



WATERWORKS AND WATER RATES BYLAW

BYLAW NO. 5637

EFFECTIVE DATE – JANUARY 1, 1991

CONSOLIDATED FOR CONVENIENCE ONLY

This is a consolidation of the bylaws below. The amendment bylaws have been combined with the original bylaw for convenience only. This consolidation is not a legal document. Certified copies of the original bylaws should be consulted for all interpretations and applications of the bylaws on this subject.

<u>AMENDMENT BYLAW</u>	<u>DATE OF ADOPTION</u>	<u>EFFECTIVE DATE</u> (If different from Date of Adoption)
Bylaw 5821	December 16, 1991	
Bylaw 8545	January 27, 1992	
Bylaw 5915	June 1, 1992	
Bylaw 6006	December 21, 1992	
Bylaw 6232	December 20, 1993	
Bylaw 6238	December 20, 1993	
Bylaw 6270	February 28, 1994	
Bylaw 6407	December 12, 1994	
Bylaw 6572	December 11, 1995	
Bylaw 6702	December 16, 1996	
Bylaw 6849	December 17, 1997	
Bylaw 6974	December 14, 1998	
Bylaw 7065	December 20, 1999	
Bylaw 7193	December 18, 2000	
Bylaw 7302	December 17, 2001	January 1, 2002
Bylaw 7405	August 26, 2002	August 1, 2002
Bylaw 7552	December 9, 2002	
Bylaw 7620	December 3, 2003	January 1, 2004
Bylaw 7646	February 9, 2004	
Bylaw 7685	March 29, 2004	
Bylaw 7851	December 13, 2004	January 1, 2005

AMENDMENT BYLAW

DATE OF ADOPTION

EFFECTIVE DATE

(If different from Date of Adoption)

Bylaw 8006	December 19, 2005	January 1, 2006
Bylaw 8153	November 27, 2006	January 1, 2007
Bylaw 8312	December 19, 2007	January 1, 2008
Bylaw 8442	November 10, 2008	
Bylaw 8453	December 16, 2008	January 1, 2009
Bylaw 8548	December 14, 2009	January 1, 2010
Bylaw 8680	December 13, 2010	January 1, 2011
Bylaw 8846	December 19, 2011	January 1, 2012
Bylaw 8978	December 10, 2012	January 1, 2013
Bylaw 8909	February 12, 2013	
Bylaw 9080	December 9, 2013	January 1, 2014
Bylaw 9099	March 10, 2014	
Bylaw 9192	November 10, 2014	January 1, 2015
Bylaw 9202	February 10, 2015	

CITY OF RICHMOND
WATERWORKS & WATER RATES

BYLAW NO. 5637

TABLE OF CONTENTS

PART ONE – INTERPRETATION	1
PART TWO – ESTABLISHMENT AND DISCONTINUANCE OF WATER SERVICES	
2. Application Procedure	5
3. Requirements	5
3A. Requirement to Install Water Meter	5
3B. Construction Period Water Charges	6
4. Service Pipe – Size and Renewal	6
5. City’s Capacity	7
6. Location of Meters	7
7. Inaccessibility of Meters	7
8. Remote Meter Register	7
9. Metering of Multi-Family Dwelling Properties	8
10. Location of Service Pipe, Curb Stop and Service Box	9
11. Turn On and Shut Off	9
12. Pressure, Supply and Quality	10
13. Rates and Rents	10
14. Right to Substitute a Meter Service	11
15. Applications Voided	11
16. Service Pipes Shut Off for Five Years Deemed to be Discontinued	11
17. Schedules	11
PART THREE – RESPONSIBILITIES OF THE CUSTOMER	
18. Works to be Supervised	12
19. Installation and Maintenance Criteria	12
20. Services to Drinking Troughs	12
20A. Services to Ornamental Fountains	12
21. Services to Water-Operated Machinery	12
22. Services to be Metered	12
22A. Voluntary Water Metering	13
22B. Toilet Rebate	13
23. Services to be Protected from Frost	14
24. Inspection of Premises	14
25. No Deduction for Waste	14
25A. Underground Leaks	14
25B. Underground Leak Calculation	14
26. Testing and Verification of Water Meters	15
27. Non-Registering Meters	15
28. Abatement of Noises and Pressure Surges	15

**WATERWORKS & WATER RATES
BYLAW NO. 5637**

TABLE OF CONTENTS

PART THREE – RESPONSIBILITIES OF THE CUSTOMER (Cont.)

29.	Prevention of Contamination	16
30.	Interconnected Service Pipes	17
31.	Provision for Special Requirements.....	17

PART FOUR – OPERATION AND INSPECTION

32.	Supervision by City	17
32A.	Repair of Water Meters	18
33.	Turn-Off for Illegal Operations	18
34.	Sprinkling Restrictions	18
35.	Inspection of Water Pipes and Taps.....	18
36.	Operation of City Waterworks Fittings	19
37.	Use and Location of City Fire Hydrants	19
37.1	Use of Private Fire Hydrants	19
38.	Quotes for Non-Standard Installations.....	20
39.	Severability	20
40.	Violations and Penalties	20
41.	Previous Bylaw Repeal	20
42.	Date of Effect	20
43.	Bylaw Citation.....	20

Schedule A	Flat Rates for Residential, Agricultural and Institutional Purposes Only	21
Schedule B	Metered Commercial, Industrial and Institutional Properties Metered Multiple-Family and Strata Titled Properties Metered Farms	22
Schedule C	Metered Residential Properties.....	23
Schedule D	Water Connection Charge	24
Schedule E	Construction Period Water Consumption Rates	25
Schedule F	Miscellaneous Charges.....	26
Schedule G	Rates for Vancouver International Airport Authority (YVR)	27
Schedule H	Airport Water Mains	28

CITY OF RICHMOND

WATERWORKS AND WATER RATES BYLAW

BYLAW NO. 5637

WHEREAS it is expedient that provision should be made for regulating the rates, conditions and terms upon which water may be supplied by the **City** to its inhabitants:

NOW THEREFORE the Council of the **City** of Richmond, in open meeting assembled, enacts as follows:

PART I - INTERPRETATION

1. In this bylaw, unless the context otherwise requires:

BACKFLOW PREVENTER	means a device or a method which prevents backflow in a water system and which prevents a potable water cross connection.
BUILDING PERMIT	means permission or authorization in writing by the building inspector under this bylaw to perform construction regulated by the current Building Regulation of the City .
COMBINED SERVICE or COMBINED SERVICE PIPE	respectively means the service or the service pipe that is intended to supply water for fire protection combined with the normal use.
CITY	means the City of Richmond.
COUNCIL	means the City Council of the City of Richmond.
CURB STOP	means the City -owned valve on a service pipe in a City street or lane or within a statutory right-of-way at or near the customer's property line, or statutory right-of-way line.
CUSTOMER	means any person, firm or City supplied with water from the waterworks.
DUAL SERVICE	means a private service pipe which branches on private property to provide two service connections, one of which is a metered line and the other of which is a fire line.

