

Re:	Fire Protection and Life Safety Bylaw Update		
From:	John McGowan Fire Chief, Richmond Fire-Rescue	File:	99-Fire Rescue/2015- Vol 01
То:	Community Safety Committee	Date:	February 25, 2015

#### **Staff Recommendation**

- 1. That Fire Protection and Life Safety Bylaw No. 8306, Amendment Bylaw No. 9221, be introduced and given first, second, and third readings.
- 2. That Consolidated Fees Bylaw No. 8636, Amendment Bylaw No. 9222, be introduced and given first, second, and third readings.

John McGowan Fire Chief (604 303-2734)

REPORT CONCURRENCE				
ROUTED TO:	CONCURRENCE	CONCURRENCE OF GENERAL MANAGER		
Law		Y MAXIM		
REVIEWED BY STAFF REPORT / AGENDA REVIEW SUBCOMMITTEE	INITIALS:	APPROVED BK CAO		

#### Staff Report

#### Origin

This report supports Council's Term Goal #1 Community Safety:

To ensure Richmond remains a safe and desirable community to live, work and play in, through the delivery of effective public safety services that are targeted to the City's specific needs and priorities.

The City's Fire-Rescue's *Fire-Rescue Plan 2012-2015* identified the review of fire related regulations and enforcement mechanisms associated with those regulations as a short term objectives. This report provides proposed changes to the Fire Protection and Life Safety Bylaw No. 8306 ("Fire Bylaw") to enhance and streamline the City and Richmond Fire-Rescue's (RFR) cost recovery process with Vacant/Abandoned Properties.

#### Background

At the Community Safety Joint Operations Team (JOT) monthly meetings, the subject of Vacant/Abandoned Properties is a standing item. To reduce the Vacant/Abandoned Properties issues and impacts to the community, a multi-faceted approach was used to develop a comprehensive inventory of Vacant/Abandoned Properties. This inventory is updated and reviewed on a regular basis by staff from the RCMP, RFR and Community Bylaws in order to identify problematic properties and to develop a coordinated and cost-effective approach.

In the fall of 2013 Community Bylaw Officers began frequent patrols to identify Vacant/Abandoned properties and proactively identify outstanding problems. Richmond RCMP provides daily updates on issues occurring at abandoned home sites, which are acted upon through City departments. RFR conducts frequent and regular inspections to ensure the property owners secure their properties.

Name	Definition
Demo - Occupied	Home has evidence of being occupied.
Monitoring	
Demo - Vacant	Demo permit on file home is evidently not occupied, for sale sign on
Monitoring	property, no furniture, still has electricity and water service.
Vacant Unsightly	Do not have demo permits attached, however home is evidently not occupied, for sale sign on property, no furniture, still has electricity and water service.
Abandoned Buildings - Unsightly	RFR Standard for vacant premises includes a lot, building or other structure in respect of which a water or electricity service has been intentionally discontinued, other than for temporary maintenance,
	repair or upgrading, so that the condition of the premises is not suitable
	for human habitation or other occupancy that is normally permitted.

The inventory is maintained by Community Bylaws and identifies the properties in the following categories:

In September 2014, City Council adopted updates to the Fire Protection and Life Safety Bylaw No. 8306.

- 3 -

The changes in the Fire Bylaw regarding vacant premise securing procedures were enhanced. Part of that enhancement included communication to the property owners and contractors of requirements that could be measureable, regarding securing the property. These requirements have been communicated to the Small Builders Group and to contractors at the building permit stage and properties facing demolition. Failure to meet these requirements could result in the homes being secured by the City with a charge back to the owner as described in the Fire Bylaw:

- 9.7.2 The owner of vacant premises must promptly act to ensure that, at all times:
  - (b) all openings in the **premises** are securely closed and fastened in a manner acceptable to the **Fire Chief** so as to prevent fires and the entry of unauthorized persons.

In September 2014, RFR implemented the International Association of Arson Investigators (IAAI) and United States Fire Administration (USFA) Abandoned Building Project – USFA National Arson Prevention Initiative Boarding-up Procedures (Attachment # 1). Building security is essential to the prevention of unauthorized entry into Vacant/Abandoned buildings. Properly securing Vacant/Abandoned buildings is a key to the prevention of crime, fire and deterioration due to exposure to the elements.

