# BYLAW C-7259-2013 OF ROCKY VIEW COUNTY FIRE HYDRANT WATER SUPPRESSION BYLAW

A Bylaw of Rocky View County, to provide for the regulation of fire suppression water supply, Private Hydrants and Private Water Systems.

**WHEREAS** the *Municipal Government Act*, R.S.A. 2000 Chapter M-26, as amended, provides that a municipal Council may pass bylaws respecting the safety, health and welfare of people and the protection of people and property;

**AND WHEREAS** the *Safety Codes Act*, R.S.A. 2000 Chapter S-1, as amended, provides that an accredited municipality may make bylaws respecting the carrying out of its powers and duties as an accredited municipality;

**AND WHEREAS** the Rocky View County Fire Services utilizes privately owned, operated and maintained Fire Hydrants and water supply systems in the course of providing fire fighting services within the County;

AND WHEREAS the Council for Rocky View County deems it expedient to establish common standards to apply to all Fire Hydrants and water systems within the County that provide water for firefighting services in order to ensure that the Rocky View County Fire Service has adequate access to Fire Hydrants and water supply systems in the course of providing fire fighting services within the County;

**NOW THEREFORE** the Council of Rocky View County, in the Province of Alberta, duly assembled enacts the following:

### 1.0 Title

1.1 This Bylaw may be cited as the "Fire Hydrant Water Suppression Bylaw".

#### 2.0 **DEFINITIONS**

- 2.1 In this Bylaw, the following terms are defined as:
  - (a) "Cistern" means an artificial reservoir or underground tank for storing water;
  - (b) "Council" means the Council of Rocky View County;
  - (c) "County" means Rocky View County and all lands within its jurisdiction:
  - (d) "County Hydrant" means a Fire Hydrant that is owned, operated and maintained by the County;
  - (e) "County Main" means pipe and appurtenances owned and operated by the County that supplies water to a Fire Hydrant or is used to deliver water for fire fighting purposes;
  - (f) "Development" has the same definition as provided in the Municipal Government Act;
  - (g) "Drafting Hydrant" means an arrangement of pipe permanently connected to a water source other than a piped pressurized water supply system that provides a ready means of water

- supply for firefighting purposes and that utilizes the drafting (suction) capability of a fire department pump (engine, tender) as approved by the General Manager and Fire Chief;
- (h) "**Drafting Hydrant Port Turnout**" means a turnout constructed 2 metre off the edge of road pavement;
- (i) "Final Approval" means the approval issued by the County under Part 4 of this Bylaw confirming that the installation of the Fire Hydrant or Private Water System is satisfactory to the County;
- (j) "Fire Chief" means the County's Fire Chief or his/her designate;
- (k) "Fire Flow" means the volume, pressure and flow rate of water required for fire fighting purposes;
- (l) "Fire Hydrant" means any appliance for drawing water directly from a water main or other water source and which is used principally for fire fighting purposes and includes County Hydrants, Drafting Hydrants, Pressurized Hydrants and Private Hydrants;
- (m) "Fire Service" means the County's Fire Service Section;
- (n) "General Manager" means the County's General Manager of Infrastructure and Operations or his/her designate;
- (o) "Land Owner" means the Person who is the registered owner of lands upon which a Private Hydrant or Private Water System is installed;
- (p) "Municipal Government Act" means the Municipal Government Act, R.S.A. 2000 Chapter M-26, as amended;
- (q) "NFPA" means National Fire Protection Association;
- (r) "Owner" means the Person who owns, operates and maintains the Private Hydrant or Private Water System as provided for in this Bylaw including but not limited to a Land Owner or System Owner;
- (s) "Peace Officer" means any person employed by the County as a Bylaw Enforcement Officer and includes a Community Peace Officer or any other Person authorized by the County to enforce the provisions of this Bylaw including but not limited to members of the RCMP or other police organizations;
- (t) "Person" means any individual, firm, corporation, cooperative, organization or partnership;
- (u) "Pressurized Hydrant" is a Fire Hydrant that draws water from a pressurized water supply system;
- (v) "Private Hydrant" means a Fire Hydrant that is owned, operated and maintained by a Person other than the County;
- (w) "Private Water System" means a water supply system including pipe, storage facilities, and all related works and appurtenances that is owned, operated and maintained by a Person other than the County and that supplies water to a Fire Hydrant or is used to deliver water for fire fighting purposes;
- (x) "Qualified Inspector" means a professional engineer with a tester's licence; a professional engineer who practices with an engineering firm which holds a tester's licence; a certified engineering technologist with a tester's licence or who is practicing with an engineering firm that holds a tester's licence, if under the direction of a professional engineer; a licensed master plumber with contractor and tester's licence; a journeyman plumber with a tester's licence if employed by a licenced plumbing contractor; or an apprentice plumber with a tester's licence if employed by a licenced plumbing contractor and under the direct supervision of a journeyman plumber;
- (y) "System Owner" means that Person who owns and operates a public utility service within the County that provides water for public consumption, benefit, convenience or use; and
- (z) "Violation Ticket" means a ticket issued pursuant to Part II of the *Provincial Offences Procedure Act*, R.S.A. 2000, c. P-34, as amended.

