



Finance Committee

**Anderson Room, City Hall
6911 No. 3 Road**

Monday, November 6, 2017

Immediately following the open General Purposes Committee meeting

Pg. # ITEM

MINUTES

FIN-4 *Motion to adopt the **minutes** of the meeting of the Finance Committee held on October 2, 2017.*



FINANCE AND CORPORATE SERVICES DIVISION

1. **DEVELOPMENT COST CHARGES RESERVE FUND
ESTABLISHMENT BYLAW NO. 9779**
(File Ref. No.: 03-0900-01) (REDMS No. 5598385; 5596236 v. 2)

FIN-7

See Page FIN-7 for full report

Designated Speaker: Cindy Gilfillan

STAFF RECOMMENDATION

That the Development Cost Charges Reserve Fund Establishment Bylaw No. 9779 be introduced and given first, second and third readings.



Pg. # ITEM

2. **2017 AUDIT ENGAGEMENT**
(File Ref. No.: 03-0905-01) (REDMS No. 5601786; 5633496)

FIN-12

[See Page FIN-12 for full report](#)

Designated Speaker: Cindy Gilfillan

STAFF RECOMMENDATION

That the 2017 Audit Planning Letter from KPMG, LLP, dated October 26, 2017, as provided in Attachment 1 of the staff report titled, “2017 Audit Engagement”, dated October 27, 2017, from the Director, Finance, be received for information.



3. **2018 UTILITY BUDGETS AND RATES**
(File Ref. No. 10-6060-03-01) (REDMS No. 5536775 v. 12)

FIN-46

[See Page FIN-46 for full report](#)

Designated Speakers: Lloyd Bie, Suzanne Bycraft, and Ivy Wong

STAFF RECOMMENDATION

That the 2018 Utility Budgets, as outlined under Option 1 for Water, Option 2 for Sewer, Option 2 for Drainage and Diking, and Option 1 for Solid Waste and Recycling, as contained in the staff report dated October 31, 2017 from the General Manager of Finance & Corporate Services and the Deputy CAO and General Manager of Engineering & Public Works, be approved as the basis for establishing the 2018 Utility Rates and preparing the 5 Year Financial Plan (2018-2021) Bylaw.



RICHMOND PUBLIC LIBRARY

4. **2018 OPERATING AND CAPITAL BUDGETS FOR RICHMOND PUBLIC LIBRARY**
(File Ref. No.) (REDMS No. 5646446)

FIN-74

[See Page FIN-74 for full report](#)

Designated Speaker: Susan Walters

Finance Committee Agenda – Monday, November 6, 2017

Pg. #

ITEM

STAFF RECOMMENDATION

That the 2018 Richmond Public Library budget of \$9,143,000 as presented in Attachment 1 from the Chief Librarian and the Secretary to the Board, has been reviewed by the Senior Management Team.

☐

ADJOURNMENT

☐



Finance Committee

Date: Monday, October 2, 2017

Place: Anderson Room
Richmond City Hall

Present: Mayor Malcolm D. Brodie, Chair
Councillor Derek Dang
Councillor Carol Day
Councillor Ken Johnston
Councillor Alexa Loo
Councillor Bill McNulty
Councillor Linda McPhail
Councillor Harold Steves

Absent: Councillor Chak Au

Call to Order: The Chair called the meeting to order at 4:31 p.m.

MINUTES

It was moved and seconded

That the minutes of the meeting of the Finance Committee held on September 5, 2017, be adopted as circulated.

CARRIED

FINANCE AND CORPORATE SERVICES DIVISION

1. **PERMISSIVE EXEMPTION (2018) BYLAW NO. 9730**
(File Ref. No. 03-0925-02-01) (REDMS No. 5416138)

It was moved and seconded

That Permissive Exemption (2018) Bylaw No. 9730 be introduced and given first, second and third readings.

CARRIED

Finance Committee
Monday, October 2, 2017

2. **CONSOLIDATED FEES BYLAW NO. 8636, AMENDMENT BYLAW NO. 9729**

(File Ref. No. 03-1240-01) (REDMS No. 5538168 v. 1A)

It was moved and seconded

That Consolidated Fees Bylaw No. 8636, Amendment Bylaw No. 9729 be introduced and given first, second and third readings.

The question on the motion was not called as clarification was provided by staff regarding dog licencing for puppies and building permit fees.

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

3. **APPOINTMENT OF EXTERNAL FINANCIAL AUDITOR**

(File Ref. No. 03-0905-01) (REDMS No. 5549980)

It was moved and seconded

That KPMG LLP be appointed as the external financial auditor for the City of Richmond for a five-year period, beginning with the 2017 fiscal year that ends December 31, 2017 through to the 2021 fiscal year that ends December 31, 2021.

CARRIED

4. **AMENDMENTS TO THE 5 YEAR CONSOLIDATED FINANCIAL PLAN (2017-2021) BYLAW 9663**

(File Ref. No. 03-0970-01) (REDMS No. 5535260 v. 3)

It was moved and seconded

That the 5 Year Consolidated Financial Plan (2017-2021) Bylaw 9663, Amendment Bylaw 9757, which incorporates and puts into effect the changes as outlined in the staff report titled "Amendments to the 5 Year Consolidated Financial Plan (2017-2021) Bylaw 9663" dated September 5, 2017 from the General Manager, Finance Corporate Services, be introduced and given first, second and third readings.

CARRIED

ADJOURNMENT

It was moved and seconded

That the meeting adjourn (4:36 p.m.).

CARRIED

Finance Committee
Monday, October 2, 2017

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 Monday, October 2, 2017.

Mayor Malcolm D. Brodie
Chair

Amanda Welby
Legislative Services Coordinator



City of Richmond

Report to Committee

To: Finance Committee

Date: October 12, 2017

From: Jerry Chong
Director, Finance

File: 03-0900-01/2017-Vol
01

Re: Development Cost Charges Reserve Fund Establishment Bylaw No. 9779

Staff Recommendation

That the Development Cost Charges Reserve Fund Establishment Bylaw No. 9779 be introduced and given first, second and third readings.

Jerry Chong
Director, Finance
(604-276-4064)

Att. 1

REPORT CONCURRENCE		
ROUTED TO:	CONCURRENCE	CONCURRENCE OF GENERAL MANAGER
Law	<input checked="" type="checkbox"/>	
REVIEWED BY STAFF REPORT / AGENDA REVIEW SUBCOMMITTEE	INITIALS: 	APPROVED BY CAO

Staff Report

Origin

In accordance with Section 188 of the Community Charter and Section 566 of the Local Government Act, money received from the imposition of a development cost charge is to be placed to the credit of a separate development cost charge reserve fund established for each purpose for which the local government imposes the development cost charge.

Since the inception of DCCs, all funds collected have been reported separately in accordance with the intended purposes identified in the applicable DCC imposition bylaws. This report and Bylaw address the administrative requirement of a Bylaw to establish the DCC reserve fund.

Analysis

In 2017, the City adopted a new development cost charges (DCC) imposition bylaw, Bylaw No. 9499 to collect funds to assist the City in paying the capital costs of providing, constructing, altering or expanding sewage, water, drainage and highway facilities, other than off-street parking facilities, and providing and improving park land to service, directly or indirectly.

There are currently two development cost areas:

1. The Alexandra area; and
2. The remaining area of Richmond.

Staff recommends that the following reserve funds be established:

- a) DCC Drainage
 - b) DCC Park Land Acquisition
 - c) DCC Park Development
 - d) DCC Roads
 - e) DCC Sanitary Sewer
 - f) DCC Water
 - g) DCC Alexandra Drainage
 - h) DCC Alexandra Park Land Acquisition
 - i) DCC Alexandra Park Development
 - j) DCC Alexandra Roads
 - k) DCC Alexandra Sanitary Sewer
 - l) DCC Alexandra Water
- (collectively, the "DCC Reserve Funds")

Expenditures from the DCC reserve funds must be approved by bylaw and be used in accordance with the Local Government Act for the purpose intended.

The DCC reserve funds are different from the existing reserve funds that have been established. DCC reserve funds are considered liabilities as their use is externally restricted, whereas the other reserve funds form part of the City's accumulated surplus.

Financial Impact

None.

Conclusion

In accordance with the Community Charter, staff recommends that the specific development cost charges reserve funds be established and that the money collected through the development cost charges imposition Bylaw No. 9499 be placed to the credit of these reserve funds.



Cindy Gilfillan, CPA, CMA
Manager, Financial Reporting
(604-276-4077)

CG:cg

Att. 1: Development Cost Charges Reserve Fund Establishment Bylaw No. 9779



City of Richmond

Bylaw 9779

Development Cost Charges Reserve Fund Establishment Bylaw No. 9779

WHEREAS pursuant to Section 188(2)(a) of the *Community Charter*, if a municipality receives money from the imposition of a development cost charge, the money received must be placed to the credit of a reserve fund in accordance with section 566 [*use of development cost charges*] of the *Local Government Act*;

AND WHEREAS pursuant to Section 188(1) of the *Community Charter*, a council may, by bylaw, establish a reserve fund for a specified purpose and direct that money be placed to the credit of the reserve fund;

AND WHEREAS pursuant to Section 566(1) of the *Local Government Act*, a development cost charge paid to a local government must be deposited by the local government in a separate special development cost charge reserve fund established for each purpose for which the local government imposes the development cost charge,

NOW THEREFORE, The Council of the City of Richmond enacts as follows:

PART ONE: DEVELOPMENT COST CHARGES RESERVE FUNDS

1.1 The development cost charges reserve funds hereby established are:

- a) DCC Drainage
- b) DCC Park Land Acquisition
- c) DCC Park Development
- d) DCC Roads
- e) DCC Sanitary Sewer
- f) DCC Water
- g) DCC Alexandra Drainage
- h) DCC Alexandra Park Land Acquisition
- i) DCC Alexandra Park Development
- j) DCC Alexandra Roads
- k) DCC Alexandra Sanitary Sewer
- l) DCC Alexandra Water

(collectively, the "DCC Reserve Funds")

PART TWO: SOURCE OF FUNDS

2.1 All monies paid to the City of Richmond under any development cost charges imposition bylaw for the purposes of Drainage, Park Land Acquisition, Park Development, Roads,

Sanitation Sewer, Water, shall be deposited into the applicable DCC Reserve Fund established under Section 1.1 of this Bylaw that corresponds to the purpose and area for which the charge was imposed.

PART THREE: DEPOSIT AND INVESTMENT OF FUNDS

3.1 Monies paid into the DCC Reserve Funds may, until required to be used, be invested in the manner provided in the Community Charter for the investment of municipal funds.

PART FOUR: USE OF FUNDS

4.1 In accordance with Section 566(2) of the *Local Government Act*, money in a DCC Reserve Fund, together with interest on it, may be used only for the following:

- a) to pay the capital costs on projects related to the purpose for which the DCC charge was imposed;
- b) to pay the principal and interest on a debt incurred by the City as a result of an expenditure incurred under paragraph 4.1(a); or
- c) as expended by the City in accordance with the requirements in Section 189 of the *Community Charter*.

PART FIVE: MISCELLANEOUS PROVISIONS

5.1 This bylaw is cited as "**Development Cost Charges Reserve Fund Establishment Bylaw No. 9779**".

FIRST READING

SECOND READING

THIRD READING

INSPECTOR OF MUNICIPALITIES APPROVAL

ADOPTED

_____	<div style="border: 1px solid black; padding: 2px;"> CITY OF RICHMOND APPROVED for content by originating dept. <i>JC</i> APPROVED for legality by Solicitor <i>[Signature]</i> </div>

MAYOR

CORPORATE OFFICER



City of Richmond

Report to Committee

To: Finance Committee
From: Jerry Chong
Director, Finance
Re: 2017 Audit Engagement

Date: October 27, 2017
File: 03-0905-01/2017-Vol
01

Staff Recommendation

That the 2017 Audit Planning Letter from KPMG, LLP, dated October 26, 2017, as provided in Attachment 1 of the staff report titled, "2017 Audit Engagement", dated October 27, 2017, from the Director, Finance, be received for information.

Jerry Chong
Director, Finance
(604-276-4064)

Att. 1

REPORT CONCURRENCE	
CONCURRENCE OF GENERAL MANAGER 	
REVIEWED BY STAFF REPORT / AGENDA REVIEW SUBCOMMITTEE	INITIALS: CJ
APPROVED BY GAO 	

Staff Report

Origin

Pursuant to Section 169 (1) of the *Community Charter*, a Council must appoint an auditor for the municipality (municipal auditor). Under Section 169 (3), a municipal auditor has the power and duty to conduct the examinations necessary to prepare the required reports.

Section 171 of the *Community Charter* directs that the municipal auditor must report to Council on the annual financial statements of the municipality. The report must be in accordance with the form and the reporting standards recommended by the Chartered Professional Accountants of Canada.

This report outlines the terms of the audit engagement for the period ending December 31, 2017.

Analysis

At the October 10, 2017 Council meeting, KPMG, LLP (KPMG) was re-appointed as the City's auditor for the fiscal years 2017 to 2021.

Audit Plan

KPMG's planned scope and timing for the audit of the consolidated financial statements is provided in their Audit Planning Letter (Attachment 1). The overall audit strategy and audit approach is designed to address any significant risks identified during the planning process.

A summary of observations will be provided at the completion of the audit that may include comments on risks and the City's approach to those risks, performance improvement observations, or other industry trends and developments.

Annual Inquiries of the Committee

Professional standards require that KPMG ask questions of the Finance Committee (the Committee) in connection with oversight of management's process for identifying and responding to risks of fraud. The above questions are the same as prior years and relate to the consolidated City entity including the City, Richmond Olympic Oval, Library and Lulu Island Energy Company.

The specific questions asked of the Committee are:

- Are you aware of, or have you identified any instances of, actual, suspected, possible, or alleged non-compliance of laws and regulation or fraud, including misconduct or unethical behaviour related to financial reporting or misappropriation of assets? If so, have these instances been appropriately addressed to your satisfaction?
- Are you aware of any significant fraud risks facing the City?

- Do you believe that the Committee exercises effective oversight of management's process for identifying and responding to the risk of fraud in the City and the internal controls that management has established to mitigate these fraud risks?
- Are you aware of the City entering into any significant unusual transactions?

As with previous years, KPMG requests that their Engagement Partner be contacted if the Committee has any comments on the above questions that the Committee believes should be brought to KPMG's attention.

Audit Scope

The scope of the audit engagement includes:

- Audit of the City's consolidated financial statements
- Audit of the Home Owner Grant Treasurer/Auditor Certificate, and
- Audit of the City's compliance with subsections 2 and 3 of section 124 of Part 8 of the School Act

Financial Impact

There is no financial impact. The audit fee is provided for within the City's Operating Budget.

Conclusion

KPMG has been engaged to perform the audit for the year ended December 31, 2017. Their Audit Plan communicates KPMG's overall audit responsibilities and audit approach in accordance with Canadian generally accepted auditing standards. The 2017 audit standards continue to focus the audit on areas where there is greater risk of misstatement.



Cindy Gilfillan
Manager, Financial Reporting
(604-276-4077)

CG:cg

Att. 1: Audit Planning Letter



KPMG Enterprise™
Metro Tower I
4710 Kingsway, Suite 2400
Burnaby BC V5H 4M2
Canada
Telephone (604) 527-3600
Fax (604) 527-3636

AUDIT PLANNING LETTER

PRIVATE & CONFIDENTIAL

Chair and Members of the Finance Committee
City of Richmond
6911 No. 3 Road
Richmond BC, V6Y 2C1

October 26, 2017

To the Chair and Members of the Finance Committee of the City of Richmond (the "Committee"):

Thank you for providing us with the opportunity to continue in our role as external auditors of the City of Richmond. We are pleased to provide for your review the following information relating to the planned scope and timing for the audit of the consolidated financial statements of the City of Richmond (the "City") for the year ended December 31, 2017.

We would be pleased to receive any comments or suggestions you may have with respect to the planned audit scope or timing and we look forward to discussing the letter and answering questions that you may have. If you have any specific areas of concerns or other issues you would like addressed in the audit, please contact us. We appreciate the opportunity to serve you and look forward to our continuing relationship.

This letter is for the use of the Committee for the purpose of carrying out and discharging your responsibilities and exercising oversight over our audit. This letter should not be used for any other purpose or by anyone other than the Committee. KPMG shall have no responsibility or liability for loss or damages or claims, if any, to or by any third party as this letter has not been prepared for, and is not intended for, and should not be used by, any third party or for any other purpose.

Yours very truly

C.J. James, CPA, CA
Engagement Partner
(604) 527-3635

Archie G. Johnston, FCPA, FCA, CIA, MBA
Senior Advisor and Quality Reviewer
(604) 527-3757

cc: Mr. George Duncan, Chief Administrative Officer
Mr. Andrew Nazareth, General Manager, Finance & Corporate Services
Mr. Jerry Chong, Director of Finance

Enclosures:
Appendix 1 – Engagement letter



CONSIDERATIONS IN DEVELOPING OUR AUDIT PLAN

There are no significant changes in the operations of the City in the current year that will impact the financial statements.

There are no significant changes in accounting standards in the current year that will impact the audit of the City's financial statements.

There are no significant changes in the auditing and other professional standards in the current year that will impact the audit of the City's financial statements.

SCOPE AND TIMING OF THE AUDIT

The objectives of the audit, our responsibilities in carrying out our audit, as well as management's responsibilities, are set out in the engagement letter which is included in the appendices to this letter.

We design an overall audit strategy and audit approach to address the significant risks identified during the planning process.

Materiality

We determine materiality in order to plan and perform the audit and to evaluate the effects of identified misstatements on the audit and of any uncorrected misstatements on the financial statements. The determination of materiality requires judgment and is based on a combination of quantitative and qualitative assessments, including the nature of account balances and financial statement disclosures.

We determine performance materiality (from materiality) in order to assess risks of material misstatement and to determine the nature, timing and extent of audit procedures.

We determine an audit misstatement posting threshold (from materiality) in order to accumulate misstatements identified during the audit.

For the current period, the following amounts have been determined:

Materiality	Performance Materiality	Audit Misstatement Posting Threshold
\$7,600,000 (2016 - \$7,500,000)	\$5,700,000 which has been set at 75% of materiality (2016 - \$5,625,000)	\$380,000 which has been set at 5% of materiality (2016 - \$375,000)

We will reassess materiality based on period-end results or new information to confirm whether it remains appropriate for evaluating the effects of uncorrected misstatements on the financial statements.



Identification of significant risks

As part of our audit planning, we identify the significant financial reporting risks that, by their nature, require special audit consideration. By focusing on these risks, we establish an overall audit strategy and effectively target our audit procedures.

The significant financial reporting risks identified during our audit planning are listed below:

Significant unusual transactions

There were no significant unusual transactions noted through our discussion with management.

Risk of management override of controls

Although the level of risk of management override of controls will vary from entity to entity, professional standards presume the risk of management override of controls is nevertheless present in all entities and requires the performance of specific procedures to address this presumed risk. We plan on performing the required procedures under professional standards. These include testing journal entries and performing a retrospective review of areas of estimate.

Timing of audit and deliverables

<i>Topic:</i>	<i>Dates:</i>
Conduct interim audit field work	November 6 - 10, 2017
Provide our audit planning letter	October 26, 2017
Conduct year-end audit field work	February 19 - March 9, 2018
Present our year-end audit findings letter, including independence communications to the Committee	Date to be determined
Provide audit opinion on financial statements	Upon acceptance by Council of the financial statements.

ANNUAL INQUIRIES OF THE COMMITTEE

Professional auditing standards require that we annually inquire concerning the Committee's oversight of management's process for identifying and responding to the risks of fraud within the City. Accordingly, we ask whether you:

- Are aware of, or have identified any instances of, actual, suspected, possible, or alleged non-compliance of laws and regulations or fraud, including misconduct or unethical behaviour related to financial reporting or misappropriation of assets? If so, have these instances been appropriately addressed to your satisfaction?
- Are aware of any significant fraud risks facing the City?



ANNUAL INQUIRIES OF THE COMMITTEE (CONTINUED)

- Believe that the Committee exercises effective oversight of management's process for identifying and responding to the risk of fraud in the City and the internal controls that management has established to mitigate these fraud risks?
- Aware of the City entering into any significant unusual transactions?

If you have any comments on the above questions that you would like to bring to our attention, please contact C.J. James, Engagement Partner.

OBSERVATIONS AND INSIGHTS

During the course of our audit, we may become aware of a number of observations that may be of interest to you. These observations may include comments on risks and the City's approach to those risks, performance improvement observations, or other industry trends and developments. These observations are based on, among other things, our understanding of the affairs and processes of the City, as well as our understanding of many other entities in the same or other industries.

We will discuss any such observations with management and provide our insights. We will also include a synopsis of these observations and insights in our discussions with you at the completion of the audit.

CURRENT DEVELOPMENTS

The following is a summary of the current developments that are relevant to the City:

Related Party Disclosures and Inter-Entity Transactions

- Two new Handbook sections were approved in December 2014, effective for fiscal years beginning on or after April 1, 2017.
- Related parties include entities that control or are controlled by a reporting entity, entities that are under common control and entities that have shared control over or that are subject to shared control of a reporting entity.
- Individuals that are members of key management personnel and close members of their family are related parties. Disclosure of key management personnel compensation arrangements, expense allowances and other similar payments routinely paid in exchange for services rendered is not required.
- Determining which related party transactions to disclose is a matter of judgment based on assessment of:
 - the terms and conditions underlying the transactions;
 - the financial significance of the transactions;
 - the relevance of the information; and
 - the need for the information to enable users' understanding of the financial statements and for making comparisons.
- Related party transactions, if recognized, should be recorded at the exchange amount. A public sector entity's policy, budget practices or accountability structures may dictate that the exchange amount is the carrying amount, consideration paid or received or fair value.