When RFR crews are dispatched to any incident the RFR response sheet (rip-n-run) and Mobile Data terminal provide the following information:

- any identified Vacant/Abandoned property within a 100 meter radius of the incident; and
- a description of the hazards associated for fire crews to be aware of.

Since September 2014, RFR has written several Orders to Comply and initiated the City Works Yard to secure the properties to the RFR Vacant Premises Securing Procedures (Attachment #1), resulting in a charge back to the owner of all associated costs. RFR has also initiated a contract with a local private contractor to perform the securing procedures when required.

The City is working with community agencies to support their development of an interim housing program to utilize houses slated for demolition or redevelopment as temporary housing options in Richmond.

Year:	RFR Fire	RFR Medical	RFR Fire Safety Inspection	RFR "Order to Comply" issued	City of Richmond Bylaws	RCMP
2013	29	42	139	2	269	59
2014	17	37	378	13	461	55
2015	1	0	26	1	8	8

Responses to Vacant/Abandoned Properties:

In order to address issues associated with Vacant/Abandoned Properties, changes are proposed for the Fire Bylaw and Consolidated Fees Bylaw No. 8636 (see Amendment Bylaws 9221 and 9222). The amendments would:

- a) expand the definition of "vacant premises" to include both properties that have had its water or electricity service intentionally discontinued and those that are not suitable for occupancy due to Fire Code, Building Code, or health or safety violations;
- b) permit fire inspectors as well as the Fire Chief to inspect, issue orders and to take action in respect to vacant premises;
- c) mean that, when an incident occurs on a vacant premises, the property owner will be liable to pay for costs incurred by the City for:
  - response to any fire, fire hazard, or other incident at the premises;
  - additional City personnel, consumables and damage to City equipment resulting from a response to any fire, fire hazard, or other incident at the premises; and
  - demolition, clean-up, abatement, removal, disposal, and safe transport of a building or structure on the premises; and
- d) reduce the appeal period for orders related to securing vacant premises to 24 hours, since RFR proceeds to secure a vacant premises if the property owner does not comply with such an order within 24 hours.

The presented bylaw amendments, procedures and changes relating to cost recovery and enforcement bring consistency to the delivery of effective public safety services and the degree of seriousness of the Fire Bylaw.

#### **Financial Impact**

None

#### Conclusion

RFR will continue to work with the JOT to ensure a multi-faceted approach is used to reduce the risk of Vacant/Abandoned Properties within the community. RFR will ensure all partner agencies are kept current with securing of the properties. The application of fees and cost recovery for bylaw contraventions will be applied to all of the properties that have been identified as Vacant/Abandoned for all RFR responses and inspections.

Kevin Gray Deputy Chief (604 303-2700)

KG:kg Att. 1: Vacant Premises Securing Procedures (*REDMS* #4385001)



# **Richmond Fire Rescue**

Vacant Premises Securing Procedures

#### There are potential fire and life safety issues associated with vacant properties which pose risks to members of the community and city staff.

In the City of Richmond, it is the responsibility of the property owner to secure and maintain the security of their vacant premises, until demolition is achieved.

The property owner(s) or their agent(s) who have vacant properties are responsible for:

- securing and maintaining the condition of their property (structures and land)
- reducing the risk of fire and other life safety matters
- inspecting regularly and taking corrective measures

The hazards and risks associated with vacant premises are mitigated through the enforcement of maintaining and securing vacant premises under the powers of the Fire Protection and Life Safety Bylaw No. 8306 as defined below:

#### 9.7 Vacant Premises

- 9.7.1 For the purpose of this Section, vacant premises includes a lot, building or other structure in respect of which a water or electricity service has been intentionally discontinued, other than for temporary maintenance, repair or upgrading, so that the condition of the premises is not suitable for human habitation or other occupancy that is normally permitted.
- 9.7.2 The owner of vacant premises must promptly act to ensure that, at all times:
  - (a) the premises are free from litter and debris or accumulations of combustible or flammable materials except where storage of combustible or flammable materials is in strict accordance with the Fire Code and this Bylaw; and
  - (b) all openings in the premises are securely closed and fastened in a manner acceptable to the Fire Chief so as to prevent fires and the entry of unauthorized persons.