#### 3.0 SCOPE

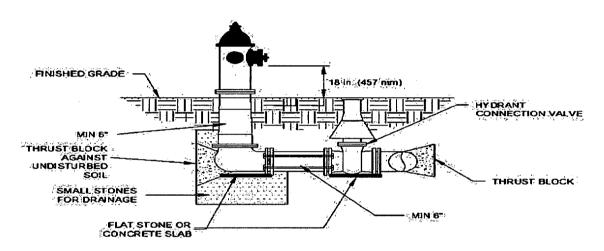
3.1 This Bylaw applies to the installation of all new Private Hydrants and Private Water Systems and the maintenance and operation of all existing and new Private Hydrants and Private Water Systems located within the County.

#### 4.0 INSTALLATION OF NEW PRIVATE HYDRANTS AND PRIVATE WATER SYSTEMS

- 4.1 At the time of Development of lands, the Land Owner is responsible to ensure that the appropriate number of Fire Hydrants as well as the Private Water System with the necessary level of Fire Flow are installed on the lands in accordance with the requirements of the current *Alberta Fire Code*, *Alberta Building Code*, the County's Servicing Standards *National Fire Code* and *National Building Code*, the County's Land Use Bylaw and this Bylaw, all as such exist at the time that Development commences on the lands.
- 4.2 Owners shall ensure that the installation, location, orientation and Fire Flow rates of all Private Hydrants and Private Water Systems are approved by the General Manager with due regard to access and proximity to buildings and other site structures. All Private Hydrant or Private Water System installations which are contrary to the General Manager's approved location, orientation and Fire Flow rates shall be corrected by the Owner within thirty (30) days of receiving written notice from the General Manager with all costs for correction to be paid by the Owner. Non complying hydrants must be identified as "Out of Service" until corrected and the Fire Chief notified.
- 4.3 Plan and specifications for the Private Hydrant or a Private Water System, bearing the stamp and seal of a professional engineer licenced to practice in the Province of Alberta, shall be provided to the General Manager for approval prior to the installation of a new Private Hydrant or Private Water System.
- 4.4 The plans and specifications referenced under Paragraph 4.3 shall be drawn to scale and shall include all necessary details including:
  - a) Size and location of all water supplies;
  - b) Size and location of all water storage Cisterns, tanks, lagoons and related works;
  - c) Size and location of all piping, including the class, type and depth of existing pipe, the class and type of new pipe to be installed and the depth to which it is to be buried;
  - d) Size, type and location of valves, indicating if located in a pit or if operation is by post indicator valve or key wrench through a curb box and indicating the size, type and location of metres, regulators and check valves;
  - e) Size and location of Fire Hydrants, showing size and number of outlets and if outlets are to be equipped with independent gate valves, indicating if hose houses are to be provided and by whom;
  - f) Location of Fire Service connections including details of connections; and
  - g) Any other information deemed necessary by the County.
- 4.5 All installation work of Private Hydrants and Private Water Systems is to be performed by properly certified persons in accordance with good engineering practices and standards.
- 4.6 All piping, fittings and other materials used in the installation of Private Water Systems and their appurtenances shall be listed for fire protection service and comply with approved standards set by the current edition of the *Alberta Building Code*, *Alberta Fire Code*, *National Fire Code* and

*National Building Code* or other relevant Federal or Provincial legislation at the time of construction of the Private Water System.

