

**PART 1 GENERAL****1.1 CONSTRUCTION FIRE SAFETY**

- . 1 The Contractor shall provide construction fire safety in accordance with the National Fire Code of Canada.

**1.2 FIRE DEPARTMENT BRIEFING**

- . 1 Departmental Representative will co-ordinate arrangements for Pre Commencement Meeting following contract award. Contractors will be briefed on Fire Safety by the Fire Chief or his designated representative before work starts.

**1.3 REPORTING FIRES**

- . 1 The Contractor shall inform the Departmental representative and Fire Chief of all fire incidents at the construction site, regardless of size.
- . 2 Know location of nearest fire alarm pull station and telephone, including emergency phone number.
- . 3 Report immediately fire incidents to Fire Department as follows:
  - . 1 Activate nearest fire alarm pull station.
  - . 2 Telephone.
- . 4 Person activating fire alarm pull station will remain at the front entrance to direct Fire Department to scene of fire.
- . 5 When reporting fire by telephone, give location of fire, name or number of building and be prepared to verify location.

**1.4 FIRE SAFETY PLAN**

- . 1 Submit a fire safety plan for the construction site prior to commencement of construction work. The fire safety plan shall conform to the National Fire Code of Canada.
- . 2 The fire safety plan shall be submitted to the Departmental representative for review by local fire department. Any comments by local fire department shall be implemented by the Contractor.
- . 3 The fire safety plan shall be limited to the area of construction only. Contractor is not responsible for amending fire safety plans in existing buildings.
- . 4 Post the fire safety plan at the entrance to the construction site or near the construction site's health and safety board.
- . 5 The fire safety plan shall conform to the National Fire Code of Canada, and shall contain, at minimum:
  - . 1 Emergency procedures to be used in case of fire, including
    - . 1 Sounding the fire alarm;
    - . 2 Notifying the fire department;
    - . 3 Instructing occupants on procedures to be followed when the fire alarm sounds;

- . 4 Evacuating occupants, including special provisions for persons requiring assistance; and
  - . 5 Confining, controlling and extinguishing fires.
- . 2 The appointment and organization of designated supervisory staff to carry out fire safety duties.
- . 3 The training of supervisory staff and other occupants in their responsibilities for fire safety.
- . 4 Documents including diagrams, showing the type, location and operation of building fire emergency systems.
- . 5 The holding of fire drills (where applicable).
- . 6 The control of fire hazards in the building.
- . 7 The inspection and maintenance of building facilities provided for the safety of occupants.

## **1.5 FIRE WARNING SYSTEM**

- . 1 Provide a fire warning system for entire construction site, capable of notifying construction personnel of a fire emergency in construction area.
- . 2 Provide system with sufficient coverage so that alarms are capable of being heard throughout building and anywhere on site.

## **1.6 ALARM AND FIRE PROTECTION SYSTEMS, INTERIOR AND EXTERIOR**

- . 1 Alarm and protection systems must not:
  - . 1 be obstructed;
  - . 2 be stopped or inactivated
  - . 3 left inactive at the end of the day or shift without written permission from the fire chief.
- . 2 Fire hydrants, tank systems or fire hoses should not be used for any purpose other than fire fighting without permission from the fire chief.

## **1.7 FIRE PROTECTION SYSTEM DEACTIVATION**

- . 1 Submit written notification to Departmental Representative and Senior Fire Fighter 48 hours in advance of planned interruption of services. Submit written notification for operation including shutting down active fire protection system, including water supply, fire suppression, fire detection and life safety systems.

- . 2 Where a fire protection system that provides fire alarm monitoring is impaired in an existing building, provide a fire watch as directed by Senior Fire Fighter.
- . 3 Conduct work on fire protection system where systems are affected or impaired in accordance with National Fire Code of Canada conforming to Base Fire Orders. These will be provided during the meeting prior to the execution of the work.