DWELLING UNIT	means a room or suite of two or more rooms designed for or occupied by one family only as a single housekeeping unit providing cooking, sanitary and sleeping facilities.
EMERGENCY SERVICE CALL	means a service call to turn off a water line located on private property which is leaking and causing or threatening to cause damage to the property.
FAMILY	means one or more persons occupying a dwelling unit and living together as a single non-profit housekeeping unit, but limited to a maximum of six persons who are unrelated by blood or marriage.
FARM	means any property classified as a farm under the Assessment Act.
FARM DWELLING	means same as dwelling unit .
FIRE LINE	means a pipe that is intended solely for the purpose of providing a stand-by supply of water for fire protection purposes.
GENERAL MANAGER, ENGINEERING & PUBLIC WORKS	means the person appointed to the position of General Manager, Engineering & Public Works, and includes a person designated as an alternate.
HOUSEHOLD	means a group of persons who dwell as a family under one roof.
IRRIGATION	means the sprinkling or pouring of water by means of any pipe, hose, water pot, irrigation ditch or flume upon or under the surface of the ground from the water supply mains of the City .
METER SERVICE	means a service having attached thereto a meter for determining the quantity of water supplied by such service.
MULTIPLE-FAMILY DWELLING	means a detached, multi-floor building containing three or more residential dwelling units .
NORMAL USE	means the use of water for normal residential, commercial, or industrial purposes, including residential lawn sprinkling, but not including fire protection or other uses which the General Manager, Engineering & Public Works deems to be special or extra-ordinary.
ONE-FAMILY DWELLING	means a detached building used exclusively for residential purposes, containing one dwelling unit only.

PERMANENT DISCONNECTION	typically means the disconnection of a service pipe that is no longer needed. This disconnection will be made at the watermain.
PLUMBING CODE	means the current edition of Part 7 of the British Columbia Building Code established by regulation under the <i>Local Government Act</i> .
PRIVATE SERVICE PIPE	means the pipe and appurtenant fittings intended to distribute water within the premises and connected to the service pipe.
PROPERTY OWNER	means the registered owner of a parcel of land in the City.
RATE	means the price or sum of money to be paid by any owner or any consumer either for the quantity of water supplied to him as measured by a meter or for a service to his premises for a stated period.
REGULAR WORKING HOURS	means the time between 7:30 a.m. and 11:30 p.m. Monday to Friday (excluding statutory holidays).
RENT	means an additional charge levied for a water meter and appurtenances when such meter is used in connection with a service.
SELF-CONTAINED SUITE	means an area within a dwelling unit having provision for residential living within such area by the occupants of such area, including equipment for the preservation or preparation of food, and a toilet, lavatory, shower or bath, or facilities for installation of the same.
SERVICE BOX	means the appurtenance which provides above-ground access to the curb stop.
SERVICE PIPE	means the City -owned pipe and appurtenant fittings either on a street or within a statutory right-of-way, intended to carry water from the City 's watermain to the farthest downstream City -installed fittings, with City ownership extending to the downstream face of the City fittings.
SINGLE OCCUPANT DWELLING	means: <ul style="list-style-type: none"> (a) any dwelling unit occupied by only one person which person is a registered owner of the said dwelling unit, or (b) in a rental apartment building, excluding those established under the <i>Condominium Act</i>, notwithstanding the actual occupancy, those apartments designed and certified by the

Building Department as bachelor units at the time of construction.

STRATA CORPORATION	means the strata corporation responsible for a strata titled multi-family dwelling property.
TEMPORARY DISCONNECTION	means the disconnection of a service pipe at a property line for a short term during which time building or structures on the premises served are demolished and new buildings or structures are constructed, other than a service pipe that is less than 25 mm in diameter or a service pipe that is older than 25 years.
TEMPORARY TURN-OFF	means temporary interruption to service by a shut-off and subsequent turn-on of a service pipe.
THERMAL EXPANSION	means the expansion of water when heated within a closed system.
TWO-FAMILY DWELLING	means a detached building used exclusively for residential purposes containing two dwelling units only, which building is not readily convertible into additional dwelling units and the plans for which have been filed with the Building Inspector showing all areas of the building finished, and the design of the building showing each dwelling unit consisting of: <ul style="list-style-type: none">(a) one storey only, not set upon another storey or upon a basement; or(b) two storeys only, the upper storey not containing a kitchen; not set upon another storey or upon a basement; or(c) a split level arrangement of two storeys only, the upper storey not containing a kitchen; not set upon another storey or upon a basement.
WATER HAMMER	means the effect caused by a rapid change of velocity of water in a pipe.
WATER METER	means a device supplied and owned by the City which measures the quantity of water delivered to a property.
WATERWORKS	means the water distribution system, now or hereafter constituted, of the City .

PART II - ESTABLISHMENT AND DISCONTINUANCE OF WATER SERVICES

2. APPLICATION PROCEDURE

- (a) Every **property owner** wishing to connect a property to the **City** water system must, prior to making such a connection:
- (i) apply to the **City** to make a water connection;
 - (ii) pay the applicable water connection charge specified in section 1 of Schedule D;
 - (iii) submit a design plan or drawing of each proposed connection, including:
 - a. existing services;
 - b. proposed services; and
 - c. the location of buildings, trees, driveways, and sidewalks,

which plan or drawing has been prepared by a professional engineer in accordance with the current version of Design Specifications and Supplementary Specifications and Detail Designs, publications of the City's Engineering & Public Works Department.

- (b) Notwithstanding clause (a) of Section 2, where:
- i) the connection charge is not specified in Schedule D;
 - ii) the property is not adjacent to **City** property or right-of-way in which the **service pipe** is located; or
 - iii) due to utility conflict or any other reason, the connection charge specified in Schedule D does not apply;

the **property owner** must pay to the **City** the amount quoted by the **City** in accordance with Section 38 of this bylaw.