- 4.7 Connections larger than 50 millimetres to County Mains shall be controlled by post indicator valves of a standard type and located not less than 12.2 metres from the buildings being protected. Post indicator valves shall be set so that the top of the post will be one metre above the final grade and shall be protected against mechanical damage where needed. Where it is impractical to provide a post indicator valve, valves may be placed in pits. Valve pits shall meet the requirements of the County and the location of the valve shall be clearly marked and the cover of the pit shall be kept free of obstructions.
- 4.8 Private Water Systems shall have sectional controlling valves at appropriate points in accordance with good engineering practices and standards in order to permit sectionalizing of the Private Water System in the event of a break or for repair and maintenance work.



- 4.9 Main valves shall be of the same size as the main and shall be located such that no more than thirty (30) single family lots and one Fire Hydrant are involved in a shut down and a maximum of four (4) main valves are required to shut down any section of the main. The design standard for main valves shall be two (2) valves at a tee and three (3) valves at a cross, unless approved otherwise by the Consulting Engineer. A valve and minimum one (1) length of pipe shall be installed at interim limits of construction. An isolation valve is required on the water main between adjacent Fire Hydrants.
- 4.10 Fire Hydrants shall have not less than a 150 mm connection with the water mains. A valve shall be installed in the Fire Hydrant connection.
- 4.11 Fire Hydrants shall be McAvity M67 and shall include 3 ports with the following specifications:
  - a) One 152 mm (6") pumper connection. National Hydrant Thread (Type NA);
  - b) Two 57 mm (2-1/2") hose connections. Alberta Mutual Aid Thread (Type AMA); and
  - c) Operating nuts shall be 1 1/4" (32mm) square opening in a counter-clockwise direction.

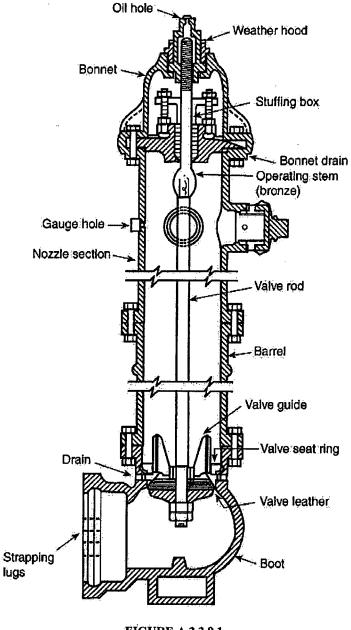
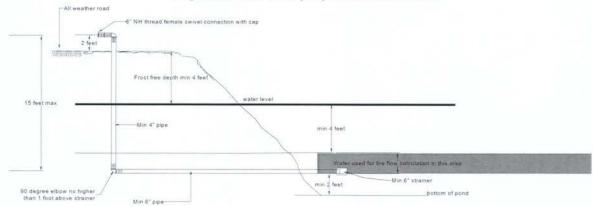


FIGURE A.3.3.9.1
Dry Barrel Hydrant.

4.12 Drafting Hydrants must be equipped with a 6" National Hydrant Thread female swivel connection which would allow a Fire Service truck or pump to be hooked directly into it. The steamer connection must be located adjacent to a municipal road allowance within a Drafting Hydrant Port Turnout.

