disposable mask will be supplied if required.

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

ADJOURNMENT

It was moved and seconded *That the meeting adjourn (5:46 p.m.).*

CARRIED

Certified a true and correct copy of the Minutes of the meeting of the General Purposes Committee of the Council of the City of Richmond held on September 5, 2020.

Mayor Malcolm D. Brodie Chair Hanieh Berg Legislative Services Associate



Finance Committee

Date:	Monday, October 5, 2020
Place:	Council Chambers Richmond City Hall
Present:	Mayor Malcolm D. Brodie, Chair Councillor Chak Au Councillor Carol Day (by teleconference) Councillor Kelly Greene (by teleconference) Councillor Alexa Loo Councillor Bill McNulty (by teleconference) Councillor Linda McPhail(by teleconference) Councillor Harold Steves (by teleconference) Councillor Michael Wolfe (by teleconference)
Call to Order:	The Chair called the meeting to order at 5:47 p.m.

MINUTES

It was moved and seconded That the minutes of the meeting of the Finance Committee held on September 8, 2020, be adopted as circulated.

CARRIED

Minutes

FINANCE AND CORPORATE SERVICES DIVISION

1. DEFERRING THE CPI INCREASE TO THE CONSOLIDATED FEES BYLAW TO 2021

(File Ref. No. 03-1240-01) (REDMS No. 6530565)

It was moved and seconded That the annual CPI increase to the Consolidated Fees Bylaw be deferred to 2021.

CARRIED

1.

2. PERMISSIVE PROPERTY TAX EXEMPTION (2021) BYLAW NO. 10196

(File Ref. No. 03-0925-02-01) (REDMS No. 6488014)

It was moved and seconded

That Permissive Property Tax Exemption (2021) Bylaw No. 10196 be introduced and given first, second and third readings.

CARRIED

3. AMENDMENTS TO THE REVISED CONSOLIDATED 5 YEAR FINANCIAL PLAN (2020-2024) BYLAW NO. 10183

(File Ref. No. 03-0975-01) (REDMS No. 6515307 v. 14; 6515307; 6516649)

It was moved and seconded

That the Revised Consolidated 5 Year Financial Plan (2020-2024) Bylaw No. 10183, Amendment Bylaw No. 10203, which incorporates and puts into effect the changes as outlined in the staff report titled "Amendments to the Revised Consolidated 5 Year Financial Plan (2020-2024) Bylaw No. 10183" dated September 15, 2020, from the General Manager, Finance and Corporate Services, be introduced and given first, second and third readings.

CARRIED

4. DEVELOPMENT COST CHARGES IMPOSITION BYLAW ANNUAL INFLATIONARY UPDATE (2020)

(File Ref. No. 03-0900-01) (REDMS No. 6413783 v. 8)

It was moved and seconded

That Option 1 – Keep DCC Rates Unchanged as outlined in the staff report titled "Development Cost Charges Imposition Bylaw Annual Inflationary Update (2020)" dated September 8, 2020 from the Director, Finance be approved by Council.

CARRIED Opposed: Cllrs. Day Greene Steves Wolfe

ADJOURNMENT

It was moved and seconded *That the meeting adjourn (5:53 p.m.).*

CARRIED

6539672

Certified a true and correct copy of the Minutes of the meeting of the Finance Committee of the Council of the City of Richmond held on September 5, 2020.

Mayor Malcolm D. Brodie Chair Hanieh Berg Legislative Services Associate



То:	General Purposes Committee	Date:	September 21, 2020
From:	Milton Chan, P.Eng. Director, Engineering	File:	10-6060-01/2020-Vol 01
Re:	UBCM Community Emergency Preparedness Fu	nd 2020	2021 Application

Staff Recommendation

- 1. That the Box Culvert Repair project submission to the 2020 Union of BC Municipalities (UBCM) Community Emergency Preparedness Fund for Structural Flood Mitigation be endorsed; and
- 2. That, should the submission be successful, the Chief Administrative Officer and General Manager, Engineering and Public Works be authorized to negotiate and execute the funding agreement with UBCM.

M

Milton Chan, P.Eng. Director, Engineering (604-276-4377)

REPORT CONCURRENCE			
ROUTED TO:	CONCURRENCE	CONCURRENCE OF GENERAL MANAGER	
Intergovernmental Relations Finance	N N		
SENIOR STAFF REPORT REVIEW	INITIALS:	APPROVED BY CAO	

Version: 1

Staff Report

Origin

On May 29, 2019, the Province announced \$31 million in grant allocation for the Community Emergency Preparedness Fund (CEPF). UBCM administers the CEPF to provide grant funding for partners to plan and implement structural flood protection projects in British Columbia.

There are a number of different funding streams in this program. Under the Structural Flood Mitigation category, staff are preparing an application for Box Culvert Repair. Major repairs to existing flood protection works or flood conveyance works (e.g. culverts) are eligible for funding.

The application guidelines state that projects must be endorsed by Council to be considered for funding. Staff are requesting Council's endorsement for this project submission to the UBCM Community Emergency Preparedness Fund.

This report supports the following strategies within Council's Strategic Plan 2018-2022:

Strategy #1 A Safe and Resilient City:

Enhance and protect the safety and well-being of Richmond.

1.2 Future-proof and maintain city infrastructure to keep the community safe.

Strategy #5 Sound Financial Management:

Accountable, transparent, and responsible financial management that supports the needs of the community into the future.

5.1 Maintain a strong and robust financial position.

5.4 Work cooperatively and respectfully with all levels of government and stakeholders while advocating for the best interests of Richmond.

Analysis

There are approximately 585 kilometers of drainage pipe and 61 kilometers of box culvert owned and maintained by the City. The drainage network collects storm water throughout the City and discharges it directly to the Fraser River.

The scope of work for this project includes, but is not limited to, the repair and rehabilitation of the No. 4 Road box culvert between Blundell Road and Granville Avenue. Repair work will include filling of voids and separated joints, sealing of cracks and grouting of walls, floors and any infiltration areas.

Completion of the Box Culvert Repair project will reduce flood risk, increase flood protection and minimize potential flood damage. This project corresponds with the City's Flood Protection Management Strategy, which identifies the requirement for an integrated physical flood

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September 21, 2020

protection approach as a top priority. There are two box culvert projects which were previously approved by Council. These were the 2020 Box Culvert Repair capital account (\$1,000,000) and the 2018 Box Culvert Repair capital account (\$1,500,000).

Staff reviewed Council approved projects in order to choose a project that met the grant program guidelines. These projects were chosen as they are shovel ready, with a detailed budget and will be completed within a 2 year timeline, both of which are requirements in the technical review process for this grant. The remaining, shovel ready, structural flood mitigation projects are already provincially and/or federally grant funded.

The UBCM Community Emergency Preparedness Fund can contribute up to 100% of the project costs, to a maximum of \$750,000. The estimated cost to complete the box culvert repair between Blundell Road and Granville Avenue is \$1,740,000. Should the City be awarded the UBCM grant, the funding for the two respective capital projects will be amended, the original funding will be returned to their respective source and the 5 Year Financial Plan will be amended accordingly.

Financial Impact

None.

Conclusion

The Union of BC Municipalities has requested funding applications from local governments for emergency preparedness activities to reduce flood risk through the construction of structural flood mitigation projects. Staff recommend that Council endorse the Structural Flood Mitigation Project for grant funding in accordance with grant program guidelines. Staff are also seeking Council authority for the negotiation and execution of funding agreements should the City's application be successful.

Jason Ho, P. Eng. Manager, Engineering Planning (604-244-1281)

JH:ch

Corrine Haer, P. Eng. Project Manager, Engineering Planning (604-219-5281)



То:	General Purposes Committee	Date:	September 14, 2020
From:	Barry Konkin Director, Policy Planning	File:	08-4045-00/Vol 01
Re:	Amendments to Official Community Plan Bylaw Preparation Consultation Policy 5043 (Update to Referrals to the Board of Education of School District No. 38 (Richmond)) and New Policy on Independent School Referral to the Board of Education of School District No. 38 (Richmond)		tion Consultation on of School District ool Referral to the

Staff Recommendation

- 1. That Council Policy 5043 "OCP Bylaw Preparation Consultation Policy" be amended to update the Board of Education of School District No. 38 (Richmond) referral process to lower the criteria for Richmond Official Community Plan Bylaw 9000 Amendment applications being forwarded to the Board of Education of School District No. 38 from 50 additional school-aged children to 25 additional school-aged children, and undertake minor administrative updates as outlined in the report dated September 14, 2020, from the Director of Policy Planning.
- That the new proposed Council Policy "Referrals to the Board of Education of School District No. 38 (Richmond) for Development Applications Involving Independent Schools" be approved to address referring Independent School proposals requiring a development application to the Board of Education of School District No. 38 (Richmond) as outlined in the report dated September 14, 2020, from the Director of Policy Planning.

Barry Konkin Director, Policy Planning (604-276-4139)

Att. 3

REPORT CONCURRENCE			
ROUTED TO:	CONCURRENCE	CONCURRENCE OF GENERAL MANAGER	
Development Applications	V	be Erceg	
SENIOR STAFF REPORT REVIEW		APPROVED BY CAO	

Staff Report

Origin

At the open Planning Committee meeting of September 4, 2019, the following referral motion was passed:

"That staff explore options to amend the consultation policy to inform the Richmond School District No. 38 of all multiple family units and refer the amended consultation policy to the Council/School Board Liaison Committee."

A separate referral motion was also passed at the December 3, 2019 Planning Committee meeting:

"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."

This report responds to both referrals and brings forward amendments to Council Policy 5043 (OCP Bylaw Preparation Consultation Policy) as a result of consultation with the Board of Education of School District No. 38 (Richmond) (Richmond Board of Education) and School District staff. Staff propose to amend Council Policy 5043 to revise the criteria for when the City refers Official Community Plan (OCP) amendments involving residential development to the Richmond Board of Education and make minor administrative revisions to reflect changes in legislation and update external agencies to reflect current organization names.

This report also presents a proposed Council Policy (Referrals to the Board of Education of School District No. 38 (Richmond) for Development Applications Involving Independent Schools), which has been drafted for Council's consideration in response to the December 3, 2019 Planning Committee referral.

This report supports Council's Strategic Plan 2018-2022 Strategy #5 Sound Financial Management:

Accountable, transparent, and responsible financial management that supports the needs of the community into the future.

5.4 Work cooperatively and respectfully with all levels of government and stakeholders while advocating for the best interests of Richmond.

This report supports Council's Strategic Plan 2018-2022 Strategy #6 Strategic and Well-Planned Growth:

Leadership in effective and sustainable growth that supports Richmond's physical and social needs.

6.1 Ensure an effective OCP and ensure development aligns with it.

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Findings of Fact

Existing Council Policy 5043 (OCP Bylaw Preparation Consultation Policy)

Council Policy 5043, adopted in May 2005, provides direction to both staff and Council on when the City should consult with external agencies that may be affected by the enactment, repeal or amendment of the OCP or related Area Plans.

Residential development proposals that only require a rezoning (i.e., conform to the OCP Land Use Plan) are not referred to the Richmond Board of Education based on the School District's review and endorsement of the OCP. The City's OCP was drafted in consultation with the Richmond Board of Education and the School District's population and student enrollment projections reflect the allowable population growth provided by current OCP land use designations. Accordingly, these development applications that comply with the OCP are not referred to the Richmond Board of Education.

Furthermore, residential development information is provided to Richmond School District staff quarterly through the transfer of School Site Acquisition funds collected by the City on behalf of the School District. School District staff have communicated that the existing approach is sufficient and that all residential development proposals do not need to be forwarded to them.

With respect to consultation with the Richmond Board of Education in accordance with Council Policy 5043, the City refers OCP amendment applications for residential development where the proposal results in an <u>additional</u> 295 multi-family dwelling units or 200 single-family dwelling units above what the existing OCP allows for in terms of growth and development. For reference, the 295 multi-family units or 200 single-family dwelling units is equivalent to having the potential to generate enrolment for approximately 50 school-aged children.

Independent Schools - Zoning Information

Private or independent schools are institutions that generally provide for education within the Provincial curriculum of Kindergarten to Grade 12 (K-12). Independent schools are permitted in the "education" use definition of the Zoning Bylaw. Generally, independent schools being developed on sites that permit "education" would only require a Building Permit.

Analysis

Residential Development Information Provided to School District Staff

Residential development information, including the number of dwelling units and their location, is provided quarterly to Richmond School District staff through the process of transferring funding associated with School Site Acquisition Charges that are collected by the City on behalf of the School District from development. Information provided to the School District is as follows:

- Address/location of residential development.
- Total number of dwelling units.
- School Site Acquisition Charges collected.

Based on discussions with School District staff, the information provided on residential developments that conform to the OCP through the School Site Acquisition Charge transfer of funds is adequate to inform projected student enrolment.

Richmond Board of Education Referral Process – Proposed Amendments to Council Policy 5043

The proposed revisions will amend the criteria in the Policy to indicate that residential developments for projects involving 150 new multi-family dwelling units or 60 new single-family dwelling units above what the OCP currently permits, will be referred to the Richmond Board of Education. This scale of development has the potential to generate enrollment for approximately 25 school-aged children.

Proposed Administrative Amendments to Council Policy 5043

Administrative amendments are also proposed to Council Policy 5043 to ensure consistency with Provincial legislation (*Local Government Act*) and update the list of external agencies and stakeholders to reflect current organization names.

<u>Proposed Council Policy – Referrals to the Board of Education of School District No. 38</u> (Richmond) for Development Applications Involving Independent Schools

In response to the December 3, 2019 Planning Committee referral, staff propose a new Council Policy that would require the referral of any independent school proposals that require a development application (i.e., rezoning, temporary use permit application, and/or Agricultural Land Reserve – ALR non-farm use application) to the Richmond Board of Education for information purposes only. Sites with existing zoning that allows for an independent school where no development application is required would not be referred to the Richmond Board of Education. The new proposed Council Policy is contained in Attachment 3. A summary of the provisions contained in the proposed Council Policy is summarized as follows:

- Development applications (i.e., rezoning, temporary use permit and/or ALR non-farm use applications) for proposed independent schools will be referred to the Richmond Board of Education for information purposes.
- Prior to Council's consideration of the application, City staff will coordinate with Richmond School District staff to facilitate the referral of the proposed independent school to the Richmond Board of Education as part of the processing of the application.
- Any comments from the Richmond Board of Education and/or Richmond School District staff, including project responses, will be provided in the staff report to Council on the application.

Consultation with Richmond School District

City staff have discussed amendments to Council Policy 5043 with the Council/School Board Liaison Committee and School District staff who support the amended criteria and revised policy as the basis for referrals. Residential development information will continue to be provided to the School District quarterly through the transfer of School Site Acquisition Charges collected by the City.

The Council/School Board Liaison Committee were notified of the December 3, 2019 Planning Committee motion about being informed about independent school proposals at their meeting on December 4, 2019, with direction provided to City and Richmond School District staff to develop a suitable approach.

The drafted amendments to Council Policy 5043 and new policy on referring independent school proposals to the Richmond Board of Education incorporates all feedback from Richmond School District staff.

Financial Impact

None.

Conclusion

This report responds to separate Planning Committee referrals from September 4, 2019 and December 3, 2019. Based on consultation undertaken with Richmond Board of Education and School District staff, the following is being recommended for Council's consideration:

- Approve amendments to the existing Council Policy 5043 (OCP Bylaw Preparation Consultation Policy) to amend the criteria for referring residential developments involving an OCP amendment to the Richmond Board of Education from 50 additional school-aged children to 25 school-aged children, and undertake minor administrative changes to the Policy; and
- Approve a New Council Policy (Referrals to the Board of Education of School District No. 38 (Richmond) for Development Applications Involving Independent Schools) to refer independent school development applications to the Richmond Board of Education, which is consistent with the direction provided by Planning Committee on December 3, 2019.

The recommended amendments to Council Policy 5043 and new Council Policy will ensure excellent communication is maintained between the City and Richmond School District on residential development and development applications for proposed new independent schools.

Kevin Eng Planner 2 (604-247-4626) KE:

- Att. 1: Existing Council Policy 5043 (OCP Bylaw Preparation Consultation Policy)
 - 2: Proposed Amended Council Policy 5043 (OCP Bylaw Preparation Consultation Policy)
 - 3: Proposed New Council Policy (Referrals to the Board of Education of School District No. 38 (Richmond) for Development Applications Involving Independent Schools)

Policy Manual



Page 1 of 2	OCP Bylaw Preparation Consultation Policy	Pol icy 5043
	Adopted by Council: May 9, 2005 Amended by Council: April 24, 2006	

POLICY 5043:

It is Council Policy that:

1. PURPOSE

In accordance with the requirements of the *Local Government Act* section 879 and section 881 that require a local government to consider opportunities for consultation during the presentation, repeal or amendment of an Official Community Plan (OCP), this policy provides direction to City staff and Council.

2. CONSULTATION CONSIDERATIONS

It is Council policy that, where the development, repeal or amendment of an Official Community Plan (OCP) (including an Area Plan) bylaw is proposed:

- Staff will consider consultation with persons, organizations and authorities that may be affected by the enactment, repeal or amendment of the Official Community Plan bylaw (e.g. where the other parties' land use, programming, servicing, transportation and environmental interests may be affected).
- 2) Staff will consider early and ongoing consultation with the external agencies listed below and with any other persons, organizations and authorities, as deemed appropriate:

Ex	ternal Agencies which will be Considered for Consultation
	The Board of the Greater Vancouver Regional District (GVRD)
	The Councils of adjacent Municipalities
	First Nations (e.g., Sto:lo, Tsawwassen, Musqueam)
	TransLink
	Port Authorities (Fraser River, North Fraser, Steveston Harbour Authority)
	Vancouver International Airport Authority (VIAA) (Federal Government Agency)
	BC Land Reserve Commission
a	Richmond School Board
	Richmond Coastal Health Authority
	Community Groups and Neighbours
	All relevant Federal and Provincial Government Agencies


Page 2 of 2	OCP Bylaw Preparation Consultation Policy	Policy 5043
	Adopted by Council: May 9, 2005 Amended by Council: April 24, 2006	

3) School Board Consultation

- a) City staff shall refer proposed OCP amendments to the Richmond School Board where the OCP amendment involves a residential development which would have the potential to generate for 50 or more school aged children (e.g., 295 or more multiple family housing units and/or 200 or more single-family housing units).
- b) Where in a calendar year, should there be no OCP bylaw amendment that meets this criteria, City staff will consult with the School Board, on the overall OCP and its implications on the School Board (e.g., school needs) at the beginning of each school term in September of each year.
- c) The City and the School Board have agreed to share information (e.g., statistics, maps, reports) to co-ordinate City and School Board interests and facilitate consultations.
- 4) Prior to the first reading of a proposed Official Community Plan Bylaw, Council will consider, through the receipt of a staff report summarizing the consultation undertaken, if additional consultation with external agencies, persons, organizations and authorities is required.
- 5) Consultation may involve a variety of methods, including information meetings, dialogue and/or written correspondence.

ATTACHMENT 2





POLICY 5043:

City of

Richmond

It is Council Policy that:

1. PURPOSE

In accordance with the requirements of the *Local Government Act* section 475, 476 and section 477 that require a local government to consider opportunities for consultation during the presentation, repeal or amendment of an Official Community Plan (OCP), this policy provides direction to City staff and Council.

2. CONSULTATION CONSIDERATIONS

It is Council policy that, where the development, repeal or amendment of an Official Community Plan (OCP) (including an Area Plan) bylaw is proposed:

- Staff will consider consultation with persons, organizations and authorities that may be affected by the enactment, repeal or amendment of the Official Community Plan bylaw (e.g. where the other parties' land use, programming, servicing, transportation and environmental interests may be affected).
- 2) Staff will consider early and ongoing consultation with the external agencies listed below and with any other persons, organizations and authorities, as deemed appropriate:

Ex	External Agencies which will be Considered for Consultation			
	The Board of Metro Vancouver			
	The Councils of adjacent Municipalities			
	First Nations (e.g., Sto:lo, Tsawwassen, Musqueam)			
	TransLink			
	Port Authorities (Vancouver Fraser Port Authority and Steveston Harbour Authority)			
۵	Vancouver International Airport Authority (VIAA) (Federal Government Agency)			
a	Agricultural Land Commission			
	Board of Education of School District No. 38 (Richmond)			
	Vancouver Coastal Health Authority			
	Community Groups and Neighbours			
	All relevant Federal and Provincial Government Agencies			

Version: 2

ATTACHMENT 2





Page 2 of 2	OCP Bylaw Preparation Consultation Policy	Policy 5043
	Adopted by Council: May 9, 2005 Amended by Council: April 24, 2006 Amended by Council:	

- 3) Board of Education of School District No. 38 (Richmond) Consultation
 - a) City staff shall refer proposed OCP amendments to the Board of Education of School District No. 38 (Richmond) where the OCP amendment involves a residential development proposing an additional 150 or more multiple family housing units or 60 or more single-family housing units, above what the current OCP allows for.
 - b) As needed, City staff will consult with the Board of Education of School District No. 38 (Richmond) on the overall OCP and its implications (e.g., school needs).
 - c) The City and the Board of Education of School District No. 38 (Richmond) have agreed to share information (e.g., statistics, maps, reports) to co-ordinate interests and facilitate consultations.
- 4) Prior to the first reading of a proposed Official Community Plan Bylaw, Council will consider, through the receipt of a staff report summarizing the consultation undertaken, if additional consultation with external agencies, persons, organizations and authorities is required.
- 5) Consultation may involve a variety of methods, including information meetings, dialogue and/or written correspondence.

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City of Richmond

Policy Manual

Page 1 of 1	Referrals to the Board of Education of School District No. 38 (Richmond) for Development Applications Involving Independent Schools
	Adopted by Council: <date></date>

POLICY 5XXX:

It is Council policy that:

Development applications involving proposed independent schools will be referred to the Board of Education of School District No. 38 (Richmond) for information purposes as part of the processing of the application. The following criteria and processes will apply:

- Types of applications to be referred to the Board of Education of School District No. 38 (Richmond) – Development applications involving a proposed independent school requiring a:
 - a. Rezoning application;
 - b. Temporary Use Permit application; and/or
 - c. Agricultural Land Reserve Non-Farm Use application.
- 2. Only those independent schools requiring a development application identified above will be covered under this policy.
- 3. While referrals made to the Board of Education of School District No. 38 (Richmond) will be for information purposes only, School District staff may provide comments if desired.
- 4. Referrals to the Board of Education of School District No. 38 (Richmond) will be made during the City staff processing of a development application involving an independent school, prior to Richmond City Council consideration of the proposal.
- 5. Summary information on any response to the referral of the independent school development application from the School District will be provided in the City staff report to Council on the proposal.

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Report to Committee

То:	General Purposes Committee	Date:	September 27, 2020
From:	Serena Lusk General Manager, Community Services	File:	09-5125-01/2020-Vol 01
Re:	Mask Wearing in City Buildings		

Staff Recommendation

That the wearing of masks in City buildings be required as described in Option 3 in the staff report titled, "Mask Wearing in City Buildings," dated September 27, 2020 from the General Manager, Community Services.

frence

Serena Lusk General Manager, Community Services (604-233-3344)

Att. 2

REPORT CONCURRENCE		
APPRO		

Staff Report

Origin

At the General Purposes Committee on September 8, 2020, Committee made the following referral:

That staff review the development of a mask policy for all City buildings, and report back.

The purpose of this report is to respond to the above referral. This report supports Council's Strategic Plan 2018-2022 Strategy #1 A Safe and Resilient City:

Enhance and protect the safety and well-being of Richmond.

1.4 Foster a safe, caring and resilient environment.

This report supports Council's Strategic Plan 2018-2022 Strategy #3 One Community Together:

3.1 Foster community resiliency, neighbourhood identity, sense of belonging, and intercultural harmony.

Analysis

In response to the COVID-19 Pandemic, Richmond implemented a number of measures to keep the community safe, including closing City buildings and introducing various safety measures. Up until now, the wearing of masks has been optional. The following report provides information in support of Council's interest in adopting a formal mask wearing policy for city buildings during the Pandemic.

Expert Advice

Guidance from the World Health Organization, BC Centre for Disease Control (BC CDC) and Vancouver Coastal Health is consistent in identifying the most effective ways to prevent the spread of COVID-19: frequent handwashing; maintaining physical distancing; and staying home when sick. Each of these authorities recommend that masks should be used as part of a comprehensive strategy to suppress transmission of COVID-19.

Specifically, masks should be used as an additional control measure if:

- A person is sick;
- A person is caring for someone who is or may be sick;
- Physical distancing is not possible; or
- Individuals are in close, prolonged contact with others.

The Medical Health Officer for Richmond, Dr. Meena Dawar, has also provided her advice in a letter included as Attachment 2 to this report.



The Occupational Health and Safety Regulation (WorkSafeBC) requires the City to implement infectious disease controls in the following order of preference (Hierarchy of Controls):

When the first three levels of protection are not enough to mitigate the risk, the need for Personal Protective Equipment (PPE), including non-medical masks as appropriate, will be assessed and assigned as required. Some staff may not be able to avoid contact with the public from time to time, or individually elect to take extra measures for their personal comfort. PPE, including non-medical masks, will be supplied by the City.

Current practice - Employee Mask Use

To date, the City of Richmond has taken a permissive approach to mask wearing in City buildings. Staff providing customer service to the public are given the option to wear a non-medical mask where engineering controls are in place and physical distancing can easily be maintained. A mask is required for staff and in limited situations, members of the public, only if other controls are not in place. Examples illustrating the City's current mask requirements are included in Table 1 below.

City of Richmond facilities	Situations requiring staff to wear masks and rationale	Situations requiring the public to wear masks
Fitness centres at Minoru Centre for Active Living and community centres	Fitness attendants are required to wear masks	If distancing cannot be maintained, the use of non- medical face masks must be used by both patrons and staff.
Transportation in City vehicles e.g. parking enforcement, animal control, community ambassadors	 Limit to one person per vehicle wherever operationally possible. When not operationally possible, follow: PPE: Wear a disposable non- medical or cloth mask when there is more than one person in the vehicle 	n/a
Inspectors – Building Approvals, Bylaws	Inspectors are required to wear PPE (including masks) at all times when doing a site visit to a home/building	Home owners/permit holders are advised during appointment booking that they must wear a mask during an inspection. An inspector may cancel/reject the on-site inspection if appropriate controls (distancing, masks) are not followed.
First Aid response	Attendants to follow OFAA protocols, including wearing appropriate PPE (including appropriate style of mask) if providing direct patient care or within 2m (6 ft) of patient	

Table 1: Mask use in City Buildings – Current Practice

The Administration is currently implementing a more restrictive approach to mask wearing for City employees including the requirement that they be worn in all cases where there will or may be interaction with another employee or member of the public in areas such as hallways, washrooms, elevators, and shared workspaces. Staff will be issued re-useable masks and provided appropriate training.

It should be noted that this increased requirement for mask wearing by City staff will not replace the need to follow the hierarchy of controls including maintaining physical distance. For the City's approach, this includes staff working remotely where possible and effective and carefully considering the need to re-open any City buildings including Richmond City Hall.

Practices in other Jurisdictions

Many jurisdictions across Canada, and a number of agencies serving the public in British Columbia such as TransLink and BC Ferries, and many local businesses, have implemented mandatory face mask requirements for the public in indoor public spaces.

A scan of Lower Mainland municipalities suggests that a number of other municipalities are also considering the development of a mask requirement for visitors to municipal facilities. Delta has recently announced the requirement for mandatory facemasks to be worn by anyone entering, exiting or moving around City of Delta facilities

Increasing numbers of Canadian municipalities outside of BC have developed policies or implemented bylaws requiring the use of masks including Calgary, Edmonton and Toronto.

It appears that there are a range of factors that have led others to consider and implement more restrictive mask policies. These factors can be summarized as follows:

- Desire for enhanced protection from an anticipated second wave of COVID-19;
- Re-opening access to City buildings for additional staff and the public;
- Perception that the ability to maintain 6 ft physical distancing in indoor public spaces is inconsistent and unpredictable;
- An increase in regional COVID-19 cases; and
- Guidance from Provincial Health Office.

A review of other mask use policies highlights a spectrum of potential policy approaches to the use of masks in City buildings. Within each of those approaches, a range of tools have been utilized to identify and communicate when, where and how masks should/must be used and if/how these requirements are enforced. These are illustrated in the graphic below. Attachment 1 offers an enlarged version of this graphic.

Illustration 1: Spectrum of Mask Use Requirements in City Buildings



- 6 -

Considerations for a more restrictive mask policy in City buildings

Cost implications and supply of masks

The City of Richmond's current practice is for employees whose job function requires the use of a mask according to the Hierarchy of Controls identified in the Pandemic Exposure Control Plan to be provided with an appropriate style of mask at the City's cost.

Should Council provide the direction to implement a more restrictive mask requirement for members of the public using City buildings, it is best practice to request they provide their own mask but supply a disposable mask if needed.

The City currently has a stock of disposable masks that can accommodate this approach at this stage of the Restoring Richmond Plan. Should further facilities open or participation increase, the cost and supply availability may need to be further considered.

Education and training

Should Council provide the direction to implement a more restrictive mask requirement for members of the public using City buildings, a communication plan will be developed, with additional signage produced at all City facilities, outlining requirements for mask use and guidelines for proper use and disposal of a facemask.

Exemptions

A common feature of even the most restrictive mask policies or bylaws implemented by other public serving agencies or jurisdictions, includes exemptions where mask use is not feasible or recommended. Many of these exemptions involve considerations for people with disabilities, considerations around age, activity level of participants, and considerations relative to indoor and outdoor spaces.

Considerations for people with disabilities

- A common practice is to consider an exemption for anyone with an underlying medical condition or disability which inhibits the ability to wear a mask or face covering; this would include:
 - Individuals with disabilities for whom it is difficult or impossible to wear a mask, such as:
 - Individuals with sensory disabilities (e.g. persons living on the autism spectrum);
 - Individuals with chronic health conditions that are respiratory in nature (COPD, asthma);
 - Individuals with cognitive disabilities (e.g. dementia); and
 - Individuals with physical disabilities who are not able to put on / take off a mask.
 - Individuals who are deaf or hard of hearing who may face increased communication challenges including:
 - Putting the elastic around their ears affects the volume or causes the hearing aids to come out;
 - Individuals who rely on lip reading are unable to communicate in this manner; and
 - Individuals with auditory processing challenges find it can be more challenging to hear/understand.
- There has also been challenges within the disability community where individuals with disabilities who are unable to wear masks have been excluded from certain spaces/ businesses as there have been no accommodations in place to support them, and even with accommodations in place members of the community have been stigmatized for not wearing one. Considerations would need to be made to address this issue.

Age

A common practice in more restrictive mask use policies is the inclusion of an exemption related to age, and particularly related to children. It appears that there is a range of perspectives regarding the appropriate age for children to be required to wear a mask. The BC Centre for Disease Control recommends not putting a face mask or any covering including visors and eye protection on infants under two (2) years of age. A facemask or covering will make it difficult for a baby to breathe because their airways are still small. There is also a risk that parts of the facemask, visor or eye protection can come off and become a choking hazard. The World Health Organization suggests that children over five (5) years should be required to wear masks, considering childhood developmental milestones, compliance challenges and the autonomy required to use a mask properly. The BC Ministry of Education has mandated masks for all staff,

middle and secondary students in common areas where physical distancing cannot be maintained.

Any more restrictive mask use requirements for City buildings will need to consider exceptions based on age.

Activity levels

Any more restrictive mask use requirements will need to consider exceptions for individuals participating in physical activity. Examples include water activities (e.g. swimming, aquatic fitness activities) and physical activities that cause significant sweating. According to the World Health Organization, people should not wear masks when exercising as masks may reduce the ability to breathe comfortably. Sweat can also make a mask become wet more quickly, making it more difficult to breathe, reducing the masks effectiveness and promoting the growth of microorganisms.

However, it is common practice in more restrictive mask use policies to require any person entering, exiting or moving around a building while not actively participating in strenuous or vigorous activity to wear a mask.

Indoor/Outdoor

According to health authorities, transmission of COVID-19 is much more likely when in close contact in an indoor setting. Transmission is less likely in an outdoor setting where there is more space for people to keep physically distanced. As such, many of the mask policies reviewed to date apply to indoor and enclosed spaces only.

However, evolving guidance from health authorities across Canada, including the Public Health Agency of Canada, recommend wearing a non-medical mask in closed spaces and close contact situations when distancing is difficult, whether indoor or outdoor.

A more restrictive mask policy for City buildings could include masking requirements in adjacent outdoor spaces where physical distancing is inconsistent or unpredictable.

Enforcement

One of the key differentiators along the spectrum of mask use requirements is the method of enforcement undertaken for non-compliance. On the permissive end of the spectrum, enforcement is focused on targeted education and communication with staff and only those members of the public who are directly impacted by the requirement.

Moving further along the spectrum into more restrictive requirements for mask use, the need for more broad education and communication increases. Public facing education and communication tools to educate the public on mask use requirements could include: signage at entrances to City buildings; public corporate statements on the required use of masks; updates on the City website, social media channels and other digital communication tools; and the availability of disposable masks to members of the public on request in all City buildings to reduce barriers to compliance.

Considering more extreme enforcement options, such as refusal of service and implementing a process for issuing monetary penalties and/or fines would need to be considered carefully and include input from a range of stakeholders.

Support for a mask policy for City buildings

There appears to be a significant level of support, both in the Richmond community, and with City staff, for the consideration of a more restrictive mask use requirement for City buildings.

Trends in public sentiment

Anecdotal comments from patrons at community facilities where services are being restored suggest that there is some apprehension about the risks of transmission of COVID-19 in indoor spaces.

A scan of social media comments responding to local announcements of actions taken to mitigate COVID-19 in Richmond and surrounding communities have been predominantly in favour or increased use of masks in public spaces. An example of this is the overwhelmingly supportive comments on Delta's FaceBook posts announcing their decision to require masks.

While the Richmond Chamber of Commerce has not surveyed local businesses specifically regarding mask use, there is a perception that there is a prevalence of mask use by both staff and patrons of businesses in Richmond.

Nationally, a recent online survey by Leger and the Association for Canadian Studies found that 83 per cent of respondents feel governments should order people to wear a mask in all indoor public spaces.

Options for Consideration

The implementation of any of the options below will not change the need for continued vigilance in other areas including the elimination of risk through modified work schedules and physical distancing, engineering controls and administrative controls. The requirement for masks is meant as an additional layer of protection rather than an alternative to those protections already in place.

Further, senior staff, under the direction of the Chief Administrative Officer, continue to monitor trends in health outcomes in the city and regionally in implementing the Restoring Richmond Plan. The addition of a requirement for mask use in city buildings will not impact the potential that services may need to be reduced or facilities closed in response to increasing negative health outcomes related to the Pandemic.

Option 1 – Permissive Mask Use Requirements

Next steps: None.

Option 2 – Specific Recommendation on Mask Use

Next steps: Should Council recommend this option, staff would implement and communicate a mask use requirement that encourages an expanded use of masks for staff and the public in City buildings, with a focus on education and communication.

Option 3 – Semi-Restrictive Mask Use Requirements (RECOMMENDED)

Next steps: Should Council recommend this option, staff would implement and communicate requirements for mask wearing that mandates required use indoors in City buildings, with a focus on education and communication. Exceptions will be identified for those with disabilities, those under five (5) years of age, and those engaged in vigorous physical activity. Refusal of service for non-compliance is recommended for those who do not fall into these categories.

Option 4 – Restrictive Mask Use Requirement

Action required: As jurisdiction in BC for health matters lies with the Province, should Council direct staff to investigate implementation of a bylaw requiring mask use in all public spaces, staff would advocate to the Province for direction on implementing a bylaw requiring mask use in all public spaces.

Financial Impact

None. Cost implications of the recommended option can be accommodated within existing budgets.

Conclusion

While the implementation of a mandatory mask policy is not formally recommended by agencies such as the World Health Organization, WorkSafe BC or Vancouver Coastal Health, a clearly communicated guideline on the City's position on mask use in facilities will ensure that expectations for staff and members of the public entering City buildings is clear and well-understood. A review of other jurisdictions, public sentiment and an increase in COVID-19 cases regionally support a recommendation to draft and communicate a more restrictive mask use requirement in City buildings.

the Fordenik

Lisa Fedoruk Program Manager 1 (604-276-4320)

Mandeep Bains Manager, Continuous Improvement (604-247-4682)

Att. 1: Spectrum of Mask Use Requirements in City Buildings Att. 2: Letter from Vancouver Coastal Health



CNCL - 51



2 October 2020

Ms. Serena Lusk General Manager, Community Services City of Richmond 6911 No. 3 Road Richmond, B.C. V6Y 2C1

Dear Ms. Lusk,

Re: Mask Policy for City of Richmond Buildings

Thank you for seeking my input as you explore options to enhance safety of City of Richmond (the City) staff and Richmond residents who attend City buildings. First, I want to acknowledge and thank the administration's attention to COVID-19 safety as demonstrated in the thoughtful <u>Restoring Richmond</u> plan and detailed scrutiny to <u>COVID-19 safety</u> for all City operated premises. These plans have already implemented the most effective COVID-19 precautions: screening of staff and clients, physical distancing with limitations to numbers of visitors so distancing can be maintained, engineering controls where applicable, enhanced cleaning, and attention to hand hygiene. I want to assure you that these protocols already assure maximum safety of your staff and clients.

Non-medical masks do enjoy a broad level of support in public polls and are used by many City residents. The question you are facing is whether there is justification to require all healthy staff and clients to wear a non-medical face mask while on City premises. The policy direction of Canadian public health jurisdictions has remained consistent: medical masks should be reserved for health care settings, with non-medical face masks are recommended to be worn by people who are symptomatic and those caring for them.

Nationally, Canadians have also been *advised* to wear face coverings when in the community and it is not possible to maintain a 2-meter distance from others, particularly in a crowded setting, and *when local epidemiology and rate of community transmission warrant it.*¹ Non-medical masks have been described to perform the same function as covering of face with a tissue or sleeve when coughing or sneezing. The BC Centre for Disease Control and Provincial Health Officer encourage mask use "as a matter of personal

¹ Regulatory considerations on the classification of non-medical masks or face coverings: Notice to industry, Health Canada, accessed at <u>https://www.canada.ca/en/health-canada/services/drugs-health-products/covid19-industry/medical-devices/personal-protective-equipment/medical-masks-respirators/face-covering-classifications-notice.html</u>

choice" and in situations where safe distance cannot be maintained.^{2 3} There is no interest in BC to pursue a mandatory mask policy; nor is there any compelling reason to do so.

In Vancouver Coastal Health, there is no public health order requiring people to wear masks in public spaces. Despite the recent increase in cases of COVID-19, the overall rates in the population are low, including in Richmond, when compared to other jurisdictions in Canada and abroad, and thus our local situation does not warrant such an order. The City is likely aware of a few local governments in Ontario that have recently implemented mask requirements; these were brought in at the recommendation of local public health and in context of their local COVID-19 transmission risks.

In the hierarchy of measures public health has recommended to prevent transmission since the beginning of the pandemic, non-medical mask wearing is one of the lowest, and should never replace more effective measures i.e. staying home, particularly if feeling unwell, limiting social interaction, especially outside your own family or immediate social contacts, and keeping physically distanced when interacting with strangers, etc. These are actions that all people in Richmond can and should take that do not require buying masks or other face coverings which may create additional financial costs for already stretched households. In addition, masks cannot be tolerated by people with certain medical conditions. As such, a mandatory masking requirement risks creating potential barriers and risks for vulnerable people in communities, such as a lack of access to essential services and the experience of further stigmatization and marginalization, if they are unable to afford such items or unable to wear them.

Given the excellent safety plans in place for all City premises, there is little justification for a mandatory mask policy and I recommend that it not be pursued. The city should continue to implement its COVID-19 safety plans with full assurance that it is serving its citizens well within the context of national, provincial and local public health guidance.

Sincerely,

MAADOR

Dr. Meena Dawar Medical Health Officer- Richmond

² http://www.bccdc.ca/health-info/diseases-conditions/covid-19/prevention-risks/masks

³ Non-medical cloth masks are your choice during COVID-19, Dr. Bonnie Henry, Ministry of Health https://news.gov.bc.ca/factsheets/non-medical-cloth-masks-are-your-choice-during-covid-19



Report to Committee

То:	Finance Committee	Date:	September 14, 2020
From:	Jerry Chong Director, Finance	File:	03-1240-01/2020-Vol 01
Re:	Deferring the CPI Increase to the Consolidated Fees Bylaw to 2021		

Staff Recommendation

That the annual CPI increase to the Consolidated Fees Bylaw be deferred to 2021.

Jerry Chong Acting General Manager, Finance and Corporate Services (604-276-4064)

REPORT CONCURRENCE	
SENIOR STAFF REPORT REVIEW	INITIALS:
APPROVED BY CAO	

Document Number: 6530565

Staff Report

Origin

As part of the City's Long Term Financial Management Strategy Policy 3707, fees and charges have been adjusted annually based on projected Vancouver Consumer Price Index increases.

This report supports Council's Strategic Plan 2018-2022 Strategy #5 Sound Financial Management:

5.3 Decision-making focuses on sustainability and considers circular economic principles.

5.4 Work cooperatively and respectfully with all levels of government and stakeholders while advocating for the best interests of Richmond.

Analysis

Annually, staff updates the Consolidated Fees Bylaw using CPI estimates provided by the Conference Board of Canada. The Conference Board's last Vancouver 2021 CPI forecast was provided in March of this year during the early stages of the pandemic. The next forecast is not expected until November of this year, however, there would still be uncertainty due to the pandemic.

Historically CPI increases have always been around 1.75% to 2.25%. A 2% increase to the rates is estimated to bring in an additional \$225,000 to the City annually.

Currently a large portion of the fees in the Consolidated Fees Bylaw are related to commercial activities such as annual business license fees, filming fees, and development application fees. With many businesses still impacted by COVID, various social distancing restrictions, and changes in Provincial legislations due to infection rate increases, increasing City fees may will additional burden to many struggling businesses.

Since a CPI estimate is not available for 2021, staff proposes that the annual rate increase for the Consolidated Fees Bylaw is deferred to 2021 when an accurate Vancouver CPI rate available. At that time, Council can determine whether to increase rates for both 2021 and 2022 or to forego the 2021 rate increase entirely.

Financial Impact

The City will be foregoing an approximate revenue increase of \$225,000.

Conclusion

That the annual CPI increase to the Consolidated Fees Bylaw be deferred to 2021.

6

Ivy Wong Manager, Revenue (604-276-4046)

IW:iw



Report to Committee

То:	Finance Committee	Date:	September 21, 2020
From:	Jerry Chong Director, Finance	File:	03-0925-02-01/2020- Vol 01
Re:	Permissive Property Tax Exemption (2021) Bylaw No. 10196		

Staff Recommendation

That Permissive Property Tax Exemption (2021) Bylaw No. 10196 be introduced and given first, second and third readings.

Jerry Chong Acting General Manager, Finance and Corporate Services (604-276-4064)

Att. 1

REPORT CONCURRENCE	
SENIOR STAFF REPORT REVIEW	INITIALS:
APPROVED BY CAO	

Staff Report

Origin

Permissive exemptions of property tax are provided to various properties in accordance with Sections 220 and 224 of the Community Charter and Council Policy 3561, which has been consistently applied since 1977. The exemption bylaw must be adopted by October 31 of each year to be effective for the following year.

This report supports Council's Strategic Plan 2018-2022 Strategy #5 Sound Financial Management:

Accountable, transparent, and responsible financial management that supports the needs of the community into the future.

5.1 Maintain a strong and robust financial position.

5.3 Decision-making focuses on sustainability and considers circular economic principles.

Analysis

Owners of exempted properties in 2020 were contacted and their eligibility for permissive exemptions were verified for the upcoming year. Changes to the 2021 bylaw are listed in Attachment 1.

New applications for Council consideration:

1. Sharing Farm Society – 2771 Westminster Highway

In 2017, the City entered into a five year agreement with the Sharing Farm Society for the Society to farm a 2.8 acre portion of land at Terra Nova Rural Park. In addition to raising public awareness to urban farming in our community, the Society donates surplus harvest to local residents in need through the Richmond Food Bank and other community programs.

As a non-profit tenant on City property, the Sharing Farm Society qualifies for a permissive exemption. The property was not added to the permissive exemption bylaw in 2018 because the formal agreement was not signed by both parties until 2020. Adding this property to Permissive Exemption Bylaw No. 10196 will formally recognize the tax exemption status of the lease.

2. Field Hockey Canada - 6111 River Road

Field Hockey Canada is a national sport organization that has leased space at the Oval for their head office. As a non-profit tenant at the Oval the applicant qualifies for exemption

under Council Policy 3561, however, since they serve as a national organization, they cannot provide programming or services specifically to Richmond residents.

As this property is the national head office for the organization and promotes the sport nationally, there is minimal benefit specifically to Richmond residents and the community. Therefore, staff is unable to recommend that this property be added to Permissive Exemption Bylaw No. 10196.

3. Richmond Baptist Church – 6640 Blundell Avenue

Richmond Baptist Church recently demolished a residential rental home that was on the southeast corner of lot at 6640 Blundell Avenue. The original residential building and the land beneath the building was subject to property taxes and the representative of the church contacted staff requesting for a tax exemption for that portion of the land. According to the representative, the land is currently used for parking purposes.

Under Council Policy 3561, parking area for religious organizations are exempted based on the number of church attendees. Currently, the property has the maximum allowable exemption for parking purposes based on the number of attendees as provided by the representative. No changes were made to Permissive Exemption Bylaw No. 10196 for this property.

Permissive Exemption Bylaw Deletions

1. Canadian Sport Institute Pacific Society – 2005 – 6111 River Road

The Canadian Sport Institute Pacific Society is no longer a tenant of the Oval. This should be removed from Permissive Exemption Bylaw No. 10196.

2. Canadian Mental Health Association - 8911 Westminster Highway

This property was designated as Supportive Housing by the Province of BC in 2020. With a supportive housing designation, the property is given an assessment value of \$1 for the land and \$1 for the improvements by BC Assessment. A property with a taxable value of \$2 will not trigger property taxes and therefore should be removed from Permissive Exemption Bylaw No. 10196.

No. 5 Road Backlands

As part of the review, staff ensured that all of the religious organizations on No. 5 Road with farming requirements were reminded of their obligation to farm the backlands.

Financial Impact

Property tax exemptions impact the City's finances by reducing the total assessed value of properties subject to taxation. This results in the City recovering the shortfall through tax increases to general taxpayers.

Church properties represent the largest number of permissively exempted properties and account for approximately \$546,000 in direct municipal taxes waived in 2020. Exempted non-City owned properties account for approximately \$133,000 in waived municipal taxes and City owned or leased properties account for approximately \$2.069 million.

Permissive exemptions impact both municipal and other agencies' taxes. It is fiscally prudent to provide permissive exemptions to City owned or leased properties, otherwise the City would need to increase annual municipal taxes in order to pay property taxes to the other taxing agencies.

Conclusion

Permissive exemptions are granted by Council annually to qualifying organizations that provide social benefit to the Community. Permissive Exemption Bylaw No. 10196 will provide tax exemptions in accordance with Provincial legislation and Council Policy.

Ivy Wong Manager, Revenue (604-276-4046)

IW:gjn

Att. 1: Changes to 2021 Permissive Property Tax Exemption (2021) Bylaw No. 10196

Changes to Permissive Property Tax Exemption (2021) Bylaw No. 10196

Additions to the Bylaw:

ROLL NO	ORGANIZATION NAME	CIVIC ADDRESS	ADDITION
091-575-614	Sharing Farm Society	That portion of 2771 Westminster Hwy occupied by Sharing Farm Society	Schedule H

Deletions to the Bylaw:

ROLL NO	ORGANIZATION NAME	CIVIC ADDRESS	DELETION
057-902-804	Canadian Sport Institute Pacific Society	2005 – 6111 River Road	Schedule H
056-610-001	Canadian Mental Health Association	8911 Westminster Hwy	Schedule G



Report to Committee

То:	Finance Committee	Date:	September 15, 2020
From:	Andrew Nazareth General Manager, Finance and Corporate Services	File:	03-0975-01/2020-Vol 01
Re:	Amendments to the Revised Consolidated 5 Yea Bylaw No. 10183	r Financ	ial Plan (2020-2024)

Staff Recommendation

That the Revised Consolidated 5 Year Financial Plan (2020-2024) Bylaw No. 10183, Amendment Bylaw No. 10203, which incorporates and puts into effect the changes as outlined in the staff report titled "Amendments to the Revised Consolidated 5 Year Financial Plan (2020-2024) Bylaw No. 10183" dated September 15, 2020, from the General Manager, Finance and Corporate Services, be introduced and given first, second and third readings.

for

Andrew Nazareth General Manager, Finance and Corporate Services (604-276-4095)

Att. 3

REPORT CONCURRENCE					
ROUTED TO:CONCURRENCELawImage: ConcurrenceReal Estate ServicesImage: ConcurrenceArts, Culture & HeritageImage: ConcurrenceCommunity Social DevelopmentImage: ConcurrenceCommunity Social DevelopmentImage: ConcurrenceRecreation ServicesImage: ConcurrenceParks ServicesImage: ConcurrenceRoads & ConstructionImage: ConcurrenceSewerage & DrainageImage: Concurrence		Sustainability and Energy Management Community Safety Policy & Programs Emergency Programs Transportation Sanitation and Recycling CONCURRENCE OF GENERAL MANAGER (for Andrew Nazareth)	র র র র		
SENIOR STAFF REPORT REVIEW	INITIALS:	APPROVED BY CAO			

Staff Report

Origin

The Revised Consolidated 5 Year Financial Plan (2020-2024) Bylaw No. 10183 was adopted on May 11, 2020. Included in the Revised Consolidated 5 Year Financial Plan (5YFP) are the City's 2020 Capital, Utility and Operating Budgets. In addition, the Revised Consolidated 5YFP includes the budgets of Richmond Olympic Oval Corporation and Richmond Public Library. The following budget amendments are for the 2020 Capital, Utility and Operating Budgets of the City.

This report supports Council's Strategic Plan 2018-2022 Strategy #5 Sound Financial Management:

5.2 Clear accountability through transparent budgeting practices and effective public communication.

Analysis

Subsequent to the adoption of the 5YFP, new projects and changes to previously established programs have occurred. Individual staff reports detailing these amendments have been presented to Council for approval.

Increases to the operating and capital budget are required where expenses were not contemplated in the 5YFP. The current expenditure bylaw does not include these amounts and in order to comply with Section 173 of the *Community Charter*, the 5YFP needs to be amended to have authority to incur these expenditures. There is no tax impact for any of these amendments.

The Council approved amendments to the Revised Consolidated Five Year Financial Plan (2020-2024) presented in order of Council meeting dates, are:

- 1 a) At the Council meeting on March 9, 2020, Council approved the following:
 - (1) That the application to the Union of British Columbia Municipalities (UBCM) 2020 Poverty Reduction Planning and Action Program for \$25,000 be endorsed; and
 - (2) That should the funding application be successful, that the Chief Administrative Officer and the General Manager, Planning and Development be authorized on behalf of the City to enter into an agreement with UBCM for the above mentioned project and that the Consolidated 5 Year Financial Plan (2020–2024) be amended accordingly.

In May 2020, the City was informed that this funding application was successful. The Planning and Development Operating Budget will be increased by \$25,000 funded by the Union of British Columbia Municipalities (UBCM) 2020 Poverty Reduction Planning and Action Program to further actions in the 2013-2022 Social Development Strategy.

- b) At the Council meeting on March 23, 2020, Council approved the following:
 - (1) That Consolidated Fees Bylaw No. 8636, Amendment Bylaw No. 10160, which adds a service fee for video footage requests, be introduced and given first, second and third reading; and
 - (2) That the Consolidated 5 Year Financial Plan (2020-2024) be amended to include the operating budget impact of implementing the Traffic Intersection Cameras system of \$100,000 funded by an estimate of \$50,000 from revenue and a reallocation of resources from the Community Safety Division.

This operating budget impact of \$100,000 provides funding for a new Traffic Signal Systems Technologist position. The 2020 Community Safety Operating Budget will be increased by \$50,000 funded by the revenues from public requests for video footage. The remaining \$50,000 is funded by a reallocation of existing resources within Community Safety.

- c) At the Council meeting on May 25, 2020, Council approved the following:
 - (1) That the Revised City Event Program 2020 and budget as outlined in Table 1 of the staff report titled "Revised City Event Program 2020", dated April 20, 2020, from the Director, Arts, Culture and Heritage Services be approved; and
 - (2) That \$780,000 be returned to the Rate Stabilization Account after payment of \$17,000 for the Providence contract and an increase to \$20,000 for farm markets.

The 2020 Community Services Operating Budget will be decreased by \$780,000, which will be returned to the Rate Stabilization Provision.

The 2020 Neighbourhood Celebration Grant Program totalling of \$75,000 is deferred to 2021.

- d) At the Council meeting on May 25, 2020, Council approved the following:
 - (1) That the application to the Union of British Columbia Municipalities Community Emergency Preparedness Fund for up to \$25,000 in grant funding to support Emergency Support Services for the City of Richmond be endorsed;
 - (2) That the application to the Union of British Columbia Municipalities Community Emergency Preparedness Fund for up to \$25,000 in grant funding to support Emergency Operations Centres & Training for the City of Richmond be endorsed;

- (3) That the application to the Union of British Columbia Municipalities Community Emergency Preparedness Fund for up to \$25,000 in grant funding to support Evacuation Route Planning for the City of Richmond be endorsed;
- (4) That should the funding application be successful, the Chief Administrative Officer and the General Manager, Community Safety be authorized to execute the agreements on behalf of the City of Richmond with the UBCM; and
- (5) That should the funding application be successful, the 2020-2024 Five Year Financial Plan Bylaw be adjusted accordingly.

The Union of BC Municipalities Community Emergency Preparedness Fund program approved both funding applications on May 28, 2020 as follows:

- i. \$23,432 in grant funding to support Emergency Support Services;
- ii. \$24,942 in grant funding to support Emergency Operations Centres and Training Program.

The 2020 Community Safety Operating Budget will be increased by \$48,374.

e) At the Council meeting on July 27, 2020, Council approved the following: *That the Equipment Renewal and GHG Reduction Project, described as Option 2 on page 4 in the staff report titled "Library Cultural Centre Mechanical Upgrade Project", dated July 20, 2020, from the Director, Sustainability and District Energy, be approved.*

Option 2 offers a greater greenhouse gas (GHG) emission reduction at City facilities by implementing a deep greenhouse gas emission and energy-efficient retrofit of heating and cooling systems. The 2020 Capital Budget – Equipment Program will be increased by \$1,630,000, comprised of:

- \$1,075,000 funded from the Capital Building and Infrastructure Reserve,
- \$465,000 from the Gas Tax Provision;
- \$200,000 grant from BC Hydro;
- \$40,000 grant from Fortis BC;
- \$150,000 anticipated reduction of grant funding from the Federation of Canadian Municipalities' (FCM) Municipal Climate Innovation Program (MCIP).
- f) At the Closed Council meeting held on July 27, 2020, Council approved an increase to the 2020 Capital Budget – Other Program of \$3,000,000 funded by the Capstan Station Capital Reserve.
- g) At the Council meeting on July 27, 2020, Council approved the following:

That as described in the report titled "TransLink 2020 Capital Cost-Share Program – Supplemental Applications" dated June 19, 2020 from the Director, Transportation:

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- a) The transit-related projects recommended for cost-sharing as part of the TransLink 2020 Bus Speed and Reliability Program be endorsed.
- b) Should the above project receive final approval from TransLink, the Chief Administrative Officer and General Manager, Planning and Development be authorized to execute the funding agreements and the Revised Consolidated 5 Year Financial Plan (2020-2024) be updated accordingly.

The 2020 Capital Budget - Roads Program will be increased by \$950,150 funded by TransLink's Bus Speed and Reliability (BSR) Program to achieve a higher transit mode share and improve traffic operations for the public at two key locations: Steveston Highway-No. 5 Road and Garden City Road-Sea Island Way.

- h) At the Council meeting on September 14, 2020, Council approved the following:
 - (1) That the Chief Administrative Officer and the General Manager, Planning and Development, be authorized to execute the Rail Safety Improvement Program funding agreement with Transport Canada for the Williams Road-Shell Road intersection; and
 - (2) That the Revised Consolidated 5 Year Financial Plan (2020-2024) be amended accordingly.

