

BY-LAW NUMBER 2015-083

OF

THE CORPORATION OF THE TOWNSHIP OF UXBRIDGE

**BEING A BY-LAW TO ADOPT THE
CONSTRUCTION SITE FIRE SAFETY GUIDELINES**


WHEREAS the Construction Site Fire Safety Guidelines have been used by the Fire Department since 1992 to reduce the risk of fire on construction sites in the Township;

AND WHEREAS the Fire Department reviewed the existing Guidelines and found that they were not in compliance with today's fire safety practices and Provincial Regulations.

NOW THEREFORE THE COUNCIL OF THE CORPORATION OF THE TOWNSHIP OF UXBRIDGE HEREBY ENACTS A BY-LAW AS FOLLOWS:

1. **THAT** the Construction Site Fire Safety Guidelines attached hereto as Schedule 'A' be adopted.

READ a FIRST, SECOND and THIRD time and finally passed this 22nd day of June, 2015


GERRILYNN O'CONNOR
MAYOR


DEBBIE LEROUX
CLERK

SCHEDULE "A"

ATTACHED TO AND FORMING PART OF

BY-LAW NO. 2015-^{OR3}~~XXX~~



TOWNSHIP OF UXBRIDGE

FIRE DEPARTMENT

**CONSTRUCTION SITE FIRE SAFETY
2015**

1.0 APPLICATION

- 1.1. All new construction being undertaken within the Township of Uxbridge shall comply with the following guidelines. Where a subdivision or other development has been constructed at the time of the adoption of these guidelines, but not yet fully occupied and services have not yet been fully assumed and/or accepted by the Township, and the development shall be deemed not in compliance with the guidelines, the developer shall be ordered to comply, with these guidelines.

2.0 FIREBREAK REQUIREMENTS

- 2.1. To assist in firefighting activities, no more than six (6) consecutive lots in a subdivision townhouse unit or other development shall be built on simultaneously. The building or structure located on the 6th lot shall be left capped at the sub-floor level at grade, until such time that the building or structure on both sides are substantially completed with all external finishing including cladding, soffits, roofing and windows having been completed.
- 2.2. The Chief Fire Official may designate additional firebreak lots in a subdivision, townhouse blocks or other development if in their opinion additional fire breaks are necessary to ensure construction site fire safety.
- 2.3. The minimum lot width of a firebreak lot shall be a minimum of 40 feet. In the case of smaller lots, where link homes or semi-detached homes are being constructed, a double foundation shall be used as a firebreak, so that two (2) lots are left unbuilt and act as a firebreak.
- 2.4. The Building Department for the Township shall be contacted prior to any construction commencing on the site. Individual Municipal requirements shall be reviewed and complied with, including the provision of firebreaks where required by the Municipality.

3.0 FIRE SAFETY PLAN

- 3.1. Prior to beginning construction, a fire safety plan shall be prepared and approved by the Chief Fire Official. This fire safety plan shall be in graphic form and shall be clearly mounted on a highly visible wall in the construction offices.
- 3.2. The fire safety plan shall include the following:
 - (a) The designation and organization of site personnel to carry out fire safety duties. This shall include a watchman during the idle periods. It is strongly recommended that site personnel check-in and check-out with site superintendents. This would assist with the accountability of persons working on the site.
 - (b) Emergency procedures in the event of a fire shall include: sounding the alarm, notifying the fire department, instructing site personnel on procedures to follow upon hearing the alarm and firefighting procedures.
 - (c) An emergency list of critical phone numbers i.e. Fire Department, Builder's home numbers shall be mounted in an easily accessible area in the construction trailer.
 - (d) Procedures for the control of fire hazards on the site (see sections on propane storage, waste handling and hot work).
 - (e) The maintenance of firefighting equipment and facilities (see section on fire extinguishers and water supply) (Ontario Fire Code Section 6).

Note: All site personnel shall comply with and carry out the requirements of Section 3 of this document.