Revenue

- PSAB is proposing a single framework to categorize revenues to enhance the consistency of revenue recognition and its measurement.
- An Exposure Draft (ED) was issued in May 2017 seeking feedback from stakeholders. Responses are currently under deliberation.
- The ED proposes that in the case of revenues arising from an exchange, a public sector entity must ensure the recognition of revenue aligns with the satisfaction of related performance obligations.
- The ED proposes that unilateral revenues arise when no performance obligations are present, and recognition occurs when there is authority to record the revenue and an event has happened that gives the public sector entity the right to the revenue.
- The new section would be applied retroactively with restatement for fiscal years beginning on or after April 1, 2021.

Assets, Contingent Assets and Contractual Rights

- Three new Handbook sections were approved in March 2015, effective for fiscal years beginning on or after April 1, 2017.
- The intended outcome of the three new Handbook Sections is improved consistency and comparability.
- The standard includes enhanced guidance on the definition of assets and disclosure of assets to provide users with better information about the types of resources available to the public sector entity.
- Disclosure of contingent assets and contractual rights is required to provide users with information about the nature, extent and timing of future assets and potential assets and revenues available to the public sector entity when the terms of those contracts are met.

Employee Future Benefit Obligations

- PSAB has initiated a review of sections PS3250 Retirement Benefits and PS3255 Post-Employment Benefits. Given the complexity of issues involved and potential implications of any changes that may arise from this review, the project will be undertaken in phases. Phase I will address specific issues related to measurement of employment benefits. Phase II will address accounting for plans with risk sharing features, multi-employer defined benefit plans and sick leave benefits.
- An Invitation to comment was issued in November 2016 and closed March 2017, seeking guidance on whether the deferral provisions in existing public sector standards remain appropriate and justified and the appropriateness of accounting for various components of changes in the value of the accrued benefit obligation and plan assets. Responses are currently under deliberation.
- An invitation to Comment is expected to be issued in November 2017 seeking guidance on the present value measurement of accrued benefit obligations. Webinars with an overview of the Invitation to Comment are scheduled for January 2018.



- The ultimate objective of this project is to issue a new employment benefits section to replace existing guidance.

Asset Retirement Obligations

- A new standard is under development addressing the recognition, measurement, presentation and disclosure of legal obligations associated with retirement of tangible capital assets in productive use. Retirement costs would be recognized as an integral cost of owning and operating tangible capital assets. PSAB currently contains no specific guidance in this area.
- PSAB recently released an Exposure Draft following the consideration of comments received in response to the previously released Statement of Principles. Responses are currently under deliberation.
- The proposed ARO standard would require the City to record a liability related to future costs of any legal obligations to be incurred upon retirement of any controlled tangible capital assets ("TCA"). The amount of the initial liability would be added to the historical cost of the asset and amortized over its useful life.
- As a result of the proposed standard, the City would have to:
 - consider how the additional liability will impact net debt, as a new liability will be recognized with no corresponding increase in a financial asset;
 - carefully review legal agreements, senior government directives and legislation in relation to all controlled TCA to determine if any legal obligations exist with respect to asset retirements;
 - begin considering the potential effects on the organization as soon as possible to coordinate with resources outside the finance department to identify AROs and obtain information to estimate the value of potential AROs to avoid unexpected issues.
- The Exposure Draft has a proposed effective date of April 1, 2021 for the standard.

Public Private Partnership

- A taskforce was established in 2016 as a result of increasing use of public private partnerships for the delivery of services and provision of assets.
- A Statement of Principles (SOP) was issued in August 2017 which proposes new requirements for recognizing, measuring and classifying infrastructure procured through a public private partnership. Responses are currently under deliberation.
- The SOP proposes that recognition of infrastructure by the public sector entity would occur when it controls the purpose and use of the infrastructure, when it controls access and the price, if any, charged for use, and it controls any significant interest accumulated in the infrastructure when the P3 ends.
- The SOP proposes the public sector entity recognize a liability when it needs to pay cash or non-cash consideration to the private sector partner for the infrastructure.
- The infrastructure would be valued at cost, with a liability of the same amount if one exists. Cost would be measured by discounting the expected cash flows by a discount rate that reflects the time value of money and risks specific to the project.

Appendix 1 – Engagement Letter



KPMG LLP
Metrotower I
4710 Kingsway, Suite 2400
Burnaby, BC V5H 4M2
Canada
Telephone (604) 527-3600
Fax (604) 527-3636

PRIVATE & CONFIDENTIAL

Mr. Andrew Nazareth
General Manager, Finance and Corporate Services
City of Richmond
6911 No. 3 Road
Richmond, BC V6Y 2C1

October 26, 2017

Dear Mr. Nazareth,

The purpose of this letter is to outline the terms of the following audit engagements for the City of Richmond (the "City" or "Entity" or "Client"), commencing for the period ending December 31, 2017:

- Audit of the consolidated financial statements
- Audit of the Home Owner Grant Treasurer/Auditor Certificate, and
- Audit of the City's compliance with subsections 2 and 3 of section 124 of Part 8 of the School Act

This letter supersedes our previous letter to the City dated November 4, 2013. The terms of the engagement outlined in this letter will continue for a three (3) year term with the option to extend in one year increments to a maximum of five (5) years unless amended or terminated in writing. The attached Terms and Conditions and any exhibits, attachments and appendices hereto and subsequent amendments form an integral part of the terms of this engagement and are incorporated herein by reference (collectively the "Engagement Letter").

KPMG LLP is a Canadian limited liability partnership and a member firm of the KPMG network of independent member firms affiliated with KPMG International Cooperative ("KPMG International"), a Swiss entity. KPMG Canada provides services to KPMG LLP.



City of Richmond
October 26, 2017

FINANCIAL REPORTING FRAMEWORK FOR THE CONSOLIDATED FINANCIAL STATEMENTS

The annual consolidated financial statements will be prepared and presented in accordance with Canadian public sector accounting standards (hereinafter referred to as the "financial reporting framework").

The annual consolidated financial statements will include an adequate description of the financial reporting framework (hereinafter referred to as the "financial statements" or "annual consolidated financial statements").

MANAGEMENT'S RESPONSIBILITIES

Management responsibilities are described in [Appendix A – Management's Responsibilities](#).

An audit does not relieve management or those charged with governance of their responsibilities.

AUDITOR'S RESPONSIBILITIES

Our responsibilities are described in [Appendix B – Auditor's Responsibilities](#).

If management does not fulfill the responsibilities above, we cannot complete our audit.

AUDITOR'S DELIVERABLES

The expected form and content of our report(s) is provided in [Appendix C – Expected Form of Report](#). However, there may be circumstances in which a report may differ from its expected form and content.

In addition, if we become aware of information that relates to the consolidated financial statements after we have issued our audit report, but which was not known to us at the date of our audit report, and which is of such a nature and from such a source that we would have investigated that information had it come to our attention during the course of our audit, we will, as soon as practicable: (1) communicate such an occurrence to those charged with governance; and (2) undertake an investigation to determine whether the information is reliable and whether the facts existed at the date of our audit report. Further, management agrees that in conducting that investigation, we will have the full cooperation of the City's personnel. If the subsequently discovered information is found to be of such a nature that: (a) our audit report would have been affected if the information had been known as of the date of our audit report; and (b) we believe that the audit report is currently being



City of Richmond
October 26, 2017

relied upon or is likely to be relied upon by someone who would attach importance to the information, appropriate steps will be taken by KPMG and expected by the City to prevent further reliance on our audit report. Such steps include, but may not be limited to, appropriate disclosures by the City of the newly discovered facts and the impact to the consolidated financial statements.

Our deliverables regarding income tax advisory services are described in [Appendix D – Income Tax Advisory Services](#).

COMPLIMENTARY VALUE-ADDED SERVICES

As a commitment to our ongoing relationship with the City, we have agreed to contribute certain value-added services to the City's efforts to enhance its delivery of services, improve processes and minimize risks. The value-added services are detailed on page 11 to 12 of the proposal, RFP 6050P for external audit services, dated August 15, 2017. In collaboration with Management, we will offer the value-added services during the course of our engagement as auditors.

FEES

[Appendix E – Fees for Professional Services](#) to this letter lists our fees for professional services to be performed under this Engagement Letter.

We are available to provide a wide range of services beyond those outlined above. Additional services are subject to separate terms and arrangements.

We are proud to provide you with the services outlined above and we appreciate your confidence in our work. We shall be pleased to discuss this letter with you at any time. If the arrangements and terms are acceptable, please sign the duplicate of this letter in the space provided and return it to us.



City of Richmond
October 26, 2017

Yours very truly,

KPMG LLP

Chartered Professional Accountant

CJ James, CPA, CA

Partner, responsible for the engagement and its performance, and for the report that is issued on behalf of KPMG LLP, and who, where required, has the appropriate authority from a professional, legal or regulatory body
604-527- 3635

Enclosure

cc: Mr. Jerry Chong, Director of Finance
Finance Committee

The terms of the engagement set out are as agreed:

A. ———

Mr. Andrew Nazareth, General Manager, Finance and Corporate Services

26/10/17

Date (dd/mm/yy)

Appendix A – Management's Responsibilities

Management acknowledges and understands that they are responsible for:

- (a) the preparation and fair presentation of the consolidated financial statements in accordance with the financial reporting framework referred to above
- (b) ensuring that all transactions have been recorded and are reflected in the consolidated financial statements
- (c) such internal control as management determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error. Management also acknowledges and understands that they are responsible for the design, implementation and maintenance of internal control to prevent and detect fraud
- (d) providing us with access to all information of which management is aware that is relevant to the preparation of the consolidated financial statements such as financial records, documentation and other matters, including the names of all related parties and information regarding all relationships and transactions with related parties
- (e) providing us with additional information that we may request from management for the purpose of the audit
- (f) providing us with unrestricted access to persons within the City from whom we determine it necessary to obtain audit evidence
- (g) providing us with written representations required to be obtained under professional standards and written representations that we determine are necessary. Management also acknowledges and understands that, as required by professional standards, we may disclaim an audit opinion when management does not provide certain written representations required.
- (h) ensuring that internal auditors providing direct assistance to us, if any, will be instructed to follow our instructions and that management, and others within the City, will not intervene in the work the internal auditors perform for us.

Appendix B– Auditor’s Responsibilities Regarding the Audit of the Consolidated Financial Statements

Our function as auditors of the City is:

- to express an opinion on whether the City's annual consolidated financial statements, prepared by management with the oversight of those charged with governance, are, in all material respects, in accordance with the financial reporting framework referred to above
- to report on the annual consolidated financial statements

We will conduct the audit of the City's annual consolidated financial statements in accordance with Canadian generally accepted auditing standards and relevant ethical requirements, including those pertaining to independence (hereinafter referred to as applicable “professional standards”).

We will plan and perform the audit to obtain reasonable assurance about whether the annual consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error. Accordingly, we will, among other things:

- identify and assess risks of material misstatement, whether due to fraud or error, based on an understanding of the City and its environment, including the City's internal control. In making those risk assessments, we consider internal control relevant to the City's preparation of the annual consolidated financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the City's internal control
- obtain sufficient appropriate audit evidence about whether material misstatements exist, through designing and implementing appropriate responses to the assessed risks
- form an opinion on the City's annual consolidated financial statements based on conclusions drawn from the audit evidence obtained
- communicate matters required by professional standards, to the extent that such matters come to our attention, to the appropriate level of management, those charged with governance and/or the board of directors. The form (oral or in writing) and the timing will depend on the importance of the matter and the requirements under professional standards.

**Appendix B – Auditor’s Responsibilities Regarding the Audit of the Home Owner Grant:
Treasurer/Auditor Certificate**

We will also perform audit procedures with respect to the Home Owner Grant: Treasurer / Auditor Certificate (“the Certificate”) in accordance with Canadian generally accepted auditing standards with the objective of expressing an opinion on whether the financial information in the Certificate presents fairly, in all material respects, in accordance with Section 12 of the Home Owner Grant Act. However, we cannot provide assurance that an opinion without reservation will be rendered. Circumstances may arise in which it is necessary for us to modify our audit report or withdraw from the audit engagement. In such circumstances, our findings or reasons for withdrawal will be communicated to management and the Finance Committee.

The report will indicate that it is intended solely for the information and use of the City and the Ministry of Municipal Affairs & Housing and that it is not intended to be and should not be used by anyone other than these specified parties.

Appendix B – Auditor’s Responsibilities Regarding the Compliance with Subsections 2 and 3 of Section 124 of Part 8 of the School Act

We will also perform audit procedures with respect to the City’s compliance with subsections 2 and 3 of section 124 of Part 8 of the School Act in accordance with Canadian generally accepted auditing standards with the objective of expressing an opinion on whether the City is in compliance with subsections 2 and 3 of section 124 of Part 8 of the School Act. However, we cannot provide assurance that an opinion without reservation will be rendered. Circumstances may arise in which it is necessary for us to modify our audit report or withdraw from the audit engagement. In such circumstances, our findings or reasons for withdrawal will be communicated to management and the Finance Committee.

The report will indicate that it is intended solely for the information and use of the City and the Ministry of Municipal Affairs & Housing and that it is not intended to be and should not be used by anyone other than these specified parties.

Appendix C – Expected Forms of Report INDEPENDENT AUDITORS' REPORT

To the Mayor and Council

We have audited the accompanying consolidated financial statements of the City of Richmond (the "City"), which comprise the consolidated statement of financial position as at December 31, 2017 and the consolidated statements of operations, changes in net financial assets and cash flows for the year then ended, and notes, comprising a summary of significant accounting policies and other explanatory information.

Management's Responsibility for the Consolidated Financial Statements

Management is responsible for the preparation and fair presentation of these consolidated financial statements in accordance with Canadian public sector accounting standards, and for such internal control as management determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

Auditors' Responsibility

Our responsibility is to express an opinion on these consolidated financial statements based on our audit. We conducted our audit in accordance with Canadian generally accepted auditing standards. Those standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the consolidated financial statements. The procedures selected depend on our judgment, including the assessment of the risks of material misstatement of the consolidated financial statements, whether due to fraud or error. In making those risk assessments, we consider internal control relevant to the City's preparation and fair presentation of the consolidated financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the City's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the consolidated financial statements present fairly, in all material respects, the consolidated financial position of the City of Richmond as at December 31, 2017, and its consolidated results of operations, its changes in net consolidated financial assets and its consolidated cash flows for the year then ended in accordance with Canadian public sector accounting standards.

Chartered Professional Accountants

Date

Burnaby, Canada

Appendix C – Expected Forms of Report INDEPENDENT AUDITORS' REPORT

To the City of Richmond and the Ministry of Municipal Affairs & Housing

We have audited the accompanying financial information in the Form C2 - Home Owner Grant: Treasurer/Auditor Certificate comprised of total Home Owner Grants of \$xxx, total reimbursement by Province of \$xxx and balance due from Province of \$xxx for the City of Richmond, for the year ended December 31, 2017 and notes, comprising a summary of significant accounting policies (together "the Certificate"). The Certificate has been prepared by management in accordance with the financial reporting provisions of Section 12(1) of the Home Owner Grant Act.

Management's Responsibility for the Certificate

Management is responsible for the preparation of the Certificate in accordance with the financial reporting provisions of Section 12(1) of the Home Owner Grant Act, and for such internal control as management determines is necessary to enable the preparation of the Certificate that is free from material misstatement, whether due to fraud or error.

Auditors' Responsibility

Our responsibility is to express an opinion on the Certificate based on our audit. We conducted our audit in accordance with Canadian generally accepted auditing standards. Those standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the Certificate is free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the Certificate. The procedures selected depend on our judgment, including the assessment of the risks of material misstatement of the Certificate, whether due to fraud or error. In making those risk assessments, we consider internal control relevant to the City's preparation of the Certificate in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the City's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the Certificate.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the financial information in the Form C2 - Home Owner Grant: Treasurer/Auditor Certificate comprised of total Home Owner Grants of \$xxx, total reimbursement by Province of \$xxx and balance due from Province of \$xxx for the City of Richmond, for the year ended December 31, 2017, is prepared, in all material respects, in accordance with the financial reporting provisions of Section 12(1) of the Home Owner Grant Act.

Basis of Accounting and Restriction on Use

Without modifying our opinion, we draw attention to Note 1 to the Certificate, which describes the basis of accounting. The Certificate is prepared to meet the requirements of Section 12(1) of the Home Owner Grant Act. As a result, the Certificate may not be suitable for another purpose. Our report is intended solely for the City of Richmond and the Ministry of Municipal Affairs & Housing and should not be used by parties other than the City of Richmond and the Ministry of Municipal Affairs & Housing.

Chartered Professional Accountants

Date

Burnaby, Canada

APPENDIX C - AUDITORS' REPORT ON SUBSECTIONS 2 AND 3 OF SECTION 124 OF PART 8 OF THE SCHOOL ACT

To the Ministry of Municipal Affairs & Housing

We have audited the City of Richmond's compliance with subsections 2 and 3 of section 124 of Part 8 of the School Act for the year ended December 31, 2017. Compliance with subsections 2 and 3 of section 124 of Part 8 of the School Act is the responsibility of the City's management. Our responsibility is to express an opinion on this compliance based on our audit.

We conducted our audit in accordance with Canadian generally accepted auditing standards. Those standards require that we plan and perform an audit to obtain reasonable assurance whether the City complied with subsections 2 and 3 of section 124 of Part 8 of the School Act. Such an audit includes examining, on a test basis, evidence supporting compliance, evaluating the overall compliance with subsections 2 and 3 of section 124 of Part 8 of the School Act and, where applicable, assessing the accounting principles used and significant estimates made by management.

In our opinion, the City of Richmond has complied, in all material respects, with subsections 2 and 3 of section 124 of Part 8 of the School Act for the year ended December 31, 2017.

Our report is intended solely for the City of Richmond and the Ministry of Municipal Affairs & Housing and should not be used by parties other than the City of Richmond or the Ministry of Municipal Affairs & Housing.

Chartered Professional Accountants

Date

Burnaby, Canada

Appendix D – Income Tax Advisory Services

This letter details the general tax advisory services to be provided to the City of Richmond (the "City" or "Entity" or "Client") for the year ended December 31, 2017. If there are tax services to be delivered outside the scope of those described in this letter, we will require a separate engagement letter for those services.

General tax advisory services

Our advice generally falls under one of the following situations:

- 1) On an ongoing basis, we will provide advisory services of a general nature relating to various income, capital, payroll and indirect tax matters as they arise. This type of service generally arises on a periodic basis as a result of preliminary inquiries made by you. In rendering these services, it is important to recognize that the advice provided is dependent on the detail of the information provided and the environment in which it is rendered. When professional judgment suggests written confirmation of the facts and advice is necessary, we will draft the appropriate correspondence to ensure the appropriate standard of care is met by all parties.
- 2) Periodically, you will seek detailed advice from us in connection with a specific transaction or undertaking you are contemplating. In such a situation, our advice will be based on the information provided to us. It is the responsibility of the City to ensure we are provided with all the information necessary in order for us to render the advice sought. Our tax advice will most likely be communicated to you, or your designate, in writing.

Our tax advisory services, both written and oral, will be based on the facts and assumptions submitted to us. We will not independently verify this information. Inaccuracy or incompleteness of the information could have a material effect on our conclusions.

Our advice will be limited to the conclusions specifically set forth in our reporting letter and KPMG will not express an opinion with respect to any other federal, provincial or foreign tax or legal aspect of the transactions described therein. It should be noted that the Canada Revenue Agency and/or the relevant provincial tax authority and/or any other governmental tax authority (collectively a Tax or Revenue Authority) could take a different position with respect to these transactions, in which case it may be necessary for you to defend this position on appeal from an assessment or litigate the dispute before the courts, including one or more appellate courts, in order for our conclusions to prevail. If a settlement were reached with a Tax or Revenue Authority or if such appeal and litigation were not, or were not entirely, successful, the result would likely be different from the views we express in our reporting letter. Unless expressly provided for, KPMG's services do not include representing Client in the event of a challenge by a Tax or Revenue Authority or litigation before any court.

To be of greatest assistance to the City we should be advised in advance of any proposed transactions. If such matters exceed the scope of this engagement letter, we will issue additional engagement letters to confirm the particular scope and terms.

Appendix E – Fees for Professional Services

The City and KPMG agree to a fee based on actual hours incurred at mutually agreed-upon rates for the audit. The estimated fee for the services described in this letter is in accordance with our proposal, RFP 6050P for external audit services dated August 15, 2017.

Our fees will be billed as the work progresses.



TERMS AND CONDITIONS FOR ASSURANCE ENGAGEMENTS

These Terms and Conditions are an integral part of the accompanying engagement letter or proposal from KPMG that identifies the engagement to which they relate (and collectively form the "Engagement Letter"). This Engagement Letter supersedes all written or oral representations on this matter. The term "Entity" used herein has the meaning set out in the accompanying engagement letter or proposal. The term "Management" used herein means the management of the Entity.

1. SEVERABILITY.

The provisions of these Terms and Conditions and the accompanying proposal or engagement letter shall only apply to the extent that they are not prohibited by a mandatory provision of applicable law, regulation or professional standards. If any of the provisions of these Terms and Conditions or the accompanying proposal or engagement letter are determined to be invalid, void or unenforceable, the remaining provisions of these Terms and Conditions or the accompanying proposal or engagement letter, as the case may be, shall not be affected, impaired or invalidated, and each such provision shall remain valid and in effect and be enforceable and binding on the parties to the fullest extent permitted by law.

2. GOVERNING LAW.

This Engagement Letter shall be subject to and governed by the laws of the province where KPMG's principal office performing this engagement is located (without regard to such province's rules on conflicts of law).