The 2020 Capital Budget - Roads Program will be increased by \$547,200 funded by a grant from Transport Canada for the implementation of road and rail safety measures at Williams Road - Shell Road.

- i) At the Council meeting on September 14, 2020, Council approved the following:
 - (3) That the Minoru Place Activity Centre Project capital budget be increased by \$749,000, which will be funded by Project Developments 2020 Operating Budget account "Infrastructure Replacement" and that the Revised Consolidated 5 Year Financial Plan (2020-2024) be amended accordingly; and
 - (4) That the Revised Consolidated 5 Year Financial Plan (2020-2024) be amended accordingly should the aforementioned project be approved for funding as outlined in the report titled, "Investing in Canada Infrastructure Program -Minoru Place Activity Centre Conversion to Arts Centre," dated August 5, 2020 from the Director, Facilities and Project Development.

The 2020 Capital Budget – Building Program will be increased by \$749,000 reallocated from Project Development's 2020 Operating Budget (Infrastructure Replacement), to enable the completion of base building upgrades and sustainability features of the Minoru Place Activity Centre Conversion to Arts Centre project. If the application for funding is approved, a further amendment will be required.

September 15, 2020

2

During the year, the Revised Consolidated 5 Year Financial Plan Bylaw may require Capital Budget amendments due to external contributions or unanticipated expenditures. The amendments are as follows:

a) i. Increase the scope of existing programs and projects by a total of \$2,123,630 from external funding received or anticipated to be received from various sources including developers, grants, etc. The Capital Budget is proposed to be amended as follows:

Table 1: Various Grants and External Sources	(in \$000's)
Capital Programs	Amounts
Roads	\$1,895
Equipment	90
Drainage	73
Building	66
Total	\$2,124

- The Revised Consolidated 5 Year Financial Plan includes an estimate of \$10,000,000 in Contingent Capital Grants, which may be received throughout the year for various projects. Spending is only incurred if the funds are confirmed. Once the funds are confirmed, the amount is transferred into the applicable capital program as summarized above. A total of \$2,123,630 has been transferred to the above programs to date.
- b) Increase the 2020 Capital Budget Building Program by \$1,598,008 funded by the Corporate Provision for minor building capital improvement projects.
- 3 The following reallocations within previously approved capital projects are summarized in the following table:

Table 2: Capital Budget Reallocations(i					
	Program	Transfer From	Transfer To	Amount	
3a	Building	Enhanced Community Centre Police Office (2018)	Major Facilities Phase I Multi Project Contingency and Construction Escalation Contingency (2014)	\$330	
3b	Building	Community Safety Building Mechanical Upgrades (2017)	Community Safety Building - Mechanical Component Replacements and Associated Works (2020)	70	
3c.i	Equipment	WiFi Network Expansion Phase II (2016)	Network Refresh for City Facilities (Phase 1 of 3) (2020)	12	
3c.ii	Equipment	Wifi Network Expansion (2017)	Network Refresh for City Facilities (Phase 1 of 3) (2020)	6	

Table	(in \$000's)			
	Program	Transfer From	Transfer To	Amount
3d	Roads	Annual Asphalt Re-Paving Program - MRN (2020)	Annual Asphalt Re-Paving Program - Non-MRN (2019)	4
3e	Equipment	Log Management Implementation Payment Card Industry Compliance (2016)	Microsoft Exchange 2016 Upgrade (2017)	3
3f	Water	Development Coordinated Works - Water (2019)	Development Coordinated Works - Water (2018)	1
Total Budget Reallocations				

-7-

- 4 The following amendment represents program changes that result in no net increase to the 2020 Capital Budget:
 - a) The Capital Program of the Advancement of Partial Funding for the Canada Line Capstan Station and the Capstan Station Construction projects are changed from Building and Roads to Other.
- 5 Budget Amendment Policy 3001 states that changes to salaries be reported to the Finance Committee. The following amendments will result in no net increase to the 2020 Operating Budget:
 - a) Reallocate \$43,574 within the Community Services Operating Budget from Contracts-Other and Supplies to salaries for converting an Arts Coordinator position from auxiliary to regular full-time as agreed within collective bargaining.
 - b) Reallocate staff resources between Divisions as follows:
 - Transfer \$280,000 from Community Services, \$249,000 from Engineering and Public Works, \$220,000 from Finance and Corporate Services, \$73,000 from Sanitation and Recycling, \$180,000 from Planning and Development, \$165,000 from Corporate Administration, \$13,000 from Sanitary Sewer Utility for a total of \$1,180,000 to the Community Safety Division for the activation of the Community Ambassador program.
 - Transfer \$302,000 from Community Services to the Engineering and Public Works Division mainly for additional janitorial services required in order meet recommended public health regulations to reduce the risk of spreading the coronavirus and for public works seasonal labour.
 - Transfer \$28,000 from Planning and Development and \$15,000 from Community Services to Water for a total of \$43,000.
 - Transfer \$28,000 from Community Services to Finance and Corporate Services for seasonal labour.
- 6 Budget Amendment Policy 3001 states that increases in City's expenditures are only permitted where funding is from sources other than taxation and utility fees. The following amendments to the Operating and Utility Budget are funded by external grants, contributions, transfer of existing budget resources, or funding from provisions and has no tax impact:

- a) Increase the Corporate Administration Operating Budget by \$700,000 funded from the Legal Provision for professional legal expenditures.
- b) Increase the Sustainability and Energy Management Operating Budget by \$248,044 for the following:
 - i. \$150,000 funded by the Carbon Tax Provision for completing the Circular Economy project;
 - ii. \$98,044 funded by the Corporate Provision for completing the Community Energy and Emissions Plan (CEEP), Energy Step Code, and electric vehicle projects.
- c) Increase the Storm Drainage Operating Budget by \$170,000 funded by the Corporate Provision for completing processing and removal of wet materials.
- d) Increase the Sanitary Sewer Utility Operating Budget by \$150,000 funded by the Corporate Provision for completing planned maintenance and pump replacements.
- e) Increase the Sanitation and Recycling Operating Budget by \$42,139 funded by the Corporate Provision for the works related to dewatering permits.
- 7 The following amendment represents organization changes that result in no net increase to the 2020 Operating Budget:
 - a) Transfer the Corporate Partnerships Operating Budget from Finance and Corporate Services to Community Services resulting from an organization change in 2020.

Financial Impact

The proposed 2020 budget amendments have no tax impact. Each of these annual budgets combines to form part of the 2020-2024 5YFP. The 2020-2024 Revised Consolidated 5YFP Amended Bylaw and Amended Capital Program can be found in Attachments 1 - 3.

Table 3 Capital Budget – Summary of Changes (in \$000's) Reference			
Capital Budget as at May 11, 2020			\$166,492
1	Withdrawal from Capstan Station Reserve	1f	3,000
2	Library Cultural Centre Mechanical Upgrade Project	1e	1,630
3	Minor Building Capital Improvement Projects	2b	1,598
4	TransLink 2020 Capital Cost-Share Program	1g	950
5	Budget Transfer for Minoru Place Activity Centre	1i	749
6	Transport Canada Rail Safety Improvement Program	1h	547
7	Various Grants & External Sources	2a.i	537
8	Various Capital Budget Reallocations	3a-f	-
9	Contingent External Contributions	2a.ii	(2,124)
			6,887
		the advertised of the	\$173,379

Table 4 Net Budget – Summary of Changes (in \$000's) Reference				
Net Bu	dget as at May 11, 2020		\$87,364	
Revenu	ie			
1	Traffic Intersection Cameras Sales of Services	1b	50	
2	UBCM Emergency Preparedness Grants	1d.i-ii	48	
3	UBCM 2020 Poverty Reduction Planning and Action Program Grants	1a	25	
Total F	Revenue Amendments		123	
Expens	ses			
1	Increased Legal services	6a	700	
2	Increase to Sustainability and Energy Management	6b.i-ii	248	
3	Increase to Storm Drainage	6c	170	
4	Increase to Sanitary Sewer Utility	6d	150	
5	Increase Community Safety Traffic Intersection Cameras Implementation Planning	1b	50	
6	Emergency Support Services grant expenses	1d.i-ii	48	
7	Increase to Sanitation and Recycling	6e	42	
8	Poverty Reduction Planning and Action Program grant expenses	1a	25	
9	Arts Coordinator Position Conversion	5a	-	
10	Staff redeployment	5b	-	
11	Corporate Partnerships Budget Transfer from Finance and Corporate Services to Community Services	7a	-	
12	Reduce Arts Culture and Heritage for the Neighbourhood Celebration Grant deferred to 2021	1 c	(75)	
13	Budget Transfer to Minoru Place Activity Centre Capital project	1i	(749)	
14	Decrease from the Revised City Event Program 2020	1c	(780)	
Total E	Expenses Amendments		(171)	
NET A	MENDMENT		294	
Total A	Amended 2020 Net Budget		\$87,658	

Conclusion

Staff recommend that Council approve the 2020 Capital, Operating and Utility Budget amendments to accommodate the expenditures within the Revised Consolidated 5 Year Financial Plan Bylaw. The proposed 2020 budget amendments have no tax impact.

As required in Section 166 of the *Community Charter*, staff will conduct a process of public consultation prior to bylaw adoption, which is anticipated to be November 9, 2020.

pla

Melissa Shiau, CPA, CA Manager, Financial Planning and Analysis (604-276-4231)

MS:sx

- Att. 1: Revised Consolidated 5 Year Financial Plan (2020-2024) Amended Revenue and Expenses
 - 2: Revised Consolidated 5 Year Financial Plan (2020-2024) Amended Capital Funding Sources
 - 3: Amended Revised 5 Year Capital Plan Summary (2020-2024)

4

CITY OF RICHMOND REVISED CONSOLIDATED 5 YEAR FINANCIAL PLAN (2020-2024) AMENDED REVENUE AND EXPENSES (In \$000's)					
	2020 Amended	2021 Amended	2022 Amended	2023	2024
	Budget	Plan	Plan	Plan	Plan
Revenue:	220.257	250.002	264.144	270.025	201 175
Liser Free	239,357	250,992	264,144	278,025	291,175
Oser Fees	115,210	121,447	128,203	135,460	143,422
Sales of Services	37,804	44,165	44,701	45,247	45,803
Deumente la Lieu Of Teure	15,562	16,190	16,754	17,256	17,695
Coming Bougeue	14,841	14,989	15,139	15,290	15,443
Other Devenue	7,905	7,905	7,905	7,905	7,905
Licenses and Dermite	13,708	14,122	16,263	18,409	18,902
Licenses and Permits	11,435	11,657	11,884	12,116	12,352
Provincial and Federal Grants	6,868	9,368	9,439	9,511	9,584
Developer Contributed Assets	50,000	50,000	50,000	50,000	50,000
Development Cost Charges	29,111	20,493	17,984	15,802	16,910
Other Capital Funding Sources	16,274	15,028	15,191	14,005	13,150
	558,075	576,356	597,607	619,026	642,341
Expenses:	110 170	100.450	407.050	101 150	495 999
Community Safety	119,176	122,450	127,353	131,159	135,038
Engineering and Public Works	78,340	//,180	78,804	80,034	81,423
Community Services	64,568	68,317	69,639	/3,184	74,820
Finance and Corporate Services	25,279	23,990	24,525	25,131	25,747
Planning and Development Services	24,159	23,904	24,386	24,934	25,538
Fiscal	22,507	21,016	21,959	24,810	27,847
Corporate Administration	14,512	13,817	14,135	14,521	14,917
Debt Interest	1,677	1,677	1,677	1,677	838
Utility Budget					
Water Utility	46,440	49,427	53,234	57,435	62,101
Sanitary Sewer Utility	37,677	40,135	42,614	45,310	48,240
Sanitation and Recycling	20,795	20,170	20,576	20,999	21,432
Richmond Public Library	11,095	11,052	11,269	11,533	11,805
Richmond Olympic Oval Corporation	17,120	17,409	17,736	18,104	18,481
	483,345	490,544	507,907	528,831	548,227
Annual Surplus	74,730	85,812	89,700	90,195	94,114
Transfers:					
Debt Principal	5,149	5,355	5,570	5,792	6,024
Transfer To (From) Reserves	64,919	67,620	70,229	72,908	75,715
Transfer To (From) Surplus	(23,539)	(8,093)	2,256	3,409	2,966
Capital Expenditures - Current Year	173,379	213,275	118,370	103,759	109,631
Capital Expenditures - Prior Years	308,609	114,470	75,154	41,819	41,819
Capital Expenditures - Developer Contributed Assets	50,000	50,000	50,000	50,000	50,000
Capital Expenditures - Richmond Public Library	892	892	892	892	892
Capital Expenditures - Richmond Olympic Oval Corporation	1,721	1,970	2,215	2,236	2,548
Capital Funding	(506,400)	(359,677)	(234,986)	(190,620)	(195,481)
Transfers/Amortization offset:	74,730	85,812	89,700	90,195	94,114
Balanced Budget	\$-	\$-	\$-	\$-	\$-
lax increase	2.97%	4.03%	4.44%	4.50%	4.01%
CITY OF RICHMOND REVISED CONSOLIDATED 5 YEAR FINANCIAL PLAN (2020-2024) AMENDED CAPITAL FUNDING SOURCES (In \$000's)

	2020 Amended	2021 Amended	2022	2023	2024
	Budget	Plan	Plan	Plan	Plan
DCC Reserves					A Star Farmer
Drainage DCC	- 12	1,510	-	-	2,144
Park Development DCC	6,330	3,907	1,647	1,787	1,740
Park Land Acquisition DCC	5,964	5,964	5,964	5,964	5,964
Roads DCC	13,152	8,478	8,047	8,051	5,731
Sanitary DCC	3,527	- 1. S 1.	1,428	-)	658
Water DCC	138	634	898	-	673
Total DCC	\$29,111	\$20,493	\$17,984	\$15,802	\$16,910
Statutory Reserves					
Affordable Housing	925	725	725	725	725
Capital Building and Infrastructure	25,303	63,512	6,800	13,700	10,550
Capital Reserve	16,050	54,706	28,979	8,575	14,010
Capstan Station	31,000	-	-	-	-
Child Care	170	172	174	177	179
Drainage Improvement	12,415	13,552	14,577	15,603	23,286
Equipment Replacement	3,655	3,392	3,310	4,833	4,066
Leisure Facilities		4,934	-	-	-
Public Art Program	745	150	150	150	150
Sanitary Sewer	13,386	12,850	14,641	14,620	11,542
Watermain Replacement	10,590	8,820	8,466	8,407	8,480
Total Statutory Reserves	\$114,239	\$162,813	\$77,822	\$66,790	\$72,988
Other Sources					
Enterprise Fund	125	550	550	550	-
Grant and Developer Contribution	16,274	15,028	15,191	14,005	13,150
Other Sources	12,180	12,221	6,248	5,862	5,883
Rate Stabilitzation	STRANSPECTIVES -	1,320			
Sewer Levy	350	100	-	50	50
Solid Waste and Recycling	450	300	300	300	300
Water Levy	650	450	275	400	350
Total Other Sources	\$30,029	\$29,969	\$22,564	\$21,167	\$19,733
Total Capital Program	\$173.379	\$213.275	\$118.370	\$103,759	\$109,631

CITY OF RICHMOND AMENDED REVISED 5 YEAR CAPITAL PLAN SUMMARY (2020-2024) (in \$000s)							
	2020 Amended Budget	2021 Amended Plan	2022 Plan	2023 Plan	2024 Plan		
Infrastructure Program							
Roads	26,588	14,821	14,867	14,527	13,480		
Drainage	14,280	18,934	17,859	18,228	27,201		
Water	9,143	7,779	7,792	6,906	7,751		
Sanitary Sewer	15,063	11,300	15,450	13,370	10,950		
Infrastructure Advanced Design and Minor Public Works	5,130	5,700	4,049	4,080	3,980		
Total Infrastructure Program	\$70,204	\$58,534	\$60,017	\$57,111	\$63,362		
Building Program							
Building	16,533	113,610	26,800	13,700	11,160		
Heritage	7,940		- 14 A		-		
Total Building Program	\$24,473	\$113,610	\$26,800	\$13,700	\$11,160		
Parks Program							
Parkland	4,000	4,000	4,000	4,000	4,000		
Parks	8,180	6,144	2,780	2,860	2,700		
Total Parks Program	\$12,180	\$10,144	\$6,780	\$6,860	\$6,700		
Public Art Program	\$745	\$150	\$150	\$150	\$150		
Land Program	\$10,000	\$10,000	\$5,000	\$5,000	\$10,000		
Affordable Housing	\$400	\$200	\$200	\$200	\$200		
Equipment Program					1002/27		
Vehicle	3,441	2,528	2,334	3,995	4,434		
Fire Vehicle	416	1,186	1,221	1,258			
Information Technology	1,996	1,386	913	526	548		
Equipment	2,168	779	580	581	. 32		
Total Equipment Program	\$8,021	\$5,879	\$5,048	\$6,360	\$5,014		
Child Care Program	\$170	\$172	\$174	\$177	\$179		
Other Program	\$34,000	\$-	\$-	\$-	\$-		
Internal Transfers/Debt Payment	\$5,310	\$4,586	\$4,201	\$4,201	\$2,866		
Contingent External Contributions	\$7,876	\$10,000	\$10,000	\$10,000	\$10,000		
Total Capital Program	\$173,379	\$213,275	\$118,370	\$103,759	\$109,631		



The Council of the City of Richmond enacts as follows:

- 1. Schedule "A", Schedule "B", and Schedule "C" of the Revised Consolidated 5 Year Financial Plan (2020-2024) Bylaw No. 10183, are deleted and replaced with Schedule "A", Schedule "B", and Schedule "C" attached to and forming part of this amendment bylaw.
- 2. This Bylaw is cited as "Revised Consolidated 5 Year Financial Plan (2020-2024) Bylaw No. 10183, Amendment Bylaw No. 10203".

FIRST READING		CITY OF RICHMOND
SECOND READING		APPROVED for content by originating dept.
THIRD READING		MS
	-	APPROVED for legality by Solicitor
ADOPTED		LB

MAYOR

CORPORATE OFFICER

Version: 3

SCHEDULE A:

CITY OF RICHMOND REVISED CONSOLIDATED 5 YEAR FINANCIAL PLAN (2020-2024) AMENDED REVENUE AND EXPENSES (In \$000's)

	2020	2021	2022		
	Amended	Amended	Amended	2023	2024
Real Participation of the Statistics in the Statistics of the Stat	Budget	Plan -	Plan	Plan	Plan
Revenue:					
Taxation and Levies	239,357	250,992	264,144	278,025	291,175
User Fees	115,210	121,447	128,203	135,460	143,422
Sales of Services	43,926	44,165	44,701	45,247	45,803
Investment Income	18,562	19,190	19,754	20,256	20,695
Payments In Lieu Of Taxes	14,841	14,989	15,139	15,290	15,443
Gaming Revenue	14,500	14,500	14,500	14,500	14,500
Other Revenue	14,075	14,122	16,263	18,409	18,902
Licenses And Permits	11,435	11,657	11,884	12,116	12,352
Provincial and Federal Grants	10,061	9,368	9,439	9,511	9,584
Developer Contributed Assets	50,000	50,000	50,000	50,000	50,000
Development Cost Charges	29,111	20,493	17,984	15,802	16,910
Other Capital Funding Sources	16,274	15,028	15,191	14,005	13,150
	577,352	585,951	607,202	628,621	651,936
Expenses:					
Community Safety	119,483	122,450	127,353	131,159	135,038
Engineering and Public Works	78,340	77,180	78,804	80,034	81,423
Community Services	70,610	68,317	69,639	73,184	74,820
Finance and Corporate Services	25,279	23,990	24,525	25,131	25,747
Planning and Development Services	24,159	23,904	24,386	24,934	25,538
Fiscal	22,507	21,016	21,959	24,810	27,847
Corporate Administration	14,512	13,817	14,135	14,521	14,917
Debt Interest	1,677	1,677	1,677	1,677	838
Utility Budget					
Water Utility	46,440	49,427	53,234	57,435	62,101
Sanitary Sewer Utility	37,677	40,135	42,614	45,310	48,240
Sanitation and Recycling	20,795	20,170	20,576	20,999	21,432
Richmond Public Library	11,095	11,052	11,269	11,533	11,805
Richmond Olympic Oval Corporation	17,120	17,409	17,736	18,104	18,481
	489,694	490,544	507,907	528,831	548,227
Annual Surplus	87,658	95,407	99,295	99,790	103,709

CITY OF RICHMOND REVISED CONSOLIDATED 5 YEAR FINANCIAL PLAN (2020-2024) TRANSFERS (In \$000's)

	2020 Amended Budget	2021 Amended Plan	2022 Amended Plan	2023 Plan	2024 Plan
T					
Transfers:	5 4 4 0	5 255	5 570	F 700	6 02 4
Debt Principal	5,149	5,355	5,570	5,/92	6,024
Transfer To (From) Reserves	74,424	76,925	79,534	82,213	85,020
Transfer To (From) Surplus	(20,116)	(7,803)	2,546	3,699	3,256
Capital Expenditures - Current Year	173,379	213,275	118,370	103,759	109,631
Capital Expenditures - Prior Years	308,609	114,470	75,154	41,819	41,819
Capital Expenditures - Developer Contributed Assets	50,000	50,000	50,000	50,000	50,000
Capital Expenditures - Richmond Public Library	892	892	892	892	892
Capital Expenditures - Richmond Olympic Oval Corporation	1,721	1,970	2,215	2,236	2,548
Capital Funding	(506,400)	(359,677)	(234,986)	(190,620)	(195,481)
Transfers/Amortization offset:	87,658	95,407	99,295	99,790	103,709
Balanced Budget	Ş -	\$-	\$-	\$- \$-	\$
Tax Increase	2 97%	4.03%	4.44%	4.50%	4.01%

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SCHEDULE B:

CITY OF RICHMOND REVISED 5 YEAR FINANCIAL PLAN AMENDED CAPITAL FUNDING SOURCES (2020-2024) (In \$000's)

s. An the first of the office of the description of the second second second second second second second second s	2020	2021			
	Amended	Amended			
	Budget	Plan	2022 Plan	2023 Plan	2024 Plan
DCC Reserves			al an a that is		
Drainage DCC		1,510		-	2,144
Park Development DCC	6,330	3,907	1,647	1,787	1,740
Park Land Acquisition DCC	5,964	5,964	5,964	5,964	5,964
Roads DCC	13,152	8,478	8,047	8,051	5,731
Sanitary DCC	3,527	-	1,428	-	658
Water DCC	138	634	898	-	673
Total DCC	\$29,111	\$20,493	\$17,984	\$15,802	\$16,910
Statutory Reserves					
Affordable Housing	925	725	725	725	725
Capital Building and Infrastructure	25,303	63,512	6,800	13,700	10,550
Capital Reserve	16,050	54,706	28,979	8,575	14,010
Capstan Station	31,000	-	-	-	- .
Child Care	170	172	174	177	179
Drainage Improvement	12,415	13,552	14,577	15,603	23,286
Equipment Replacement	3,655	3,392	3,310	4,833	4,066
Leisure Facilities	-	4,934	-	-	-
Public Art Program	745	150	150	150	150
Sanitary Sewer	13,386	12,850	14,641	14,620	11,542
Watermain Replacement	10,590	8,820	8,466	8,407	8,480
Total Statutory Reserves	\$114,239	\$162,813	\$77,822	\$66,790	\$72,988
Other Sources					
Enterprise Fund	125	550	550	550	-
Grant and Developer Contribution	16,274	15,028	15,191	14,005	13,150
Other Sources	12,180	12,221	6,248	5,862	5,883
Rate Stabilization	-	1,320	-	-	-
Sewer Levy	350	100	-	50	50
Solid Waste and Recycling	450	300	300	300	300
Water Levy	650	450	275	400	350
Total Other Sources	\$30,029	\$29,969	\$22,564	\$21,167	\$19,733
Total Capital Program	\$173,379	\$213,275	\$118,370	\$103,759	\$109,631

SCHEDULE C:

CITY OF RICHMOND CONSOLIDATED 5 YEAR FINANCIAL PLAN (2020-2024) AMENDED STATEMENT OF POLICIES AND OBJECTIVES

Revenue Proportions By Funding Source

Property taxes are the largest portion of revenue for any municipality. Taxes provide a stable and consistent source of revenue for many services that are difficult or undesirable to fund on a user-pay basis. These include services such as community safety, general government, libraries and park maintenance.

Objective:

• Maintain revenue proportion from property taxes at current level or lower

Policies:

- Tax increases will be at CPI + 1% for transfers to reserves
- Annually, review and increase user fee levels by consumer price index (CPI).
- Any increase in alternative revenues and economic development beyond all financial strategy targets can be utilized for increased levels of service or to reduce the tax rate.

Table 1 shows the proportion of total revenue proposed to be raised from each funding source in 2020.

Table 1:	
Funding Source	% of Total Revenue
Property Taxes	49.6%
User Fees	23.9%
Sales of Services	9.1%
Investment Income	3.9%
Payments in Lieu of Taxes	3.1%
Gaming Revenue	3.0%
Licenses and Permits	2.4%
Provincial and Federal Grants	2.1%
Other	2.9%
Total Operating and Utility Funding Sources	100.0%

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SCHEDULE C (CONT'D):

CITY OF RICHMOND CONSOLIDATED 5 YEAR FINANCIAL PLAN (2020-2024) AMENDED STATEMENT OF POLICIES AND OBJECTIVES

Distribution of Property Taxes

Table 2 provides the estimated 2020 distribution of property tax revenue among the property classes.

Objective:

• Maintain the City's business to residential tax ratio in the middle in comparison to other municipalities. This will ensure that the City will remain competitive with other municipalities in attracting and retaining businesses.

Policies:

• Regularly review and compare the City's tax ratio between residential property owners and business property owners relative to other municipalities in Metro Vancouver.

Property Class	% of Tax Burden
Residential (1)	56.53%
Business (6)	34.64%
Light Industry (5)	6.80%
Others (2,3,4,8 & 9)	2.03%
Total	100.00%

Table 2: ((Based o	on the	2020	Revised	Roll	figures`	ì
	, Dasea c	, in the	2020	10011500	i con	ingui co,	,

Permissive Tax Exemptions

Objective:

- Council passes the annual permissive exemption bylaw to exempt certain properties from property tax in accordance with guidelines set out by Council Policy and the Community Charter. There is no legal obligation to grant exemptions.
- Permissive exemptions are evaluated with consideration to minimizing the tax burden to be shifted to the general taxpayer.

Policy:

• Exemptions are reviewed on an annual basis and are granted to those organizations meeting the requirements as set out under Council Policy 3561 and Sections 220 and 224 of the *Community Charter*.



Report to Committee

То:	General Purposes Committee	Date:	August 27, 2020
From:	Cecilia Achiam General Manager, Community Safety	File:	12-8080-12-01/Vol 01
Re:	Soil Use for the Placement of Fill Application for No. 6 Road (Jiang)	the Pro	perty Located at 8511

Staff Recommendation

That the 'Soil Use for the Placement of Fill' application, submitted by Bohan Jiang (the "Applicant"), proposing to deposit soil on the property located at 8511 No. 6 Road for the purpose of remediating the property to develop a blueberry farm, be authorized for referral to the Agricultural Land Commission (ALC) for the ALC to review and determine the merits of the proposal from an agricultural perspective as the Applicant has satisfied all of the City's current reporting requirements.

Cecilia Achiam General Manager, Community Safety (604-276-4122)

Att. 14

REPORT CONCURRENCE					
ROUTED TO:	CONCURRENCE				
Engineering Policy Planning Sustainability Transportation	র হ হ হ				
SENIOR STAFF REPORT REVIEW	INITIALS:				
APPROVED BY CAO					

Staff Report

Origin

The City of Richmond received a 'Soil Use for the Placement of Fill' application for the property located at 8511 No. 6 Road (the "Property"). The intent of the application is to address damage to a large portion of the Property due to past activities of a previous landowner(s) approximately 38 years ago, which included excavating and removing the native soil and replacing the soil with untreated woodwaste. The Applicant is proposing to improve the agricultural capability of the Property from its current Class 6 or 7 rating to a Class 1 rating to allow for the development of a blueberry farm.

The Property is situated within the Agricultural Land Reserve (ALR) and is subject to provisions of the *Agricultural Land Commission Act (ALC Act)* and its regulations (the "Regulations"), and the City's Soil Removal and Fill Deposit Regulation Bylaw No. 8094 (the "Soil Bylaw").

Pursuant to applicable Provincial regulations, a 'Soil Use for the Placement of Fill' application requires authorization from local government in order to be referred to the Agricultural Land Commission (ALC) for their review and approval. As such, this application must be submitted to the City for review and a decision from Council. Should the application be referred to the ALC and should it subsequently be approved by the ALC, the Applicant is required to satisfy the City's requirements outlined in the Soil Bylaw before a soil deposit permit would be issued by the City.

The Applicant has satisfied all of the City's referral requirements for submission to the ALC.

This report supports Council's Strategic Plan 2018-2022 Strategy #2 A Sustainable and Environmentally Conscious City:

Environmentally conscious decision-making that demonstrates leadership in implementing innovative, sustainable practices and supports the City's unique biodiversity and island ecology.

2.1 Continued leadership in addressing climate change and promoting circular economic principles.

2.3 Increase emphasis on local food systems, urban agriculture and organic farming.

Analysis

The Property is zoned AG1 (Agriculture). The current zoning permits a wide range of farming and compatible uses consistent with the provisions of the *ALC Act* and Regulations and the City's Official Community Plan and Zoning Bylaw. The Applicant is proposing to deposit 30,000 cubic metres of soil over approximately 2.5 ha of the 4.05 ha Property at an average depth of 1.0m, which would bring the Property to the same elevation as neighbouring properties as it currently resides at a lower elevation due to the previous excavation and removal of native soil.

The soil deposition will serve to cap untreated woodwaste placed on the Property by a previous owner(s) in addition to improving the Property's soil conditions to develop a blueberry farm.

Uses on Adjacent Lots

- To the North: ALR Land is not in agricultural production
- To the East: ALR Golf course
- To the South: ALR Land is in agricultural production
- To the West: ALR Land is not in agricultural production

Table 1. Existing information and Proposed Changes for the Propert	Table 1:	Existing	Information	and Propos	sed Changes	for the	Propertv
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Item	Existing	
Owner/Applicant	Bohan Jiang (the "Applicant")	
Authorized Agent/Lead Contractor	Barry Mah (the "Agent")	
Authorized Consultants	Daniel Lamhonwah, PhD candidate, MES, P. Ag. and Thomas Elliot, PhD, P. Geo, P. Ag. (Madrone Environmental Services Ltd.) (the "Agrologists)	
Authorized Farm Manager	Quan Ming Wu (the "Farm Manager")	
Lot Size	4.05 hectares (10 acres)	
Current Land Uses	A portion of the Property is currently under agricultural production (blueberries and orchard)	
Proposed Land Uses	Remediate 2.5ha of the Property to create a blueberry farm	
Official Community Plan Designation	Agriculture	
ALR Designation	Property is within the ALR	
Zoning	AG1	
Riparian Management Area (RMA)	Yes; no disturbance proposed	
Environmental Sensitive Area (ESA)	No	

Project Overview

The Applicant – who has owned the Property since 2005 – is applying to deposit 30,000 cubic metres of soil over approximately 2.5 ha of the 4.05 ha Property at an average depth of 1.0m. The objective is to improve the agricultural capability of the Property from its current Class 6/7 rating to a Class 1 rating to allow for the development of a blueberry farm. Class 1 soil would provide the maximum flexibility for future agricultural activities because it would allow a farmer to grow the widest range of crops.

In addition, the soil deposition will serve to ensure the woodwaste deposited on the Property by a previous owner approximately 38 years ago remains in an anaerobic state to ensure leachate does

not enter neighbouring watercourses. As per the Agrologists, the remediation work will ensure the long term stability of the woodwaste.

The Applicant has advised that the project will take two years to complete. The timeline for completion is heavily dependent on ensuring the appropriate soil – as recommended by the Agrologists – is sourced to complete the project. Soil sourcing has not commenced at this time due to the considerable period of time involved with respect to the soil deposit application process and seeking approval from the City and ALC.

Staff Comments

The proposal aligns with a number of Council endorsed strategies and directions including concerns about the use of Richmond soil. Other objectives satisfied by the project are described as follows:

- The Applicant's desire to utilize Richmond soil where possible provides for a reduction in carbon emissions as there will be a considerable decrease in mileage as trucks will not be traveling back and forth from City approved development projects to the Fraser Valley as is the common practice;
- Following completion of the project, the Applicant's Farm Plan will include expansion of current farming operation by over six acres thus supporting initiatives as described within the City's Food Charter; and
- The proposal to raise the Property to improve the agricultural viability is consistent with the City's current Flood Protection Management Strategy (FPMS) which identifies raising land levels within all areas of the City as a key overall long-term objective. At the January 27, 2020 Regular Council Meeting, Council made a referral for staff to review the FPMS and provide comments with regard to the raising of land, specifically as it relates to agricultural land and agricultural viability. Staff are preparing a response to this referral.

Richmond Food Security and Agricultural Advisory Committee (FSAAC) Consultation

The Applicant presented the proposal to the FSAAC on July 23, 2020. The FSAAC unanimously supported the proposal with conditions, passing the following motion:

That the Food Security and Agricultural Advisory Committee support the ALR Soil Use for Placement of Fill Application at 8511 No. 6 Road, subject to the following considerations:

- Monitoring and regular reporting of fill deposits (suitable fertile soil);
- Completion of a long-term lease (minimum 10 years) between the property owner and the farm operator; and
- Submission of a performance bond equal to the revenue from tipping fees minus the cost to implement the farm plan, to be returned upon completion of the farm plan.

Agricultural Considerations

The Applicant has provided a Proposed Remediation Report (the "Remediation Report") prepared by Bruce McTavish, MSc MBA, PAg, RPBio and Dr. Hubert Timmenga, PhD, PAg, CMC. The Remediation Report (Attachment 1) outlines the history of the Property, the current soil conditions at the time of reporting, soil analysis conclusions, and proposed options to improve the Property. Following analysis and site investigation (ie. test digs), McTavish and Timmenga concluded that the agricultural capability of the Property had been negatively impacted due to the extraction of native peat and the subsequent backfilling of cedar woodwaste and wooden construction debris by a previous owner(s).

The Remediation Report indicates that at the time of their assessment of the Property, "the blueberry plants on the Property are stunted or dead due to the lack of adequate soil depth for them to grow in." It was the opinion of McTavish and Timmenga that "a large portion of the [Property] seems only capable of producing annual weeds". As per McTavish and Timmenga, the Property was deemed to have a Land Capability Assessment of a Class 6 or 7D.

The Remediation Report provided for two options to improve the agricultural capability of the Property. Option 1 outlines movement of the shallow soil cap to facilitate the removal of the woodwaste from the Property and import and deposit soil to complete remediation. This option is prohibitive due to the financial cost of the removal. In addition, as noted in the Remediation Report, "the disruption of the wood waste may lead to the generation of leachate which is not happening at the present time." In addition, the Remediation Report estimates that the Property contains 13,000 m³ of woodwaste. As result, should Option 1 be undertaken – excavating and removing the woodwaste – it would result in the requirement for more soil to be imported/deposited to complete remediation than is currently being requested by the Applicant.

Option 2 (preferred by the Applicant) proposes to leave the woodwaste in its current state. The Remediation Report proposes that the Applicant deposit 25mm of silty clay to silty clay loam on top of the current soil. In addition, that 75mm of topsoil be deposited to improve the land capability for future crops. With the additional soil capping, anaerobic conditions will be maintained and will "inhibit the production of leachate."

The Remediation Report concluded that upon project completion, the land would be improved "to class 2 or 3 which [would] support a wide range of agricultural crops."

In addition, the Applicant has provided a Woodwaste Leachate and Site Drainage Report (the "Leachate/Drainage Report"). The Leachate/Drainage Report (Attachment 2) indicates "the wood waste has been buried on [the Property] for at least [38] years and it is in virtually the same condition as when it was buried." The Leachate/Drainage Report outlines the projected work plan to ensure the proposed capping with imported soil "preserve[s] the wood waste and prevent[s] the formation of leachate."

Subsequent to the initial reporting from McTavish and Timmenga, the Applicant was required to retain a new qualified professional as Mr. McTavish currently reviews and assesses soil deposit proposals on behalf of the City. As a result, Daniel Lamhonwah and Thomas Elliot, PhD, P. Geo,

P. Ag. of Madrone Environmental Services Ltd. were retained to review the proposal and provided additional information on behalf of the Applicant.

As per City requirements, the Agrologists provided an updated Farm Plan (Attachment 3). As noted in the Farm Plan, the Class 6 or 7D classification(s) is an "undesirable soil structure/aeration, with the limiting factor being the root restricting layer of anaerobic wood waste." Subsequent reporting by the Agrologists confirms that the majority of the Property remains a Class 6 or 7D classification.

Following additional study by the Agrologists, the initial conclusion by McTavish and Timmenga that the Property would be improved to a Class 2 or 3 was amended by the Agrologists, who state:

Following implementation of the Remediation Plan and the recommendations [within the Farm Plan], the proposed soil importation and deposit is targeting a **Class 1** agricultural capability by selectively receiving soils suitable to that end goal.

The improvement to Class 1 will allow for the implementation of a blueberry farm as desired by the Applicant and the Farm Manager; however, the proposed improvements would allow for the growing of a multitude of different crops - as verified by the Agrologists - should the Applicant wish to vary crop types in the future. Such crops would require deep rooting (0.6m to 0.9m) and would include rhubarb, sweet potatoes, tomatoes, pumpkins and asparagus.

As per the Farm Manager (Attachment 4), who manages the Property on behalf of the Applicant, 8,000 blueberry bushes were planted in 2006 in addition to implementing irrigation improvements and the application of fertilizer and sawdust. Due to the conditions within the proposed soil deposit area, only 500 plants have survived as of 2016. Following consultation with other local blueberry farmers and continuing crop failure, the Applicant retained the Agent in 2012 to determine a means to improve the Property. The Agent in turn retained McTavish and Timmenga to assess the Property and provide recommendations.

Subsequent to the Remediation Report being provided by McTavish and Timmenga, the Applicant provided a Technical Addendum to [the] Remediation Plan (the "Remediation Addendum"). The Remediation Addendum (Attachment 5) outlines recommendations based on current regulatory practices. In particular, it focuses on source site approval and maintaining the quality of soil that is to be imported and deposited on the Property.

The Applicant has also provided a Technical Memorandum re. Appropriate Imported Soil and Soil Source Sites (the "Soil Memo"). The Soil Memo (Attachment 6) addresses the types of soil required to properly complete the project should the Applicant receive approval. In particular, the Soil Memo addresses why the Applicant should not be solely restricted to importing alluvial soils. Furthermore, the Agrologists advise that limiting the type of soil to alluvial and specifically to sources found within Richmond "may introduce an undesirable salinity limitation (Class N limitation) that may not have existed on a receiving site."

The Agrologists "recommend that the City favours imposing a condition that considers the physical and chemical properties of the soil proposed to be imported instead of restricting the imported soil to a deposition method and/or soil parent material type."

It must be noted that a portion of the Property to the west of the house was improved as a result of excavated soil – sourced from the Property due to construction of a house – being relocated to raise the level of the Property. The raised area (Attachment 7) was planted with blueberry plants and an orchard. The Agent has confirmed that there was no woodwaste under the raised area. This work was conducted following submission of the McTavish and Timmenga reports.

Should the proposal be approved, the City will require that a qualified agrologist be retained to monitor the project and provide regular reporting. Should an agrologist not be retained or cease providing regular oversight and reporting, the City would reserve the right, as per the Soil deposit permit (the "Permit") conditions, to suspend and/or void the Permit until such time as a new qualified agrologist, agreeable to the City and ALC, is retained to monitor the project and provide regular reporting.

The Applicant has confirmed with staff (Attachment 8), in response to the FSAAC conditions of support, that a long term lease will be signed once the proposed soil deposit area is improved to standard capable of growing crops. In addition, while there is no requirement within the current Soil Bylaw, the Farm Manager and Applicant have confirmed a willingness to "submit a \$30,000 performance bond as a guarantee to implement and complete the Farm Plan, to be returned upon completion of the farm plan" (Attachment 9).

Drainage & Geotechnical Considerations

The Leachate/Drainage Report indicates that flow direction for the existing ditches on the Property is to be maintained with minor regrading and widening. In addition, it is proposed that a new ditch be constructed along the west property line. The Leachate/Drainage Report contends that there will be no increase to peak flows into City ditches.

The Leachate/Drainage has been reviewed by Colin S. Johnson, P.Eng (OOTB Engineering Ltd.) at the request of the City. The Drainage Assessment Memo (Attachment 10) confirms "that the site drainage recommendations in [the Leachate/Drainage Report] appear to be reasonable and should allow for adequate storm water drainage from the site, without altering peak flow conditions."

A Geotechnical Assessment (the "Geotech Assessment") has been provided by Tony Yam Engineering Ltd. The Geotech Assessment (Attachment 11) concludes that the "additional fills over the impacted area will not impact the drainage pattern of the adjacent areas (filling elevation of the impacted area is lower than the adjacent areas)." The Geotech Assessment has determined that the "placing of fills will not impact stability of adjacent areas as the impacted area is not less than 6 m away from adjacent properties." In addition, the Agrologists confirm that the soil deposition shall bring the Property to the same elevation as the neighbouring properties.

Permit conditions will provide staff the latitude to request a geotechnical report at any time in addition to requiring a closure report from the geotechnical engineer following completion of the project.

In response to discussions at previous Council and FSAAC meetings, the Agrologists have also provided a Soil Drainage & High Water Table Memorandum (the "Water Table Memo")

addressing the concept of berming and pumping the Property to address excess water issues on the Property rather than importing soil. As per the Water Table Memo (Attachment 12) and the conclusion of McTavish and Timmenga, the "[p]roperty is affected by groundwater and not flood water (i.e., from watercourses)."

A separate technical memorandum that focuses on the Agricultural Environmental Management Code (the "AEM Code Memo") (Attachment 13) further addresses the question of pumping excess water from the Property. The Agrologists state the following:

[P]ump works are generally suitable for bermed (or dyked) areas, such as floodplains, whereby the inundation/excess water is not congruent with the regional high water table. In many circumstances within the [City of Richmond], the issue is more related to high water table and regional conveyance rather than point-specific short duration inundation-water sources (i.e. flooding during the late spring freshet of the Fraser River) that pumping is ideally suited to resolve.

It is the professional opinion of the Agrologists, that berming and pumping cannot eliminate the current excess water issues and that the Property will be improved via importing soil and raising the land.

Despite the aforesaid water table issue and the suitability of berming and pumping, the main driver of the proposal is to ensure that the woodwaste is capped with an appropriate level of soil to ensure that there is no potential for leachate and to ensure that there is an appropriate depth of soil to permit for the planting of a blueberry crop and orchard.

Environmental Considerations

While the overall objective is to improve the agricultural capability of the Property, an additional purpose of the proposal is to cap the woodwaste currently located beneath the surface soil to ensure water does not penetrate and permeate the woodwaste.

As per City staff, at the time of the deposition of the woodwaste and upon receipt of the application in 2012, there were no measures available for the City to undertake enforcement action. Prior to receipt of the application, staff were not aware of the issue and the City does not have any records or complaints related to the issue. Currently, there is no enforcement measure available within the Soil Bylaw or other City bylaws for the City to take action with respect to the woodwaste. In addition, the property owner is not required to advise the province of what has occurred on-site (ie. dumping of untreated woodwaste) as the site is not considered to be contaminated.

Staff note that landfilling with wood waste and the environmental liability associated with such a practice is covered under provincial jurisdiction. The "responsible party" is generally the previous owner, or the site operator who buried the woodwaste. The Agent has confirmed that due to the challenge in proving who undertook the work 38 years ago and the potential expense in litigating the matter, the Owner does not intend to address this matter through the courts; however, would prefer to utilize his financial resources to re-establish the Property to an agricultural standard capable of growing blueberries.

As noted in a Ditch Water Analysis Report submitted by McTavish and Timmenga (Attachment 14), which analysed the water within the ditches on the Property and in the City allowances, testing found that the ditch water was "not affected by wood waste leachate." The Leachate/Drainage Report provides recommendations to ensure there is no generation of leachates from the woodwaste following completion of the project. As per the Leachate/Drainage Report, placement of additional soil will ensure that "the wood waste [remains] in an anaerobic state". Staff are satisfied with the aforesaid reports and conclusions within.

The proposed soil deposition area is outside of the Riparian Management Area located on the east property line running along No. 6 Road.

Staff have determined that areas identified within the City's GIS mapping system as an Environmentally Sensitive Area along the north, south and western property lines are referencing vegetation on adjacent properties. The proposal will not impact any neighbouring Environmentally Sensitive Area.

There will be no impacts to trees due to the soil deposit operations.

As per Permit conditions, all work undertaken in or around a watercourse, must be completed in compliance with the *Water Sustainability Act*, under the guidance of a Qualified Environmental Professional (QEP). The City will require that erosion and sediment control measures be installed and inspected by a QEP should it be deemed necessary by City staff. Staff will require on-going monitoring by a QEP of the project to ensure no leachate enters City ditches or other watercourses.

Financial Costs and Considerations for the Applicant

Due to ongoing and approved development within the City of Richmond and the Lower Mainland, developers and contractors must find a location (the "End Site") that will accept soil excavated and removed off-site to facilitate development. Due to such demand, a market has been created in which End Site owners can generate income via tipping fees. Such fees are variable depending on the location, type and volume of soil, and season. Contractors are willing to pay a premium based on location of the soil (the "Source Site") to the End Site in order to reduce significant costs. Although End Site owners derive income due to tipping fees, soil deposit projects are not without significant costs to the Permit holder.

Please refer to the Farm Plan (pgs. 14-17) to review the potential tipping fee income and soil deposit project and farm development costs as provided by the Applicant.

Road and Traffic Considerations

A Traffic Management Plan has been submitted and reviewed by City staff. Truck access to the Property will be limited to Steveston Highway and will not be permitted to access the Property from Blundell Road or Westminster Highway.

Soil Deposit Permit Requirements and City Inspection and Project Oversight Protocols

Should the proposal receive ALC and City approval, City staff will prepare a comprehensive Permit that sets out a number of conditions, including but not limited to:

- Oversight by a professional agrologist;
- Source site inspection requirements;
- On-site monitoring and reporting requirements;
- Requirements for protection of the Riparian Management Area near the truck entrance point on No. 6 Road;
- Measures needed to eliminate impacts, including drainage, to neighbouring properties and City infrastructure;
- Permitted hours/days of operation;
- An approved Traffic Management Plan; and
- Security deposits (further explained below).

Despite the Remediation Report recommending that source site inspections occur for sites generating more than fifty truck loads, Qualified Professional reporting requirements are intended to be similar to the requirements for the Sixwest Holdings soil deposit project located on Westminster Highway. This will include the agrologist-of-record being required to inspect and approve all source sites. An on-site monitor will be required to inspect each load of soil prior to deposition on the Property and maintain an accurate daily log of trucks depositing soil on the site. At the sole discretion of the City, alternate measures may be required (i.e. survey) to determine the volume of soil deposited on the Property.

In addition to the expected reporting requirements of an agrologist or other qualified professionals to the City and ALC, City staff will maintain proactive inspection and enforcement on the Property that will include the following:

- multiple site inspections per week of the Property at the onset of the project to ensure conditions of the Permit are being maintained;
- weekly site assessments to continue to be undertaken when soil importation is underway to ensure the Permit conditions are respected;
- meet on-site with the site supervisor a minimum of two times per month;
- maintain communication with the agrologist-of-record and Agent on a regular basis;
- review reports to ensure conditions of the Permit are being satisfied; and
- advise the ALC of concerns relative to the project and request that ALC staff undertake inspections to ensure compliance with the approval conditions when deemed necessary by City staff.

No soil will be permitted to be imported/deposited until such time as all City and ALC requirements have been satisfied and the Permit has been issued by the City.

Security Bonds

Should the soil deposit project receive approval, the City will require that the Applicant provide the following security bonds:

- \$5,000 pursuant to s. 8(d) of the current *Boulevard and Roadway Protection Regulation Bylaw No. 6366* to ensure that roadways and drainage systems are kept free and clear of materials, debris, dirt, or mud resulting from the soil deposit activity;
- \$10,000 pursuant to s. 4.2.1 of the current *Soil Removal and Fill Deposit Regulation Bylaw No. 8094* to ensure full and proper compliance with the provisions of this Bylaw and all other terms and conditions of the Permit; and
- The Applicant has also proposed to provide a \$30,000 bond to the City for implementation of the Farm Plan. Beyond completion of the soil project, this bond will provide security that the Farm Plan will be implemented.

In addition to the security bonds provided to the City, the ALC has the authority to require a performance bond to ensure that all required mitigation and monitoring measures are completed. The bond required by the ALC is also intended to ensure the rehabilitation of the Property in the event the project is not completed. ALC performance bonds and the approved volumes from four previous approvals for projects within the City are as follows:

- \$70,000 17,500m³ (Athwal approved May 2020)
- \$160,000 48,000m³ (City of Richmond approved June 2017)
- \$290,000 140,000m³ (Sixwest Holdings approved Jan. 2017)
- \$500,000 102,080m³ (Sunshine Cranberry Farms approved Jan. 2014)

As per the Permit conditions, security deposits will not be returned until all conditions as stated in the Permit and the ALC approval are satisfied in their entirety, to the satisfaction of the City. This will include confirmation that the Farm Plan has been completed as per a final report from the owner's agrologist-of-record. City staff is to conduct a final inspection and receive confirmation from the ALC that the project has been completed as per ALC approval prior to closing the file.

Alternatives to Council Approval

Should Council not authorize staff to refer the proposal to the ALC for their review and decision; the application will be considered to be rejected. Council may add additional recommendations for ALC consideration and/or conditions within a referral to the ALC, similar to conditions already provided within this report.

Financial Impact

None.

Conclusion

Staff recommends that the soil deposit application for the Property located at 8511 No. 6 Road be authorized for referral to the ALC for the ALC to review and determine the merits of the

August 27, 2020

proposal from an agricultural perspective as the Applicant has satisfied all of the City's current reporting requirements.

Mike Morin Soil Bylaw Officer, Community Bylaws (8625)

Cultur

Carli Williams, P.Eng. Manager, Business Licence and Bylaws (4136)

Att. 1: Proposed Remediation Report (30 Sept 2012)

- 2: Woodwaste Leachate and Site Drainage Report (14 Dec 2013)
- 3: Farm Plan (11 Aug 2020)
- 4: Letter from Farm Manager re. Farming Background (10 Aug 2020)
- 5: Technical Addendum to Remediation Plan re. Regulatory Updates (30 Jun 2020)
- 6: Technical Memorandum re. Appropriate Imported Soil & Soil Source Sites (30 Jun 2020)
- 7: Farm Plan re. Figure 1 (16 Jun 2020)
- 8: Letter from Owner re. Lease Commitment (12 Aug 2020)
- 9: Letter of Commitment re. Farm Plan Security Bond (10 Aug 2020)
- 10: Drainage Assessment Memo (29 Jun 2020)
- 11: Geotechnical Assessment (10 Oct 2018)
- 12: Soil Drainage & High Water Table Memorandum (30 Jun 2020)
- 13: Technical Memorandum: Agricultural Environmental Management Code (09 Mar 2020)
- 14: Ditch Water Analysis Report (04 Mar 2015)

Proposed Remediation of Land Located at 8511 #6 Road Richmond, B.C.

BCAA Legal: SEC 20 BLK4N RG5W PL 3109 Parcel A, Subsidy Lot 3, (J71246E).

Prepared by:

Dun M

Bruce McTavish, M.Sc., MBA, P.Ag., RPBio. McTavish Resource & Management Consultants Ltd. 2858 Bayview St. Surrey, B.C. V4A 3Z4 bmct@intergate.ca

and WD2-.

Hubert Timmenga, PhD, P.Ag., CMC Timmenga & Associates Inc 292 E 56 Avenue, Vancouver BC V5X 1R3 htimmenga@telus.net

Prepared for:

Bohan Jiang

September 30, 2012

McTavish Resource & Management Consultants Ltd.

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1.0 Introduction

McTavish Resource & Management Consultants Ltd. was retained by Bohan Jiang to determine the cause for the Blueberry Crop failure and develop a remediation plan to allow agricultural production on the land. The farm is located at 8511 #6 Road in Richmond, B.C. The total farm size is 40475 m² or 10 acres and is zoned AG1. Approximately 2.5 hectares of the land is planted in Blueberries and $\frac{1}{2}$ of the crop has been a complete failure and the other $\frac{1}{2}$ has marginal growth.

2.0 Site Location

The subject properties are located at 8511 # 6 Road Richmond B.C. The legal description is: SEC 20 BLK4N RG5W PL 3109 Parcel A, Subsidy Lot 3, (J71246E).

2.1 Zoning and Present Land Use

The subject property is 4 hectares and is in the ALR and is zoned AG1. At the present time the owner is attempting to grow Blueberries on the land with limited success.

2.2 Previous Land Use

The use of the land for any agricultural use is severely impeded by the fact that approximately 25 to 30 years ago a previous owner has stripped all the organic soil (peat) from the site and filled it with cedar wood waste and wooden construction debris. This will be discussed in detail in section 3 of this report.

3.0 Soils

Based on existing soil mapping, the soils on the site are in a large polygon of Lulu and Triggs soils. The Lulu soils are composed of partially decomposed organic deposits (peat) varying in depth from 40 cm to 160 cm deep. The underlying soil is fine textured deltaic deposits, either silty clay loam, or silty clay. The Triggs soils are deep (at least 2m) un-decomposed organic deposits composed mainly of sphagnum and other mosses. The underlying soil is medium to moderately fine textured Fraser River deltaic or floodplain sediments.

The on-site soil survey information found that all of the organic soils (peat) on the site had been removed, and that the site was backfilled with cedar wood waste, and wooden construction debris. It is the understanding of the author that approximately 30 years ago the land owner at the time removed all the organic soil (peat) and back filled with wood

waste.¹ They then capped the wood waste with 35 to 40 cm of loam to silty loam soil. The soil map aerial photo shown in figure 2 which is from 1980 seems to show a large pile of wood waste at the eastern end of the property which would confirm the time frame that the wood waste was buried.

To determine the extent of the fill and the texture of the soil used to cap the site 12 soil pits were excavated and samples collected for laboratory analysis. The objective of the soil analysis was to determine if pH, Electrical Conductivity, or Sulphur were limiting factors to plant growth in the capping loam/silty loam soil and to determine the macro nutrients that were available for plant growth in the capping soil. In the capping soil (WP 211) the pH, and electrical conductivity were rated as good; pH was slightly acidic (5.9) and the organic matter was 6.0%. A soil sample beneath the fill was taken at site WP205 and on this soil the pH was 4.8 (acidic) and the sulphur content was high at 128 ppm. It is typical for various soils in Delta and Richmond to be acidic and have high sulphur content in subsoil. Plant roots would not reach those subsoil layers. The detailed results for all soil samples are provided in Appendix 1

Based on the soil analysis of the capping soil, there are no obvious limiting factors to growth. It is the opinion of the authors that the plant limiting factor is the shallow depth of the capping soil above the anaerobic wood waste. The present depth of soil above this layer is not deep enough for adequate root development for perennial plants. Roots of the perennial plants would penetrate the wood waste and be affected by its anaerobic conditions. At the present time only (shallow-rooting) annual weeds seem to thrive on the site.

It is important to note that the soils that underlay the wood waste are fine textured and as such have a low saturated hydraulic conductivity (low permeability) and water will move through them very slowly. This has effectively produced a sealed environment that has contained the wood waste in an anaerobic environment, and based on visual inspection inhibited the generation or movement of any wood waste leachate.

¹ Personal communication Mr. Barry Mah

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4.0 Land Capability based on Mapping

The land capability mapping shown in figure 3 indicates that the site before the organic soil was removed was 7:O4W 3:O5WF (O3LW). This means that based on the published mapping without improvement 70% is class O4W with excess wetness as a restriction (O indicates and organic soil). Observation of the adjoining land would indicate that classification Class 4W and 5WF (W being the same for organic and mineral soils) is correct for this site and is described below:² The improved class to 3 LW which is also described below.