- 9.7.3 Where an owner fails to securely close a vacant building as required by Subsection 9.7.2 (b), the Fire Chief may, by notice in writing, order the owner to secure the building or other part of the vacant premises against unauthorized entry in a manner set out in the notice.
- 9.7.4 If an owner of vacant premises fails to bring the premises into compliance with this Bylaw within twenty-four (24) hours of receiving a notice under Subsection 9.7.3, or if the Fire Chief or member is unable to contact the owner within twenty-four (24) hours of finding vacant premises in an unsecured state, the Fire Chief may cause the premises to be secured by City employees or agents, who may board up or otherwise secure doors, windows and other points of entry into the premises in order to prevent fires and unauthorized entry, at the cost and expense of the owner.

#### **Materials List and Specifications**

#### Security Measures

- All openings in the basement, first floor doors and windows, and any point of entry accessible from a porch, fire escape or other potential climbing point shall be barricaded with plywood, 2 x 4 braces, carriage bolt sets, and nails. Particle board, wafer board, Masonite, or other similar material shall not be used for purposes of boarding-up a building.
- Openings that are at least 10' from ground level which are not accessible from a porch, fire escape, roof, or other climbing point can be secured with nails in each brace, and every 12" center to center (c/c) around the perimeter. For all openings, the plywood should be fitted so that it rests snugly against the exterior frame, butting up to the siding on wood frame buildings and up to the brick molding edge on brick buildings. It may be necessary to remove the staff bead so this fit can be flush and tight.
- All secured exterior openings (windows and doors) will be painted flat black in color
- The structure shall be posted with a NO TRESPASSING sign at the completion of the board-up. The posting will be displayed as Fire Protection and Life Safety Bylaw 8306 7.10 Street Addresses



Richmond Fire-Rescue 604-278-5131 www.richmond.ca/fire



**RCMP** 604-278-1212



**Community Bylaws** 604-204-8631

www.**GS**nm**55**nd.ca

#### Table 7.10

Distance measured from public street curb to building	Size Height (mm)	Stroke Width (mm)
Up to 15m	75 .	18.0
>15m to 20m	100	25.0
>20M to 25m	150	32.0
>25m to 35m	200	38.0
>35m to 40m	250	42.0
>40m	300	50.0

#### Materials

- 1/2" CDX Plywood, exterior grade (4 ply)
- 2 x 4 construction grade lumber
- 3/8-16 x 12" carriage bolts (rounded head on weather side)
- 3/8-16 construction grade nuts
- 1/2" (USS Standard) Flat washers with an inside diameter large enough to bypass the wrench neck inside the carriage bolt head so no lift edge is available beneath an installed carriage bolt head.
- 3/8" (USS Standard) diameter flat washers for installation beneath the nut inside the building

#### As required:

1 5/8" (6D) galvanized or stainless steel ring-shank nails or comparable deck nails.