3. LLP STATUS.

KPMG LLP is a registered limited liability Partnership ("LLP") established under the laws of the Province of Ontario and, where applicable, has been registered extra-provincially under provincial legislation. KPMG is a partnership, but its partners have a degree of limited liability. A partner is not personally liable for any debts, obligations or liabilities of the LLP that arise from a negligent act or omission by another partner or by any other person under that other partner's direct supervision or control. The legislation relating to limited liability partnerships does not, however, reduce or limit the liability of the firm. The firm's insurance exceeds the mandatory professional indemnity insurance requirements established by the relevant professional bodies. Subject to the other provisions hereof, all partners of the LLP remain personally liable for their own actions and/or actions of those they directly supervise or control.

4. DOCUMENTS AND INFORMATION.

Management's cooperation in providing us with documents and related information and agreed-upon assistance on a timely basis is an important factor in being able to issue our report. Entity agrees that all management functions/responsibilities will be performed and all management decisions will be made by Entity, and not KPMG. KPMG shall be entitled to share all information provided by the Entity with all other member firms of KPMG International Cooperative ("KPMG International") and with KPMG International itself for the purpose of quality performance reviews, provided that any personal information shall remain within Canada.

All work papers, files and other internal materials created or produced by KPMG during the engagement and all copyright and intellectual property rights in our work papers are the property of KPMG. Except as required by applicable law or regulation, the Entity shall keep confidential the existence and terms of this Engagement Letter, and such confidential information shall not be distributed, published or made available to any other person without KPMG's express written permission. Further, for purposes of the services described in this Engagement Letter only, the Entity hereby grants to KPMG a limited, revocable, non-exclusive, non-transferable, paid up and royalty-free license, without right of sublicense, to use all logos, trademarks and service marks of Entity solely for presentations or reports to the Entity or for internal KPMG presentations and intranet sites.

5. INFORMATION PROCESSING OUTSIDE CANADA.

Confidential information, but not personal information, collected by KPMG during the course of this engagement may be used, processed and stored outside of Canada by KPMG, KPMG International member firms performing services hereunder or third party service providers to provide professional services and administrative, analytical and clerical support and to comply with applicable law, regulations and professional standards. Entity also understands and agrees that KPMG aggregates Entity's confidential information, but not personal information, with information from other sources for the purpose of improving quality and service, and for use in

presentations to clients and non-clients, in a form where such information is sufficiently de-identified so as not to be attributable to Entity. KPMG represents to the Entity that each KPMG International member firm and third party service provider providing services hereunder has agreed or shall agree to conditions of confidentiality with respect to the Entity's confidential information. Further, KPMG is responsible to the Entity for causing such third party service providers to comply with such conditions of confidentiality, and KPMG shall be responsible to the Entity for their failure to comply and failure of each KPMG International member firm providing services hereunder to comply with its obligations of confidentiality owed to KPMG. Any services performed by third party service providers shall be performed in accordance with the terms of this Engagement Letter, but KPMG shall remain responsible to the Entity for the performance of such services and services performed by each KPMG International member firm providing services hereunder. Such confidential information, but not personal information, may be subject to disclosure in accordance with the laws applicable in the jurisdiction in which the information is processed or stored, which laws may not provide the same level of protection for such confidential information as will Canadian laws.

KPMG will collect, use and store all personal information in Canada, and may disclose such personal information to KPMG International, other KPMG member firms or third party service providers to the extent required for quality performance reviews or to provide services in connection with the engagement, provided that any such entity will only access the personal information within Canada. For greater certainty, KPMG will not disclose personal information to any person or entity outside Canada except where required by applicable law, regulation or professional standards, or where prior written consent is obtained from the Entity.

6. PERSONAL INFORMATION CONSENTS AND NOTICES.

Any collection, use or disclosure of personal information is subject to KPMG's Privacy Policy available at www.kpmg.ca. KPMG may be required to collect, use and disclose personal information about individuals during the course of this engagement.

The Entity represents and warrants that it will obtain any consents reasonably required to allow KPMG to collect, use and disclose personal information in the course of the engagement. KPMG's Privacy Officer noted in KPMG's Privacy Policy is able to answer any individual's questions about the collection of personal information required for KPMG to deliver services hereunder.

7. OFFERS OF EMPLOYMENT.

In order to allow issues of independence to be addressed, Management agrees that prior to extending an offer of employment to any KPMG partner, employee or contractor, the matter is communicated to the engagement partner or associate partner.

8. OFFERING DOCUMENTS.

If the Entity wishes to include or incorporate by reference the financial statements and our report thereon in an offering document, we will consider consenting to the use of our report and the terms thereof at that time. Nothing in this Engagement Letter shall be construed as consent and KPMG expressly does not consent to the use of our audit report(s) in offering documents. If the Entity wishes to obtain KPMG's written consent to the use of our audit report(s) in an offering document, or wishes us to provide a comfort or advice letter, we will be required to perform procedures as required by professional standards; any agreement to perform such procedures will be documented in a separate engagement letter. Management agrees to provide us with adequate notice of the preparation of such documents.

9. FEE AND OTHER ARRANGEMENTS.

KPMG's estimated fee is based on the quality of the Entity's accounting records, the agreed-upon level of preparation and assistance from the Entity's personnel, and adherence to the agreed-upon timetable. KPMG's estimated fee also assumes that the Entity's financial statements are in accordance with the applicable financial reporting framework and that there are no significant new or changed accounting policies or issues, or financial reporting, internal control over financial reporting or other reporting issues. KPMG will inform the Entity on a timely basis if these factors are not in place.



TERMS AND CONDITIONS FOR ASSURANCE ENGAGEMENTS

Additional time may be incurred for such matters as significant issues, significant unusual and/or complex transactions, informing management about new professional standards, and any related accounting advice. Where these matters arise and require research, consultation and work beyond that included in the estimated fee, the Entity and KPMG agree to revise the estimated fee. No significant additional work will proceed without Management's concurrence, and, if applicable, without the concurrence of those charged with governance. Upon completion of these services KPMG will review with the Entity any fees and expenses incurred in excess of KPMG's estimate, following which KPMG will render the final billing.

KPMG's invoices are due within 30 days of receipt. Amounts overdue are subject to interest. In order to avoid the possible implication that unpaid fees might be viewed as creating a threat to KPMG's independence, it is important that KPMG's bills be paid promptly when rendered. If a situation arises in which it may appear that KPMG's independence is threatened because of significant unpaid bills, KPMG may be prohibited from signing the report and, if applicable, any consent.

Fees for any other services will be billed separately from the services described in this Engagement Letter and may be subject to written terms and conditions supplemental to those in this letter.

Canadian Public Accountability Board (CPAB) participation fees, when applicable, are charged to the Entity based on the annual fees levied by CPAB.

To the extent that KPMG partners and employees are on the Entity's premises, the Entity will take all reasonable precautions for the safety of KPMG partners and employees at the Entity's premises.

10. LEGAL PROCESSES.

a. The Entity on its own behalf hereby acknowledges and agrees to cause its subsidiaries and affiliates to hereby acknowledge that KPMG may from time to time receive requests or orders from the Canadian Public Accountability Board or from professional, securities or other regulatory, judicial or governmental authorities (both in Canada and abroad) to provide them with information and copies of documents in KPMG's files including (without limitation) working papers and other work-product relating to the affairs of the Entity, its subsidiaries and affiliates, which information and documents may contain confidential information of Entity. Except where prohibited by law, if a request or order is directly related to an inspection or investigation of KPMG's audit of the Entity, KPMG will advise the Entity of the request or order. The Entity hereby acknowledges that KPMG will provide these documents and information without further reference to, or authority from, the Entity, its subsidiaries and affiliates. The Entity must mark any document over which it asserts privilege as "privileged". When such an authority requests access to KPMG's working papers and other work-product relating to the Entity's affairs, KPMG will, on a reasonable efforts basis, refuse access to any document over which the Entity has expressly informed KPMG at the time of delivery that the Entity asserts privilege (by the Entity marking such document as "privileged" as contemplated in the foregoing sentence). Notwithstanding the foregoing, where disclosure of such privileged documents is required by law, KPMG will disclose such privileged documents. If and only if the authority requires such access to such privileged documents pursuant to the laws of a jurisdiction in which express consent of the Entity is required for such disclosure, then the Entity hereby provides its consent.

Where privileged Entity documents are disclosed by KPMG as contemplated above, KPMG is directed to advise the authority that the Entity is permitting disclosure only to the extent required by law and for the limited purpose of the authority's exercise of statutory authority. KPMG is directed to advise the authority that the Entity does not intend to waive privilege for any other purpose and that the Entity expects its documents to be held by the authority as privileged and confidential material. For greater certainty, the Entity and KPMG hereby agree that this acknowledgement (and, if required, consent) does not negate or constitute a waiver of privilege for any purpose and the Entity expressly relies upon the privilege protections afforded under statute and otherwise under law.

The Entity agrees to reimburse KPMG, upon request, at standard billing rates for KPMG's professional time and expenses, including reasonable legal fees, expenses and taxes, incurred in dealing with the matters described above.

b. The Entity agrees to notify KPMG promptly of any request received by Entity from any court or applicable regulatory authority with respect to the services hereunder, KPMG's confidential information, KPMG's advice or

report or any related document. If KPMG is required by law, pursuant to government regulation, subpoena or other legal process to produce documents or personnel as witnesses arising out of the engagement and KPMG is not a party to such proceedings, Entity shall reimburse KPMG at standard billing rates for professional time and expenses, including, without limitation, reasonable legal fees, expenses and taxes incurred in responding to such compelled assistance.

c. If the Entity requests that KPMG produce documents or personnel as witnesses in any proceedings in any way related to the engagement or services provided by KPMG hereunder and KPMG is not a party to such proceedings, KPMG may agree to produce documents or personnel as witnesses on such terms and conditions as KPMG may, in its sole discretion, determine. Without limiting the generality of the foregoing, the Entity shall reimburse KPMG at standard billing rates for professional time and expenses, including, without limitation, reasonable legal fees, expenses and taxes incurred in responding to such Entity requests.

11. KPMG INTERNATIONAL MEMBER FIRMS.

The Entity agrees that any claims that may arise out of this engagement will be brought solely against KPMG, the contracting party, and not against any other KPMG International member firms participating in this engagement or such third party service providers referred to in Section 5 above.

12. CONNECTING TO THE ENTITY'S IT NETWORK.

KPMG personnel are authorized to connect their computers to the Entity's IT Network, subject to any restrictions communicated to KPMG from time to time. Connection to the Entity's IT Network or the Internet via the Network, while at the Entity's premises, will be for the express purpose of conducting normal business activities, primarily relating to facilitating the completion of work referred to in this letter.

13. DELIVERABLES OR COMMUNICATIONS.

KPMG may issue other deliverables or communications as part of the services described in this Engagement Letter. Such other deliverables or communications may not be included in, summarized in, quoted from or otherwise used or referred to, in whole or in part, in any public documents or public oral statement.

KPMG expressly does not consent to the use of any communication, report, statement or conclusion prepared by us on the interim financial statements. Further any such communication, report, statement or conclusion on the interim financial statements may not be included in, summarized in, quoted from or otherwise used in any public document or public oral statement except when the interim review conclusion contains a modified conclusion as explained below.

If the interim review conclusion is modified relating to a departure from the applicable financial reporting framework, which is not as a result of an exemption permitted by securities legislation, you agree that our interim review report will accompany the interim financial statement.

14. LIMITATION ON WARRANTIES

THIS IS A SERVICES ENGAGEMENT. KPMG WARRANTS THAT IT WILL PERFORM SERVICES HEREUNDER IN GOOD FAITH WITH QUALIFIED PERSONNEL IN A COMPETENT AND WORKMANLIKE MANNER IN ACCORDANCE WITH APPLICABLE INDUSTRY STANDARDS. SUBJECT TO SECTION 1, KPMG DISCLAIMS ALL OTHER WARRANTIES, REPRESENTATIONS OR CONDITIONS, EITHER EXPRESS OR IMPLIED, INCLUDING, WITHOUT LIMITATION, WARRANTIES, REPRESENTATIONS OR CONDITIONS OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

15. LIMITATION ON LIABILITY AND INDEMNIFICATION

a. Subject to Section 1: (i) Entity agrees that KPMG shall not be liable to Entity for any actions, damages, claims, fines, penalties, complaints, demands, suits, proceedings, liabilities, costs, expenses, or losses (collectively, "Claims") in any way arising out of or relating to the services performed hereunder for an aggregate amount in excess of the fees paid by Entity to KPMG under the engagement; and (ii) on a multi-phase engagement, KPMG's liability shall be based on the amount actually paid to KPMG for the particular phase that gives rise to the liability.

b. Subject to Section 1, in the event of a Claim by any third party against KPMG that arises out of or relates to the services performed hereunder, Entity will indemnify and hold harmless KPMG from all such Claims, including, without limitation, reasonable legal fees, except to the extent



TERMS AND CONDITIONS FOR ASSURANCE ENGAGEMENTS

finally determined to have resulted from the intentional, deliberate or fraudulent misconduct of KPMG.

c. Subject to Section 1: (i) in no event shall KPMG be liable for consequential, special, indirect, incidental, punitive or exemplary damages, liabilities, costs, expenses, or losses (including, without limitation, lost profits and opportunity costs); (ii) in any Claim arising out of the engagement, Entity agrees that KPMG's liability will be several and not joint and several; and (iii) Entity may only claim payment from KPMG of KPMG's proportionate share of the total liability based on degree of fault.

d. For purposes of this Section 15, the term KPMG shall include its subsidiaries, its associated and affiliated entities and their respective current and former partners, directors, officers, employees, agents and representatives. The provisions of this Section 15 shall apply regardless of the form of Claim, whether in contract, statute, tort (including, without limitation, negligence) or otherwise.

16. ALTERNATIVE DISPUTE RESOLUTION.

The parties shall, and shall cause both their and their respective subsidiaries', affiliates' and associated entities' current and former officers, partners, directors, employees, agents and representatives, to first attempt to settle any dispute arising out of or relating to this Engagement Letter or the services provided hereunder (the "Dispute") through good faith negotiations in the spirit of mutual cooperation between representatives of each of the parties with authority to resolve the Dispute. In the event that the parties are unable to settle or resolve a Dispute through negotiation within 30 days of when one of the parties has notified the other party of the Dispute by delivering a notice of dispute, or such longer period as the parties may mutually agree upon, such Dispute shall, as promptly as is reasonably practicable, be subject to mediation pursuant to the National Mediation Rules of the ADR Institute of Canada, Inc. that are in force at the time the notice of dispute is delivered. Any Dispute remaining unresolved for more than 60 days following the parties first meeting with a mediator or such longer period as the parties may mutually agree upon shall, as promptly as is reasonably practicable, be resolved by arbitration pursuant to the Arbitration Rules of the ADR Institute of Canada, Inc. (the "Arbitration Rules") that are in force at the time the Dispute is subject to arbitration. For certainty, the parties hereby waive any right they may otherwise have to bring a court action in connection with a Dispute. The parties also waive any right they may otherwise have to bring or participate in a class, collective, or representative proceeding in connection with a Dispute, whether in court or before an arbitrator. The arbitrator's decision shall be final, conclusive and binding upon the parties, and the parties shall have no right to appeal or seek judicial review of the arbitrator's decision. For certainty, the parties hereby waive any right of appeal which may otherwise be available under applicable legislation or under the Arbitration Rules. The place of mediation and arbitration shall be the city in Canada in which the principal KPMG office that performed the engagement is located. The language of the mediation and arbitration shall be English.

17. LIMITATION PERIOD

Subject to Section 1, no proceeding arising under or relating to the engagement may be brought by either party more than one year after the cause of action has accrued or in any event not more than five years after completion of the engagement, except that a proceeding for non-payment may be brought by KPMG at any time following the date of the last payment due to KPMG hereunder. For purposes of this Section 17, the term "KPMG" shall include its subsidiaries and associated and affiliated entities and their respective current and former partners, directors, officers, employees, agents and representatives.

18. COMMENT LETTERS OR EQUIVALENT.

Management agrees to promptly provide us with a copy of any comment letter or request for information issued by a relevant securities regulatory authority on the Entity's continuous disclosure filings or equivalent. If any of the comments pertain to the Entity's financial statements and, when applicable, Management's assessment of the effectiveness of internal control over financial reporting, Management and those charged with governance agree to engage our assistance, subject to any pre-approval process, in the process of responding to such comments.

19. PUBLIC DOCUMENTS OR EQUIVALENT.

Except as otherwise specifically agreed in this Engagement Letter, nothing in this Engagement Letter shall be construed as consent and KPMG

expressly does not consent to the use of our audit report(s) in any "document" or "public oral statement" (as those terms are defined in section 138.1 of the Securities Act (Ontario)), including but not limited to when:

- (i) the Entity files with securities regulatory authorities its annual financial statements and KPMG's audit report thereon;
- (ii) the Entity files with securities regulatory authorities its Management's Discussion and Analysis in connection with the material in (i) above;
- (iii) the Entity files with securities regulatory authorities any other continuous disclosure document containing, or incorporating by reference, the annual financial statements and KPMG's audit report thereon (e.g., Annual Reports on Form 40-F or 20-F or 10-K filed on SEDAR).

If the Entity wishes to obtain KPMG's written consent to the use of our audit report(s), we will be required to perform procedures as required by professional standards. Except as otherwise specifically agreed in this Engagement Letter, any agreement to perform procedures necessary to provide KPMG's written consent or any agreement to read any other document issued by the Entity will be a separate engagement.

20. POTENTIAL CONFLICTS OF INTEREST

a. KPMG is engaged by a wide variety of entities and individuals, some of whom may be creditors, investors, borrowers, shareholders, competitors, suppliers or customers of Entity, or other parties with conflicting legal and business interests to Entity, including, without limitation, in relation to the audit, tax or advisory services provided to Entity by KPMG. KPMG's engagements with such companies and individuals may result in a conflict with Entity's interests.

b. As a condition of KPMG's engagement by Entity, Entity agrees that: (i) without further notice or disclosure, KPMG may accept or continue engagements on unrelated matters to KPMG's engagement for Entity in which KPMG may act contrary to Entity's interests even if those unrelated matters are materially and directly adverse to Entity; and (ii) without further notice or disclosure, KPMG may provide advice or services to any other person or entity making a competing bid or proposal to that of Entity whether or not KPMG is providing advice or services to Entity in respect of Entity's competing bid or proposal.

c. In accordance with professional standards, and except as set out below, KPMG will not use any confidential information regarding Entity in connection with its engagements with other clients, and will establish confidentiality and other safeguards to manage conflicts, which may include, in KPMG's sole discretion, the use of separate engagement teams and data access controls. In no event shall KPMG be liable to Entity or shall Entity be entitled to a return of fees and disbursements incurred on behalf of Entity or any other compensation whatsoever as a result of KPMG accepting or continuing a conflicting engagement.

d. Entity further agrees that KPMG may, in its sole discretion, disclose the fact or general nature of its engagement for Entity to (i) KPMG International and other KPMG International member firms in order to check against potential conflicts of interest, and (ii) to the extent reasonably required in order to obtain the consent of another entity or individual in order to permit KPMG to act for such entity or individual, or for Entity, in connection with the engagement or any future engagement.

e. Where another party has engaged KPMG to deliver services before Entity has done so, and subsequently circumstances change such that there is a conflict, which in KPMG's sole opinion cannot be adequately managed through the use of confidentiality and other safeguards, KPMG shall be entitled to terminate the engagement for Entity, without liability, immediately upon notice.

f. Other KPMG International member firms are engaged by many entities and individuals, including, without limitation, entities and individuals that may enter into transactions or may have disputes with Entity or Entity's related or affiliated entities. Entity agrees that (i) it will not assert that other KPMG International member firms are precluded from being engaged by those other entities or individuals, and (ii) those engagements of other KPMG International member firms do not conflict with KPMG's engagement for Entity.

g. Subject to Section 1, Entity will indemnify and hold harmless KPMG, its subsidiaries and associated and affiliated entities, and their respective current and former partners, directors, officers, employees, agents and representatives from any claims, actions, damages, complaints, demands, suits, proceedings, liabilities, fines, penalties, costs, expenses or losses by any third party (including, without limitation, reasonable legal fees) that



TERMS AND CONDITIONS FOR ASSURANCE ENGAGEMENTS

alleges that KPMG was in a conflict of interest by providing services hereunder. The provisions of this subsection 20(g) shall apply regardless of the form of Claim, whether in contract, statute, tort (including, without limitation, negligence) or otherwise.

h. KPMG encourages Entity to obtain legal advice with respect to Entity's rights in connection with potential future conflicts prior to entering into the engagement.

21. LOBBYING

Unless expressly stated in this Engagement Letter, KPMG will not undertake any lobbying activity, as that term is defined in all applicable federal, provincial and municipal lobbyist registration statutes and regulations, in connection with the engagement. In the event that KPMG and Entity agree that KPMG will undertake lobbying activity in connection with the engagement, such agreement shall be set out in an amendment to this Engagement Letter.

22. SURVIVAL

All sections hereof other than Section 12 shall survive the expiration or termination of the engagement.



TERMS AND CONDITIONS FOR ADVISORY AND TAX SERVICES

1. TERMS AND CONDITIONS.

a. These Terms and Conditions are an integral part of the accompanying Proposal or Engagement Letter from KPMG that identifies the engagement to which they relate.

b. In the event of conflict between the Proposal or Engagement Letter and these Terms and Conditions, these Terms and Conditions shall prevail unless specific reference to a provision of the Terms and Conditions being varied is made in the Proposal or Engagement Letter. Other capitalized words in these Terms and Conditions shall have the meanings given to them in the Proposal or Engagement Letter.