4.0. SITE SECURITY

- 4.1. Guard services shall be provided when required by The Township of Uxbridge Building Department, the Fire Department, or as a condition of insurance.
- 4.2. Where guard service is provided, the guard(s) shall be trained in; (1) Notification procedures to call the Fire Department and management personnel, (2) Knowledge of fire protection equipment, and (3) Familiarization with fire hazards. Guards shall be informed of any special status of emergency equipment or hazards.
- 4.3. Security fences shall be provided when required by the Township of Uxbridge.
- 4.4. Entrances (doors and windows) to a structure under construction, alteration, or demolition, shall be secured as required by the Township of Uxbridge.

**FIRE CODE
ONTARIO REGULATION 213/07
INCLUDES AMENDMENTS CURRENT TO JANUARY 1, 2015
REGULATION MADE UNDER THE
FIRE PROTECTION AND PREVENTION ACT, 1997
S.O. 1997, CHAPTER 4, AS AMENDED**

While the Ontario Fire Code deals with many provisions other than those stipulated here which all must be adhered to, the following excerpts are highlighted in this guideline as being particularly relevant to construction site fire safety and will be enforced to the fullest extent allowable by The Ontario Fire Code.

ONTARIO FIRE CODE - PART A

Section 1.2 Compliance

Article 1.2.1.1. “Unless otherwise specified, the owner is responsible for carrying out the provisions of this Code.”

ONTARIO FIRE CODE - PART B

Subsection 2.1.1. Scope and Application

Article 2.1.1.1. “This part provides measures for the safety of persons and buildings, the elimination or control of fire hazards in and around buildings, the maintenance of certain life safety systems in buildings, the establishment of a fire safety plan in certain buildings and the installation of smoke alarms and carbon monoxide alarms.”

Section 2.1.2. Classification of Buildings or Parts of Building by Major Occupancy

Article 2.1.2.2. “Activities that create a hazard and that are not allowed for in the original design shall not be carried out in a building unless approved provisions are made to control the hazard.”

Note: The following activities shall be avoided:
 (a) Paint Storage
 (b) Lumber Storage
 (c) Keeping Straw in Basements
 (d) Open Air Burning

Note: “Approved” is defined in the Code to mean approved by the Chief Fire Official.

Section 2.4 Fire Hazards

Article 2.4.1.1.(1) “Combustible materials shall not be accumulated in or around a building in such quantity or such location as to create a fire hazard.”

Article 2.4.1.1.(4) “Combustible materials shall not be stored on a roof or adjacent to any building so as to create a fire hazard to the building or its occupants.”

Article 2.4.1.3.(1) “Materials subject to spontaneous ignition, such as greasy or oily rags, shall be deposited in a receptacle conforming to Sentence (3) or be removed from the premises.”

Article 2.4.1.3.(3) "A receptacle required in Sentences (1) and (2) shall
(a) be constructed of noncombustible materials,
(b) have a close-fitting, self-closing metal cover,
(c) if the floor material upon which it is placed is combustible, have a flanged bottom or legs not less than 50 mm high, and
(d) not be placed closer than 1 m to combustible materials, except as permitted in Clause (c).

Note: This would include straw and hay which will be disposed of immediately.

Article 2.4.3.1.(1) "If conditions are such that smoking would create a fire or explosion hazard, smoking shall not take place except in approved smoking areas."

Note: "Approved" in this section means approved by the Chief Fire Official.

Article 2.4.3.2. "The areas where smoking is not permitted shall be identified by signs having black lettering 50mm high, with 12.5 mm stroke on a yellow background, except that symbols of 150 mm x 150 mm may be used in lieu of lettering or covered by instructions established under a fire safety plan and available to all persons."

Note: An example of where such lettering or instructions will be required is a propane storage area where propane is being used.

Article 2.4.4.3. "Devices having open flames shall be securely supported in non-combustible holders and located or protected so as to prevent accidental contact of the flame with combustible materials."

Note: An example of such a device is a propane salamander.