- (c) A connection to the **City** water system will not be made until all required connection charges and any other related costs have been paid in full.
- (d) At the request of the **property owner**, a design plan or drawing referred to in subsection 2(a)(iii) may be prepared by the **City** for the fee specified in Section 2 of Schedule D.

3. Requirements

No person shall permit the connection of a private service pipe to the curb stop until all requirements of this Bylaw pertaining to the installation of service pipes upon any property shall be met.

3A. Requirement to Install Water Meter

- (a) Where an application for a **building permit** has been made for works valued at \$75,000 or greater and neither subsection 4(b)(i) nor 4(b)(ii) applies, the **property owner** must have a **water meter** installed, if one does not exist on the property, and pay the **water meter** installation fee set-out in Schedule "D".

- (b) The **City** will install the **water meter** for all **water meter** installations under this bylaw, except:
 - (i) where there is a site servicing agreement with respect to the property; or
 - (ii) where the **General Manager, Engineering & Public Works** determines that installation of a **water meter** by the **property owner** would:
 - A) be cost-efficient;
 - B) capture all water usage by the property; and
 - C) provide the City with readily available access to the **water meter**.
- (c) In the case of either subsection 3A(b)(i) or 3A(b)(ii) above, the **property owner** is responsible for installing the **water meter**.

3B. **Construction Period Water Charges**

- (a) Where a property owner applies for a **building permit** and a connection to the **City** water service is needed, such owner is required to pay the amount specified in Schedule E for water consumption for the applicable construction period set out in clause (b) of Section 3B.
- (b) The construction period water consumption charges specified in clause (a) of Section 3B apply for the following periods of time:
 - (i) 6 months for **one-family dwellings** and **two-family dwellings**;
 - (ii) 12 months for **multiple-family dwellings** of less than 4 storeys in building height;
 - (iii) 18 months for **multiple-family dwellings** of 4 or more storeys in building height; and
 - (iv) 6 months for any other type of building not specified above.

4. **Service Pipe - Size and Renewal**

- (a) The **General Manager, Engineering & Public Works** may determine the size of the service pipe and meters to be used in supplying any premises.
- (b) Where an application for a **building permit** has been made for works valued at \$75,000 or greater and the existing **service pipe** from the **curb stop** at the property line to the City's watermain is either:
 - (i) more than 25 years old; or
 - (ii) smaller than 25 mm and the works include an increase in the number of plumbing fixtures,the **property owner** must install a new water connection, including a **water meter** if one does not exist on the property, and pay the applicable water connection fee set-out in Schedule "D".
- (c) Notwithstanding clause (b) of Section 4, the **property owner** may not be required to install a new water connection if the **General Manager, Engineering**

& Public Works is satisfied that the number of fixtures in the dwelling are below the average number required for similar sized dwellings and that low flow fixtures have been utilized throughout the dwelling.

5. **City's Capacity**

Nothing in this Bylaw contained or implied herein, nor any act or undertaking of the **City** shall be construed as prejudicing or affecting the rights and powers of the **City** in the exercise of its functions under any public and private statutes and bylaws in connection with the establishment, construction, maintenance, alteration or removal of **waterworks** or in regard to the provision, limitation or cessation of a supply of water.

6. **Location of Meters**

- (a) When specifying the location for a meter the **General Manager, Engineering & Public Works** may consult the customer. The **General Manager, Engineering & Public Works** shall specify the location of any meter, and if the meter is located on private property, the customer shall provide access for maintaining the meter and the appurtenances for meter reading.
- (b) The pipes, valves and other appurtenances to the meter shall be installed in accordance with standards specified by the **General Manager, Engineering & Public Works**.
- (c) A meter on a new connection shall not encroach upon a sidewalk or driveway.

7. **Inaccessibility of Meters**

Any customer served by a privately located meter which meter or accessory thereof has become inaccessible for reading or maintenance, shall pay, in addition to the amounts set out in Schedule B or C, as applicable and as part payment of additional work, the charge set out in Schedule "F" hereto, not pro-rated, while the said meter or accessory remains inaccessible provided that there shall be no additional charge if a customer makes the meter or accessory accessible within 96 hours of receipt of a notice to do so from the **General Manager, Engineering & Public Works**.

8. **Remote Meter Register**

- (a) Every person shall, when ordered to do so by the **General Manager, Engineering & Public Works**, install a remote meter register.
- (b) Every person who does not install a remote meter register, when ordered to do so, shall pay an extra charge as set out in Section 7.
- (c) The **General Manager, Engineering & Public Works** may turn off any service in the event that an owner does not comply with a notice under this Section or Section 7.

9. **Metering of Multi-Family Dwelling Properties**

- (a) For all new **multi-family dwelling** properties and for existing **multi-family dwelling** properties that apply for metered water service:
- (i) a **water meter** will be installed at each of the **service pipe** connections at or near the property line; or
 - (ii) if the **General Manager, Engineering & Public Works** determines that separate metering for water usage by different dwellings, buildings or areas within a **multi-family dwelling** property would:
 - A) be cost-efficient;
 - B) capture all water usage by the property; and
 - C) provide the City with readily available access to the **water meter** or **water meters**,the **General Manager, Engineering & Public Works** may permit, in addition to or in place of **water meters** installed pursuant to subsection 9(a)(i), **water meters** to be installed in the following locations:
 - D) at all **service pipe** connections in the mechanical room or the **service pipe** junction of one or more buildings within the **multi-family dwelling** property; or
 - E) at the water connection for each dwelling unit and each common area within the **multi-family dwelling** property.
- (b) For all existing **multi-family dwelling** properties which do not have metered water service:
- (i) the **property owner** or **property owners** may apply to the **City** for one or more metered water service by submitting:
 - A) a written request, if the property is not a strata development; or
 - B) a resolution of the Strata Council of the **Strata Corporation** authorizing the change to metered water service, if the property is a strata development;
 - (ii) the **City** will reimburse to the **property owner**, if the property is not a strata development, or the **Strata Corporation**, if the property is a strata development, the actual cost incurred to establish one or more new metered water service, to a maximum of the greater of:
 - A) \$60,000.00 per **multi-family dwelling** property; or
 - B) \$500.00 per dwelling unit within a **multi-family dwelling** property.