2. SERVICES.

KPMG will use reasonable efforts to complete the performance of the services within any agreed-upon time-frame. It is understood and agreed that KPMG's services may include advice and recommendations, but all decisions in connection with the implementation of such advice and recommendations shall be the responsibility of, and made by, Client. KPMG will not perform management functions or make management decisions for Client. Nothing in these Terms and Conditions or Engagement Letter (or Proposal) shall be construed as precluding or limiting in any way the right of KPMG to provide services of any kind or nature whatsoever to any person or entity as KPMG in its sole discretion deems appropriate.

3. CLIENT RESPONSIBILITIES.

a. Client agrees to cooperate with KPMG in the performance of the services under the Engagement Letter and shall provide or arrange to provide KPMG with timely access to and use of the personnel, facilities, equipment, data and information necessary for KPMG to perform the services under the Engagement Letter. To the extent that KPMG personnel are on Client premises, Client will take all reasonable precautions for the safety of KPMG partners and employees at Client premises. Client shall be responsible for the performance of its employees and agents and for the accuracy and completeness of all data and information provided to KPMG for purposes of the performance by KPMG of its services hereunder. The Proposal or Engagement Letter may set forth additional responsibilities of Client in connection with the engagement. Client acknowledges that Client's failure to perform these obligations could adversely impact KPMG's ability to perform its services.

b. Client agrees that Client, and not KPMG, shall perform the following functions: (i) make all management decisions and perform all management functions; (ii) designate an individual who possesses suitable skill, knowledge and experience, preferably within senior management, to oversee the performance of the services under the Engagement Letter, and to evaluate the adequacy and results of such services; (iii) accept responsibility for the results of such services; and (iv) establish and maintain internal controls over the processes with which such services are concerned, including, without limitation, monitoring ongoing activities.

c. Client acknowledges and agrees that KPMG will, in performing the services, base its conclusions on the facts and assumptions that Client furnishes and that KPMG may use data, material, and other information furnished by or at the request or direction of Client without any independent investigation or verification and that KPMG shall be entitled to rely upon the accuracy and completeness of such data, material and other information. Inaccuracy or incompleteness of such data, material and other information furnished to KPMG could have a material effect on KPMG's conclusions.

d. Client acknowledges that information made available by it, or by others on Client's behalf, or otherwise known to partners or staff of KPMG who are not engaged in the provision of the services hereunder shall not be deemed to have been made available to the individuals within KPMG who are engaged in the provision of the services hereunder. Client undertakes that, if anything occurs after information is provided by Client to KPMG to render such information untrue, unfair or misleading, Client shall promptly notify KPMG.

4. REPORTING.

a. All oral and written communications by KPMG to Client with respect to the engagement, including, without limitation, drafts and those communications occurring prior to the execution of the Engagement Letter will be subject to the terms and conditions of the Engagement Letter and

these Terms and Conditions. During the performance of the services, KPMG may supply oral, draft or interim advice, reports or presentations but in such circumstances KPMG's written advice or final written report shall take precedence. No reliance should be placed by Client on any oral, draft or interim advice, reports or presentations. Where Client wishes to rely on oral advice or oral presentation, Client shall inform KPMG and KPMG will provide documentary confirmation of the advice concerned.

b. Subsequent to the completion of the engagement, KPMG will not update its advice, recommendations or work product for changes or modification to the law and regulations, or to the judicial and administrative interpretations thereof, or for subsequent events or transactions, unless Client separately engages KPMG to do so in writing after such changes or modifications, interpretations, events or transactions occur.

5. WORKING PAPERS AND USE OF REPORTS; USE OF NAME AND LOGO

a. KPMG retains all rights in all methodologies, know-how, knowledge, applications and software developed by KPMG either prior to or during the engagement. KPMG also retains all rights (including, without limitation, copyright) in all reports, written advice and other working papers and materials developed by KPMG during the engagement. Unless contemplated by the Engagement Letter, all reports and written advice are confidential and intended solely for Client's internal use (or the use of Client's management, as applicable) to assist with this specific matter or transaction, and, where applicable, government taxation authorities, and are not for general use, circulation or publication. Such reports and written advice shall not be edited, referred to, circulated, reproduced, distributed, published, made available, used for any other purpose or relied upon by any other person without KPMG's express written permission and on such terms and conditions as KPMG may require in its sole discretion. If such permission is given, Client shall not publish any extract or excerpt of KPMG's written advice or report or refer to KPMG without providing the entire advice or report at the same time. Notwithstanding the foregoing, Client may disclose in whole any report or written advice given to Client by KPMG hereunder solely to Client's legal and professional advisors for the purposes of Client seeking advice in respect of the transaction or matter to which the engagement relates, provided that when doing so Client informs such advisors that: (i) disclosure by them (except as permitted herein) is not permitted without KPMG's prior written consent; and (ii) KPMG accepts no responsibility or liability to such advisors in connection with such reports or written advice. Subject to the restrictions of Section 6, KPMG is entitled to use or develop the knowledge, experience and skills of general application gained through performing the engagement.

b. Client shall not refer to KPMG or use KPMG's name or logo in any manner or medium without the prior written permission of KPMG in each instance, which permission may be unreasonably withheld by KPMG.

c. The contents of this Section 5 may be reproduced in any report or written advice of KPMG, in whole or in part, at KPMG's sole discretion. Any failure of KPMG to include any such language shall not derogate from the obligations set out in this Section 5.

6. CONFIDENTIALITY.

a. Except as described in Section 5 above, Client will treat in confidence any information provided by KPMG to Client, including but not limited to KPMG methodologies, know-how, knowledge, application or software, and will not use or disclose any such confidential information of KPMG to others.

b. Except as expressly set forth herein, KPMG will treat as confidential all proprietary information and personal information obtained from Client in the course of the engagement.

c. The restrictions in subsections 6 (a) and (b) above shall not apply to any information that: (i) is required by law or professional standards applicable to KPMG to be disclosed; (ii) that is in or hereafter enters the public domain; (iii) that is or hereafter becomes known to Client or KPMG, as the case may be, without breach of any confidentiality obligation; or (iv) that is independently developed by KPMG.

d. KPMG shall be entitled to include a description of the services rendered in the course of the engagement in marketing and research materials and disclose such information to third parties, provided that all such information will be rendered anonymous and not subject to association with Client.



TERMS AND CONDITIONS FOR ADVISORY AND TAX SERVICES

e. KPMG shall be entitled to share all information provided by the Entity with all other member firms of KPMG International Cooperative ("KPMG International") and with KPMG International itself for the purpose of quality performance reviews, provided that any personal information shall remain within Canada.

f. Professional standards require KPMG personnel performing any audit or assurance services for clients to discuss or have available to them all information and materials that may affect the audit or assurance engagement. Client authorizes, if Client is or becomes an assurance Client, KPMG personnel performing services under the engagement to make available to the KPMG assurance engagement team and other KPMG personnel, the findings, observations and recommendations from the engagement and agrees that KPMG may use all such findings, observations and recommendations in KPMG's assurance engagement.

g. Except as required by applicable law or regulation, Client shall keep confidential the existence and terms of the Proposal or the Engagement Letter (as applicable) and these Terms and Conditions. Such confidential information shall not be distributed, published or made available to any other person without KPMG's express written permission. Further, for purposes of the services described in the Engagement Letter only, the Client hereby grants to KPMG a limited, revocable, non-exclusive, non-transferable, paid up and royalty-free license, without right of sublicense, to use all logos, trademarks and service marks of Client solely for presentations or reports to the Client or for internal KPMG presentations and intranet sites.

7. PERSONAL INFORMATION CONSENTS AND NOTICES.

Any collection, use or disclosure of personal information is subject to KPMG's Privacy Policy available at www.kpmg.ca. KPMG may be required to collect, use and disclose personal information about individuals during the course of this engagement.

The Entity represents and warrants that it will obtain any consents reasonably required to allow KPMG to collect, use and disclose personal information in the course of the engagement. KPMG's Privacy Officer noted in KPMG's Privacy Policy is able to answer any individual's questions about the collection of personal information required for KPMG to deliver services hereunder.

8. INFORMATION PROCESSING OUTSIDE CANADA.

Confidential information, but not personal information, collected by KPMG during the course of this engagement may be used, processed and stored outside of Canada by KPMG, KPMG International member firms performing services hereunder or third party service providers to provide professional services and administrative, analytical and clerical support and to comply with applicable law, regulations and professional standards. Entity also understands and agrees that KPMG aggregates Entity's confidential information, but not personal information, with information from other sources for the purpose of improving quality and service, and for use in presentations to clients and non-clients, in a form where such information is sufficiently de-identified so as not to be attributable to Entity. KPMG represents to the Entity that each KPMG International member firm and third party service provider providing services hereunder has agreed or shall agree to conditions of confidentiality with respect to the Entity's confidential information. Further, KPMG is responsible to the Entity for causing such third party service providers to comply with such conditions of confidentiality, and KPMG shall be responsible to the Entity for their failure to comply and failure of each KPMG International member firm providing services hereunder to comply with its obligations of confidentiality owed to KPMG. Any services performed by third party service providers shall be performed in accordance with the terms of this Engagement Letter, but KPMG shall remain responsible to the Entity for the performance of such services and services performed by each KPMG International member firm providing services hereunder. Such confidential information, but not personal information, may be subject to disclosure in accordance with the laws applicable in the jurisdiction in which the information is processed or stored, which laws may not provide the same level of protection for such confidential information as will Canadian laws.

KPMG will collect, use and store all personal information in Canada, and may disclose such personal information to KPMG International, other KPMG member firms or third party service providers to the extent required

for quality performance reviews or to provide services in connection with the engagement, provided that any such entity will only access the personal information within Canada. For greater certainty, KPMG will not disclose personal information to any person or entity outside Canada except where required by applicable law, regulation or professional standards, or where prior written consent is obtained from the Entity.

9. TAXES/BILLING/EXPENSES/FEES.

a. All fees and other charges do not include any applicable federal, provincial, or other goods and services or sales taxes, or any other taxes or duties whether presently in force or imposed in the future. Any such taxes or duties shall be assumed and paid by Client without deduction from the fees and charges hereunder.

b. Bills will be rendered on a regular basis as the engagement progresses. For certainty, Client acknowledges that to the extent a subsidiary, affiliate or related party of KPMG is engaged by KPMG to assist KPMG in providing the services hereunder, Client may receive bills from such subsidiary, affiliate or related party of KPMG for such services. KPMG's invoices are due within 30 days of receipt. Interest on overdue accounts is calculated at the rate noted on the invoice commencing 30 days following the date of the invoice.

c. Without limiting its rights or remedies, KPMG shall have the right to halt or terminate entirely its services until payment is received on past due invoices.

d. In the event that the engagement is terminated and Client proceeds to complete the transaction or financing within 18 months from the termination date, then the full amount of any Completion Fee shall be payable on closing of the transaction or the completion of financing, regardless of whether KPMG provided further service.

10. LIMITATION ON WARRANTIES.

THIS IS A SERVICES ENGAGEMENT. KPMG WARRANTS THAT IT WILL PERFORM SERVICES HEREUNDER IN GOOD FAITH WITH QUALIFIED PERSONNEL IN A COMPETENT AND WORKMANLIKE MANNER IN ACCORDANCE WITH APPLICABLE INDUSTRY STANDARDS. KPMG DISCLAIMS ALL OTHER WARRANTIES, REPRESENTATIONS OR CONDITIONS, EITHER EXPRESS OR IMPLIED, INCLUDING, WITHOUT LIMITATION, WARRANTIES, REPRESENTATIONS OR CONDITIONS OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

11. LIMITATION ON LIABILITY.

a. Client agrees that KPMG shall not be liable to Client for any actions, damages, claims, fines, penalties, complaints, demands, suits, proceedings, liabilities, costs, expenses, or losses (collectively, "Claims") in any way arising out of or relating to the services performed hereunder for an aggregate amount in excess of the fees paid by Client to KPMG under the engagement. On a multi-phase engagement, KPMG's liability shall be based on the amount actually paid to KPMG for the particular phase that gives rise to the liability.

b. In the event of a Claim by any third party against KPMG that arises out of or relates to the services performed hereunder, Client will indemnify and hold harmless KPMG from all such Claims, including, without limitation, reasonable legal fees, except to the extent finally determined to have resulted from the intentional, deliberate or fraudulent misconduct of KPMG.

c. In no event shall KPMG be liable for consequential, special, indirect, incidental, punitive or exemplary damages, liabilities, costs, expenses, or losses (including, without limitation, lost profits and opportunity costs). In any Claim arising out of the engagement, Client agrees that KPMG's liability will be several and not joint and several. Client may only claim payment from KPMG of KPMG's proportionate share of the total liability based on degree of fault.

d. For purposes of this Section 11, the term KPMG shall include its subsidiaries, its associated and affiliated entities and their respective current and former partners, directors, officers, employees, agents and representatives. The provisions of this Section 11 shall apply regardless of the form of Claim, whether in contract, statute, tort (including, without limitation, negligence) or otherwise.



TERMS AND CONDITIONS FOR ADVISORY AND TAX SERVICES

12. LEGAL PROCEEDINGS.

a. Client agrees to notify KPMG promptly of any request received by Client from any court or applicable regulatory authority with respect to the services hereunder, KPMG's confidential information, KPMG's advice or report or any related document.

b. If KPMG is required by law, pursuant to government regulation, subpoena or other legal process to produce documents or personnel as witnesses arising out of the engagement and KPMG is not a party to such proceedings, Client shall reimburse KPMG at standard billing rates for professional time and expenses, including, without limitation, reasonable legal fees, expenses and taxes incurred in responding to such compelled assistance.

c. If Client requests that KPMG produce documents or personnel as witnesses in any proceedings in any way related to the engagement or services provided by KPMG hereunder and KPMG is not a party to such proceedings, KPMG may agree to produce documents or personnel as witnesses on such terms and conditions as KPMG may, in its sole discretion, determine. Without limiting the generality of the foregoing, Client shall reimburse KPMG at standard billing rates for professional time and expenses, including, without limitation, reasonable legal fees, expenses and taxes, incurred in responding to such Client requests.

d. Client acknowledges that KPMG may from time to time receive requests or orders from professional, securities or other regulatory, judicial or governmental authorities (both in Canada and abroad) to provide them with information and copies of documents in KPMG's files including, without limitation, working papers and other work-product relating to Client, which information and documents may contain confidential information of Client. Except where prohibited by law, KPMG will advise Client of the request or order. Client hereby acknowledges that KPMG will provide these documents and information without further reference to, or authority from Client.

Client must mark any document over which it asserts privilege as "privileged". When such an authority requests access to KPMG's working papers and other work-product relating to Client's affairs, KPMG will, on a reasonable efforts basis, refuse access to any document over which Client has expressly informed KPMG at the time of delivery that the Client asserts privilege (by the Client marking such document as "privileged" as contemplated in the foregoing sentence). Notwithstanding the foregoing, where disclosure of documents is required by law, KPMG will disclose such privileged documents. If and only if the authority requires such access to such privileged documents pursuant to the laws of a jurisdiction in which express consent of the Client is required for such disclosure, then Client hereby provides its consent.

Where privileged Client documents are disclosed by KPMG as contemplated above, KPMG is directed to advise the authority that Client is permitting disclosure only to the extent required by law and for the limited purpose of the authority's exercise of statutory authority. KPMG is directed to advise the authority that Client does not intend to waive privilege for any other purpose and that Client expects its documents to be held by the authority as privileged and confidential material. For greater certainty, Client and KPMG hereby agree that this acknowledgement (and, if required, consent) does not negate or constitute a waiver of privilege for any purpose and Client expressly relies upon the privilege protections afforded under statute and otherwise under law.

13. LIMITATION PERIOD.

No proceeding arising under or relating to the engagement, may be brought by either party more than one year after the cause of action has accrued or in any event not more than five years after completion of the engagement in the case of an advisory services engagement and not more than eight years after completion of the engagement in the case of a tax services engagement, except that a proceeding for non-payment may be brought by KPMG at any time following the date of the last payment due to KPMG hereunder. For purposes of this Section 13, the term KPMG shall include its subsidiaries and associated and affiliated entities and their respective current and former partners, directors, officers, employees, agents and representatives.

14. TERMINATION.

Unless terminated sooner in accordance with its terms, the engagement shall terminate on the completion of KPMG's services hereunder, which completion shall be evidenced by the delivery by KPMG to Client of the

final invoice in respect of the services performed hereunder. Should Client not fulfill its obligations set out herein or in the Engagement Letter and in the absence of rectification by Client within 10 days, KPMG may, upon written notice, terminate its performance and will not be responsible for any loss, cost or expense resulting therefrom. If at any time during the engagement it is determined by KPMG, in its sole discretion, that there may be an actual or potential breach by KPMG of applicable professional standards, KPMG may terminate the engagement, without liability, immediately on notice to Client. The engagement may be terminated by either party at any time by giving written notice to the other party not less than 30 calendar days before the effective date of termination. Upon early termination of the engagement, Client shall be responsible for the payment to KPMG for KPMG's time and expenses incurred up to the termination date, as well as reasonable time and expenses to bring the engagement to a close in a prompt and orderly manner.

15. E-MAIL COMMUNICATION.

Client recognizes and accepts the risks associated with communicating by Internet e-mail, including (but without limitation) the lack of security, unreliability of delivery and possible loss of confidentiality and privilege. Unless Client requests in writing that KPMG does not communicate by Internet e-mail, Client assumes all responsibility or liability in respect of the risk associated with its use.

16. POTENTIAL CONFLICTS OF INTEREST.

a. For purposes of this Section 16, "KPMG" means KPMG LLP and KPMG subsidiaries, affiliates and related parties providing services hereunder, if applicable. KPMG is engaged by a wide variety of entities and individuals, some of whom may be creditors, investors, borrowers, shareholders, competitors, suppliers or customers of Client, or other parties with conflicting legal and business interests to Client, including, without limitation, in relation to the audit, tax or advisory services provided to Client by KPMG. KPMG's engagements with such companies and individuals may result in a conflict with Client's interests.

b. As a condition of KPMG's engagement by Client, Client agrees that: (i) without further notice or disclosure, KPMG may accept or continue engagements on unrelated matters to KPMG's engagement for Client in which KPMG may act contrary to Client's interests even if those unrelated matters are materially and directly adverse to Client; and (ii) without further notice or disclosure, KPMG may provide advice or services to any other person or entity making a competing bid or proposal to that of Client whether or not KPMG is providing advice or services to Client in respect of Client's competing bid or proposal.

c. In accordance with professional standards, and except as set out below, KPMG will not use any confidential information regarding Client in connection with its engagements with other clients, and will establish confidentiality and other safeguards to manage conflicts, which may include, in KPMG's sole discretion, the use of separate engagement teams and data access controls. In no event shall KPMG be liable to Client or shall Client be entitled to a return of fees and disbursements incurred on behalf of Client or any other compensation whatsoever as a result of KPMG accepting or continuing a conflicting engagement.

d. Client further agrees that KPMG may, in its sole discretion, disclose the fact or general nature of its engagement for Client to (i) KPMG International and other KPMG International member firms in order to check against potential conflicts of interest, and (ii) to the extent reasonably required in order to obtain the consent of another entity or individual in order to permit KPMG to act for such entity or individual, or for Client, in connection with the engagement or any future engagement.

e. Where another party has engaged KPMG to deliver services before Client has done so, and subsequently circumstances change such that there is a conflict, which in KPMG's sole opinion cannot be adequately managed through the use of confidentiality and other safeguards, KPMG shall be entitled to terminate the engagement for Client, without liability, immediately upon notice.

f. Other KPMG International member firms are engaged by many entities and individuals, including, without limitation, entities and individuals that may enter into transactions or may have disputes with Client or Client's related or affiliated entities. Client agrees that (i) it will not assert that other KPMG International member firms are precluded from being engaged by those other entities or individuals, and (ii) those



TERMS AND CONDITIONS FOR ADVISORY AND TAX SERVICES

engagements of other KPMG International member firms do not conflict with KPMG's engagement for Client.

g. Client will indemnify and hold harmless KPMG, its subsidiaries and associated and affiliated entities, and their respective current and former partners, directors, officers, employees, agents and representatives from any Claim by any third party (including, without limitation, reasonable legal fees) that alleges that KPMG was in a conflict of interest by providing services hereunder. The provisions of this subsection 16(g) shall apply regardless of the form of Claim, whether in contract, statute, tort (including, without limitation, negligence) or otherwise.

h. KPMG encourages Client to obtain legal advice with respect to Client's rights in connection with potential future conflicts prior to entering into the engagement.

17. FORCE MAJEURE.

Neither Client nor KPMG shall be liable for any delays resulting from circumstances or causes beyond its reasonable control, including, without limitation, fire or other casualty, act of God, strike or labour dispute, war or other violence, or any law, order or requirement of any governmental agency or authority.

18. INDEPENDENT CONTRACTOR.

It is understood and agreed that each of the parties hereto is an independent contractor and that neither party is, nor shall be considered to be, an agent, distributor or representative of the other. Neither party shall act or represent itself, directly or by implication, as an agent of the other or in any manner assume or create any obligation on behalf of, or in the name of, the other.

19. SURVIVAL.

Sections 1, 4(b), 5-16, 18-30, 31(a) and (c)-(g), and 33-34 hereof shall survive the expiration or termination of the engagement.

20. SUCCESSORS AND ASSIGNS.

These Terms and Conditions and the accompanying Proposal or Engagement Letter shall be binding upon the parties hereto and their respective subsidiaries and associated and affiliated entities and their respective partners, directors, officers and employees and successors and permitted assigns. Except as provided below, neither party may assign, transfer or delegate any of the rights or obligations hereunder without the prior written consent of the other party. KPMG may assign its rights and obligations hereunder to any affiliate or successor in interest to all or substantially all of the assets or business of the relevant KPMG practice, without the consent of Client. In addition, KPMG may arrange for or engage (as applicable) KPMG affiliates, subsidiaries, related parties, independent contractors and KPMG International member firms to assist KPMG in performing the services hereunder.