# Exploded View of Dry Hydrant Construction



- 4.13 All Fire Hydrants shall be clearly identified with a reference number assigned by the County and shall be painted bright red with white blank caps.
- 4.14 The required Fire Flow for each Fire Hydrant shall be determined by the Fire Chief in conjunction with the requirements of the current edition of the *Alberta Building Code*, *Alberta Fire Code*, *National Building Code*, *National Fire Code* or other relevant Federal or Provincial legislation at the time of installation of the Fire Hydrant.
- 4.15 Where any Private Hydrant is attached directly to a County Main, ownership of that Fire Hydrant shall be transferred to the County following the issuance of Final Approval by the General Manager for the Fire Hydrant.
- 4.16 Where an additional Fire Hydrant is required by the Alberta Building Code, Alberta Fire Code, National Fire Code or National Building Code to meet distance limits between an existing County Hydrant and Fire Service connections on a building, it is the Land Owner's responsibility to install the Fire Hydrant.
- 4.17 Where the County determines, in its sole discretion, that Fire Hydrant coverage for certain lands is inadequate, the County shall install any additional Fire Hydrants deemed necessary by the County at the owner's expense.
- 4.18 All Fire Hydrants shall be self-draining.
- 4.19 Fire Hydrants should be placed at street intersections where possible to improve their visibility to emergency vehicles, particularly at cul-de-sac entrances. Where Fire Hydrants are installed within a commercial/industrial area within 2 metres of an approach, the Fire Hydrant shall be protected from damage by bollards. For Fire Hydrants installed in rural areas with rural road cross sections they shall be installed in turnouts 2 metres off the edge of road pavement and be protected from damage by bollards. The bollards must not obstruct access to the Fire Hydrant ports.
- 4.20 Fire Hydrants on private property shall be protected against damage by vehicular traffic. Steel posts of at least 150 millimetres in diameter filled with concrete shall be placed into the ground not less than one metre from the sides of the Fire Hydrant. The protective posts must not obstruct access to the Fire Hydrant ports. All protective posts shall be painted bright yellow.

- 4.21 No pipe smaller than 150 millimetres or 6" shall be installed for use as a distribution main or water trunk main in a Private Water System.
- 4.22 Private Water Systems shall be installed at a depth which will provide a minimum cover of 2.75 metres over all underground mains and works.
- 4.23 Underground mains and lead-in connections to system risers shall be flushed thoroughly before connection is made to sprinkler, standpipe or other fire protection system piping to remove any foreign materials which may have entered the piping during installation. The minimum rates of flow shall not be less than the water demand rate of the fire protection system or not less than is necessary to provide a velocity of 3 metres per second, whichever is greater.

#### 5.0 FINAL APPROVAL

- No new Private Hydrant or Private Water System shall be put into use prior to having Final Approval issued by the County.
- 5.2 Prior to requesting Final Approval from the General Manager, the Owner shall provide the General Manager with a standard Contractor's Manual and Test Certificate, signed by the Owner, and party who performed the installation together with the Fire Hydrant Fire Flow test performed on the Fire Hydrant.
- 5.3 Upon completion of the installation work and prior to the issuance of the Final Approval, a professional engineer licenced to practice in the Province of Alberta shall submit to the County a statement under his/her professional seal certifying that the professional engineer has provided adequate periodic inspection services during the course of the installation and that the professional engineer is satisfied that the installation work has been completed in a good and workmanlike manner in accordance with the County approved plans and specifications, in accordance with the Engineering Standards, and in accordance with accepted engineering and construction practices.
- 5.4 Underground piping, valves and other fittings shall not be buried until approval to do so have been given by the County after having performed the inspection pursuant to Paragraph 5.5.
- 5.5 Upon receiving a request for Final Approval from the Owner, the County shall conduct an inspection of the Private Hydrants or Private Water System and shall either issue a Final Approval for the installation of the Private Hydrant or Private Water System or shall issue a list of deficiencies to the Owner which must be rectified prior to Final Approval being issued by the County.

# 6.0 RATING AND TESTING

- 6.1 Prior to receiving Final Approval, all Private Water Systems shall be rated at not less than 1400 kilopascals or 200 psi pressure for 2 hours or at 350 kilopascals or 50 psi in excess of the maximum static pressure where the pressure is in excess of 1000 kilopascals or 142 psi.
- Prior to receiving Final Approval, all Private Hydrants shall be fully opened and closed under system water pressure. Where fire pumps are available, this shall be done with the pumps running. All control valves shall be fully opened and closed under water system pressure to ensure proper operation. All outlet caps shall be opened and closed to ensure ease of operation.