- CLASS-4W: Frequent or continuous occurrence of excess water during the growing period causing moderate crop damage and occasional crop loss. Water level is near the soil surface during most of the winter and/or until late spring preventing seeding in some years, or the soil is very poorly drained.
- CLASS 5W: Frequent or continuous occurrence of excess water during the growing period making the land suitable for only perennial forage crops, and/or improved pasture. Water Tevel is near the soil surface until early summer, or the maximum period the water level is less than 20 cm below the soil surface is 6 weeks during the growing period, or the soil is very poorly drained, commonly with shallow organic surface layers. Effective grazing period is longer than 10 weeks.
- CLASS 5F: Includes soils with very severe nutrient imbalances, extreme acidity or alkalinity and/of extremely high levels of carbonates. Fertility status restricts the range of crops to perennial forages or other specially adapted crops such as cranberries. With very intensive, closely controlled and carefully monitored applications of fertilizers and/or other soil amendments, these soils are improvable in crop range, climate permitting. If expected crop range upon improvement is wide the Improved Rating is 2F, otherwise 3F.

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² Henk E., & I Cotic. 1983. Land Capability Classification for Agriculture. BC Ministry of Agriculture and BC Ministry of Environment.

- CLASS 03L: Dominantly humic or fibric soil in the 30 to 150 cm depth and/or aquatic muck greater than 5 cm thick in the 100 to 150 cm depth of the profile and/or a cumulo or continuous layer of loamy soil greater than 5 cm thick occurring in the upper 150 cm.
- CLASS 3W: Occasional occurrence of excess water during the growing period causing minor crop damage, but no crop loss, or the occurrence of excess water during the winter months adversely affecting perennial crops. Water level is near the soil surface until mid-spring forcing late seeding, or the soil is poorly and in some cases imperfectly drained, or the water level is less than 20 cm below the soil surface for a continuous maximum period of 7 days during the growing period.

Given the removal of all of the organic soils from the site the land capability improved ratings will not be applicable to this site. It is the author's opinion that a strategy must be developed that will improve the existing site which presently would be classed as 6^3 or 7^4 with the limiting factor being the root restricting layer of anaerobic wood waste. It is not clear if perennial grasses would survive on this site due to the shallow (34cm) soil cap. At the present time a large portion of the site seems only capable of producing annual weeds.

³ Class 6 land is nonarable but is capable of producing native and or uncultivated perennial forage crops.

⁴ Class 7 land has no capability for arable culture or sustained natural grazing.

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5.0 On Site Observations from Soil Pits

Nineteen soil pits were dug on the site. The pits were located in positions to observe typical soils and depth of wood waste burial on the site. The sampling locations are shown on Figure 1 while Figure 4 shows a typical sample of the wood waste debris found on the site, Figure 5 shows typical depth of soil capping wood waste and Figure 6 shows an example of the cedar shavings (hog fuel) found on the site. Figure 7 shows the undisturbed organic soil from Pit WP 272, in the northwest corner of the property.

All soil pits showed a profile including a cap of fill of various depths overlaying semi decomposed wood waste over non-decomposed wood waste. The border between decomposed and non-decomposed wood waste appeared to be the summer water table for the property, which was at about 1m depth. The winter water table appeared to be at the surface of the soil, with some lower areas being flooded during the winter – according to Ming Wu, the site manager.

Location	Depth of Capping (cm)	Depth of Wood (cm)
WP 202	32	118 (limit of backhoe)
WP 203	30	120 (limit of backhoe)
WP 204	60	140 (limit of backhoe)
WP 205	46	34
WP 206	0	40
WP 207	40	20
WP 208	30	30
WP 209	38	0
WP 210	35	15
WP 211	35	15
WP 212	35	67
WP 213	23	30
WP 268	55	110
WP 269	28	47
WP 270	45	27
WP 271	48	46
WP 272	15	60 organic soil no
		wood
WP 273	30	95 ++ limit of hoe
WP 274	85	40++ limit of hoe
Average	37.4	

Table 1 Depth of Soil Cap and Wood Waste



1:

Figure 4: Typical Wood Debris found buried on the Farm



Figure 5: Cedar Shaving Buried on Site

The capping soil on all pit sites was hand textured and one sample was sent to the laboratory for particle size analysis. Hand texturing indicted the capping soil was loam to silty loam and this was confirmed by the lab analysis as seen in appendix I (detailed soil analysis). The average depth of the capping soil is 33.7 cm and the depth of the wood waste and hog fuel (cedar shavings) varies considerably as shown in Table 1. In locations WP 202 to 204, and 273 and 274 it may have been considerably deeper as the depth in the shown in Table 1 was the maximum depth the excavator could dig. These areas are where the Triggs were located and depths are likely to be much greater than 2m.



Figure 6: Buried Wood waste



Figure 7: Undisturbed Soil Profile

Most of the buried wood waste was in almost fresh condition with no signs of decomposition as can be seen in figure 4 and 6. It appears that the high water table and the soil capping are keeping the wood waste in anaerobic conditions and no microbial

decomposition is taking place. There is no visual indication of toxic leachates being generated from this material. The ditch to the south was visually observed and there were no signs of typical wood waste leachate, and the blueberry plants on property to the south are in healthy condition. For wood waste to generate toxic substances there needs to be oxygen present as seen by the high chemical and biological oxygen demand in studies on generation of leachate from cedar and other wood waste.⁵ ⁶

The blueberry plants on the subject property are stunted or dead due to the lack of adequate soil depth for them to grow in, and possibly through flooding of the property, as alluded to by the Manager. Review of the laboratory analysis of the site soils provided in Appendix I indicate that pH, electrical conductivity and sulphur are within normal parameters. The flooding hypothesis appears plausible for stunted growth. Figure 8 provides contours for the depth of wood waste: red is the 100cm depth contour, orange the 50cm contour and green the 25cm contour. Wood waste filling does not appear to be beyond the property boundaries.



Figure 8: Depth of Wood Waste on Site (contour in cm)

6.0 Site Remediation

There are two options to remediate this site and bring it back into agricultural productivity. One option is to remove the capping soil, remove all the wood waste, fill the site with clean fill and top this with a minimum of 50 cm of high quality topsoil. A second option is to leave the wood waste in place, improve the soil cap by importing and depositing a 50 cm layer of silty clay or silty clay loam to increase the depth of the cap

⁵ Hall, Kne J, et. al. 2005. Water Quality Research Journal of Canada vol. # 4 40 pp 476-483

⁶ Samis, S.C. et.al. 1999. Mitigation of Fisheries Impacts from the Use and Disposal of Wood Residue in British Columbia and the Yukon. Canadian Technical Report of Fisheries and Aquatic Sciences 2296.

and provide additional rooting depth and topping this with a and topping this with a minimum of 50 cm of high quality topsoil, preferably silty loam or loam.

6.1 Option 1 Removal of Wood waste

Removal of the wood waste would require the:

- removal of all irrigation works and irrigation lines
- removal of all vegetation
- stripping of the existing soil cap,
- excavation of the wood waste (this will be in excess of 13,000 m³ as it is not possible to determine the depth of the eastern portion of the property.)
- hauling and disposal of the wood waste
- importing of fill to backfill from wood waste removal (difference between removal is an estimated increase of 20% in compaction of fill vs. the wood waste.
- Importing and spreading a minimum of 50 cm of topsoil or about 12,500 m³ after compaction

Removal would eliminate any long term threat of pollution and provide a suitable site for agricultural production in the future. The negative side of removal is that the disruption of the wood waste may lead to the generation of leachate which is not happening at the present time; the disposal of this material is difficult and it would end up in landfills in the area and there is a significant financial cost to excavate and remove the material.

6.2 Option 2 Leave Wood waste improve Cap and Topsoil

The Richmond, Triggs and Lulu soil complexes found at and around the site consist of peat of various depth and state of decomposition (Richmond: 40 - 160 cm of well decomposed organic matter; Triggs more than 160cm mainly sphagnum moss; and Lulu 40 - 160 cm of partially decomposed organic matter). All are located over moderately to fine textured deltaic deposits.

Formation of a peat soil typically takes place when vegetation grows in stagnant bodies of water such as lakes or cut-off river arms. First, dying water plants accumulate on the bottom followed by remains of reeds, sedges, and later trees. Because of the stagnant water with low oxygen content and a low pH, organic matter is not decomposed and accumulates to fill the complete body of water. This may be followed by a build-up of growth of primarily sphagnum moss that will form a dome with a locally elevated water table, thus forming a sphagnum-peat bog.

Peat bogs typically have an impermeable bottom and water turn-over is rather low. This will deprive the water of oxygen which is used in the decomposition process, and the pH is typically low, around pH 4 or 4.5. When peat is dug from peat bogs and the remaining area is not dewatered, the peat forming process repeats itself. When peat soils are dewatered and cultivated, organic matter is quickly oxidized and the depth of the peat soil rapidly diminishes.

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At the subject site, peat has been replaced by wood waste. During the site investigation it was found that is the wood waste had not decomposed to a great extent, likely due to the site conditions that allowed the anaerobic conditions and low water movement to continue. A remediation plan that includes capping, should include measures to keep the peat formation factors in place to preserve the wood waste and prevent the formation of leachate.

6.3 Preferred Option

The preferred option based on our site observations is to leave the wood waste in place and return the land to agricultural production by increasing the depth of the cap by 25 cm and adding a minimum of 75 cm of topsoil.

The wood waste has been buried on this site for at least 30 years and as can be seen in figure 5 and 6, it is in virtually the same condition as when it was buried. The fine textured deltaic deposits that underlay the wood waste and the fine textured soil barrier between the wood waste and the ditches to the south and north has effectively sealed this site⁷. One of the key considerations in keeping the wood waste in an anaerobic condition is to ensure that the ground water is recharged at historical rates, as these have kept the wood waste submerged for most of the year. For this reason it is recommended that the cap depth be increased by 25 cm using silty clay loam or silty clay and not compacting to a state of impermeability. This cap will allow water to move slowly through and assist in the recharge of the water table on the site. There will of course be some recharge from the lateral and vertical movement of water into the site from the natural water table.

On top of this cap a layer of 75 cm of quality topsoil should be applied. The combination of 25 cm of the capping layer and the topsoil will provide between 75 and 100 cm of rooting depth while keeping the wood waste contained in its present anaerobic condition. The added topsoil will act as a small "pre-load" for the site and may compact the wood waste layer. While in the case of wood waste (the pieces of 2x4 seen in one of the pictures) the compaction will be minimal, some of the fine wood waste may be compacted. This will keep the wood waste under water and in the stable, anaerobic state.

The increase of height of the soil will also prevent flooding of the property during the winter wet season, allowing permanent vegetation such as blueberries to survive and other crops such as nursery trees to flourish. A small part of the property has been raised with quality topsoil and now supports vegetable production and some large fruit trees.

⁷ The saturated hydraulic conductivity of these soils will be between 0.42 and 1.41 um/sec

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The preferred option would require:

- Removal of all irrigation works including pressure lines and drip hoses
- Removal of all vegetation, either by mowing or uprooting and hauling for disposal, or through digging and saving blueberry plants that are several years old.
- Placing 25 cm of cap
- Placing of 75cm of quality topsoil
- Crowning and ditching where required
- Seed with cover crop and establish soil forming processes
- Installing subsurface drainage where required
- Installing irrigation works where required
- Improve ditch on north side of property and clean the ditch on the south side.

7.0 Summary and Recommendation

Based on the analysis provided in this report it is recommended that the wood waste and debris be left in place and that 25 cm of silty clay loam to silty clay cap be placed on top of the existing soil cap and that 75cm of quality topsoil be placed on top of the soil cap. This strategy will maintain the wood waste in anaerobic conditions and inhibit the production of leachate and improve the land capability to class 2 or 3 which will support a wide range of agricultural crops.

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The estimated volume of fill is provided below:

Area of	Fill depth m	m ³	loose	m ³ loose material
proposed fill	_	compacted		
m^2				
Fill – silty				
clay loam or				
silty clay				
2.5 hectares	0.25	6,250	1.25	7,800
Topsoil*				
2.5 hectares	0.75	18,750	1.2	22,500
			compaction	
			factor	
Total Loose				30,300 m ³
Volume Fill				
capping +				
Top Soil				

Table 2 Fill Volume Estimates

Site Management 8.0

Good site management will be critical for the success of the fill operation and the final use of the site for an agricultural production.

The following activities must take place:

- Monitor the removal of irrigation works and vegetation .
- Monitor the incoming fill to ensure that there are is not concrete, asphalt, plastic • or other non-soil materials mixed with the fill
- Monitor to ensure that there are no contaminants in any of the fill brought to the site.
- Monitor to ensure that there is no large woody debris or other non-mineral components in the fill.
- Ensure that the truck wash facility is operating properly and that sediment is removed from wash water before entering waterways.
- Install silt fencing to protect all ditches.

The fill operator has agreed and it is assumed it will be a condition of the permit that a Professional Agrologist will carry out regular monitoring and oversight, and that they will have the authority to stop filling if there are issues with the fill quality or environmental concerns on the site.

8.1 Soil Stockpiling

Since topsoil will be delivered at the same time as mineral fill, it is important that topsoil be stockpiled and managed separately. As well, any excavated organic soil that is being retained on site should also be separately stockpiled. For all topsoil piles the following procedures should be implemented.

- Compaction will be minimized by minimizing vehicle traffic when stockpiling and handling soils when not wet
- Stockpiles will be constructed to heights of 4m or less with 2 H: 1 V slopes.
- The shape of the stockpile should provide for positive drainage (i.e. sufficiently sloped to prevent puddling or ponding), to minimize water infiltration into the pile.
- Peat and topsoil will be stockpiled separate from mineral fill to ensure they are not mixed.

8.2 Sediment Control

- Sediment will be controlled by the installation of silt fences along all watercourses.
- The on-site Agrologist will also make decisions to halt the fill operation of weather conditions are so wet that excess sediment is being produced from the site that the sediment control fences cannot handle.
- All sediment will be removed from truck wash water prior to discharge.

8.3 Dust Control

- All tires will be washed which will reduce dust during dry periods
- Access roads will be watered on a regular basis during dry periods to minimize dust.

8.4 Drainage Management

- The ditch on the north side of the property will need to be widened and deepened to ensure positive drainage of surface water,
- The ditch on the south side of the property should be cleaned.

8.5 Management of Fill Quality

Management of fill quality is critical for the success of this site and for meeting the legal requirements of the ALC and the City of Richmond. This section expands on the comments made in section 8.0.

• There cannot be any fill that has any probability of hydrocarbon or metal contamination. Soil must adhere to Schedule 7 Column III of the Contaminated Sites Regulation. If soil originates from a contaminated site an Approved Soil

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Relocation Agreement and authorization from the ALC must be in place. This requires the fill operator to be certain of the origin of all fill.

- There cannot be any concrete, asphalt, plastic or other non granular soil/gravel contaminants in the fill. It is understood that occasionally a piece of asphalt or concrete or other material may be in a load, but is the responsibility of the fill operator to spot this on dumping and remove it prior to spreading of the fill. The on-site staff must be fully briefed and trained on the importance of ensuring no contaminants enter the site.
- If there are more than 50 truck loads originating from a source site the fill should be inspected at the point of origin by a Professional Agrologist prior to entering the fill site.
- On a regular basis (at least once per month) a professional agrologist will with the cooperation of the fill operator dig random test holes to make observations on the quality of the fill.

8.5 Transition to Agriculture

Once the project is completed it is recommended that forage grasses and legumes be planted and harvested for the first two years. This will help establish good soil structure, create macrospores to improve drainage, and improve fertility. After two years the pasture can be cultivated, and a wide range of agricultural crops will be capable of growing on the site.

9.0 References

Bertrand, R.A., G.A. Hughes-Games, D.C. Nikkel. 1991. *Soil Management Handbook for the Lower Fraser Valley*. BC Ministry of Agriculture, Fisheries and Food. Abbotsford, B.C.

Henk E., & I Cotic. 1983. Land Capability Classification for Agriculture in British Columbia. BC Ministry of Environment & Ministry of Agriculture and Food. Kelowna, B.C.

Luttmerding, H.A. 1981. Sols of the Langley-Vancouver Map Area. RAB Bulletin 18, Vol. 1 & 3. BC Ministry of Environment, Victoria, B.C.

Appendix I McTavish Resource & Management Consultants Ltd. **Soil Chemical Analysis**

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Excess														Alkaline	Very Toxic	High	•
Optimum														→ Neutral	Toxic	Normal	
Marginal														Acidic	Caution	Low	
Deficient														Very Acidic	Good	Very Low	
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lbs/acre	+	0 4	τος Ο	ġ	Sand	n/a	Si	t n/a		Clay	nía		Ca 81	.4% Mg	7.7% N	a <1%	K 1.5%
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Site WP 202 Existing soil cap Exove 1: +1 (b04) or 4-3022 #104, 19575-55 A Ave. F: +1 (604) 514-3023 Surray, Brätsh Columbia E: -Surray@exova.com

EXOVQ

Bill To:	McTavish Resour	ce & Managen	nent Consultan	Is Grower Name:	Ming Wu	Lot Nun	1ber:	878074	
Report To:	McTavish Resour	ce & Managen	nent Consultant	ls Client's Sample Id: Field Id:	#6 Road WP 205 Native Sc	Report I Date Re	Vumber: ceived:	1747013 Jun 26, 201	12
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Excess				· · ·		Alkaline	Very Toxic	High	
Optimum						Neutral	Toxic	Normal	
Marginal					÷	Acidic	Caution	Low	
Deficient						Very Acidic	◆ Good	Very Low	
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Ibs/acre	¥		e n/a	Buffer pH n/a	Est. N Rel	ease n/a.	Ω	N Ratio n/a	

Existing Site Soil from Below Wood Waste Site WP 205 To +1 (804) 514-3322 Ft +1 (804) 514-3323 Et: Surrey@exova.com W/ www.exova.com

Exova #104, 19575-55 A Ave. Surrey, British Columbia V3S 9P9, Carrada

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"Nitrate-N "Sulfate-S Deficient Agreement: 36394 Estimated Ibs/acre Marginal Optimum Excess Total lbs/acre 0" - 6" Depth \$ Z, œ 4 Surrey, BC., Canada V4A 2Z4 n/a = not analysed υ ア ŝ 8 \$ 10 Nutrient analysis (ppm) റ്റ Lime n/a Ammonium Sand n/a Texture n/a Mg **0** n/a Silt Q Hand Texture Last Crop: Legal Location: Buffer pH n/a Ľ n/a nía Clay œ n/a Mn Crop not provided Ω Est. N Release C_a TEC n/a ß BiCarbP л/a n/a Very Acidic Neutral Alkaline Acidic n/a 5.8 PH Arrival Condition: Report Date: Mg ਨਾਂਬ EC(dS/m) OM(%) Very Toxic Caution 0.12 Good Toxic Soil Quality Na n/a Na n/a C:N Ratio Very Low Jul 26, 2012 Normal Jun 28, 2012 High Low n/a K n/a Sample# 4102832

RECOMMENDATIONS FOR BALANCED CROP NUTRITION

Page 1 of 1

Analysis of Cedar Wood-Waste Site WP 204

Exova #104, 19575-55 A Ave. Surrey, British Columbia V3S 8P8, Canada T: +1 (604) 514-33<u>5</u>2 F: +1 (604) 514-3323 E: Suney@exova.com W: www.exova.com

Farm Soll Analysis

Bill To:

Report To:

McTavish Resource & Management Consultants

Client's Sample Id:

#6 Road

Ming Wu

878074

Jun 26, 2012

1747014

WP 204 Hog Fuel

Disposal Date: Date Received: Report Number: Lot Number:

Field Id:

Acres:

Grower Name:

McTavish Resource & Management Consultants

2858 Bayview Street



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Exova #104, 19575-55 A Ave Surrey, Sritish Column V3S 8P8, Canada	212	T: +1 (50) F: +1 (50) E: Surrey W: www.s	1) 514-332 1) 514-332 @exova.co wova.com	Βup										U.	ίονς Λο	
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0" - 6" 5	13	83	7	1400	180		 						5,9	0.15	6.0	4102829
Excess													Alkaline	Very Toxic	High	
Optimum													Neutral	Toxic	► Normal	
Marginal													Acidic	Caution	Low	
Deficient.													Very Acidic	Good	Very Low	
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Capping Soil Site WP 211

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Page 1 of 1

Woodwaste Leachate and Site Drainage Addendum I

То

Proposed Remediation of Land Located at 8511 #6 Road Richmond, B.C. BCAA Legal: SEC 20 BLK4N RG5W PL 3109 Parcel A, Subsidy Lot 3, (J71246E).

Prepared by:

Due MCZ

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Prepared for:

Bohan Jiang

December 14, 2013

McTavish Resource & Management Consultants Ltd.

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1.0 Introduction

McTavish Resource & Management Consultants Ltd. was retained by Bohan Jiang to determine the cause for the Blueberry Crop failure and develop a remediation plan to allow agricultural production on the land. That report was submitted to the City of Richmond in September of 2012. The City of Richmond requested further information on the generation of leachate from the wood waste and a drainage plan. This current report provides further information on wood waste leachate and recommended mitigation measures.

2.0 Site Location

The subject properties are located at 8511 No 6 Road Richmond B.C. The legal description is: SEC 20 BLK4N RG5W PL 3109 Parcel A, Subsidy Lot 3, (J71246E).

The street address is 8511 No 6 Road in Richmond, B.C. The total farm size is 40475 m^2 or 10 acres and is zoned AG1. Approximately 2.5 hectares of the land is planted in Blueberries and $\frac{1}{2}$ of the crop has been a complete failure and the other $\frac{1}{2}$ has marginal growth.

2.1 Previous Land Use

The use of the land for any agricultural use is severely impeded by the fact that approximately 25 to 30 years ago a previous owner has stripped all the organic soil (peat) from the site and filled it with cedar wood waste and wooden construction debris. This has been discussed in detail in section 3 of the September 2012 report.

3.0 Recommendations from 2012 Report

The Richmond, Triggs and Lulu soil complexes found at and around the site consist of peat of various depth and state of decomposition (Richmond: 40 - 160 cm of well decomposed organic matter; Triggs more than 160cm mainly sphagnum moss; and Lulu 40 - 160 cm of partially decomposed organic matter). All are located over moderately to fine textured deltaic deposits. Formation of a peat soil typically takes place when vegetation grows in stagnant bodies of water such as lakes or cut-off river arms. First, dying water plants accumulate on the bottom followed by remains of reeds, sedges, and later trees. Because of the stagnant water with low oxygen content and a low pH, organic matter is not decomposed and accumulates to fill the complete body of water. This may be followed by a build-up of growth of primarily sphagnum moss that will form a dome with a locally elevated water table, thus forming a sphagnum-peat bog.

Peat bogs typically have an impermeable bottom and water turn-over is rather low. This will deprive the water of oxygen which is used in the decomposition process, and the pH is typically low, around pH 4 or 4.5. When peat is dug from peat bogs and the remaining area is not dewatered, the peat forming process repeats itself. When peat soils are dewatered and cultivated, organic matter is quickly oxidized and the depth of the peat soil rapidly diminishes.

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At the subject site, peat has been replaced by wood waste. During the site investigation it was found that is the wood waste had not decomposed to a great extent, likely due to the site conditions that allowed the anaerobic conditions and low water movement to continue. A remediation plan that includes capping, should include measures to keep the peat formation factors in place to preserve the wood waste and prevent the formation of leachate.

The preferred option based on site observations is to leave the wood waste in place and return the land to agricultural production by increasing the depth of the fine textured soil cap by 25 cm and adding a minimum of 75 cm of topsoil.

The wood waste has been buried on this site for at least 30 years and it is in virtually the same condition as when it was buried. The fine textured deltaic deposits that underlay the wood waste and the fine textured soil barrier that exists in most locations between the wood waste and the ditches to the south and north has effectively sealed this site¹. One of the key considerations in keeping the wood waste in an anaerobic condition is to ensure that the ground water is recharged at historical rates, as these have kept the wood waste submerged for most of the year. For this reason it is recommended that the cap depth be increased by 25 cm using silty clay loam or silty clay and not compacting to a state of impermeability. This cap will allow water to move slowly through and assist in the recharge of the water table on the site. There will of course be some recharge from the lateral and vertical movement of water into the site from the natural water table.

On top of this cap a layer of 75 cm of quality topsoil should be applied. The combination of 25 cm of the capping layer and the topsoil will provide between 75 and 100 cm of rooting depth while keeping the wood waste contained in its present anaerobic condition. The added topsoil will act as a small "pre-load" for the site and may compact the wood waste layer. While in the case of wood waste (the pieces of 2x4 shown in the 2012 report) the compaction will be minimal, some of the fine wood waste may be compacted. This will keep the wood waste under water and in the stable, anaerobic state.

The increase of height of the soil will also prevent flooding of the property during the winter wet season, allowing permanent vegetation such as blueberries to survive and other crops such as nursery trees to flourish. A small part of the property has been raised with quality topsoil and now supports vegetable production and some large fruit trees.

The preferred option will require:

- removal of all irrigation works including pressure lines and drip hoses;
- removal of all vegetation, either by mowing or uprooting and hauling for disposal, or through digging and saving blueberry plants that are several years old;
- placing 25 cm of cap of fine textured soil;
- placing of 75cm of quality topsoil;

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¹ The saturated hydraulic conductivity of these soils will be between 0.42 and 1.41 um/sec

- crowning and ditching improvements where required;
- seed with cover crop and establish soil forming processes;
- installing irrigation works where required;
- improve ditch on north side of property and clean the ditch on the south side; and
- implement measures to ensure a minimum of a 2 m sealed buffer between the wood waste and the ditches on the north and south of the property. This is a new recommendation.

4.0 Potential for Leachate Generation and Mitigation

Based on visual observations made during 2012 and 2013 there does not appear to be any leachate entering the ditches on the north or south side of the property. To determine the potential impact on the surrounding ditches, on-site observations were made in December of 2013 to determine the distance of buried wood waste to the ditches on the north and south of the property. Figure 1 shows where auguring took place to identify underlying conditions.

4.1 Site Observations December 2013

From the onsite investigation it appears that the former owner of the property only excavated peat and replaced it with wood waste on the property itself and not on the adjoining properties. The west side of the property did not contain wood waste (or only to a very small extent), and in most places the wood waste was at least 2m from the north or the south ditches. However in one location (GPS location 826) wood waste was found close to the north ditch. Along the south ditch there is an area (between GPS location 831 and 832) where the wood waste is near and/or underneath the ditch. The wood waste close to and underneath the ditch was covered with a layer of 20 to 30 cm of clay and the wood waste was virtually in a non-decomposed form. At the south ditch the water level was well above the top of the wood waste.

These observations indicate that no or very little lateral movement of water takes place through the wood waste and into the ditches. It appears that in the current configuration, there is enough of a clay buffer between the wood waste and the ditches to keep the wood waste anaerobic and the ditches unaffected.

4.2 Leachate Risk Management

The rehabilitation plan is geared towards capping the surface of the wood waste to prevent precipitation water from entering this mass. This protection will be enhanced with the crowning of the subsoil and topsoil. Precipitation will move by overland flow and lateral movement through the topsoil towards the ditches. Some downwards percolation is preferred to keep the wood waste in an anaerobic state.

Based on the recent findings; (December 12, 2013 field visit – see Appendix I) there are locations where the wood waste is close to or even underneath the perimeter ditches. In these areas it is recommended that when the project is underway, that wood waste is stripped from near the ditches to a width of 2 m from the ditches and replaced with clay or silty clay to provide

a barrier between the remaining wood waste and the ditch. This will prevent any wood waste leachate from reaching the ditch and thus ensure that the municipal drainage system unaffected. Stripping wood waste and replacing it with clay to form a barrier is only required in a few areas as most of the site it is separated from the ditches by at least 2 m of natural soil.

It is recommended that at the time of project execution the consultants work with the contractor and clearly mark all areas where the 2m buffer is not in place and supervise the removal of wood waste in these areas and the back filling with clay or silty clay.

5.0 Summary and Conclusions Leachate

Extensive sampling of the site (see figure 2) has identified of the extent and the anaerobic condition of the wood waste as described in the September 2012 report and this report. To ensure that leachate is not generated from this site, the following recommendations need to be implemented as part of the process of making the subject property a productive and environmentally safe farm:

- cap with 25 cm of fine texture soil
- add 75 cm of topsoil
- crown the land to facilitate drainage
- ensure a 2m buffer between the woodwaste and the ditches

6.0 Site Drainage

The subject farm presently has a ditch on the north and south side of the property. The north ditch has its flow split with part of the ditch flowing east to the # 6 road ditch part flowing west, connecting to a north south ditch flowing south and connecting with the ditch on the southern border of property.

The south ditch flows to the west from approximately the mid-point of the property and continues into the adjoining property to the west. At the present time these ditches are not functioning properly as grades fluctuate and the ditches are overgrown with vegetation.

It is recommended that the following drainage plan be implemented

- a) Keep the flow direction as is and do minor regarding and clean ditches of water flow constricting vegetation;
- b) Construct a new ditch along the western side of the property if the existing ditch is on the neighbouring property;
- c) During the filling operation ensure that subsoil and topsoil is crowned to enable water to flow from the centre of the property to the ditches on the north and south sides of the property.

These activities will not increase peak flows to the City of Richmond ditches above historical levels as all ditches previously existed (with one replacing the neigbouring ditch), and only needed maintenance and re-grading is taking place

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6.1 New Ditch Elevations

The following section provides details on ditch elevations and flow directions. The purpose is to improve the site drainage by minor regarding and clearing of vegetation and debris that is impeding water flow.

6.1.1 Southern Ditch

The property (like most of Richmond) has very little natural grade and therefore the slope of the ditches have very little gradient. The highest point along the southern ditch is at the culvert invert across from the access road shown on the elevation map in Appendix II. The ditch elevation at this point is 0.81m the ditch slopes from this point to the west to an elevation of 0.21m at the western end of the ditch. From this point it continues to flow to the west into the neigbouring property which has an ESA designation and is considered a Freshwater Wetland.

The southern ditch requires minor regarding to eliminate the topographic fluctuations and make the bottom an even gradient to the west, keeping western bottom of ditch elevation at approximately its present level (See Appendix II). Some ditch widening is recommended to have an average cross section as shown in Appendix II. At the eastern end it will not be possible to maintain 0.50 m ditch depth, however there is little flow at this end of the system and a shallower ditch will be functional.

6.1.2 Northern Ditch

The northern ditch should be graded from approximately the cross section 5 line on the topographic map to have all flow from this point split go east to the #6 road ditch and all flow to the west of this point to drain as it presently does to the west. The water flowing west presently connects with a north south ditch that connects with the south property ditch. The north south ditch seems to be on the neigbouring property and a new ditch that is entirely on the subject property should be installed to connect the north and south ditches. See Appendix III for detailed elevations.

6.1.3 Western Ditch

As described in section 6.1.2 there is a ditch running from north to south along the western property boundary. Based on survey pins observed during the December site visit this ditch seems to be on the neighbouring property. For this reason a new ditch should be installed on the subject property to connect the north and south ditches. Elevations are shown in Appendix IV.

6.1.4 Impact on Western Environmentally Sensitive Area

The southern ditch flows to the west into an Environmentally Sensitive Area (ESA) that is categorized as Fresh Water Wetland (FRWT). By keeping the drainage flow direction as it presently exists on this property the freshwater recharge from the subject property to the ESA will be maintained.

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Figure 1: Auger Sampling Points December 2013

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Figure 2: Sampling Sites 8511 #6 Road

Appendix I Field Notes

GPS Location	Comments
820	Ditch lower than adjacent land to north
	Property to north is peat/organic soil as seen
	by ditch edge
821	Woodwaste 60 cm below surface
	Greater than 3m away from north ditch
822	Woodwaste 35 cm below surface
	Woodwaste 7.5m from ditch
823	Woodwaste 40 cm below surface
	Woodwaste 4 m from ditch
824	Shallow layer of woodwaste 3m from ditch
825	Auger 2m from ditch no woodwaste, peat only
826	Woodwaste at 15 cm below surface 1m from
	ditch
	0.5 m from ditch only a thin layer of
	woodwaste
827	2m from ditch no woodwaste
828	3m from ditch no woodwaste
829	3m from ditch no woodwaste
830	2m from ditch no woodwaste
831	Woodwaste at 75cm from ditch edge
	Sample in ditch, woodwaste found buried
	below 20 cm clay layer, still anaerobic, no
	sign of leaching or pollution
832	Sample in ditch, woodwaste found buried
	below 20 cm clay layer, still anaerobic, no
	sign of leaching or pollution



Leave water flow in historical directions

Appendix II

Ditch Elevations and Cross Sections South Ditch

Average Ditch Cross-Section South Ditch





Appendix III 0.30 公会合 9.C) E. ŧ. West Property + + 20135 + 19.7 **Ditch Elevations North Ditch** Line + + + 0 % le S 붊 New Elevations Ditch Bottom с Ч + 532 232 + % 5 10 109 OF 944 4 24 24 + 2.76 SECTION 1 + + 5 10 中の ALL SED THE OF PLL + * * + *** + 0.33 0.75 1 The second ∰8**+**% + EDGE OF 9**1** 승 51919 11911 0.40 150 2 1 SECTION 4 155-551 1000 ¤ ⊒___ 22 4 1 T 3.44





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This is a new ditch to be installed of existing ditch is on the neighbouring property. This will be a relative shallow ditch due to the existing bottom of ditch elevations.

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Appendix VEnvironmentally Sensitive Areas



Attachment 3



1081 Canada Ave Duncan, BC V9L 1V2 p. 250.746.5545 f. 250.746.5850 #202 – 2790 Gladwin Road Abbotsford, BC V2T 4S7 p. 604.504.1972 f. 604.504.1912

> info@madrone.ca www.madrone.ca

August 11, 2020

Barry Mah Westwood Topsoil Ltd. 6604 62B Street Delta, BC V4K 5A8 westwoodbarry@mac.com

Dear Mr. Mah,

RE: Requirement of a Farm Plan for 8511 No. 6 Road, Richmond, BC (CD 28808)

Madrone Environmental Services Ltd. ('Madrone') understands that you, Mr. Barry Mah ('the Client'), requires the development of a Farm Plan to facilitate a proposal to import soil onto a parcel located at 8511 No. 6 Road, Richmond, BC ('the Property') for the purpose of remediating the land for crop cultivation. This soil importation proposal will be reviewed by the City of Richmond ('the City'), the City's Food Security and Agricultural Advisory Committee (FSAAC) and the Agricultural Land Commission (ALC).

In an email¹, Mr. Mike Morin, Community Bylaws, City of Richmond, outlined requirements for the Farm Plan which includes a site plan, site description, legal description, zoning and current land use, soils description and unimproved agricultural capability, soil management rationale/improved agricultural capability, recommended agricultural uses and suitable crops, drainage requirements, irrigation requirements, proposed agricultural operation, proposed planting plan and a cost estimate for agricultural improvement. Mr. Morin also commented that although the aforesaid information may be found in other reports specifically prepared for the Property by Qualified Professionals (QPs), the City wants said information consolidated into a single document to better clarify what is planned post-project completion.

This report has been prepared by Daniel Lamhonwah, MES, P.Ag, and reviewed by Thomas R Elliot, PhD P.Ag, P.Geo, of Madrone for the specific purpose of providing the City and the FSAAC with the information required in a summarized manner for review. Please note that this Farm Plan has been informed by reports previously prepared by non-Madrone QPs for the Property. Information available from municipal and provincial sources were used by Madrone for the purpose of corroborating information presented in previous

¹ Email communication addressed to Barry Mah from Mike Morin, Community Bylaws, City of Richmond. Subject: CD 28808 - Outstanding application requirements - Jaing/Barry Mah (21 Apr 2020). Sent on April 21, 2020 12:47 PM.

BARRY MAH FARM PLAN FOR 8511 NO. 6 ROAD, RICHMOND, BC

reports for making applicable updates to the Farm Plan. Madrone did not conduct any field investigations on the Property to specifically inform this report.

1 Introduction

The Client had previously retained McTavish Resource and Management Consultants Ltd. ('McTavish') and Timmenga and Associates Inc. ('Timmenga') to design a remediation plan² ('the Remediation Plan') for the Property, further to which a drainage and leachate management plan³ ('the Drainage and Leachate Plan') and analysis of perimeter ditch water report⁴ ('the Ditch Analysis Report') was developed jointly by these two firms. Since the development of aforementioned plans, Bruce McTavish, former Principal of McTavish, has been employed by the City as a municipal agrologist, thus creating a conflict of interest within the context of City review of the Client's intention for soil importation on the Property. Thus, the Client has retained Madrone to act as QPs for the purpose of finalizing documentation for intended remediation works on the Property for review by the City, FSAAC, and the Agricultural Land Commission (ALC), acting at the QPs during any future council meetings, and monitoring the proposed soil importation works on the Property should they be approved.

2 Site Description

The Property is a 4.05 ha (10 acre) parcel of private land located at the street address 8551 No.6 Road, in Richmond, BC. Information about the Property, as provided by the City⁵, is summarized in Table 1. Recent satellite imagery of the Property (2018) is shown in Figure 1.

3 Current and Previous Land Use

At time of writing, it is Madrone's understanding that the owner of the Property, Mr. Bohan Jiang, is attempting to grow blueberries on the land with limited success. Our understanding is supported by recent satellite imagery provided by the City showing limited agricultural activity for the majority of the Property (\sim 3.0 ha; 7.4 acre), particularly in the centre and western sides of the parcel (Figure 1). As reported in the Remediation Plan, the Property has been severely impeded by removal of native surficial organic soil (peat)

² Proposed Remediation of Land Located at 8511 #6 Road Richmond, B.C. Prepared by McTavish Resource and Management Consultants Ltd. and Timmenga and Associates Inc. Prepared for Bohan Jiang. Dated September 30, 2012.

³ Woodwaste Leachate and Site Drainage Addendum I To Proposed Remediation of Land Located at 8511 #6 Road Richmond, B.C. Prepared by McTavish Resource and Management Consultants Ltd. and Timmenga and Associates Inc. Prepared for Bohan Jiang. Dated December 14, 2013.

⁴ Analysis of Perimeter Ditch Water from Property Located at 8511 #6 Road Richmond, B.C. Prepared by McTavish Resource and Management Consultants Ltd. and Timmenga and Associates Inc. Prepared for Bohan Jiang. Dated March 4, 2015.

⁵ City of Richmond (2019). Richmond Interactive Map. <u>https://maps.richmond.ca/rim/</u>. Accessed April 30, 2020.

from the site, which was replaced with cedar wood waste and, as reported, 'wooden construction debris' with a mineral-soil cap-layer, approximately 25 to 30 years ago by a previous land owner.

PID	005-147-077
Property Roll	025686728
Legal	SEC 20 BLK 4N RG 5W PL NWP3109 Parcel A, Block 4N, Plan NWP3109, Sublot 3, Section 20, Range 5W, New Westminster Land District, (J712 46E)
Richmond Key	162678
Official Community Plan (OCP) Land Use	Agriculture
Official Community Plan (OCP) Environmentally Sensitive Areas (ESAs)	Freshwater Wetland (FRWT)
Environmentally Sensitive Areas (ESAs) Development Permit (DP)	Yes
Agricultural Land Reserve (ALR)	Yes
Agricultural Land Reserve (ALR) Development Permit (DP)	, No
Zoning Development Permit (DP)	No
Flood construction Level (FCL)	3.0 m GSC

TABLE 1. PROPERTY INFORMATION FOR 8511 NO. 6 ROAD, RICHMOND, BC



0 0.0225 0.045 0.09 mi

FIGURE 1. SATELLITE IMAGERY OF 8511 NO.6 ROAD OUTLINED IN YELLOW. THE RED SHADED AREA REPRESENTS TO PROPOSED AREA FOR SOIL IMPORTATION. IMAGE PROVIDED BY THE CITY OF RICHMOND AND DATED AS TAKEN IN 2018.

4 Soils Description

Provincial soil mapping⁶ indicates that the area of the Property contains soils of the Lulu soil association. Lulu soils are composed of partially decomposed organic deposits that are between 40 to 160 cm deep with underlying silty clay loam or silty clay deltaic deposits. The provincially mapped Land Capability for Agriculture (LCA) for the Property is Class O4 and contains an excess water (W) limitation and degree of decomposition – permeability (L) limitation.

An on-site soil survey conducted by McTavish and Timmenga in 2012 as reported in the Remediation Plan⁷ found that the organic peat on the Property was removed by a previous landowner (estimated to be between 20 to 30 years ago) and backfilled with cedar wood waste and 'wooden construction debris'. From review of site photographs in the Remediation Plan (specifically Figure 4), Madrone disputes the presence of 'wooden construction debris' and instead identifies the materials present as 'end cuts' which are a standard byproduct of sawmills when cutting feedstock to dimensional lumber. This distinction is of moderate importance as

⁶ Province of British Columbia (2019). BC Soil Information Finder Tool. https://www2.gov.bc.ca/gov/content/environment/air-land-water/land/soil/soil-information-finder. Accessed April 30, 2020.

⁷ Proposed Remediation of Land Located at 8511 #6 Road Richmond, B.C. Prepared by McTavish Resource and Management Consultants Ltd. and Timmenga and Associates Inc. Prepared for Bohan Jiang. Dated September 30, 2012.

construction debris is not suitable fill material as per the *Agricultural Environmental Management Code of Practice⁸* (AEMCoP), while end cuts are a category of wood residue acceptable for use on agricultural land as per the AEMCoP. Hereafter, these materials will be referred to as 'wood residue' to be in line with current regulations. The wood residue layer was backfilled with 35 to 40 cm of loam to silty loam sand by the previous landowner. These activities resulted in subsurface conditions which limit root growth highly acidic, poorly draining and anaerobic subsurface environment due to the natural perched watertable creating the local 'W' agricultural capability limitation, as identified in provincial mapping of Lulu soils.

5 Unimproved Agricultural Capability

Based on the soil and landscape conditions of the Property at time of assessment, the professional opinions of McTavish and Timmenga⁹, the land has an LCA of Class 6 or 7D (D subclass is undesirable soil structure/aeration)¹⁰, with the limiting factor being the root restricting layer of anaerobic wood waste. Note that Class 6 and 7 lands, as defined by the ALC, are unsuitable for cultivation or use of farm machinery, or the soils do not respond to intensive improvement practices. We at Madrone understand that the Property has retained a Class 6 or 7D limitations to LCA because, to our knowledge, no management practices or earthworks have been implemented to improve the site LCA.

6 Soil Importation Rationale and Site Plan

The Remediation Plan developed by McTavish and Timmenga recommends that the wood residue be left in place (and kept at an anaerobic state) and that the land be returned to agricultural production by:

- Removing all irrigation works including pressure lines and drop hoses;
- Removing all vegetation, either by mowing or uprooting and hauling for disposal, or through digging and saving blueberry plants that are several years old;
- Increasing the cap depth by 25 cm with noncompacted permeable silty clay loam or silty clay; and

⁸ Province of British Columbia (2019). Environmental Management Act Agricultural Environmental Management Code of Practice. <u>http://www.bclaws.ca/civix/document/id/complete/statreg/8 2019</u>. Accessed April 30, 2020.

⁹ As reported in the Remediation Plan.

¹⁰ Land in Class 6 provides sustained natural grazing for domestic livestock and is not arable in its present condition. Land is placed in this class because of severe climate, or the terrain is unsuitable for cultivation or use of farm machinery, or the soils do not respond to intensive improvement practises. Some unimproved Class 6 lands can be improved by draining and/or diking. Class 7 land may have limitations equivalent to Class 6 land but they do not provide natural sustained grazing by domestic livestock due to climate and resulting unsuitable natural vegetation. Also included are rockland, other nonsoil areas, and small water-bodies not shown on maps. Some unimproved Class 7 land can be improved by draining or diking. (source: https://www.alc.gov.bc.ca/assets/alc/assets/library/agricultural-capability/agriculture_capability/agriculture_capability/agriculture.pdf

• Adding a minimum of 75 cm of topsoil.

Based on the proposed area of soil important (2.5 ha), the Remediation Plan involves importing \sim 30,000 m³ of soil (silty clay loam or silty clay + topsoil).

McTavish and Timmenga comment that the plan will also prevent flooding of the Property during the wet season and allow permanent vegetation (i.e. blueberries) to survive and nursery plants to flourish. Additional recommendations in this remediation plan includes:

- Crowning and ditching the remediated land where required;
- Seeding the topsoil with cover crop and establishing soil forming processes;
- Installing subsurface drainage where required;
- Installing irrigation works where required; and
- Improving the ditch on the north side of Property and cleaning the ditch on the south side.

A site plan ('the Site Plan') showing the proposed fill for the Property based on McTavish and Timmenga's reporting was developed by Peak Surveying in 2013 and is attached at the end of this Farm Plan developed by Madrone.

In 2018, the Client retained Tony Yam Engineering Ltd. ('Tony Yam') as the geotechnical engineer to evaluate the remediation works proposed by McTavish and Timmenga for the Property. Following a site visit and test pit excavation, Tony Yam provided the following comments in a letter-style report¹¹ prepared for the Client:

- Placing 1.0 m of additional fill over the impacted area (whereby the impacted area refers to the area where organic soils were removed, and wood waste was placed by a previous owner) will not impact the drainage pattern of adjacent areas;
- The weight of additional fill will not impact the stability of adjacent areas; and
- The remediated area is only suitable for agricultural use and is not suitable to support any building structure without further site improvement.

Madrone acknowledges that the importation of soil onto the Property (25 cm of noncompacted permeable silty clay loam or silty clay, and 75 cm) will raise lands on the Property to a similar elevation of adjacent land parcels in the area. This statement is based on a survey prepared by Peak Surveying and provided to Madrone by the Client. The survey, which contains cross sections, point elevations and site plan for the Property, shows point elevations of the adjacent parcel to the left ranging from 1.55 to 1.77 m above sea level (masl).

¹¹ Project No: G18154-00 – Remediation of Farm Land, 8511 No.6 Road, Richmond BC. Prepared by

Tony Yam Engineering Ltd. Prepared for Barry Mah. Dated October 10, 2018.

Point elevations of proposed fill area on the Property generally range from ~ 0.60 to 0.85 masl. Thus, the addition of soil at an average depth of 100 cm (1.0 m) across the proposed fill area would result in the Property being level with surrounding lands.

7 Improved Agricultural Capability

It is the professional opinion of Madrone that following implementation of the Remediation Plan and the recommendations outlined in the next section (*8 Proposed Agricultural Plan*), the proposed soil importation and deposit is **targeting a Class 1 agricultural capability**¹² by selectively receiving soils suitable to that end goal¹³. If the deposited soil is assessed as anything other than a Class 1 agricultural capability upon completion of the project, the farm operator (Mr. Jiang) should endeavour to improve the agricultural limitations through soil amendment, irrigation, or some combination thereof.

8 Proposed Agricultural Plan

8.1 Soil Preparation and Amendments

Following Madrone's review of the Remediation Plan, we have determined that all proposed works and recommendations are appropriate based on the available background information and field survey results detailed in these reports. We would however like to make the following soil preparation and amendment recommendations to supplement the professional opinions expressed by McTavish and Timmenga:

• It is our understanding that peat moss has been removed and recovered from the Property. Peat moss can be used as a soil conditioner and/or amendment on farms, thus we encourage the use of such on the Property to facilitate crop growth. Similarly, any clean wood waste recovered from the Property can be chipped into mulch, composted as per AEMCoP and/or the *Organic Matter Recycling Regulation*¹⁴ (OMRR), and used as a soil conditioner and/or amendment.

¹² Class 1 is defined as land that has no or only very slight limitations that restrict its use for the production of common agricultural crops. Land in Class 1 is level or nearly level. The soils are deep, well to imperfectly drained under natural conditions, or have good artificial water table control, and hold moisture well. They can be managed and cropped without difficulty. Productivity is easily maintained for a wide range of field crops. (source: <a href="https://www.alc.gov.bc.ca/assets/alc/assets/library/agricultural-capability/agriculture_capability/agriculture_capability/agriculture_capability/agriculture_capability/agriculture/ag

¹³ The Remediation Plan prepared by McTavish and Timmenga states that following importation of soil under their recommendations, the agricultural capability of the Property will be improved "to class 2 or 3 which will support a wide range of agricultural crops". It is Madrone's professional opinion that there is potential for the Property to be improved to Class 1 if the receiving soil is suitable.

¹⁴ Province of British Columbia (2019). Environmental Management Act and Public health Act Organic Matter Recycling Regulation.

http://www.bclaws.ca/civix/document/id/complete/statreg/18 2002. Accessed April 30, 2020.

- We encourage that any vegetation removed by mowing or uprooting be composted on-site as opposed to being hauled off-site for disposal. Compost generated on the Property can be used as an additional soil conditioner and/or amendment. Composting is a permitted use on land in the ALR, however are subject to conditions outlined in the *Part 6 Division 2 Agricultural Composting in the Environmental Management Act Agricultural Environmental Management Code of Practice*¹⁵.
- When increasing the cap depth over the wood residue by 25 cm with silty clay loam or silty clay, Madrone recommends grading the surface to facilitate drainage to perimeter ditching.
- Due to the local perched water table, seasonal inundation from flooding and requirement to maintain anaerobic conditions within the historically deposited wood residue through increased thickness of low-permeability silty clay loam/silty clay cap, Madrone recommends installation of widely spaced (~10m) subsurface drainage tile.
- Once the 75 cm of topsoil has been applied to the 25 cm cap, we recommend grading the soils to a 1V:2H slope (1 m vertical, 2 m horizontal) on the north, west and south sides of the soil import area to mitigate slumping along the perimeters.
- Madrone recommends progressive use of fall rye (cereal rye) as a cover crop option for areas completed in the fall or early winter. Fall rye is effective at loosening compact soil, suppressing weeds and adding nitrogen to soil. If cover crop is to be established in the spring, we recommend using buckwheat, clover, annual ryegrass or oats as options.
- Following one to two years of cover cropping, we recommend that the topsoil be tested for nutrient concentrations in the spring, specifically to quantify nitrogen (N), phosphorus (P), potassium (K), boron (B) and magnesium (Mg) as recommended by the *BC Berry Production Guide*¹⁶. It is recommended that 10 to 20 individual samples to a depth of 15 cm be taken from a uniform sample width through the entire 0 to 15 cm soil profile. The *BC Berry Production Guide* contains general recommendations on how to determine how much fertilizer to apply based on nutrient range ratings.
- We further we recommend testing the topsoil pH post placement and adjusting (increasing¹⁷ or reducing¹⁸) the pH range using soil amendments if necessary. Blueberries do best in acid soil with a pH range of 4.5 to 5.2. A pH outside this range can result in poor growth and low yields.

¹⁵ Province of British Columbia (2019). Environmental Management Act Agricultural Environmental Management Code of Practice. <u>http://www.bclaws.ca/civix/document/id/complete/statreg/8 2019</u>. Accessed April 30, 2020.

¹⁶ Province of British Columbia (2012). Berry Production Guide – Beneficial Management Practices for Commercial Growers in British Columbia. <u>https://www2.gov.bc.ca/assets/gov/farming-natural-resources-and-industry/agriculture-and-seafood/agriservicebc/production-guides/berries/nutrient_management.pdf</u>. Accessed April 30, 2020.

¹⁷ Anderson, N.P. et al. (2013). Applying Lime to Raise Soil pH for Crop Production (Western Oregon). <u>http://ir.library.oregonstate.edu/xmlui/bitstream/handle/1957/38531/em9057.pdf</u>. Accessed April 30, 2020.

¹⁸ Horneck, D. et al. (2004). Acidifying Soil for Crop Production West of the Cascade Mountains (Western Oregon and Washington).

BARRY MAH FARM PLAN FOR 8511 NO. 6 ROAD, RICHMOND, BC

8.2 Suitable Crop and Proposed Planting Plan

Madrone acknowledges that blueberries are a suitable choice following remediation of the Property based on favourable soil conditions (assuming all recommendations are implemented), regional climate and distance to market. Please note that the proposed texture and depth of imported soil would facilitate the growth of crops that typically require deep rooting such as rhubarb, sweet potatoes, tomatoes, pumpkins and asparagus, all of which would require 0.6 to 0.9 m (24 to 36 inches) of soil for optimal growth. Blueberry production is detailed in this Farm Plan because this crop is the preferred choice of the proposed farm operator (8.7 Proposed Agricultural Operator).

Table 2, informed by the Blueberry Production Guide¹⁹ (an online resource) developed by the Province of British Columbia, outlines a planting plan for the proposed blueberry farm. It is anticipated that new plantings will occur in the spring (March) following cover cropping in the previous year. Additional information such as disease control, insect control, weed control and food safety can be found in the aforementioned guide. The guide also contains information pertaining to blueberry varieties and pollination strategies.

Timing	Activity	Plant Care Recommendations
March	Budding	New plantingsBegin land preparation for fall or next spring plantings
Late March to Late April	Leaf and flower bud break	 Make first fertilizer application (mid-April) New plantings. Set out new plants as conditions permit (up to mid-May)
Late April/May	Blossoming	 Place bee hives in field when 10% of blossoms are open. Protect hives from bears where necessary Remove hives from fields when blossoming is over
June	Fruit development	Make second fertilizer applications up to mid-JuneIrrigate as necessary
July	Fruit development and ripening	Monitor soil moisture and irrigate as necessary
July to September	Harvesting	 Harvest and market fruit. Collect plant tissue samples (mid-July to mid-August) for nutrient analysis Irrigate as needed
September	Post-harvest growth	Irrigate as necessary
October	Post-harvest growth	Continue to prune out and remove diseased wood.

TABLE 2. BLUEBERRY PLANT CARE SCHEDULE

https://catalog.extension.oregonstate.edu/sites/catalog/files/project/pdf/em8857.pdf. Accessed April 30, 2020.

¹⁹ Province of British Columbia (n.d.). Blueberries. <u>https://www2.gov.bc.ca/gov/content/industry/agriservice-bc/production-guides/berries/blueberries</u>. Accessed April 30, 2020.

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Timing	Activity	Plant Care Recommendations
		 New plantings. Set out new plants. Best time to plant container stock in coastal areas.
November/December	Plants dormant	Apply sawdust mulch, if necessaryOrder bees for the coming season
January/February	Plants dormant	 Prune beginning after leaf drop. Be sure to remove diseased and dead wood.

8.3 Field Layout and Plant Spacing

The following recommendations are outlined in the BC Blueberry Production Guide²⁰:

- Fields should be designed for mechanical harvesting to allow flexibility in future harvesting decisions. Mechanical harvesting requires a minimum of 3 m between the rows. Provide a 4.5 to 5.0 m wide row break every 125 m for unloading harvesters and other machinery. Most harvesters require 7.6 to 9.0 m at the ends of rows (headlands) to turn around.
- The risers or posts for overhead irrigation should be no higher than 2.1 m and placed in the center of the row.
- Plant on raised beds to reduce fruit drop when harvesting mechanically. Beds place the catcher plates nearer to the narrow base of the plant, keeping them in close contact resulting in less fruit drop. Build the beds 20 cm high and 120 cm wide at the base.
- The most commonly used in-row spacing between plants is 90 cm. The number is plants required for this spacing scheme is ~4115 plants per ha or ~1646 plants per acre (depending on variety).

Based on these guidelines, we estimate that the Property can accommodate ~ 50 vertical rows of blueberry plants based on the approximate 250 m length of the proposed soil important area. This includes a row break every 125 m, and an 8 m distance along the perimeter of the growing area to allow room for mechanical harvesters to turnaround. Over the ~ 2.5 ha of proposed soil importation, $\sim 10,000$ to 12,000 blueberry plants are required.