- (c) If **water meters** for a **multi-family dwelling** property have been installed in accordance with subsection 9(a)(ii)(E), the **City** will issue a bill for each dwelling unit to the **property owner** of the dwelling unit and a bill for the common area(s) to the **property owner** of the **multi-family dwelling** property or the Strata Council of the **Strata Corporation**, whichever is applicable. In all other cases, the City will issue a single bill to the **property owner** of the **multi-family dwelling** property or the Strata Council of the **Strata Corporation**, whichever is applicable.

10. **Location of Service Pipe, Curb Stop, and Service Box**

- (a) Every owner shall locate all service pipes and curb stops clear of any structure, driveway, curb or sidewalk.
- (b) Every owner shall locate the service box and or meter box at finished ground level and clear of any structure, driveway, curb or sidewalk.
- (c) The **General Manager, Engineering & Public Works** may, upon payment of all costs associated with the placement and raising of a service box, place the service box in a location requested by the owner.
- (d) The **General Manager, Engineering & Public Works** may, upon payment of all costs associated with the installation of a new service pipe and curb stop and the removal of any existing service, move the service to a location requested by the owner.

11. **Turn On and Shut Off**

(a) **Non-Emergency Service Call During Regular Working Hours**

- (i) A **property owner** may, in writing, apply to the **General Manager, Engineering & Public Works** for the turning on or the shut off of water. Such application to be submitted at least five days in advance of the requested turn-off.
- (ii) The **property owner** shall be liable for the full amount of the water rates and rents chargeable for the services up to the time the service is turned off.
- (iii) The **property owner** shall pay the charges set out in Section 2 of Schedule "F" hereto for each turn on or turn off.

(b) **Non-Emergency Service Call Outside Regular Working Hours**

- (i) A **property owner** requesting non-emergency service calls to turn water off or on outside regular working hours shall pay the charge set out in Section 3 of Schedule "F" hereto.

(c) **Emergency Service Calls**

- (i) A **customer** requesting an **emergency service call** to turn water off or on must pay the turn off and turn on charges specified in Section 2 of Schedule "F" hereto.

(d) **Loaning of Curb Stop Turn-Off Key**

- (i) A **property owner** wishing to turn off the water supply to a property, where the turn off does not relate to an **emergency service call**, may borrow a **curb stop** turn-off key from the **City** for a period of one week by completing a key sign-out form.
- (ii) A **property owner** who fails to return a borrowed **curb stop** turn-off key within one week must pay \$200 within 60 days of a request for payment by the City, failing which the \$200 fee will be added to the property taxes for the property.
- (iii) A **property owner** may not borrow a **curb stop** turn-off key in the case of an **emergency service call**.

12. **Pressure, Supply and Quality**

The **City** does not guarantee pressure nor continuous supply of water, nor does it accept responsibility at any time for the maintenance of pressure on its line nor for increases or decreases in pressure. The **City** reserves the right at any and all times, without notice, to change operating water service for the purposes of making repairs, extensions, alterations or improvements or for any other reason, and to increase or reduce pressure at any time. Neither the **City**, its officers, employees or agents shall incur any liability of any kind whatever by reason of the cessation in whole or in part of water pressure or water supply, or changes in operating pressures, or by reason of the water containing sediments, deposits or other foreign matter.

13. **Rates and Rents**

- (a) Except where otherwise provided in this bylaw, every property owner must pay the applicable rates and rents for water service as specified in Schedules A through G of this bylaw.
- (b) Every owner of property which does not have metered water service will be invoiced annually and must pay the rates specified in Schedule A on or before March 31st each calendar year.
- (c) Every owner of a property which has metered water service:
 - (i) must pay for water consumption at the rates specified in Schedule B or C, as applicable, and pay the **water meter** rental rates specified in Schedule B or C, as applicable;
 - (ii) will be invoiced for water service every three months; and
 - (iii) must pay invoices for water service on or before the twenty-fifth (25th) day of the month following the month in which the invoice was issued.
- (d) Every owner of a **one-family dwelling** or **two-family dwelling** which has a **water meter** installed:
 - (i) pursuant to section 14(b) or section 22A of this bylaw; or
 - (ii) as a consequence of a **City** infrastructure renewal program,

will receive a credit to be applied to future water charges equal to the difference between the metered charges for the first 12 months of consumption subsequent to the initial meter reading for billing purposes and the amount that would have been payable on a flat rate basis, provided:

- (iii) the metered charges exceed the flat rate by more than \$10;
 - (iv) the **property owner** submits a request for the credit to the **City** in writing within 15 months of the initial metered billing start date; and
 - (v) there has been no change in ownership of the property.
- (e) All invoices for water service which are paid in full prior to the invoice due date will be discounted by 10%.

14. **Right to Substitute a Meter Service**

- (a) The **General Manager, Engineering & Public Works** shall have the right at any time to substitute a meter service in lieu of an ordinary service to any premises.
- (b) Commencing January 1, 2014, the **General Manager, Engineering & Public Works** shall establish a schedule for substituting a meter service in lieu of an ordinary service for all existing **one-family dwellings** in the **City** that do not have meter service, and the **City** will supply and install **water meters** at these **one-family dwellings** at no charge to the **property owner**.
- (c) For **water meters** installed pursuant to section 14(a) or (b), meter rates will be payable from the time such meter is installed notwithstanding that the **customer** may have paid in advance a flat rate for the current year which has not expired, but a rebate of part of such advance payment proportionate to the unexpired part of the current year shall be credited and allowed to the **customer's** meter rate account for such meter service.

15. **Applications Voided**

- (a) No person shall request a hook-up after a period of one year after the date of an application for a water connection.
- (b) The **General Manager, Engineering & Public Works** may, upon receipt of a written request, extend the deadline in Subsection (a) of this Section.

16. **Service Pipes Shut Off for Five Years Deemed to be Discontinued**

Where a service pipe remains shut off for a period of five years, the service pipe shall be deemed to be discontinued.

17. **Schedules**

Schedules A, B, C, D, E, F, G and H attached hereto are hereby incorporated with and form part of this Bylaw.

PART III - RESPONSIBILITIES OF THE CUSTOMER

18. Works to be Supervised

No person shall do any work connected with the water service, including the laying of new services and the repair of old services, upon or under any street, lane or Statutory Right-of-Way without the consent and supervision of the appropriate officers and employees of the **City**.