21. SEVERABILITY.

The provisions of these Terms and Conditions and the accompanying Proposal or Engagement Letter shall only apply to the extent that they are not prohibited by a mandatory provision of applicable law, regulation or professional standards. If any of these provisions shall be held to be invalid, void or unenforceable, then the remainder of these Terms and Conditions and the attached Proposal or Engagement Letter, as the case may be, shall not be affected, impaired or invalidated, and each such provision shall be valid and enforceable to the fullest extent permitted by law.

22. ENTIRE AGREEMENT.

These Terms and Conditions and the accompanying Proposal or Engagement Letter including, without limitation, Exhibits, constitute the entire agreement between KPMG and Client with respect to the engagement and supersede all other oral and written representation, understandings or agreements relating to the engagement.

23. GOVERNING LAW.

These Terms and Conditions and the accompanying Proposal or Engagement Letter shall be subject to and governed by the laws of the province in which KPMG's principal Canadian office performing the engagement is located (without regard to such province's rules on conflicts of law).

24. PUBLICITY.

Upon the closing of a transaction, KPMG will have the right (but shall not be obliged), at its expense, to publicize its association with the transaction by way of public announcement in "tombstone" or similar format, subject to prior review of the wording for any such announcement with Client.

25. KPMG INTERNATIONAL MEMBER FIRMS.

In the case of multi-firm engagements, all KPMG International member firms performing services hereunder shall be entitled to the benefits of these Terms and Conditions. Client agrees that any Claims that may arise out of the engagement will be brought solely against KPMG, the contracting party, and not against any other KPMG International member firms or such third party service providers referred to in Section 8 above.

26. SARBANES-OXLEY ACT.

Except as set forth in the Engagement Letter, Client acknowledges that completion of the engagement or acceptance of KPMG's reports, advice, recommendations and other deliverables resulting from the engagement will not constitute a basis for Client's assessment of internal control over financial reporting or Client's evaluation of disclosure controls and procedures, or its compliance with its principal officer certification requirements under Section 302 of the *Sarbanes-Oxley Act of 2002* (the "Act"). The engagement shall not be construed to support Client's responsibilities under Section 404 of the Act requiring each annual report filed under Section 13(a) or 15(d) of the *Securities Exchange Act of 1934* to contain an internal control report from management.

27. NATIONAL INSTRUMENT 52-109.

Except as set forth in the Engagement Letter, Client acknowledges that completion of the engagement or acceptance of KPMG's reports, advice, recommendations and other deliverables resulting from the engagement will not constitute a basis for Client's evaluation of disclosure controls and procedures and internal control over financial reporting, or its compliance with its CEO/CFO certification requirements under *National Instrument 52-109, Certification of Disclosure in Issuers' Annual and Interim Filings*, including those related to the design of disclosure controls and procedures and internal control over financial reporting.

28. SPECIFIC ACCOUNTING AND OTHER ADVICE.

Except as set forth in the Engagement Letter, the engagement does not contemplate the provision of specific accounting advice or opinions or the issuance of a written report on the application of accounting standards to specific transactions and facts and circumstances of Client. Such services, if requested, would be provided pursuant to a separate engagement.

Client should consult with and/or engage legal counsel for the purpose of advising on legal aspects of matters on which KPMG provides its advice and drafting any legal documents and/or agreements that may be required. To the extent legal counsel or other professional service providers are required, Client is exclusively responsible for engaging and paying such service providers.

29. TAX SERVICES.

a. If tax work is specifically requested by Client, KPMG will perform the procedures in accordance with this Section 29. KPMG will base its findings exclusively on the facts and assumptions provided to KPMG by Client and Client's personnel and advisors. KPMG will consider the applicable provisions of the relevant taxing statutes, the regulations thereunder, applicable tax treaties and judicial and administrative interpretations thereof. In the case of Canadian tax services only, KPMG will also take into account all specific proposals to amend such statutes, regulations and treaties publicly announced prior to the date of KPMG's reports, based on the assumption that these amendments will be enacted substantially as proposed. For certainty, in the case of US tax services, KPMG shall not take into account any specific proposals to amend such statutes, regulations and treaties. The authorities referred to in this subsection 29(a) are subject to change, retroactively and/or prospectively, and any such changes could affect the validity of KPMG's findings and may result in incremental taxes, interest or penalties.



TERMS AND CONDITIONS FOR ADVISORY AND TAX SERVICES

KPMG's findings will not otherwise take into account or anticipate any changes in law or practice, by way of judicial, governmental or legislative action or interpretation. Unless Client specifically requests otherwise, KPMG will not update tax work to take any such changes into account.

b. KPMG will use professional judgment in providing advice, and will, unless Client instructs otherwise, take the position most favourable to Client whenever reasonable. All returns are subject to examination by tax authorities, and KPMG's advice may be audited and challenged by a tax authority. Client understands that KPMG's conclusions are not binding on tax authorities or the courts and should not be construed as a representation, warranty or guarantee that the tax authorities or courts will agree with KPMG's conclusion.

c. Client is also responsible for ensuring that KPMG's advice is implemented strictly in accordance with KPMG's recommendations. KPMG is not responsible for any penalties or interest assessed against Client as a result of a failure by Client to provide KPMG with accurate and complete information.

d. Unless expressly provided for, KPMG's services do not include representing Client in the event of a challenge by the Canada Revenue Agency or other tax or revenue authorities.

30. TAX SERVICES FOR SEC REGISTERED AUDIT CLIENTS AND/OR US TAX SERVICES

a. In circumstances where the services provided by KPMG hereunder: (i) involve the delivery of any tax services, Client is or is an affiliate of (whether at the time of the engagement or at any point thereafter) an entity that is registered with the United States Securities and Exchange Commission ("SEC"), and Client or such affiliate is audited by KPMG; or (ii) involve the delivery of US tax services, then the prohibition regarding the distribution of KPMG's reports and written advice set out in Section 5 of these Terms and Conditions shall not apply and no provision of the Engagement Letter is or is intended to be construed as a condition of confidentiality in relation to the tax services to which (i) and/or (ii) above are applicable. Further, in respect of the services to which (i) and/or (ii) above are applicable, no provision in the Engagement Letter or these Terms and Conditions is or is intended to be construed as a condition of confidentiality within the meaning of Internal Revenue Code ("IRC") sections 6011, 6111, 6112 or the regulations thereunder, or under any similar or analogous provisions of the laws of a state or other jurisdiction. In particular, Client (and each employee, representative, or other agent of Client) may disclose to any and all persons, without limitation of any kind, the tax treatment and tax structure of any transaction within the scope of the engagement and all materials of any kind (including opinions and other tax analyses) that are provided to Client relating to such tax treatment and tax structure. Client also agrees to use commercially reasonable efforts to inform KPMG of any conditions of confidentiality imposed by third party advisors with respect to any transaction on which KPMG's advice is requested. Such notification must occur prior to KPMG providing any advice with respect to the transaction.

b. For certainty, Section 5 of these Terms and Conditions shall continue to apply in its entirety, and this Section 30 shall not apply, to any tax services to which subsection 30(a)(i) and/or (ii) above are not applicable. In this Section 30, the term "affiliate" is interpreted as that term is used by the SEC with reference to auditor independence rules.

c. In respect of any tax services to which subsection 30(a)(i) or (ii) above are applicable, any reports or advice ("Tax Deliverable") released to Client in any form or medium shall be supplied by KPMG on the basis that it is for Client's benefit and use only. If Client refers to or discloses in whole or in part any Tax Deliverable to any third party, Client shall notify such third party in writing as follows: that (i) the tax services performed by KPMG for Client were designed to meet Client's agreed requirements only, as determined by Client's needs at the time; (ii) any product of the tax services should not be regarded as suitable to be used or relied upon by any party wishing to acquire any rights against KPMG other than Client; (iii) KPMG does not assume any responsibility in respect of the tax services performed for Client, any product of the tax services, or any judgments, conclusions, opinions, findings or recommendations that KPMG may have formed or made, to any party except Client; (iv) to the fullest extent permitted by law, KPMG accepts no liability in respect of any such matters to any other person; and (v) should any person or entity except Client choose to rely on the tax services or any product thereof, that person or entity will do so at their own risk. Notwithstanding the

foregoing, (A) in the event of a disclosure made by Client that is required by law, that is made to a regulatory authority having jurisdiction over Client, or that is made pursuant to subsection 30(a) above, no such notification shall be required and (B) no such notification shall be required with respect to disclosures expressly authorized by the Engagement Letter.

d. If Client refers or discloses in whole or in part any Tax Deliverable to any third party but does not notify such third party in writing as required in subsection 30(c) above, Client shall compensate KPMG and reimburse KPMG for and protect, indemnify and hold harmless KPMG against any Claim incurred by KPMG (including, without limitation, reasonable legal fees) as a result of, arising from or in connection with any such reference or disclosure, unless KPMG has agreed in writing with such third party to accept responsibility and liability to that third party in respect of the tax services and the Tax Deliverable. If any payment is made by Client under this subsection 30(d), Client shall not seek recovery of that payment from KPMG at any time. In this subsection 30(d), "KPMG" shall include KPMG and its subsidiaries, its associated and affiliated entities and their respective current and former partners, directors, officers, employees, agents and representatives, and "Client" shall include Client, Client's affiliates and any other beneficiaries of KPMG's tax services. The foregoing indemnification obligations shall apply regardless of the form of Claim, whether in contract, statute, tort (including, without limitation, negligence) or otherwise.

e. Treasury regulations under IRC section 6011 require taxpayers to disclose to the IRS their participation in reportable transactions and IRC section 6707A imposes strict penalties for noncompliance. Client agrees to use commercially reasonable efforts to inform KPMG if Client is required to disclose any transaction covered by the Engagement Letter as a reportable transaction to the IRS or to any state or other jurisdiction adopting similar or analogous provisions. IRC section 6111 requires a material advisor with respect to a reportable transaction to disclose information on the transaction to the IRS by a prescribed date, and IRC section 6112 requires the material advisor to maintain, and make available to the IRS upon request, a list of persons and other information with respect to the transaction. KPMG will use commercially reasonable efforts to inform Client if KPMG provides Client's identifying information to the IRS under IRC section 6111 or 6112, or to any state or other jurisdiction adopting similar or analogous provisions.

f. For engagements where services will be provided by a KPMG International member firm with offices located in California, Client acknowledges that certain of KPMG's personnel who may be considered "owners" under the California Accountancy Act and implementing regulations (California Business and Professions Code section 5079(a); 16 Cal. Code Regs. sections 51 and 51.1) and who may provide services in connection with the engagement, may not be licensed as certified public accountants under the laws of any of the various states.

31. DUE DILIGENCE SERVICES (TAX AND TRANSACTION SERVICES)

a. The procedures KPMG will perform are limited to those referred to in the Engagement Letter and its appendices. The procedures KPMG will perform are limited in nature and extent to those determined by Client to meet its needs and, as such, will not necessarily disclose all significant matters about Target or reveal errors in the underlying information, instances of fraud, or illegal acts, if any. KPMG provides no assurance and makes no representation regarding the sufficiency of the procedures either for the purpose of the proposed transaction in the context of which KPMG has been engaged or for any other purpose. KPMG's findings will not constitute recommendations to Client as to whether or not Client should proceed with any proposed transactions. In performing the procedures and reporting its findings, KPMG will rely exclusively upon information provided to KPMG by Target, its personnel and advisors, Client's advisors, and Client, and any publicly available information KPMG obtains, and will not independently verify the accuracy or completeness of such information. KPMG's procedures with respect to Target's financial information will be substantially less in scope than any audit or other attestation standards, including without limitation those established by the Auditing and Assurance Standards Board and the Chartered Professional Accountants of Canada. Consequently, KPMG expresses no opinion and will provide no other form of assurance on Target's prospective financial information, financial statements or Target's internal control over financial reporting.



TERMS AND CONDITIONS FOR ADVISORY AND TAX SERVICES

b. Client agrees to review reports promptly and to advise KPMG on a timely basis of any additional procedures Client would like KPMG to perform or areas to address.

c. In the event KPMG performs procedures related to future-oriented financial information, KPMG will not compile, examine, or apply other assurance procedures to such information and, accordingly, will express no opinion or any other form of assurance or representations concerning its accuracy, completeness or presentation format. Future-oriented financial information is based on assumptions regarding future events, actual results will vary from the information presented and the variations may be material.

d. Unless specifically requested by Client, KPMG is not obligated to provide a copy of the report to Target for the purpose of confirming Target's representations concerning the accuracy of the factual information presented in the report. If Client would like Target to review the report, KPMG will require Client and Target to indemnify KPMG for any Claims arising out of or relating to such review on such terms and conditions specified by KPMG in its sole discretion. In certain instances, Client may request that KPMG's report be distributed to a third party for informational purposes. KPMG will consider consenting to distribution based on such factors as the identity of the third party and the third party's intended use of the report. If KPMG agrees to the distribution of the report to a third party, Client agrees to execute and agrees to require the third party to execute an agreement in the form provided by KPMG regarding the release of information.

e. Client expressly acknowledges and agrees that if Client and Target (as such terms are defined in the Engagement Letter) are the same entity, that all references herein to "Target" shall be deemed to be references to "Client".

f. The provisions of subsections 3(c)-(d) and Section 6 shall apply to information about Target provided to KPMG in the course of performing the services under the Engagement Letter. Client agrees to use all reasonable efforts to arrange for KPMG's access to Target's personnel and advisors, business offices and financial information as required for KPMG to perform the services contemplated by the Engagement Letter.

g. If KPMG serves as independent auditors of Target or another party disclosed to Client, or provides any other audit or attestation services to Target or such other party (such as the target of a contract compliance review or a party having a connection to an investigation or proceeding), Client hereby acknowledges and agrees that KPMG may be in possession of confidential information concerning Target or such other party that may be relevant to Client's due diligence procedures or other services KPMG is providing to Client under the Engagement Letter and that such information will not be disclosed to Client unless Target or such other party provides prior written consent to such disclosure or provides such information directly to Client or to the KPMG engagement team serving Client for purposes of the services under the Engagement Letter.

32. LOBBYING

Unless expressly stated in the Engagement Letter, KPMG will not undertake any lobbying activity, as that term is defined in all applicable federal, provincial and municipal lobbyist registration statutes and regulations, in connection with the engagement. In the event that KPMG and Client agree that KPMG will undertake lobbying activity in connection with the engagement, such agreement shall be set out in an amendment to the Engagement Letter.

33. LLP.

KPMG LLP is a registered limited liability partnership ("LLP") established under the laws of the Province of Ontario and, where applicable, has been registered extra-provincially under provincial LLP legislation. KPMG is a partnership, but its partners have a degree of limited liability. A partner is not personally liable for any debts, obligations or liabilities of the LLP that arise from a negligent act or omission by another partner or any person under that other partner's direct supervision or control. The legislation relating to limited liability partnerships does not, however, reduce or limit the liability of the firm. The firm's insurance exceeds the mandatory professional indemnity insurance requirements established by the relevant professional bodies. Subject to the other provisions hereof, all partners of the LLP remain personally liable for their own actions and/or actions of those they directly supervise or control.

34. ALTERNATIVE DISPUTE RESOLUTION.

The parties shall, and shall cause both their and their respective subsidiaries', affiliates' and associated entities' current and former officers, partners, directors, employees, agents and representatives, to first attempt to settle any dispute arising out of or relating to the Engagement Letter or the services provided hereunder (the "Dispute") through good faith negotiations in the spirit of mutual cooperation between representatives of each of the parties with authority to resolve the Dispute. In the event that the parties are unable to settle or resolve a Dispute through negotiation within 30 days of when one of the parties has notified the other party of the Dispute by delivering a notice of dispute, or such longer period as the parties may mutually agree upon, such Dispute shall, as promptly as is reasonably practicable, be subject to mediation pursuant to the National Mediation Rules of the ADR Institute of Canada, Inc. that are in force at the time the notice of dispute is delivered. Any Dispute remaining unresolved for more than 60 days following the parties first meeting with a mediator or such longer period as the parties may mutually agree upon shall, as promptly as is reasonably practicable, be resolved by arbitration pursuant to the Arbitration Rules of the ADR Institute of Canada, Inc. (the "Arbitration Rules") that are in force at the time the Dispute is subject to arbitration. For certainty, the parties hereby waive any right they may otherwise have to bring a court action in connection with a Dispute. The parties also waive any right they may otherwise have to bring or participate in a class, collective or representative proceeding in connection with a Dispute, whether in court or before an arbitrator. The arbitrator's decision shall be final, conclusive and binding upon the parties, and the parties shall have no right to appeal or seek judicial review of the arbitrator's decision. For certainty, the parties hereby waive any right of appeal which may otherwise be available under applicable legislation or under the Arbitration Rules. The place of mediation and arbitration shall be the city in Canada in which the principal KPMG office that performed the engagement is located. The language of the mediation and arbitration shall be English.



City of Richmond

Report to Committee

To: Finance Committee

Date: October 31, 2017

From: Andrew Nazareth
General Manager, Finance & Corporate Services

File: 03-0970-01/2017-Vol
01

Robert Gonzalez, P.Eng.
Deputy CAO and General Manager,
Engineering & Public Works

Re: 2018 Utility Budgets and Rates

Staff Recommendation

That the 2018 Utility Budgets, as outlined under Option 1 for Water, Option 2 for Sewer, Option 2 for Drainage and Diking, and Option 1 for Solid Waste and Recycling, as contained in the staff report dated October 31, 2017 from the General Manager of Finance & Corporate Services and the Deputy CAO and General Manager of Engineering & Public Works, be approved as the basis for establishing the 2018 Utility Rates and preparing the 5 Year Financial Plan (2018-2021) Bylaw.

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

Robert Gonzalez, P.Eng.
Deputy CAO and General Manager,
Engineering and Public Works
(604-276-4150)

REPORT CONCURRENCE	
CONCURRENCE OF GENERAL MANAGER 	
REVIEWED BY SENIOR MANAGEMENT TEAM 	INITIALS: CJ
APPROVED BY CAO 	

Staff Report

Origin

This report presents the recommended 2018 utility budgets and rates for Water, Sewer, Drainage and Diking, and Solid Waste and Recycling. The utility rates need to be established by December 31, 2017, in order for the rates to take effect on January 1, 2018.

Analysis

In September 2017, Canada's Ecofiscal Commission released a report discussing best practices for pricing and improving municipal water and sewer services. The report identifies universal water metering, identification of long-term funding requirements, developing full cost recovery strategies for infrastructure and adopting user fees as best practices. The City of Richmond has largely implemented these best practices and staff will continue to explore means to further improve upon the existing budget strategy and remain a leader in the region.

The three primary cost drivers increasing the City's utility budget are:

- Metro Vancouver fees;
- Solid waste processing contract costs; and
- Ageing infrastructure replacement (Capital Program).

Metro Vancouver's 2018 utility rates, as approved by the Metro Vancouver Board on October 27, 2017 are included in the City's 2018 utility rates and are as follows:

- Greater Vancouver Water District (GVWD) unit rate increase is 3.9%. GVWD's water purchase cost represents almost 60% of the total water utility budget.
- Greater Vancouver Sewerage and Drainage District (GVS&DD) sewer levy increase for Richmond is 3.4%. GVS&DD's sewer levy represents 66% of the total sewer utility budget.
- Metro Vancouver solid waste tipping fees for municipal customers will be \$103 per tonne for 2018, plus a transaction fee of \$5 per load. A tiered structure based on load size/weight will continue to be used for small vehicles and commercial customers.

Another component of the City's utility budget relates to replacement of ageing municipal infrastructure. The City's "Ageing Utility and Road Infrastructure Planning – 2017 Update" report received by Council on July 24, 2017 outlines annual funding requirements to support long-term infrastructure replacement. The City has achieved the target range for long-term ageing infrastructure replacement in both the water and drainage utilities and has achieved 72% of the long-term funding target for the sanitary sewer utility. The ageing infrastructure component is discussed in the water, sewer and drainage sections of this report.

The introduction of many new successful recycling and waste reduction services and programs in Richmond has contributed to high recycling rates by residents. Residents are currently recycling approximately 78% of their waste, just 2% short of the regional target of 80% waste diversion by 2020. Increased emphasis on food scraps recycling, coupled with disincentives to waste disposal

(such as switching to bi-weekly garbage collection), has helped advance diversion rates. A key challenge in 2017 has emerged in relation to food scraps processing, and the need for new approaches to address the odour challenges resulting from managing increasing volumes of this material. The lack of suitable, enclosed facilities for composting food scraps is driving processing capacity shortages in the region. Greater processing infrastructure investment from the private sector is needed to respond to these emerging challenges, given traditional outdoor composting methods are not sufficient to capture and treat odours. These are key issues driving the budget increases and rates in the 2018 Solid Waste and Recycling budget.

Recognizing the challenges of cost increases outside of the City's control and those associated with maintaining City infrastructure, staff have presented various budget and rate options for 2018. Budgets and rates presented include three different options for each of the City's utilities. Option 1 presents the minimum non-discretionary increases necessary to meet demands placed on the City by factors outside of the City's direct control (e.g. regional or other agency increases, contractual obligations, plant growth, fuel, insurance, etc.) based on the currently approved level of service. Options 2 and 3 present various actions the City can take to either reduce or increase the budget and rates depending on the varying circumstances and needs within each budget area. The various options are presented for each of the City utilities in the following sections, and a summary of proposed rates for 2018 is shown in Tables 14 and 15.