8.4 Drainage Requirements

The Drainage and Leachate Plan developed by McTavish and Timmenga as an addendum to the initial Remediation Plan makes a number of recommendations, which we incorporate to this Farm plan with commentary as follows:

²⁰ Province of British Columbia (n.d.). Blueberries. <u>https://www2.gov.bc.ca/gov/content/industry/agriservice-bc/production-guides/berries/blueberries</u>. Accessed April 30, 2020.
- i. That a 'sealed buffer' (2 m minimum) be placed between the wood residue and ditches on the north and south of the Property to "ensure that leachate is not generated from this site", whereby this site refers to the Property.
 - a. Madrone interprets this recommendation to require the excavation to low permeability native material adjacent to the ditch line, removal of wood residue, and replacement with the fine-texture capping material;
 - b. This approach is not conducive with best practices for setback from sensitive habitats, as outlined in the Federal Fisheries Act S.35 which 'prohibits harmful alteration, disruption or destruction of fish habitat unless authorized (e.g. removing stream side vegetation)';
 - c. These modifications would require a Section 11 working in or about water of the BC Water Sustainability Act;
 - d. Madrone strongly recommends that this recommendation from the Drainage and Leachate Plan be substituted for the modified version contained in section 8.5 of this report (Below).
- Southern ditch: Regrade to eliminate topographic fluctuations and make the bottom (of the ditch) an even gradient to the west; some ditch widening is also recommended;
 - a. Madrone recommends a gradient of 1 2%, with a minimum ditch width of 3m.
 - b. These modifications would require a Section 11 applications for changes in and about a stream – of the BC Water Sustainability Act;
 - c. All works should be conducted during low flow season with full isolation of working area from natural streams;
- iii. Northern ditch: Regrade to have all flow split east and west;
 - a. Madrone recommends an even split of flow between east and west, established through regrading of the ditch bottom to a central crest with a 1 2% gradient descending therefrom;
 - b. These modifications would require a Section 11 applications for changes in and about a stream – of the BC Water Sustainability Act;
 - c. All works should be conducted during low flow season with full isolation of working area from natural streams;
- iv. Western ditch: Install a new ditch to connect the north and south ditches.
 - a. Madrone recommends a 1 2% gradient;
 - b. These modifications would require a Section 11 applications for changes in and about a stream of the BC Water Sustainability Act;
 - c. All works should be conducted during low flow season with full isolation of working area from natural streams;

Madrone otherwise agrees with the recommendations contained in the Drainage and Leachate Plan developed by McTavish and Timmenga.

8.5 Update of Drainage and Leachate Plan Recommendation

A follow-up Ditch Analysis Report by McTavish and Timmenga, saw ditch water sampled and analyzed. Laboratory results indicated that "the quality of the ditch water of the lateral drainage ditches on the subject property and in the main City of Richmond ditch is not affected by wood waste leachate and is not toxic to fish" whereby subject property refers to the Property.

Therefore, we, Madrone, do not see a requirement to further laterally encapsulate the existing wood residue provided that:

- i. The existing cap layer is enhanced with additional thickness, as recommended, and extended out to a 5 m buffer of the streamside area; and
- ii. The subsurface drain tile is installed atop the cap layer so as to rapidly convey subsurface water toward the perimeter ditches without infiltration to the wood residue.

By pursuing the above course of action, there will be limited water flux through the wood residue from precipitation. Further, influx of water from the perimeter ditches will not change from the preceding 20 - 30 years wherefrom it has been demonstrated there is little/no influence from such, as evidenced through analytic testing.

We do not have any additional contributions to the drainage plan.

8.6 Irrigation Requirements

The Remediation Plan developed by McTavish and Timmenga did not include detailed information regarding irrigation requirements and planning for the Property, thus we at Madrone have provided the required details and resources for irrigation in this section of the Farm Plan. The monthly and annual irrigation demand for the intended blueberry farm on the Property was estimated using the *BC Agriculture Water Calculator*²¹ (Table 3). The soil type selected was silty clay loam which conforms to the recommended imported soil texture in the Reclamation Plan. The irrigation season was selected to be from the start of May to the end of September (153 days). Climactic data and growing season were automatically generated by the calculator based on the location of the Property. Note that the *BC Agriculture Water Calculator* does not take into account climate change (rising air surface temperatures resulting in changes to evapotranspiration), thus irrigation estimates reflect current climactic conditions.

Guidelines for irrigation best management practices can be found in the *BC Irrigation Management Guide*²². Typically, blueberry plants on commercial farms are irrigated using a sprinkler or drip system. We recommend using a drip system because water is applied directly to the root zone, better water control and distribution uniformity compared to a sprinkler system, and the ability for fertigation and other chemical

²¹ BC Agriculture Water Calculator (n.d.). BC Agriculture Water Calculator. <u>http://bcwatercalculator.ca/agriculture</u>. Accessed May 1, 2020.

²² Province of British Columbia (2005). BC Irrigation Management Guide. <u>https://www2.gov.bc.ca/gov/content/industry/agriculture-seafood/agricultural-land-and-environment/water/irrigation/irrigation-management-guide</u>. Accessed May 1, 2020.

application. For drip irrigation systems, it is recommended that one irrigation line is installed per row with 1.9 L per hour (0.5 gallons per hour) emitters every 30.5 cm (12 inches)²³.

Month	Irrigation demand (sprinkler system)	Irrigation demand (drip system)490 m3	
May	620 m ³		
June	1990 m ³	1560 m ³	
July	2730 m ³	2130 m ³	
August	2080 m ³	1630 m ³	
September	740 m ³	580 m ³	
Total 8160 m ³		6390 m ³	

TABLE 3. IRRIGATION REQUIREMENT ESTIMATES

8.7 Proposed Agricultural Operator

It is Madrone's understanding that the proposed agricultural operator for the blueberry farm is the owner of the Property, Mr. Bohan Jiang. It is assumed that Mr. Jiang will be responsible for the management decisions in operating the proposed agricultural operation (blueberry farm) on the Property. Management decisions pertinent to blueberry farming (and farming in general) involve planting, harvesting, marketing and sales, and making capital purchases and other financial decisions²⁴.

9 Agricultural Improvement Cost and Revenue Estimate

A cost estimated developed by Madrone for the proposed blueberry farm's establishment (Year 1) is presented in Table 4. We estimate the total cost for establishment to be \$2,050 to \$171,350 (median total cost is \$86,700). Please note that estimating costs of farming is largely speculative and depends on the size of farm, the intended use of the farm products (i.e., for personal consumption, for sale via farmer's markets, road stands or u-pick, or a mix several of these factors), experience with farming, and whether the agricultural operator owns basic farm equipment and/or machinery such as a mechanical berry harvester which can cost between \$80,000 to \$120,000 used. Access to farm labour is also critical and may dictate which crops to grow if labour cannot be sourced at specific harvest windows. There are many other costs to consider, including material such as packing crates, a container for temporary cool storage, harvest tools and fencing supplies. We have not included these in the establishment cost table as such detail may result in excessively complicated and extensive cost tables.

 ²³ United States Department of Agriculture (2011). Irrigation Guidelines for Better Blueberry Production.
 <u>http://extension.missouri.edu/blueberry/documents/Shared_Documents/MOBBSchool/MOBBSch</u>

²⁴ Government of Canada (2019). Farm operation – definition. <u>https://www23.statcan.gc.ca/imdb/p3Var.pl?Function=Unit&Id=103167</u>. Accessed May 1, 2020.

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As estimated in 8.3 Field Layout and Plant Spacing, over the ~2.5 ha of proposed soil importation, ~10,000 to 12,000 blueberry plants are required. If each plant following maturation can produce 5 to 20 lbs of blueberries²⁵, there is a potential yield of 60,000 to 240,000 lbs per annum barring any major disease, weather or pest-related growing restrictions. Blueberry plants take a minimum of 2 to 3 years to mature for fruit production, and at least 7 years before full maturation (optimal growing). Assuming that the price of blueberries is \$2.50 CAD/lb²⁶, there is the potential for gross venue²⁷ of ~\$150,000 CAD 2 to 3 years after farm establishment (Years 3 and 4). According Statistics Canada²⁸, the average operating profit margin for fruit and tree nut farming in 2017 was 15.8 cents, resulting in a net profit for the proposed blueberry farm of ~\$24,000 CAD 2 to 3 years after initial establishment. By Year 8, there is the potential for up to ~\$95,000 CAD net profit with optimal fruit yield (20 lbs/plant) and/or market conditions.

Activity	Description of Work	Units	Unit Costs	Total (\$CAD, 2020 estimated)
	Importation of clean, silty clay loam ²⁹ and topsoil for remediation	Remediation would require ~30,000 m ³ (39,238.5 yd ³) of imported soil	\$60 to \$80 tipping fee per truckload; typical dump truck has a capacity of 10 yd ³	\$240,000 to \$320,000
Soil importation	Ongoing monitoring and reporting by Professional Agrologist as required by the ALC and the City of Richmond (generally per 3,000 m ³)	At minimum 10 visits required for 30,000 m ³ of imported soil, to meet ALC monitoring requirements	\$500 per monitoring visit and report	\$5000

TABLE 4. ESTIMATED (COSTS FOR BLUEBERRY FAF	M ESTABLISHMENT AT NO	.6 ROAD, RICHMOND, BC
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²⁵ Blue Grass Blueberries (2020). Small Farm Business Opportunity – How to Profit From Blueberry Sales? <u>https://bluegrassblueberries.com/small-farm-business-opportunity-how-to-profit-fromblueberry-sales/</u>. Accessed May 4, 2020.

²⁶ Note that price of berries can vary based on variety and quality. Indicate price assumes general market cost for premium berries for high-demand varieties.

²⁷ Gross venue is intermediate earnings figure before all expenses are included for farm operations including labour, soil amendments, machinery, irrigation, fuel, taxes etc.

²⁸ Statistics Canada (2019). Chart 2 Average operating profit margin, by farm type, Canada, 2017. <u>https://www150.statcan.gc.ca/n1/daily-quotidien/190329/cg-c002-eng.htm</u>. Accessed May 4, 2020.

²⁹ Soil texture is readily found in the Richmond area therefore, trucking distances are anticipated to be small.

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FARM PLAN FOR 8511 NO. 6 ROAD, RICHMOND, BC

Activity	Description of Work	Units	Unit Costs	Total (\$CAD, 2020 estimated)
	Earthworks costs including project management, load inspector (on Site), machine / labour costs, fuel and traffic management	Costs take into consideration complete development of the soil deposit area (~2.5 ha)	Estimated at \$23,000 to \$27,000/acre (\$50,000 to \$60,000/ha) based on other projects of similar nature and location	\$100,000 to \$120,000
Post-importation land preparation and pre-planting preparation	Tractor purchase (one-time)	1 tractor for field preparation and ongoing farm maintenance	\$35,000 to \$50,000 per machine ^A ; used tractor, diesel- powered; includes costs of periodic maintenance	\$40,000 to \$55,000
	Plowing or tilling field, applying manure and/or fertilizer, mulch application, fence construction, bed construction	Estimated 2 months of labour from 1 farm worker	\$14.60/hr ^B x 40 hr/week x 2 months	\$4600
	Soil testing - nutrients and pH	Laboratory fees at AGAT Laboratories: Nutrients 5 package - \$160/soil sample (includes pH and environmental handling and compliance fee)°	 \$160/soil sample x 4 soil samples \$500 minimum consultant time to collect samples, report results 	\$1200
	Tractor use during pre- planting preparation	Estimated 50 hours of machine time Fuel consumption - 4L/hr Diesel cost - Richmond price, \$1.10/L °	4 L/hr x 50 hr = 200 L 200 L x \$1.10/L	\$220
	Erosion and sediment control implementation such as silt fencing installation, gravel road rehabilitation and possible wheel wash installation	Material and installation costs	\$5000 to \$10,000	\$5000 to \$10,000

BARRY MAH FARM PLAN FOR 8511 NO. 6 ROAD, RICHMOND, BC

Activity	Description of Work	Units	Unit Costs	Total (\$CAD, 2020 estimated)
Irrigation system (drip)	Purchase and installation by hired farm labourers, accounted for above; one-time cost (until replacement needed due to age, wear and tear)	\$1/m planted Length of vertical row (80) x # of rows (50 to 55) = 4000 to 4400 m of drip irrigation	\$1/m x 4000 to 4400 m	\$4000 to \$4400
Plant purchase	Purchase juvenile blueberry plants	10,000 to 12,000 plants required	\$4/1.5-year-old blueberry starter plant	\$40,000 to \$48,000
Soil amendment**	75 lbs per acre of 18- 9-9 of granular fertilizer is applied twice Year 1 ^D	Soil import area is ~7.0 acres ~1100 lbs (550 lbs x 2 applications) of fertilizer is required	40 lb bag is ~\$100 CAD ^E	\$2750
Pest management consultant	Retention of a pest management consultant prior to seeding of either crop to test soil and prescribe biological controls (if organic farming, assuming no applications of chemical controls, or pesticides)	10 to 20 hours consultant time, plus travel for initial consultation, soil testing and reporting recommendations. Cost of biological controls unknown.	\$150 per hour consultant time (Professional Agrologist)	\$3000
Maintenance of crop during growing and harvesting	Mechanical harvester (one-time)	1 mechanical harvester for blueberry harvesting	\$80,000 to \$125,000 per machine ^F ; used harvester, diesel- powered; includes costs of periodic maintenance	\$85,000 to \$125,000
	Mechanical harvester operator and general farm maintenance (e.g., fertilizer application, irrigation, weeding, pruning, fruit quality control, fruit preparation for sales, new plantings)	Estimated 4 months of labour from 2 farm workers	\$14.60/hr ^B x 40 hr/week x 4 months x 2 workers	\$18,700

Activity	Description of Work	Units	Unit Costs	Total (\$CAD, 2020 estimated)
Application fee	If the proposal is forwarded to the ALC by the City of Richmond	One-time application fee to the ALC	\$1500	\$1500
Other service and reporting costs from Qualified Professional (QP)	Final topographic survey	Includes travel, field time, equipment fees, report writing, map and/or survey development (if applicable), senior review and report formatting	\$2000 to \$4000	\$2000 to \$4000
	Final geotechnical report (if required)		\$2000 to \$4000	\$2000 to \$4000
	Final closure report from Professional Agrologist		\$3000 to \$4000	\$3000 to \$4000
Estimated total cost for farm establishment without revenue from tipping fees				\$317,950 to \$411,350
Estimated total cost for farm establishment <u>with</u> revenue from tipping fees				\$2050 to \$171,350 (median total cost is \$86,700)

Green text represents revenue from tipping fees Red text represents capital costs for farm establishment (Year 1)

 * based on information from other soil importation projects in the area

** does not include the cost to increase or decrease soil pH with lime, sphagnum peat, elemental sulfur, aluminum sulfate, iron sulfate, acidifying nitrogen, and organic mulches; these includes additional costs following soil testing

Cost estimation sources

^A Used tractor sales: https://www.countrytractor.ca/default.asp?page=xPreOwnedInventory and

https://www.islandtractors.com/default.asp?page=xPreOwnedInventory

^B BC minimum wage by June 1, 2020: https://www2.gov.bc.ca/gov/content/employment-business/employment-standards-advice/employment-standards/wages/minimum-wage

^c Average diesel cost: https://www.gasbuddy.com/GasPrices/British%20Columbia/Richmond

^p Standard blueberry fertilizer blend: http://files.tlhort.com/product_info/3855-standard_blueberry_blend_18-9-9.pdf

^E 40 lb bag 18-9-18: https://www.domyown.com/contec-dg-18918-fertilizer-40-lb-p-21463.html

F Used blueberry harvester sale: https://www.marketbook.ca/listings/farm-equipment/for-

sale/list/category/300103/specialty-crop-equipment-harvesters-grape-berry

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10 Closure

By following the recommendations contained in previous reports for the Property, and incorporating any modifications thereto as contained within this Farm Plan, we are confident in establishing a robust agriculturally capable land base (targeted as Class 1 by selectively receiving suitable soil) on which the Farm Operator can pursue blueberry production. We also anticipate that, should recommendations be followed, the existing wood residue on the Property will maintain a low level of decomposition, therefore generating limited amounts of leachate with no considerable impact to surrounding aquatic resources or environmental receptors.

Sincerely,

MADRONE ENVIRONMENTAL SERVICES LTD.

*This is a digitally sign the official manually sign ument

Daniel Lamhonwah, PhD candidate, MES, P.Ag Environmental Scientist, Professional Agrologist

*This is a digitally signed duplicate of the official manually signed an 3039 lon T. ELLIOI

Thomas R Elliot, PhD, P.Geo, P.Ag Hydrogeologist, Professional Agrologist

MADRONE ENVIRONMENTAL SERVICES LTD.

August 10th, 2020

To: Mike Morin Soil Bylaw Officer City of Richmond 6911 No.3 Road Richmond, B.C V6Y 2C1

Dear Mike,

As per my agricultural, farming, and nursery experience.

Before founding Garden in Gardens, I worked at Garden City Greenhouses on 9460 Cambie Road from 1995 to 2004 as a manager where I was in charge of all farming and landscaping operations. During this time, I have managed numerous blueberries and vegetable farms from inception to completion

In 2004, I founded my business Garden in Gardens, where our retail operations have supplied trees and plants to the lower mainland for over fifteen years. On our agricultural side, we have successfully completed and managed over 6 farms, with a majority of them being blueberry farms. We have managed these farms from beginning to end, from site/land prep, ploughing, crop sourcing, planting, to fertiliser application. Our services also include the continual maintenance and operations of these farms in which we are presently managing several blueberry farms.

When Mr Bo Han Jiang purchased the land in 2005, we were contacted to oversee Mr Jiang's blueberry operations. In 2006, we prepared the site, set up irrigation, placed sawdust, planted around 8000 blueberry bushes and fertilized all plants. It was noticed that the following winter, roughly 1000 blueberries plant died due to the high water table. For the following 3 years, we replanted roughly 1000 blueberries plants annually. After that, we continued to maintain the land but did not replant the blueberries as it was not economically feasible to do so.

In 2010, we consulted with numerous other blueberry farmers and we were all told that the land was too low and that the water table was too high. This is later reaffirmed by the Madrone Environmental Services LTD report dated June 30th, 2020.

Soil conditioners were not used; however, it is important to note that the application of soil amendment on cedar wood waste (imported by the previous owner after the removal of native surficial organic soil), in addition to the high water table, would unlikely yield a successful outcome. It's evident that importing soil is the only practical solution to address both these problems.

In 2012, Mr Barry Mah was contacted to import soils onto the parcel.

In 2016, when only roughly 500 plants were remaining from the initial 8000 bushes, the remaining bushes were moved to the west of the house where the elevation is the same as the house due to peat removal from the home construction. These plants have been monitored and no further blueberry bushes have died.

Quan Ming Wu 7600 No.5 Road Richmond, B.C V6Y 2V2

Attachment 5



1081 Canada Ave Duncan, BC V9L 1V2 p. 250.746.5545 f. 250.746.5850 #202 – 2790 Gladwin Road Abbotsford, BC V2T 4S7 p. 604.504.1972 f. 604.504.1912

> info@madrone.ca www.madrone.ca

June 30, 2020

Barry Mah Westwood Topsoil Ltd. 6604 62B Street Delta, BC V4K 5A8 westwoodbarry@mac.com

Dear Mr. Mah,

RE: Technical Addendum to Remediation Plan for 8511 No. 6 Road, Richmond, BC (CD 28808)

Madrone Environmental Services Ltd. ('Madrone'), acting as the qualified professionals (QPs) retained by you, Mr. Barry Mah ('the Client'), was asked by Mr. Mike Morin¹, Community Bylaws, City of Richmond ('the City'), to respond to commentary² from City staff regarding updates to technical requirements in a Remediation Plan³ ('the Plan' or 'Plan') developed for 8511 No. 6 Road, Richmond, BC ('the Property') to be in line with recent regulatory changes that have been enacted (by the BC Ministry of Environment and the Agricultural Land Commission) since the original Plan was completed in 2012.

This addendum has been prepared by Daniel Lamhonwah, MES, P.Ag, and reviewed by Jessica Stewart, P.Ag., P.Geo, of Madrone for the specific purpose of updating the Plan's technical requirements. The section numbers referred to below are in the original Plan.

Under section 8.4 Drainage Management, we recommend the following updates:

• In-stream works should be completed in compliance with the BC Water Sustainability Act⁴ (WSA), under guidance from a Qualified Environmental Professional (QEP), with adherence to applicable

¹ Email communication addressed to Barry Mah from Mike Morin, Soil Bylaw Officer, Community Bylaws, City of Richmond. Subject: CD 28808 - Outstanding application requirements (o6 Dec 2019). Sent on Friday, December 6, 2019, 15:04.

² Food Security and Agricultural Advisory Committee meeting minutes. Held Thursday, September 12, 2019 (7:00 PM). M.2.004. Richmond City Hall.

³ McTavish and Timmenga (2012). Proposed Remediation of Land Located at 8511 #6 Road Richmond, B.C. Prepared by McTavish Resource and Management Consultants Ltd. and Timmenga and Associates Inc. Prepared for Bohan Jiang. Dated September 30, 2012.

⁴ Province of British Columbia (2020). Water Sustainability Act Water Sustainability Regulation B.C. Reg. 36/2016. Last amended December 17, 2019 by B.C. Reg. 278/2019. <u>http://www.bclaws.ca/civix/document/id/crbc/crbc/36_2016</u>. Accessed April 20, 2020.

"wildlife timing windows". Timing guidelines for works in and about watercourses to limit risk of negative impacts to aquatic organisms specific to the Lower Mainland Region is provided by the BC Ministry of Environment⁵.

• Any disturbed banks of the ditches should be stabilized/re-vegetated to limit ongoing erosion following works on the Property.

Under section 8.5 Management of Fill Quality, we recommend the following updates:

- Imported soil to the Property should meet applicable agricultural land standards under the BC Contaminated Site Regulations (BC CSR) Schedule 3.1, Part 1 Numerical Soil Standards, Column 4 Agricultural (AL)⁶.
- Imported soil to the Property should not contain Prohibitive Fills as defined in Section 36 of the Agricultural Land Commission Act Agricultural Land Reserve Use Regulation⁷.
- All soil import source sites should be approved by a QEP prior to soil removal from the source site and deposition on the Property. The QEP should be knowledgeable in the fields of contaminated sites and invasive species management. Each shipment origin, truckload, and end location must be tracked and available upon request from the City. This is an updated City of Richmond requirement.

Madrone has the capacity and experience to fulfil the role(s) of QEP described in the above recommendations, particularly with contaminated sites and invasive species management, to ensure that the quality of imported soil (i.e. also referred to as fill) meets provincial standards. Please contact the undersigned authors should there be any questions regarding the contents of this addendum and/or for discussions regarding Madrone's QEP services to facilitate the Plan.

http://www.bclaws.ca/civix/document/id/complete/statreg/30_2019#section36. Accessed April 30, 2020.

⁵ BC Ministry of Environment (2006). Guidelines for Reduced Risk Instream Work Windows Ministry of Environment, Lower Mainland Region (March, 2006). <u>https://www2.gov.bc.ca/assets/gov/environment/air-land-water/water/working-aroundwater/work windows low main.pdf</u>. Accessed April 20, 2020.

⁶ Province of British Columbia (2020). Environmental Management Act Contaminated Sites Regulation Schedule 3.1 [includes amendments up to B.C. Reg. 13/2019, January 24, 2019]. <u>http://www.bclaws.ca/civix/document/id/complete/statreg/375_96_07</u>. Accessed April 20, 2020.

⁷ Agricultural Land Commission Act (2020). Agricultural Land Commission Act Agricultural Land Reserve Use Regulation.

PAGE 3 JUNE 30, 2020

Sincerely,

MADRONE ENVIRONMENTAL SERVICES LTD.

*This is a digitally signed official manually sign ment

Daniel Lamhonwah, PhD candidate, MES, P.Ag Environmental Scientist, Professional Agrologist

*This is a digitally signed duplicate of the

Jessica Stewart, BSc, P.Ag, P.Geo Professional Geoscientist, Professional Agrologist

CNCL - 156

Attachment 6



1081 Canada Ave Duncan, BC V9L 1V2 p. 250.746.5545 f. 250.746.5850 #202 – 2790 Gladwin Road Abbotsford, BC V2T 4S7 p. 604.504.1972 f. 604.504.1912

> info@madrone.ca www.madrone.ca

June 30, 2020

Barry Mah Westwood Topsoil Ltd. 6604 62B Street Delta, BC V4K 5A8 westwoodbarry@mac.com

Dear Mr. Mah,

RE: Appropriate Imported Soil and Soil Source Sites for 8511 No. 6 Road, Richmond, BC (CD 28808)

Madrone Environmental Services Ltd. ('Madrone'), acting as the qualified professionals (QPs) retained by you, Mr. Barry Mah ('the Client'), was asked by Mr. Mike Morin¹, Community Bylaws, City of Richmond ('the City'), to respond to commentary² from City staff regarding the use of "alluvial soil" for proposed soil importation projects. This memo, prepared by Daniel Lamhonwah, MES, P.Ag, and reviewed by Jessica Stewart, P.Ag., P.Geo, of Madrone discusses why restricting soil importation to solely alluvial soils puts strong limitations on sourcing soil for the project and furthermore, may result in the importation of suboptimal textures. The proposal is intended to remediate the property and improve the existing agricultural capability.

Alluvium is defined³ as loose, unconsolidated soil or sediment that has been eroded, reshaped by water in some form, and redeposited in a non-marine setting. Soils originating from alluvial parent material (alluvial soils) do not necessarily have physical properties that would make them favourable for agriculture because of the variable texture (from sandy gravel to silty clay) which is dependent on source and exact forming process. Fine textured alluvial soils, such as those that are predominantly composed of silts and clays, can limit the movement of water through the soil profile and possibly created elevated watertables, therefore limiting the growth of certain crops. Thus, if the soil importer acts upon the directive to only import alluvial to a receiving site under the assumption that alluvial soils the best method to preserve and/or improve agricultural capability

¹ Email communication addressed to Barry Mah from Mike Morin, Soil Bylaw Officer, Community Bylaws, City of Richmond. Subject: CD 28808 - Outstanding application requirements (o6 Dec 2019). Sent on Friday, December 6, 2019, 15:04.

² Food Security and Agricultural Advisory Committee meeting minutes. Held Thursday, September 12, 2019 (7:00 PM). M.2.004. Richmond City Hall.

³ GeoTech.org (n.d.). Dictionary of Geologic Terms <u>https://web.archive.org/web/2011050155938/http://www.geotech.org/survey/geotech/dictiona.h</u> <u>tml</u>. Accessed April 30, 2020.

without taking into account the texture of the alluvial soil, this action may result in undesired subsurface drainage conditions.

The physical properties of native soils on the Property must also be taken into consideration when determining the type and source of soils for importation to reclaim the land as to not impact the conveyance of surface water. Based on existing mapping⁴, the Property is in an area containing Triggs soils, characterized by deep (at least 2 m) un-decomposed organic deposits composed mainly of sphagnum and other mosses. The on-site soil survey information for the Property found that all the organic soils (peat) on the site had been removed⁵. Using fine textured alluvial soils, such as silts and clays, to reclaim the removed Triggs soils is likely to cause undesirable surface drainage conditions on the Property, particularly infiltration-excess overland flow during precipitation events, which may impact neighboring parcels downslope.

Furthermore, the importation of alluvial soils commonly found in the Richmond area, including Blundell⁶ and Delta⁷ soils which are characterized by subsoil salinity (conductivity > 4 dS m⁻¹), may introduce an undesirable salinity limitation (Class N limitation) that may not have existed on a receiving site. Salinity limitations are difficult to improve.

To conclude, it is our qualified professional opinion that soil importation projects, with the intent of preserving agricultural capability at receiving sites, should not be limited to the use of alluvial soils. We recommend that the City imposes a condition that considers the physical and chemical properties of the soil proposed to be imported instead of restricting the imported soil to a deposition method and/or soil parent material type. This would likely reduce completion time of the proposed soil importation projects because it would increase the potential number of soil source sites available to the applicant. The ALC has recently advised through information bulletin 7 (in March of 2019) that "the Commission will not consider fill placement activities that would extend beyond two years."⁸

Please contact the undersigned authors should there be any questions regarding the contents of this memo.

⁴ Province of British Columbia (2020). BC Soil Information Finder Tool. <u>https://www2.gov.bc.ca/gov/content/environment/air-land-water/land/soil/soil-information-finder</u>. Accessed April 17, 2020.

⁵ McTavish and Timmenga (2012). Proposed Remediation of Land Located at 8511 #6 Road Richmond, B.C. Prepared by McTavish Resource and Management Consultants Ltd. and Timmenga and Associates Inc. Prepared for Bohan Jiang. Dated September 30, 2012.

⁶ Canadian Soil Information Service (2013). Description of soil BCBNLpsad~A (BLUNDELL). <u>http://sis.agr.gc.ca/cansis/soils/bc/BNL/psad~/A/description.html</u>. Accessed April 17, 2020.

⁷ Canadian Soil Information Service (2013). Description of soil BCDLTansadN (DELTA). <u>http://sis.agr.gc.ca/cansis/soils/bc/DLT/ansad/N/description.html</u>. Accessed April 17, 2020.

⁸ Agricultural Land Commission (2019). Information Bulletin 07 Soil or Fill Uses in the ALR. <u>https://www.alc.gov.bc.ca/assets/alc/assets/legislation-and-regulation/information-bulletins/information bulletin 07 - soil or fill uses in the alr.pdf</u>. Accessed April 30, 2020.

BARRY MAH

RE: APPROPRIATE IMPORTED SOIL AND SOIL SOURCE SITES FOR 8511 NO. 6 ROAD

PAGE 3 JUNE 30, 2020

Sincerely,

MADRONE ENVIRONMENTAL SERVICES LTD.

*This is a digitally sign official manually ment

Daniel Lamhonwah, PhD candidate, MES, P.Ag Environmental Scientist, Professional Agrologist

*This is a digitally signed duplicate of the aled document.

Jessica Stewart, P.Ag, P.Geo Professional Geoscientist, Professional Agrologist

Attachment 7

*Raised area identified in blue



FIGURE 1. SATELLITE IMAGERY OF 8511 NO.6 ROAD OUTLINED IN YELLOW. THE RED SHADED AREA REPRESENTS TO PROPOSED AREA FOR SOIL IMPORTATION. IMAGE PROVIDED BY THE CITY OF RICHMOND AND DATED AS TAKEN IN 2018.

Attachment 8

August 12th, 2020

To Whom It May Concern,

Mr Quan Ming Wu has been working on my property since I purchased my property in 2005. Upon the post-completion of the project should it be approved; I intend to sign a minimum 10-year lease with Mr Wu to allow him to farm and grow blueberries and vegetables on the parcel.

Bo Han Jiang 8511 No.6 Road Richmond, B.C V6W 1E3

August 10th, 2020

To: Mike Morin Soil Bylaw Officer City of Richmond 6911 No.3 Road Richmond, B.C V6Y 2C1

Should the soil deposit proposal be formally approved at the upcoming FSAAC meeting, I (Quan Ming Wu) will voluntarily submit a \$30,000 performance bond as a guarantee to implement and complete the Farm Plan, to be returned upon completion of the farm plan.

JUM 6

Quan Ming Wu 7600 No.5 Road Richmond, B.C V6Y 2V2



June 29, 2020

2020-1091

Madrone Environmental #202 - 2790 Gladwin Rd Abbotsford, BC V2T 4S7

Attention: Daniel Lamhonwah

Reference:Review of Site Drainage Report8511 #6 Road, Richmond, BC

Out of the Box Engineering (OOTBE) has been asked to review the site drainage recommendations stated in the *Woodwaste Leachate and Site Drainage Addendum I To Proposed Remediation of Land Located at 8511 #6 Road Richmond B.C.* report prepared by McTavish Resource & Management Consultants Ltd. (McTavish) and dated December 14, 2013. It is our understanding that the property is planned to be used for vegetable farming and prior to this being successful, remediations are necessary to the site conditions in order to establish a proper growing medium and allow for proper storm water drainage from the site.

A site visit and meeting with the property manager (Barry Mah) was done on June 17, 2020. The condition of the site appeared to be similar to that stated in the 2013 report. The site is overgrown, has visible wood pieces scattered throughout, and has areas with visible wetland plants.

In reference to the site drainage, McTavish's report recommends the site be cleared of excess vegetation and the slopes/ditches be repaired. It is to be ensured that all ditches are located on the subject site. The report states that the recommended changes will not increase peak flows. Also, the direction of flows and discharge locations will not be altered.

OOTBE finds that the site drainage recommendations in McTavish's report appear to be reasonable and should allow for adequate storm water drainage from the site, without altering peak flow conditions. If required, OOTBE can perform an additional site visit when contacted following the works to review the conformance of the site drainage.

Please note that only drainage recommendations in the report were reviewed by OOTBE. Other topics were not reviewed as they are out of our scope of expertise.

If there are any questions, please do not hesitate to contact the undersigned.

Regards,

Collin S. Johnson, P.Eng.



Out of the Box Engineering (DBA 0772308 BC LTD) Box 274 Agassiz PO, Agassiz, BC VOM 1A0 604-819-9809 / ootbe2013@gmail.com

CNCL - 163



Project No.: G18154-00

October 10, 2018

c/o Barry Mah

Dear Sir:

Re: Owner – Bohaw Jiang Remediation of Farm land 8511 No.6 Road Richmond, B.C.

We have retained by Mr. Mah, agent of the subject property (8511 No.6 Road, Richmond) as the geotechnical engineer to evaluate the remediation works proposed by McTavish Resource and Management Consultants Ltd. (MRMCL) for the above-mentioned address. Our scope of work is limited to the geotechnical aspect of the project. For this, we obtain and reviewed reports prepared by MRMCL including the site drainage plans.

The site is located on the west side of No.6 Road and is approximately 360 m south of Blundell Road. Site frontage along No.6 Road is 94 m and site depth is 410 m. There is an existing house along the front section of the site next to No.6 Road. The remaining of the site is vacant. We understand organic soils (peat) were removed in the mid-section of the site and the excavated area was filled with wood wastes. For remediate this section of the site so it can be used for agriculture usage, MRMCL has proposed to deposit up to 0.75m of topsoil, over 0.25m of un-compacted silty fill over the existing ground surface of the impacted area.

We visit the site on September 28, 2018. We noted the impacted area (area requires remediation is 4 to 5 feet lower than the adjacent properties to the east and the west. At the time of our site visit, two pits were put down in the impacted area. Both of the test pits encountered an existing fill, several inches thick, over wood wastes, 4 to 5 feet (1.2 to 1.5 m) thick, over a silty clay deposit to the depth of excavation. Groundwater was encountered in all test pits at approximately 1 foot (0.3m) from the existing ground surface.

Based on the test pit excavation and our observation, followings are our comment.

- 1. As the impacted area is 4 to 5 feet (1.2 to 1.5m) lower than the adjacent areas, placing of 3.3 feet (1.0 m) of additional fills over the impacted area will not impact the drainage pattern of adjacent areas (finishing elevation of the impacted area is lower than the adjacent areas).
- 2. Weight of the additional fills will be approximately 250 psf (2 feet of topsoil and one foot of silty clay). Placing of fills will not impact stability of adjacent areas as the impacted area is not less than 6 m away from adjacent properties.
- 3. The remediated area is only suitable for agricultural use and is not suitable to support any building structure without further site improvement.

Should you have any questions regarding the above or if we can be of further assistance, please call.

Yours truly,

TONY YAM ENGINEERING LTD.,

Per. GUAN Zhao Guan, M.A.Sc., P.Eng 165 235/0

TONY YAM ENGINEERING LTD.

Attachment 12



1081 Canada Ave Duncan, BC V9L 1V2 p. 250.746.5545 f. 250.746.5850 #202 – 2790 Gladwin Road Abbotsford, BC V2T 4S7 p. 604.504.1972 f. 604.504.1912

> info@madrone.ca www.madrone.ca

June 30, 2020

Barry Mah Westwood Topsoil Ltd. 6604 62B Street Delta, BC V4K 5A8 westwoodbarry@mac.com

Dear Mr. Mah,

RE: Soil Drainage and High Water Table at 8511 No. 6 Road, Richmond, BC (CD 28808)

Madrone Environmental Services Ltd. ('Madrone'), acting as the qualified professionals (QPs) retained by you, Mr. Barry Mah ('the Client'), was asked by Mr. Mike Morin¹, Community Bylaws, City of Richmond ('the City'), to respond to commentary² from City staff regarding whether at 8511 No. 6 Road, Richmond, BC ('the Property') can be 'bermed and pumped' rather than being filled with imported soil to address the drainage limitations to agricultural productivity.

Existing information indicates that Property is affected by groundwater and not flood water (i.e., from watercourses). Based on provincial mapping, the native soils in the Property area is the Lulu soil series (classified as a *Terric Mesisol*) which is an organic soil characterized by very poor drainage³. According to The Canadian Soil Information Service⁴, excess water is present in Lulu soils for the greater part of the year with groundwater flow and subsurface flow being the major water sources. These soil conditions were reported by McTavish and Timmenga⁵ whereby a locally elevated water table was observed during field assessment.

¹ Email communication addressed to Barry Mah from Mike Morin, Soil Bylaw Officer, Community Bylaws, City of Richmond. Subject: CD 28808 - Outstanding application requirements (o6 Dec 2019). Sent on Friday, December 6, 2019, 15:04.

² Food Security and Agricultural Advisory Committee meeting minutes. Held Thursday, September 12, 2019 (7:00 PM). M.2.004. Richmond City Hall.

³ Province of British Columbia (2020). BC Soil Information Finder Tool. <u>https://www2.gov.bc.ca/gov/content/environment/air-land-water/land/soil/soil-information-finder</u>. Accessed April 16, 2020.

⁴ CanSIS (2013). Description of soil BCLULd~~~~A (LULU). <u>http://sis.agr.gc.ca/cansis/soils/bc/LUL/d~~~~/A/description.html</u>. Accessed April 16, 2020.

⁵ McTavish and Timmenga (2012). Proposed Remediation of Land Located at 8511 #6 Road Richmond, B.C. Prepared by McTavish Resource and Management Consultants Ltd. and Timmenga and Associates Inc. Prepared for Bohan Jiang. Dated September 30, 2012.

PAGE 2 JUNE 30, 2020

This report described the border between the decomposed and non-decomposed wood waste⁶ to be the summer water table which was at about 1 m depth. The winter water table appeared to be at the surface of the soil, with some lower areas being inundated during the winter.

In previous communication with Mr. Morin, Jessica Stewart, P.Ag, P.Geo and Thomas R Elliot, PhD, P.Ag, P.Geo of Madrone prepared a technical memorandum titled *Significance of the Code of Practice for Agricultural Environmental Management (AEM Code) for low-lying agricultural land in the City of Richmond*. Because drainage issues on the Property is affected by groundwater and not flood water, we believe that the aforementioned technical memorandum addresses the questions posed by the City re: berming and pumping. For your convenience, the memorandum is attached to this memo.

Please contact the undersigned authors should there be any questions regarding the contents of this memo.

Sincerely,

MADRONE ENVIRONMENTAL SERVICES LTD.

*This is a digitally sign official manually sign

Daniel Lamhonwah, PhD candidate, MES, P.Ag Environmental Scientist, Professional Agrologist

*This is a digitally si ped duplicate of the

Jessica Stewart, P.Ag, P.Geo Professional Geoscientist, Professional Agrologist

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⁶ According to McTavish and Timmenga (2012), approximately 20-30 years ago the previous landowners stripped the native organic soils and replaced them with cedar wood waste and wooden construction debris. This is referred to as 'wood waste' in reports for the property.



1081 Canada Ave f. 250.746.5850

#202 – 2790 Gladwin Road Duncan, BC V9L 1V2 Abbotsford, BC V2T 4S7 p. 250.746.5545 p. 604.504.1972 p. 604.504.1972 f. 604.504.1912

> info@madrone.ca www.madrone.ca

March 9, 2020

Mr. Michael Morin, Soil Bylaw Officer & Planning and Development City of Richmond

Dear Mr. Morin

Re: Technical Memorandum: Significance of the Code of Practice for Agricultural Environmental Management (AEM Code) for low-lying agricultural land in the City of Richmond

INTRODUCTION

Madrone Environmental Services Ltd. (Madrone) is a multi-disciplinary scientific consulting firm with offices in both the Fraser Valley (Abbotsford) and Duncan, B.C. Since 2009, agrologists at our firm have prepared land capability assessments, soil deposit assessments (for both non-farm use and farm-use soil deposition on ALR Land), farm plans¹, and reclamation plans (including soil testing for contaminants, invasive species screening, fill removal plans) for landowners of properties in the City of Richmond (CoR, or 'the city'). Most, if not all, of these properties have been in the Agricultural Land Reserve (ALR).

Madrone continues to work with CoR planners and bylaw officers on such projects as a consultant and agent for applications by the respective landowners. Recently, Thomas Elliot, P.Ag. of Madrone has been engaged with the city in interpreting the significance of a new provincial regulation called the Code of Practice for Agricultural Environmental Management (AEM Code).

The AEM Code came into effect on February 28, 2019 and applies to all agricultural operations in the province². We emphasize that this applies to agricultural <u>operations</u> - not all agricultural land in the ALR has agricultural operations conducted on site (i.e. the land is completely fallow with no nutrient inputs, or the operation on site is not defined as an applicable agricultural operation in the AEM Code – the exact definition

¹ Madrone's first agricultural-related project in the City of Richmond was a farm plan prepared for the Shia Muslim Community of B.C. (8580 No. 5 Road, Richmond).

² https://www2.gov.bc.ca/gov/content/environment/waste-management/industrialwaste/agriculture Agricultural Environmental Management. Province of B.C. Accessed January 28, 2020

MICHAEL MORIN TECHNICAL MEMORANDUM - AEM CODE

is in this memo, below). This code replaces the former Agricultural Waste Control Regulation (AWCR) for the province.

We (Jessica Stewart, P.Ag. and Thomas Elliot PhD, P.Ag.) at Madrone believe that the AEM Code should be considered when reviewing soil deposit applications for properties in the ALR, specifically, properties that are low-lying with little topographic relief and are subject to **high water tables**. We emphasize that there are instances in which properties subject to excess wetness (which is a defined agricultural limitation in the Land Capability Classification for Agriculture in B.C. MOE Manual 1)³ but are not on designated floodplains. In an effort to disambiguated, the City of Richmond Flood Plain Designation and Protection Bylaw No. 8204 defines a floodplain⁴ as:

"Floodplain means a lowland area, whether or diked or floodproofed, which, by reasons of land elevation, is susceptible to flooding from an adjoining watercourse, river, ocean, lake or other body of water, and that is designated as flood plain in Part 1 of this bylaw"

Whereas lands with excess wetness are resulting from a regionally high water table, either as a result of low elevation or due to a low-permeability soil-layer below ground, resulting in water that percolates through the soil and causes limitations to planting-season (i.e. early) machine access to the lands; ability to realize two crop-rotations within the prevalent climatic conditions in City of Richmond that allow for such; and also survivability of perennial crops.

The excess wetness experienced on these properties (due to high water tables) results in agricultural limitations that we believe can be improved by placement of a mineral soil layer to elevate the growing medium (which is typically, salvaged topsoil native to the property). The significance of the AEM Code to this stance is described as follows.

AEM CODE – PURPOSE AND SECTIONS OF NOTE

The AEM Code is a new regulation that falls under the Environmental Management Act (the 'Act')⁵. According to an expert with the British Columbia Organic Grower (Journal for The Certified Organic Associations of B.C.)⁶, it was developed as the old code (the Agricultural Waste Control Regulation, AWCR)

³ <u>https://www.alc.gov.bc.ca/assets/alc/assets/library/agricultural-</u> <u>capability/land capability classification for agriculture in bc 1983.pdf</u> Land Capability Classification for Agriculture in British Columbia. MOE Manual 1. Accessed January 28, 2020

⁴ <u>https://www.richmond.ca/_shared/assets/Bylaw 8204_0410201225280.pdf</u> Bylaw 8204 Flood plain designation and protection bylaw. City of Richmond. Accessed January 28, 2020

⁵ <u>http://www.bclaws.ca/civix/document/id/complete/statreg/03053_00</u> Environmental Management Act. BC Laws. Accessed January 28, 2020

⁶ <u>http://bcorganicgrower.ca/2019/09/ask-an-expert-a-new-agricultural-environmental-management-regulation/</u> Ask An Expert: A New Agricultural Environmental Management Regulation. Published: September 1, 2019. Accessed January 28, 2020

was believed to be too vague for farm operators to follow and was not adequately protecting the environment. This expert with the Ministry of Environment & Climate Change Strategy (MoECSS) further stated:

"The new regulation includes provisions that aim to: ensure watercourses and groundwater are protected through proper storage and use of manure, other nutrient sources, and other materials, such as wood residue; prevent water quality impacts from contaminated run-off; prohibit direct discharges into watercourses; require nutrient management planning; allow for increased monitoring in high-risk areas; provide clear compliance expectations for agricultural operators for setbacks, storage, and nutrient applications; and, require record-keeping."

The AEM Code therefore ensures that agricultural practices do not impact drinking water, watercourses, air, or public health. According to the AEM Code⁷:

"...for the purpose of minimizing the introduction of waste into the environment and preventing adverse impacts to the environment and human health, this code requires persons to use environmentally responsible and sustainable agricultural practices when carrying out agricultural operations described in subsection (3)"

Section 2 (2) This code applies to an agricultural operation described in subsection (3) that is carried out in British Columbia

(a) on

(i) an agricultural land base that is owned, rented or leased, and managed, by the person who carries out the agricultural operation, and

(ii) land that is not zoned for residential purposes, and

(b) primarily for the purpose of distributing agricultural products to other persons, whether

(i) directly or indirectly,

(ii) with or without a fee, or

(iii) on a commercial or non-commercial basis.

Section 2 (3) Subject to subsection (4), the following are agricultural operations for the purposes of this code:

(a) rearing and keeping livestock or poultry, and growing and harvesting agricultural products, for

(i) consumption or use by humans, including as food, fibre or fuel,

(ii) use as animal feed,

⁷ <u>http://www.bclaws.ca/civix/document/id/complete/statreg/8_2019#division_d1e5540</u> Code of Practice For Agricultural Environmental Management. BC Laws. Accessed January 28, 2020

(iii) use as breeding stock or to produce seedlings or flowers,

(iv) use in landscaping or for ornamental purposes, in the case of plants, or

(v) work or recreational purposes, in the case of horses;

(b) storing

(i) nutrient sources and agricultural by-products, and

(ii) the primary products of livestock, poultry, insects, plants and fungi;

(c) carrying out agricultural composting processes;

(d) applying nutrient sources to land;

- (e) washing, grading or packaging agricultural products, if carried out on the same agricultural land base as the livestock or poultry were reared or kept or the agricultural products were grown or harvested;
- (f) disposing of or incinerating mortalities and processing wastes, if carried out on the same agricultural land base as the livestock or poultry were reared or kept;
- (g) operating equipment in relation to

(i) an activity referred to in this subsection, or

(ii) other activities in relation to agriculture, other than processing primary products beyond the activities described in paragraph (e).

Section 2 (4) The following are **not** agricultural operations for the purposes of this code:

- (a) aquaculture and activities described in subsection (3) that are carried out in respect of aquaculture;
- (b) soil blending operations that bring manure, sand or other materials onto a parcel of land for the purpose of producing soil for use other than on that parcel.

Therefore, there are properties in the ALR that are not agricultural operations under the AEM Code. The majority of the Lower Mainland (including the entirety of Richmond) is identified as a High-Risk Area⁸ under

⁸https://governmentofbc.maps.arcgis.com/apps/MapSeries/index.html?appid=c16cde73574c43da87 7674f423304ae9 High Precipitation Areas Map Tool. Government of B.C. Accessed January 28, 2020

the AEM Code due to high precipitation, which is defined as 600 mm or more of precipitation between October 1st and April 30th.

The AEM Code stipulates that:

"a person must <u>not</u> apply nutrient sources to land:

- (a) in a high-precipitation area during the period that begins on November 1 and that ends on February 1 of the next year,
- (b) during strong, divergent windy conditions, unless the nutrient sources are applied
 - (i) below the soil surface, or
 - (ii) under a crop canopy having a height of at least 8 cm,
- (c) during storm events, or periods of short-term intense or high rainfall, or
- (d) during any high-risk conditions that are identified by a director under this Part and are relevant to the application of nutrient sources to land.
- (2) A person must not apply nutrient sources, other than wood residue, to land in a highprecipitation area during February, March or October unless both of the following conditions are met:
 - (a) the nutrients are needed by, and will be available to, the intended crop;
 - (b) a risk assessment is made in accordance with subsection (4) before application begins.
- (3) Without limiting subsection (2), a person may apply nutrient sources to bare soil in a high-precipitation area in the fall only if the following conditions are met:
 - (a) a crop is planted before the winter non-growing season begins;
 - (b) the application is to medium or fine-textured soils with a low risk of leaching;
 - (b) the nutrients will not enter a watercourse or go below the seasonal high water table.
- (4) A person must prepare a risk assessment, in writing and in the form and manner required by a director,
 - (a) for each field to which nutrient sources are to be applied, and
 - (c) considering the special circumstances of the high-precipitation area and any high-risk conditions.

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[am. B.C. Reg. 8/2019, App. 3.]

Therefore, there are limitations to applying nutrients to land in high precipitation areas, including in the City of Richmond. The application window is smaller than elsewhere in the province where annual precipitation is not as high.

Furthermore, in Division 4, Nutrient Application and Management of the AEM Code, Section 49:

- (1) A person must not apply nutrient sources to land
 - (a) on which there is standing water or water-saturated soil,
 - (b) on ground in which the top 5 cm of soil is frozen so as to be impenetrable to manuallyoperated equipment,
 - (c) on a field having at least 5 cm of ice or snow over at least 50% of its area, or
 - (d) at a rate of application, under meteorological, topographical or soil conditions, or in a manner, that may cause nutrient sources or contaminated runoff, leachate or solids to enter a watercourse⁹, cross a property boundary or go below the seasonal high water table.
- (2) A person must not apply to land a material described in any of paragraphs (e) to (g) of the definition of "nutrient source" unless the material is treated, provided, used or produced, as applicable, in accordance with this code and the applicable regulation referred to in those paragraphs.

This requirement under the AEM code, combined with high precipitation in Richmond, further limits windows for nutrient applications that may be necessary for an agricultural operation.

SIGNIFICANCE OF THE AEM CODE TO COR AGRICULTURAL LAND

Based on our experience assessing the agricultural capability of agricultural land in the CoR, and subsequently preparing soil deposit plans to elevate properties subject to excess wetness¹⁰, we have determined the following:

⁹ Such as a ditch – the CoR defines all ditches in the city as watercourses.

¹⁰ Dr. Elliot and Ms. Stewart have prepared such applications and reports since 2014.

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- 2 The lack of vertical drainage coupled to the regionally high water table in the low-lying areas results in poor conveyance (i.e. local drainage) of water **out** of these areas which is not otherwise improvable through installation of subsurface drain-tiles due to said drain-tile outfalls being **below** the water table; and
- **3** Pump-works may supress the local elevation of water table, however the water will be required to be pumped to an area that will:
 - a. Receive the waters and not impact other agricultural lands; and
 - b. Receive the waters and not allow them to be communicated back to the field via subsurface or displacement within the regional drainage works.

Unfortunately, pump works are generally suitable for bermed (or dyked) areas, such as floodplains, whereby the inundation/excess water is not congruent with the regional high water table. In many circumstances within the CoR, the issue is more so related to high water table and regional conveyance rather than point-specific short-duration inundation-water sources (i.e. flooding during the late spring freshet of the Fraser River) that pumping is ideally suited to resolve.

With a known issue of regionally high water tables and the AEM Code disambiguation below, Dr. Elliot's interpretation is that land application of nutrient sources within certain land-parcels of CoR will be disallowed (under the AEM Code) until such time as the high water table does not allow direct transmission of nutrient sources/nutrient to adjacent watercourses, which – in some circumstances – would result in the land parcel and agricultural operation falling under one or more of the following categories:

- A. A complete mismatch of nutrient application timing window with crop needs (common case);
- B. A disallowance of nutrient application during the early planting season (moderate case);
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If only Category A is applicable, then the land is not suited to grow the operational crop or the crop will be limited to one rotation when two or more is possible based on all other factors, and the question then reverts to the standard soil importation decision making process. If Category B and C are applicable, then the portion of land determined to be limited by the excess water condition is essentially sterilized for agriculture –forcing importation of soil as the only reasonable pathway toward improving agricultural capability (due to either ineffectiveness of other options, as described in our Determinations 1 - 3 above).

The next question is how to distinguish what restrictions are resulting from AEM Code based on field-based evidence. For example, Madrone prepared a Land Capability for Agriculture assessment for an ALR property in the CoR to determine the type of agricultural limitation(s) that exist on Site. From that assessment, we found the native Lulu Soil Series (an organic Terric Mesisol – formed in areas of high groundwater and low

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conveyance) overlies dense, fine-grained deltaic sediments (silt, clay). This essentially forms 'a bathtub' under the whole area.

Therefore, since the area described in the above example is not subject to seasonal floodwater (i.e. Fraser River freshet) and is instead subject to **seasonal high water table** (Land Capability Classification for Agriculture, LCA Class 'W' limitation), the AEM Code applies and limits application of nutrient sources to Category A (timing mismatch) and potentially C (complete disallowance) circumstances as indicated above, whereas Category B does not apply due to the intended perennial crops (that by definition, live for more than two years and after harvest, do not need to be replanted every year).

We believe that there are lands in the ALR which would benefit greatly from importation of soil so long as adequate (if not excessive, to account for Changing Climate) compensation of regional drainage capacity (through enlarged ditching requirements, such as installation of canals instead of ditches) is included in the process as a requirement.

Such a tactic would still result in increased (productive) agricultural lands, and increased capability for agriculture of said lands, while addressing the most common objection to soil importation, which is that regional drainage/flooding will be negatively impacted.

MINISTRY OF ENVIRONMENT & CLIMATE CHANGE STRATEGY RESPONSE

Dr. Thomas Elliot, P.Ag. has requested input from Margaret Crowley, M.Sc., P.Ag. with the Ministry of Environment & Climate Change Strategy (MoECCS). Ms. Crowley is one of the authors of the AEM Code.

Her perspective, as interpreted from written correspondence to Dr. Elliot, is that:

- Inundation due to flooding does not discount application of nutrient sources (fertilizers, compost, wood residue, etc.), which allows for continued use of floodplains as agricultural lands;
- Seasonal high water table at, near or above ground surface **would however**, restrict land application of nutrient sources both during times of water table above ground surface (which is not surprising, as fertilizing standing water isn't effective), but also during period of generally high water table whereby precipitation/infiltration/dispersion would result in direct transmission of nutrients to groundwater/nearby watercourse.

CONCLUSIONS

The Code of Practice for Agricultural Environmental Management in a regulation under the Environmental Management Act. The regulation was made law in the province in February of 2019. As such, it is less than one year old and may not be a familiar regulation to consultants nor to municipal staff tasked with a preparing and reviewing relevant development applications in the ALR, respectively.

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MICHAEL MORIN TECHNICAL MEMORANDUM - AEM CODE PAGE 9 MARCH 9, 2020

Dr. Thomas Elliot of Madrone has reviewed the AEM Code and has found that the combination of high precipitation in the municipality of Richmond (which results in it being defined as a High Risk Area according to AEM Code criteria) and high seasonal water tables in many low-lying agricultural areas (that are not necessarily located on floodplains) results in very narrow windows for nutrient applications for agricultural operators of said lands.

In instances where agricultural operators and landowners wish to improve excess wetness due to high seasonal water tables by raising their land via soil importation, we believe special consideration should be made by the CoR of how the AEM Code may impact that particular property (and the proposed agricultural operation, if not pre-existing).

Prepared by:

*This

Jessica Stewart, P.Ag., P.Geo. on behalf of:

CC *This is a digitally signed dup 3030 official manually signed and (on

Thomas Elliot, PhD, P.Ag., P.Geo.

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Attachment 13



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> info@madrone.ca www.madrone.ca

March 9, 2020

Mr. Michael Morin, Soil Bylaw Officer & Planning and Development City of Richmond

Dear Mr. Morin

Re: Technical Memorandum: Significance of the Code of Practice for Agricultural Environmental Management (AEM Code) for low-lying agricultural land in the City of Richmond

INTRODUCTION

Madrone Environmental Services Ltd. (Madrone) is a multi-disciplinary scientific consulting firm with offices in both the Fraser Valley (Abbotsford) and Duncan, B.C. Since 2009, agrologists at our firm have prepared land capability assessments, soil deposit assessments (for both non-farm use and farm-use soil deposition on ALR Land), farm plans¹, and reclamation plans (including soil testing for contaminants, invasive species screening, fill removal plans) for landowners of properties in the City of Richmond (CoR, or 'the city'). Most, if not all, of these properties have been in the Agricultural Land Reserve (ALR).

Madrone continues to work with CoR planners and bylaw officers on such projects as a consultant and agent for applications by the respective landowners. Recently, Thomas Elliot, P.Ag. of Madrone has been engaged with the city in interpreting the significance of a new provincial regulation called the Code of Practice for Agricultural Environmental Management (AEM Code).