19. Installation and Maintenance Criteria

- (a) All persons shall install all underground pipes not less than 450 mm (18 inches) below the surface of the ground, and all other pipes where so fitted as to be exposed to frost shall be properly protected.
- (b) It shall be the duty of every customer to provide and install a stop and waste cock on each separate branch of his private service pipe.
- (c) Every customer shall install only pipes, taps, fittings, fire hydrants, and other things connected with his private service pipe that are good and sufficient.

20. Services to Drinking Troughs

Any customer having installed a drinking trough shall supply and maintain in good working order on such drinking trough:

- (i) a stop and waste cock placed in such a position as to thoroughly drain the pipe and an automatic float valve to prevent the waste of water; and,
- (ii) an approved backflow prevention device ahead of the float valve.

20A. Services to Ornamental Fountains

Where any customer has installed an ornamental water fountain, the **property owner** must have a **water meter** installed, if one does not exist, for the purpose of determining the quantity of water delivered to such fountain, and pay the **water meter** installation fee set-out in Schedule "D".

21. Services to Water-Operated Machinery

- (a) It shall be unlawful for any customer to use any service as motive power for the purpose of operating machinery or domestic apparatus without having the written consent of the **General Manager, Engineering & Public Works**.
- (b) The **General Manager, Engineering & Public Works** may withdraw his consent at any time.

22. Services to be Metered

- (a) No person shall obtain water from a watermain by means other than a metered connection for the purpose of serving any commercial or industrial establishment or farm, provided however, that nothing in this Section shall apply to the fighting of fires.

- (b) Where a person is required by this bylaw to install a **water meter**, such person must:
 - (i) use a **water meter** supplied by the **City**;
 - (ii) pay, prior to installation, the applicable connection charge specified in section 1 of Schedule D; and
 - (iii) following installation, pay for water consumption at the rates specified in Schedule B or C, as applicable and pay the **water meter** rental charge specified in Schedule B or C, as applicable.

22A. **Voluntary Water Metering**

- (a) Where an owner of an existing **one-family dwelling** requests to have a **water meter** installed and connected to the **City** water service, the **City** will supply and install the **water meter** at no charge.
- (b) Where one owner of an existing **two-family dwelling** requests to have a **water meter** installed and connected to the **City** water service, and the existing **two-family dwelling** has a shared water service, the **City** will supply and install one **water meter** at no charge, provided the plumbing to each dwelling unit is separated. The **City** will reimburse only the owner making the initial request up to an amount of \$3,000.00 (as determined by the **City** in its sole discretion) of the cost of the owner making the necessary plumbing alterations to allow for individual metering of one of the **two-family dwellings**. The owner of the **two-family dwelling** not having individual metering shall be charged a flat rate until such time as that owner requests to have a **water meter** installed and connected to the **City** water service. At that time the **City** will supply and install the **water meter** at no charge.

22B. **Toilet Rebate**

- (a) A **property owner** of a **dwelling unit** may apply to the City for a rebate when replacing an older, high flow toilet with a new 4.8 litre or less or 4.1 litre/6 litre dual flush toilet provided that all of the following criteria are satisfied:
 - (i) the **dwelling unit** was constructed prior to October 3, 2011;
 - (ii) the toilet must be a replacement for a higher volume per flush toilet;
 - (iii) the replacement toilet is approved by the Canadian Standards Association (CSA), the Canadian Uniform Plumbing Code (CUPC), the Warnock Hersey (WH) Mark or WaterSense; and
 - (iv) the application for a rebate is made within 90 days of the purchase of the replacement toilet.
- (b) The **City** will rebate the **property owner** the amount shown in Section 9 of Schedule "F" hereto for each replacement toilet up to a maximum of two replacement toilets per property, provided that the **City** is satisfied that the rebate application meets the criteria set-out in subsection 22B(a).

23. Services to be Protected from Frost

- (a) All customers shall keep their private service pipes, stop cocks, fire hydrants, and other fixtures on their own premises in good order and repair and protected from frost and injury at their own expense.
- (b) Every person shall turn off the stop and waste cock on the inside of the property line and leave a tap opened for a vent when a house is vacated.

24. Inspection of Premises

Every customer under this Bylaw shall at all reasonable times allow, suffer and permit the **General Manager, Engineering & Public Works** or any person authorized by him for such purpose, (either generally or in any particular instance), to enter into and upon the premises in respect of which such water is supplied for the purpose of inspecting the same, and the water pipes, connections, fixtures, taps, meters, fire hydrants, and any other apparatus used in connection with such water supply.

25. No Deduction for Waste

Every customer having a meter service shall pay for the full amount of water as registered by each meter, according to the rates applicable to the service, and no deduction shall be allowed on account of any waste of water.

25A. Leaks

Notwithstanding section 25, in the case of a leak in the **customer's waterworks**, if:

- (a) the **General Manager, Engineering & Public Works** is satisfied that the **customer** did not know or could not reasonably have known about the leak; and
- (b) the **customer** repairs the leak to the satisfaction of the **General Manager, Engineering & Public Works** within 14 days of the **customer's** discovery of the leak,

the **City** will charge the **customer** in accordance with section 25B below for both the billing period in which the leak was discovered and the previous billing period.

25B. Leak Calculation

- (a) When a **customer** qualifies under section 25A above, the **City** will determine the average amount of water recorded by the **water meter** per billing period for the **customer's** property over the last twelve months, or if that information is unavailable, by using the average for all users with the same type of property (as categorized in Schedule B or C, as applicable) over the past 12 months (the "**average amount**").
- (b) If the amount recorded by the **water meter** for the billing period in which the leak was discovered is greater than the **average amount**, or if the amount recorded by the **water meter** for the previous billing period is greater than the **average**

amount, the **customer** will pay, for both the billing period in which the leak was discovered and the previous billing period, the regular rate per cubic metre (in Schedule B or C, as applicable) for all amounts recorded up to the **average amount**.

- (c) Where the **General Manager, Engineering & Public Works** is satisfied that a **customer** was not notified of a leak until more than 30 days after the **City** became aware of the leak, the **customer** will pay the regular rate per cubic metre (in Schedule B or C, as applicable) for the period from the most recent billing until notification was provided, based on the **average amount** for that period.