Article 2.4.4.4.(1) "Open-air burning shall not take place unless
(a) it has been **approved**, or
(b) the open-air burning consists of a small, confined fire that is
(i) used to cook food on a grill, barbecue or spit,
(ii) commensurate with the type and quantity of food being cooked, and
(iii) supervised at all times."

(2) "Sentence (1) does not apply to the use of an appliance that
(a) meets the requirements of the Technical Standards and Safety Act, 2000,
(b) is for outdoor use,
(c) if assembled, has been assembled in accordance with the manufacturer's instructions, and
(d) if installed, has been installed in accordance with the manufacturer's instructions."

Article 2.4.6.1. "Temporary electrical wiring shall not be used where it presents a fire hazard."

Note: Frayed extension cords may not be used.

Section 2.5 Fire Department Access to Buildings

Article 2.5.1.1.(1) "This section applies to fire access routes:
(a) required to be constructed under the Building Code;
(b) required by municipal by-law; or
(c) required by this Code

Article 2.5.1.2.(1) "Fire access routes and access panels or windows provided to facilitate access for fire fighting operations shall not be obstructed by vehicles, gates, fences, building materials, vegetation, signs or any other form of obstruction."

Article 2.5.1.2.(2) "Fire Department sprinkler and standpipes connections shall be clearly identified and maintained free of obstructions for use at all times."

Note: This article will also apply during construction and upon conditional occupancy.

Article 2.5.1.3. "Fire access routes shall be maintained so as to be immediately ready for use at all times by fire department vehicles."

Section 2.6 **Service Equipment**

Article 2.6.1.7. "Heating, ventilating and air-conditioning systems, including appliances, chimneys and flue pipes, shall be operated and maintained so as not to create a hazardous condition."

Note: This includes salamanders, furnaces and electric heaters.

Article 2.6.1.10.(1) "No work on ducts involving the use of hot work equipment shall be performed unless:
(a) the system has been shut down,
(b) the duct has been cleaned of any accumulations of combustible deposits, and
(c) any combustible lining and covering material that could be ignited by the work has been removed."

Article 2.6.1.11. "Precautions shall be taken, where necessary to ensure that there is no damage to fuel supply piping or equipment that would result in fuel leakage or a fire hazard during renovations or excavations."

Section 5.6 **Compressed Gas Cylinders**

Article 5.6.1.2.(1) "Cylinders containing compressed gas shall be protected against mechanical damage."

Article 5.6.1.2.(2) "Cylinders containing compressed gas shall be stored to hold them securely in place
(a) on racks,
(b) by nesting, or
(c) by approved methods or devices"

Article 5.6.1.3. "Except when being transported, acetylene cylinders shall be kept in an upright position."

Article 5.6.1.4. "Cylinders containing compressed gas which are in storage shall be protected against valve damage."

Note: "Approved" in this section means approved by the Chief Fire Official.

Note: Cylinders shall be stored in one location and taken to the job site as required and shall be returned to the storage area after use. All compressed gas cylinders, both full and empty, must be accounted for.

There shall be compliance with CAN. 1-B149.2 – M80 Ontario Propane Storage Handling and Utilization Code at all construction sites, specifically, there shall be compliance with the following:

(a) Subsection 12.5.5. Cylinders at Construction Sites

Article 12.5.5.1. "A cylinder awaiting use shall be stored outdoors and any cylinder storage area shall meet the requirements of Subsection 12.5.4. except that fencing as required by Clause 12.5.4.1. is not mandatory, provided the cylinder is stored in an area free of vehicular or equipment travel and protected by construction barriers or equivalent."

Section 5.17 **Hot Works**

Article 5.17.3.1.(1) "Hot work operations in buildings shall be carried out in areas that
(a) are free of combustible and flammable contents, and
(b) that have walls, ceilings and floors of noncombustible construction or that are lined with noncombustible materials."

Article 5.17.3.3.(3) "At least one portable extinguisher conforming to Section 6.2. shall be provided in the hot work area."

Note: Regard should be to all of Section 6.2. which contains the standards for portable extinguishers. Only a portion of that section has been reproduced below.