6.3 Periodic Fire Flow tests or inspections of Private Water Systems or Private Hydrants may be carried out under the direction of the General Manager or Fire Chief when the General Manager or Fire Chief deems it necessary in accordance with Paragraphs 9.1 and 9.2.

# 7.0 OWNER RESPONSIBILITIES FOR PRIVATE HYDRANTS AND PRIVATE WATER SYSTEMS

- 7.1 Subject to Paragraph 7.2, all Private Hydrants and Private Water Systems are the responsibility of the Owner of the lands upon which the Private Hydrants and Private Water Systems are situated.
- 7.2 Notwithstanding Paragraph 7.1, where the System Owner owns and operates the Private Hydrants and Private Water Systems, the System Owner is responsible for the Private Hydrants and Private Water Systems.
- 7.3 The Owner is responsible to ensure that the Private Hydrants and Private Water Systems are installed, inspected, maintained and records kept in conformance with the current requirements of the:
  - a) Alberta Fire Code;
  - b) Alberta Building Code;
  - c) National Fire Code;
  - d) National Building Code;
  - e) NFPA 24-Installation of Private Fire Service Mains and their Appurtenances;
  - f) NFPA 25-Inspection, Testing and Maintenance of Water-Based Fire Protection Systems; and
  - g) Any other applicable Federal, Provincial and municipal legislation in force from time to time.
- 7.4 Private Hydrants and Private Water Systems must comply with the minimum pressure, flows, duration and volume requirements set out in Schedule "A" to this Bylaw.
- 7.5 The Owner is responsible to retain a Qualified Inspector to prepare an annual inspection report for each Private Hydrant and Private Water System. This annual inspection report shall be prepared at the Owner's expense and shall be submitted annually to the General Manager and the Fire Chief. The inspection report shall confirm:
  - a) Proper function of the Private Hydrant and Private Water System;
  - b) All maintenance, repairs and upgrades performed on the Private Hydrant and Private Water System;
  - c) Fire Flow rate; and
  - d) Any other information required by the General Manager or the Fire Chief.
- 7.6 The initial inspection report for each Private Hydrant and Private Water System installed prior to May 29, 2012 shall be submitted by the Owner to the General Manager and the Fire Chief no later than December 31, 2012. For new Private Hydrants or Private Water Systems installed after May 29, 2012, the first inspection report shall be submitted by the Owner within 30 days after the Private Hydrant or Private Water Systems is put into service.
- 7.7 The General Manager and the Fire Chief shall review the submitted annual inspection report and if there are any deficiencies noted, the General Manager shall issue a written notice to the Owner

- setting out any remedial action that may be required. The Owner must correct any deficiencies within thirty (30) days of receiving the written notice at the expense of the Owner.
- 7.8 Every Owner shall ensure that written records of tests and corrective measures are kept for two (2) years after the work is completed and the records shall be made available to the County upon written request from the General Manager or the Fire Chief.
- 7.9 Before undertaking any inspections, testing repairs or alterations to any Fire Hydrant which requires the temporary shut-down of the Fire Hydrant, the Owner must give not less than ten (10) days prior written notice to the Fire Chief of the temporary shut-down and work to be undertaken in relation to the Fire Hydrant including the following information:
  - a) The duration of the temporary shut-down of the Fire Hydrant including the start and finish date and time;
  - b) The location and reference number of the Fire Hydrants subject to the temporary shut-down and work;
  - c) Details of the repair, alteration, testing or inspection work to be undertaken; and
  - d) Any alternative fire protection measures to be made available for the Fire Service during the temporary shut-down of the Fire Hydrant.
- 7.10 The Owner is responsible to notify the Fire Chief in writing immediately whenever the Owner becomes aware that any Private Hydrant is defective, inoperative or otherwise not in compliance with this Bylaw and the Owner is unwilling or unable to correct the defect or bring the Fire Hydrant back into operation in accordance with this Bylaw.
- 7.11 All Owners with Non-Compliant hydrants must either bring the Non-Compliant Hydrant into compliance with this Bylaw or comply with Paragraph 7.12 of this Bylaw within 30 days of written notification that the hydrant is Non-Compliant.
- 7.12 Owners must ensure that all Non-Compliant Hydrants are painted black with white caps and have a clearly visible hydrant disk located on the steamer port connection facing the public road that is not less than 30 cm wide and 20 cm in height, having a white background, with block letters not less than 3 cm in height and red in colour advising that this hydrant is "OUT of SERVICE" and therefore not available/suitable for fire suppression.