The AEM Code came into effect on February 28, 2019 and applies to all agricultural operations in the province². We emphasize that this applies to agricultural <u>operations</u> – not all agricultural land in the ALR has agricultural operations conducted on site (i.e. the land is completely fallow with no nutrient inputs, or the operation on site is not defined as an applicable agricultural operation in the AEM Code – the exact definition

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¹ Madrone's first agricultural-related project in the City of Richmond was a farm plan prepared for the Shia Muslim Community of B.C. (8580 No. 5 Road, Richmond).

² <u>https://www2.gov.bc.ca/gov/content/environment/waste-management/industrial-waste/agriculture</u> Agricultural Environmental Management. Province of B.C. Accessed January 28, 2020

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is in this memo, below). This code replaces the former Agricultural Waste Control Regulation (AWCR) for the province.

We (Jessica Stewart, P.Ag. and Thomas Elliot PhD, P.Ag.) at Madrone believe that the AEM Code should be considered when reviewing soil deposit applications for properties in the ALR, specifically, properties that are low-lying with little topographic relief and are subject to **high water tables**. We emphasize that there are instances in which properties subject to excess wetness (which is a defined agricultural limitation in the Land Capability Classification for Agriculture in B.C. MOE Manual 1)³ but are not on designated floodplains. In an effort to disambiguated, the City of Richmond Flood Plain Designation and Protection Bylaw No. 8204 defines a floodplain⁴ as:

"Floodplain means a lowland area, whether or diked or floodproofed, which, by reasons of land elevation, is susceptible to flooding from an adjoining watercourse, river, ocean, lake or other body of water, and that is designated as flood plain in Part 1 of this bylaw"

Whereas lands with excess wetness are resulting from a regionally high water table, either as a result of low elevation or due to a low-permeability soil-layer below ground, resulting in water that percolates through the soil and causes limitations to planting-season (i.e. early) machine access to the lands; ability to realize two crop-rotations within the prevalent climatic conditions in City of Richmond that allow for such; and also survivability of perennial crops.

The excess wetness experienced on these properties (due to high water tables) results in agricultural limitations that we believe can be improved by placement of a mineral soil layer to elevate the growing medium (which is typically, salvaged topsoil native to the property). The significance of the AEM Code to this stance is described as follows.

AEM CODE – PURPOSE AND SECTIONS OF NOTE

The AEM Code is a new regulation that falls under the Environmental Management Act (the 'Act')⁵. According to an expert with the British Columbia Organic Grower (Journal for The Certified Organic Associations of B.C.)⁶, it was developed as the old code (the Agricultural Waste Control Regulation, AWCR)

³ <u>https://www.alc.gov.bc.ca/assets/alc/assets/library/agricultural-</u> <u>capability/land capability classification for agriculture in bc 1983.pdf</u> Land Capability Classification for Agriculture in British Columbia. MOE Manual 1. Accessed January 28, 2020

⁴ <u>https://www.richmond.ca/_shared/assets/Bylaw 8204_0410201225280.pdf</u> Bylaw 8204 Flood plain designation and protection bylaw. City of Richmond. Accessed January 28, 2020

⁵ <u>http://www.bclaws.ca/civix/document/id/complete/statreg/03053_00</u> Environmental Management Act. BC Laws. Accessed January 28, 2020

⁶ <u>http://bcorganicgrower.ca/2019/09/ask-an-expert-a-new-agricultural-environmental-management-regulation/</u> Ask An Expert: A New Agricultural Environmental Management Regulation. Published: September 1, 2019. Accessed January 28, 2020

was believed to be too vague for farm operators to follow and was not adequately protecting the environment. This expert with the Ministry of Environment & Climate Change Strategy (MoECSS) further stated:

"The new regulation includes provisions that aim to: ensure watercourses and groundwater are protected through proper storage and use of manure, other nutrient sources, and other materials, such as wood residue; prevent water quality impacts from contaminated run-off; prohibit direct discharges into watercourses; require nutrient management planning; allow for increased monitoring in high-risk areas; provide clear compliance expectations for agricultural operators for setbacks, storage, and nutrient applications; and, require record-keeping."

The AEM Code therefore ensures that agricultural practices do not impact drinking water, watercourses, air, or public health. According to the AEM Code⁷:

"...for the purpose of minimizing the introduction of waste into the environment and preventing adverse impacts to the environment and human health, this code requires persons to use environmentally responsible and sustainable agricultural practices when carrying out agricultural operations described in subsection (3)"

Section 2 (2) This code applies to an agricultural operation described in subsection (3) that is carried out in British Columbia

(a) on

(i) an agricultural land base that is owned, rented or leased, and managed, by the person who carries out the agricultural operation, and

(ii) land that is not zoned for residential purposes, and

(b) primarily for the purpose of distributing agricultural products to other persons, whether

(i) directly or indirectly,

(ii) with or without a fee, or

(iii) on a commercial or non-commercial basis.

Section 2 (3) Subject to subsection (4), the following are agricultural operations for the purposes of this code:

(a) rearing and keeping livestock or poultry, and growing and harvesting agricultural products, for

(i) consumption or use by humans, including as food, fibre or fuel,

(ii) use as animal feed,

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⁷ <u>http://www.bclaws.ca/civix/document/id/complete/statreg/8 2019#division d1e5540</u> Code of Practice For Agricultural Environmental Management. BC Laws. Accessed January 28, 2020

(iii) use as breeding stock or to produce seedlings or flowers,

(iv) use in landscaping or for ornamental purposes, in the case of plants, or

(v) work or recreational purposes, in the case of horses;

(b) storing

(i) nutrient sources and agricultural by-products, and

(ii) the primary products of livestock, poultry, insects, plants and fungi;

(c) carrying out agricultural composting processes;

(d) applying nutrient sources to land;

- (e) washing, grading or packaging agricultural products, if carried out on the same agricultural land base as the livestock or poultry were reared or kept or the agricultural products were grown or harvested;
- (f) disposing of or incinerating mortalities and processing wastes, if carried out on the same agricultural land base as the livestock or poultry were reared or kept;
- (g) operating equipment in relation to

(i) an activity referred to in this subsection, or

(ii) other activities in relation to agriculture, other than processing primary products beyond the activities described in paragraph (e).

Section 2 (4) The following are **not** agricultural operations for the purposes of this code:

- (a) aquaculture and activities described in subsection (3) that are carried out in respect of aquaculture;
- (b) soil blending operations that bring manure, sand or other materials onto a parcel of land for the purpose of producing soil for use other than on that parcel.

Therefore, there are properties in the ALR that are not agricultural operations under the AEM Code. The majority of the Lower Mainland (including the entirety of Richmond) is identified as a High-Risk Area⁸ under

⁸https://governmentofbc.maps.arcgis.com/apps/MapSeries/index.html?appid=c16cde73574c43da87 7674f423304ae9 High Precipitation Areas Map Tool. Government of B.C. Accessed January 28, 2020
the AEM Code due to high precipitation, which is defined as 600 mm or more of precipitation between October 1^{st} and April 30^{th} .

The AEM Code stipulates that:

"a person must <u>not</u> apply nutrient sources to land:

- (a) in a high-precipitation area during the period that begins on November 1 and that ends on February 1 of the next year,
- (b) during strong, divergent windy conditions, unless the nutrient sources are applied
 - (i) below the soil surface, or

(ii) under a crop canopy having a height of at least 8 cm,

- (c) during storm events, or periods of short-term intense or high rainfall, or
- (d) during any high-risk conditions that are identified by a director under this Part and are relevant to the application of nutrient sources to land.
- (2) A person must not apply nutrient sources, other than wood residue, to land in a highprecipitation area during February, March or October unless both of the following conditions are met:
 - (a) the nutrients are needed by, and will be available to, the intended crop;
 - (b) a risk assessment is made in accordance with subsection (4) before application begins.
- (3) Without limiting subsection (2), a person may apply nutrient sources to bare soil in a high-precipitation area in the fall only if the following conditions are met:
 - (a) a crop is planted before the winter non-growing season begins;
 - (b) the application is to medium or fine-textured soils with a low risk of leaching;
 - (b) the nutrients will not enter a watercourse or go below the seasonal high water table.
- (4) A person must prepare a risk assessment, in writing and in the form and manner required by a director,
 - (a) for each field to which nutrient sources are to be applied, and
 - (c) considering the special circumstances of the high-precipitation area and any high-risk conditions.

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[am. B.C. Reg. 8/2019, App. 3.]

Therefore, there are limitations to applying nutrients to land in high precipitation areas, including in the City of Richmond. The application window is smaller than elsewhere in the province where annual precipitation is not as high.

Furthermore, in Division 4, Nutrient Application and Management of the AEM Code, Section 49:

- (1) A person must not apply nutrient sources to land
 - (a) on which there is standing water or water-saturated soil,
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This requirement under the AEM code, combined with high precipitation in Richmond, further limits windows for nutrient applications that may be necessary for an agricultural operation.

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Based on our experience assessing the agricultural capability of agricultural land in the CoR, and subsequently preparing soil deposit plans to elevate properties subject to excess wetness¹⁰, we have determined the following:

⁹ Such as a ditch – the CoR defines all ditches in the city as watercourses.

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Therefore, since the area described in the above example is not subject to seasonal floodwater (i.e. Fraser River freshet) and is instead subject to **seasonal high water table** (Land Capability Classification for Agriculture, LCA Class 'W' limitation), the AEM Code applies and limits application of nutrient sources to Category A (timing mismatch) and potentially C (complete disallowance) circumstances as indicated above, whereas Category B does not apply due to the intended perennial crops (that by definition, live for more than two years and after harvest, do not need to be replanted every year).

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Prepared by:



Jessica Stewart, P.Ag., P.Geo. on behalf of:

*This is a digitally signed dup 3030 official manually signed an

Thomas Elliot, PhD, P.Ag., P.Geo.

MADRONE ENVIRONMENTAL SERVICES LTD.

Analysis of Perimeter Ditch Water from Property Located at 8511 #6 Road, Richmond, BC

BCAA Legal: SEC 20 BLK4N RG5W PL 3109 Parcel A, Subsidy Lot 3, (J71246E)

Richmond File # 12-624176

Prepared for:

Bohan Jiang

Prepared by:

Bun MCZ/

Bruce McTavish, MSc MBA, PAg, RPBio. McTavish Resource & Management Consultants Ltd. 2858 Bayview St. Surrey, B.C. V4A 3Z4 bmct@intergate.ca

and

Hubert Timmenga, PhD, PAg, CMC Timmenga & Associates Inc 292 E 56 Avenue, Vancouver BC V5X 1R3 htimmenga@telus.net

March 4 2015

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1.0 Introduction

The following report is the final report in a series of reports prepared by McTavish Resource & Management Consultants Ltd. on the property located at 8511 No 6 Road in Richmond BC. The series of reports are to provide information to the City of Richmond and the Agricultural Land Commission with respect to an application to import fill and topsoil onto the subject property. The following documents have been submitted to the City of Richmond:

- Original fill application was submitted in October 25, 2012 including supporting Agrologist's report;
- Reply letter from the City of Richmond December 13, 2012:
- Report on site drainage and leachate submitted December 14, 2013;
- Letter on wheel wash procedures submitted on December 15, 2013; and
- Letter on road access submitted February 5, 2014.

This report contains the water sampling results from the surrounding ditches as requested by the City of Richmond as part of due diligence review for the proposal import fill and topsoil to the subject property This property contains historic buried wood waste that is estimated to be at least 30 years old. The remediation plan proposes to further cap the buried wood waste with topsoil and to direct surface run-off water to the municipal ditch system along No 6 Road.¹ The City of Richmond was concerned that any seepage from the historic buried wood waste would enter the municipal drainage system.

The site contains wood waste varying in depth of over 3 m at the east side of the property to 0.5m at the west side as shown during previous excavation and soil testing that was performed by McTavish Management and Consulting Ltd. The historic wood waste is covered with a layer of 0.2 - 0.5m of topsoil. The previous excavation results showed that the wood waste was virtually non-decomposed indicating that it is kept waterlogged in stagnant low oxygen water and was well preserved. An access road is present alongside the north lateral ditch and may restrict water flow to that ditch due to soil compaction.

Wood waste can exude leachate when water is percolating through it. Wood waste leachate is toxic to fish (Samis et. al, 1999)², has a high chemical oxygen demand and contains tannins and lignin (Tao et.al.

¹ McTavish B., H. Timmenga, 2012. Proposed Remediation of Land Located at 8511 #6 Road Richmond, BC. ² Samis, S.C, S.D Liu, B.G. Wernick and M.D. Nassichuk, 1999. Mitigation of fisheries impacts from the use and disposal of wood residue in British Columbia and the Yukon. Can. Tech. Rep. Fish. Aquat. Sci. 2296: viii and 91p. Part 1: <u>http://www.for.gov.bc.ca/hfd/library/ffip/Samis_SC1999_pt1.pdf;</u> Part 2: <u>http://www.for.gov.bc.ca/hfd/library/ffip/Samis_SC1999_pt2.pdf</u>.

2005).³ Both COD and tannins and lignin have been implicated in fish toxicity (Samis et.al., 1999). Metals have not been reported as an issue in wood waste leachate (Frankowski, 2000).⁴

2.0 Methodology

In order to check whether wood waste leachate was affecting the water in the lateral drainage ditches and to compare water quality in these ditches with the quality of water in the main City of Richmond ditch draining the area, water samples were taken in December 2014, during the Lower Mainland's wet period. Samples were analysed for the parameters that are characteristic for wood waste leachate. Emphasis was given to the potential toxicity of such leachate.

Samples were taken for the following tests:

- Fish toxicity (pass-fail test);
- Chemical oxygen demand;
- Tannins and lignins; and
- Total metals.

All sample analyses were performed by Maxxam Laboratories in Burnaby BC.

3.0 Results

Sampling took place December 8, 2014. The site was dry, and the lateral ditches to the north and south of the property contained water that was clear but yellow-brown in colour. The ditches contained organic matter in the form of grass and leaves. Both ditches appear stagnant at the time of sampling, and water smelled anaerobic. Dissolved Oxygen in these ditches appeared low at 1.6 and 2.4mg/L (see Maxxam Reports in Appendix I). The main drainage ditch to the west of No 6 Road was also sampled, both up-stream and down-stream of the subject property, beyond the existing drains of the lateral drainage ditches from the subject property. The main City of Richmond ditch flows north to south along the west side of No. 6 Road. Water in the City of Richmond ditch was clear and light yellow-brown in colour. The ditch contained organic matter and green plant growth. The dissolved oxygen was moderate at 4.9 and 5.8 mg/L.

The following results were obtained from the ditch water sampling. Results were compared with the wood waste leachate characteristics outlined in Tao et al, 2005. While Tao lists a range of concentrations for differently aged wood waste, we have selected the values of aged wood waste leachate (5 year old) as a comparison.

³ Tao W., Ken J.Hali, A Masbough, K Frankowiski, and Sheldon J.B. Duff, 2005. Characterization of Leachate from a Woodwaste Pile. Water Quality Research Journal of Canada, Vol 40. No4:476-483. <u>https://www.cawa.,</u> <u>q.ca/journal/temp/article/279.pdf</u>

⁴ Frankowsski, K.A., 2000. The Treatment of Wood Leachate Using Constructed Wetlands. MSc Thesis University of British Columbia. <u>https://circle.ubc.ca/handle/2429/10463</u>

Parameter	North Ditch on Subject Property	South Ditch On Subject Property	No. 6 Road Ditch Up-stream of Subject Property	No. 6 Road Ditch Down- stream of Subject Property	Typical wood waste leachate (5 year old pile; Tao et al, 2005)
Fish toxicity	pass	pass	pass	pass	Fail
COD	199	171	67	70	3908
Tannin/Lignin	9.09	8.18	4.04	3.65	1100

Table 1 Primary Ditch Water Quality Parameters

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Table 2 Total Metals in Water Samples

I III III IIII IIII IIII IIIII IIIIII IIII	
Sampling Date 2014/12/08 10:30 2014/12/08 2014/12/08 2014/12/08	
Onits NORTH SOUTH OPSTREAM DOWNSTREAM	KDL
	0 50
Iotal Hardness (CaCO3) mg/L 129 75.7 60.0 64.4	0,50
Iotal Aluminum (Al) Ug/L 868 791 752 647	3,0
Total Antimony (Sb) Ug/L <0.50 <0.50 <0.50	0,50
Total Arsenic (As) ug/L 3.08 1.24 1.21 1.29	0.10
Total Barium (Ba) ug/L 36.8 27.6 25.4 24.8	1,0
Total Beryllium (Be) ug/L <0.10 0.11 <0.10	0.10
Total Bismuth (Bi) ug/L <1.0 <1.0 <1.0	1,0
Total Boron (B) ug/L <50 <50 <50	50
Total Cadmium (Cd) ug/L 0.063 0.037 0.138 0.111	0.010
Total Chromium (Cr) ug/L 2.7 1.8 1.7 1.6	1,0
Total Cobalt (Co) ug/L 5.79 2.22 5.15 5.03	0.50
Total Copper (Cu) ug/L 5.19 12.6 6.03 5.76	0.50
Total Iron (Fe) ug/L 9330 4990 1310 1280	10
Total Lead (Pb) ug/L 1.20 1.44 0.66 0.56	0.20
Total Lithium (Li) ug/L <5.0 <5.0 <5.0	5.0
Total Manganese (Mn) ug/L 746 275 109 145	1.0
Total Mercury (Hg) ug/L <0.050 <0.050 <0.050	0.050
Total Molybdenum (Mo) ug/L <1.0 <1.0 <1.0	1.0
Total Nickel (NI) ug/L 12.3 4.9 11.1 11.6	1.0
Total Selenium (Se) ug/L 0.25 0.12 0.10 <0.10	0.10
Total Silicon (SI) ug/L 11700 7990 5580 5140	100
Total Silver (Ag) ug/L <0.020 <0.020 <0.020	0,020
Total Strontlum (Sr) ug/L 167 105 78.3 91.4	1.0
Total Thallium (TI) ug/L <0.050 <0.050 <0.050 <0.050	0.050
Total Tin (Sn) ug/L <5.0 <5.0 <5.0 <5.0	5.0
Total Titanium (Ti) ug/L 20.7 11.7 7.0 5.6	5.0
Total Uranium (U) ug/L 0.12 <0.10 0.14 0.14	0.10
Total Vanadium (V) ug/L. 7.4 <5.0 <5.0 <5.0	5.0
Total Zinc (Zn) ug/L 24.8 14.8 26.6 67.9	5.0
Total Zirconium (Zr) ug/L 0.83 <0.50 <0.50 0.52	0.50
Total Calcium (Ca) mg/L 31.9 20.6 15.3 16.1	0.050
Total Magnesium (Mg) mg/L 11.9 5.89 5.28 5.88	0.050
Total Potassium (K) mg/L 7.20 4.74 5.97 7.15	0.050
Total Sodium (Na) mg/L 17.7 3.57 5.33 6.72	0.050
Total Sulphur (S) mg/L 18.3 4.8 9.6 13.4	3.0

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Page 4

Table 3 Guidelines for Total Metals in Water

	Units	CCME Irrigation ⁵	CCME Livestock	Canada Drinking Water ug/L ⁶	Exceed?
Calculated Parameters					
Total Hardness (CaCO3)	mg/L				
Total Metals by ICPMS					
Total Aluminum (Al)	ug/L	5000	5000		
Total Antimony (Sb)	ug/L			6	
Total Arsenic (As)	ug/L	100	25	10	
Total Barium (Ba)	ug/L			1000	
Total Beryllium (Be)	ug/L				
Total Bismuth (Bi)	ug/L		•		
Total Boron (B)	ug/L		5000		
Total Cadmium (Cd)	ug/L	5.1	80	5	
Total Chromium (Cr)	ug/L	8/4.9	50/50	50	
Total Cobalt (Co)	ug/L	50	1000		
Total Copper (Cu)	ug/L	200-1000	500-5000		
Total Iron (Fe)	ug/L	5000			North ditch likely due to natural conditions
Total Lead (Pb)	ug/L	200	100	10	
Total Lithium (Li)	ug/L	2500			
Total Manganese (Mn)	ug/L	200			North/south likely due to natural conditions
Total Mercury (Hg)	ug/L		3	1	
Total Molybdenum (Mo)	ug/L		500		
Total Nickel (Ni)	ug/L	200	1000		
Total Selenium (Se)	ug/L		50	50	
Total Silicon (Si)	ug/L				
Total Silver (Ag)	ug/L				
Total Strontium (Sr)	ug/L				
Total Thallium (TI)	ug/L				
Total Tin (Sn)	ug/L				
Total Titanium (Ti)	ug/L				
Total Uranium (U)	ug/L	10	200	20	
Total Vanadium (V)	ug/L	100	100		
Total Zinc (Zn)	ug/L		50,000		
Total Zirconium (Zr)	ug/L				

⁵ Water Quality Guidelines for the Protection of Agriculture - CCME current document. <u>http://st-ts.ccme.ca/en/index.html</u> accessed December 19, 2014

⁶ Guidelines for Canadian Drinking Water Guidelines – current table. <u>http://www.hc-sc.gc.ca/ewh-semt/pubs/water-eau/sum_guide-res_recom/index-eng.php#t2</u> accessed December 19, 2014

Total Calcium (Ca)	mg/L		
Total Magnesium (Mg)	mg/L		
Total Potassium (K)	mg/L		
Total Sodium (Na)	mg/L		
Total Sulphur (S)	mg/L		

4.0 Discussion

- 1) Ditch water in the lateral ditches and in the No 6 Road drainage ditch is not toxic to fish.
- 2) The COD in all ditch water is well below that in aged wood waste leachate; No guidelines for COD have been set.
- 3) The colour of the water in both lateral ditches and in the main City of Richmond drainage ditch is yellow brown, which is to be expected in an area with natural peat deposits and in stagnant ditches.
- 4) The tannins and lignin concentration in all ditch water is well below the typical values for aged wood waste leachate. Tannins and lignins are well below the BC Drinking water working criteria of 400ug/L, ⁷ but none is listed in the BC Approved Water Quality Guidelines.⁸
- 5) All metals in ditch water are below the Canada Drinking Water standard. Only iron and manganese may be over the irrigation or livestock guidelines, however samples reflect total metals, not dissolved metals, which typically are lower. The iron and manganese may be related to clay particles in the water sample or to the soil on the property that may be naturally high in iron or manganese. Metals are not typically related to wood waste leachate.

5.0 Conclusion

Sampling results have shown that the quality of the ditch water of the lateral drainage ditches on the subject property and in the main City of Richmond ditch is not affected by wood waste leachate and is not toxic to fish.

⁷ Nagpal, N.K., L.W. Pommen, L.G. Swain, 2006. A Compendium of Working Water Quality Guidelines for British Columbia. BC Ministry of Environment, Science and Information Branch – Water Quality. http://www.env.gov.bc.ca/wat/wg/BCguidelines/working.html Accessed December 22, 2014.

⁸ http://www2.gov.bc.ca/gov/topic.page?id=044DD64C7E24415D83D07430964113C9

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Appendix I Laboratory Results

RESULTS OF RAINBOW TROUT 96 HR LC50 @ 100%

Client: 9844 Corporate Client - Maxxam Burnaby Job Number: B4B1245 Client Project Name & Number: Test Result: 96 hrs LC50 % vol/vol (95% CL): >100 (N/A) Statistical Method: Visual NORTH Sample Name : Sample Number: 111685-04 Description: dark amber Sample Collected: Dec 08, 2014 10:30 AM N/A Site Collection: Sampling Method : N/A 11 °C Storage: 1-7 °C Sample Collected By: N/A Volume Received: 1 x 20CB Temp.Upon Arrival: Sample Received: Dec 08, 2014 02:00 PM 1.6 mg/L pH: 5.7 Dissolved Oxygen: Analysis Start : Dec 09, 2014 12:30 PM Sample Conductance: 283 µS/cm² Temperature : 14.9 °C Atypical Dissolved Dissolved Mortality Mortality Temperature moerature Conductivity Concentration pН Behaviour Oxygen Oxygen рH (°C) (°C) uS/cm² (8) (%) (mg/L) (mg/L) (#) % vol/vol Initial 96 hrs Initial 96 brs Initial 96 brs 96 hrs Initial 96 brs 96 brs 0 15.2 15.0 10.0 9.6 7.2 36 0 0 ø 7.1 100 7.8 0 15.0 7.2 9.6 6.0 280 0 o 14.9 Comments : At test initiation the fish in 100% concentration were surfacing and had slow respiration. For the remainder of the test all fish appeared and behaved normality. Culture/Control/Dilution Water Burnaby Municipal Dechlorinated Water Hardness (EDTA Method): 20 mg/L CaCO₄ Other parameters available on request. Test Conditions Test concentration : 0,100 (% vol/vol) Organisms per Vessel : 10 Test Temperature : 15±1'C Solution Depth : >15 cm Total # of Organisms Used : 20 Pre-aeration Time : 60 mln. Rate of Pre-aeration : 6.5±1 mL/min/L 15 L Test Volume : Vessel Volume : 201 Test pH Adjusted: No Loading Density : 0.33 g/L Photoperiod : 16:8 (light: dark) Test Organism : Rainbow Trout (Oncorhynchus mykiss) Source : Lyndon Fish Hatcheries Inc. Weight (Mean) +- SD : 0.50 ± 0.13 g Length (Mean) +- SD : Culture Temperature : 15±2 °C 4.01 ± 0.35 cm Culture Water Renewal : ≥ 11/min/kg fish Weight (Range) : 0.35-0.82 g Length (Range) : 3.50-4.70 cm Culture Photoperiod : 16:8 (light: dark) % Mortality within 7 days : 0.25% Feeding rate and frequency : daily: 1-5% biomass of trout. Nov 17, 2014 Reference chemical: 7inc Test Date: Test Endpoint 96 hrs LC50 (95% confidence interval) : 0.16 (0.13, 0.20) mg/L Statistical Method : Untrimmed Spearman-Kärber Historical Mean LC50 (warning limits) : 0.11 (0.05, 0.24) mg/L Concentration : 0,0.04,0.08,0.16,0.32,0.64 mg/L Maxxam's BBY2SOP-00004 is based on the latest versions of EPS 1/RM/9, EPS 1/RM/13, and EPS 1/RM/50. Test Method **Method Deviations** None The results contained in this report refer only to the testing of the sample submitted. This report may not be reproduced, except in its Note: entirety, without the written approval of the laboratory. Analyst: Michael Brassil UEmala Dec 17, 2014 01:21 PM Kimberly Tamaki, BBY QA Coordinator Date: Verified Bv :

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RESULTS OF RAINBOW TROUT 96 HR LC50 @ 100%

Client: 9844 Corporate Client - Maxxam Burnaby Job Number: B4B1245 Client Project Name & Number: Test Result: 96 hrs LC50 % vol/vol (95% CL): >100 (N/A) Statistical Method: Visual Sample Name : SOUTH Description: Sample Number: 111686-04 dark amber Sample Collected: Dec 08, 2014 10:30 AM Sampling Method : N/A Site Collection: N/A 1 x 20CB Storage: 1-7 °C Sample Collected By: N/A Volume Received: 11 °C Temp, Upon Arrival: pH: Sample Received: Dec 08, 2014 02:00 PM 5.5 Dissolved Oxygen: 2.4 mg/L Analysis Start : Dec 09, 2014 12:30 PM 14.8 'C Sample Conductance: 166 µS/cm² Temperature : Dissolved Dissolved Atypical Conductivity Temperature Temperature Mortality Mortality Concentration Oxygen Oxygen pН pН Rehavior (#) ('C) (°C) us/cm³ (%) (mg/L) (mg/L) (#) % vol/vo) Initial 96 hrs Initial 96 hrs lnitial 96 hrs Initial 96 hrs 96 hrs 96 hrs 0 0 15.2 15.0 10.0 9.6 7.1 7.2 36 0 0 100 14.9 15.1 7.1 9.6 5.8 7.7 164 0 0 0 Comments : At test initiation the fish in 100% concentration were surfacing, and had slow respiration, For the remainder of the tests all fish appeared and behaved normally. Culture/Control/Dilution Water Burnaby Municipal Dechlorinated Water Hardness (EDTA Method): 20 mg/L CaCO_a Other parameters available on request. Test Conditions Test concentration : 0,100 (% vol/vol) Organisms per Vessel : 10 Test Temperature : 15±1°C Solution Depth : >15 cm Total # of Organisms Used : 20 Pre-aeration Time : 60 min. Rate of Pre-aeration : 6.5±1 mL/min/L Test Volume ; 15 L Vessel Volume : 20L Test pH Adjusted: No Loading Density : 0.33 g/L 16:8 (light: dark) Photoperiod : Test Organism : Rainbow Trout (Oncorhynchus mykiss) Source : Lyndon Fish Hatcheries Inc. Culture Temperature : 15 ± 2 °C Weight (Mean) +- SD : 0.50 ± 0.13 g Length (Mean) +- SD : 4.01 ± 0.35 cm Culture Water Renewal : ≥ 1L/min/kg fish Weight (Range) : 0.35 - 0.82 g Length (Range) : 3.50-4.70 cm Culture Photoperiod : % Mortality within 7 days : 0.25% 16:8 (light: dark) daily: 1-5% biomass of trout.

 Feeding rate and frequency:
 daily: 1-5% biomass of trout.

 Reference chemical:
 Zinc
 Test Date:
 Nov 17, 2014

 Test Endpoint 96 hrs LC50 (95% confidence interval):
 0.16 (0.13, 0.20) mg/L
 Statistical Method :
 Untrimmed Spearman-Kärber

 Historical Mean LC50 (warning limits):
 0.11 (0.06, 0.24) mg/L
 Concentration : 0,0.04,0.08,0.16,0.32,0.64 mg/L

 Test Method
 Maxxam's BBY2SOP-00004 is based on the latest versions of EPS 1/RM/9, EPS 1/RM/13, and EPS 1/RM/50.

 Method Deviations :
 None.

Note: The results contained in this report refer only to the testing of the sample submitted. This report may not be reproduced, except in its entirety, without the written approval of the laboratory.

Analyst : Michael Brassil

Wenali

Verified By :

Kimberly Tamaki, BBY QA Coordinator

Date: Dec 17, 20

Dec 17, 2014 01:22 PM

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Maxim A Bureau Vigitus Group Company RESULTS OF RAINBOW TROUT 96 HR LC50 @ 100% Success Through S									ss Through Science*•		
Client :	9844	Corporate	e Client - M	laxxam Bur	naby				dot	Number:	B4B1245
Client Project N	lame & Numbe	er:			•						
Test Result:											
96 hrs LC50 % v	/ol/vol (95% Ci	L): >100 (N/A)	Statistical	Method:	Visual						
Sample Name :	UPSTI	REAM									
Description:		light amber						Sample	Number:	LI1687	-04
Sample Collecte	ed;	Dec 08, 2014 1	0:30 AM	Sampling	Method :		N/A	Site Co	llection:	N/A	
Sample Collecte	ed By:	N/A		Volume R	eceived:		1 x 20CB	Temp.t	Jpon Arriva	al: 11 °C	Storage: 1-7 °C
Sample Receive	d:	Dec 08, 2014 0	2:00 PM	pH:			5.6	Dissolv	ed Oxygen	: 4.9 mg	:/L
Analysis Start :		Dec 09, 2014 1	2:10 PM	Temperat	ure:		14.9 °C	Sample	Conducta	nce: 135 µS	/cm 2
Concentration	Temperature (°C)	Temperature (°C)	Dissolved Oxygen (mg/L)	Dissolved Oxygen (mg/1)	рН	рН	Conductivity uS/cm²	Mortality (#)	Mortality (%)	Atypical Behaviour (#)	
% voi/vol	Initial	96 hrs	Initial	95 hrs	Initial	96 hrs	Initial	96 hrs	96 hrs	96 hrs	
0	15.2	15.0	10.0	9.6	7.1	72	36	0	0	0	
100	15.1	15.2	7.1	9.4	5.9	7.5	134	0	0	0	
Comments :	All fish appea	red and behav	ed normall	v during the	e test.	ليستعمل		l		l	1
Culture/Control/Dilution Water Burnahy Municipal Decklorinated Water											
Hardness (EDTA	Hardness (EDTA Method): 20 mg/L CaCO ₃ Other parameters available on request.										
Test Condition	Test Conditions Test concentration : 0.100 (% vol/vol)										
Organisms per 1	- Vessel :	10		Test Temp	erature :	15 1	1 C	Solution [Depth :		>15 cm
Total # of Organ	nisms Used :	20		Pre-aeratio	n Time :	40 1	nin.	Rate of Pr	e-aeration	:	6.5±1 mL/min/L
Test Volume :		15 L		Vessel Volu	ime :	20L		Test pH A	djusted:		No
Loading Density	:	0.33 g/	L	Photoperia	d:	16:8	8 (light: dark)				
Test Organism	: Ra	inbow Trout	Oncorhync	hus mykiss) Sourc	e:	Lyndon Fish H	atcheries l	י, ה		· <u>····································</u>
Culture Tempe	rature :	15±2 °C	w	eight (Mea	n) +- SD :	0,5	i0±0,13 g	Leng	th (Mean)	+- SD :	4.01 ± 0.35 cm
Culture Water	Renewal :	≥ 1L/min/kg	fish W	eight (Rang	(e) :	0.3	15-0.82 g	Leng	th (Range)	:	3.50 – 4.70 cm
Culture Photop	eriod :	16:8 (light: d	lark)					% M	ortality wit	hin 7 days :	0.25%
Feeding rate an	d frequency :	daily: 3	-5% bioma	iss of trout.	,						
Reference cher	nical:			Zinc			Test Date:			Nov 17,	2014
Test Endpoint 9	96 hrs LC50 (95	% confidence in	iterval) :	0.16	(0.13, 0.20) mg/L	Statistical N	lethod :		Untrim Kärber	med Spearman-
Historical Mean	LC50 (warning	g limits) :		0,11	(0.05, 0.24) mg/L	Concentrati	on : 0,0.04	,0.08,0.16,	,0.32,0.64 m	ng/L
Test Method		Maxxar	n's BBY2SO	P-00004 is	based on t	he lates	t versions of E	PS 1/RM/9	, EPS 1/RM	/13, and EP	S 1/RM/50.
Method Deviati	ions :	None.									
<u>Note:</u> The r entire	esults containe	ed in this report e written aprro	t refer only val of the l	to the test aboratory.	ing of the	sample s	ubmitted. Thi	s report ma	ay not be n	eproduced,	except in its
Analyst:	Michael Bras	sil									
	KA	Imalai									
Verified By :	Kimberly Tan	naki, BBY QA Co	ordinator					I	Date:	Dec 17, 2	014 01:24 PM

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RESULTS OF RAINBOW TROUT 96 HR LC50 @ 100%

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Client : Client Project N	9844 Jame & Numbe	Corporate	e Client - M	laxxam Bur	naby				qof	Number:	B4B1245
<u>Test Result:</u> 96 hrs LC50 % v	rol/vot (95% Ci	L): >100 (N/A)	Statistica	i Method:	Visual						
Sample Name :	DOW	VSTREAM									
Description:		light amber						Sample	Number:	LI1688	3-04
Sample Collect	ed:	Dec 08, 2014 1	0:30 AM	Sampling	Method :		N/A	Site Co	llection:	N/A	
Sample Collect	ed By:	N/A		Volume R	eceived:		1 x 20CB	Temp.	Jpon Arriv	al: 11 °C	Storage: 1-7 °C
Sample Receive	ed:	Dec 08, 2014 0	2:00 PM	pH:			5.7	Dissolv	ed Oxygen	: 5.8 mg	g/L
Analysis Start :		Dec 09, 2014 1	2:00 PM	Temperat	ure :		14.9 °C	Sample	Conducta	nce: 152 µS	5/cm ²
Concentration	Temperature (°C)	Temperature (°C)	Dissolved Oxygen (mg/L)	Dissolved Oxygen (Ing/L)	рН	рН	Conductivity uS/cm²	Mortality {#)	Mortality (%)	Atypical Behaviour (#)	
% vol/vol	Initial	96 hrs	Initial	96 hrs	Initial	95 hrs	Initial	96 hrs	96 hrs	96 hrs	
0	15.2	15.0	10.0	9.6	7.1	7.2	36	0	0	0	1
100	15.1	15.2	7.3	9.4	6.1	7.5	151	0	0	0	
<u>Comments :</u>	All fish appea	red and behav	ed normall	y during the	e test.		L	l		I	ł
Culture/Contro	/Dilution Wat		Burnaby M	unicipal De	chlorinate	d Wate	•				
Hardness (EDT/	Method):	<u></u>	20 mg/L Ci	1001 1001		Otl	ner parameter	s available	on request		
Tort Condition		······	Tort con	contration		100.107					
Omanisms ner	2 (Assal •	10	Test Con	Test Temps	aratuna •	15 -	,1 °C	Solution I	Jonth 1		\15 cm
Total # of Organ	vesser.	20		Pre-peratio	n Time '	20 -	aln -	Data of Pr	o paration		~13 Lili 6 5±1 ml /min/i
Test Volume :		151		Vessel Volu	me.	201			diuctad.	•	No
Loading Density	:	0.33 g/	L	Photoperio	d:	16:8	(light: dark)	(Cat Pri A	ajustea,		110
Test Organism	Ra	inhow Trout	Oncorhync	hue mukler) Sourc		lyndon Fish H	atcharies (
Culture Tempe	±	15+2 *	w	eight (Mea	n) +- 5D *	 חי	0+013 <i>0</i>	i end	th (Mean)	+- SD ·	401+035cm
Culture Water	Renewal :	> 11/min/kg	fish W	eight (Rand	nj. ob.	0.5	5-0.82 a	lena	th (Range)	,	3 50 - 4 70 cm
Culture Photon	eriod ·	16-8 (light: d	lark)	eigne (nune			0.016	% M	artality wit	• hin 7 dave •	0.25%
Feeding rate ar	d frequency :	daily; 1	-5% bioma	iss of trout.				70 (44	Situate the	nar i udya i	0.2378
Reference cher	nical:			Zinc			Test Date:			Nov 17	2014
Test Endpoint 9	6 hrs LC50 (95	% confidence i	nterval) :	0.16	(0.13, 0.20) mg/L	Statistical M	lethod :		Untrim Kärber	med Spearman-
Historical Mean	LC50 (warning	g limits) :		0.11	(0.06, 0.24) mg/L	Concentrati	on : 0,0.04	,0.08,0.16,	0.32,0.64 п	ng/L
Test Method		Маххал	n's BBY2SQ	P-00004 is	based on t	he lates	t versions of E	PS 1/RM/9	EPS 1/RM	/13, and EP	S 1/RM/50.
Method Devlat	onsi	None.									
Note: The rentire	esults contains ety, without th	ed in this report e written aprro	t refer only val of the l	to the test aboratory,	ing of the s	ample s	ubmitted. Thi	s report ma	y not be re	eproduced,	except in its
Analyst :	Michael Øras	511		-							
	K.	Imalci									
Verified By :	Kimberly Tan	naki, BBY QA Co	ordinator					I	Date:	Dec 17, 2	014 01:28 PM

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Your C.O.C. #: G102417

Attention:Hubert Timmenga Timmenga & Associates 292 E 56 Ave Vancouver, BC CANADA V5X 1R3

> Report Date: 2014/12/17 Report #: R1718510 Version: 1 - Final

CERTIFICATE OF ANALYSIS

<u>MAXXAM IOB #: B4B1245</u> Received: 2014/12/08, 14:00

Sample Matrix: Water # Samples Received: 4

Encryption Koy

		Date	Date		
Analyses	Quantity	Extracted	Analyzed	Laboratory Method	Analytical Method
COD by Colorimeter	4	2014/12/09	2014/12/10	BBY6SOP-00024	SM 22 5220 D m
Hardness Total (calculated as CaCO3)	4	N/A	2014/12/17	BBY7SOP-00002	EPA 6020a R1 m
Na, K, Ca, Mg, S by CRC ICPMS (total)	4	2014/12/08	2014/12/17	BBY7SOP-00002	EPA 6020A R1 m
Elements by CRC ICPMS (total)	4	2014/12/11	2014/12/16	BBY75OP-00002	EPA 6020A R1 m
Rainbow Trout 96 hr LC50 @ 100%	4	N/A	2014/12/09	BBY250P-00004	EPS 1/RM/13 m
Tannin & Lignin (Total)	4	N/A	2014/12/11	BRN SOP-00221 R1.0	SM-5550 B

* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.

Share all ner Stance Aktor 19 Dec 2014 11:18:03-08:00

Please direct all questions regarding this Certificate of Analysis to your Project Manager. Shanaz Akbar, Project Manager Ernail: SAkbar@maxcan.ca Phone# [604] 734 7276

Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signaturies", as per section 5.30.2 of ISO/JEC 17625:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

Total Cover Pages : 1 Page 1 of 7

Maxxam Analytics International Corporation o/a Maxam Analytics Burnaby: 4606 Canada Way VSG 1KS Telephone(604) 734-7276 Fav(604) 731-2326



Maxxam Job #: B4B1245 Report Date: 2014/12/17

Timmenga & Associates

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		·····					
Maxxam ID		LI1685	LI1686	LI1687	LI1688		
Complian Data		2014/12/08	2014/12/08	2014/12/08	2014/12/08		
agithing nare		10:30	10:30	10:30	10:30		
COC Number		G100417	G100417	G100417	G100417		
	Units	NORTH	SOUTH	UPSTREAM	DOWNSTREAM	RDL	QC Batch
Demand Parameters							
Chemical Oxygen Demand	mg/L	199	171	67	70	10	7747711
MISCELLANEOUS	·				.		
Tannins and Lignins	mg/L	9.09	8.18	4.08 (1)	3.65	0.10	7750831
Rainbow Trout Bioassay							
LC50	% vol/vol	ATTACHED	ATTACHED	ATTACHED	ATTACHED	N/A	7756260
RDL = Reportable Detection I	imit				•		
N/A = Not Applicable					•		
(1) Matrix Spike invalid due to	o high sampl	e concentration.					
		the second s	the second se				

RESULTS OF CHEMICAL ANALYSES OF WATER

Max <u>'Xam</u>

Məxxam Job #: B4B1245 Report Date: 2014/12/17

Success Through Science»

Timmenga & Associates

Maxxam ID		L11685	L11686	U1687	LJ1688		
Sampling Date		2014/12/08	2014/12/08	2014/12/08	2014/12/08		
Sampung Date		10:30	10:30	10:30	10:30		
COC Number		G100417	G100417	G100417	G100417		
	Units	NORTH	SOUTH	UPSTREAM	DOWNSTREAM	RDL	QC Batch
Calculated Parameters							
Total Hardness (CaCO3)	mg/L	129	75.7	60.0	64,4	0.50	7746841
Total Metals by ICPMS		4			L		
Total Aluminum (Al)	ug/L	868	791	752	647	3.0	7750767
Total Antimony (Sb)	ug/L	<0.50	<0.50	<0.50	<0.50	0.50	7750767
Total Arsenic (As)	ug/L	3,08	1.24	1.21	1.29	0.10	7750767
Total Barium (Ba)	ug/L	36.8	27.6	25.4	24.8	1.0	7750767
Total Beryllium (Be)	ug/L	<0.10	<0.10	0,11	<0.10	0.10	7750767
Total Bismuth (Bi)	ug/L	<1.0	<1.0	<1.0	<1.0	1.0	7750767
Total Boron (B)	ug/L	<50	<50	<50	<50	50	7750767
Total Cadmium (Cd)	ug/L	0.063	0,037	0.138	0.111	0.010	7750767
Total Chromium (Cr)	ug/L	2.7	1.8	1.7	1.6	1.0	7750767
Total Cobalt (Co)	ug/L	5.79	2.22	5.15	5.03	0,50	7750767
Total Copper (Cu)	ug/L	5.19	12.6	6.03	5.76	0.50	7750767
Total Iron (Fe)	ug/L	9330	4990	1310	1280	10	7750767
Total Lead (Pb)	ug/L	1.20	1.44	0.66	0.56	0.20	7750767
Total Lithium (Li)	ug/L	<5.0	<5.0	<5.0	<5.0	5.0	7750767
Total Manganese (Mn)	ug/L	746	275	109	145	1.0	7750767
Total Mercury (Hg)	ug/L	<0.050	<0.050	<0.050	<0,050	0.050	7750767
Total Molybdenum (Mo)	ug/L	<1.0	<1.0	<1.0	<1.0	1.0	7750767
Total Nickel (Ni)	ug/L	12.3	4.9	11.1	11.6	1.0	7750767
Total Selenium (Se)	ug/L	0.25	0.12	0.10	<0.10	0.10	7750767
Total Silicon (Si)	ug/L	11700	7990	5580	5140	100	7750767
Total Silver (Ag)	ug/L	<0.020	<0.020	<0.020	<0.020	0.020	7750767
Total Strontium (Sr)	ug/L	167	105	78.3	91.4	1.0	7750767
Total Thallium (11)	ug/L	<0.050	<0.050	<0.050	<0.050	0.050	7750767
Total Tin (Sn)	ug/L	<5.0	<5.0	<5.0	<5.0	5.0	7750767
Total Titanium (Ti)	ug/L	20.7	11.7	7.0	5,6	5.0	7750767
Total Uranium (U)	ug/L	0.12	<0.10	0.14	0.14	0.10	7750767
Total Vanadium (V)	ug/L	7.4	<5.0	<5.0	<5,0	5.0	7750767
Total Zinc (Zn)	ug/L	24.8	14.8	26.6	67,9	5.0	7750767
Total Zirconium (Zr)	ug/L	0.83	<0.50	<0.50	0.52	0,50	7750767
Total Calcium (Ca)	mg/L	31.9	20.6	15.3	16,1	0.050	7746842
Total Magnesium (Mg)	mg/L	11.9	5.89	5.28	5.88	0.050	7746842
Total Potassium (K)	mg/L	7.20	4.74	5.97	7.15	0.050	7746842
Total Sodium (Na)	mg/L	17.7	3.57	5.33	6.72	0.050	7746842
Total Sulphur (S)	mg/L	18.3	4.8	9.6	13.4	3.0	7746842
RDL = Reportable Detection L	imit						

CSR TOTAL METALS IN WATER (WATER)

Page 3 of 7

Marzam Anelytics International Corporation of a Alasonic Analytics Burnaby: 4606 Canada Way VSG 1K5 Telephone(604) 734-7276 Fax(604) 731-2346

Max am

Maxxam Job #: B4B1245 Report Date: 2014/12/17 Timmenga & Associates

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GENERAL COMMENTS

Each temperature is the average of up to three cooler temperatures taken at receipt

Package 1 11.3°C

Results relate only to the items tested.

Page 4 of 7 Marzam Analytics antennitional Corporation of a Marzam Analytics Barably: 1605 Casada Way 1/3G 31/5 Tekephone(604) 734-7276 Fact004) 731-2216

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Page 15



QUALITY ASSURANCE REPORT

Məlrix Spike Spiked Blank Method Blank RPD QC Batch Parameter Date % Recovery | QC Limits % Recovery QCLimits Value Units Value (%) QC Limits 7747711 Chemical Oxygen Demand 2014/12/10 95 80-120 107 80-120 <10 mg/L NC 20 7750767 Total Aluminum (Al) 2014/12/16 107 80~120 116 80-120 <3.0 ug/L NC 20 7750767 Total Antimony (Sb) 2014/12/16 109 80-120 112 80-120 <0.50 ug/L NC 20 2014/12/16 7750767 Total Arsenic (As) 100 80-120 105 80-120 <0.10 og/L NC 20 7750767 Total Barium (Ba) 2014/12/16 80-120 102 104 80 - 120 <1.0 КC 20 ug/L 7750767 Total Beryllium (Be) 2014/12/15 104 80-128 105 80-120 <0.10 NC 20 ug/L 7750767 Total Bismuth (Bi) 2014/12/16 108 80~120 103 80~120 <1.0 NC 20 ug/L 7750767 Total Boron (8) 2014/12/16 <50 ug/L NC 20 7750767 Total Cadmium (Cd) 2014/12/16 103 60-120 102 80-120 <0.010 ug/L NC 20 Total Chromlum (Cr) 2014/12/16 7750767 112 80-120 101 80-120 <1.0 Ug/L NC 20 7750767 Total Cobalt (Co) 2014/12/16 105 80 - 120 100 80-120 <0.50 NC 20 ug/L 7750767 Total Copper (Cu) 2014/12/15 105 80 - 120 110 80-120 <0.50 ug/L NC 20 7750767 Total Iron (Fe) 2014/12/16 NC 80-120 113 80-120 <10 ug/L 11 20 7750767 Total Lead (Pb) 2014/12/16 107 80-120 103 80-120 <0.20 ug/Լ NC 20 7750767 Total Ulhium (U) 2014/12/15 80~120 102 102 80-120 <5.0 NC 20 ug/L 7750757 Total Manganese (Mn) 2014/12/15 NC 80~120 80-120 <1.0 20 108 5,9 ug/L Total Mercury (Hg) 7750767 2014/12/16 113 80 - 120 114 80-120 <0.050 ug/L 7750767 Tatel Malybdenum (Mo) 2014/12/16 104 80-120 115 80-120 <1.0 ug/L NC 20 7750767 Total Nickel (NI) 2014/12/15 104 80-120 105 80 - 120 <1.0 ug/L NC 20 7750767 Total Selenium (Se) 2014/12/16 98 80-120 103 80~120 <0.10 ug/L NC 20 7750767 Total Silicon (Si) 2014/12/16 <100 13 20 ug/L Total Silver (Ag) 7750767 2014/12/16 90 80-120 92 80-120 <0.020 NC 20 ug/L 7750767 Total Stronburn (Sr) 2014/12/16 NC 80-120 104 80 - 120 <1.0 ug/L 10 20 7750767 Total Thailium (TI) 2014/12/16 100 80-120 92 80-120 <0.050 Ug/L NC 20 2014/12/16 7750757 80-120 Total Tin (Sn) 107 114 80-120 NC <5.0 ug/L 20 7750767 Total Titantum (TI) 2014/12/16 80-120 84 80-120 20 99 <5.0 NC ug/L 7750767 Total Uranium (U) 2014/12/16 105 80-120 100 80-120 <0.10 NC 20 ug/L 7750767 Total Vanadium (V) 2014/12/16 103 80-120 98 80-120 <5.0 υg/L NC 20 7750767 Tatal Zinc (Zn) 2014/12/16 NC 80~120 101 80-120 <5.0 Ug/L NC 20 7750767 Total Zirconium (Zr) 2014/12/16 <0.50 ug/L NC 20

Page S of 7

Nycks International Desperation of a Manum Analytics Instalty. 6204 Canada Way 1955 313 Telephone (1944) 7,14-7276 FuerKey 731 9,316

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Timmenga & Associates



QUALITY ASSURANCE REPORT(CONT'D)

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Timmenga & Associates

Keport Date: 4	014/12/17									
			Matrix	Natrix Spike Spiked Blank		Blank	Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QCLimits	Value	Units	Value (%)	QC Limits
7750831	Tannins and Lignins	2014/12/11	NC	80~120	95	8Q-12Q	<0.10	mg/L	0.78	20
Duplicate: Pa	ired analysis of a separate portion of the same sample.	Used to evaluate	the variance in t	ha measurem	ent.					
Matrix Spike:	Matrix Spite: A sample to which a known amount of the analyte of Interest has been added. Used to evaluate sample matrix Interference.									
Spiked Blank;	A blank matrix sample to which a known amount of the	enalyte, usually f	rom a second so	urce, has bee	n added. Used (n evakate me	thod accuracy.			
Method Blant	t: A blank matrix containing all reagents used in the ana	lytical procedure.	Used to identify	y laboratory c	antamination,					
NC (Matrix Sp recovery calo	nice): The recovery in the matrix spike was not calculated ulation (matrix spike concentration was less than 2x that	l. The relative diff of the native san	ference betweer nple concentrati	n the concents ion).	ation in the par	ent semple an	d the spiked ar	nount was to	oo small to perm	it a reliable
NC (Duplicate	RPD): The duplicate RPD was not calculated. The conce	ntration in the sa	mple and/or du	picate was to	o low to permit	a reliable RPD	calculation (on	e or both sa	mples < 5x RDL).	

Page 6 of 7

a 1139 152 213 Telephone(144) 734-7298 Par(464;731-2358

-1000 Cocada Viry, Burney, BC Cocada Viry, Burney, BC Cocada Viry	a liss ne coil 271/278 tol Free L (671 Fee L
Involar To: Park Products Provided Products Provided Products Provided Prov	Report To: PO 4: HUbert Tim MCM1 Octobork Project - Tim MCM1 Project - Tim MCM1 No Project - Tim MCM1 Project - Tim MCM1 Project - Tim MCM1 No Project - Tim MCM1 Project - Tim MCM1 Project - Tim MCM1 <
REGULATORY REQUIREMENTS SERVICE REQUESTED:	
CONE " (5 cops for most less) DD Water Quility FN3H (Please context the lub) Once 1 Day Once 1 Day DRIVEND WATER Dati Description Special Instructions: Beham Cooler Ship Sample Bottles (please specify) #	
Sample Identification Identification Sample Data/Time S	
1 NORTH I Downey De D 2 South I Water Do 30 3 UP Streem I Downater am 4 Downestream I Downater am	
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THE SEARCH STREAM STREA	UT 2014 12 10 14:00 Building 13 10 11 US Visit 10 10 0000

McTavish Resource & Management Consultants Ltd.

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Report to Committee

To: General Purposes Committee

From: James Cooper, Architect AIBC Director, Building Approvals

> Barry Konkin Director, Policy Planning

 Date:
 September 21, 2020

 File:
 08-4430-01/2020-Vol 01

Re: Referral Response: Regulating Fencing Materials

Staff Recommendations

- 1. That Richmond Zoning Bylaw No. 8500, Amendment Bylaw 10122, respecting changes to fence regulations (including the prohibition of masonry as a permitted fence material for lands regulated under Section 14.1 of the Agriculture Zone), be revised as outlined in this report.
- 2. That Richmond Zoning Bylaw No. 8500, Amendment Bylaw 10122, respecting changes to fence regulations (including the prohibition of masonry as a permitted fence material for lands regulated under Section 14.1 of the Agriculture Zone), as revised, be given second reading.
- 3. That staff be directed to maintain the current bylaw regulations for fence materials including masonry in all zones in urban areas that permit single detached residential uses.

James Cooper, Architect AIBC Director, Building Approvals

Barry Konkin Director, Policy Planning

BK/JC:bk Att. 1

REPORT CONCURRENCE						
ROUTED TO:	CONCURRENCE		CONCURRENCE OF GENERAL MANAGER			
Law		V	be Erceg			
SENIOR STAFF REPORT REVIEW		INITIALS: CJ	APPROVED BY GAO			

Staff Report

Origin

This staff report responds to two separate Council referrals.

At the April 14, 2020 Council meeting, Richmond Zoning Bylaw No. 8500, Amendment Bylaw 10122 received first reading, and the following referral was passed:

That staff examine the use of concrete, masonry, and metal products for fencing and/or walls, including form, structure, content of materials, and report back.

At the May 19, 2020 Public Hearing for Richmond Zoning Bylaw No. 8500, Amendment Bylaw 10122, the following referral was passed by Council:

That Richmond Zoning Bylaw 8500, Amendment Bylaw 10122 be referred back to staff to remove the use of masonry materials in the ALR within the Zoning Bylaw.

This report responds to these referrals, and presents proposed amending bylaws to Richmond Zoning Bylaw No. 8500, and to the City's Building Regulation Bylaw No. 7230 to provide updated regulations regarding permitted fence construction and materials for development on lands regulated by Section 14.1 of the Richmond Zoning Bylaw No. 8500 - the Agriculture Zone. This report also recommends that no changes to fence regulations and materials in all zones in urban areas that permit single detached residential use be considered.

This report supports Council's Strategic Plan 2018-2022 Strategy #6 Strategic and Well-Planned Growth:

Leadership in effective and sustainable growth that supports Richmond's physical and social needs.

6.1 Ensure an effective OCP and ensure development aligns with it.

Analysis

Based on the Council referrals listed above, staff propose that Council endorse the following:

• Revised Bylaw 10122 to amend Richmond Zoning Bylaw No. 8500 to regulate fence construction and materials, with specific regulations for lots regulated under Section 14.1 of Richmond Zoning Bylaw No. 8500 - the Agriculture Zone.

This report also recommends that following a Public Hearing for revised Bylaw 10122, Council consider final adoption to Bylaw 10144 to amend Building Regulation Bylaw No. 7230 to address a number of construction and permit issues associated with fences. This Bylaw was previously given first, second and third readings, at the April 14, 2020 Council meeting. No Public Hearing is required for this bylaw amendment.