Note: All contractors performing hot work shall ensure that the work area is free of combustibles prior to beginning the job. If combustibles cannot be moved out of the work area, they shall be covered with labelled fire retardant tarps. Care should be taken to ensure that cutting or soldering operations will not ignite adjacent combustibles.

Note: Site superintendents shall ensure that a fire watchman is left at the work area for a minimum of 30 minutes after hot work is completed. This fire watchman should be the responsibility of the subcontractor.

Section 6.2 **Portable Extinguishers**

Article 6.2.1.2. "Portable extinguishers shall be kept operable and fully charged"

Article 6.2.1.6. "Portable extinguishers in proximity to a fire hazard shall be located as to be accessible without exposing the operator to undue risk."

Article 6.2.4.1. "Portable extinguishers shall be provided to protect every building, each hazardous occupancy inside the building and each hazardous process or operation located outside."

Article 6.2.7.1.(1) "Maintenance and testing of portable extinguishers shall be in conformance with NFPA 10, 'Portable Fire Extinguishers'"

Article 6.2.7.2. "Portable fire extinguishers shall be inspected monthly."

Article 6.2.7.3. "Portable extinguishers having defects shall be repaired and, if necessary, recharged to ensure the extinguishers will operate effectively and safely."

Note: The "subsection" referred to is Subsection 6.2. The entire section is found in the Ontario Fire Code.

Note: The location and number of portable extinguishers required shall be approved and accessible at all times.

Note: "Approved" in this section means approved by the Chief Fire Official.

Section 6.6 **Water Supplies for Fire Protection**

Article 6.6.1.1. “Private and public water supplies for fire protection installations shall be maintained to provide the required flow under fire conditions.”

Subsection 6.6.4. **Hydrants**

Article 6.6.4.1. “Municipal and private hydrants shall be maintained in operating condition.”

Article 6.6.4.2. “Hydrants shall be maintained free of snow and ice accumulations.”

Article 6.6.4.3. “Hydrants shall be readily available and unobstructed for use at all times.”

PART 8 **Demolition**

Subsection 8.1.1. **Application**

Article 8.1.1.1. “This part applies to the prevention or control of fire during any demolition and the protection from fire of neighbouring occupied spaces and neighbouring properties.”

Subsection 8.1.2. **Requirements**

Article 8.1.2.1.(1) “Subject to Sentence (2), before demolition of a building or part of a building is commenced, building services other than water supply for fire fighting shall be terminated at a point located outside the building or part under demolition”

Article 8.1.2.1.(2) “Instead of being terminated under Sentence (1), a service provider’s connection shall be relocated and protected from damage if it is determined that:

- (a) terminating the service at a point outside the building or part under demolition would interfere with service to a part of the building that is not under demolition or service to another building that is not under demolition; or
- (b) maintaining the service is necessary for demolition purposes.

Article 8.1.2.1.(3) “No steps shall be taken under Sentence (1) or (2) in respect of a service provider’s connection unless that service provider and all other service providers whose connections will be affected by the termination or relocation of that connection have been notified.”

Article 8.1.2.2.(1) “During periods when demolition operations will create a fire hazard to parts of the building not under demolition or to neighbouring occupied spaces or neighbouring properties, a firewatch shall be conducted.”

Article 8.1.2.2.(2) “If a fire watch is required, the demolition site shall be toured by firewatch personnel at least once each hour.”

Article 8.1.2.2.(3) “Facilities shall be provided to enable firewatch personnel to

- (a) ensure that a fire warning is sounded to notify occupants, and
- (b) communicate with the fire department.”

Article 8.1.2.2.(4) “Firewatch personnel shall be equipped with portable illumination and protective equipment.”

Article 8.1.2.3.(1) “Combustible salvage, waste material and rubbish shall not be accumulated on site in such quantity or such location as to cause a fire hazard.”

Article 8.1.2.4. "Rubbish shall not be burned on the premises unless permitted in accordance with Article 2.4.4.4."

Note: Regard should be had to Article 2.4.4.4. which can be found in its entirety in the Ontario Fire Code.