#### 8.0 IN-LIEU OF MEASURES

- 8.1 In-lieu of the provision of Fire Hydrants, the Owner may, with the prior written approval of the General Manager and Fire Chief provide alternative fire suppression water supply for the Development as follows:
  - a) Install a Cistern with Drafting Hydrant(s) of the size specified by the General Manager and Fire Chief; and/or
  - b) Provide fire suppression water provision through the use of a pond as determined and approved by the General Manager and Fire Chief; and/or
  - c) Install, maintain and inspect an engineered sprinkler system for the Development, all of which shall meet or exceed the requirements the current edition of applicable Federal, Provincial and Municipal legislation and codes including but not limited to the Alberta Fire Code, Alberta Building Code, NFPA standards, and codes of practice for the highest level of hazard or structure within the Development area.

- 8.2 All wet and evaporation ponds 750 m<sup>3</sup> or greater at normal water level in single family residential Developments must be equipped with a Drafting Hydrant with a 6" National Hydrant Thread female swivel connection which would allow a fire truck or pump to be hooked directly into it.
- 8.3 All wet and evaporation ponds 1500 m³ or greater at normal water level in commercial, industrial, institutional, or multi-family residential Developments must be equipped with a Drafting Hydrant with a 6" National Hydrant Thread female swivel connection which would allow a fire truck or pump to be hooked directly into it.
- 8.4 All Drafting Hydrant Ports must be located adjacent to a County road allowance within a Drafting Hydrant Port Turnout.

## 9.0 INSPECTIONS AND ENFORCEMENT ORDERS

- 9.1 The General Manager and Fire Chief are designated officers for the purpose of this Bylaw. Each of the General Manager, the Fire Chief, and a Peace Officer acting on the direction of the General Manager or the Fire Chief, have the authority to enter upon any land, building or other structure for the purpose of performing the necessary inspections or testing of any Fire Hydrant or Private Water System or to take any other necessary measure or action to ensure compliance with this Bylaw in accordance with Section 542 of the *Municipal Government Act*.
- 9.2 No Person shall charge the County any costs or fees relating to access to any land, building or other structure or the use of water for the purpose of conducting testing and inspections pursuant to Paragraph 9.1.
- 9.3 Where the General Manager or Fire Chief is aware of a violation of this Bylaw, in addition to any other penalties and remedies available at law, statute or under this Bylaw, he/she may issue an Enforcement Order in accordance with Section 545 of the *Municipal Government Act* to the Owner and/or any other Person(s) responsible for the violation. The Enforcement Order may:
  - a) Direct the Person to stop doing something or change the way in which the Person is doing it;
  - b) Direct the Person to take any action or measures necessary to remedy the contravention of the Bylaw;
  - c) State a time in which the Person must comply with the directions; and
  - d) State that if the Person does not comply with the directions within a specified time, the County will take the action or measure at the expense of the Person.
- 9.4 Where a Person does not comply with the Enforcement Order, the County may take whatever action or measures are necessary to remedy the contravention of the Bylaw or prevent a reoccurrence of the contravention in accordance with Section 549 of the *Municipal Government Act*.
- 9.5 Any Person who receives an Enforcement Order may, by written notice, request Council or any appeal committee appointed by Council having jurisdiction with respect to reviewing Enforcement Orders issued pursuant to this Bylaw, review the Enforcement Order by delivering the written notice to the County within 14 days after receipt of the Enforcement Order.
- 9.6 After reviewing the Enforcement Order, Council or any appointed appeal committee may confirm, vary, substitute or cancel the Enforcement Order.