Staff have reviewed the referral from the April 14, 2020 Council meeting regarding regulation of fence materials in all zones in urban areas that allow single detached residential use, and are of

the opinion that there is little advantage in prohibiting masonry, brick, stone and stone-like materials, and decorative metal as fencing materials in all zones in urban areas that permit single detached residential use. This is largely due to fence durability of masonry fences and single detached house design trends which utilize a wide range of fence materials. It is recommended that no additional changes to fence regulations for properties in urban areas that permit single detached residential use be considered.

Should Council wish to proceed with regulations for all zones in urban areas which permit single detached residential uses, Council direction on the scope and nature of regulatory changes desired would be appropriate.

For other residential development (i.e., multi-family), the character of fencing type, form, character and height are addressed in conjunction with applicable design guidelines and Development Permit requirements as per the Official Community Plan; moreover, fence character is secured through a Rezoning application, and subsequent Development Permit. The development application review process provides the opportunity for staff to ensure that fencing is consistent with endorsed design guidelines.

Staff have conducted an environmental scan of fencing regulation in nearby municipalities (Vancouver, Burnaby, New Westminster, Surrey and Delta) and found that none of these jurisdictions currently regulate materials for fencing. This is noted in an attachment to the staff report dated March 5, 2020 (Attachment 1).

Local Government Act and Fence Regulation

As context for the discussion of fence character and materials, staff note that it is unlawful for the City to prohibit a land owner to install a fence along any property line for securing their property, but as per the *Local Government Act*, Council is able to regulate these structures, including materials, siting, height and setbacks. Further to these *Local Government Act* powers, the City can regulate fence materials, so long as regulations do not conflict with the guidance of the *BC Building Act*.

Proposed Bylaw Amendments for Agriculture Zone (Bylaw 10122)

Fencing Regulations

As directed by Council at the May 19, 2020 Public Hearing, staff have made amendments to proposed Bylaw 10122, to provide new regulations for fencing construction and materials in Section 14.1 of Richmond Zoning Bylaw No. 8500 – the Agricultural Zone. Specific amendments proposed include:

• Removal of the provision to allow masonry fencing and any associated concrete and metal decorative elements along the portion of the farm home plate that fronts onto the closest road. The use of below ground concrete (poured concrete footings) shall be limited to provision of structural stability only. This will ensure that fences in the Agriculture Zone are constructed of a limited palette of materials, which capture the agrarian character of these areas.

September 21, 2020

• Fencing for lands regulated by Section 14.1 of Richmond Zoning Bylaw 8500 – the Agriculture Zone – is limited to fencing of an agrarian character, as described in the previous staff report (Attachment 1). Masonry piers or gate posts will also not be permitted.

The recommended bylaw amendment to remove provisions regarding use of masonry for fences along the farm home plate frontage (as recommended in the staff report dated March 5, 2020 in Attachment 1) specifically addresses the comments and direction provided by Council at the May 19, 2020 Public Hearing.

As presented to Council and considered at the Public Hearing on May 19, 2020, other amendments such as limiting fences to agrarian materials, as well as height measurement for fences have been retained in revised Richmond Zoning Bylaw No. 8500 Amendment Bylaw 10122.

Additional Bylaw Amendments in all zones in urban areas that permit single detached residential use (Not Recommended)

Staff are of the opinion that there is little advantage in prohibiting masonry, brick, stone and stone-like materials, and decorative metal as fencing materials in all zones in urban areas that permit single detached residential use. It is recommended that no changes to fence regulation in all zones in urban areas that permit single detached residential use be considered.

Staff would like to provide some information that Council might bear in mind when considering regulations for fences in all zones in urban areas that permit single detached residential use.

Fence durability

There are positive attributes associated with the use of other more durable materials than wood for fencing. With the damp climate of the Lower Mainland, the life span of a wooden fence can be reduced, particularly in recent years, as first growth cedar for fencing is scarce, and the more open grain of contemporary second growth cedar products is less resilient and more susceptible to rot.

Masonry, including brick and stone, or a combination of these materials, is often used in combination with metal bars or pickets spanning between piers offers a fence with a longer lifespan, reducing long-term costs to the homeowner. With proper construction methods and detailing – including soil compaction under piers / pillars, masonry, wood and metal fences will not sag or collapse.

Single Detached House Design Trends

The use of masonry and like material for fences has become a common aspect of single detached dwelling construction. Regulation of permitted fencing materials would be a unique regulation in the Lower Mainland and would limit the range of personal choice for homeowners and the design community. This may result in less diversity and opportunity to provide innovative solutions tailored to homeowners and fence style and materials compatible with existing neighbourhood character. There may be opposition from the building community and homeowners arising from such a change, as limiting the choice of materials for fencing in single

September 21, 2020

detached zones also has potential to result in homogeneity in fence materials and streetscape, reducing the variation and character achieved by allowing a wider palette of materials.

Staff recommend that no changes to fence materials in all zones in urban areas that permit single detached residential use be considered. In order to ensure that fences – including masonry - are well built and constructed properly, staff recommend approval of Building Regulation Bylaw No. 7230, Bylaw Amendment 10144 which will require a Building Permit application for all fences and elements requiring a concrete foundation in order to validate proper construction. Currently, Building Regulation Bylaw No. 7230 does not require an application for any fence construction.

Should Council wish to consider options for regulation of fences in all zones in urban areas that permit single detached residential use, staff have identified two options for Council consideration for regulating fence materials in all zones which permit single detached residential use.

1. Status quo (Recommended):

Staff have reviewed the issue of materials regulation for fences in all zones in urban areas that permit single detached residential use, and are of the opinion that with better construction methods as required by application for Building Permit, the amendments provided in Building Bylaw No. 7230 Amendment Bylaw10144, unsightly fences can be avoided, while preserving the opportunity for homeowners' personal design choice.

2. Amend all zones which allow single detached residential use to prohibit masonry fences (*Not Recommended*):

Should Council wish to proceed with regulations for all zones in urban areas which permit single detached residential uses, staff would request Council direction on the scope and nature of regulatory changes desired. If so directed, staff will report back with recommended bylaw changes.

Amendments to Richmond Building Regulation Bylaw No. 7230 – Amendment Bylaw 10144

The attached Richmond Building Regulation Bylaw No. 7230, Amendment Bylaw 10144 is the same bylaw that was presented to Committee and Council previously. This bylaw received first, second, and third reading on April 14, 2020, and may be considered for final adoption, once Richmond Zoning Bylaw No. 8500, Amendment Bylaw 10122, has been adopted. There are no changes proposed to Bylaw 10144, but there are aspects of this bylaw which staff feel are important to note again at this time.

Definition of Structure

The proposed Building Regulation Bylaw No. 7230, Amendment Bylaw 10144 includes a revised definition of 'structure' which captures a masonry wall or fence, ensuring that a Building Permit is required for these structures. As the recommended amendments in this report deal with fencing in those zones which allow single detached residential use, this amendment is still required to ensure that walls and fences in multi-family residential and other zones will require a Building Permit.

Building Permit Requirements

While the amendments to Richmond Zoning Bylaw No. 8500 proposed in this report will prohibit the construction of masonry fences on lands regulated by Section 14.1 of the Richmond Zoning Bylaw 8500 – the Agriculture Zone, staff recommend that a Building Permit be required for a masonry fence in all zones that allow single detached residential use. This will ensure that masonry fences in all zones in urban areas that allow single detached residential uses are constructed properly and safely.

In addition, it should be noted that if Council approves the recommended amendments to fence regulations for properties regulated under Section 14.1 of the Richmond Zoning Bylaw 8500 – the Agriculture Zone – as outlined in this report, there is still an opportunity for property owners to apply for a Development Variance Permit (DVP) for fencing regulations.

Further, if Council wishes to prohibit masonry and metal for fences in all zones in urban areas that permit single detached residential use, it would not preclude a homeowner from applying for a DVP to permit a masonry fence to be constructed.

Financial Impact or Economic Impact

None.

Conclusion

As directed by Council at the May 19, 2020 Public Hearing, staff have reviewed revisions to fencing regulations, including specific regulations for fencing for properties located within the Agriculture Zone. Richmond Zoning Bylaw No. 8500, Amendment Bylaw 10122 has been revised to remove any provisions to allow masonry fencing in this zone. All fence materials in the Agriculture Zone will be of an agrarian nature.

It is recommended that Richmond Zoning Bylaw No. 8500, Amendment Bylaw 10122, be revised to include the prohibition of masonry as a permitted fence material for lands regulated under Section 14.1 of the Agriculture Zone, and be given second reading. Staff are of the opinion that the regulation of fencing materials in all zones in urban areas that permit single detached residential use has a number of disadvantages, and would recommend that no changes be made at this time.

Should Council wish to proceed with regulations for all zones in urban areas which permit single detached residential uses, staff would request Council direction on the scope and nature of regulatory changes desired. If so directed, staff will report back with recommended bylaw changes.

September 21, 2020

- 7 -

In order to regulate the construction of fences as described in this report, it is further recommended that Building Regulation Bylaw No. 7230, Amendment Bylaw 10144, be adopted following the adoption of Richmond Zoning Bylaw No. 8500, Amendment Bylaw 10122, as revised.

An Drick

Serena Trachta Manager, Plan Review

BK/JC:bk

1.

John Hopkins Program Manager, Policy Planning

Attachment 1: Staff Report Dated March 5, 2020

Attachment 1



To Council_ Apr 14, 2020

Report to Committee

To Planning - Apr 7,2020

	Barry Konkin Director, Policy Planning		010144
	Director, Building Approvals		01 12-9060-70-010122
From:	James Cooper, Architect AIBC	File:	08-4430-01/2020-Vol
To:	Planning Committee	Date:	March 5, 2020

Staff Recommendation

- 1. That Richmond Zoning Bylaw No. 8500, Amendment Bylaw No. 10122, respecting changes to fence regulations, be introduced and given first reading, and
- 2. That Building Regulation Bylaw No. 7230, Amendment Bylaw No. 10144, requiring a permit for fences constructed with concrete foundations, be introduced and given first, second and third readings.

James Cooper, Architect AIBC Director, Building Approvals (604-247-4606)

Barry Konkin Director, Policy Planning (604-276-4139)

Att. 4

REPORT CONCURRENCE					
ROUTED TO:	CONCURRENCE	CONCURRENCE OF GENERAL MANAGER			
Law Finance	d d	he Eneg			
SENIOR STAFF REPORT REVIEW	INITIALS:	APPROVED BY CAO			

Staff Report

Origin

At the November 5, 2019 Planning Committee meeting, the following referral motion was passed:

That staff review Richmond Zoning Bylaw No. 8500 to examine:

- 1) regulations for building fences and walls, including the definition of a fence and a wall;
- *2) materials that can be used, including the possible elimination of masonry and iron; and*
- 3) tree planting restrictions;

and report back.

This report supports Council's Strategic Plan 2018-2022 Strategy #6 Strategic and Well-Planned Growth:

Leadership in effective and sustainable growth that supports Richmond's physical and social needs.

6.1 Ensure an effective OCP and ensure development aligns with it.

The referral was a result of public concerns regarding unpermitted construction of a concrete planter along the 181 m (594 ft) frontage of a property on No. 2 Road, which is zoned "Agriculture (AG1)." This report responds to the referral by providing information on current fence regulations in the City of Richmond and presents a bylaw for Council's consideration which would amend current fence regulations.

After investigating provisions to regulate tree planting, staff have determined that there are legal issues regarding imposition of regulations for fencing in the Agricultural Land Reserve (ALR) that are more appropriately addressed by the City Solicitor in a separate memorandum to Council offering legal advice on the matter.

Findings of Fact

Current Fence Regulations

Fences and walls are different types of structures. Richmond Zoning Bylaw No. 8500 and Building Regulation Bylaw No. 7230 contains existing interpretations and regulations for fences. Currently, both Richmond Zoning Bylaw No. 8500 and Building Regulation Bylaw No. 7230 provide a definition of 'fence,' but not 'wall.'

Bylaw No. 8500 Section 3.4 defines a fence:

"Fence means a structure used as an enclosure or for screening purposes around all or part of a lot."

Bylaw No. 7230 Section 3.4 defines a fence:

"Fence means a structure bounding an area of land designed to limit access to or from the area or to screen the area from view."

Fence regulations are provided in Section 6 of Richmond Zoning Bylaw No. 8500 and limit fence heights along arterial roads and in residential and non-residential zones. Barbed wire, razor wire and barbed tape obstacle, and electrified wire are prohibited in residential zones and permitted in other zones under certain conditions. Other materials, including masonry and iron (ornamental metal), are not currently regulated. See Attachment 1 for an excerpt of Richmond Zoning Bylaw No. 8500 current fence regulations.

In addition, in a report to committee dated June 6, 2017, staff noted that it is unlawful for the City to prohibit front yard fences or gates, but as per the *Local Government Act*, Council is able to regulate these structures, including siting, height, materials and setbacks.

Fence Regulation Research

In examining Richmond's fence regulations, staff have conducted an environmental scan of fence requirements in other municipalities in and around Metro Vancouver (Attachment 2). The results of the scan indicate the following:

- Some municipalities do not define 'fence'; however, some definitions of 'structure' include fences.
- Most municipalities do not define 'wall.'
- All municipalities limit fence height in residential zones.
- Some municipalities limit fence height in agricultural zones.
- Most municipalities do not regulate fence material with the exception of Coquitlam which has prohibited unadorned cast in place concrete which is termed "wall" and not fence.

Following the environmental scan, staff examined the City's current regulations and identified a series of recommended bylaw amendments for Council's consideration. The proposed amendments are included in Bylaw No. 10122.

Analysis

The public and Council recently raised concerns regarding concrete supported structures on agriculturally zoned properties and how such structures are regulated by existing zoning definitions. In order to address the November 5, 2019 Planning Committee referral, staff have examined existing fencing regulations and related definitions in Richmond Zoning Bylaw No. 8500, to identify areas where these regulations could be improved.

Based on the analysis, it is recommended that regulations pertaining to fence construction in agriculture zones be amended to achieve the intended agrarian character of these areas. Ornate or masonry style fences will be prohibited in agricultural zones outside of the street frontage associated with the principal dwelling. Fencing materials outside of the street frontage shall be agrarian in character consisting of materials and dimensions as defined in this report. This report also proposes amendments to clarify how the vertical height of fences is measured. Proposed Bulletins 43 and 44 (Attachments 3 and 4) have been created to clarify this information for the public.

Amendments to Richmond Zoning Bylaw No. 8500

Staff have identified opportunities to improve regulations to provide more clarity regarding fencing. The following amendments to Richmond Zoning Bylaw No. 8500 are recommended:

Proposed Amendments		Comments	
Height, fence	Means the vertical distance between the average finished site grade measured at a point 1.0 m from both sides of the property line to the top of the fence.	 Replacement of 'average landscape grade' with 'average finished site grade.' Finished site grade is consistent with the language in the zoning bylaw and is defined. Replacement of 'both sides of the fence' to 'both sides of the property line.' This accounts for fences that may be built 1.0 m or more from the property line. This amendment will be applicable in all zones. 	
Agrarian Materials, fence	 The following are suitable materials and design for construction of agrarian fencing in the agriculture zones. Wood Post and Rail, minimum spacing between horizontal members shall be 0.3 m; a. Diagonal cross bracing permitted if bracing between posts; Metal post and rail, minimum 0.3 m spacing between horizontal members; Wood Post and welded wire mesh; Steel Post and welded wire mesh; Wood pickets, 8 cm minimum distance between pickets. 	- No current definition exists.	

Amendments to Section 3.4 – Use and Term Definitions (Applicable to All Zones)
Amendments to Section 6.8 – Fence Limitations in Residential Zones

Proposed /	Amendments	Comments
6.8.3	Fence height shall be measured at the average finished site grade between points measured 1.0 m from both sides of the property line to the top of the fence.	- Replacement of 'measured at the point at which the fence intersects the ground' to reflect the same fence height measurements as prescribed in the definition of 'height, fence.'

Amendments to Section 6.9 – Fence Limitations in All Other Zones

Proposed Am	endments	Comments
6.9.1	 No fence constructed in the agricultural zones and site specific zones that govern farm businesses shall exceed 2.4 m in height, with the following exceptions: a) Fence height shall not exceed 2.0 m where the fence is located in the side yard of a single detached housing unit; b) Fence height shall not exceed 1.2 m where the fence is located in the front yard (or yard fronting a public way) of a single detached housing unit. 	- Amend the height limitations from 2.0 m to 1.2 m in the front yard of a single detached housing unit on agricultural properties, to create consistency of height in the front yard.
6.9.3	Fence height shall be measured at the average finished site grade 1.0 m from both sides of the property line to the top of the fence.	 Addition of the same fence height provision in Section 6.8.3 to regulate fence height in non- residential zones as well.
6.9.4	 The following are suitable materials and design for construction of agrarian fencing in the agriculture zones. a) Wood Post and Rail, minimum spacing between horizontal members shall be 0.3 m; Diagonal cross bracing permitted if bracing between posts; b) Metal post and rail, minimum 0.3 m spacing between horizontal members; c) Wood Post and welded wire mesh; d) Steel Post and welded wire mesh; e) Wood pickets, 8 cm minimum distance between pickets. 	- No current definition exists.

6.9.5	In agricultural zones, - Addition of provisions to regulate
	a) The fence shall be constructed of materials limited to fence agrarian materials, to the satisfaction of the Director, Building Approvals.
	 Any gate providing farm access (even when such gate also provides access to a single detached housing unit) is required to comply with the agrarian materials.
	 c) Masonry fences shall only be permitted along property lines fronting a public road. i. No masonry fence or its above grade components shall exceed 1.2 m in height and 0.3 m in width. Height to include an additional 0.15 m appurtenance allowance for piers spaced no closer than 3.65 m edge to edge.
	ii. No masonry fence below grade components shall exceed 0.43 m in width of fence footing and 0.8 m square for pier footings.
	 iii. Total masonry fence length shall be further limited to the width of the single detached dwelling fronting the public road plus 6 m.

Amendments to Section 4 – General Development Regulations (4.12 Projections into Yards in All Zones)

Proposed Amendments	Comments
4.12.1 No building, structure, feature or portion thereof shall be developed, used, occupied, constructed, erected, modified, converted, enlarged, reconstructed, altered, placed, maintained or added to within any required yard except as follows, provided that they meet the provisions of the British Columbia Building Code. The exceptions below do not apply to the 4 m side yard setback in properties with an AG1 agricultural zone when that same setback is used to accommodate farm access."	 Amend the projections into side yards such that they do not apply to farm access roads that are 4 m or less.

In order to provide clarity, Staff have created the following diagrams to illustrate some aspects of the Amendments. These illustrations will be contained in proposed Bulletins 43 & 44.





Amendments to Building Regulation Bylaw No. 7230

Current Building Regulation Bylaw No. 7230 does not require a permit for a fence. In order to enforce proposed limitations on the footing sizes as recommended in Richmond Zoning Bylaw No. 8500, and encourage applicants to limit the use of concrete, the following amendment to Building Regulation Bylaw No. 7230 is recommended to require that a building permit be secured for fencing with a concrete foundation.

Amendments to Part SIXTEEN – INTERPRETATION

Proposed Am	endments	Ch	anges to Existing Provisions
Structure	Means all or part of a construction, whether fixed to, supported by, sunk into, or located in land, water or airspace, and includes freestanding sign structures over 3.0 m in height and supporting structures for such signs, and includes a sewage holding tank, but excludes landscaping, paving, a fence without concrete foundations, or a retaining wall under 1.0m in height.	-	Clarifying that a fence with a concrete foundation requires a permit.

Financial Impact

None.

Conclusion

This report responds to a Council referral to examine regulations for fences and fence materials, particularly masonry. Staff recommend regulating fence heights and materials in agricultural zones. It is recommended that Richmond Zoning Bylaw No. 8500, Amendment Bylaw No. 10122 be introduced and given first reading and that Richmond Building Bylaw No. 7230, Amendment Bylaw No. 10144 be introduced and given first, second and third readings.

Serena Trachta Manager, Plan Review (604-204-8515)

John Hopkins Senior Policy Coordinator (604-276-4279)

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Attachment 1: Excerpt from Richmond Zoning Bylaw No. 8500 of Current Fence Regulations Attachment 2: Summary Table of Environmental Scan Attachment 3: Building Bulletin 43 Residential Zones: Fence Heights Attachment 4: Building Bulletin 44 Agricultural Zones: Fence Heights and Materials

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Current Fence Regulations in Richmond Zoning Bylaw No. 8500

Section 3.4 – Use and Term Definitions

Fence	Means a structure used as an enclosure or for screening purposes around all or part
	of a lot.

- **Height, fence** Means the vertical distance between the average landscape grade 1.0 m from both sides of the fence to the top of the fence.
- Screen Means a continuous wall, fence, compact evergreen hedge or combination thereof, supplemented with landscape planting, which would effectively screen from view the area that it encloses.
- **Structure** Means a construction of any kind whether fixed to or supported by or sunk into land or water including towers, flag poles, swimming pools, docks, signs and tanks, but does not include areas of hard-surfacing.

Section 6 - Landscaping and Screening

6.2 General

6.2.9 For a lot fronting onto a local arterial road or a major arterial road, a solid masonry or brick fence up to a maximum fence height of 1.2 m is permitted within the required front yard setback area, but any mechanical or manual gate must be located at least 6.0 m from the front lot line.

6.8 Fence Limitations in Residential Zones

- 6.8.1 No fence constructed in residential zones and site specific zones that include residential uses shall exceed 2.0 m in height. Furthermore, a fence located in the front yard, or any part of a yard between the principal building and the front lot line, shall not exceed 1.2 m in height.
- 6.8.2 Where a fence is located along a lot line that abuts:

a) a zone other than a residential zone; or

b) a site specific zone that governs residential uses;

the maximum fence height shall be 2.4 m along that lot line only.

- 6.8.3 Fence height shall be measured at the point at which the fence intersects the ground.
- 6.8.4 An outdoor play space provided on a property zoned for residential child care use shall be enclosed by a solid fence of a minimum height of 1.2 m but not exceeding a maximum height of 2.0 m. The minimum and maximum heights apply to all fences enclosing the outdoor play space, including fences located in the front yard of the zoned property, notwithstanding Section 6.8.1.

6.8.5 The use of barbed wire, electrified wire, razor wire and barbed tape obstacles as fencing material is prohibited in all the residential zones or site specific zones that govern single detached housing.

6.9 Fence Limitations in All Other Zones

6.9.1 No fence constructed in the agricultural zones and site specific zones that govern farm businesses shall exceed 2.4 m in height. Furthermore, a fence shall not exceed 2.0 m in height where:

a) the fence is located in the front yard and side yard of a single detached housing unit;

b) the fence extends in the front of the foremost portion or portions of the single detached housing unit; and

c) the single detached housing unit is situated on a lot that is used as a farm business, and the lot is assessed as a "farm" under the *Assessment Act*.

- 6.9.2 No fence constructed in all the other zones shall exceed a maximum height of 2.4 m.
- 6.9.3 The use of electrified wire as a fencing material is prohibited except where it is used to confine domestic farm animals.
- 6.9.4 Barbed wire, razor wire and barbed tape obstacle, and electrified wire may only be used as a fencing material:
 - a) where it is used to confine domestic farm animals; or

b) the purpose of the fence is to limit access to a lawful commercial, industrial, community or institutional use of land, provided that the wire component of the fence is no closer to the ground than 2.0 m.

Current Fence Regulations in Building Regulation Bylaw No. 7230

Part Sixteen: Interpretation

- **Fence** means a structure bounding an area of land designed to limit access to or from the area or to screen the area from view.
- Structure means all or part of a construction, whether fixed to, supported by, sunk into, or located in, land, water or airspace, and includes freestanding sign structures over 3.0 m in height and supporting structures for such signs, and includes a sewage holding tank, but excludes landscaping, paving, a fence, or a retaining wall under 1.0 m in height.

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	Maple Ridge	Township of Langley	City of Langley	Delta	Coquitlam	Burnaby	Richmond Proposed	Richmond	wunicipality	
	A structure constructed of materials including wood, masonry, concrete, or metal, intended for the purpose of total or partial physical and/or visual separation or enclosure of a property or portion thereof, and includes chain link fences, however	N/A	N/A	A structure used as an enclosure or for screening purposes, and includes gates and walls, but excludes retaining walls and arbors.	A structure, not being a building, intended for the purpose of total or partial physical and/or visual separation or enclosure of a property or portion thereof, includes a wall, not being part of a building, intended for the purpose of total or partial physical and/or visual separation or enclosure of a property, does not include retaining wall. Materials used to construct a fence are limited to wood, masonry materials (excluding poured concrete), metal, pre-cast manufactured perforated or decorative concrete blocks or panels, and any combination thereof.	N/A	No change	A structure used as an enclosure or for screening purposes around all or part of a lot		
	N/A	N/A	N/A	N/A	Any building element with a slope of 60 degrees or more to the horizontal; does not include a wall which is utilized as a fence, or a retaining wall.	N/A	No change	N/A		
	1.2 m	1.0 m	N/A	1.2 m	ເ ອ	1.07 m	No change	1.2 m	Front Yards	General Heig Reside
	2.0 m	2.0 m	2.0 m	1.8 m 2.4 m on lot lines abutting non- residential zones	1.8 M	1.8 m	No change	2.0 m 2.4 m on lot lines abutting non- residential zones	All Other Locations	ght Limitations in ntial Zones
	1.2 m 3.6 m	N/A	N/A	1.2 m	NÀ	N/A	1.2 B	2.0 m	Front Yards	General Heigh Agricultu
	2.0 3.6 т	N/A	N/A	2.4 m	З	N/A	2.0 m	2.4 m	All Other Locations	t Limitations in ral Zones
	N/A	N/A	N/A	Chain link Concrete blocks for retaining walls	See definition of fence.	Open mesh / chain link	Agrarian (Rural Farm) materials required in AG zones.	N/A	than Wire (Barbed, Razor, Electrified)	Regulated Fence Materials Other
Ľ	ATTACHMF	7			UNCL - 223					

Summary Table of Environmental Scan

ATTACHMENT 2

			General Heig Resider	ht Limitations in ntial Zones	General Height Agricultur	Limitations in al Zones	Regulated Fence
Municipality	Definition of 'Fence'	Definition of Wall	Front Yards	All Other Locations	Front Yards	All Other Locations	than Wire (Barbed, Razor, Electrified)
	does not include retaining walls.						
New Westminster	<i>Closed fence</i> : one that has more than fifty percent (50%) of its area closed.	N/A	1.22 m	1.83 m	N/A	N/A	Open mesh / chain link
City of North Vancouver	Structure, accessory: a structure used for an accessory use, including fences, radio and television antennae and satellite dishes.	N/A	1.22 m	1.829 m	ı	ı	N/A
District of North Vancouver	N/A	N/A	1.8 m	2.4 m	ı	J	N/A
Pitt Meadows	A structure used as an enclosure or as a visual barrier around all or part of a lot	N/A	1.2 m	1.8 m 2.4 m on lot lines abutting agricultural or industrial zones	1.8 m,	2.4 m	N/A
Port Coquitlam	A vertical structure used for enclosure or screening where the thickness is equal to or less than 8 cm (0.26 ft) excluding top and bottom rails and posts.	A vertical structure used for enclosure, screening or soil retention constructed of brick, masonry, stone, or timbers or any other material where the thickness of the wall is greater than 8 cm (0.26 ft).	1.2 m	2.5 m	1.2 m	N/A	See definition of wall.
Surrey	N/A	N/A	1.2 m	1.8 M	N/A	N/A	For properties on railway land, stones, cement, bricks, similar durable materials, chain link, or combination thereof.
Vancouver	Includes arbors, archways, boundary fences, gates, pergolas, screens, trellises, walls and similar structures.	N/A	1.2 m	1.9 m	N/A	N/A	Permitted: wood, brick, concrete block, metal
West Vancouver	A vertical structure used as an enclosure or a screen of all or part of a site, not exceeding 0.08 metre in thickness, excluding posts and rails, but shall not include a garden wall.	A vertical structure used as an enclosure or screening about all or part of a site constructed of concrete masonry, timbers, rock, or any other material where the thickness is more than 0.08 metre.	1.2 m 1.8 m	1.8 m 2.4 m			See definition of wall.



Bulletin Building Approvals Department

6911 No. 3 Road, Richmond, BC V6Y 2C1

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Residential Zones: Fence Heights

No.: BUILDING-43 Last Revised: 2020/02/06 Date Created: 2020/02/06

This bulletin is to inform Owners and Builders of the height regulations for fences in residential zones recently adopted in Richmond Zoning Bylaw No. 8500, Amendment Bylaw No. 10122 and Building Regulation Bylaw No. 7230, Amendment Bylaw No. 10144.

Summary

- Definition of fence height has been clarified to identify measurement parameters.
- Maximum fence heights in residential zones have been clarified.

Fence Height Requirements

- The maximum fence height of 2.0 metres (m) is permitted for fences constructed in residential zones and site specific zones that include residential uses. (Richmond Zoning Bylaw No.8500:6.8.1)
 - A maximum fence height of 1.2 m is permitted for fences located in the front yard or between the principal dwelling unit and the front property line or public road.
 - A maximum fence height of 1.83 m is permitted for fences when located elsewhere within a required yard. (Richmond Zoning Bylaw No. 8500:Residential Zones)
- The use of barbed wire, electrified wire, razor wire, and barbed tape obstacles as fencing material is prohibited in all residential zones and in site specific zones that govern single detached housing. (Richmond Zoning Bylaw No. 8500:6.8.5)
- A building permit is required for any fence construction with concrete foundations. (Building Regulation Bylaw No. 7230:16.1)

Measuring Fence Height

- Fence height is determined by measuring the vertical distance between the average finished site grade, measured 1.0 m from both sides of the property line, to the top of the fence. (Richmond Zoning Bylaw No. 8500:6.8.3)
- Grading must be strategically managed to avoid impact with the maximum fence height limit shown.
- Please refer to the diagrams attached.

Should you have any questions, comments, or suggestions concerning this bulletin, please reference the Bulletin number and email building@richmond.ca or call the Building Approvals General Inquiries line at **604-276-4118**.





References

Please see Bulletin BUILDING-44 for regulations regarding fences in agricultural zones.

City of Richmond Zoning Bylaw, Landscaping and Screening: https://www.richmond.ca/ shared/assets/LandscapingScreening24225.pdf

Should you have any questions, comments, or suggestions concerning this bulletin, please reference the Bulletin number and email building@richmond.ca or call the Building Approvals General Inquiries line at 604-276-4118.

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Agricultural Zones: Fence Heights and Materials

No.: BUILDING-44 Last Revised: 2020/02/06 Date Created: 2020/02/06

This bulletin is to inform Owners and Builders of the fence height and material regulations in agricultural zones recently adopted in Richmond Zoning Bylaw No. 8500, Amendment Bylaw No. 10122 and Building Regulations Bylaw No. 7230, and Amendment Bylaw No. 10144.

Summary

- Definition of fence height has been clarified to identify measurement parameters.
- Maximum fence heights in agricultural zones have been clarified.
- Acceptable materials for use in agricultural zones have been clarified in order to promote and maintain the agrarian character.

General Requirements

- The maximum fence height of 2.4 metres(m) is permitted for fences constructed in in agricultural zones and site specific zones that govern farm businesses. (Richmond Zoning Bylaw No. 8500:6.9.1)
 - A maximum fence height of 1.2 m is permitted for fences located in the front yard or between the single detached housing unit and the front property line or public road.
 - A maximum fence height of 2.0 m is permitted for fences located in the side yard or between the single detached housing unit and the side property line.
- The use of barbed wire, electrified wire, razor wire, and barbed tape obstacles as fencing material is prohibited in all residential zones and in site specific zones that govern single detached housing. (Richmond Zoning Bylaw No. 8500: 6.8.5)
- A building permit is required for any fence construction with concrete foundations. (Building Regulation Bylaw No. 7230:16.1)

Measuring Fence Height

- Fence height is determined by measuring the vertical distance between the average finished site grade, measured 1.0 m from both sides of the property line, to the top of the fence. (Richmond Zoning Bylaw No. 8500:6.9.3)
- Grading must be strategically managed to avoid impact with the maximum fence height limit shown. See Building Bulletin-43 for additional information.

Material Regulations

- The following are suitable materials and design for construction of agrarian fencing in the Agriculture zones. (Richmond Zoning Bylaw No. 8500:6.9.4)
 - Wood Post and Rail, minimum spacing between horizontal members shall be 0.3 m;

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- Diagonal cross bracing permitted if bracing between posts;
- Metal post and rail, minimum 0.3 m spacing between horizontal members;
- Wood Post and welded wire mesh;
- Steel Post and welded wire mesh; and/or
- Wood pickets, 8 cm minimum distance between pickets.
- Fences in agriculture zones shall be constructed of materials limited to fence agrarian materials, except as noted below (Zoning Bylaw 8500:6.9.5):
 - Masonry and concrete fences shall only be permitted along property lines fronting a public road.
 - Masonry and concrete fences are defined as fences composed either partially or entirely of stone, brick, concrete, concrete block, or other similar building materials.
 - No masonry or concrete fence or its components shall exceed 1.2 m in height.
 - An appurtenance allowance of 0.15 m for pier caps is permitted provided the piers are spaced no closer than 0.365 m edge to edge.
 - The width of the masonry fence shall not exceed 0.3 m in width.
 - Footings shall limited as shown in the attached diagrams.
 - Total masonry fence length shall be further limited to the width of the single detached dwelling fronting the public road plus 6 m.
 - Beyond that length, fences shall be constructed of materials limited to agrarian materials.
- Please refer to the diagrams attached for additional information.

Should you have any questions, comments, or suggestions concerning this bulletin, please reference the Bulletin number and email building@richmond.ca or call the Building Approvals General Inquiries line at 604-276-4118.



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Bylaw 10144



Building Regulation Bylaw No. 7230, Amendment Bylaw No. 10144

The Council of the City of Richmond enacts as follows:

- 1. Building Regulation Bylaw No. 7230, as amended, is further amended at Section 16.1 by deleting the definition of Structure and replacing it with the following:
 - "Structure means all or part of a construction, whether fixed to, supported by, sunk into, or located in, land, water or airspace, and includes freestanding sign structures over 3.0 m in height and supporting structures for such signs, and includes a sewage holding tank, but excludes landscaping, paving, a fence without concrete foundations, or a retaining wall under 1.0 m in height."
- 2. This Bylaw is cited as "Building Regulation Bylaw No. 7230, Amendment Bylaw No. 10144".

FIRST READING	APR 1 4 2020	CITY OF RICHMOND
SECOND READING	APR 1 4 2020	APPROVED for content by originating
THIRD READING	APR 1 4 2020	Division
ADOPTED		APPROVED for legality by Solicitor

MAYOR

CORPORATE OFFICER



Richmond Zoning Bylaw No. 8500 Amendment Bylaw No. 10122 (Fence Regulations)

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

1. Richmond Zoning Bylaw No. 8500, as amended, is further amended at Section 3.4 [Use and Term Definitions] by deleting the definitions of "Height, fence" in its entirety and replacing it with the following:

"Height, fence means the vertical distance between the average finished site grade measured at a point 1.0 m from both sides of the property line to the top of the fence."

2. Richmond Zoning Bylaw No. 8500, as amended, is further amended at Section 3.4 [Use and Term Definitions] by inserting the following definition in alphabetical order:

"Agrarian materials, fence The following are suitable materials and design for the construction of agrarian fencing in agriculture zones.

- 1. Wood Post and Rail, minimum spacing between horizontal members shall be 0.3 m.
 - a. Diagonal cross bracing permitted if bracing between posts.
- 2. Metal post and rail, minimum 0.3 m spacing between horizontal members.
- 3. Wood Post and welded wire mesh.
- 4. Steel Post and welded wire mesh.
- 5. Wood pickets, 8 cm minimum distance between pickets."
- 3. Richmond Zoning Bylaw No. 8500, as amended, is further amended at Section 6.8 [Fence Limitations in Residential Zones] by deleting Section 6.8.3 in its entirety and replacing it with the following:
 - "6.8.3 Fence height shall be measured at the average finished site grade measured at a point 1.0 m from both sides of the property line to the top of the fence."

- 4. Richmond Zoning Bylaw No. 8500, as amended, is further amended at Section 6.9 [Fence Limitations in All Other Zones] by deleting Section 6.9.1 in its entirety and replacing it with the following:
 - "6.9.1 No fence constructed in the agricultural zones and site specific zones that govern farm businesses shall exceed 2.4 m in height. Furthermore, a fence shall not:
 - a) exceed 2.0 m in height where the fence is located in the exterior side yards of a single detached housing unit; or
 - b) exceed 1.2 m in **height** where the **fence** is located in the **front yard** (or yard fronting a public street) of a **single detached housing unit**."
- 5. Richmond Zoning Bylaw No. 8500, as amended, is further amended at Section 6.9 [Fence Limitations in Residential Zones] by deleting Section 6.9.3 in its entirety and replacing it with the following:
 - "6.9.3 Fence height shall be measured at the average finished site grade measured at a point 1.0 m from both sides of the property line to the top of the fence."
- 6. Richmond Zoning Bylaw No. 8500, as amended, is further amended at Section 6.9 [Fence Limitations in All Other Zones] by inserting the following, in numerical order, and adjusting the numbers thereafter:
 - "6.9.4 The following are suitable **fence agrarian materials** for the design and construction of fencing in **agriculture zones**.
 - a) Wood Post and Rail, minimum spacing between horizontal members shall be 0.3 m.
 - i. Diagonal cross bracing permitted if bracing between posts.
 - b) Metal post and rail, minimum 0.3 m spacing between horizontal members.
 - c) Wood Post and welded wire mesh.
 - d) Steel Post and welded wire mesh.
 - e) Wood pickets, 8 cm minimum distance between pickets.
 - 6.9.5 In agricultural zones:
 - a) **Fences** shall be constructed of materials limited to farm **agrarian materials** for fencing to the satisfaction of the Director, Building Approvals.
 - b) Any gate providing farm access (even if also serving the single detached housing unit) is required to comply with the agrarian materials.

- c) Masonry **fences** shall only be permitted along **property lines** fronting a public road.
 - a. No masonry fence or its above grade components shall exceed 1.2 m in height and 0.3 m in width. Height may increase an additional 0.15 m as an appurtenance allowance for piers spaced no closer than 3.65 m edge to edge.
 - b. No masonry **fence** below **grade** components shall exceed 0.43 m in width for **fence** footing and 0.8 m square for pier footings.
 - c. Total masonry **fence** length shall be further limited to the width of the house fronting the public road plus 6 m."
- 7. Richmond Zoning Bylaw No. 8500, as amended, is further amended as Section 4.12.1 [Projections into Yards in All Zones] by deleting Section 4.12.1 in its entirety and replacing it with the following:

"4.12.1

- a) No **building**, **structure**, feature or portion thereof shall be developed, used, occupied, constructed, erected, modified, converted, enlarged, reconstructed, altered, placed, maintained or added to within any required **yard** except as follows, provided that they meet the provisions of the British Columbia Building Code. The exceptions below do not apply to the 4 m **side yard setback** in properties with an AG1 **agricultural zone** when that same **setback** is used to accommodate farm **access**."
- 8. This Bylaw is cited as "Richmond Zoning Bylaw No. 8500, Amendment Bylaw No. 10122".

FIRST READING	APR 1 4 2020	CITY OF RICHMOND
PUBLIC HEARING		APPROVED by
SECOND READING		APPROVED by Director
THIRD READING		
ADOPTED		

MAYOR

CORPORATE OFFICER



Report to Committee

- To: General Purposes Committee
- From: Wayne Craig Director, Development

 Date:
 September 21, 2020

 File:
 RZ 19-881151

Re: Application by Kulbinder Dhesi, Rajbinder Aujla and Paulveer Aujla for Rezoning at 10160 Williams Road from the "Single Detached (RS1/E)" Zone to the "Compact Single Detached (RC2)" Zone

Staff Recommendation

That Richmond Zoning Bylaw 8500, Amendment Bylaw 10206, for the rezoning of 10160 Williams Road from the "Single Detached (RS1/E)" zone to the "Compact Single Detached (RC2)" zone, be introduced and given first reading.

ayne la

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

WC:na Att. 7

	REPORT CONCURRE	ENCE
ROUTED TO:	CONCURRENCE	CONCURRENCE OF GENERAL MANAGER
Affordable Housing		be Erceq

Staff Report

Origin

Kulbinder Dhesi, Rajbinder Aujla and Paulveer Aujla – the owners of the property, have applied to the City of Richmond for permission to rezone 10160 Williams Road from the "Single Detached (RS1/E)" zone to the "Compact Single Detached (RC2)" zone, to permit a subdivision to create two single detached lots, with vehicle access from the rear lane (Attachment 1). The site survey and proposed subdivision plan is attached (Attachment 2).

Findings of Fact

A Development Application Data Sheet providing details about the development proposal is attached (Attachment 3).

Surrounding Development

The subject property is located on the south side of Williams Road, between No. 4 Road and Aquila Road. The existing house on site is currently owner occupied. In recent years, the south side of this block of Williams Road has undergone redevelopment to smaller lots through rezoning and subdivision.

To the North:	Across Williams Road, are two dwellings zoned "Compact Single Detached (RC1)" that were part of an approved rezoning and subdivision application from 2006 (RZ 06-350258 and SD 06-350259).
To the South:	Directly across the rear lane, is a large lot zoned "Single Detached with Granny Flat or Coach House - Edgemere (RE1)".
To the East:	A single-family dwelling zoned "Compact Single Detached (RC2)" that was part of an approved rezoning and subdivision application from 2012 (RZ 12-610058 and SD 12-610059).
To the West:	A single-family dwelling zoned "Compact Single Detached (RC1)" that was part of an approved rezoning and subdivision application from 2007 (RZ 07-386470 and SD 07-386469).

Related Policies & Studies

Official Community Plan (OCP) Designation

The OCP's Generalized Land Use Map designation for this property is "Neighbourhood Residential". This redevelopment proposal is consistent with this designation.

Arterial Road Land Use Policy

The Arterial Road Land Use Policy identifies the subject property for Compact Lot Single Detached development. This policy permits rezoning and subdivision along this section of Williams Road where there is an existing operational rear lane. This redevelopment proposal to rezone and subdivide a single-family lot into two compact single-family lots is consistent with the Arterial Road Redevelopment Policy.

Lot Size Policy 5443

The subject property is located within the area covered by Lot Size Policy 5443 (adopted by Council in 1990; amended in 2006). This Policy permits rezoning and subdivision of lots along this section of Williams Road in accordance with the provisions of Single-Family Housing District (R1-0.6) or Coach House District (R9) provided there is access to an operational rear lane (Attachment 4). These Districts are equivalent to the "Compact Single Detached (RC2)" and "Coach House (RCH)" zones of the current Zoning Bylaw 8500). This redevelopment proposal would allow for the creation of two lots, each approximately 10 m wide and 336 m² in area, which is consistent with the Lot Size 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

A rezoning sign has been installed on the subject property. Staff have not received any comments from the public about the rezoning application in response to the placement of the rezoning sign on the property.

Should 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

This redevelopment proposes to rezone and subdivide one existing single-family property into two new compact single-family lots with vehicular access from the rear laneway. This rezoning and subdivision is consistent with the lot fabric and vehicular access of the adjacent lots on Williams Road. Similar applications to rezone and subdivide properties have been approved in recent years on both sides of this block of Williams Road, between No. 4 Road and Aquila Road.

Transportation and Site Access

Vehicular access to Williams Road is not permitted in accordance with Bylaw No. 7222 and therefore will be restricted to the rear lane only. Secondary suite parking will also be provided as required by Bylaw 8500, adjacent to the garages of the primary units and accessed from the rear lane. Based on the attached architectural drawings, both lots would provide a garage with side-by-side parking with an additional 3rd parking space provided for the use of the secondary suite.

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 five bylaw-sized trees on the subject property; one non-bylaw sized tree on neighbouring property, and one bylaw sized street tree on City property.

The City's Tree Preservation Coordinator has reviewed the Arborist's Report and supports the Arborist's findings, with the following comments:

- The City's Tree Preservation Coordinator concurs with the Arborist's recommendations for the removal of the five on-site trees (tag# 446, 447, 448, 449, 450) based on their very poor condition as a result of sparse canopy foliage and historical topping. The on-site trees are not good candidates for retention and should be removed and replaced.
- The City's Parks Arborist recommends that the one 23cm dbh Liquidambar Styraciflua street tree (tag# C01) in the boulevard on City-owned property should be retained and protected prior to demolition and construction on the subject site and a \$5,000.00 tree survival security be required.
- One tree (tag# N01) located on adjacent neighbouring properties is identified to be retained and protected and a \$5,000.00 tree survival security be required. Provide tree protection as per City of Richmond Tree Protection Information Bulletin Tree-03.

Tree Replacement

The applicant wishes to remove five on-site trees (Trees # 446, 447, 448, 449, 450) that are in very poor condition. The 2:1 replacement ratio would require a total of 10 replacement trees. The applicant has agreed to plant five trees on each lot proposed; for a total of ten trees. The required replacement trees are to be planted and sized as illustrated on Landscape Plan in Attachment 5.

Tree Protection

One tree (tag# N01) on neighbouring properties is to be retained and protected. The applicant has submitted a tree protection plan showing the trees to be retained and the measures taken to protect them during development stage (Attachment 6). The applicant has provided a site plan and landscape plan demonstrating their ability to plant five trees on each of the resulting lots (Attachment 5). To ensure that the trees identified for retention are protected at development stage, the applicant is required to complete the following items:

- 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 final adoption of the rezoning bylaw, submission to the City of a Tree Survival Security to the City in the amount of \$10,000.00 (\$5,000 each) for the two (2) trees (tag# C01, N01) to be retained.
- 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 completed.

Affordable Housing Strategy

The applicant is required to comply with the City's Affordable Housing Strategy. The applicant proposes to provide a legal secondary suite on both future lots at the subject site. To ensure that the two-storey one-bedroom secondary suites of approximately $42.3 \text{ m}^2 (455 \text{ft}^2)$ are built to the satisfaction of the City in accordance with the City's Affordable Housing Strategy, the applicant is required to enter into a legal agreement registered on title, stating that no final Building Permit inspection will be granted until the secondary suite is constructed to the satisfaction of the City in accordance with the City's Zoning Bylaw. This legal agreement is a condition of rezoning adoption.

Site Servicing

At Subdivision stage, the applicant will be required to pay Development Cost Charges (City and GVS & DD & TransLink), Cost Recovery Bylaw Charge of \$26,309.54 for lane improvements, School Site Acquisition Charge, Address Assignment Fee, and Servicing Costs. Construction works for upgrades will be performed via a City Work Order at the time of subdivision.

Financial Impact or Economic 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

This rezoning application to permit subdivision of 10160 Williams Road into two single-family lots complies with all applicable land use designations and policies contained within the OCP, and is consistent with Lot Size Policy 5443, which allows rezoning and subdivision to "Compact Single Detached (RC2)". This rezoning application is consistent with the established pattern of redevelopment in the neighbourhood.

The list of rezoning considerations is included at Attachment 7, which has been agreed to by the applicant (signed concurrence on file).

On this basis, it is recommended that Richmond Zoning Bylaw 8500, Amendment Bylaw 10206 be introduced and given first reading.

Nathan Andrews Planning Technician (604-247-4911)

NA:blg

Attachment 1: Location Map/Aerial Photo Attachment 2: Site Survey and Subdivision Plan Attachment 3: Development Application Data Sheet Attachment 4: Lot Size Policy 5443 Attachment 5: Site Plan and Landscape Plan Attachment 6: Tree Retention Plan Attachment 7: Rezoning Considerations



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City of Richmond





RZ 19-881151

Original Date: 01/09/20

Revision Date:

Note: Dimensions are in METRES





Development Application Data Sheet

Development Applications Department

RZ 19-881151

Attachment 3

Address: 10160 Williams Road

Applicant: Kulbinder Dhesi, Rajbinder Aujla and Paulveer Aujla

Planning Area(s): Shellmont

	Existing	Proposed
Owner:	Kulbinder Dhesi Rajbinder Aujla Paulveer Aujla	To be determined
Site Size (m²):	672 m² (7,234 ft²)	Two lots, each approximately 336 m ² (3,617 ft ²)
Land Uses:	One single detached dwelling	Two single detached dwellings
OCP Designation:	Neighbourhood Residential	No change
Area Plan Designation:	N/A	No change
702 Policy Designation:	Lot Size Policy 5443 permits rezoning and subdivision of lots along the south side of this section of Williams Road to "Compact Single Detached (RC2)" or "Coach House (RCH)".	No change
Zoning:	Single Detached (RS1/E)	Compact Single Detached (RC2)
Number of Units:	1	2
Other Designations:	The Arterial Road Redevelopment Policy permits rezoning and subdivision to smaller lots along the south side of this section of Williams Road due to the existing operational rear lane.	No change

On Future Subdivided Lots	Bylaw Requirement	Proposed	Variance
Floor Area Ratio:	Max. 0.6	Max. 0.6	none permitted
Buildable Floor Area (m²):*	Lot A: Max. 201.60 m ² (2,170 ft ²) Lot B: Max. 201.60 m ² (2,170 ft ²)	Lot A: Max. 201.23 m ² (2,166 ft ²) Lot B: Max. 201.23 m ² (2,166 ft ²)	none permitted
Lot Coverage (% of lot area):	Building: Max. 50% Non-porous Surfaces: Max. 70% Lot Landscaping with live plant material: Min. 20%	Building: Max. 50% Non-porous Surfaces: Max. 70% Lot Landscaping with live plant material: Min. 20%	none
Lot Size:	Min. 270 m²	336 m²	none
Lot Dimensions (m):	Width: 9.0 m Depth: 24.0 m	Width: 10.21 m Depth: 32.92 m	none

September 9, 2020

On Future Subdivided Lots	Bylaw Requirement	Proposed	Variance
Setbacks (m):	Front: Min. 6.0 m Rear: Min. 6.0 m Side: Min. 1.2 m	Front: Min. 6.0 m Rear: Min. 6.0 m Side: Min. 1.2 m	none
Height (m):	Max. 9.0 m (2.5 storeys)	9.0 m	none
On-site Vehicle Parking with Secondary Suite:	3 per lot	Lot A: 3 Lot B: 3	none

Other: Tree replacement compensation required for loss of significant trees.

* Preliminary estimate; not inclusive of garage; exact building size to be determined through zoning bylaw compliance review at Building Permit stage.



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ATTACHMENT 7



Rezoning Considerations

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

Address: 10160 Williams Road

File No.: RZ 19-881151

Prior to final adoption of Richmond Zoning Bylaw 8500, Amendment Bylaw 10206, the developer is required to complete the following:

- 1. 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 installation costs. 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 ten (10) required replacement trees to be planted and sized as illustrated on Landscape Plan in Attachment 5 of the Rezoning Report.

If required replacement trees cannot be accommodated on-site, a cash-in-lieu contribution in the amount of \$750/tree to the City's Tree Compensation Fund for off-site planting is required.

- 2. 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.
- 3. Submission of a Tree Survival Security to the City in the amount of \$10,000.00 (\$5,000 each) for the two (2) trees (tag# C01, N01) to be retained.
- 4. Registration of a flood indemnity covenant on title.
- 5. Registration of a legal agreement on Title to ensure that no final Building Permit inspection is granted until a minimum one-bedroom secondary suite of approximately 42.3 m² (455ft²) is constructed on both of the future lots, to the satisfaction of the City in accordance with the BC Building Code and the City's Zoning Bylaw.

Prior to Demolition Permit Issuance, the developer must complete the following requirements:

1. Installation of appropriate tree protection fencing around all trees to be retained as part of the development prior to any construction activities, including building demolition, occurring on-site.

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.

At Subdivision* stage, the developer must complete the following requirements:

- 1. Pay Development Cost Charges (City and GVS & DD & Translink), Cost Recovery Bylaw Charge of \$26,309.54 for lane improvements, School Site Acquisition Charge, Address Assignment Fee, and Servicing Costs.
- 2. At the developer's sole cost complete the following works via a City Work Order:



Water Works:

- a) Using the OCP Model, there is 748.0 L/s of water available at a 20 psi residual at the Williams Road frontage. Based on your proposed development, your site requires a minimum fire flow of 95 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.
- c) At Developer's cost, the City will:
 - i) Cut and cap the existing water service connection to the existing parcel, and remove water meter.
 - ii) Install one new water service connection for each proposed lot, complete with meter and meter box.

Storm Sewer Works:

- d) At Developer's cost, the City will:
 - i) Install a new storm service connection to the east lot, complete with inspection chamber.
 - ii) For the existing building, confirm the capacity and condition of the existing storm connection. If the existing storm connection is adequate to be reused, it may be retained; if not, it shall be replaced by the City at the developer's cost.

Sanitary Sewer Works:

- e) At Developer's cost, the City will:
 - i) Cut and cap the service connection to the existing parcel. Retain the inspection chamber to serve adjacent properties.
 - ii) Install one new sanitary service connection complete with inspection chamber and dual service leads.

Frontage Improvements:

- f) At Developer's cost, the Developer is required to:
 - i) Coordinate with BC Hydro, Telus and other private communication service providers:
 - (1) To pre-duct for future hydro, telephone and cable utilities along all road frontages.
 - (2) Before relocating/modifying any of the existing power poles and/or guy wires within the property frontages.
 - ii) Complete other frontage improvements as per Transportation requirements.

General Items:

- g) At Developer's cost, the Developer is required to:
 - i) Comply with and pay the determined costs under Schedule 5 of the Works and Services Cost Recovery Bylaw #8752 at subdivision.
 - ii) 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.

Note:

* This requires a separate application.

Initial: _____
• 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

Date

Bylaw 10206



Richmond Zoning Bylaw 8500 Amendment Bylaw 10206 (RZ 19-881151) 10160 Williams Road

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. 004-305-728 Lot 28 Block 1 Section 35 Block 4 North Range 6 West New Westminster District Plan 18549

2. This Bylaw may be cited as "Richmond Zoning Bylaw 8500, Amendment Bylaw 10206".

FIRST READING

A PUBLIC HEARING WAS HELD ON

SECOND READING

THIRD READING

OTHER CONDITIONS SATISFIED

ADOPTED

APPROVED by APPROVED by APPROVED by Director or Solicitor

MAYOR

CORPORATE OFFICER



Monday, November 16, 2020 – 7 pm

Council Chambers, 1st Floor, Richmond City Hall 6911 No. 3 Road, Richmond, BC V6Y 2C1

Richmond Zoning Bylaw 8500, Amendment Bylaw 10206 (RZ 19-881151)

Location/s:	10160 Williams Road
Applicant/s:	Kulbinder Dhesi, Rajbinder Aujla, and Paulveer Aujla
Purpose:	To rezone the subject property from "Single Detached (RS1/E)" to "Compact Single Detached (RC2)", to permit development of two single- family lots with vehicle access from a rear lane.
City Contact:	Nathan Andrews, 604-247-4911, Planning and Development Division

How to obtain further information:

- By Phone: If you have questions or concerns, please call the CITY CONTACT shown above.
- On the City Website: Public Hearing Agendas, including staff reports and the proposed bylaws, are available on the City Website at http://www.richmond.ca/cityhall/council/agendas/hearings/2020.htm
- At City Hall: Copies of the proposed bylaw, supporting staff and Committee reports and other background material, are also available for inspection at the Planning and Development Division at City Hall, between the hours of 8:15 am and 5 pm, Monday through Friday, except statutory holidays, commencing November 6, 2020 and ending November 16, 2020, or upon the conclusion of the hearing.
- By FAX or Mail: Staff reports and the proposed bylaws may also be obtained by FAX or by standard mail, by calling 604-276-4007 between the hours of 8:15 am and 5 pm, Monday through Friday, except statutory holidays, commencing November 6, 2020 and ending November 16, 2020.