Water Utility

Table 1. Water Utility Budget				
Key Budget Areas	2017 Base Level Budget (Restated for Comparison)	Option 1 (Recommended) Non-Discretionary Increases	Option 2 Non-Discretionary Increases with \$100,000 increase to Capital	Option 3 Non-Discretionary Increases with \$540,000 drawdown from Rate Stabilization for Zero Rate Increase
Expenditures				
Salaries	\$5,472,100	\$138,200	\$138,200	\$138,200
PW Materials/Equipment/Power Costs	\$2,129,900	\$60,500	\$60,500	\$60,500
Operating Expenditures ¹	\$1,387,000	\$46,200	\$46,200	\$46,200
Water Meter Reading and Maintenance	\$234,900	\$1,000	\$1,000	\$1,000
Toilet Rebate Program	\$100,000	\$0	\$0	\$0
GVWD Water Purchases (Metro Vancouver)	\$24,303,700	\$129,500	\$129,500	\$129,500
Capital Infrastructure Replacement Program	\$7,500,000	\$0	\$100,000	\$0
Firm Price/Receivable	\$2,544,300	\$33,800	\$33,800	\$33,800
Residential Water Metering Program	\$1,320,000	\$0	\$0	\$0
Overhead Allocation	\$981,100	\$0	\$0	\$0
Total Base Level Expenditure Budget	\$45,973,000	\$46,382,200	\$46,482,200	\$46,382,200
Revenues				
Provision (Rate Stabilization)	\$0	\$0	\$0	-\$540,000
Investment Income	-\$392,000	\$0	\$0	\$0
Firm Price/Receivable	-\$2,544,300	-\$33,800	-\$33,800	-\$33,800
Water Meter Fixed Charge	-\$2,040,000	\$163,000	\$163,000	\$163,000
YVR Maintenance	-\$30,000	\$0	\$0	\$0
Provision (Toilet Rebate/Flushing)	-\$251,100	\$0	\$0	\$0
Provision (OBI Adjustment) ²	-\$354,900	\$354,900	\$354,900	\$354,900
Meter Re-Reads and Other Services	-\$80,800	\$0	\$0	\$0
Total Base Level Revenue Budget	-\$5,693,100	-\$5,209,000	-\$5,209,000	-\$5,209,000
Net Budget	\$40,279,900	\$41,173,200	\$41,273,200	\$40,633,200
Net Difference Over 2017 Base Level Budget		\$893,300	\$993,300	\$353,300

¹ Operating Expenditures includes internal shared costs, vehicle charges, and asset management system costs² See "Provision (OBI Adjustment)" on page 6

The following is an explanation of the budget reductions and increases outlined in Table 1.

GVWD Water Purchases – Metro Vancouver

Bulk water is purchased from Metro Vancouver on a unit volume basis and accounts for 59% of Richmond's water rate (Figure 1). Highlights of the 2018 GVWD water purchase budget are as follows:

- Metro Vancouver's water unit rate increase is 3.9%. Metro Vancouver's 5-year water rate projections are identified in Table 2.
- Richmond's water purchase budget net increase is 0.5% (\$129,500). Richmond's successful Water Demand Management Program has mitigated Metro Vancouver's unit rate increase through reduced water volume purchases. The reduced water purchase was achieved primarily through water metering and pressure management.

Figure 1. 2018 Water Utility User Fee Breakdown

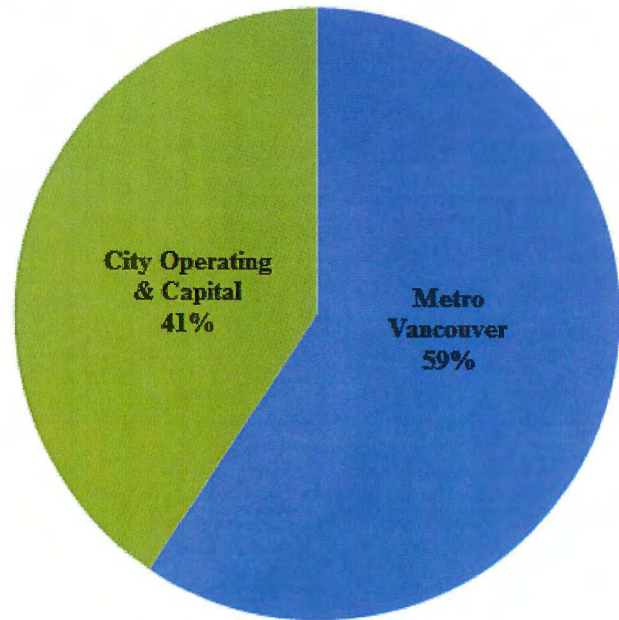


Table 2. Metro Vancouver 5-Year Water Rate Projection

	2017	2018	2019	2020	2021	2022
Blended Rate (\$/m³)	\$0.6728	\$0.6990	\$0.7399	\$0.7966	\$0.8583	\$0.9259
% Change		3.9%	5.8%	7.7%	7.8%	7.9%

The volume of water the City purchases and is subsequently consumed by property owners has a degree of variability, primarily due to weather impacts on summer irrigation demands and the level of water use restrictions activated by Metro Vancouver. The total volume estimated for budget purposes is based on average City water demand over the last 4 years. The variability in the demand during this period has been plus or minus 5%, and similar variability can be anticipated in the 2018 water purchase.

Capital Infrastructure Replacement Program

The annual capital contribution for water-related infrastructure replacement is currently \$7.5 million. The "Ageing Utility and Road Infrastructure Planning – 2017 Update" report received by Council on July 24, 2017 identified long-term annual water infrastructure funding requirements of \$7.6 million, which has increased by 1.3% due to inflation. Options 1 and 3 maintain current funding levels for water capital project contributions; Options 2 includes an increase of \$100,000 to meet the increase in ageing infrastructure target funding levels.

Provision (OBI Adjustment)

One-time transfers from the Provision are utilized each year to fund operating budget impacts (OBIs) for the current year's capital program. This amount is incorporated into the utility in the following year to become part of the base level budget. In 2017, \$354,900 was transferred from the Provision to fund OBIs associated with the 2017 Capital Program.

Water Metering Program

Residential water metering plays a significant role in the City's water demand management program. Canada's Ecofiscal Commission's report on Best Practices for Pricing and Improving Municipal Water and Wastewater Services published in September 2017 identified water metering as the number one best practice for designing municipal water fees as it allows for implementation of volume-based user fees, allows the municipality to identify leaks, and contributes to long-term planning.

The City's Universal Single-Family Water Meter Program will be complete by the end of 2017. All industrial, commercial and institutional (ICI) properties are currently metered. By 2018, all single-family units and 44% of multi-family units in Richmond will be metered. There continue to be opportunities to advance water metering within the City through the switching out of touchpad meters for implementation of fixed base water metering and continuation of the voluntary multi-family water metering program. Staff will bring forward recommendations for the water metering program as part of the 2018 Capital Program for Council's consideration.

Water Rate Stabilization Contribution

The Water Levy Stabilization Provision was established by Council as a funding source for water rate stabilization. The Provision, which has a balance of \$9.4 million as of September 30, 2017, has been used to offset significant increases in regional water purchase costs. Options 1 and 2 maintain a \$0 impact on the Water Levy Stabilization Provision; Option 3 includes a \$540,000 drawdown from the Provision to subsidize the water rate. Option 1 is recommended as impacts from Metro Vancouver's 2018 water rate increases have been largely mitigated through water use reductions resulting from Richmond's successful water demand management program.

Construction Period Revenues

The City receives construction period revenues from development customers for water use during construction. This revenue is not budgeted due to the long term variability in these revenues. Any actual revenue will be transferred to the Water Levy Stabilization Provision for future rate stabilization funding.

Impact on 2018 Water Rates

The impact of the three budget options on water rates is shown in Tables 3 and 4. Table 3 shows the various options for metered rate customers; Table 4 shows the options for flat rate customers. The rates presented include fixed costs for metering such as meter reading, billing and maintenance. Numbers in italics represent the difference between 2017 rates and 2018 optional rates.

Option 3 results in the lowest rates as it includes drawdown from the Water Levy Stabilization Provision to minimize rate impacts; Option 2 results in the highest rates as it includes additional contribution to the Capital Infrastructure Replacement Program.

Table 3. 2018 Metered Rate Water Options (net of discount)				
Customer Class	2017 Rates	Option 1 (Recommended)	Option 2	Option 3
Single-Family Dwelling (based on 315 m ³ average)	\$408.41	\$413.55 \$5.14	\$414.49 \$6.08	\$408.41 \$0.00
Townhouse (based on 210 m ³ average)	\$279.47	\$282.90 \$3.43	\$283.53 \$4.06	\$279.47 \$0.00
Apartment (based on 160 m ³ average)	\$194.50	\$197.11 \$2.61	\$197.59 \$3.09	\$194.50 \$0.00
Metered Rate (\$/m ³)	\$1.1595	\$1.1757 \$0.0162	\$1.1787 \$0.0192	\$1.1595 \$0.0000

Table 4. 2018 Flat Rate Water Options (net of discount)				
Customer Class	2017 Rates	Option 1 (Recommended)	Option 2	Option 3
Single-Family Dwelling	\$615.62	\$624.30 \$8.68	\$625.90 \$10.28	\$615.62 \$0.00
Townhouse	\$503.94	\$511.04 \$7.10	\$512.36 \$8.42	\$503.94 \$0.00
Apartment	\$324.73	\$329.31 \$4.58	\$330.15 \$5.42	\$324.73 \$0.00

The rates outlined in Tables 3 and 4 are net rates. The Water Bylaw provides a 10% discount for utility bills paid prior to a deadline. The rates shown will be increased by 10% in the supporting bylaws to provide for the discount incentive while ensuring appropriate cost recovery.

Advantages/Disadvantages of Various Options

Option 1 (Recommended)

- Represents the minimum increase necessary to maintain the current level of service.
- Maintains a \$7.5 million contribution to the Capital Infrastructure Replacement Program, which is within the target range identified in the “Ageing Utility and Road Infrastructure Planning – 2017 Update” report.
- Maintains a \$0 impact on the Water Levy Stabilization Provision.

Option 2

- Represents the minimum increase necessary to maintain the current level of service.
- Includes a \$100,000 increase to the Capital Infrastructure Replacement Program in order to meet the target funding level identified in the “Ageing Utility and Road Infrastructure Planning – 2017 Update” report.
- Maintains a \$0 impact on the Water Levy Stabilization Provision.

Option 3

- Represents the minimum increase necessary to maintain the current level of service.
- Maintains a \$7.5 million contribution to the Capital Infrastructure Replacement Program, which is within the target range identified in the “Ageing Utility and Road Infrastructure Planning – 2017 Update” report.
- Includes a contribution of \$540,000 drawdown from the Water Levy Stabilization Provision.

Recommended Option

Staff recommends the budgets and rates identified in Option 1 for Water Services. This option represents the minimum increase necessary to maintain the current level of service without subsidizing the water rate using the Water Levy Stabilization Provision. Staff recommends maintaining the current contribution to the Capital Infrastructure Replacement Program at this time since the current funding levels remain within the target funding range. Staff will continue to undertake further assessments to determine infrastructure replacement requirements going forward and identify any recommended changes to the annual contribution.

Reductions in water purchase volumes achieved through the City’s successful water demand management program is mitigating impacts of Metro Vancouver’s water rate increases on Richmond’s rate payers. As such, it is recommended that no additional drawdown from the Provision be utilized at this time. This will allow the Provision to accumulate until such time that Metro Vancouver introduces additional projects requiring that the rate be subsidized to level significant increases in water rates.

2017 Townhouse Flat Rate Credit

The rate identified in the 2017 Utility Budgets and Rates report for townhouse flat rate customers is \$559.93 and the corresponding bylaw indicates a townhouse flat rate of \$599.93. The Utility Rate Amendment Bylaws report that follows this report will include amendments to the 2017 Waterworks and Water Rate Bylaw to reflect the rate identified in the 2017 Utility Budgets and Rates report and recommendations for providing a one-time credit to compensate impacted residents for the additional charge.

Sewer Utility**Table 5. Sewer Utility Budget**

Key Budget Areas	2017 Base Level Budget (Restated for Comparison)¹	Option 1 Non-Discretionary Increases	Option 2 (Recommended) Non-Discretionary Increases with Full-time Grease Inspector	Option 3 Non-Discretionary Increases with Full-time Grease Inspector and \$500,000 Additional Capital Infrastructure Replacement
<u>Expenditures</u>				
Salaries	\$2,850,700	\$60,400	\$100,270	\$100,270
PW Materials/Equipment/Power Costs	\$1,722,400	\$6,900	\$6,900	\$6,900
Operating Expenditures ²	\$766,400	\$37,900	\$37,900	\$37,900
GVS&DD O&M (Metro Vancouver)	\$20,139,000	\$679,000	\$679,000	\$679,000
GVS&DD Debt (Metro Vancouver)	\$434,300	-\$61,600	-\$61,600	-\$61,600
Capital Infrastructure Replacement Program	\$5,256,400	\$0	\$0	\$500,000
Firm Price/Receivable	\$613,900	\$7,500	\$7,500	\$7,500
Overhead Allocation	\$565,400	\$0	\$0	\$0
Total Base Level Expenditure Budget	\$32,348,500	\$33,078,600	\$33,118,470	\$33,618,470
<u>Revenues</u>				
Provision (Rate Stabilization)	-\$500,000	\$0	\$0	\$0
Provision (OBI Adjustment) ³	-\$226,200	\$226,200	\$226,200	\$226,200
Investment Income	-\$152,000	\$0	\$0	\$0
Firm Price/Receivable	-\$613,900	-\$7,500	-\$7,500	-\$7,500
Property Tax for GVS&DD Debt ⁴	-\$434,300	\$61,600	\$61,600	\$61,600
Total Base Level Revenue Budget	-\$1,926,400	-\$1,646,100	-\$1,646,100	-\$1,646,100
Net Budget	\$30,422,100	\$31,432,500	\$31,472,370	\$31,972,370
Net Difference Over 2017 Base Level Budget		\$1,010,400	\$1,050,270	\$1,550,270

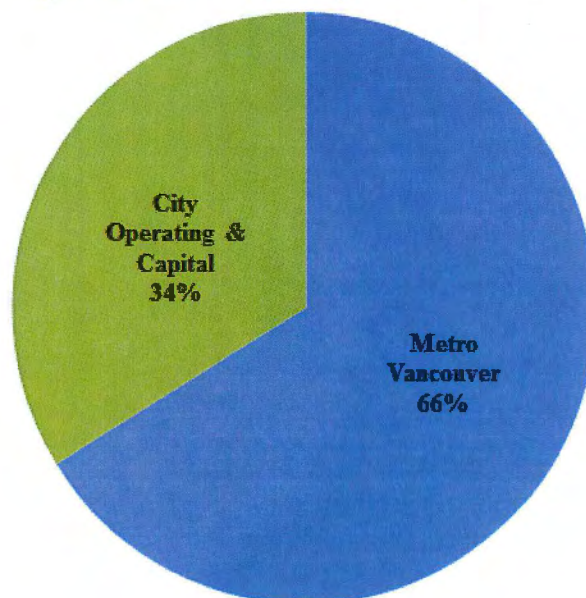
¹ One-time transfer from Provision for funding of grease inspector is excluded for sake of comparison² Operating Expenditures includes internal shared costs, vehicle charges, and asset management system costs³ See "Provision (OBI Adjustment)" on page 11⁴ See "Metro Vancouver GVS&DD Operating and Maintenance (O&M) Costs" on page 10

The following is an explanation of the budget reductions and increases outlined in Table 5.

Metro Vancouver GVS&DD Operating and Maintenance (O&M) Costs

The Metro Vancouver GVS&DD O&M levy will increase by \$679,000 (3.4%) to \$20,818,000 for 2018. Richmond pays Metro Vancouver for bulk transmission and treatment of collected liquid waste on a flat rate basis through the Metro Vancouver O&M levy, which accounts for approximately 66% of Richmond's sewer rate and is a primary budget driver (Figure 2). 87% of non-discretionary expenditure increases proposed for the 2018 Sewer Utility Budget are attributed to increases in Metro Vancouver's rates.

Figure 2. 2018 Sewer Utility User Fee Breakdown



Metro Vancouver's overall 2018 sewer cost increase of 3.0% for Richmond includes a \$679,000 (3.4%) increase in the GVS&DD O&M levy to \$20,818,000 that is recovered through the City's sewer utility rate, and a \$61,600 (14%) decrease in the GVS&DD debt to \$372,600, which is recovered through Richmond's tax levy.

Metro Vancouver's 5-year projections for overall sewer increases for the Lulu Island Sewerage Area (LSA) are identified in Table 6. The City of Richmond comprises all of LSA, and small percentages of the Fraser Sewerage Area (FSA) and Vancouver Sewerage Area (VSA). While 5-year projections have not been provided for Richmond, it is anticipated that increases in Richmond's levy will be largely similar to projected increases for LSA.

	2017	2018	2019	2020	2021	2022
Sewer Levy – LSA (\$ Millions)	\$19.3	\$19.9	\$21.2	\$22.4	\$24.7	\$26.9
% Change		3.1%	6.4%	5.7%	10.0%	8.9%

Grease Bylaw Inspector

The impact of grease on the sanitary sewer collection system is an ongoing concern for the City of Richmond. The City manages grease through source control, sanitary sewer system monitoring and inspection and on-going maintenance. Richmond's Drainage, Dyke and Sanitary System Bylaw No. 7551 requires food sector establishments to have and maintain grease traps as part of Richmond's efforts for grease source control. In 2008, funding for a part-time Bylaw Enforcement staff member was established to ensure that grease interceptors are installed and maintained in accordance with the bylaw in all new food sector buildings.

In 2017, a one-time transfer of \$37,700 from the Sewer Levy Stabilization Provision to fund the increase in level of service from a part-time inspector to a full-time inspector was approved as part of the 2017 Utility Budgets and Rates to assess the effectiveness of the increased level of service. With the grease inspector upgraded from part-time to full-time in 2017, there has been an increase in bylaw compliance, indicating that the additional efforts from the grease inspector through increased education and inspection efforts has been successful in reducing grease discharge. In addition, expanded efforts from the grease inspector have led to development of an improved integrated inspection program that enhances efficiency and effectiveness. Due to the added value observed, the "Grease Inspector Update 2017" report dated September 22, 2017 from the Director, Engineering recommends:

That a full-time grease inspector be submitted as part of the 2018 Utility Budgets for Council consideration.

Options 2 and 3 include an additional level of service for upgrading the grease inspector position from part-time to full-time through the Sewer Utility, with a budget impact of \$39,870.

Capital Infrastructure Replacement Program

The annual capital contribution for sewer-related infrastructure replacement is currently \$5.25 million. The "Ageing Utility and Road Infrastructure Planning – 2017 Update" report identifies a long-term sustainable funding level of \$7.3 million for sanitary sewer infrastructure. Options 1 and 2 maintain the annual contribution to the capital infrastructure replacement program at its current level of \$5.25 million, while Option 3 increases the program by \$500,000, reducing the funding gap.

Provision (OBI Adjustment)

One-time transfers from the Provision are utilized each year to fund operating budget impacts (OBIs) for the current year's capital program. This amount is incorporated into the utility in the following year to become part of the base level budget. In 2017, \$226,200 was transferred from the Provision to fund OBIs associated with the 2017 Capital Program.

Construction Period Revenues

The City receives construction period revenues from development customers for sewer use during construction. This revenue is not budgeted due to the long term variability in these revenues. Any actual revenue will be transferred to the Sewer Levy Stabilization Provision for future rate stabilization funding.

Sewer Rate Stabilization Provision

The Sewer Levy Stabilization Provision was established by Council as a funding source for sewer rate stabilization. The Provision, which has a balance of \$7.5 million as of September 30, 2017 has been used to offset significant increases in regional sewer treatment and capacity costs. All options maintain the current \$500,000 drawdown on the Sewer Rate Stabilization Provision to partially offset Metro Vancouver GVS&DD O&M increases.

Impact on 2018 Sewer Rates

The impact of the three budget options on the sewer rates is shown in Tables 7 and 8. Table 7 identifies the impact of each option on metered customers; Table 8 identifies the impact on flat rate customers. Numbers in italics represent the difference between 2017 rates and 2018 optional rates.

Table 7. 2018 Metered Rate Sewer Options (net of discount)				
Customer Class	2017 Rates	Option 1	Option 2 (Recommended)	Option 3
Single-Family Dwelling (based on 315 m ³ average)	\$321.05	\$329.71 <i>\$8.66</i>	\$330.15 <i>\$9.10</i>	\$335.51 <i>\$14.46</i>
Townhouse (based on 210 m ³ average)	\$214.03	\$219.81 <i>\$5.78</i>	\$220.10 <i>\$6.07</i>	\$223.67 <i>\$9.64</i>
Apartment (based on 160 m ³ average)	\$163.07	\$167.47 <i>\$4.40</i>	\$167.70 <i>\$4.63</i>	\$170.42 <i>\$7.35</i>
Metered Rate (\$/m ³)	\$1.0192	\$1.0467 <i>\$0.0275</i>	\$1.0481 <i>\$0.0289</i>	\$1.0651 <i>\$0.0459</i>

Table 8. 2018 Flat Rate Sewer Options (net of discount)				
Customer Class	2017 Rates	Option 1	Option 2 (Recommended)	Option 3
Single-Family Dwelling	\$417.89	\$429.19 <i>\$11.30</i>	\$429.74 <i>\$11.85</i>	\$436.71 <i>\$18.82</i>
Townhouse	\$382.35	\$392.69 <i>\$10.34</i>	\$393.20 <i>\$10.85</i>	\$399.57 <i>\$17.22</i>
Apartment	\$318.45	\$327.06 <i>\$8.61</i>	\$327.48 <i>\$9.03</i>	\$332.79 <i>\$14.34</i>

The rates outlined in Tables 7 and 8 are net rates. The bylaw provides a 10% discount for utility bills paid prior to a deadline. The rates shown will be increased by 10% in the supporting bylaws to provide for the discount incentive while ensuring appropriate cost recovery.