Article 8.1.2.5. "The installation, operation and maintenance of hot work equipment shall be carried out in accordance with Section 5.11."

Article 8.1.2.6.(1) "Where a building being demolished floor by floor is equipped with a standpipe system, the system, together with fire department connections, valves, couplings and hose, shall be maintained in operable condition on all storeys below the one being demolished, except for the storey immediately below it."

Article 8.1.2.6.(2) "If no fire department standpipe connections exist in a building under demolition that is 4 storeys or more in building height, a temporary standpipe connection shall be provided."

Article 8.1.2.6.(3) "If no standpipe system exists in a building under demolition that is 8 storeys or more in building height, a temporary standpipe shall be provided."

Article 8.1.2.6.(4) "Standpipe systems shall be kept in such condition that they may be connected near street level, to a fire department pump, so as to supply water to every outlet on each floor."

Article 8.1.2.6.(5) "If a building under demolition that is over 84 m in height, the primary water supply serving the standpipe system, including fire pumps, shall be maintained in operating condition."

Article 8.1.2.7.(1). "During demolition, fire fighting access routes shall be maintained in accordance with Section 2.5."

Article 8.2.7.1.(2) "Unobstructed access to fire hydrants, portable fire extinguishers and fire department connections for standpipe and sprinkler systems shall be maintained during demolition."

Article 8.2.7.1.(3) "If a demolition site is fenced so as to prevent general entry, provision shall be made for access by fire department equipment and personnel."

Article 8.2.7.1.(4) "Elevating devices shall be accessible for the use of firefighters for buildings under demolition that are more than 36 m in building height, measured between grade and the floor level of the top storey."

Note: Refer to Section 2.5 which can be found in its entirety in the Ontario Fire Code.

Article 8.1.2.8.(1). "Portable extinguishers shall be provided in buildings under demolition in accordance with Subsection 6.2.6. as if the building were graded for ordinary hazard under Subsection 6.2.5."

Note: Refer to Subsections 6.2.5. and 6.2.6. which can be found in their entirety in the Ontario Fire Code.

Article 8.1.2.8.(2) "In addition to the other requirements of this Code, if a building is under demolition, portable extinguishers shall be provided;

- (a) adjacent to hot works operations,
- (b) in areas where combustibles are stored,
- (c) near or on any internal combustion engines,
- (d) adjacent to areas where flammable liquids, combustible liquids or gases are stored or handled,
- (e) adjacent to temporary oil-fired or gas-fired equipment, and
- (f) adjacent to bitumen heating equipment."

Article 8.1.2.8.(3) "The extinguishers required by Sentence (2) shall have a minimum rating of:

- (a) 2A:10B:C on moveable equipment, and
- (b) 4A:40B:C in all other locations."

Article 8.1.2.8.(4) "Portable extinguishers required in Sentences (1), (2) and (3) shall be maintained in conformance with Section 6.2."

Article 8.1.2.9. "Smoking shall not take place in, on or near a building under demolition, except as provided in Subsection 2.4.3."

Article 8.1.2.10.(1) "Internal combustion engines, other devices capable of producing ignition and devices associated with either of the foregoing shall be kept at sufficient distance from combustible material so as to prevent ignition."

Article 8.1.2.10.(2) "The clearance between combustible material and temporary heating equipment, including flues, shall comply with:

- (a) the minimum clearance, if any, shown on certified heating equipment, or
- (b) the minimum clearance specified in the Building Code, if no minimum clearance is shown on the heating equipment."

Article 8.1.2.11. "Fabrics and films used to temporarily enclose buildings shall be securely fastened to prevent them from being blown against heaters or other ignition sources."

Article 8.1.2.12. "Unless otherwise approved, at least two exits shall be accessible and usable at all times."

Article 8.1.2.13. "A means shall be provided that is capable of alerting persons throughout a building under demolition and the property of which the building is located of a fire emergency."

Note: "Approved" in this section means approved by the Chief Fire Official.

Note: Refer to Section 6.2. which can be found in its entirety in the Ontario Fire Code.