Participating in the Public Hearing process:

- The health and wellness of our residents, staff and Council remain our priority. Please be advised that measures will be taken at the meeting to respect physical distancing requirements and adhere to recommended preventative measures to limit the spread of COVID-19.
- During the COVID-19 Pandemic, the Public Hearing is open to members of the public who may be affected by the proposed bylaw and wish to make a presentation.
- Due to the public health concerns and social distancing requirements, the public is encouraged to submit written comments in advance of the Public Hearing, or register to participate remotely via telephone, instead of attending the meeting in person if possible.
- Registration to participate remotely via telephone is available starting on the Friday prior to the Public Hearing until 1:00 pm on the date of the Hearing. Information on how to register is available on the City website: https://www.richmond.ca/cityhall/council/phone-participation.htm
- Written comments may be submitted to the City Clerk's Office by 4:00 pm on the date of the Public Hearing as follows:
 - By E-mail: using the on-line form at http://www.richmond.ca/cityhall/council/hearings/about.htm
 - By Standard Mail: 6911 No.3 Road, Richmond, BC, V6Y 2C1, Attention: Director, City Clerk's Office
 - By Fax: 604-278-5139, Attention: Director, City Clerk's Office
- Public Hearing Rules: For information on public hearing rules and procedures, please consult the City



Bylaw 10206

website at <u>http://www.richmond.ca/cityhall/council/hearings/about.htm</u> or call the City Clerk's Office at 604-276-4007.

All submissions will form part of the record of the hearing. Once the Public Hearing has concluded, no further information or submissions can be considered by Council. It should be noted that the rezoned property may be used for any or all of the uses permitted in the "new" zone.

Claudia Jesson Director, City Clerk's Office



CNCL - 257



Report to Committee

To: General Purposes Committee

From: Wayne Craig Director, Development Date: September 21, 2020

File: RZ 20-898600

Re: Application by Raman Kooner for Rezoning at 3540 Lockhart Road from the "Single Detached (RS1/E)" Zone to the "Single Detached (RS2/B)" Zone

Staff Recommendation

That Richmond Zoning Bylaw 8500, Amendment Bylaw 10211, for the rezoning of 3540 Lockhart Road from the "Single Detached (RS1/E)" zone to the "Single Detached (RS2/B)" zone, be introduced and given first reading.

Wayne Co

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

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REPORT CONCURRENCE			
ROUTED TO:	CONCURRENCE	CONCURRENCE OF GENERAL MANAGER	
Affordable Housing	M	pe Erceq	
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Staff Report

Origin

Raman Kooner has applied to the City of Richmond on behalf of 1254396 B.C. Ltd (Akkalan Holdings Inc. (Directors – Amit Robbie Sharda and Bhupinder Kooner)) for permission to rezone 3540 Lockhart Road (Attachment 1) from the "Single Detached (RS1/E)" zone to the "Single Detached (RS2/B)" zone in order to create two new single-family residential lots. The proposed subdivision is shown in Attachment 2.

Findings of Fact

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

Subject Site Existing Housing Profile

There is a non-conforming two-unit dwelling on the site currently and which will be demolished. One unit is currently occupied by the previous owner of the property until the end of September and the other unit is vacant.

Surrounding Development

The area is an established residential neighbourhood containing a mix of older and newer single-family and two-unit dwelling lots.

To the North:	Across Lockhart Road, two single-family lots zoned "Single Detached (RS1/B)" that were part of an approved rezoning and subdivision application from 2006 (RZ 06-344783 and SD 06-344786).
To the South:	A duplex on property zoned "Two-Unit Dwellings (RD1)".
To the East:	A single-family dwelling on property zoned "Single Detached (RS1/B)".
To the West:	A single-family dwelling that was part of an approved rezoning and subdivision application from 2006 (RZ 06-345319 and SD 06-345321) zoned "Single Detached (RS1/B)".

Related Policies & Studies

Official Community Plan

The subject property is located in the Quilchena neighbourhood of the Seafair planning area (Attachment 4). The Official Community Plan (OCP) land use designation for the subject property is "Neighbourhood Residential". The proposed rezoning is compliant with this designation.

Lot Size Policy 5447

The subject property is located within the area covered by Single-Family Lot Size Policy 5447 (Attachment 5). This Single-Family Lot Size Policy permits subdivision consistent with the requirements of the "Single Detached (RS2/B)" zone. The proposed rezoning and subdivision would allow for the creation of two lots; each 12.19 m in width and 467 m² (5027 ft²) in area, consistent with the requirements of the "Single Detached (RS2/B)" zone.

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

A rezoning sign has been installed on the subject property. Staff have not received any comments from the public about the rezoning application in response to the placement of the rezoning sign on the property.

Should 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

Existing Legal Encumbrances

There is an existing 3.0 m-wide statutory right-of-way (SRW) for sanitary services registered on title (K86910) within the rear yard of the subject lot, which will not be impacted by the proposed rezoning and subdivision. The applicant is aware that encroachment and construction works are not permitted in the SRW.

Transportation and Site Access

The property frontage was recently upgraded to meet City standards. Vehicle access will be provided from Lockhart Road via separate driveway crossings to each new lot.

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 one bylaw-sized tree on the subject property, one bylaw-sized tree on neighbouring property, and one street tree on City property.

The City's Tree Preservation Coordinator has reviewed the Arborist's Report and supports the Arborist's findings, with the following comments:

- One 33 cm Douglas Fir (tag#1601) on-site is in good condition and therefore should be retained and protected. A \$10,000.00 Tree Survival security will be required.
- Two trees (tag#Os1 (25 cm dbh Sycamore Maple) and tag#City-1 (0.08 cm dbh Katsura tree) located on adjacent neighbouring and City properties are identified to be retained and protected. Both trees will each require a \$5,000.00 Tree Survival Security. Provide tree protection as per City of Richmond Tree Protection Information Bulletin Tree-03.

Tree Replacement

No trees are proposed to be removed. As per the Richmond Zoning Bylaw 8500, on a lot that is subject to a building permit application, each new lot will provide two new trees and comply with the minimum planting sizes specified in the City's Tree Protection Bylaw 8057 where trees are being planted. To ensure that each new lot will have a minimum of two new trees on-site, a Landscape security of \$3,000.00 for four new trees (\$750/tree) will be required.

Tree Protection

Two off-site trees (one neighbouring tree tag#Os1 and one City tree tag#City-1) are to be retained and protected. The applicant has submitted a tree protection plan showing the trees to be retained and the measures taken to protect them during development stage (Attachment 6). Three hedges are also highlighted and tagged (tag# Hedge1, Hedge2, OsHedge) as part of the tree protection plan. While hedges are not required to be retained these hedges are in good condition and the applicant has agreed to retain them. To ensure that the trees identified for retention are protected at development stage, the applicant is required to complete the following items:

- 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 final adoption of the rezoning bylaw, submission of a Tree Survival Security to the City in the amount of \$20,000.00 for the three (3) trees to be retained (on-site: tag# 1601; off-site: tag# Os1, City-1).
- 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 completed.

Affordable Housing Strategy

The Affordable Housing Strategy for single-family rezoning applications requires a secondary suite or coach house on 100% of new lots created; a secondary suite or coach house on 50% of new lots created together with a cash-in-lieu contribution to the City's Affordable Housing Reserve Fund of \$4.00/ft² of the total buildable area of the remaining lots; or, where a secondary

suite cannot be accommodated in the development, a cash-in-lieu contribution to the Affordable Housing Reserve Fund of 4.00/ft² of the total buildable area of the development.

Consistent with the Affordable Housing Strategy, the applicant has proposed to provide a one-bedroom secondary suite of minimum 36 m^2 (388 ft^2) in each of the dwellings to be constructed on the new lots, for a total of two suites. 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 minimum one-bedroom 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.

Site Servicing and Frontage Improvements

At the Subdivision stage, the applicant will pay a voluntary \$31,097.00 cash-in-lieu contribution for the road widening, concrete sidewalk, concrete curb, treed boulevard, and driveway crossings completed by the City Capital Project along Lockhart Road. The applicant is also required to pay the current year's taxes, Development Cost Charges (City and GVS & DD & Translink), School Site Acquisition Charge, Address Assignment Fees, and other costs associated with the completion of the servicing works as described in Attachment 7 via a City Work Order.

Financial Impact or Economic 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 application is to rezone 3540 Lockhart Road from the "Single Detached (RS1/E)" zone to the "Single Detached (RS2/B)" zone, to permit the property to be subdivided to create two single-family lots, each with a secondary suite, with vehicle access from Lockhart Road.

This application is consistent with all applicable land use designations and policies, and is consistent with the established subdivision pattern in the surrounding area.

The list of rezoning considerations is included in Attachment 7, which has been agreed to by the applicant (signed concurrence on file).

On this basis, staff support the application and it is recommended that Richmond Zoning Bylaw 8500, Amendment Bylaw 10211 be introduced and given first reading.

zh

Nathan Andrews Planning Technician

6522282

(604-247-4911)

NA:blg

Attachments:

Attachment 1: Location Map and Aerial Photo

Attachment 2: Survey Plan and Proposed Subdivision Plan

Attachment 3: Development Application Data Sheet

Attachment 4: Seafair Planning Area Land Use Map

Attachment 5: Lot Size Policy 5447

Attachment 6: Tree Retention Plan

Attachment 7: Rezoning Considerations









RZ 20-898600

Original Date: 04/14/20

Revision Date:

Note: Dimensions are in METRES





Development Application Data Sheet

Development Applications Department

Attachment 3

RZ 20-898600

Address: 3540 Lockhart Road

Applicant: Raman Kooner

Planning Area(s): Seafair

	Existing	Proposed
Owner:	1254396 BC Ltd. Firm name: Akkalan Holdings Inc. Director – Amit Robbie Sharda Director – Bhupinder Kooner	To be determined
Site Size (m²):	934 m² (10,054 ft²)	Two (2) lots – each approximately 467 m ² (5,027 ft ²)
Land Uses:	One (1) two-family dwelling	Two (2) single-family dwellings
OCP Designation:	Neighbourhood Residential	No change
Area Plan Designation:	N/A	No change
702 Policy Designation:	Lot Size Policy 5447 permits rezoning and subdivision of the subject site to Single Detached (RS1/B or RS2/B)	No change
Zoning:	Single Detached (RS1/E)	Single Detached (RS2/B)
Number of Units:	2	2
Other Designations:	N/A	No change

On Future Subdivided Lots	Bylaw Requirement	Proposed	Variance
Floor Area Ratio:	Max. 0.55 for lot area up to 464.5 m ² plus 0.3 for area in excess of 464.5 m ²	Max. 0.55 for lot area up to 464.5 m ² plus 0.3 for area in excess of 464.5 m ²	none permitted
Lot Coverage (% of lot area):	Building: Max. 45% Non-porous Surfaces: Max. 70% Lot Landscaping with live plant material: Min. 25%	Building: Max. 45% Non-porous Surfaces: Max. 70% Lot Landscaping with live plant material: Min. 25%	none
Lot Size:	360 m² Min.	467 m²	none
Lot Dimensions (m):	Width: 12.0 m Depth: 24.0 m	Width: 12.19 m Depth: 38.27 m	none
Setbacks (m):	Front: Min. 6.0 m Rear: Min. 7.65 m Side: Min. 1.2 m	Front: Min. 6.0 m Rear: Min. 7.65 m Side: Min. 1.2 m	none
Height (m):	2.5 storeys or 9.0 m	2.5 storeys or 9.0 m	none

Other:

* Preliminary estimate; not inclusive of garage; exact building size to be determined through zoning bylaw compliance review at Building Permit stage.





SUBJECT PROPERTY







ATTACHMENT 7



Rezoning Considerations

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

Address: 3540 Lockhart Road

File No.: RZ 20-898600

Prior to final adoption of Richmond Zoning Bylaw 8500, Amendment Bylaw 10211, the developer is required to complete the following:

- Submission of a Landscape Security in the amount of \$3,000.00 (\$750/tree) to ensure four new trees are planted and maintained (two trees on Lot A and two trees on Lot B); minimum 6 cm deciduous caliper or 3.5 m high conifers. NOTE: minimum size to be as per Tree Protection Bylaw No. 8057
- 2. 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.
- 3. Submission of a Tree Survival Security to the City in the amount of \$20,000.00 for the three (3) trees to be retained (tag# 1601, Os1, City-1).
- 4. Registration of a flood indemnity covenant on title.
- 5. Registration of a legal agreement on Title to ensure that no final Building Permit inspection is granted until a minimum one-bedroom secondary suite of approximately 36 m² (388 ft²) in size is constructed on both future lots, to the satisfaction of the City in accordance with the BC Building Code and the City's Zoning Bylaw.

Prior to Demolition Permit Issuance, the developer must complete the following requirements:

1. Installation of appropriate tree protection fencing around all trees to be retained as part of the development prior to any construction activities, including building demolition, occurring on-site.

At Subdivision* stage, the developer must complete the following requirements:

- 1. Pay a voluntary \$31,097.00 cash-in-lieu contribution for the road widening, concrete sidewalk, concrete curb, treed boulevard, and driveway crossings installed by the City capital project along Lockhart Road.
- 2. Payment of property taxes up to the current year, Development Cost Charges (City and GVSS & DD & Translink), School Site Acquisition Charge, Address Assignment Fees, and any other costs or fees identified at the time of Subdivision application, including servicing costs associated with the following works done via a City Work Order at the developer's sole cost:

Water Works:

- a) Using the OCP Model, there is 272 L/s of water available at a 20 psi residual at the Lockhart Road frontage. Based on your proposed development, your site requires a minimum fire flow of 95 L/s.
- b) 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) Pay a voluntary \$4,793 cash-in-lieu contribution for the water connection and meter installed by the City capital water main replacement project along Lockhart Road. Payment should be made to the Water Reserve account (7600-90176). Please note that this does not include any disconnect/reconnect fees required at building permit stage.

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Initial:

- c) At Developer's cost, the City is to:
 - i) Install one new water service connections, complete with meter and meter box, to serve the proposed eastern lot.
 - ii) Retain the existing water connection to serve the proposed western lot.
 - iii) Replace the 20 mm water meter on the existing water connection with a 25 mm water meter, to suit the proposed onsite service size.

Storm Sewer Works:

- d) At Developer's cost, the City is to:
 - i) Inspect and confirm the capacity and condition of the existing storm connections. If the existing storm connections are adequate to be reused, they may be retained. If not, a single service connection and inspection chamber with dual service leads shall be installed at the common property of the proposed lots, and the existing service connections capped at the inspection chambers.

Sanitary Sewer Works:

- e) The Developer is required to:
 - i) Not start onsite excavation or foundation construction until completion of rear-yard sanitary works.
- f) At Developer's cost, the City is to:
 - i) Cap the existing sanitary connection at the inspection chamber.
 - ii) Install a new sanitary connection complete with inspection chamber and dual service leads at the common property line of the proposed lots.

Frontage Improvements:

- g) The Developer is required to:
 - Pay a voluntary \$31,097.00 cash-in-lieu contribution for the road widening, concrete sidewalk, concrete curb, treed boulevard, and driveway crossings installed by the City capital project along Lockhart Road. Payment should be made to the Roads Ext Contributions account (7500-90363). This item is highlighted at the beginning of the "At Subdivision Stage" requirements.
 - ii) Coordinate with BC Hydro, Telus and other private communication service providers:
 - (1) Before relocating/modifying any of the existing power poles and/or guy wires within the property frontages.
 - (2) To locate all above ground utility cabinets and kiosks required to service the proposed development within the development site.

General Items:

- h) The Developer is required to:
 - i) Not encroach into the proposed right of ways with trees, non-removable fencing, or other non-removable structures.
 - 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.

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

Date

Bylaw 10211

CITY OF RICHMOND

APPROVED by

APPROVED by Director



Richmond Zoning Bylaw 8500 Amendment Bylaw 10211 (RZ 20-898600) 3540 Lockhart Road

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 **"SINGLE DETACHED (RS2/B)"**.

P.I.D. 003-502-899 Lot 49 Except the South 120 Feet Section 15 Block 4 North Range 7 West New Westminster District Plan 15447

2. This Bylaw may be cited as "Richmond Zoning Bylaw 8500, Amendment Bylaw 10211".

FIRST READING

A PUBLIC HEARING WAS HELD ON

SECOND READING

THIRD READING

OTHER CONDITIONS SATISFIED

ADOPTED

MAYOR

CORPORATE OFFICER





Monday, November 16, 2020 – 7 pm

Council Chambers, 1st Floor, Richmond City Hall 6911 No. 3 Road, Richmond, BC V6Y 2C1

Richmond Zoning Bylaw 8500, Amendment Bylaw 10211 (RZ 20-898600)

Location/s:	3540 Lockhart Road
Applicant/s:	Raman Kooner
Purpose:	To rezone the subject property from "Single Detached (RS1/E)" to "Single Detached (RS2/B)", to permit development of two single-family lots with vehicle access from Lockhart Road.
City Contact:	Nathan Andrews, 604-247-4911, Planning and Development Division

How to obtain further information:

- By Phone: If you have questions or concerns, please call the CITY CONTACT shown above.
- On the City Website: Public Hearing Agendas, including staff reports and the proposed bylaws, are available on the City Website at http://www.richmond.ca/cityhall/council/agendas/hearings/2020.htm
- At City Hall: Copies of the proposed bylaw, supporting staff and Committee reports and other background material, are also available for inspection at the Planning and Development Division at City Hall, between the hours of 8:15 am and 5 pm, Monday through Friday, except statutory holidays, commencing November 6, 2020 and ending November 16, 2020, or upon the conclusion of the hearing.
- By FAX or Mail: Staff reports and the proposed bylaws may also be obtained by FAX or by standard mail, by calling 604-276-4007 between the hours of 8:15 am and 5 pm, Monday through Friday, except statutory holidays, commencing November 6, 2020 and ending November 16, 2020.

Participating in the Public Hearing process:

- The health and wellness of our residents, staff and Council remain our priority. Please be advised that measures will be taken at the meeting to respect physical distancing requirements and adhere to recommended preventative measures to limit the spread of COVID-19.
- During the COVID-19 Pandemic, the Public Hearing is open to members of the public who may be affected by the proposed bylaw and wish to make a presentation.
- Due to the public health concerns and social distancing requirements, the public is encouraged to submit written comments in advance of the Public Hearing, or register to participate remotely via telephone, instead of attending the meeting in person if possible.
- Registration to participate remotely via telephone is available starting on the Friday prior to the Public Hearing until 1:00 pm on the date of the Hearing. Information on how to register is available on the City website: https://www.richmond.ca/cityhall/council/phone-participation.htm
- Written comments may be submitted to the City Clerk's Office by 4:00 pm on the date of the Public Hearing as follows:
 - By E-mail: using the on-line form at http://www.richmond.ca/cityhall/council/hearings/about.htm
 - By Standard Mail: 6911 No.3 Road, Richmond, BC, V6Y 2C1, Attention: Director, City Clerk's Office

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By Fax: 604-278-5139, Attention: Director, City Clerk's Office



Bylaw 10211

- Public Hearing Rules: For information on public hearing rules and procedures, please consult the City website at <u>http://www.richmond.ca/cityhall/council/hearings/about.htm</u> or call the City Clerk's Office at 604-276-4007.
- All submissions will form part of the record of the hearing. Once the Public Hearing has concluded, no further information or submissions can be considered by Council. It should be noted that the rezoned property may be used for any or all of the uses permitted in the "new" zone.

Claudia Jesson Director, City Clerk's Office



City of Richmond



CNCL - 277



Report to Committee

То:	Finance Committee	Date:	September 8, 2020
From:	Jerry Chong, CPA, CA Director, Finance	File:	03-0900-01/2020-Vol 01
Re:	Development Cost Charges Imposition Bylaw Ar (2020)	nual Inf	lationary Update

Staff Recommendation

That *Option 1 – Keep DCC Rates Unchanged* as outlined in the staff report titled "Development Cost Charges Imposition Bylaw Annual Inflationary Update (2020)" dated September 8, 2020 from the Director, Finance be approved by Council.

Jerry Chong, CPA, CA Director, Finance (604-276-4064)

REPORT CONCURRENCE			
ROUTED TO:	CONCURRENCE	CONCURRENCE OF GENERAL MANAGER	
Economic Development Law Parks Services Engineering Building Approvals Development Applications Policy Planning Transportation	র র র র র র	Acting for A. Nazareth	
SENIOR STAFF REPORT REVIEW	INITIALS:	APPROVED BY CAO	

Staff Report

Origin

Development Cost Charges (DCC's) are collected by local governments from new developments in order to fund the capital cost of infrastructures required by growth, such as parkland purchase, park development, traffic improvements and engineering infrastructures.

The Ministry's Development Finance Review Committee (DFRC), through its *Development Cost Charges Best Practice Guide*, recommends annual amendments to the DCC bylaw be made by municipalities to reflect general inflationary increase in their DCC program costs.

During the City's last major DCC update in 2017, the development industry expressed concerns with respect to the significant increase in DCC rates due to the compounding effect of cost escalation between major DCC updates. Therefore, the development industry supported the City's proposal to adjust DCC rates annually. The City has since completed two annual DCC updates in May 2018 and May 2019 that reflected the general inflationary increase of DCC program costs.

The annual DCC rate update for the current year (2020) was originally scheduled to take place in May 2020. However, due to the COVID-19 pandemic, the update that was scheduled to take place in May 2020 was put on hold. The purpose of this report is to review the current market conditions and provide recommendation on the City's 2020 annual DCC rate update.

This report supports Council's Strategic Plan 2018-2022 Strategy #5 Sound Financial Management:

Accountable, transparent, and responsible financial management that supports the needs of the community into the future.

5.1 Maintain a strong and robust financial position.

5.2 Clear accountability through transparent budgeting practices and effective public communication.

5.4 Work cooperatively and respectfully with all levels of government and stakeholders while advocating for the best interests of Richmond.

This report supports Council's Strategic Plan 2018-2022 Strategy #6 Strategic and Well-Planned Growth:

Leadership in effective and sustainable growth that supports Richmond's physical and social needs.

6.1 Ensure an effective OCP and ensure development aligns with it.

Finding of Facts

The full economic effects of COVID-19 are still very much unknown. B.C. has seen its highest unemployment rate of over 13% since 1987. Thousands of jobs were lost and consumer spending has plummeted where job losses have been concentrated in wholesale, retail, accommodation and food sectors. B.C.'s GDP is forecast to decrease by 5.4% for 2020, while Canada's is forecast to decrease by 6.6%. It is hard to predict how long it will take for the B.C. economy to fully recover.

Richmond's Development Activity

Richmond's housing starts and construction activities in the recent months have remained active. Some recently published economic reports confirmed that housing starts have bounced back to pre-COVID-19 lockdown levels. Despite the fact that home sales volume fell dramatically at the onset of the pandemic, low interest rates and limited overall supply of homes for sale are creating competition resulting in housing activities rebounding quicker than expected.

According to the City's Building Approvals Department, although the overall scope of building activity over the spectrum of building types is reduced from previous years, the level of activity in construction is higher than the annual average of the past six years with much of the current activity concentrated in larger, more complex projects such as mixed-used residential and commercial construction. These applications may result in lower permit issuance in certain periods, but will ultimately result in more housing units and higher constructions value, as shown in the charts below.





Home Sales Activity

Volatility in the housing market was seen at the onset of the COVID-19 pandemic. However, recent data suggests that there has been a quick rebound in the home sales activity in Metro Vancouver. Recent home sales data released by the Real Estate Board of Greater Vancouver (REBGV) suggested that home buying and selling activities are strong and active across Metro Vancouver, with home sale and new listing activities outpacing the region's historical averages.

In its latest August 2020 market report, REBGV highlighted that that residential home sales in the region totaled 3,047 in August 2020, a 36.6 % increase from the 2,231 sales recorded in August 2019. The August 2020 sales were 19.9% above the 10-year August sales average.

Cost Inflation Trends

The COVID-19 pandemic continued to have a visible impact on consumer prices. Consumer Price Index (CPI) for B.C. has been on a continuous decline since the start of the pandemic, with the latest 12-month average of 1.4% last being reported by Statistics B.C. for up to July 2020.

While CPI measures the cost inflation of consumer products (e.g. food, shelter, transportation, household costs, clothing etc.), the Building Construction Price Index (BCPI) is used by government agencies undertaking economic analyses and other users that are interested in evaluating the impact of price changes on capital expenditures. Statistics Canada publishes the BCPI for each major metropolitan areas in Canada on a quarterly basis. The latest year-to-year data shows that the Vancouver BCPI increased by 2.0% between Q2 2019 and Q2 2020. Escalation in construction costs was mainly due to costs of commodities, raw materials and wages that continue to rise despite of the slowdown of the economic activities.

Analysis

The presented market statistics are based on a snapshot in time while the future trends and projection are largely unknown. Due to the uncertainty of the full impact of COVID-19, including the possibility of future outbreaks in B.C. or elsewhere, evolutions in public health responses, and the timing of the development of a vaccine, the City has to take these variables into consideration when determining the course of action to take for the current year's annual DCC update. Staff propose the following two options for Council's consideration:

Development Type	Unit	Option 1	Option 2	Difference
		Keep DCC	Increase DCC	(\$)
		Rates Unchanged	Rates by VCPI	
		(Recommended)	of 2.3%	
Single Family	per lot	\$41,533.50	\$42,488.77	\$955.27
Townhouse	per ft ²	\$22.59	\$23.11	\$0.52
Apartment	per ft ²	\$23.78	\$24.33	\$0.55
Commercial/Institutional	per ft ²	\$15.27	\$15.62	\$0.35
Light Industrial	per ft ²	\$11.92	\$12.19	\$0.27
Major Industrial	per acre	\$102,762.27	\$105,125.80	\$2,363.53

<u>Option 1 – Keep DCC rates Unchanged (Recommended)</u>

Pros:

- This option provides relief to the development industry during this time of uncertainty.
- By keeping the DCC rates unchanged, it could prevent imposing unintended consequences to the development industry if the health crisis continues or worsens.

Cons:

- By skipping the current year's annual DCC rate update, it could result in the development industry's expressed unwanted outcome of the compounding effect of DCC rate increases in the next major DCC update (scheduled to be completed in 2022, being five years from the last major DCC update in 2017) due to the cumulative effect of multi-year cost escalation adjustment.
- By keeping the DCC rate unchanged in 2020, DCC revenue collection is estimated to be \$1 million less based on an average of \$40 million in annual DCC collection. The inflationary adjustments would be added to the future DCC rates which will be borne by future developments. Any potential shortfall in funding the required DCC infrastructure costs may need to be funded by rate payers through property tax or utility, depending on the funding source.

Option 2 - Increase DCC rates by 2.3% (Not Recommended)

Pros:

- The proposed inflationary increase adjustment of 2.3% is based on the 2019 Vancouver Consumer Price Index (VCPI) as published by Statistics Canada, which is an approach consistent with the DFRC's *Development Cost Charges Best Practice Guide's* recommendation on annual inflationary DCC rate updates.
- This approach is consistent with the allowable annual increase under the *Development Cost Charges Bylaw Approval Exemption Regulation, B.C. Reg. 130/2010.*
- By continuing to adjust the DCC rates annually to reflect general inflationary increase, it mitigates large rate increases at the next major DCC update, which is an approach supported by the development industry.
- The level of proposed increase is consistent with the latest published BCPI which is a relevant measurement in providing a reasonable estimate in the inflationary increase in costs in delivering the City's DCC Program which supports capital infrastructures resulting from growth.

Cons:

- The development industry may raise concerns about the rising development fees imposed by the City during this time of uncertainty.
- Higher DCC rates may discourage development and/or business activities in Richmond.

To support the recovery of the local economy from the unprecedented effect from the COVID-19 health and economic crisis, Option 1 is recommended where the 2020 DCC rates are proposed to remain unchanged. As new information becomes available, staff will continue to review and assess the market conditions and its impacts to the City.

Financial Impact

By keeping the DCC rate unchanged, the annual DCC revenue collection is estimated to be \$1 million less than the overall DCC revenue collection had an inflationary rate increase been imposed.

Conclusion

Due to the unknown impact of COVID-19 on the local economy and development activities, it is recommended that the current year annual inflationary DCC update be put on hold, thereby keeping the DCC rates unchanged until the next annual DCC update in 2021.

Venus Ngan, CPA, CA Manager, Treasury and Financial Services (604-276-4217)

6413783



Permissive Property Tax Exemption (2021) Bylaw No. 10196

The Council of the City of Richmond enacts as follows:

PART ONE: RELIGIOUS PROPERTIES PERMISSIVE EXEMPTION

- **1.1** Pursuant to Section 224(2)(f) of the *Community Charter*, the religious halls and the whole of the parcels of land surrounding the religious halls shown on Schedule A are considered necessary to an exempt building set apart for public worship, and are hereby exempt from taxation for the 2021 year.
- **1.2** Pursuant to Section 224(2)(f) of the *Community Charter*, the portions of the parcels of land and improvements surrounding the religious halls shown on Schedule B are considered necessary to an exempt building set apart for public worship, and are hereby exempt from taxation for the 2021 year.
- **1.3** Notwithstanding Sections 1.1 and 1.2 of this bylaw, no additional exemption from taxation pursuant to Section 224(2)(f) will be granted to any parcel of land for which an associated building is not exempted by the British Columbia Assessment Authority pursuant to Section 220(1)(h) of the *Community Charter*.
- **1.4** Notwithstanding Sections 1.1 and 1.2 of this bylaw, if at any point from the period commencing on the date of Council approval of this bylaw and December 31, 2021, parcels of land or portions thereof that are listed in Schedule A or Schedule B no longer qualify for the statutory tax exemption set out in section 220(1)(h) of the *Community Charter*, such parcels of land or portions thereof will be reassessed and subject to taxation for the period commencing on the date on which qualification for the statutory tax exemption ceased and ending on December 31, 2021.

PART TWO: TENANTED RELIGIOUS PROPERTIES PERMISSIVE EXEMPTION

2.1 Pursuant to Section 224(2)(g) of the *Community Charter*, the portions of land and improvements shown on Schedule C are hereby exempt from taxation for the 2021 year.

PART THREE: CHARITABLE AND RECREATIONAL PROPERTIES PERMISSIVE EXEMPTION

- **3.1** Pursuant to Section 224(2)(a) of the *Community Charter*, the whole of the parcels of land shown on Schedule D are hereby exempt from taxation for the 2021 year.
- **3.2** Notwithstanding Section 3.1 of this bylaw, no additional exemption from taxation pursuant to Section 3.1 of this bylaw will be granted to any parcel of land for which an associated building is not exempted by the British Columbia Assessment Authority pursuant to Section 220(1)(i) of the *Community Charter*.
- **3.3** Pursuant to Section 224(2)(a) and Section 224(2)(j) of the *Community Charter*, the whole of the parcels of land and improvements shown on Schedule E are hereby exempt from taxation for the 2021 year.
- **3.4** Pursuant to Section 224(2)(a) and Section 224(2)(k) of the *Community Charter*, the whole of the parcels of land and improvements shown on Schedule F are hereby exempt from taxation for the 2021 year.
- **3.5** Pursuant to Section 224(2)(a) of the *Community Charter*, the whole or portions of the parcels of land and improvements shown on Schedule G are hereby exempt from taxation for the 2021 year.
- **3.6** Pursuant to Section 224(2)(i) of the *Community Charter*, the whole or portions of land and improvements shown on Schedule H are hereby exempt from taxation for the 2021 year.
- **3.7** Pursuant to Section 224(2)(d) of the *Community Charter*, the whole or portions of land and improvements shown on Schedule I are hereby exempt from taxation for the 2021 year.

PART FOUR: MISCELLANEOUS PROVISIONS

- 4.1 Schedules A through I inclusive, which are attached hereto, form a part of this bylaw.
- 4.2 Permissive Exemption Bylaw 10027 is here by repealed in its entirety.

4.3 This Bylaw is cited as "Permissive Property Tax Exemption (2021) Bylaw No. 10196".

FIRST READING	 CITY OF RICHMOND
SECOND READING	 APPROVED for content by originating dept.
THIRD READING	 APPROVED
LEGAL REQUIREMENTS SATISFIED	 for legality by Solicitor
ADOPTED	 DID

MAYOR

CORPORATE OFFICER

Bylaw 10196 PLACE OF PUBLIC WORSHIP PROPER & HALL

SCHEDULE A to BYLAW 10196

NAME, ROLL NO. & CIVIC ADDRESS	LEGAL DESCRIPTION OF PROPERTY	MAILING ADDRESS
Bakerview Gospel Chapel (067-375-002) 8991 Francis Road	PID 009-294-902 Lot 135 Except: Parcel B (Bylaw Plan 87226) Section 21 Block 4 North Range 6 West New Westminster District Plan 23737	Bakerview Gospel Chapel 10260 Algonquin Drive Richmond, B.C. V7A 3A4
Beth Tikvah Congregation and Centre Association (099-358-999) 9711 Geal Road	PID 003-644-391 Lot 1 Except: Firstly: Part Subdivided by Plan 44537 Secondly: Part Subdivided by Plan LMP47252 Section 26 Block 4 North Range 7 West New Westminster District Plan 17824	Beth Tikvah Congregation and Centre Association 9711 Geal Road Richmond, B.C. V7E 1R4
Brighouse United Church Hall (064-046-009) 8151 Bennett Road	PID 006 199 631 Lot 362 of Section 16 Block 4 North Range 6 West New Westminster District Plan 47516	Congregation of the United Church of BC 8151 Bennett Road Richmond, B.C. V6Y 1N4
Canadian Martyrs Parish (094-145-000) 5771 Granville Avenue	PID 003-894-266 Lot 610 Section 12 Block 4 North Range 7 West New Westminster District Plan 58494	Roman Catholic Archbishop of Vancouver 5771 Granville Avenue Richmond, B.C. V7C 1E8
Christian and Missionary Alliance (082-148-009) 3360 Sexsmith Road	PID 003-469-247 Lot 23 Except: Firstly: the East 414.3 Feet Secondly: the South 66 Feet, and Thirdly: Part Subdivided by Plan 33481 Sections 27 and 28 Block 5 North Range 6 West New Westminster District Plan 3404	North Richmond Alliance Church 3360 Sexsmith Road Richmond, B. C. V6X 2H8
Christian Reformed Church of Richmond (072-496-000) 9280 No. 2 Road	PID 018-262-767 Lot 2 of Section 30 Block 4 North Range 6 West New Westminster District Plan LMP9785	Christian Reformed Church of Richmond 9280 No. 2 Road Richmond, B.C. V7E 2C8

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SCHEDULE A to BYLAW 10196

NAME, ROLL NO. & CIVIC ADDRESS	LEGAL DESCRIPTION OF PROPERTY	MAILING ADDRESS
Church in Richmond (083-953-080) 4460 Brown Road	PID 028-628-110 Lot 7 Section 33 Block 5North Range 6 West New Westminster District Plan 3318 Part S 1/2, Except Plan 24362, Exp 24381	Church in Richmond 4460 Brown Road Richmond BC V6X 2E8
Conference of The United Mennonite Churches of B.C. (080-792-000) 11571 Daniels Road	PID 004 152 832 Lot 323 of Section 25 Block 5 North Range 6 West New Westminster District Plan 57915	Conference of Mennonites in B.C. c/o Peace Mennonite Church 11571 Daniels Road Richmond, B.C. V6X 1M7
Convention of Baptist Churches of B.C. (071-191-006) 8140 Saunders Road	PID 007-397-216 Lot 123 Section 28 Block 4 North Range 6 West New Westminster District Plan 44397	Convention of Baptist Churches of B.C. 8140 Saunders Road Richmond, B.C. V7A 2A5
Emmanuel Christian Community Society (102-050-053) 10351 No. 1 Road	PID 011-908-106 Lot 13 Block A Section 34 Block 4 North Range 7 West Except Plan 53407 New Westminster District Plan 710	Emmanuel Christian Community Society 10351 No. 1 Road Richmond, B.C. V7E 1S1
Fujian Evangelical Church (025-172-004) 12200 Blundell Road	PID 025-000-047 Lot 1 Section 19 Block A North Range 5 West New Westminster District Plan LMP49532	Fujian Evangelical Church 12200 Blundell Road Richmond, B.C. V6W 1B3
Gilmore Park United Church (097-837-001) 8060 No. 1 Road	PID 024-570-541 Strata Lot 1 Section 23 Block 4 North Range 7 West New Westminster District Strata Plan LMS3968	Congregation of the Gilmore Park United Church 8060 No. 1 Road Richmond, B.C. V7C 1T9
I Kuan Tao (Fayi Chungder) Association (084-144-013) 8866 Odlin Crescent	PID 025-418-645 Lot 30 Section 33 Block 5 North Range 6 West new Westminster District Plan LMP54149	I Kuan Tao (Fayi Chungder) Association #2100, 1075 West Georgia Street Vancouver, B.C. V6E 3G2

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	SCHEDULE A to BYLAW 10196	
NAME, ROLL NO. & CIVIC ADDRESS	LEGAL DESCRIPTION OF PROPERTY	MAILING ADDRESS
Immanuel Christian Reformed Church (062-719-724) 7600 No. 4 Road	PID 003-486-486 Parcel One Section 14 Block 4 North Range 6 West New Westminster District Reference Plan 71292	Immanuel Christian Reformed Church 7600 No. 4 Road Richmond, B.C. V6Y 2T5
Johrei Fellowship (084-786-000) 10380 Odlin Road	PID 003-485 757 East Half of Lot 4 Except: Part Subdivided by Plan 79974; Section 35 Block 5 North Range 6 West, New Westminster District Plan 5164	Johrei Fellowship Inc. 10380 Odlin Road Richmond, B.C. V6X 1E2
Lansdowne Congregation Jehovah's Witnesses (061-569-073) 11014 Westminster Highway	PID 003-578-356 Lot 107 Section 12 Block 4 North Range 6 West New Westminster District Plan 52886	Trustees of the Lansdowne Congregation Jehovah's Witnesses c/o Jurgan Halbheer 10960 Ryan Road Richmond, B.C. V6A 2G4
Lutheran Church Hall (061-166-000) 6340 No. 4 Road	PID 010-899-294 Parcel 1 of Section 11 Block 4 North Range 6 West New Westminster District Plan 77676	Our Saviour Lutheran Church of Richmond BC 6340 No. 4 Road Richmond, B.C. V6Y 2S9
Meeting Room (025-166-010) 8020 No. 5 Road Property owner registered as Gabe Csanyi, Jonathan Csanyi, Wayne Coleman, Bruce Anstey	PID 016-718-739 Lot A Section 19 Block 4 North Range 5 West New Westminster District Plan 86178	Meeting Room Attn: Jonathan Csanyi 9034 187 Street Surrey, BC V4N 3N4
North Richmond Alliance Church (063-418-009) 9140 Granville Avenue	PID 017-691-842 Lot 1 (BF53537) Section 15 Block 4 North Range 6 West New Westminster Plan 7631	North Richmond Alliance Church 9140 Granville Avenue Richmond, B.C. V6Y 1P8
Our Saviour Lutheran Church of Richmond (061-166-000) 6340 No. 4 Road	PID 010-899-294 Parcel 1 of Section 11 Block 4 North Range 6 West New Westminster District Plan 77676	Our Saviour Lutheran Church of Richmond 6340 No. 4 Road Richmond, B.C. V6Y 2S9

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NAME, ROLL NO. & CIVIC ADDRESS	LEGAL DESCRIPTION OF PROPERTY	MAILING ADDRESS
The Public School of Vancouver Archdiocese (067-043-063) 8251 St. Albans Road	PID 010 900 691 Lot 15 Except: Firstly: Part Dedicated as Road on Plan 20753, Secondly: Part Subdivided by Plan 58438; Section 21 Block 4 North Range 6 West New Westminster District Plan 3238	Catholic Independent Schools of Vancouver Archdiocese St. Paul's Roman Catholic Parish 8251 St. Alban's Road Richmond, B.C. V6Y 2L2
Richmond (Bethel) Mennonite Church (030-869-001) 10160 No. 5 Road	PID 017 945 054 Lot A (BF302986) Section 31 Block 4 North Range 5 West New Westminster District Plan 35312	B.C. Conference of the Mennonite Brethren Churches 10200 No. 5 Road Richmond, B.C. V7A 4E5
Richmond Chinese Evangelical Free Church (025-162-005) 8040 No 5 Road	PID 004-332-695 South 100 feet West Half Lot 1 Block "A" Section 19 Block 4 North Range 5 West New Westminster District Plan 4090	Richmond Chinese Evangelical Free Church Inc. 8040 No. 5 Road Richmond, B.C. V6Y 2V4
Richmond Chinese Alliance Church (102-369-073) 10100 No. 1 Road	PID 003-898-474 Lot 68 Section 35 Block 4 North Range 7 West New Westminster District Plan 31799	Christian and Missionary Alliance (Canadian Pacific District) 107 – 7585 132 nd Street Surrey, B.C. V2W 1K5
Richmond Faith Fellowship (085-780-002) 11960 Montego Street	PID 010-267-930 Lot A Except: Parcel E (Bylaw Plan LMP22889), Section 36 Block 5 North Range 6 West New Westminster District Plan 17398	Northwest Canada Conference Evangelical Church 11960 Montego Street Richmond, B.C. V6X 1H4
Richmond Gospel Hall (098-373-006) 5651 Francis Road	PID 008-825-025 Lot 45 Except: Parcel A (Statutory Right of Way Plan LMP11165) Section 24 Block 4 North Range 7 West New Westminster District Plan 25900	Congregation of the Richmond Gospel Hall 5651 Francis Road Richmond, B.C. V7C 1K2

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Bylaw 10196 PLACE OF PUBLIC WORSHIP PROPER & HALL

SCHEDULE A to BYLAW 10196

	SCHEDULE A 10 DILAW 10190	
NAME, ROLL NO. & CIVIC ADDRESS	LEGAL DESCRIPTION OF PROPERTY	MAILING ADDRESS
Richmond Pentecostal Church (060-300-000) 9300 Westminster Highway	PID 024-957-828 Parcel C Section 10 Block 4 North Range 6 West New Westminster District Plan 48990	Pentecostal Assemblies of Canada 9300 Westminster Highway Richmond, B.C. V6X 1B1
Richmond Presbyterian Church (094-627-007) 7111 No. 2 Road	PID 009-213-244 Lot 110 of Section 13 Block 4 North Range 7 West New Westminster District Plan 24870	Trustees of Richmond Congregation of Presbyterian Church 7111 No. 2 Road Richmond, B.C. V7C 3L7
Richmond Sea Island United Church (082-454-062) 8711 Cambie Road	PID 011-031-182 Lot 3 Sections 27 and 28 Block 5 North Range 6 West New Westminster District Plan 4037	Congregation of the Richmond United Church of Canada 8711 Cambie Road Richmond, B.C. V6X 1K2
The Salvation Army Richmond (066-497-000) 8280 Gilbert Road	PID 001-234-684 Lot "L" (Y24736) of Section 20 Block 4 North Range 6 West New Westminster District Plan 10008	Governing Council of the Salvation Army Canada West 8280 Gilbert Road Richmond, B.C. V7C 3W7
South Arm United Church Hall (plus Annex - Pioneer Church) (047-431-056) 11051 No. 3 Road	PID 015-438-562 Parcel E (Explanatory Plan 21821) of Lots 1 and 2 of Parcel A Section 5 Block 3 North Range 6 West New Westminster District, Plan 4120 Except: Firstly; Part Subdivided by Plan 29159 AND Secondly: Parcel "D" (Bylaw Plan 79687)	Congregation of the South Arm United Church of Canada 11051 No. 3 Road Richmond, B.C. V6X 1X3
Steveston Congregation of Jehovah's Witnesses (102-520-003) 4260 Williams Road	PID 006-274-382 Parcel "A" (Reference Plan 17189) Lot 1 of Section 35 Block 4 North Range 7 West New Westminster District Plan 10994	Steveston Congregation of Jehovah's Witnesses Attn: Jonathan Mearns #87 – 6800 Lynas Lane Richmond, B.C. V7C 5E2

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	SCHEDULE A 10 DILAW 10190	
NAME, ROLL NO. & CIVIC ADDRESS	LEGAL DESCRIPTION OF PROPERTY	MAILING ADDRESS
Steveston United Church (087-640-000) 3720 Broadway Street	PID 010-910-336 Parcel A Section 3 Block 3 North Range 7 West New Westminster District Reference Plan 77684	Trustees of Steveston Congregation of United Church of Canada 3720 Broadway Street Richmond, B.C. V7E 4Y8
Subramaniya Swamy Temple (025-161-000) 8840 No. 5 Road	PID 000-594-261 Parcel B (Explanatory Plan 10524) Lot 3 Section 19 Block 4 North Range 5 West New Westminster District Plan 5239	Subramaniya Swamy Temple of B.C. 8840 No. 5 Road Richmond, B.C. V6Y 2V4
Trinity Pacific Church (076-082-008) 10011 No. 5 Road	PID 007-178-204 Lot 297 Except Parcel B (Bylaw Plan 79916) Section 36 Block 4 North Range 6 West New Westminster District Plan 35779	Trinity Pacific Church 10011 No. 5 Road Richmond, B.C. V7A 4E4
United Church Hall (082-454-062) 8711 Cambie Road	PID 011-031-182 Lot 3 of Sections 27 and 28 Block 5 North Range 6 West New Westminster District Plan 4037	Congregation of the Richmond United Church of Canada 8711 Cambie Road Richmond, B.C. V6X 1K2
Vancouver International Buddhist Progress Society (082-265-053) 6670 – 8181 Cambie Road	PID 018-553-532 Lot 53 Section 28 Block 5 North Range 6 West New Westminster District Plan LMS 1162 together with an interest in the common property in proportion to the unit entitlement of the strata lot.	Vancouver International Buddhist Progress Society 6680 – 8181 Cambie Road Richmond, B.C. V6X 3X9
Walford Road Gospel Church (081-608-000) 9291 Walford Street	PID 012-734-756 Lot 21 of Blocks 25 and 26 Section 27 Block 5 North Range 6 West New Westminster District Plan 2534	Holy Spirit Association For The Unification Of World Christianity 9291 Walford Street Richmond, B.C. V6X 1P3

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Bylaw 10196 PLACE OF PUBLIC WORSHIP PROPER & HALL

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		SCHEDULE B to BYLAW 1	0196			
NAME, ROLL NO. & CIVIC ADDRESS	LEGAL DESCRIPTION OF PARCEL	MAILING ADDRESS	PROPORTION OF LAND EXEMPTED FROM TAXATION	PROPORTION OF LAND TAXABLE	PROPORTION OF IMPROVEMENTS EXEMPTED FROM TAXATION	PROPORTION OF IMPROVEMENT TAXABLE
Aga Khan Foundation Canada (The Ismaili Jamatkhana and Centre) (084-310-003) 4000 May Drive	PID 029-176-263 Lot A Section 34 Block 5 North Range 6 West New Westminster District Plan EPP32741	Aga Khan Foundation Canada (The Ismaili Jamatkhana and Centre) 4000 May Drive Richmond, B.C.	100% of footprint of building 60,000 sq. ft. for parking	Remainder of land not exempted	100%	0%0
Assumption of the Blessed Virgin Mary Ukrainian Catholic Church (098-394-005) 8700 Railway Avenue Manse	PID 011-070-749 Parcel "One" (Explanatory Plan 24522) of Lots "A "and "B" Plan 4347 and Lot 26 of Plan 21100 Section 24 Block 4 North Range 7 West New Westminster District	Ukrainian Catholic Episcopal Corp. of MB 8700 Railway Avenue Richmond, B.C. V7C 3K3	97.65% 2,031.18 m ²	2.35% 48.82 m ²	75.6% of Manse Building 302.59 m ² 100% of Religious Hall	24.4% of Manse Building 97.64 m ²
Bethany Baptist Church (000-821-001) 22680 Westminster Highway (Site Area 5.295 acres)	PID 018-604-897 Lot 1 Except: Part Dedicated Road on Plan LMP18317; Section 2 Block 4 North Range 4 West New Westminster District Plan LMP9648	Bethany Baptist Church 22680 Westminster Highway Richmond, B.C. V6V 1B7	42% 8,999.7 m ² 2.224 acres	58% 12,427.9 m ² 3.071 acres	100%	%0

Bylaw 10196 Portions of land & improvements for place of public worship

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	PROPOI OI IMPROVI TAXA	°0	0	°0
	PROPORTION OF IMPROVEMENTS EXEMPTED FROM TAXATION	100%	100%	100%
	PROPORTION OF LAND TAXABLE	56.4% 10,903.97 m ² 2.694 acres	7% 680 m ² 0.17 acres	9.2% 817.5 m ² 0.202 acres
0196	PROPORTION OF LAND EXEMPTED FROM TAXATION	43.6% 8,440 m ² 2.086 acres	93% 9,034.3 m ² 2.23 acres	90.8% 8,093.7 m ² 2.00 acres
SCHEDULE B to BYLAW 1	MAILING ADDRESS	BC Muslim Association 12300 Blundell Road Richmond, B.C. V6W 1B3	Roman Catholic Archbishop of Vancouver 5771 Granville Avenue Richmond, B.C. V7C 1E8	Corp. of the President of the Lethbridge Stake of the Church of Jesus Christ of Latter-Day Saints c/o LDS Church Tax Division #502 - 7136 50 E. North Temple Street Salt Lake City, Utah, 84150- 2201
	LEGAL DESCRIPTION OF PARCEL	PID 01 1-053-569 Lot 5 Except: Part Subdivided by Plan 33568; Block "A" Section 19 Block 4 North Range 5 West New Westminster District Plan 4090	PID 003-894-266 Lot 610 Section 12 Block 4 North Range 7 West New Westminster District Plan 58494	PID 009-210-890 Lot 2 Section 33 Block 4 North Range 6 West New Westminster District Plan 24922
	NAME, ROLL NO. & CIVIC ADDRESS	BC Muslim Association (025-243-080) 12300 Blundell Road (Site Area 4.78 Acres)	Canadian Martyrs Parish (094-145-000) <i>577</i> 1 Granville Avenue	Church of Latter Day Saints (074-575-000) 8440 Williams Road (Site Area 2.202 acres)

Bylaw 10196 Portions of Land & IMPROVEMENTS For place of public worship

Page 11	PROPORTION OF IMPROVEMENT TAXABLE	0%0	28.2% 286.33 m ²	0%0
	PROPORTION OF IMPROVEMENTS EXEMPTED FROM TAXATION	100%	71.8% 729.75 m ²	100%
	PROPORTION OF LAND TAXABLE	90% 46,426.6 m ²	65.2% 6,333 m ² 1.565 acres	28.3% 3,180.3 m ² 0.794 acres
0196	PROPORTION OF LAND EXEMPTED FROM TAXATION	10% 5,158.4 m ²	34.8% 3,384 m ² 0.836 acres	71.7% 8,077 m ² 1.996 acres
SCHEDULE B to BYLAW 1	MAILING ADDRESS	Cornerstone Evangelical Baptist Church of Vancouver 7890 No. 5 Road Richmond, B.C. V6Y 2V2	Dharma Drum Mountain Buddhist Association 8240 No. 5 Road Richmond, B.C. V6Y 2V4	BC Conference of the Mennonite Brethren Churches 11295 Mellis Drive Richmond, B.C. V5X 4K2
APROVEMENTS VORSHIP	LEGAL DESCRIPTION OF PARCEL	PID 002-555-310 South Half of South West Quarter Section 18 Block 4 North Range 5 West New Westminster District Except: Firstly: Part Dedicated Road on Plan 87640 Secondly: Parcel E (Bylaw Plan LMP4874) Thirdly: Parcel F (Bylaw Plan LMP12615) Fourthly: Part on SRW Plan 21735	PID 003-740-315 Lot 23 Section 19 Block 4 North Range 5 West New Westminster District Plan 55080	PID 000-471-780 That portion of Lot 176 Section 25 Block 5 North Range 6 West New Westminster District Plan 53633
Bylaw 10196 Portions of land & in For place of public w	NAME, ROLL NO. & CIVIC ADDRESS	Cornerstone Evangelical Baptist Church (024-279-000) 12011 Blundell Road Church Parking	Dharma Drum Mountain Buddhist Association (025-222-030) 8240 No. 5 Road Manse	Fraserview Mennonite Brethren (080-623-027) 11295 Mellis Drive (Site Area 2.79 Acres)

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	PROPORTION OF IMPROVEMENT TAXABLE	100% of Manse 103.87 m ²	16.8% of hall used for Manse and dining 632.0 m ² 100% of farm buildings	49.4% 1,171.8 m ²
	PROPORTION OF IMPROVEMENTS EXEMPTED FROM TAXATION	Remaining portion of Building	83.2% of remaining hall 3,132.4 m ² 0% of farm buildings	50.6% 1,199.3 m ²
	PROPORTION OF LAND TAXABLE	56.1% 27,828.07 m ²	63.5% 28,622.31 m ²	72.3% 14,391.7 m ² 3.556 acres
06101	PROPORTION OF LAND EXEMPTED FROM TAXATION	43.9% 21,778.93 m ²	36.5% 16,458.69 m ²	27.7% 5,502.6 m ² 1.36 acres
SCHEDULE B 10 BYLAW	MAILING ADDRESS	India Cultural Centre of Canada 8600 No 5 Road Richmond, B.C. V6Y 2V4	International Buddhist Society 9160 Steveston Highway Richmond, B.C. V7A 1M5	Ling Yen Mountain Temple 10060 No. 5 Road Richmond, B.C. V7A 4C5
	LEGAL DESCRIPTION OF PARCEL	PID 004-328-850 Lot 19 Section 19 Block 4 North Range 5 West New Westminster District Plan 39242	PID 026-438-160 Section 3 Block 3 North Range 6 West New Westminster District Plan BCP19994 Parcel 1	PID 025-566-806 Lot 42 Except: Part Dedicated Road on Plan LMP22689, Section 31 Block 4 North Range 5 West New Westminster District Plan 25987
	NAME, ROLL NO. & CIVIC ADDRESS	India Cultural Centre of Canada (024-908-040) 8600 No 5 Road Manse & Parking	International Buddhist Society (046-195-007) 9160 Steveston Highway Manse The land under the taxable improvements situated on this property shall also be assessed as taxable.	Ling Yen Mountain Temple (030-901-000) 10060 No. 5 Road (Site Area 4.916 Acres) Manse

Bylaw 10196 Portions of land & improvements for place of public worship

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		SCHEDULE B to BYLAW 1	0196			
NAME, ROLL NO. & CIVIC ADDRESS	LEGAL DESCRIPTION OF PARCEL	MAILING ADDRESS	PROPORTION OF LAND EXEMPTED FROM TAXATION	PROPORTION OF LAND TAXABLE	PROPORTION OF IMPROVEMENTS EXEMPTED FROM TAXATION	PROPORTION OF IMPROVEMENT TAXABLE
Nanaksar- Gurdwara- Gursikh Temple (002-822-001) 18691 Westminster Highway (Site Area 14.88 Acres) Manse	PID 023-751-878 Lot 1 Section 6 Block 4 North Range 4 West New Westminster District Plan 33029	Nanaksar-Gurdwara- Gursikh Temple 18691 Westminster Highway Richmond, B.C. V6V 1B1	16% 9,619.5 m ² 2.377 acres	84% 50,597.7 m ² 12.503 acres	86.9% of Manse 2,925.05 m ² 100% of Religious Hall	13.1% of Manse 441.29 m ²
Parish of St. Alban's (Richmond) (064-132-000) 7260 St. Alban's Road Manse	PID 013-077-911 Parcel One Section 16 Block 4 North Range 6 West New Westminster District Reference Plan 80504	Parish of St. Alban's (Richmond) 7260 St. Alban's Road Richmond, B.C. V6Y 2K3	91.6% 4,464.1 m ²	8.4% 406.9 m ²	0% of Manse 100% of Religious Hall	100% of Manse 83.6 m ²
Parish of St. Anne's - Steveston, B.C. (097-615-002) 4071 Francis Road Religious Hall Commercial Use	PID 002-456-320 Lot 2 of Section 23 Block 4 North Range 7 West New Westminster District Plan 70472	Parish of St. Anne's 4071 Francis Road Richmond, B.C. V7C 1J8	99.2% 3,067.86 m ²	0.8% 24.14 m ²	97.8% 1,090.66 m ²	2.2% 24.14 m ²
Peace Evangelical Church (025-231-041) 8280 No. 5 Road Manse	PID 004-099-303 Lot 24 Section 19 Block 4 North Range 5 West New Westminster District Plan	Peace Evangelical Church 8280 No. 5 Road Richmond, B.C. V6Y 2V4	34.4% 3,614.3 m ² 0.893 acres	65.6% 6,892.7 m ² 1.703 acres	100% of Religious Hall 0% of Manse	100% Manse