Advantages/Disadvantages of Various Options

Option 1

- Represents the minimum increase necessary to maintain the current level of service.
- Maintains a \$5.25 million contribution to the Capital Infrastructure Replacement Program.
- Maintains a \$500,000 drawdown from the Sewer Levy Stabilization Provision to minimize the impact of regional increases on sewer rates.

Option 2 (Recommended)

- Represents the minimum increase necessary to maintain the current level of service.
- Maintains a \$5.25 million contribution to the Capital Infrastructure Replacement Program.
- Maintains a \$500,000 drawdown from the Sewer Levy Stabilization Provision to minimize the impact of regional increases on sewer rates.

- Includes an additional level of service for upgrading the part-time Grease Inspector to a full-time position, as recommended in the “Grease Inspector Update 2017” report.

Option 3

- Represents the minimum increase necessary to maintain the current level of service.
- Includes a \$500,000 increase to the capital infrastructure replacement program, in order to reduce the gap between the current funding level of approximately \$5.25 million and the long-term annual funding requirement of \$7.3 million, as recommended in the “Ageing Utility and Road Infrastructure Planning – 2017 Update” report.
- Maintains a \$500,000 drawdown from the Sewer Levy Stabilization Provision minimize the impact of regional increases on sewer rates.
- Includes an additional level of service for upgrading the part-time Grease Inspector to a full-time position, as recommended in the “Grease Inspector Update 2017” report.

Recommended Option

Staff recommends the budgets and rates identified in Option 2 for Sewer Services. This option accommodates an additional level of service for upgrading the part-time grease inspector to full-time, which demonstrated added values during the one-time trial in 2017. Due to significant Metro Vancouver’s O&M levy increases, staff recommends maintaining the current \$5.25 million contribution to the Capital Infrastructure Replacement Program to limit increases to sewer rates. Current funding levels are adequate for short to medium-term sanitary infrastructure replacement needs; however, the funding shortfall defers the financial obligation to future years and bridging the funding gap will be an important consideration in future utility budgets.

Drainage and Diking Utility

The drainage and diking utility was created to develop a reserve fund to maintain, operate and upgrade drainage and diking infrastructure. The objective, as outlined in the “Ageing Utilities and Roads Infrastructure Planning – 2017 Update” report, is to build the fund to an anticipated annual target contribution of approximately \$12.8 million, subject to on-going review of the drainage and diking infrastructure replacement requirements.

Box Culvert Preventative Maintenance Program

Through the 2017 Utility Budgets and Rates report, Council approved annual funding of \$240,000 to implement a Box Culvert Preventative Maintenance Program through the Drainage and Diking Utility. The program includes inspection and minor repairs along the City’s 56 kilometers of concrete box culverts. Inspection completed in 2017 has identified more minor defects than originally anticipated, and additional funding would be required to adequately address minor defects encountered during the inspection process. Staff recommends introducing an additional level of service with respect to the box culvert preventative maintenance program with a budget impact of \$140,000 to address defects encountered during box culvert inspections.

Dyke Repair Program

The City’s dikes are continually subject to erosion, vegetation growth and human activity that damages the dikes. Staff proactively identify and repair this damage to maintain the dike’s high level of flood protection through the Dyke Repair program. Staff have identified a funding gap in the dikes maintenance program and are recommending that \$149,000 be allocated through the Drainage and Diking Utility to close this gap.

Drainage Rate Equity (Drainage Rate Options)

In 2003, Council adopted a starting net rate of \$10 per property for drainage infrastructure replacements and a net rate of \$10 per property for dike upgrades, with an increase of \$10 each year. Since 2016, new rate classes have been introduced to enhance equity amongst users and ensure that user rates reflect varying demands users place on the City’s drainage and diking systems. In 2016, drainage and diking rates were increased for non-stratified industrial, commercial and institutional (ICI) properties with lot areas greater than 800 m² to enhance equity amongst users; in 2017, rates were further increased for large non-stratified ICI properties with lot areas greater than 10,000 m². Residential and smaller ICI properties received no drainage and diking rate increases in 2015 and 2016.

Staff propose to further improve equity by introducing a new rate class for multi-family residential units which include apartments and townhouses. These units are associated with a smaller impermeable area and hence place less demand on the drainage system. Option 1 has no increase to individual rate payers, however, there is a budget increase due to growth (projecting an estimated 1,625 additional residential units to the City’s inventory for 2018). Option 2 maintains current drainage and diking rates for multi-family properties, increases rates for large, non-stratified ICI properties by 4% and increases rates for all other properties by 1%. Option 3 increases drainage and diking rates for all properties except multi-family units by 2%.

Drainage and Diking System Fees – Bylaw No. 7551

The City's Drainage Improvement Reserve Fund was established in 2000 to fund the maintenance, operation and upgrade of drainage and diking infrastructure. Drainage and diking infrastructure works are funded through one utility as key components such as pump stations and canals are shared between the drainage and diking networks which operate as one integrated flood protection system.

The Drainage, Dyke, and Sanitary Sewer System Bylaw No. 7551 can be interpreted to include separate fees for the drainage system and the dike system. Additionally, language in the bylaw can be interpreted to limit use of the funds collected through the Drainage and Diking Utility for capital purposes. Staff will bring forward amendments through the 2018 Utility Rate Amendment Bylaws report that follows this report for clarifying the collection of fees and that the utility funds can be allocated to both capital and maintenance programs.

Impact on 2018 Drainage and Diking Rates

Table 9. 2018 Drainage and Diking Rate Options (Net of Discount)				
Rate Class	2017 Rates	Option 1 Non-discretionary increases	Option 2 (Recommended) 4% increase to Non-stratified ICI Properties > 800 m ² , 1% increase to all other properties except Multi-family Properties	Option 3 2% increase to all properties except Multi-family Properties
Multi-family Residential	\$140.31	\$140.31 \$0.00	\$140.31 \$0.00	\$140.31 \$0.00
Single-family and Agricultural	\$140.31	\$140.31 \$0.00	\$141.71 \$1.40	\$143.12 \$2.81
ICI - Non-Stratified, between 800 m ² and 10,000 m ²	\$290.00	\$290.00 \$0.00	\$301.60 \$11.60	\$295.80 \$5.80
ICI - Non-Stratified, above 10,000 m ²	\$580.00	\$580.00 \$0.00	\$603.20 \$23.20	\$591.60 \$11.60
ICI - Others	\$140.31	\$140.31 \$0.00	\$141.71 \$1.40	\$143.12 \$2.81
Net Budget	\$11,631,000	\$11,859,000	\$11,920,000	\$11,956,000
Capital Infrastructure Replacement Program	\$11,391,000	\$11,391,000	\$11,391,000	\$11,427,000
Box Culvert Preventative Maintenance Program	\$240,000	\$240,000	\$380,000	\$380,000
Dyke Repair Program	\$0	\$0	\$149,000	\$149,000
Net Difference Over 2017 Base Level Budget		\$228,000	\$289,000	\$325,000

The rates outlined in Table 9 are net rates. The bylaw provides a 10% discount for utility bills paid prior to a deadline. The net rates shown will be increased by 10% in the supporting bylaws to provide for the discount incentive while ensuring appropriate cost recovery. Numbers in italics represent the difference between 2017 rates and 2018 optional rates.

Advantages/Disadvantages of Various OptionsOption 1

- Represents no increase to Drainage and Diking rates.
- Maintains the current Drainage and Diking capital program value of \$11,391,000.

Option 2 (Recommended)

- Improves equity by introducing a new rate class for multi-family residential properties and maintaining current rates for this rate class, which place the lowest demands on the City's drainage and diking system.
- Increases the rate for all large, non-stratified ICI properties by 4% and all single-family residential, agricultural and small or stratified ICI properties by 1%.
- Includes additional funding of \$140,000 for the Box Culvert Preventative Maintenance program to include repair of minor deficiencies encountered during box culvert inspections.
- Includes additional funding of \$149,000 for the Dyke Repair Program.
- Maintains the current Drainage and Diking capital program value of \$11,391,000.

Option 3

- Improves equity by introducing a new rate class for multi-family residential properties and maintaining current rates for this rate class, which place the lowest demands on the City's drainage and diking system.
- Increases the rate for all properties except multi-family residential units by 2%.
- Includes additional funding of \$140,000 for the Box Culvert Preventative Maintenance program to include repair of minor deficiencies encountered during box culvert inspections.
- Includes additional funding of \$149,000 for the Dyke Repair Program.
- Increases the Drainage and Diking capital program value by \$36,000 to \$11,427,000.

Recommended Option

Staff recommends the budgets and rates identified in Option 2 for Drainage and Diking Services. This option continues the City's ongoing efforts to increase equity within the drainage and diking utility rates, accommodates an additional level of service for addressing minor deficiencies encountered during box culvert inspections as part of the Box Culvert Preventative Maintenance Program, provides additional funding to address identified funding gaps in the Dyke Repair Program, and supports an incremental increase to the Drainage and Diking capital program to address the funding gap identified in the "Ageing Utility and Road Infrastructure Planning – 2017 Update" report.

Solid Waste and Recycling

Table 10. 2018 Solid Waste & Recycling Budget

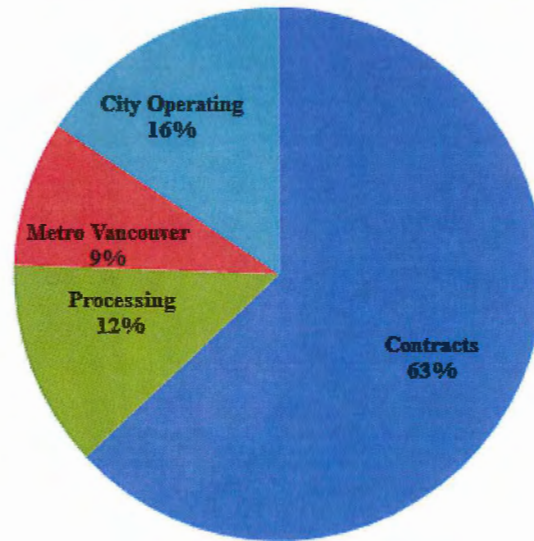
Key Budget Areas	2017 Base Level Budget (Original)	Option 1 (Recommended) Non-Discretionary Increases	Option 2 Non-Discretionary Increases \$200,000 Transfer from Provision	Option 3 Non-Discretionary Increases with \$400,000 Transfer from Provision
<u>Expenditures</u>				
Salaries	\$2,596,800	\$43,600	\$43,600	\$43,600
Contracts	\$8,182,000	\$669,800	\$669,800	\$669,800
Equipment/Materials	\$565,000	\$85,600	\$85,600	\$85,600
Metro Vancouver Disposal Costs	\$1,241,000	\$42,500	\$42,500	\$42,500
Recycling Materials Processing	\$1,275,800	\$553,900	\$553,900	\$553,900
Container Rental/Collection	\$154,100	\$3,600	\$3,600	\$3,600
Operating Expenditures	\$310,900	\$1,800	\$1,800	\$1,800
Internal Shared Costs	\$342,700	-\$2,200	-\$2,200	-\$2,200
Agreements	\$183,500	\$4,600	\$4,600	\$4,600
Rate Stabilization	\$369,500	-\$1,100	-\$1,100	-\$1,100
Base Level Expenditure Budget	\$15,221,300	\$16,623,400	\$16,623,400	\$16,623,400
<u>Revenues</u>				
Transfer from Provision	\$0	\$0	-\$200,000	-\$400,000
Recycling Material	-\$223,600	\$46,800	\$46,800	\$46,800
Garbage Tags	-\$17,500	\$0	\$0	\$0
Revenue Sharing Grant	-\$2,500	-\$600	-\$600	-\$600
MMBC Incentive	-\$1,700,000	-\$131,700	-\$131,700	-\$131,700
Base Level Revenue Budget	-\$1,943,600	-\$2,029,100	-\$2,229,100	-\$2,429,100
Net Budget	\$13,277,700	\$14,594,300	\$14,394,300	\$14,194,300
Net Difference Over 2017 Base Level Budget		\$1,316,600	\$1,116,600	\$916,600

Key Cost Drivers

There are unique issues impacting the Solid Waste and Recycling Budget and rates in 2018, including:

- Contract (transportation) and processing cost increases associated with improved practices to transport and process organic materials. The need for added infrastructure to incorporate improved odour management practices is driving cost increases across the region, so this issue is not unique only to Richmond.
- Metro Vancouver tipping fee costs for waste disposal are increasing by 3%. The impacts from increasing tipping fee costs are mitigated by increased diversion of recyclables, including organics. The City is currently diverting 78% of single-family residential waste.

Figure 3. 2018 Solid Waste and Recycling User Rate Breakdown



The following is an explanation of the budget reductions and increases outlined in Table 10.

Salaries

All options include non-discretionary salary increases.

Contracts

Contract cost increases relate to non-discretionary increases for solid waste and recycling collection services as outlined in Council-approved agreements and an amount for growth in the number of units serviced. Cost increases also included projected amounts for additional hauling services associated with transportation of organics.

Equipment/Materials

Equipment and material cost increases are primarily associated with increasing costs for handling illegally dumped drywall. WorkSafe requirements for handling drywall relating to the potential presence of asbestos has led to increased illegal dumping of this material as well as added costs for handling and disposal. Increases in this category also relate to handling and replacement of Green Carts, which have higher damage rates due to the weight of organic materials.

Metro Vancouver Disposal Costs

The regional tipping fee for local governments will increase by 3% or to \$103/tonne in 2018 (up from \$100/tonne in 2017). The \$5 per load transaction fee remains in effect and is unchanged.

The tiered rate structure with varying rates per tonne for solid waste disposal based on load size remains in effect, as outlined in the following table. The 2018 – 2022 Solid Waste Budget outlines a projected annual 3% increase, as shown in Table 11.

Table 11. Metro Vancouver 2018 – 2022 Solid Waste Budget						
	2017	2018	2019	2020	2021	2022
Tipping Fees						
Up to 1 tonne	\$133	\$137	\$141	\$145	\$150	\$155
1 to 9 tonnes	\$112	\$115	\$119	\$122	\$126	\$130
Over 9 tonnes	\$80	\$82	\$85	\$87	\$90	\$93
Municipal	\$100	\$103	\$106	\$109	\$113	\$116

Recycling Materials Processing

Recycling material processing costs are increased slightly associated with increased volumes from commercial landscape drop off of yard and garden trimmings at Ecowaste.

The most substantial increase relates to additional costs for organic materials processing due to odour management challenges. Greater emphasis on food scraps recycling is creating additional volumes of these more odorous materials as a component of yard and garden trimmings. Traditional low-cost open window composting methods are proving insufficient to treat and capture odours associated with composting food scraps. This is changing the landscape of organics material processing in the region, pointing to the need for developing better (indoor) facilities designed to treat and capture odour. Additional processing infrastructure investment in locally based facilities is needed as part of a broader regional strategy to help address odour management issues.

Container Rental/Collection and Operating Expenditures

Container rental/collection costs are increased slightly associated with Recycling Depot costs under a new service contract 5757 EOI, awarded by Council on May 23, 2017.

Internal Shared/Agreements

Internal Shared Costs are reduced to more closely align with expected costs. Agreement costs are increased slightly based on the consumer price index and contractual increase with Vancouver Coastal Health Authority for the City's public health protection service agreement.

Rate Stabilization

Rate stabilization costs have decreased slightly associated with budget rounding. The Sanitation and Recycling provision has a current balance of \$1.8 million as of September 30, 2017.

Base Level Expenditure Budget – General

The recommended Solid Waste & Recycling budget also includes a full-time Sanitation & Recycling Assistant position to support the variety of new programs implemented, including bi-weekly garbage, multi-family organics recycling, MMBC program, etc. There is no financial impact to the 2018 utility budget as the funding was approved in prior years as part of implementation of these programs and only represents a consolidation of temporary functions into a single, regular full time position. There is no change in service level or increased staffing levels associated with this full time position as the work is currently being performed on a temporary full-time basis by several staff.

Construction Period Revenues

The City receives construction period revenues from development customers for solid waste and recycling during construction. This revenue is not budgeted due to the long term variability in these revenues. Any actual these revenues will be transferred to the Sanitation and Recycling Provision for future rate stabilization funding.

Revenues – General Solid Waste and Recycling Provision

Transfer from Provision

Option 1 reflects no funds being drawn from the Sanitation and Recycling provision to offset rates, thereby reflecting full program cost increases of \$1,316,600. Options 2 and 3 include optional transfers from existing provision funding to offset rates. Option 2 draws \$200,000 from provision for a net budget increase of \$1,116,600 to be recovered from rates. Option 3 draws \$400,000 from provision for a net budget increase of \$916,600 to be recovered from rates. These options can be considered as part of a rate leveling strategy to transition the cost increases over two years.

Recycling Material Revenues

Recycling material revenues are reduced associated with the decline in commodity markets for materials received at the Recycling Depot. Commodity pricing was sought under a new service contract 5757 EOI, awarded by Council on May 23, 2017.

MMBC Revenue Incentive

The net MMBC revenue incentive is increased to offset inflationary cost increases in order to maintain no net impact in the Blue Box/Multi-Family Recycling Rate. Overall, the MMBC program is expected to generate net revenue of approximately \$1 million for 2017 and can be deposited into the solid waste provision account subject to Council approval. This is in alignment

with previous Council direction (November 25, 2013) when the decision to join MMBC was made.

Impact on 2018 Rates

The impact of the budget options to ratepayers is provided in the tables which follow. The principal reason for the increase in 2018 relates to increased organics processing requirements associated with odour management challenges. Numbers in italics represent the difference between 2017 rates and 2018 optional rates.

Table 12 provides total costs based on standard garbage cart sizes for single-family (240L) and townhouse (120L). Table 13 provides a more detailed breakdown of Option 1 rates based on the four different garbage cart size options that are available to residents in single-family and townhouse units. The percentage of container sizes subscribed to by each customer class is also shown for information. Residents are able to reduce or increase the amount they pay for service based on the cart size they select for garbage collection service.

Table 12. 2018 Solid Waste and Recycling Rate Options (net of discount)				
Customer Class	2017 Rates	Option 1 (Recommended)	Option 2	Option 3
Single Family Dwelling (Standard 240L Cart)	\$285.10	\$313.10 \$28.00	\$306.10 \$21.00	\$299.15 \$14.05
Townhouse (Standard 120L Cart)	\$213.60	\$223.95 \$10.35	\$223.95 \$10.35	\$223.95 \$10.35
Apartment	\$94.45	\$99.80 \$5.35	\$99.80 \$5.35	\$99.80 \$5.35
Business Rate	\$29.31	\$32.29 \$2.98	\$32.29 \$2.98	\$32.29 \$2.98

Table 13. 2018 Single-Family and Townhome Net Rates by Garbage Cart Size				
Cart Size	Single Family		Townhomes	
	Full Service Rate (Including Recycling, Organics, Other Services)	Approximate Percent - Subscribed Size	Full Service Rate (Including Recycling, Organics, Other Services)	Approximate Percent - Subscribed Size
80L	\$275.10	5%	\$201.95	13%
120L	\$297.10	12%	\$223.95	78%
240L	\$313.10	78%	\$239.95	8%
360L	\$413.10	5%	\$339.95	1%

The rates outlined in Tables 12 and 13 are net rates. The bylaw provides a 10% discount for utility bills paid prior to a deadline. The rates shown will be increased by 10% in the supporting bylaws to provide for the discount incentive while ensuring appropriate cost recovery.

Regional Issues

In 2018, tipping fees are expected to increase by 3%. Further, Metro Vancouver has indicated annual projected increases over the next 5-year period, i.e. 2018 – 2022, to be consistent at 3% per year.

Metro Vancouver has undertaken consultation on a proposed new Generator Levy on all residential and commercial/institutional waste generated in the region, regardless of whether it is managed at Metro Vancouver facilities. This proposed levy, coupled with a proposed new Hauler Licensing bylaw, is aimed at ensuring all waste generators in the region contribute to the fixed costs of the region's transfer station network. Public consultation on changes to Greater Vancouver Sewerage and Drainage District Municipal Solid Waste and Recyclable Material Regulatory Bylaw No. 181, 1996 (Bylaw 181) was also undertaken to seek feedback on updated regulation of privately operated solid waste and recycling facilities. These proposed new regulations are being objected to by some members of private industry, who consider the approach as overly prescriptive, potentially limiting of the competitive landscape, and being pursued in a manner too quickly to support adequate consultation.

Metro Vancouver has reported expected overall positive performance in 2017. This is due to higher than expected waste flows combined with management of expenditures which has led to projected results being better than anticipated when compared to the approved 2017 budget. The expected net operational gains will increase the projected surplus to around \$10.9 million compared to a planned budget reserves contribution from generated surplus of \$4.9 million.

Key actions in 2018 include the introduction of an expanded polystyrene disposal ban, the Coquitlam Transfer Station replacement, Surrey small vehicle drop-off facility, and reduction activities focused on food waste and construction and demolition waste. The expanded polystyrene disposal ban would apply to polystyrene used for packaging and distributing products (excludes food and beverage packaging, packing peanuts, etc.) and would attract a 100% surcharge on threshold levels above 20% (by weight or volume). While expected to impact mostly commercial sources, the City could expect that illegal dumping of polystyrene will increase once the ban comes into effect, as typically occurs when disposal bans are introduced.

As noted previously in this report, a key emerging issue impacting the region is a lack of adequate organics processing capacity. In light of the increased focus on food scraps recycling, there is a lack of suitable processing facilities designed to capture, treat and manage odour from those facilities which manage food scraps. Additional efforts at the regional level to encourage greater processing capacity investment are needed.

Advantages/Disadvantages of Various OptionsOption 1 (Recommended)

- Represents full cost recovery via rates of all program costs, including substantial cost increases in organics processing.
- Includes funding for a full-time Sanitation & Recycling Assistant position to support the variety of new programs implemented, with no financial impact to the 2018 utility budget or rates as funding was approved in prior years.