## 10.0 GENERAL

- 10.1 No Person shall hinder or obstruct any Person lawfully carrying out enforcement, testing or inspections under this Bylaw.
- 10.2 No Person shall connect, cause to be connected, or allow to remain connected, any piping, fixture, fitting, container or appliance to a Fire Hydrant which, under any circumstances, may allow water, wastewater or any liquid or substance of any kind to enter into a County or Private Water System.
- 10.3 No Person shall in any way interfere with any Fire Hydrant, valve or appurtenance.
- 10.4 No Person shall draw water from a Fire Hydrant except for fire fighting purposes or for County approved maintenance or operations without first obtaining written approval from the General Manager.
- No Person shall obstruct the free access to any Fire Hydrant by placing on it or close to it building materials, earth, snow, rubbish or other obstructive matter nor shall any Person cause or permit to be caused a Fire Hydrant to be concealed from view by any type of building, shrubbery or other object.
- 10.6 No Person shall park an automobile, truck or vehicle of any description within a distance of three (3) meters of any Fire Hydrant, measured along the curb line or along the shoulder of the roadway immediately adjacent to the Fire Hydrant.
- 10.7 All Fire Hydrants and Fire Hydrant ports must be accessible to the Fire Service and Fire Service equipment at all times.
- 10.8 In the event of a conflict between the provisions of this Bylaw and the provisions of any applicable Provincial or Federal legislation including but not limited to the *Alberta Fire Code*, *Alberta Building Code*, *National Fire Code* and *National Building Code*, the provisions of the Provincial or Federal legislation shall take precedence.

# 11.0 OFFENCE

- 11.1 Any Person who contravenes any provision of this Bylaw is guilty of an offence and if no other penalty is provided:
  - a. Is liable upon prosecution of a fine of not less than \$500.00 and not more than \$10,000.00 and in the case of a continuing offence, to a further fine of not more than \$1,000.00 for each day or part of a day during which the offence continues after the first day or part of a day; or
  - b. To imprisonment for a term not exceeding 6 months; or
  - c. To both fines and imprisonment.
- Any Person who is convicted of a second or subsequent offence is liable to a fine of not less than \$1,000 and not more than \$10,000 and, in the case of a continuing offence, to a further fine of not more than \$2,000 for each day or part of a day during which the offence continues after the first day, or to imprisonment not exceeding 12 months, or to both fines and imprisonment.

# 12.0 <u>VIOLATION TICKETS</u>

- 12.1 A Peace Officer is hereby authorized and empowered to issue Violation Tickets to any Person who the Peace Officer has reasonable and probable grounds to believe has contravened a provision of this Bylaw;
- 12.2 A Violation Ticket issued with respect to a contravention of this Bylaw shall be served upon the Person responsible for the contravention in accordance with the *Provincial Offences Procedure*\*Act, R.S.A. 2000, c. P-34, as amended or repealed and replaced from time to time;
- 12.3 The Person to whom the Violation Ticket has been issued may plead guilty by making a voluntary payment in respect of the Summons by delivering to the Provincial Court, on or before the initial appearance date, the Violation Ticket together with an amount equal to the specified penalty for the offence.
- When a Clerk of the Provincial Court records the receipt of a voluntary payment pursuant to Section 12.3 and the *Provincial Offences Procedure Act*, R.S.A. 2000, c. P-34, as amended or repealed and replaced from time to time, the act of recording constitutes acceptance of the guilty plea and also constitutes a conviction and the imposition of a fine in the amount of the specified penalty.

#### 13.0 INTERPRETATION

Wherever the provisions of the Fire Hydrant Bylaw is or are deemed to be, at variance with each other, the more restrictive of the two provisions shall apply.

# 14.0 **SEVERABILITY**

Should any section or part of this Bylaw be found to have been improperly enacted for any reason or is determined to conflict with any Provincial or Federal legislation by a Court having jurisdiction, then such section or part shall be regarded as being severable from the rest of the Bylaw and the Bylaw remaining after such severance shall be effective and enforceable as if the section found to be improperly enacted had not been enacted as part of this Bylaw.