26. Testing and Verification of Water Meters

- (a) The **General Manager, Engineering and Public Works** will, upon written request and the payment of the fee as set out in section 4 of Schedule "F" hereto by a **customer**, test a **water meter** for accuracy.
- (b) The **General Manager, Engineering and Public Works** shall refund to the **customer** the fee along with any over-charge relating to the period one (1) year prior to the **water meter** test under subsection 26(a) if the test indicates an over-charge in excess of 2%. In no other circumstance will the fee be refunded to the **customer**.
- (c) A **customer** shall pay to the City any under-charges for the one (1) year period prior to the **water meter** test under subsection 26(a) if the test indicates an under-charge in excess of 2%.
- (d) Where a **customer** requests verification that a **water meter** at a property is functioning properly, the **City** will conduct an on-site inspection of the **water meter** after the **customer** has paid, in advance, the fee outlined in Section 10 of Schedule "F" hereto. This fee will be refunded to the **customer** if the **City** determines that the **water meter** fails to register or properly indicate the flow of water. In no other circumstance will the fee be refunded to the **customer**.

27. Non-Registering Meters

If a meter fails to register or to properly indicate the flow of water, the **General Manager, Engineering & Public Works** shall estimate the consumption and render a bill based on the average previous consumption adjusted to take into account seasonal variations, changes in occupancy, or other factors which, in the opinion of the **General Manager, Engineering & Public Works**, may affect the consumption of water.

28. Abatement of Noises and Pressure Surges

- (a) No person shall connect or allow to remain connected, or operate an apparatus, fitting, or fixture which will cause noises, pressure surges or other disturbances which may, in the opinion of the **General Manager, Engineering & Public Works**, result in annoyance to other customers, damage to their water system or damage to the **City's** water system.
- (b) The **General Manager, Engineering & Public Works** may, if any such condition exists, give notice to the customer to correct the fault within 96 hours or such lesser period as may be specified in the notice.

- (c) The **General Manager, Engineering & Public Works** may, if the customer fails to comply with such notice within the time specified:
 - (i) Have the service shut off until the fault has been corrected, or
 - (ii) Take such other action, either on or off the customer's property as he deems appropriate to correct the fault or to reduce the possibility or severity of annoyance or damage, or
 - (iii) Have the work done, and any cost incurred may be recovered as a charge under this Bylaw.

29. **Prevention of Contamination**

- (a) No customer or person shall connect, cause to be connected, or allow to remain connected, any piping, fixture, fitting, container or appliance in a manner which, under any circumstances, may allow water, waste water, or any harmful liquid or substance to enter the **City's** water system.
- (b) All metered water service connections must be equipped with a **backflow preventer**. Notwithstanding the foregoing, in the case of an existing **one-family dwelling** or **two-family dwelling**, the **General Manager, Engineering & Public Works** may, if satisfied that existing plumbing infrastructure for such dwelling may not permit the installation of a **backflow preventer** or that adequate provision is made to prevent backflow into the **City's** water system, permit the water service connection without a **backflow preventer**.
- (c) Every owner of a property with a metered water service connection must ensure that the plumbing on the property complies with the **Plumbing Code** and is equipped to mitigate **thermal expansion** and **water hammer**.
- (d) If a condition is found to exist which, in the opinion of the **General Manager, Engineering & Public Works** is contrary to the provisions of Subsection (a), the **General Manager, Engineering & Public Works** may either:
 - (i) shut off the service or services, or
 - (ii) give notice to the customer to correct the fault within 96 hours, or a specified lesser period, and if the customer fails to comply with such notice, the **General Manager, Engineering & Public Works** shall proceed in accordance with Subsection (i) of this Section. Without prejudicing the aforesaid, the **General Manager, Engineering & Public Works** may allow cross-connection control devices to be installed on the service pipe on **City** property. The device and installation is to be approved by the **General Manager, Engineering & Public Works** and applicable charges paid by the **property owner**.

The water service pipe shall not be turned on at the curb stop for occupancy use until the private plumbing system has been approved by the **City** Plumbing Inspector and has been inspected for cross-connections.

This shall not prohibit the use of a water service for construction purposes for a limited time, provided the **General Manager, Engineering & Public Works** is satisfied that adequate provision is made to prevent backflow into the **City's**

water system. No new water service for any building, irrigation system, sprinkling system, will be given to a customer unless the **General Manager, Engineering & Public Works** is satisfied that cross-connections do not exist, or unless a permit is obtained at the Permits and Licences Department for the installation of an approved cross-connection control device. The said device installation must then be inspected and approved by the Plumbing Inspector.

Where a cross connection control device is required the said device shall be approved by the **General Manager, Engineering & Public Works**. The approval shall be based on the devices conforming to American Water Works Association C506-78 and Canadian Standards Association B64-1976 or latest revisions thereof, and the successful completion of an **General Manager, Engineering & Public Works** approved one year field evaluation program. All Cross-connection control devices are the responsibility of the customer, who must ensure that the devices are in proper working order. These devices are to be tested by a Certified Tester of Cross-Connection Control Devices, and the test results, including repairs performed, submitted to the **City** at regular intervals as directed by the **City**.

30. **Interconnected Service Pipes**

- (a) The **General Manager, Engineering & Public Works** may require that the water piping within premises served by two or more service pipes for similar uses shall be interconnected.
- (b) The customer shall, if the premises are supplied by two or more services and these services are interconnected within the premises, install and maintain check valves of a type approved by the **General Manager, Engineering & Public Works** on all private service pipes in such locations so as to prevent backflow from any private service into the **City's** water system.

31. **Provision for Special Requirements**

Customers depending on a continuous and uninterrupted supply of water or having processes or equipment that require particularly clear or pure water may provide such emergency storage, over-size piping, pumps, tanks, filters, pressure regulators, check valves, additional service pipes, or other means for a continuous and adequate supply of water suitable to their requirements, in accordance with any requirements of a Plumbing Permit issued by the City under its Building Regulation Bylaw.

PART IV - OPERATION AND INSPECTION

32. **Supervision by City**

- (a) No work shall be done by the **City** upon the premises of any customer.
- (b) The **City** shall have the right, by its employees and officers, to supervise all work to be done by the customer in connection with water services; provided, however, that the **City** shall not be liable for the manner in which any work is done privately on such premises.