Option 2

- Represents partial cost recovery via rates of all programs costs, including substantial cost increases in organics processing.
- Includes a \$200,000 offset from the Sanitation & Recycling provision to temporarily offset the rate impact of program cost increases.
- Includes funding for a full-time Sanitation & Recycling Assistant position to support the variety of new programs implemented, with no financial impact to the 2018 utility budget or rates as funding was approved in prior years.

Option 3

- Represents partial cost recovery via rates of all programs costs, including substantial cost increases in organics processing.
- Includes a \$400,000 offset from the Sanitation & Recycling provision to temporarily offset the rate impact of program cost increases.
- Includes funding for a full-time Sanitation & Recycling Assistant position to support the variety of new programs implemented, with no financial impact to the 2018 utility budget or rates as funding was approved in prior years.

Recommended Option

Staff recommend the budget and rates identified in Option 1 for Solid Waste and Recycling. This option provides full funding for all existing programs in 2018. This option also ensures continuity of service by providing adequate resource levels to support solid waste and recycling programs through securing a full-time Sanitation & Recycling Assistant position.

Total Recommended 2018 Utility Rate Option

In light of the significant challenges associated with the impacts of regional costs and new programs in the City, staff recommend the budget and rates options as follows:

- Option 1 is recommended for Water
- Option 2 is recommended for Sewer
- Option 2 is recommended for Drainage and Diking
- Option 1 is recommended for Solid Waste and Recycling

Table 14 summarizes the estimated total metered rate utility charge, based on average water and sewer consumption. Table 15 summarizes the total flat rate utility charge. Numbers in italics represent the difference between 2017 rates and 2018 proposed rates.

Table 14. 2018 Estimated Total Net Rates to Metered Customers		
Customer Class	2017 Estimated Net Metered Rates	2018 Estimated Net Metered Rates (Recommended)
Single-Family Dwelling (based on 315 m ³ average)	\$1,154.87	\$1,198.51 <i>\$43.64</i>
Townhouse (on City garbage service) (based on 210 m ³ average)	\$847.41	\$867.26 <i>\$19.85</i>
Townhouse (not on City garbage service) (based on 210 m ³ average)	\$760.41	\$777.76 <i>\$17.35</i>
Apartment (based on 160m ³ average)	\$592.33	\$604.92 <i>\$12.59</i>
Commercial/Industrial		
Metered Water (\$/m ³)	\$1.1595	\$1.1757 <i>\$0.0162</i>
Metered Sewer (\$/m ³)	\$1.0192	\$1.0481 <i>\$0.0289</i>
Business: General Environmental Charge	\$29.31	\$32.29 <i>\$2.98</i>
Business: Drainage & Diking (800 m ² to 10,000 m ²)	\$290.00	\$301.60 <i>\$11.60</i>
Business: Drainage & Diking (above 10,000 m ²)	\$580.00	\$603.20 <i>\$23.20</i>
Business: Drainage & Diking (Others)	\$140.31	\$141.71 <i>\$1.40</i>

Table 15. 2018 Total Net Rates to Flat Rate Customers		
Customer Class	2017 Net Flat Rates	2018 Net Flat Rates (Recommended)
Single-Family Dwelling	\$1,458.92	\$1,508.86 \$49.94
Townhouse (on City garbage service)	\$1,240.20	\$1,268.50 \$28.30
Townhouse (not on City garbage service)	\$1,153.20	\$1,179.00 \$25.80
Apartment	\$877.94	\$896.90 \$18.96

The rates outlined in Tables 14 and 15 are net rates. The bylaw provides a 10% discount for utility bills paid prior to a deadline. The rates shown will be increased by 10% in the supporting bylaws to provide for the discount incentive while ensuring appropriate cost recovery. The recommended rates outlined above result in gross rate charges to residents as outlined in Attachment 1. These rates would be reflected in the amending bylaws for each utility area, should they be approved by Council.

Flat Rate and Metered Customers

By January 1, 2018, the residential metering program will be successful in transitioning 100% of single-family households from flat rates to metered rates. The single-family residential flat rate will continue to apply to duplex units that share one water service. These units require significant internal plumbing separation work to facilitate metering and were not included in the universal metering program. The majority of townhouses and apartments are still on flat rate; however, the number with meters will continue to increase with the ongoing volunteer and mandatory water meter programs for multi-family dwellings. The number of units by customer class is identified in Table 16:

Table 16. Flat Rate and Metered Property Unit Counts				
	2017 Percentages (Mid-year)	2017 Counts (Mid-year)	2018 Counts (Mid-year Estimate)	Difference
Single-Family Residential	Flat Rate (6%)	1,567	681	-886
	Metered (94%)	26,909	28,028	1,119
Townhouse	Flat Rate (70%)	11,647	11,479	-168
	Metered (30%)	5,099	5,383	284
Apartment	Flat Rate (48%)	15,010	14,460	-550
	Metered (52%)	16,178	18,004	1,826
Total Residential Units		76,410	78,035	1,625
Commercial Units	Metered	3,538	3,538	0
Farms	Metered	47	47	0

Comparison of 2017 City Utility Rates to Other Major Household Expenses

In relation to other common household expenses, City utility expenses represent good value when compared with other daily major household expenses, such as telephone, cable, internet, electricity, transit and others. Water, sewer, garbage and drainage utility services are fundamental to a quality lifestyle for residents as well as necessary infrastructure to support the local economy. Figure 4 illustrates the value of these services when compared to other common household expenses.

Figure 4. Cost Comparison of Main Household Expenses for a Single-Family Dwelling

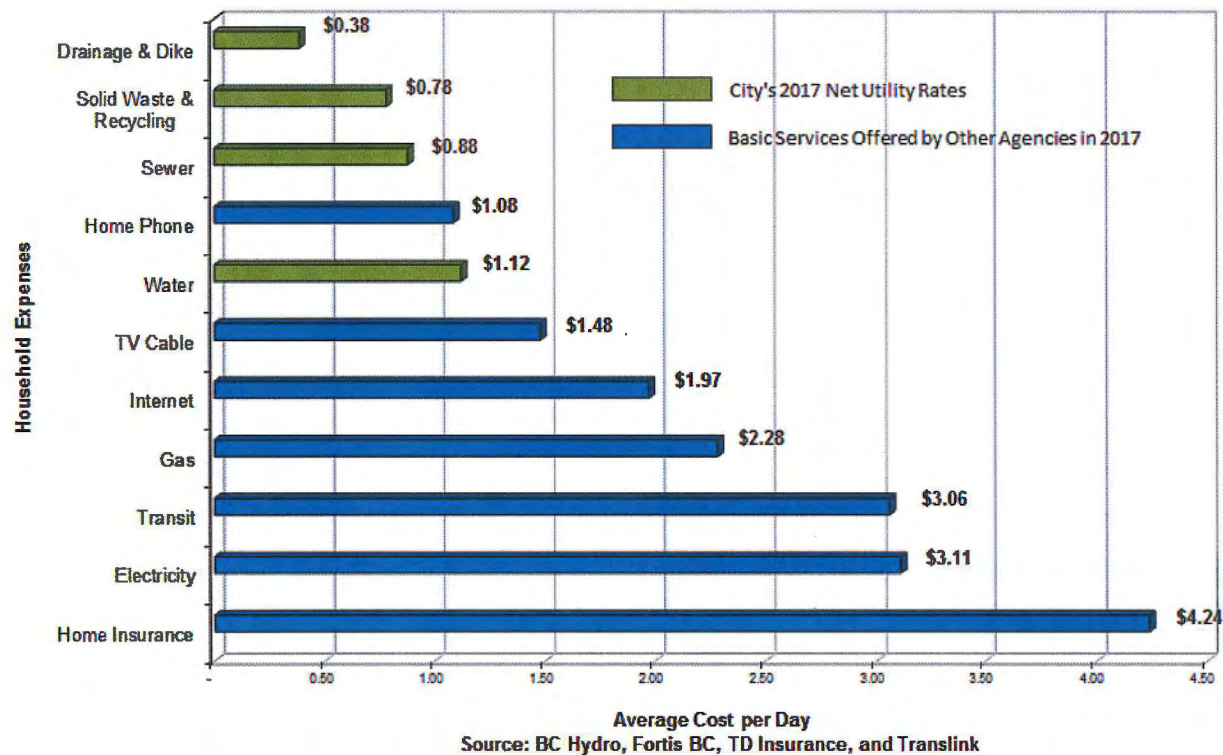


Figure 1 Reference REDMS 5590609

Comparison of City Utility Budgets to Comparative Municipalities

Figure 5 provides a comparison between the City's 2017 utility budget and comparative municipalities.

Figure 5. 2017 Utility Budgets

Division:	Coquitlam	Richmond	Burnaby	Surrey	Vancouver
Waterworks	33,000,000	46,590,100	55,342,700	72,644,000	116,140,000
Sanitary Sewer	34,000,000	34,197,300	43,147,900	49,980,000	72,369,000
Sanitation & Recycling	8,250,000	15,221,300	18,300,000	42,079,000	63,771,000
Storm Drainage	-	19,584,300	-	36,386,000	-
TOTAL	\$75,250,000	\$115,593,000	\$116,790,600	\$201,089,000	\$252,280,000

Financial Impact

The budget and rate impacts associated with each option are outlined in detail in this report. In all options, the budgets and rates represent full cost recovery for each City service.

The key impacts to the recommended 2018 utility budgets and rates stem from estimated Metro Vancouver increases for bulk water purchase and the sewer levy. Staff recommend the budget and rates options as follows:

- Option 1 is recommended for Water
- Option 2 is recommended for Sewer
- Option 2 is recommended for Drainage and Diking
- Option 1 is recommended for Solid Waste & Recycling

Considerable effort has been made to minimize City costs and other costs within our ability in order to minimize the impact to property owners.

Conclusion

This report presents the 2018 proposed utility budgets and rates for City services relating to the provision of water, the connection of wastewater, drainage and flood protection, as well as the provision of solid waste and recycling services. Considerable measures are taken to reduce costs where possible in order to minimize rate increases. A significant portion of the City's costs relate to impacts from influences outside of the City's direct control, such as regional cost impacts, organics material processing and hauling cost increases, power and postage increases, etc. Regional costs are expected to continue increasing to meet demands for high quality drinking water and sewer treatment.

Staff recommend that the budgets and rates as outlined in this report be approved and that the appropriate amending bylaws be brought forward to Council to bring these rates into effect.



Lloyd Bie, P.Eng.
Manager, Engineering Planning
(604-276-4075)



Suzanne Bycraft
Manager, Fleet &
Environmental Programs
(604-233-3338)



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

Att. 1 2017 Annual Utility Charges – Recommended Gross Rates per Bylaw

Attachment 1

2018 Annual Utility Charges – Recommended Gross Rates per Bylaw (Estimated Metered and Actual Flat Rates)

	Water	Sewer	Drainage/ Diking	Garbage/ Recycling	Total
Metered (Based on Average Consumption)					
Single-Family Dwelling	\$459.50	\$366.83	\$157.46	\$347.89	\$1,331.68
Townhouse (with City garbage)	\$314.33	\$244.56	\$155.90	\$248.83	\$963.62
Townhouse (no City garbage)	\$314.33	\$244.56	\$155.90	\$149.39	\$864.18
Apartment	\$219.01	\$186.33	\$155.90	\$110.89	\$672.13
Flat Rate (Actual)					
Single-Family Dwelling	\$693.67	\$477.49	\$157.46	\$347.89	\$1,676.51
Townhouse (with City garbage)	\$567.82	\$436.89	\$155.90	\$248.83	\$1,409.44
Townhouse (no City garbage)	\$567.82	\$436.89	\$155.90	\$149.39	\$1,310.00
Apartment	\$365.90	\$363.87	\$155.90	\$110.89	\$996.56
General – Other/Business					
Metered Water (\$/m ³)	\$1.3063				
Metered Sewer (\$/m ³)		\$1.1646			
Business: General Environmental Charge				\$35.88	
Non-Stratified ICI: Drainage & Diking (800 m ² to 10,000 m ²)			\$335.11		
Non-Stratified ICI: Drainage & Diking (above 10,000 m ²)			\$670.22		
ICI: Drainage & Diking (Others)			\$157.46		



City of Richmond

Report to Committee

To: Finance Committee

Date: November 2, 2017

From: Joe Erceg
General Manager, Planning & Development

File:

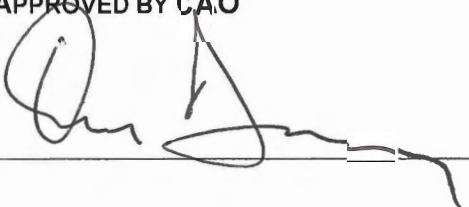
Andrew Nazareth
General Manager, Finance and Corporate Services

Re: 2018 Operating and Capital Budgets for Richmond Public Library

Staff Recommendation

That the 2018 Richmond Public Library budget of \$9,143,000 as presented in Attachment 1 from the Chief Librarian and the Secretary to the Board, has been reviewed by the Senior Management Team.

Attach. 1

REPORT CONCURRENCE		
ROUTED TO:	CONCURRENCE	APPROVED BY CAO
Finance Department Senior Management Team	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	
REVIEWED BY STAFF REPORT / AGENDA REVIEW SUBCOMMITTEE	INITIALS: CT	

**Report to Committee**

To: Finance Committee **Date:** October 27, 2017

From: Susan Walters
Chief Librarian and Secretary to the Board
Richmond Public Library

Re: 2018 Operating and Capital Budgets for Richmond Public Library

Staff Recommendation

That the 2018 Richmond Public Library Operating and Capital budgets as presented in this report dated October 27, 2017 from the Chief Librarian and Secretary to the Board be approved with a same level of service municipal contribution of \$9,143,000 representing a 1.66% increase.

A handwritten signature in cursive script, appearing to read "S. Walters".

Susan Walters
Chief Librarian and Secretary to the Board
Richmond Public Library
(604-231-6466)

Staff Report

Origin

In accordance with the *BC Library Act, Section 10(1)*, the Richmond Public Library Board must prepare and submit to City Council its 2018 budget for providing library services on or before March 1, 2018. Council must approve the budget with or without amendment. This library staff report details the Draft 2018 Operating and Capital Budgets, which were approved for submission to the City by the Library Board at its September 27, 2017 meeting.

Analysis

2018 Outlook

The Library Board is entering the final year of its Strategic and Long Range Plan 2014-2018 and continues to transform library services from a primarily print-based information service to a blend of traditional and digital services.

One focus of the Library Board and senior library staff in 2018 will be the development of a new 3-year strategic plan. Public consultation with key stakeholders, including the City, will improve current services and guide future library services.

The shift to blended traditional and digital library services has been greatly enhanced with the introduction of the Launchpad, a Canada 150 Infrastructure project that opened to the public at the Brighthouse branch in June 2017. The Launchpad provides Richmond residents with access to new technology, equipment and learning spaces that facilitate daily training and workshops led by staff and community partners. Many innovative programs are planned for 2018 that will increase youth, adult and seniors' digital literacy skills.

To accommodate the Launchpad project, over 40,000 books were relocated at the Brighthouse branch. Some key collections shifted to the 2nd floor. This service point, seating, and adjacent collaborative space required a review. The Library Board has allocated operating surplus funding for a minor renovation on the 2nd floor. With the support of Capital Buildings Project Development staff, this work should be completed in April 2018. The refreshed space will include an improved service desk, better lighting and comfortable seating for library members browsing the non-fiction and Chinese collections.

As part of the library's 2017 budget, Council approved additional operational funds to assist in restoring the hours of operation at the Cambie, Ironwood and Steveston branches in February 2017. This level of service will continue through 2018 to meet the needs of Richmond residents. Many library members, especially families and seniors, greatly value the extended hours at their neighbourhood libraries.

2018 Operating Budget**Revenues:**

The 2017 Per Capita Operating Grant increased by 1.64% due to population growth. This slight increase should balance any decreases in the three smaller grants. Revenues from provincial grants are expected to see a similar increase in 2018.

Revenues from book fines were higher in 2017 due to a change to the fines threshold. A continuing increase in fines revenue is not projected for 2018.

Non-resident borrowing from other InterLINK libraries is also expected to decline due to the general downward trend in circulation and the collection improvements made by other libraries. We expect a decline in the InterLINK reimbursement revenue of \$18,900.

Overall, revenue is expected to drop by \$35,600 or -4.85% to \$697,700.

Expenditures:

Salaries and benefits are anticipated to increase by \$101,400 or 1.43% to \$7,171,300. This increase includes an allowance for anticipated contract increases, which are currently under negotiation, and step increments.

General and Administration expenses increased by \$378,000, mostly due to Subscriptions increasing by \$377,700. That increase was due to eBook expenses being reallocated from Collections to Subscriptions, as recommended by KPMG during the 2016 Audit. The increase in Subscriptions has been offset by a reduction in Collections.

Total expenses increased by \$113,400 or 1.17% to \$9,840,700.

**Richmond Public Library
2018 Operating Budget**

	2017 Approved Budget	2018 Budget as Submitted	Difference	% Difference
REVENUES				
Provincial Grants	\$395,700	\$402,200	\$6,500	1.64%
Book Fines	177,600	\$156,300	-\$21,300	-11.99%
Interlink Reimbursement	69,600	\$50,700	-\$18,900	-27.16%
Printers & photocopiers	39,400	\$39,100	-\$300	-0.76%
In House Book Sales	34,900	\$33,900	-\$1,000	-2.87%
Other Revenue	16,100	\$15,500	-\$600	-3.73%
Total Revenues	\$733,300	\$697,700	-\$35,600	-4.85%

	2017 Approved Budget	2018 Budget as Submitted	Difference	% Difference
EXPENDITURES				
Total Salaries and Benefits	\$7,069,900	\$7,171,300	\$101,400	1.43%
Contracts	442,500	446,600	\$4,100	0.93%
General and Administration	361,900	739,900	\$378,000	104.45%
Leases	240,100	240,100	\$0	0.00%
Utilities	122,500	133,200	\$10,700	8.73%
Supplies	114,000	114,000	\$0	0.00%
Equipment Purchases	72,200	72,200	\$0	0.00%
Professional Fees and Insurance	20,700	21,900	\$1,200	5.80%
Total Operating Expenses	\$1,373,900	\$1,767,900	\$394,000	28.68%
Transfer to Provision - Collection	\$1,274,400	\$892,400	-\$382,000	-29.97%
Transfer to Provision - Enterprise Fund	9,100	9,100	\$0	0.00%
TOTAL EXPENSES	\$9,727,300	\$9,840,700	\$113,400	1.17%
SUMMARY:				
REVENUE	\$733,300	\$697,700	-\$35,600	-4.85%
EXPENDITURE	\$9,727,300	\$9,840,700	\$113,400	1.17%
NET BUDGET (MUNICIPAL CONTRIBUTION)	\$8,994,000	\$9,143,000	\$149,000	1.657%

2018 Capital Budget

Collection:

The library's capital budget for 2018 is \$892,400 shown under Expenditures – Transfer to Provision – Collection. This is the amount of money the library spends on the acquisition, cataloguing and processing of collection materials including books and multimedia. The collection budget for 2018 has been reduced by \$382,000 due to \$377,700 being reallocated to subscriptions for eBooks.

Ongoing Additional Level Requests

Expanded Service for Seniors – \$203,004 Ongoing:

Richmond seniors are one of the primary user groups of library services. They depend on barrier-reduced access to collections and programs both in the library and in their homes. Expanded programs and services that focus on technology, the library's collections and healthy aging would support senior's wellbeing. Given the increasing diversity of Richmond seniors, there is a need to develop multilingual seniors outreach services, refocus home delivery, and diversify the library's community volunteer program.

This level of increased service will require two specialized library positions to assist seniors in accessing library resources in an increasingly digital environment. These additional resources will support participation in intergenerational learning and meaningful volunteer opportunities; access to library resources that support reading and learning for seniors who cannot come to a physical branch; and increased awareness and use of specialized collections and resources for seniors.

With specialized outreach several favourable outcomes will be achieved. Library services and programs will be delivered to seniors where they reside in the community. New partnerships will be developed with community organizations and city departments to provide collaborative services to seniors. Access to and awareness of library resources and services will be enhanced. Community volunteer capabilities will grow and support greater outreach services to seniors.

Book Vending Technology – \$76,950 One-time:

The library is a vital community resource to support literacy, life-long learning and education, and to assist in building a vibrant and informed community.

The library currently offers one day a week “pop-up” library service to a rapidly growing community at the Hamilton Community Centre in East Richmond. Hamilton residents have daily access to a library kiosk for placing holds and a book return bin during the community centre’s open hours, but must wait until library service returns on Saturdays to access new materials. With the closest library branch nearly 12 km away, access is a barrier for families and seniors living in this community.

Innovative book vending technology would provide residents of all ages with access to expanded library collections during all Hamilton Community Centre operational hours.

Impact and outcome measures would be analysed to determine collection preferences and overall use of this new service. Launching this innovative technology in Hamilton Community Centre as a proof-of-concept service will determine if the technology could be expanded to other neighbourhoods and locations across Richmond, wherever an immediate need for increased access to library collections is identified.

Financial Impact

The 2018 library budget has a decrease in revenues of \$35,600 (-4.85%) and an increase in expenditures of \$113,400 (1.17%).

The total municipal contribution for operating and capital is \$9,143,000, an increase of \$149,000 or 1.66%.

Conclusion

This report recommends a same level of service budget with a municipal contribution of \$9,143,000 be approved, and requests consideration of two additional level requests.

A handwritten signature in cursive script, appearing to read "SWalters".

Susan Walters, Chief Librarian
and Secretary to the Board
Richmond Public Library
(604-231-6466)