#12 x 3" deck/wood screws

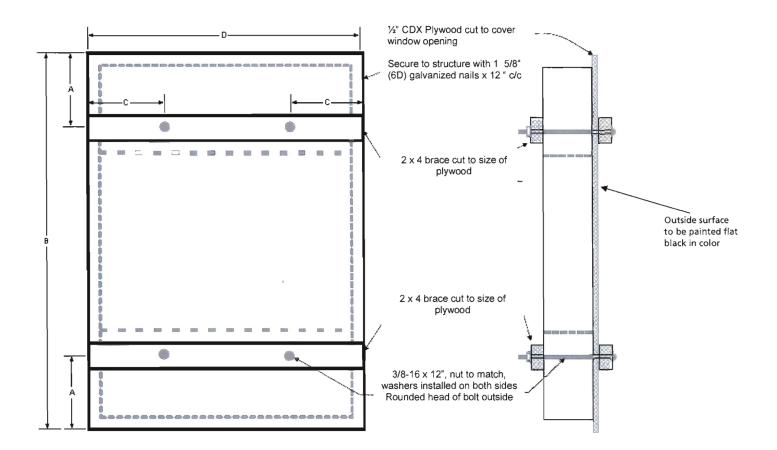
#### **Barrier Assembly**

- Applying barriers is accomplished with an inside and outside carpenter with appropriate tools and supplies. The inside carpenter will need a light. Exit is made over a ladder when the last window is boarded.
- Plywood shall be cut to fit over the window and door openings, flush with outside of the molding/trimmer stud. Application of barriers shall be completed so that all lift or pry points are avoided.
- The 2 x 4 braces shall be cut to fit the horizontal dimension of the plywood. (x2) exterior and (x2) interior 2 x 4 braces shall be provided for each window and (x3) sets for each door.
- Window Assembly Braces are located horizontally approximately 1/3 of the distance from the top and the bottom of the window. Bolt holes are located 1/3 of the length of the brace from the outside edge of the window jams. Prior to installation, the assembly should be pre-assembled and 3/8" holes drilled through all of the components.

- Door Assembly Door braces will be placed horizontally; one in the center of the doorway and one 1/2 the distance from the center to the top and one 1/2 distance from the center to the bottom of the doorway. Bolt holes are located 1/3 of the length of the brace from the outside edge of the door frame. Prior to installation, the assembly should be pre-assembled and 3/8" holes drilled through all of the components.
- Plywood used to cover exterior openings shall be nailed every 12" c/c along the perimeter to the window or door frame.
- The 2 x 4 braces on the interior and exterior of the assemblies shall be secured using 3/8-16 x 12" carriage bolt assemblies. Bolts shall be inserted through the pre-drilled holes from the exterior with a 1/2" washer place against the exterior brace, a 3/8" washer is placed against the interior brace. The bolt is tightened from the inside so that it slightly compresses the interior brace.
- The exterior surfaces of barriers shall be painted or stained flat black to minimize the appearance.

Should the through-bolt compression method be impossible due to the size or condition of the opening, the opening shall be covered with plywood and secured with a minimum of  $#12 \times 3''$  deck/wood screws installed on 4'' c/c around the circumference of the opening.

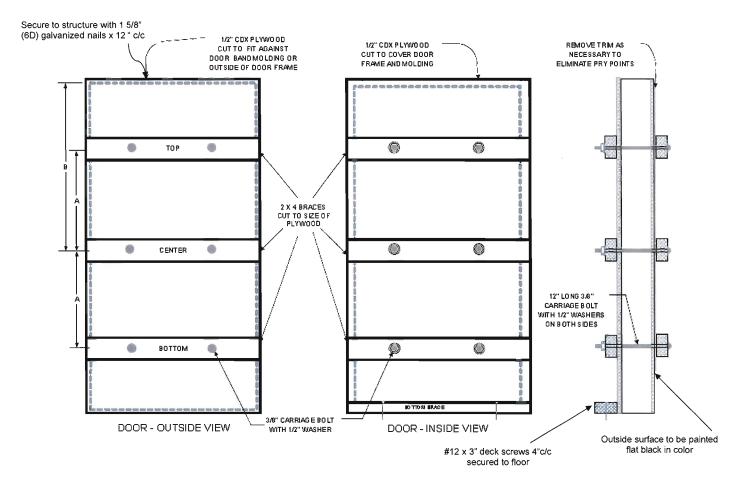
For buildings that require access by authorized personnel, a single door that is visible from the street may be secured using a solid core wood or steel door. There shall be no windows or other openings in this door. The door shall be securely locked using a padlock and hasp assembly that is bolted through the door. The lock loop portion of the hasp is attached to the door frame using a minimum of #12 x 3" deck/wood screws.