Bylaw 10196 Portions of land & improvements for place of public worship

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Page 14	PROPORTION OF IMPROVEMENT TAXABLE	0%0	100% of Manse 106.84 m ²	100% of Manse	100%
	PROPORTION OF IMPROVEMENTS EXEMPTED FROM TAXATION	100%	0% of Manse	0% of Manse 100% of Religious Hall	0%0
	PROPORTION OF LAND TAXABLE	20% 2,030.5 m ² 0.504 acres	43% 868.6 m ²	Land under manse	70% Non- parking area 1,521.8 m ²
0196	PROPORTION OF LAND EXEMPTED FROM TAXATION	80% 8,077.5 m ² 1.996 acres	<i>57%</i> 1,151.4 m ²	Portion of land not under church	30% Paved parking area behind building 652.2 m ²
SCHEDULE B to BYLAW 1	MAILING ADDRESS	Christian and Missionary Alliance (Canadian Pacific District) 11371 No. 3 Road Richmond, B.C. V7A 1X3	Richmond Baptist Church 6640 Blundell Road Richmond, B.C. V7C 1H8	Richmond Baptist Church 6640 Blundell Road Richmond, B.C. V7C 1H8	Pentecostal Assemblies of Canada 9260 Westminster Highway. Richmond, B.C. V6X 1B1
IPROVEMENTS VORSHIP	LEGAL DESCRIPTION OF PARCEL	PID 004-113-331 South Half of 14 Section 5 Block 3 North Range 6 West New Westminster District Plan 4120	PID 006-457-118 Lot 43 Section 19 Block 4 North Range 6 West New Westminster District Plan 30356	PID 033-732-193 Section 19 Block 4 North Range 6 West New Westminster District Plan 71422 Parcel A	PID 004-140-125 Lot A Section 10 Block 4 North Range 6 West New Westminster District Plan 13172
Bylaw 10196 Portions of Land & In For place of public W	NAME, ROLL NO. & CIVIC ADDRESS	Richmond Alliance Church (047-535-044) 11371 No. 3 Road (Site Area 2.5 acres)	Richmond Baptist Church (065-972-089) 6560 Blundell Road Manse and Parking	Richmond Baptist Church (066-062-000) 6560 Blundell Road Manse and Parking	Richmond Pentecostal Church (060-287-008) 9260 Westminster Highway Manse and Parking

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FOR PLACE OF PUBLIC WORSHIP	
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SCHEDULE B to BYLAW 10196

E, ROLL NO. VIC ADDRESS	LEGAL DESCRIPTION OF PARCEL	MAILING ADDRESS	PROPORTION OF LAND EXEMPTED FROM	PROPORTION OF LAND TAXABLE	PROPORTION OF IMPROVEMENTS EXEMPTED FROM TAXATION	PROPORTION OF IMPROVEMENT TAXABLE
	PID 024-957-828	Pentecostal Assemblies of	58.7%	51.3%	100%	0%0
l Church	Lot 107 Section 10 Block	Canada	$8.093.7 \text{ m}^2$	$5.690.3 \text{ m}^2$		
(00)	4 North Range 6 West	9300 Westminster Highway				
minster	New Westminster District	Richmond, B.C. V6X 1B1	2 acres	1.4 acres		
	Plan 64615					

r		
	PROPORTION OF IMPROVEMENT TAXABLE	%
	PROPORTION OF IMPROVEMENTS EXEMPTED FROM TAXATION	100%
	PROPORTION OF LAND TAXABLE	50% 385 m ²
0196	PROPORTION OF LAND EXEMPTED FROM TAXATION	50% 385 m ²
SCHEDULE B to BYLAW I	MAILING ADDRESS	Science of Spirituality SKRM Inc. 9100 Van Horne Way Richmond, B.C. V6X 1W3
	LEGAL DESCRIPTION OF PARCEL	 PID 015-725-871 Parcel F (Reference Plan 2869) Section 2 Block 3 North Range 6 West New Westminster District Except: Part Dedicated Road on Plan LMP4152 PID 013-082-566 North Easterly 5 and 1/5th Square Chains Section 2 Block 3 North Range 6 West New Westminster District Except: Part Dedicated Road by Plan LMP54152 PID 015-342-433 Parcel D (Explanatory Plan 1980) Section 2 Block 3 North Range 6 West New Westminster District Except: Part Dedicated Road by Plan 1980) Section 2 Block 3 North Range 6 West New Westminster District Dedicated Road by Plan 1980) Section 2 Block 3 North Range 6 West New Westminster District PID 015-725-880 PID 015-725-880 Parcel "G" (Reference Plan 2870) Section 2 Block 3 North Range 6 West New Westminster District
	NAME, ROLL NO. & CIVIC ADDRESS	The Science of Spirituality Eco Centre (045-488-098) Civic address: 11011 Shell Road Farm Land

HEDULE B to BYLAW 10]

Bylaw 10196 Portions of land & IMPROVEMENTS For place of public worship

		SCHEDULE B to BYLAW 1	0196			
NAME, ROLL NO. & CIVIC ADDRESS	LEGAL DESCRIPTION OF PARCEL	MAILING ADDRESS	PROPORTION OF LAND EXEMPTED FROM TAXATION	PROPORTION OF LAND TAXABLE	PROPORTION OF IMPROVEMENTS EXEMPTED FROM TAXATION	PROPORTION OF IMPROVEMENT TAXABLE
The Shia Muslim Community of British Columbia (024-941-069) 8580 No. 5 Road (Site Area 9.8 acres)	PID 004-884-850 Lot 20 Section 19 Block 4 North Range 5 West New Westminster District Plan 39242	The Shia Muslim Community of British Columbia 8580 No. 5 Road Richmond, B.C. V6Y 2V4	38.1% 15,117.2 m ² 3.736 acres	61.9% 24,512.8 m ² 6.064 acres	100%	0%0
South Arm United Church (047-431-056) 11051 No. 3 Road (Site Area 6.42 acres)	PID 015-438-562 Parcel "E" (Explanatory Plan 21821) of Lots 1 and 2 of Parcel "A" Section 5 Block 3 North Range 6 West New Westminster District Plan 4120 EXCEPT: FIRSTLY: Part Subdivided by Plan 29159 AND SECONDLY: Parcel "D" (Bylaw Plan 79687)	Congregation of the South Arm United Church of Canada 11051 No. 3 Road Richmond, B.C. V7A 1X3	31.6% 8,093.7 m ² 2 acres	68.4% 17,496.3 m ² 4.42 acres	100%	%0
St. Gregory Armenian Apostolic Church of BC (018-330-000) 13780 Westminster Highway	PID 002-946-068 Lot "A" (RD 190757) Section 8 Block 4 North Range 5 West New Westminster District Plan 12960	Armenian Apostolic Church of British Columbia 13780 Westminster Highway Richmond, B.C. V6V 1A2	95% 2,505.15 m ²	5% 131.85 m ²	100%	%0

Bylaw 10196 Portions of Land & IMPROVEMENTS FOR PLACE OF PUBLIC WORSHIP

Page 18	PROPORTION OF IMPROVEMENT TAXABLE	40% 423.6 m ²	100% of Manse 196.8 m ²	%0
	PROPORTION OF IMPROVEMENTS EXEMPTED FROM TAXATION	60% 635.4 m ²	0% of Manse 100% of Religious Hall	100%
	PROPORTION OF LAND TAXABLE	61.2% 14,838.13 m ² 3.67 acres	Note: The land under the manse is exempt; the manse itself is not exempt. 26.65% 1,723.67 m ² 0.43 acres	60% 11,547.6 m ² 2.86 acres
0196	PROPORTION OF LAND EXEMPTED FROM TAXATION	38.8% (School portion exempted under Schedule C) 9,397.07 m ² 2.32 acres	Note: The land under the manse is exempt; the manse itself is not exempt. 73.35% 4,744.33 m ² 1.17 acres	40% 7,698.4 m ² 1.90 acres
SCHEDULE B to BYLAW 1	MAILING ADDRESS	Roman Catholic Archbishop of Vancouver St. Joseph the Worker Parish 4451 Williams Road Richmond, B.C. V7E 1J7	Roman Catholic Archbishop of Vancouver St. Monica's Parish 12011 Woodhead Road Richmond, B.C. V6V 1G2	Catholic Independent Schools of Vancouver Archdiocese St. Paul's Roman Catholic Parish 8251 St. Alban's Road Richmond, B.C. V6Y 2L2
APROVEMENTS VORSHIP	LEGAL DESCRIPTION OF PARCEL	PID 010-887-725 Parcel "C" (Explanatory Plan 8670) of Lots 3 and 4 Except: Part Subdivided by Plan 30525; Section 26 Block 4 North Range 7 West New Westminster District Plan 3139	PID 024-840-319 Lot A Section 31 Block 5 North Range 5 West New Westminster District Plan LMP47203	PID 010-900- 691 Lot 15 Except: Firstly: Part Dedicated as Road on Plan 20753, Secondly; Part Subdivided by Plan 58438; Section 21 Block 4 North Range 6 West New Westminster District Plan 3238
Bylaw 10196 PORTIONS OF LAND & IN FOR PLACE OF PUBLIC V	NAME, ROLL NO. & CIVIC ADDRESS	St. Joseph The Worker Parish (099-300-034) 4451 Williams Road (Site Area 8.268 acres) 3.26 and 5.00 acres	St. Monica's Parish (040-800-004) 12011 Woodhead Road (Site Area 1.60 acres) Manse and Hall	St. Paul's Roman Catholic Parish (067-043-063) 8251 St. Alban's Road (Site Area 4.77 acres)

		SCHEDULE B to BYLAW 1	0196			
, ROLL NO. IC ADDRESS	LEGAL DESCRIPTION OF PARCEL	MAILING ADDRESS	PROPORTION OF LAND EXEMPTED FROM TAXATION	PROPORTION OF LAND TAXABLE	PROPORTION OF IMPROVEMENTS EXEMPTED FROM TAXATION	PROPORTION OF IMPROVEMENT TAXABLE
on Buddhist e 11-000) arry Street rea 4.53 acres)	PID 001-235-265 Lot 132 Except: Firstly: Part Road on Plan LMP20538, Secondly: Part Subdivided by Plan LMP25471, Section 2 Block 3 North Range 7 West New Westminster District Plan 40449	Steveston Buddhist Temple 4360 Garry Street Richmond, B.C. V7E 2V2	44.15% 8,093.7 m ² 2 acres	55.85% 10,238.56 m ² 2.53 acres	100%	%0
gu Monastery ation 93-000) Io. 5 Road	PID 027-242-838 Lot A Section 19 Block 4N Range 5W New Westminster District Plan BCP32842	Thrangu Monastery Association 8140 No. 5 Road Richmond, B.C. V6Y 2V4	0% of land beneath the dormitory 59.55% 11,421.8 m ² 2.82 acres	100% of land beneath the dormitory 40.45% 7,759.2 m ² 1.92 acres	76.3% 2,060.1 m ²	23.7% 639 m ²
gu Monastery ation 93-000) & 02-011) - ned 160 No. 5	PID 027-242-838 Lot A Section 19 Block 4N Range 5W New Westminster District Plan BCP32842	Thrangu Monastery Association 8140 No. 5 Road Richmond, B.C. V6Y 2V4	59.55% 11,421.8 m ² 2.82 acres	40.45% 7,759.2 m ² 1.92 acres	100% of the shed used to store religious artefacts	%0

Bylaw 10196 Portions of Land & Improvements for place of public worship

Bylaw 10196 Portions of land & In For place of public v	APROVEMENTS VORSHIP					Page 20
		SCHEDULE B to BYLAW 1	0196			
NAME, ROLL NO. & CIVIC ADDRESS	LEGAL DESCRIPTION OF PARCEL	MAILING ADDRESS	PROPORTION OF LAND EXEMPTED FROM TAXATION	PROPORTION OF LAND TAXABLE	PROPORTION OF IMPROVEMENTS EXEMPTED FROM TAXATION	PROPORTION OF IMPROVEMENT TAXABLE
Towers Baptist Church (070-101-000) 10311 Albion Road (Site Area 2.148 acres) Manse	PID 000-565-318 Parcel "A" Except Part on Plan 32239 Section 26 Block 4 North Range 6 West New Westminster District Plan 22468	New Wineskins Society 10311 Albion Road Richmond, B.C. V7A 3E5	78.9% 7,002.4 m ² 1.73 acres	21.1% 1,872.6 m ² 0.418 acres	0% of Manse 100% of Religious Hall	100% Manse 162.6 m ²
Trinity Lutheran Church Hall (064-438-000) 7100 Granville Avenue Manse and Hall	PID 025-555-669 Section 17 Block 4 North Range 6 West Plan BCP3056 Parcel A	Trinity Lutheran Church – Richmond 7100 Granville Avenue Richmond, B.C. V6Y 1N8	87.09% 6,012.32	12.91% Manse 891.68 m ²	0% of Manse 100% of Religious Hall	100% of Manse 142.5 m ² 0% of Religious Hall
Vancouver International Buddhist Progress Society (082-304-006) 8271 Cambie Road (Site Area 0.757 acres)	PID 00-316-002 9 Section 28 Block 5 North Range 6 West Plan 7532	Vancouver International Buddhist Progress Society 6680 – 8181 Cambie Road Richmond, B.C. V6X 3X9	76% 2,322.58 m ²	24% 740.42 m ²	N/A	N/A

		SCHEDULE B to BYLAW 1	0196			
NAME, ROLL NO. & CIVIC ADDRESS	LEGAL DESCRIPTION OF PARCEL	MAILING ADDRESS	PROPORTION OF LAND EXEMPTED FROM TAXATION	PROPORTION OF LAND TAXABLE	PROPORTION OF IMPROVEMENTS EXEMPTED FROM TAXATION	PROPORTION OF IMPROVEMENT TAXABLE
Vancouver International Buddhist Progress Society (082-265-059) 6680 – 8181 Cambie Road Manse	PID 018-553-591 Strata Lot 59 Section 28 Block 5 North Range 6 West New Westminster District Plan Strata Plan LMS1162	Vancouver International Buddhist Progress Society 6680 – 8181 Cambie Road Richmond, B.C. V6X 3X9	91.72% 1,212.05 m ²	8.28% 109.40 m ²	0% of Manse Remaining Religious Hall	100% Manse 109.4 m ²
Vancouver International Buddhist Progress Society (082-265-060) 6690 – 8181 Cambie Road	PID 018-553-605 Strata Lot 60 Section 28 Block 5 North Range 6 West New Westminster District Plan Strata Plan LMS1162	Vancouver International Buddhist Progress Society 6680 – 8181 Cambie Road Richmond, B.C. V6X 3X9	Included in Above Calculation	Included in Above Calculation	Included in Above Calculation	Included in Above Calculation
Vedic Cultural Society of BC (025-212-021) 8200 No 5 Road	PID 011-053-551 South Half Lot 3 Block A Section 19 Block 4 North Range 5 West New Westminster District Plan 4090	Vedic Cultural Society of BC 8200 No 5 Road Richmond, B.C. V6Y 2V4	88% 8,883.6 m ²	12% 1,211.4 m ²	99.1% 2,144.6 m ²	0.9% 18.9 m ²

Bylaw 10196 PORTIONS OF LAND & IMPROVEMENTS FOR PLACE OF PUBLIC WORSHIP

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ROLL NO. & CIVIC ADDRESS	LEGAL DESCRIPTION OF PROPERTY	PORTION OF LAND AND IMPROVEMENT EXEMPTED FROM TAXATION	TENANTS MAILING ADDRESS
(057-614-000) 200 – 7451 Elmbridge Way	PID 007-501-129 Lot 87 Section 5 Block 4 North Range 6 West New District Plan 36964	That portion of the property occupied by the Richmond Emmanuel Church	Richmond Emmanuel Church 200 – 7451 Elmbridge Way Richmond, B.C. V6X 1B8
(136-467-527) 3211 Grant McConachie Way	PID 009-025-103 Lot 58 Sections 14, 15, 16, 17, 20, 21, 23 and 29 Block 5 North Range 7 West New Westminster District Plan 29409	That portion of the property occupied by Vancouver Airport Chaplaincy	Vancouver Airport Chaplaincy Box 32362 Domestic Terminal RPO Richmond, B.C. V7B 1W2

SCHEDULE C to BYLAW 10196

Bylaw 10196 Religious properties

3ylaw 10196
CHARLIABLE, PHILAN I RUPIC & UTHER
VOT-FOR-PROFIT – ELDERLY CITIZENS HOUSING
PROVINCIAL ASSISTANCE)

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ROLL NO. & CIVIC ADDRESS	LEGAL DESCRIPTION OF PROPERTY	OWNER/HOLDER'S MAILING ADDRESS
(086-938-001) 11820 No. 1 Road	PID 001-431-030 Lot 2 Section 2 Block 3 North Range 7 West NWD Plan 69234	Anavets Senior Citizens Housing Society #200 - 951 East 8th Avenue Vancouver, B.C. V5T 4L2

,, PHILANTROPIC & OTHER DFIT – COMMUNITY CARE OR /ING

SCHEDULE E to BYLAW 10196

ROLL NO. & CIVIC ADDRESS	LEGAL DESCRIPTION OF PROPERTY	OWNER/HOLDER'S MAILING ADDRESS
(058-885-000) 6531 Azure Road	PID 003-680-100 Lot 525 Section 7 Block 4 North Range 6 West NWD Plan 25611	Development Disabilities Association 100–3851 Shell Road Richmond, B.C. V6X 2W2
(067-321-001) 8400 Robinson Road	PID 009-826-386 Lot 80 Except: Part Subdivided by Plan 81951, Section 21 Block 4 North Range 6 West NWD Plan 12819	Development Disabilities Association 100 – 3851 Shell Road Richmond, B.C. V6X 2W2
(099-371-000) 4811 Williams Road	PID 004-864-077 Lot 4 Section 26 Block 4 North Range 7 West NWD Plan 17824	Greater Vancouver Community Service Society 500–1212 W. Broadway Vancouver, B.C. V6H 3V1
(080-622-000) 11331 Mellis Drive	PID 004-107-292 Lot 175 Section 25 Block 5 North Range 6 West NWD Plan 53633	Pinegrove Place Mennonite Care Home Society of Richmond 11331 Mellis Drive Richmond, B.C. V6X 1L8
(082-199-000) 9020 Bridgeport	PID 002-672-855 Block 5 North Range 6 West New Westminster District Plan 60997 Parcel B, Section 27/28, REF 60997	0952590 BC Ltd. Richmond Lion's Manor 400 – 13450 102 nd Avenue Surrey BC V3T 0H1
(099-561-000) 9580 Pendleton Road	PID 003-751-678 Lot 450 Section 26 Block 4 North Range 7 West NWD Plan 66281	Richmond Society for Community Living 170 – 7000 Minoru Boulevard Richmond, B.C. V6Y 3Z5
(064-762-037) 303 – 7560 Moffatt Road	PID 014-890-305 Strata Lot 37 Section 17 Block 4 North Range 6 West New Westminster District Strata Plan NW3081	Richmond Society for Community Living 170–7000 Minoru Boulevard Richmond, B.C. V6Y 3Z5

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Bylaw 10196 CHARITABLE, PHILANTROPIC & OTHER NOT-FOR-PROFIT – COMMUNITY CARE OR ASSISTED LIVING

SCHEDULE E to BYLAW 10196

OWNER/HOLDER'S MAILING ADDRESS	Richmond Society for Community Living 170 – 7000 Minoru Boulevard Richmond, B.C. V6Y 3Z5	Richmond Society for Community Living 170 – 7000 Minoru Boulevard Richmond, B.C. V6Y 3Z5	Richmond Society for Community Living 170–7000 Minoru Boulevard Richmond, B.C. V6Y 3Z5	Riverside Children's Centre Developmental Disability Association 100 – 3851 Shell Road Richmond, B.C. V6X 2W2	Rosewood Manor Richmond Intermediate Care Society 6260 Blundell Road Richmond, B.C. V7C 5C4	Treehouse Learning Centre Richmond Society for Community Living 170 – 7000 Minoru Boulevard Richmond, B.C. V6Y 3Z5
LEGAL DESCRIPTION OF PROPERTY	PID 013-396-901 Strata Lot 9 Section 2 Block 3 North Range 7 West New Westminster District Strata Plan NW2952	PID 003-887-022 Lot 890 Section 23 Block 4 North Range 7 West New Westminster District Plan 66590	PID 027-789-471 Lot A Section 25 Block 4 North Range 7 West New Westminster District Plan BCP39662	PID 023-648-058 Strata Lot 105 Section 1 Block 4 North Range 7 West New Westminster District Strata Plan LMS2643	PID 005-146-135 Lot "A" (RD135044) Section 19 Block 4 North Range 6 West New Westminster District Plan 48878	PID 023-684-801 Strata Lot 129 Section 12 Block 3 North Range 7 West New Westminster District Strata Plan LMS2701
ROLL NO. & CIVIC ADDRESS	(087-058-109) 9 – 11020 No. 1 Road	(097-575-028) 4433 Francis Road	(099-126-002) 5728 Woodwards Road	(090-515-105) 5862 Dover Crescent	(065-571-000) 6260 Blundell Road	(089-830-129) 5500 Andrews Road, Unit 100

CNCL - 308

Bylaw 10196
CHARITABLE, PHILANTROPIC & OTHER
NOT-FOR-PROFIT – COMMUNITY CARE OR
ASSISTED LIVING

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	SCHEDULE E to BYLAW 101	96
ROLL NO. & CIVIC ADDRESS	LEGAL DESCRIPTION OF PROPERTY	OWNER/HOLDER'S MAILING ADDRESS
084-988-041 10411 Odlin Road	PID 017-418-780 Lot 141 Section 35 Block 5 North Range 6 West New Westminster District Plan LMP942	Turning Point Recovery Society Suite 260 – 7000 Minoru Blvd. Richmond, BC V6Y 3Z5

Bylaw 10196 Charitable, philantropic & other not-for-profit – elderly citizens housing

SCHEDULE F to BYLAW 10196

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ROLL NO. & CIVIC ADDRESS	LEGAL DESCRIPTION OF PROPERTY	OWNER/HOLDER'S MAILING ADDRESS
(094-282-297) 7251 Langton Road	PID 003-460-525 Lot 319 Section 13 Block 4 North Range 7 West NWD Plan 49467	Richmond Legion Senior Citizen Society #800 – 7251 Langton Road. Richmond, B.C. V7C 4R6

	SCHEDULI	G to BYLAW 10196	
ROLL NO. & CIVIC ADDRESS	LEGAL DESCRIPTION OF PROPERTY	PORTION OF LAND AND IMPROVEMENT EXEMPTED FROM TAXATION	OWNER/HOLDER (MAILING ADDRESS)
(059-905-125) 8300 Cook Road	PID 023-800-496 Strata Lot 125 Section 9 Block 4 North Range 6 West New Westminster District Strata Plan LMS2845 together with an interest in the common property in proportion to the unit entitlement of the strata lot as shown on form 1	100% that is occupied by Society of Richmond Children's Centres	Cook Road Children's Centre Society of Richmond Children's Centres 110 – 6100 Bowling Green Road Richmond, B.C. V6Y 4G2
(011-892-000) 23591 Westminster Highway	PID 028-376-650 Lot B Section 36 Block 5 North Range 4 West New Westminster District Plan BCP46528	That portion of the property occupied by Richmond Children's Centres	Cranberry Children's Centre Society of Richmond Children's Centres 23591 Westminster Highway Richmond, B.C.
(094-391-000) 7611 Langton Road	PID 004-700-368 Lot 11 Section 13 Block 4 North Range 7 West NWD Plan 19107	100%	Development Disabilities Association 100 – 3851 Shell Road Richmond, B.C. V6X 2W2
(030-700-000) 10640 No. 5 Road	PID 028-631-595 Lot F Section 31 Block 4 North Range 5 West New Westminster District Plan EPP12978	That portion of property occupied by Richmond Children's Centres	Gardens Children's Centre Society of Richmond Children's Centres 4033 Stolberg Street Richmond, B.C. V6X 3N7
(064-810-001) 7000 Minoru Boulevard	PID 018-489-613 Lot 1 Section 17 Block 4 North Range 6 West NWD Plan LMP 12593	100% of land and improvements leased to Richmond Caring Place or 8,038 sq.m. as indicated in LMP 12594	Richmond Caring Place 140 – 7000 Minoru Boulevard Richmond, B.C. V6Y 3Z5

Bylaw 10196 Charitable, philantropic & other Not-for-profit

ROLL NO. & CIVIC ADDRESS	LEGAL DESCRIPTION OF PROPERTY	PORTION OF LAND AND IMPROVEMENT EXEMPTED FROM TAXATION	OWNER/HOLDER (MAILING ADDRESS)
(067-813-000) 8660 Ash Street	PID 017-854-997 Lot C Section 22 Block 4 North Range 6 West Plan 2670	Exempting that portion of the property occupied by the Richmond Family Place	Richmond Family Place 8660 Ash Street Richmond, B.C. V6Y 2S3
(073-560-608) 10380 No. 2 Road	PID 029-631-408 Lot 2 Section 31 Block 4 North Range 6 West New Westminster District Plan EPP49229	That portion of property occupied by YMCA of Greater Vancouver	Seasong Child Care Centre YMCA of Greater Vancouver 955 Burrard Street Vancouver, B.C. V6Z 1Y2
(093-050-002) 6011 Blanshard Drive	PID 019-052-685 Lot 2 Section 10 Block 4 North Range 7 West New Westminster District Plan LMP19283	100% that is occupied by Society of Richmond Children's Centres	Terra Nova Children's Centre Society of Richmond Children's Centres 110–6100 Bowling Green Road Richmond, B.C. V6Y 4G2
(084-195-000) 4033 Stolberg Street	PID 028-745-540 Section 34 Block 4 North Range 6 West New Westminster District Plan BCP49848 Air Space Parcel 3	100% that is occupied by Society of Richmond Children's Centres	West Cambie Child Care Centre Society of Richmond Children's Centres 110–6100 Bowling Green Road Richmond, B.C. V6Y 4G2
(057-600-003) 650-5688 Hollybridge Way	PID 030 085 489 Section 5 Block 4 North Range 6 West NWD Plan EPP65030 Air Space Parcel 1	100%	Willow Early Care and Learning Centre Atira Women's Resource Society #201 – 190 Alexander Street Vancouver, B.C. V6A 1B5
(079-772-001) 10277 River Drive	PID 031-035-124 Lot 1 Section 23 Block 5 North Range 6 West NWD Plan EPS5734	100% of the portion of the property in the name of the City of Richmond and occupied by Atira Women's Resource Society	River Run Early Care and Learning Centre Atira Women's Resource Society #201 – 190 Alexander Street Vancouver, B.C. V6A 1B5

SCHEDULE G to BYLAW 10196

Bylaw 10196 CHARITABLE, PHILANTROPIC & OTHER NOT-FOR-PROFIT

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	SCHEDULE H to I	BYLAW 10196	
ROLL NO. & CIVIC ADDRESS	LEGAL DESCRIPTION OF PROPERTY	PORTION OF LAND AND IMPROVEMENT EXEMPTED FROM TAXATION	OWNER/HOLDER (MAILING ADDRESS)
097-842-000) 4780 Blundell Road	PID 001-145-801 Lot 2 Block 4 North Range 7 West New Westminster District Plan 3892	That portion of the property occupied by Girl Guides of Canada	Girl Guides of Canada 4780 Blundell Road Richmond, B.C. V7C 1G9
(051-521-010) 11551 Dyke Road	PID 014-924-781 Dedicated Park Plan 565772		Girl Guides of Canada 1476 West 8th Avenue Vancouver, BC V6H 1E1
083-465-000) 7411 River Road	PID 007 206 518 Lot "N" Except: Part Subdivided by Plan 35001, Fractional Section 6 and of Sections 5, 7 and 8 Block 4 North Range 6 West and of Fractional Section 32 Block 5 North Range 6 West New Westminster District Plan 23828 (see R083-466-000, R083-467-000, R083-467-505 for remainder)	That portion of the property occupied by Navy League of Canada National Council	Navy League of Canada National Council c/o Richmond/Delta Branch Box 43130 Richmond, B.C. V6Y 3Y3
(083-218-000) 7400 River Road (Unit 140)	PID 003-752-534 Lot 20 Section 32 Block 5 North Range 6 West New Westminster District Plan 40727	That portion of the property occupied by Richmond Gymnastics Association	Richmond Gymnastics Association Unit 140 – 7400 River Road Richmond B.C. V6Y 2C1
(059-477-003) 5133 Bowling Green Road	PID 009 300 261 Lot 26, Except that part in Plan LMP39941 Section 8 Block 4 North Range 6 West New Westminster District Plan 24068	That portion of the property occupied by Richmond Lawn Bowling Club	Richmond Lawn Bowling Club 7321 Westminster Highway Richmond, B.C. V6X 1A3

Bylaw 10196 ATHLETIC & RECREATIONAL

Page 31	OWNER/HOLDER (MAILING ADDRESS)	Richmond Rod and Gun Club P.O. Box 26551 Blundell Centre Post Office Richmond, B.C. V7C 5M9	Richmond Rod and Gun Club P.O. Box 26551 Blundell Centre Post Office Richmond, B.C. V7C 5M9	Richmond Tennis Club 6820 Gilbert Road Richmond, B.C. V7C 3V4	Richmond Winter Club 5540 Hollybridge Way Richmond, B.C. V7C 4N3	Scotch Pond Heritage Cooperative 3811 Moncton Street Richmond, B.C. V7E 3A0	Sharing Farm Society 2771 Westminster Highway Richmond, B.C. V7C 1A8
3YLAW 10196	PORTION OF LAND AND IMPROVEMENT EXEMPTED FROM TAXATION	That portion of the property occupied by Richmond Rod and Gun Club	That portion of the property occupied by Richmond Rod and Gun Club	That portion of the property occupied by Richmond Tennis Club	That portion of the property occupied by Richmond Winter Club	That portion of the property occupied by Scotch Pond Heritage Cooperative	That portion of 2771 Westminster Highway occupied by Sharing Farm Society
SCHEDULE H to F	LEGAL DESCRIPTION OF PROPERTY	PID 009 311 998 Lot 2 Except: Firstly; Part Subdivided by Plan 28458; Secondly; Parcel "C" (Bylaw Plan 62679); Thirdly: Parcel G (Bylaw Plan 80333); Sections 29 and 32 Block 5 North Range 6 West New Westminster District Plan 24230	PID 003-752-534 Lot 20 Section 32 Block 5 North Range 6 West New Westminster District Plan 40727	PID 017 844 525 Lot A Section 8 Block 4 North Range 6 West, New Westminster District Plan LMP 5323	PID 007 250 983 Lot 73 Except: Part Subdivided by Plan 48002; Sections 5 and 6 Block 4 North Range 6 West New Westminster District Plan 36115	PID 004-276-159 Block 3 N Range 7W Section 4 Parcel D, Except Plan REF 43247, EXP 60417, REF 10984 File NO 1000-14-045	PID 011-566-825 Block 4 North Range 7 West Plan NWP457
Bylaw 10196 ATHLETIC & RECREATIONAL	ROLL NO. & CIVIC ADDRESS	(082-479-000) 7760 River Road	(083-218-000) 7 400 River Road (Unit 140) 2	-(059-216-001) 	(057-590-001) 5540 Hollybridge Way	(088-500-046) 2220 Chatham Street	(091-575-614) 2771 Westminster Highway

Bylaw 10196 ATHLETIC & RECREATIONAL

SCHEDULE H to BYLAW 10196

ROLL NO. & CIVIC ADDRESS	LEGAL DESCRIPTION OF	PORTION OF LAND AND	OWNER/HOLDER (MAILING
	PROPERTY	IMPROVEMENT	ADDRESS)
		EXEMPTED FROM	
		TAXATION	
(091-488-000)	PID 017-094-755	That portion of 2900 River	Sharing Farm Society
	Lot 2 Section 4 Block 4 North Range 7	Road occupied by Sharing	2771 Westminster Highway
2900 River Road	West Plan NWP88135	Farm Society	Richmond, B.C. V7C 1A8

ROLL NO. & CIVIC ADDRESS	LEGAL DESCRIPTION OF PROPERTY	PORTION OF LAND AND IMPROVEMENT EXEMPTED FROM TAXATION	OWNER/HOLDER (MAILING ADDRESS)
(085-643-001) Unit 140-160 11590 Cambie Road	PID 018-844-456 Lot C Section 36 Block 5 North Range 6 West Plan LMP17749 Except Plan BCP 14207	That portion of the property occupied by Richmond Public Library	Richmond Public Library Cambie Branch Unit 150 - 11590 Cambie Road Richmond, B.C. V6X 3Z5
(044-761-005) 11688 Steveston Highway	PID 023-710-047 Lot 1 Section 1 Block 3 North Range 6 West Plan 32147	That portion of the property occupied by Richmond Public Library	Richmond Public Library Ironwood Branch 11688 Steveston Highway, Unit 8200 Richmond, B.C. V7A 1N6
2031-969-003) 24300 Entertainment Boulevard	PID 023-672-269 Lot C Section 33 Block 4 North Range 5 West NWD Plan LMP31752	That portion of the property occupied by City of Richmond	City of Richmond 6911 No. 3 Road Richmond, B.C. V6Y 2C1
81111 River Road	PID 027-090-434 Lot 8 Section 6 Block 4 North Range 6 West Plan BCP30383	That portion of the property occupied by Richmond Oval Corporation	City of Richmond 6911 No. 3 Road Richmond, B.C. V6Y 2C1
(051-557-060) 12071 No. 5 Road	PID 013-082-531 Section 12 Block 3 North Range 6 West NWD Plan 15624 Parcel A-J, Part NE 1/4, Ref 15624, Ref 8114 File No. 1000- 05-021	That portion of the property occupied by Richmond Animal Protection Society	City of Richmond 6911 No. 3 Road Richmond, B.C. V6Y 2C1
(057-561-001) 5900 Minoru Boulevard	Lot A Section 5 Block 4 North 6 West New Westminster District Plan BCP45912	That portion of the property occupied by City Centre Community Centre	City of Richmond 6911 No. 3 Road Richmond, B.C. V6Y 2C1

SCHEDULE I to BYLAW 10196

Bylaw 10196 CITY HELD PROPERTIES

Bylaw 9969



Richmond Zoning Bylaw 8500 Amendment Bylaw 9969 (ZT18-835424) 13171 and a Portion of 13251 Smallwood Place

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

- 1. Richmond Zoning Bylaw 8500 section 10.7 entitled "Vehicle Sales (CV)" is amended by appending the following to subsection 10.7.4.1.
 - e) 0.94
 13171 Smallwood Place
 PID 002-886-171
 Lot H Section 5 Block 4 North Range 5 West

And a portion of 13251Smallwood Place PID 002-886-138 Lot G Section 5 Block 4 North Range 5 West New Westminster District Plan 70848, approximately 729.9 m² in area as outlined on plan EPP87240

2. This Bylaw may be cited as "Richmond Zoning Bylaw 8500, Amendment Bylaw 9969".

FIRST READING	FEB 2 5 2019	CITY OF RICHMOND
PUBLIC HEARING	MAR 1 8 2019	APPROVED by
SECOND READING	MAR 1 8 2019	APPROVED by Director
THIRD READING	MAR 1 8 2019	or Solicitor
OTHER CONDITIONS SATISFIED	SEP 2 9 2020	
MINISTRY OF TRANSPORTATION AND INFRASTRUCTURE	AUG 1 3 2019	
ADOPTED		

MAYOR

CORPORATE OFFICER







Richmond Zoning Bylaw 8500 Amendment Bylaw 10108 (RZ 19-857867) 10671 and 10691 Gilmore Crescent

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 "SINGLE DETACHED (RS2/B)".

P.I.D. 008-706-450 Easterly Half of Lot 118 Section 23 Block 5 North Range 6 West New Westminster District Plan 25167

P.I.D. 005-959-811 Lot 320 Section 23 Block 5 North Range 6 West New Westminster District Plan 45757

2. This Bylaw may be cited as "Richmond Zoning Bylaw 8500, Amendment Bylaw 10108".

FIRST READING	NOV 1 2 2019	CITY OF RICHMOND
A PUBLIC HEARING WAS HELD ON	DEC 1 6 2019	APPROVED
SECOND READING	DEC 1 6 2019	APPROVED
THIRD READING	DEC 1 6 2019	or Solicitor
OTHER CONDITIONS SATISFIED	OCT 0 7 2020	
ADOPTED		

MAYOR

CORPORATE OFFICER



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Minutes



Development Permit Panel Wednesday, September 30, 2020

Time: 3:30 p.m.

- Place: Council Chambers Richmond City Hall
- Present: Joe Erceg, Chair Cecilia Achiam, General Manager, Community Safety Peter Russell, Director, Sustainability and District Energy

The meeting was called to order at 3:30 p.m.

Minutes

It was moved and seconded That the minutes of the meeting of the Development Permit Panel held on September 16, 2020 be adopted.

CARRIED

1. GENERAL COMPLIANCE – REQUEST BY HAMILTON VILLAGE CARE CENTRE HOLDINGS LTD. FOR A GENERAL COMPLIANCE RULING AT 23111 GARRIPIE AVENUE

(File Ref. No.: DP 20-906520 Xr: DP 17-771210) (REDMS No. 6500176)

APPLICANT: Hamilton Village Care Centre Holdings Ltd.

PROPERTY LOCATION: 23111 Garripie Avenue

INTENT OF PERMIT:

To consider the attached plans involving changes to the design of the proposed landscaping and to the approved ESA compensation to be in General Compliance with the approved Development Permit (DP 17 771210).

Applicant's Comments

Travis Martin, van der Zalm + Associates, with the aid of a visual presentation (attached to and forming part of these Minutes as <u>Schedule 1</u>), briefed the Panel on the applicant's response to the Panel's referral motion at the September 16, 2020 meeting, highlighting the following:

- the goals of the landscaping for the project are for the proposed planting to look good initially, grow and mature in the future, and enhance the livability of the senior's care facility on the site;
- a significant amount of planting has been proposed for the project, including replacement trees, perennials, grasses, groundcovers and shrubs for landscaping and enhancement of the Environmentally Sensitive Area (ESA);
- the two replacement trees for the damaged tree (Tree #869) have been planted on the site;
- the damaged tree had been properly protected during two years of construction and was unintentionally harmed in the last two months prior to the opening of the project;
- the landscaping for the project is already adequate and introducing additional trees would adversely impact the growth of existing plantings already on-site and would result in maintenance issues; and
- in addition to the \$10,000 forfeiture of the security for Tree #869, a \$5,000 cash contribution to the City's Tree Planting Compensation Fund is proposed for the planting of 20 trees in the Hamilton Highway Park.

Mary McDougall, President and owner of Hamilton Village Care Centre, clarified that there was no intention to harm Tree #869 as it is their goal to protect the environment and they committed to retain the tree. She noted that the loss of the tree was regrettable as it was cared for and protected for two years but was accidentally damaged thereafter. She added that in recognition of the environmental and community value of the damaged tree, it has been replaced with two trees and an off-site contribution of 20 additional trees is being proposed.

The Chair expressed appreciation for the additional information provided which was not presented at the Panel's previous meeting and noted that the Panel would now have a better foundation for making a decision on the subject application.

Staff Comments

Wayne Craig, Director, Development noted that the City's Parks Department will conduct the proposed off-site tree replacement planting and has identified Hamilton Highway Park as the likely location.

Gallery Comments

None.

Correspondence

None.

Panel Discussion

The Panel expressed support for the proposed compensation package for the loss of the significant tree on-site, noting that the project's on-site landscaping is already adequate and the proposed off-site planting of additional replacement trees would benefit the public.

Panel Decision

It was moved and seconded

That the attached plans involving changes to the design of the proposed landscaping and to the approved ESA compensation area be considered to be in General Compliance with the approved Development Permit (DP 17 771210).

CARRIED

2. DEVELOPMENT PERMIT 18-837117 (REFERRAL FROM THE JULY 29, 2020 DEVELOPMENT PERMIT PANEL MEETING) (REDMS No. 6524478)

APPLICANT: W. T. Leung Architects Inc.

PROPERTY LOCATION: 6333 Mah Bing Street

INTENT OF PERMIT:

- 1. Permit the construction of a multiple-family residential development with two 15storey high-rise buildings and a nine-storey mid-rise building, consisting of approximately 232 dwelling units and 364 parking spaces at 6333 Mah Bing Street on a site zoned "High Rise Apartment (ZHR4) – Brighouse Village (City Centre)"; and
- 2. Vary the provisions of Richmond Zoning Bylaw 8500 to reduce the minimum lot area from 13,000 m² (139,930 ft²) to 8,227 m² (88,554 ft²).

Applicant's Comments

Wing Leung, W.T. Leung Architects, with the aid of a visual presentation (attached to and forming part of these Minutes as <u>Schedule 2</u>), provided a summary of the applicant's response to the Panel's referral motion at the July 29, 2020 meeting of the Development Permit Panel, highlighting the following:

- the architectural and landscaping treatment of the south wall of Tower D/E podium has been revised and includes reducing the mechanical grilles from seven to five, introducing new landscape planting on the second floor podium roof, introducing glass block walls on the lower floors of the exposed parkade walls, maintaining vine planting and widening of the recess on the ground level of the parkade to allow for additional landscaping, and painting of the wall recess to match the colour of the wall panels of the townhouses;
- the applicant has met with representatives of the Strata Council of the Regency Park Towers (the adjacent residential development to the south of the subject site at 6611 Minoru Boulevard) and was advised that the Strata Council had approved the proposal to remove the two visitor parking stalls on the Regency Park Towers to provide a more direct truck access route to allow garbage and recycling collection for 6611 Minoru Boulevard;
- the Strata Council's approval has been scheduled for ratification by all strata owners at their Annual General Assembly in November 2020;
- two surveys were conducted for tenants of existing rental buildings at 6391 and 6491 Minoru Boulevard regarding the types and levels of relocation assistance needed; and
- 98 out of the 128 existing tenants have responded to the surveys and the results indicated that 92 requested assistance in finding alternate accommodations, six did not request any assistance, and two indicated that they would like to move to the City of Vancouver.

In reply to queries from the Panel, Mr. Leung acknowledged that (i) the project's Tenant Relocation Coordinator was involved in the surveys and is attending the Panel's current meeting, (ii) the applicant has had previous experiences in dealing with tenant relocation issues in other projects, including holding open houses; however, these are not feasible in the current health situation, (iii) the garbage and recycling truck access option that was approved by the Strata Council of 6611 Minoru Boulevard is the preferred option by the applicant as it would benefit both the subject development and the adjacent residential development to the south, and (iv) the other garbage and recycling truck access option proposes the installation of a hammerhead at the southwest corner of the subject property and should this option not proceed, the proposed location for the hammerhead would become a front yard and part of the Right-of-Way (ROW) to the park.
Staff Comments

Mr. Craig noted that (i) there are two options available in providing truck access to the adjacent development to the south at 6611 Minoru Boulevard for garbage and recycling collection, (ii) the project would be able to proceed with either of the two options, (iii) the more direct truck access route requiring the removal of two visitor parking spaces at 6611 Minoru Boulevard was the option that was approved by the Strata Council and scheduled for ratification by all strata owners, (iv) the proposed enhancement of the architectural and landscaping treatment for the south wall of Tower D/E podium responds to the Panel's direction, (v) the proposed Tenant Relocation Plan complies with the City's Official Community Plan (OCP) requirements and will be secured by a legal agreement as a condition of Development Permit issuance, and (vi) the applicant will be required to provide a report to the City regarding the implementation of the Tenant Relocation Plan prior to the demolition of existing buildings on the subject site.

In reply to queries from the Panel, Mr. Craig acknowledged that (i) the City's Policy Planning, Affordable Housing and Development Applications staff will review the report on the implementation of the Tenant Relocation Plan that that will be provided by the applicant, and (ii) the City's issuance of the demolition permit would be conditioned on the effective implementation of the Tenant Relocation Plan by the applicant.

Gallery Comments

None.

Correspondence

None.

Panel Decision

It was moved and seconded

That a Development Permit be issued which would:

- 1. permit the construction of a multiple-family residential development with two 15storey high-rise buildings and a nine-storey mid-rise building, consisting of approximately 232 dwelling units and 364 parking spaces at 6333 Mah Bing Street on a site zoned "High Rise Apartment (ZHR4) – Brighouse Village (City Centre)"; and
- 2. vary the provisions of Richmond Zoning Bylaw 8500 to reduce the minimum lot area from 13,000 m² (139,930 ft²) to 8,227 m² (88,554 ft²).

CARRIED

3. Date of Next Meeting: October 15, 2020

4. Adjournment

It was moved and seconded *That the meeting be adjourned at 4:02 p.m.*

CARRIED

Certified a true and correct copy of the Minutes of the meeting of the Development Permit Panel of the Council of the City of Richmond held on Wednesday, September 30, 2020.

Joe Erceg Chair Rustico Agawin Committee Clerk

Panel Schedule 1 to the Minutes of the on Wednesday, Permit September 30, 2020 meeting held Development

TRELLIS SENIORS SERVICES @ HAMILTON VILLAGE

Development Permit Panel, September 30, 2020 General Compliance Application Presentation

Initial Design Goals and Intentions

- Landscape that will look good on day one and mature for generations.
 - Space for trees to grow and prosper to their mature state.
 - Future residents of the care home experience:
 - Natural lighting,
 - Views, and
- Connection to Community

2 2 Planting Design Plan

Green and robust landscape that ensures residents would be supported by nature but not overly shaded, claustrophobic or disconnected from community.

Planting design included:

- 74 Regular sized replacement trees
 - 79 Native saplings in the ESA; and
- 4,163 perennials, grasses, groundcovers and shrubs.
- environmental professional to develop the ESA planting design. Design team worked closely with City Planning Staff and an
- May have been one of the first projects in Richmond to create an aesthetically pleasing high visibility ESA area.



Frontage along Garripie Ave



Components of Landscape

- Regular planted frontage and Green link •
- 1,099m2 of reinstated Environmethally Sensitive Area (ESA) Area.
- The ESA area includes mostly native trees and specifically native conifers, such as, the grand fir and cedar.
- These trees have been positioned in a way for maximum effect.
- Including the additional 2 new 3.5m tall cedars.

Planting Result

- This robust landscape that will mature well with the site.
- This site will not benefit from additional on-site tree planting.

Tree Protection by the Development Team

- Contractor/Owner acted in good faith and with the full intent of protecting tree #869.





Westminster Hwy Frontage - ESA Planting amongst retained trees

- For 2-years the contractor operated on a confined site with limited staging and mobility.
- Incurred cost of expansion of on-site gabion wall to accommodate off-site grade changes.
- not anyones intent to lose tree #869 after such complicated and costly efforts Tree #869 being harmed only in the last two months before opening. It was through construction.

Proposal

- Owner has forfeited \$10,000 security for tree #869.
- We propose an additional \$5,000 for use by the City of Richmond to plant trees in Hamilton Village or where appropriate.
 - Equates to 20 new trees to be planted in City of Richmond.



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Schedule 2 to the Minutes of the Development Permit Panel meeting held on Wednesday, September 30, 2020.

W. T. LEUNG ARCHITECTS INC.

Ste. 300 - 973 West Broadway, Vancouver, British Columbia, V5Z 1K3 Telephone 604-736-9711/Facsimile 604-73607991

September 2nd, 2020

Mr. Edwin Lee, City of Richmond, Planning Department 6911 No. 3 Road, Richmond, British Columbia V6Y 1C1

Dear Mr. Lee:

Re: 6333 Mah Bing Street, Richmond, B. C. – Tenant Relocation Plan Current Existing Building's addresses are 6391 and 6491 Minoru Boulevard, Richmond, British Columbia

The Property Manager and Tenant Relocation Co-ordinator from Rhome, sent out a Survey Questionnaire on August 6th, 2020, and a Reminder Notice on August 14th, 2020, asking all tenants to fill out and return by August 21st, 2020, for compilation. Please find, attached, copies of the two letters that were sent out by Rhome, for your information.

In light of the responses below, we are of the view that the Relocation Survey's purpose was fulfilled in a meaningful way, such that the Developer can take steps to accommodate the reasonable expectations and requirements of the Tenants.

As the completed Surveys from the tenants contain personal information, we are advised by our client's lawyers, Stikeman Elliott, that the tenant's privacy rights could be violated if the completed Surveys were disclosed to the City, especially as the personal information could be subject to a "Freedom of Information" request. Accordingly we are providing the City with redacted copies of the completed Surveys, as our client is accountable for the tenants' privacy rights.

Please find attached copies of the Survey with the personal information of the respondents redacted. We confirm that these are true copies of the completed Surveys that were received, that no Surveys have been omitted and that none of the Surveys have been altered, (other than to redact personal information).

The following is a summary of our findings:

- 98 Surveys were received out of a total of 128 units in the two buildings, a high response rate.
- 92 Tenants requested assistance in helping find alternate accommodations. This is an expected request rate.
- 16 Tenants have asked for accessible units. There are currently no accessible units in the two existing buildings, so this is a request for an amenity that is not currently in place.
- 34 Tenants would like some help in moving, due to physical or mobility issues.

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Tenant Relocation Plan 6333 Mah Bing Street, Tenant Relocation Plan 6391 and 6491 Minoru Boulevard., Richmond, B. C.

> - 32 Tenants have dependents living with them and of these 28 have asked for family units. We note that overall 51 tenants have asked for family units, (larger than 1 bedroom units), regardless of whether they have dependents living with them or not. This is another example of a request for an increase in an amenity that is not currently available to many of the tenants making this request.

The tenants' budget range, indicated, is quite wide but, of note, is that most tenants are realistic in their expectations and have indicated rent budgets which exceeded, (in some cases, substantially exceeded), what they are currently paying at the existing buildings.

- 83 tenants indicated the budget range that they are comfortable with;
- 15 tenants did not indicate a budget;
- Of those who responded, 6 tenants indicated a budget range which is lower than the current rental rate that they are paying in the existing buildings.

Some respondents have indicated that they would like to live near the Richmond City Centre and near public transit. 96 have indicated that they would like to stay in Richmond with 2 indicating that they would like to move to Vancouver.

We note the following with respect to these responses, with respect to the fact that all tenants have been aware, since 2018, that the buildings would be redeveloped and that all tenancies have been on a month to month rental basis since 2018, due to the Demolition Bond in place and registered on title, as required by the City.

- 39 respondents have been living in the existing buildings for less than 2 years all these tenants would have been aware when moving into the building that it would be redeveloped and demolished.
- 22 respondents have been living in the existing buildings for between 2 to 5 years.
- 16 respondents have been living in the existing buildings for between 5 to 10 years.
- 13 respondents have been living in the existing buildings for over 10 years.
- 8 respondents did not indicate how long they have been living in the existing buildings.

Please let me know if you require further information on this issue.

Regards,

W T. LEUNG ARCHITECT Wing Ti eung WTL/gn c.c. - Mr. Wayne Craig - Director of Development



13468 - 77th Avenue, Surrey British Columbia, Canada V3W 6Y3 Phone (604) 591-6060

September 3, 2020

To the City of Richmond

RE: 6391 & 6491 Minoru Boulevard, Richmond, BC

Please be advised that Rhome Property Management is a division of Associa British Columbia, Inc. We have been providing strata and rental management services for over 30 years in the Lower Mainland.

We have been engaged by the developer, Park Residences Phase II Limited Partnership, to assist them with tenant relocation matters. We have the following general experience and perform property management and related services, including assisting owner-developers with tenant relocation matters.

At this time, we manage over 1500 rental units and over 560 strata communities. We have experience in assisting owner developers with tenant relocation matters similar to common practice in the industry. The following are some of the services we provide in assisting tenants to find new rental property:

- a. advising tenants of current or upcoming vacancies in buildings that we manage;
- b. assisting tenants by providing listings and links to social media websites, both showcasing units available for rent
- c. assisting tenants by referring them to other governmental agencies who will provide assistance particular to their needs.
- d. assisting tenants by providing a list of moving companies which they can contact for their individual moving arrangement.
- e. administering monetary compensation to tenants as outlined in the Tenant Relocation Plan, upon each qualified tenant's preference (i.e. their choice of compensation in terms of either free rent or lump sum payments, or a combination of both, all pursuant to the Tenant Relocation Plan).

Timing is a critical factor in finding new tenancies. We understand that the tenants of the Minoru buildings will not need to vacate for at least six months. As the actual timing is still to be determined, we cannot provide information at this time as to what vacancies will be available in the future. It is each tenant's responsibility to decide on their future accommodation and moving companies based on their budget and preference. However, we will provide assistance to the tenants with the information available at the time they will need to vacate. Arrangements as to any applicable monetary compensation will also be made in due course, at the appropriate time.

Yours truly,

Associa British Columbia, Inc.-Rhome Property Management

Katie Khoo

Senior Vice-President, Rental Division

Direct Line: 604-501-4177

Email: kkhoo@associa.ca



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09.30 Revision Landscape Plan



09.30 Revision South Elevation



LANE SOUTH ELEVATION TOWER E

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Report to Council

То:	Richmond City Council	Date:	September 30, 2020
From:	John Irving Chair, Development Permit Panel	File:	DP 18-810720
Re:	Development Permit Panel Meeting Held on October 30, 2019		

Staff Recommendation

That the recommendation of the Panel to authorize the issuance of a Development Permit (DP 18-810720) for the property at 13171 and a portion of 13251 Smallwood Place be endorsed, and the Permit so issued.

John Irving Chair, Development Permit Panel (604-276-4140)

SB:blg

Panel Report

The Development Permit Panel considered the following item at its meeting held on October 30, 2019.

DP 18-810720 – 13171 AND A PORTION OF 13251 SMALLWOOD PLACE – KASIAN ARCHITECTURE INTERIOR DESIGN & PLANNING LTD. (October 30, 2019)

The Panel considered a Development Permit (DP) application to permit the construction of an auto dealership consisting of a three-storey principal building and single-storey accessory buildings/structures totalling 7,009 m² on a site zoned "Vehicle Sales (CV)". Variances are included in the proposal for increased maximum building height, reduced minimum rear yard setback for a one-storey storage building located near the east property line and reduced minimum number of on-site loading spaces.

Architect, Scott Douglas, of Kasian Architecture Interior Design and Planning Ltd., and Landscape Architect, Mary Chan-Yip, of PMG Landscape Architects, provided a brief presentation, including:

- On-site signage will be installed to direct customers to their intended destination.
- Skylight and window use will introduce daylight into the building.
- The height variance is requested for the principal building.
- The shadow study indicates minimal shadow impact of the building to the Richmond Nature Park to the west of the subject site.
- The proposed landscape design considered the existing on-site landscaping and design guidelines of the Richmond Auto Mall Association (RAMA).
- Proposed new plantings in prominent locations within the subject site will enhance the street edge and provide visual interest.
- 13 existing trees on-site and in the boulevard along Smallwood Place will be retained, and 14 replacement trees are proposed to be planted on-site.
- A high-efficiency irrigation system is proposed.
- Public pedestrian connections will be provided on the site consistent with the updated overall RAMA public realm design.
- Permeable pavers will be installed in certain areas on the site for storm water mitigation.

Staff noted that: (i) the proposed building height, rear yard setback and loading variances were identified at the rezoning stage and no changes in requested variances were made since rezoning; (ii) the proposed variances are consistent with similar variances that have been granted in projects within the Richmond Auto Mall; (iii) the principal building has been designed to be 15 percent more energy efficient than the base line model as per the BC Building Code requirement; (iv) a legal agreement will be secured as a condition prior to Development Permit issuance to ensure compliance with the building's targeted energy performance level; and (v) five electric vehicle charging stations will be provided on-site and secured through the Development Permit process.

In reply to Panel queries, the project's design team noted that: (i) as indicated in the shadow study, the potential worst-case scenario is that the proposed principal building will cast a shadow on a small portion of the Nature Park for only a brief period of time at sunrise during the winter solstice in December; (ii) there were no bird strikes reported by auto dealerships within the Richmond Auto Mall; (iii) a post-construction weekly monitoring of bird strikes will be conducted on-site by a Registered Professional Biologist for a period of 12 months; (iv) the use of glazing on the ground level of the building and the absence of landscaping close to the building will mitigate the potential for bird strikes; (v) the proposed single-storey accessory building is located adjacent to the car wash facility of the adjacent auto dealership to the east; (vi) a total of nine trees located on-site and in the boulevard along Smallwood Place will be removed; (vii) new plantings on-site are consistent with the RAMA guidelines; and (viii) the proposed on-site electric vehicle charging stations are located in front of the principal building and are available for public use.

No correspondence was submitted to the Development Permit Panel meeting regarding the application.

The Panel expressed support for the project, noting that the proposed development is a welcome addition to the area and consistent with previously approved projects in the Richmond Auto Mall.

The Panel recommends the Permit be issued.