32A. Repair of Water Meters

- (a) Subject to clause (b), the **City** will undertake all necessary repairs on all **water meters** connected to the **City** water service at no cost to the property owner.
- (b) Where a **water meter** is damaged as a result of an act or omission of the owner or occupant of the property, the **City** will repair the **water meter**, but the cost of repair or replacement must be paid by the owner of the property and if unpaid on or before December 31st in the year in which the charges are incurred, will form part of the water bill payable on such property.

33. Turn-off for Illegal Operations

- (a) the **General Manager, Engineering & Public Works** shall turn-off service to any parcel of real property being in contravention of any law, Bylaw or regulations of:
 - (i) Canada,
 - (ii) The Province of British Columbia, and
 - (iii) the **City** of Richmond,

regarding safety, health and the use of land, buildings and structures; provided, however, that no such service shall be turned off until two (2) weeks after the mailing of a notice of the impending turn-off to every person who appears in the Land Title Office records as registered owner in fee-simple of, or as owner of a registered charge on the real property and such notice, if not given or served personally, shall be sent by registered mail to such person or persons, or by a method of delivery that provides proof of delivery, to the person's actual or last known address.

- (b) Should any person continue to occupy real property after water has been turned off pursuant to Section (a) of this Section, and should any unsanitary condition arise as a result thereof, the person so occupying the real property shall be deemed solely responsible for the creation of such unsanitary condition.

34. Sprinkling Restrictions

- (a) The **General Manager, Engineering & Public Works** may from time to time impose restrictions on sprinkling or change or revoke such restrictions, and in so doing may make the restrictions applicable at specified times or on specified days and may differentiate between classes of customers or areas of the **City** of Richmond.
- (b) The **General Manager, Engineering & Public Works** shall cause to be published notice of such restrictions in a newspaper having a circulation in the **City** of Richmond.

35. Inspection of Water Pipes and Taps

- (a) The **General Manager, Engineering & Public Works** or any other person appointed by the Council may make personal inspection of all pipes and taps used for distributing water in any building or premises to check for leaks or defects in such tap or pipes.

- (b) It shall be unlawful for any person to make any alterations, additions, extensions or new branches to the existing water service on any premises without first making application to the **City** and obtaining a permit therefor.
- (c) It shall be unlawful for any person to cover up any alteration, addition, extensions or new branches to the existing water service on any premises until same has been inspected by the **General Manager, Engineering & Public Works**.

36. **Operation of City Waterworks Fittings**

No person, except the duly authorized agent of the **City**, shall:

- (i) in any way interfere with any hydrant, valve, stop cock, pipe or other waterworks appliances outside of his own premises; nor,
- (ii) interfere in any way with any meter or pipe leading to such meter, whether inside or outside of his premises; nor
- (iii) make any addition or alteration to the water service in the street or road; nor,
- (iv) make any connection with the water mains.

37. **Use and Location of City Fire Hydrants**

- (a) The **General Manager, Engineering & Public Works** may, upon written application, permit the use of a fire hydrant as a temporary source of water. The unauthorized use of a City fire hydrant is prohibited.
- (b) The **General Manager, Engineering & Public Works** may, in his discretion, require a water meter to be attached to any fire hydrant being used as a temporary source of water.
- (c) An applicant who is required to have a water meter shall pay a \$340.00 refundable deposit for the water meter, and further, shall pay the greater of the rates, set out in Schedule B or C, as applicable to this Bylaw or \$195.00, provided, however, no meter rental rate will be charged.
- (d) An applicant who is not required to have a water meter shall pay a fee of \$195.00 for the first day of use or part thereof and a further fee of \$62.00 for each additional day of use or part thereof.
- (e) Owners will not locate driveways within one metre of any fire hydrant.
- (f) The **General Manager, Engineering & Public Works** may, upon agreement to pay all costs, move the hydrant to a location requested by the owner.

37.1 **Use of Private Fire Hydrants**

- (a) The **General Manager, Engineering & Public Works** may, upon written application, accompanied by the written permission of the owner of the hydrant, permit the use of a private fire hydrant as a temporary source of water. The unauthorized use of a private fire hydrant is prohibited.

- (b) The **General Manager, Engineering & Public Works** may, at his discretion, require a water meter to be attached to any fire hydrant being used as a temporary source of water.
- (c) An applicant who is required to have a water meter shall pay a \$360.00 refundable deposit for the water meter, and further, shall pay the greater of the rates, set out in Schedule B or C as applicable to this Bylaw or \$210.00, provided however, no meter rental rate will be charged.
- (d) An applicant who is not required to have a water meter shall pay a fee of \$100.00 for the first day of use or part thereof and a further a fee of \$65.00 for each additional day or use, or part thereof.
- (e) Owners of a private fire hydrant shall arrange for and ensure servicing of the fire hydrant after use.

38. **Quotes for Non-Standard Installations**

- a) In the circumstances specified in section 2(b) of this bylaw, the **City** will provide to the **property owner** a quote on the basis of approved final design drawings.
 - b) The **property owner** will make an advance payment equal to the total quoted construction cost, prior to commencement of the construction.
 - c) If a design change is required during construction, it will be considered as scope change or extra work. The **property owner** will be responsible for the cost of the extra work, in addition to the amount quoted in accordance with section 38(a) of this bylaw.
39. Each provision of this Bylaw is severable from each other provision, and if any provision is determined to be void or unenforceable in whole or in part, such determination shall not be deemed to affect or impair the validity of any other provision, unless a Court otherwise determines.
40. Any person who violates any of the provisions of this Bylaw shall be guilty of an offence punishable as provided in the Offence Act.
41. Bylaw No. 5507 and amendments thereto, being a Bylaw for the Regulation of the Waterworks and Water Supply and Rates, is hereby repealed.
42. This Bylaw is effective and in force and binding on all persons as from the 1st day of January, 1991.
43. This Bylaw may be cited for all purposes as "**The City of Richmond Waterworks and Water Rates Bylaw No. 5637**".