#### **WINDOW – Outside View**

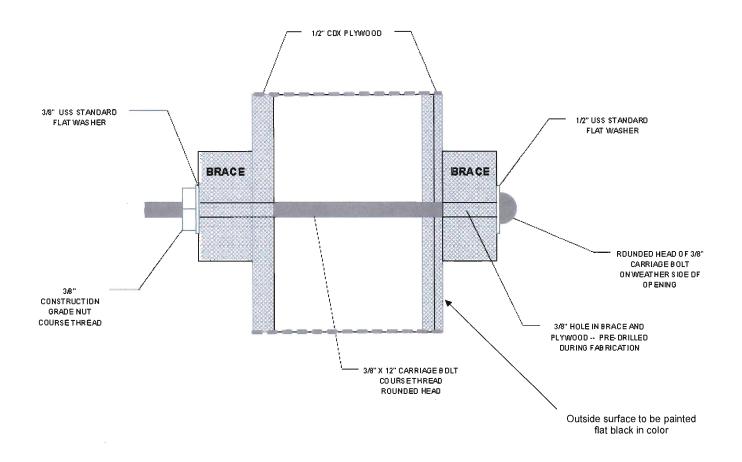
#### NOTES:

- 1. For double hung windows, slide sash to center of unit and pass bolts through the openings at top and bottom
- 2. Storm windows should be removed and stored inside premises.
- 3. Outside trim may have to be removed to accommodate a flush tight fit.
- 4. Tighten nuts from inside enough to slightly compress 2 x 4 brace.
- 5. Brace locations: A = 1/3 B (See dimension locations on drawing)
- 6. Location of bolt holes: C = 1/3D (See dimension locations on drawing)



#### NOTES:

- Door is removed and stored inside of building.
- Use 3/8-16 x 12" Carriage bolts rounded head on outside of building
- Tighten nuts from inside enough to slightly compress 2 x 4 brace.
- If plywood cannot be butted against band molding, cut to cover outside edge of door frame.
- Bolt holes are located as they are for windows detail (see window detail)
- Center brace located in center of doorway opening. Top and bottom braces are positioned where A = 1/2B (see dimension locations on drawing)



#### NOTES:

- Use 3/8-16 X 12" carriage bolts rounded head on outside of building
- Tighten nuts from inside enough to slightly compress washer into 2 x 4 brace.
- Use 1/2" Washer on weather side to accommodate the wrench neck of bolt and eliminate pry points.

# MATERIALS LIST

#### WINDOW ASSEMBLY

Materials required per window

- (x1) 1/2" CDX Plywood cut to dimensions of window frame (weather side) Number of windows to be secured (NW):
- (x4) 2 x 4 braces cut to width of plywood Number of window braces required: (NW X 4)
- (x4) Carriage Bolt assemblies Carriage bolt assemblies required (BW): (NW X 4)

#### As required:

1 5/8" (6D) galvanized or stainless steel ring-shank nails or comparable deck nails.

#12 x 3" deck/wood screws

#### **DOOR ASSEMBLIES**

Materials required per door

- (x1) 1/2" CDX Plywood sheet cut to dimensions of door frame (weather side) number of doors to be secured (ND):
- 1/2" CDX Plywood sheet cut to outside dimensions of door frame (inside)
- (x1) 2 x 4 braces (x3) cut to width of outside plywood,
  (x3) cut to width of inside plywood number of door required: (No. x 6)
- 2 x 4 bottom brace cut to width of door trim number of bottom braces required: (No.)
- (x6) Carriage bolt assemblies carriage bolt assemblies required (BD): (No x 6)

#### As required:

1 5/8" (6D) galvanized or stainless steel ring-shank nails or comparable deck nails.

#12 x 3" deck/wood screws

#### **CARRIAGE BOLT ASSEMBLY**

(x1) 3/8-16 x 12" Carriage bolt

- (x1) 1/2" USS Standard flat washer (weather side)
- (x1) 3/8" USS Standard flat washer (inside)

(x1) 3/8-16 Construction grade nut

Total carriage bolt assemblies (BW + BD)

Reference: IAAI/USFA Abandoned Building Project – Board-up Procedures



## Fire Protection and Life Safety Bylaw No. 8306, Amendment Bylaw No. 9221

The Council of the City of Richmond enacts as follows:

- 1. The Fire Protection and Life Safety Bylaw No. 8306, as amended, is further amended by:
  - (a) deleting subsection 9.7.1 and substituting the following:
    - "9.7.1 For the purposes of this Section, **vacant premises** means a lot, **building** or other structure:
      - (a) in respect of which a water or electricity service has been intentionally discontinued, other than for temporary maintenance, repair or upgrading; or
      - (b) where the condition of the **premises** is not suitable for human habitation or other **occupancy** due to non-compliance with the **Fire Code**, **Building Code** or health or safety regulations."
  - (b) deleting subsections 9.7.3 and 9.7.4 and substituting the following:
    - "9.7.3 Where an **owner** fails to securely close a **vacant premises** as required by Subsection 9.7.2(b), a **Fire Inspector** may, by notice in writing, order the **owner** to secure the **building** or other part of the **vacant premises** against unauthorized entry in a manner set out in the notice.
    - 9.7.4 If an owner of vacant premises fails to bring the premises into compliance with this Bylaw within twenty-four (24) hours of receiving a notice under Subsection 9.7.3, or if the Fire Inspector is unable to contact the owner within twenty-four (24) hours of finding vacant premises in an unsecured state, the Fire Inspector may cause the premises to be secured by City employees or agents, who may board up or otherwise secure doors, windows and other points of entry into the premises in order to prevent fires and unauthorized entry, at the cost and expense of the owner.
    - 9.7.5 The **owner** of a **vacant premises** shall pay to the **City**, upon invoice by the **City**, the costs and expenses incurred by the **City** or its contractors or agents for:

- (a) response to any fire, **fire hazard**, or other incident at the **premises**;
- (b) additional **City** personnel, consumables and damage to **City** equipment resulting from a response to any fire, **fire hazard**, or other incident at the **premises**; and
- (c) demolition, clean-up, abatement, removal, disposal, and safe transport of a **building** or **structure** on the **premises**,

in accordance with the rates and amounts set-out from time to time in the Consolidated Fees Bylaw No. 8636. Such rates and amounts are in addition to any fines or penalties imposed under this Bylaw, any other **City** bylaw or otherwise by law."

- (c) by deleting subsection 14.1.4 and substituting the following:
  - "14.1.4 Except for an order issued pursuant to Subsection 9.7.3, a person against whom an order has been made under this Bylaw may, by submitting a request in writing before the expiration of ten days from the date of the order, appeal to or seek a reconsideration by the **Fire Chief**, who may uphold the order, vary or set aside the order, or issue an alternative order. For an order issued pursuant to Subsection 9.7.3, the written request must be made within twenty-four (24) hours of receiving the order."
- 2. This Bylaw is cited as "Fire Protection and Life Safety Bylaw No. 8306, Amendment Bylaw No. 9221".

FIRST READING		CITY OF RICHMOND
SECOND READING		APPROVED for content by originating dept
THIRD READING	(	APPROVED
ADOPTED		for legality by Solicitor

MAYOR

CORPORATE OFFICER



## Consolidated Fees Bylaw No. 8636, Amendment Bylaw No. 9222

The Council of the City of Richmond enacts as follows:

1. The **Consolidated Fees Bylaw No. 8636**, as amended, is further amended by adding the following to Schedule – Fire Protection and Life Safety Bylaw No. 8306 Fees & Cost Recovery, in chronological order on the basis of the Section number:

Description	Section	Fee	Units
Vacant premises – Richmond Fire-Rescue	9.7.5(a)	\$452 per vehicle	
response			
Vacant premises – additional personnel,	9.7.5(b)	Actual cost	
consumables and damage to equipment			
Vacant premises – demolition, clean-up, etc.	9.7.5(c)		Actual cost

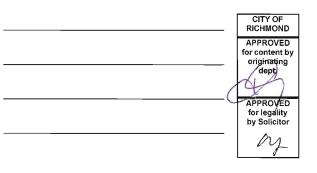
2. This Bylaw is cited as "Consolidated Fees Bylaw No. 8636, Amendment Bylaw No. 9222".

FIRST READING

SECOND READING

THIRD READING

ADOPTED



MAYOR

CORPORATE OFFICER