#### 15.0. STRICT LIABILITY OFFENCE

15.1 It is the intention of Council that all Offences created by this bylaw be interpreted to be strict liability offences.

# 16.0 REPEAL

Bylaw C-7152-2012 and C7244-2012 are repealed on the date that this Bylaw comes into force and effect.

#### 17.0 EFFECTIVE DATE

17.1 This Bylaw comes into full force and effect upon third and final reading.

First reading passed in open Council, assembled in the City of Calgary, in the Province of Alberta this 23<sup>rd</sup> day of April, 2013 on a motion by Councillor Solberg.

Second reading passed in open Council, assembled in the City of Calgary, in the Province of Alberta this 23<sup>rd</sup> day of April, 2013 on a motion by Councillor Bahcheli.

Permission for third and final reading passed in open Council, assembled in the City of Calgary, in the Province of Alberta this 23<sup>rd</sup> day of April, 2013 on a motion by Councillor Sacuta.

Third and final reading passed in open Council, assembled in the City of Calgary, in the Province of Alberta this 23<sup>rd</sup> day of April, 2013 on a motion by Councillor Solberg.

REEVE OR DEPUTY REEVE

# SCHEDULE "A"

# Minimum Pressure Requirements for Private Hydrants and Private Water Systems

 Private Hydrants and Private Water Systems for all Developments must maintain a minimum static pressure reading of not less than 22 psi and must maintain the following pressure requirements:

> Maximum Daily Demand + Fire Flow 150 kPa (22 psi) Minimum Residual Pressure under Peak Hour Demand 300 kPa (44 psi)

- For predominately industrial Development areas, the minimum residual pressure under peak hour demand requirements for the Private Hydrants and Private Water Systems may be higher, as determined by the Fire Chief.
- For systems providing delivery pressures above 550 kPa (80 psi), the Owner is required to provide pressure reducing valves to buildings.
- 4. The Owner will be required to provide on-site booster pumps/storage and/or other requirements to meet the current requirements of applicable Federal, Provincial and Municipal legislation and codes including but not limited to the *Alberta Fire Code*, *Alberta Building Code* and the NFPA, if the Private Water System cannot provide adequate pressure flow.
- Minor pressure losses through valves and fittings in the Private Water System must be accounted for.
- Minimum flows, duration and volume requirements for Private Hydrants and Private Water Systems for all Developments are as follows:

Minimum Flows, Duration and Volume Requirements

Type	Flow	Duration	Volume
Single Family Residential* >100 ft separation	60 l/s + MDD*** (3600l/m +MDD)	1.5 hours	320 m <sup>3</sup> + MDD
Single Family Residential Between 11 ft and 100 ft separation	100 l/s + MDD (6,000l/m + MDD)	2.0 hours	720 m <sup>3</sup> + MDD
Multi – Family Residential <10 ft separation	166 l/s + MDD (10,000l/m + MDD)	2.0 hours	1200 m <sup>3</sup> + MDD
High Density Residential (Apartments)	250 l/s + MDD (15,000l/m + MDD)	3.5 hours	3200 m <sup>3</sup> + MDD
Commercial Industrial**	166l/s-250l/s + MDD (10,000l/m-15,000l/m + MDD)	2.0 to 3.5 hours	1200-3200 m <sup>3</sup> + MDD

<sup>\*</sup>If the Developer proposes a Fire Hydrant system for the Development or if a Fire Hydrant system is required by Council or the approving authority for the Development. Country Residential is considered any lot that is 2 acres or greater and has a nominal building separation greater than 100 ft.

- \*\*Range in fire flows depending on scale of project i.e. "light" industrial commercial versus "regular" industrial commercial.
- \*\*\*The water supply required shall be capable of being delivered at a rate of not less than 45 l/s for a building required to have a quantity less than 75,000 L and at a rate of not less than 60 l/s for a building requiring a quantity of 75,000 L and greater.