SCHEDULE "A" to BYLAW NO. 5637**BYLAW YEAR - 2015****FLAT RATES FOR
RESIDENTIAL, AGRICULTURAL, AND INSTITUTIONAL PROPERTIES**

A.	Residential Dwellings per unit	
	Single-family and two-family dwellings with 20 mm ($\frac{3}{4}$ ") water service	\$661.30
	For dwellings with 25mm (1") water service or greater, see Metered Rates – Schedule B or C, as applicable	
	Townhouse	\$541.34
	Apartment	\$348.83
B.	Stable or Barn per unit	\$133.25
C.	Field Supply – each trough or water receptacle or tap	\$83.30
D.	Public Schools for each pupil based on registration January 1 st	\$7.89

SCHEDULE "B" TO BYLAW NO. 5637

BYLAW YEAR 2015

**METERED RATES FOR
INDUSTRIAL, COMMERCIAL, INSTITUTIONAL, MULTI-FAMILY,
STRATA-TITLED AND FARM PROPERTIES**

1. RATES

All consumption per cubic metre:	\$1.2454
Minimum charge in any 3 month period (not applicable to Farms)	\$114.00

2. RATES FOR EACH METER

Rent per **water meter** for each 3-month period:

Meter Size	Base Rate
16 mm to 25 mm (inclusive)	\$15
32 mm to 50 mm (inclusive)	\$30
75 mm	\$110
100 mm	\$150
150 mm	\$300
200 mm and larger	\$500

SCHEDULE "C" TO BYLAW NO. 5637

BYLAW YEAR 2015

**METERED RATES FOR
SINGLE-FAMILY AND TWO-FAMILY DWELLINGS**

1. RATES

All consumption per cubic metre: \$1.2454

2. RATES FOR EACH METER

Rent per **water meter** for each 3-month period:

<u>Meter Size</u>	<u>Base Rate</u>
16 mm to 25 mm (inclusive)	\$12
32 mm to 50 mm (inclusive)	\$14
75 mm	\$110
100 mm	\$150
150 mm	\$300
200 mm and larger	\$500

SCHEDULE “D” to BYLAW 5637

1. WATER CONNECTION CHARGE

Single-Family, Multi-Family, Industrial, Commercial Water Connection Size	Connection Charge	
	Tie In Charge	Price Per Metre of Service Pipe
25mm (1”) diameter	\$2,550	\$175.00
40mm (1 ½”) diameter	\$3,500	\$175.00
50mm (2”) diameter	\$3,650	\$175.00
100mm (4”) diameter	\$6,900	\$350.00
150mm (6”) diameter or larger	in accordance with Section 38	in accordance with Section 38

2. DESIGN PLAN PREPARED BY CITY

Design plan prepared by City for one-family dwelling or two-family dwelling \$1,000 each

Design plan for all other buildings \$2,000

3. WATER METER INSTALLATION FEE

Install water meter [s. 3A(a)] \$1,000 each

SCHEDULE “E” to BYLAW 5637

BYLAW YEAR - 2015

**CONSTRUCTION PERIOD WATER CONSUMPTION RATES –
RESIDENTIAL**

MONTH (2015)	SINGLE-FAMILY DWELLINGS & EACH UNIT IN A DUPLEX DWELLING (rate per unit)	START BILL YEAR	MULTI-FAMILY LESS THAN 4 STOREYS (rate per unit)	START BILL YEAR	MULTI-FAMILY 4 STOREYS OR MORE (rate per unit)	START BILL YEAR
January	\$661	2016	\$541	2016	\$715	2017
February	\$606	2016	\$1,065	2017	\$686	2017
March	\$551	2016	\$1,020	2017	\$657	2017
April	\$496	2016	\$974	2017	\$628	2017
May	\$441	2016	\$929	2017	\$599	2017
June	\$386	2016	\$884	2017	\$570	2017
July	\$331	2016	\$839	2017	\$541	2017
August	\$967	2017	\$794	2017	\$896	2018
September	\$909	2017	\$749	2017	\$867	2018
October	\$851	2017	\$704	2017	\$838	2018
November	\$794	2017	\$659	2017	\$809	2018
December	\$736	2017	\$614	2017	\$780	2018

**CONSTRUCTION PERIOD WATER CONSUMPTION RATES –
COMMERCIAL AND INDUSTRIAL**

Water Connection Size	Consumption Charge
20mm (3/4”) diameter	\$135
25mm (1”) diameter	\$270
40mm (1 ½”) diameter	\$675
50mm (2”) diameter	\$1,690

SCHEDULE "F" to BYLAW 5637

BYLAW YEAR - 2015**MISCELLANEOUS CHARGES**

1.	For an inaccessible meter as set out in Section 7	\$165 per quarter
2.	For each turn on or turn off	\$95
3.	For each non-emergency service call outside regular hours	Actual Cost
4.	Fee for testing a water meter	\$355
5.	Water Service Disconnections:	
	(a) when the service pipe is temporarily disconnected at the property line for later use as service to a new building	\$165
	(b) when the service pipe is not needed for a future development and must be permanently disconnected at the watermain, up to and including 50mm	\$1,100
	(c) if the service pipe is larger than 50mm	Actual Cost
6.	Trouble Shooting on Private Property	Actual Cost
7.	Fire flow tests of a watermain:	
	First test	\$250
	Subsequent test	\$150
8.	Locate or repair of curb stop service box or meter box	Actual Cost
9.	Toilet rebate per replacement	\$100
10.	Fee for water meter verification request	\$50

SCHEDULE "G" to BYLAW 5637

BYLAW YEAR - 2015**RATES FOR VANCOUVER INTERNATIONAL AIRPORT AUTHORITY (YVR)**

Applicable rate is \$0.7345 per cubic meter of water consumed, plus the following amounts:

- YVR's share of future water infrastructure capital replacement calculated at \$0.3372 per m³
- 50% of the actual cost of operations and maintenance activities on water infrastructure shared by the **City** and YVR, as shown outlined in red on the plan attached as Schedule H
- 100% of the actual cost of operations and maintenance activities on water infrastructure serving only YVR, as shown outlined in red on the plan attached as Schedule H
- 100% of the actual cost of operations and maintenance activities on a section of 1064 m water main, as shown outlined in green on the plan attached as Schedule H from the date of completion of the Canada Line public transportation line for a period of 5 years. After the 5 year period has expired, costs for this section will be equally shared between the **City** and YVR
- 76 m³ of water per annum at rate of \$0.7345 per cubic meter for water used annually for testing and flushing of the tank cooling system at Storage Tank Farm TF2 (in lieu of metering the 200 mm diameter water connection to this facility)

(Note: water infrastructure includes water mains, pressure reducing valve stations, valves, hydrants, sponge vaults and appurtenances)

SCHEDULE H to BYLAW NO. 5637