## **1.8 FIRE EXTINGUISHERS**

- . 1 Supply fire extinguishers, as scaled by Senior Fire Fighter, necessary to protect work in progress and contractor's physical plant on site.
- . 2 Provide supplemental fire extinguishers to these areas and otherwise as directed by Senior Fire Fighter:
  - . 1 Adjacent to hot works.
  - . 2 Areas where combustibles materials are stored.
  - . 3 Adjacent to areas where flammable liquids or gases are stored or handled.
  - . 4 Near or on internal combustion engines.
  - . 5 Adjacent to temporary oil fired or gas fired equipment.
  - . 6 Adjacent to bitumen heating equipment.
- . 3 Provide extinguishers rated as follows: 4A:40BC. Minimum 20 pounds unless otherwise directed by Senior Fire Fighter.
- . 4 Provide dry chemical type extinguishers unless otherwise required by hazard being protected.
- . 5 Provide sufficient numbers of extinguishers based on a maximum travel distance between extinguishers of 23.0 meters (75 feet).

## **1.9 ROOF LAYING OR INSTALLATION**

- . 1 Indicate to the fire chief the location of the bitumen boilers as well as the dates of use of the latter. Make sure that the staff respect the following instructions:
  - . 1 Use only bitumen boilers equipped with thermometers and indicators in good condition.
  - . 2 Place bitumen boilers in a safe location, outside the building or, with the approval of the fire chief, on the roof if it is made of non-combustible materials.
  - . 3 When using bitumen boilers, ensure continuous surveillance and provide metal covers to smother flames in case of fire. Provide portable fire extinguishers in accordance with the requirements of article 1.8.
  - . 4 Before starting work, demonstrate to the fire chief that the containers have the appropriate capacity.
  - . 5 Use only glass fiber guipons.
  - . 6 Do not leave soiled guipons unattended on the roof. Store them away from the building and combustible materials.
  - . 7 Store roofing materials at least 3 m from any construction.

## **1.10 ACCESS FOR FIRE FIGHTING**

- . 1 Provide and maintain access for firefighting in accordance with National Fire Code of Canada.

- . 2 The fire chief must be informed in advance of the performance of any work that may interfere with the movement of fire fighting vehicles; this includes any deviation from the minimum headroom and horizontal clearance prescribed by it, the placement of barriers and the execution of excavation work
- . 3 Maintain a minimum clear horizontal width on access routes of 5.0 meters or otherwise as defined by Senior Fire Fighter.
- . 4 Maintain a minimum vertical clearance of 6.0 meters or otherwise as defined by Senior Fire Fighter.

#### **1.11 SMOKING PRECAUTIONS**

- . 1 Smoking is prohibited in buildings including buildings under construction. Observe posted smoking restrictions near existing buildings.

#### **1.12 RUBBISH AND WASTE MATERIALS**

- . 1 Keep rubbish and waste materials at minimum quantities.
- . 2 Burning of rubbish is prohibited.
- . 3 Remove rubbish from work site at end of work day or shift or more frequently as directed by Senior Fire Fighter.
- . 4 Storage:
  - . 1 Store oily waste in approved receptacles to ensure maximum cleanliness and safety.
  - . 2 Deposit greasy or oily rags and materials subject to spontaneous combustion in approved receptacles and remove specified.

#### **1.13 FLAMMABLE AND COMBUSTIBLE LIQUIDS**

- . 1 Handling, storage and use of flammable and combustible liquids governed by current National Fire Code of Canada.
- . 2 Keep flammable and combustible liquids such as gasoline, kerosene and naphtha for ready use in quantities not exceeding 45 litres provided they are stored in approved safety cans bearing Underwriters' Laboratory of Canada or Factory Mutual seal of approval. Storage of quantities of flammable and combustible liquids exceeding 45 litres for work purposes requires permission of Fire Chief.
- . 3 Transfer of flammable and combustible liquids is prohibited within buildings or jetties.
- . 4 Transfer of flammable and combustible liquids will not be carried out in vicinity of open flames or any type of heat producing devices.
- . 5 Use of flammable liquids having flash point below 38 degrees C such as naphtha or gasoline as solvents or cleaning agents is prohibited.
- . 6 Storing flammable and combustible waste liquids on site is prohibited. Remove daily or more frequently as directed by Senior Fire Fighter.

## 1.14 HOT WORK

- . 1 Implement a hot works program in accordance with National Fire Code of Canada and NFPA 51 Standard for Fire Prevention. Apply hot works program to processes involving welding, cutting, roofing and other hot works as defined by Senior Fire Fighter.
- . 2 Obtain a "Hot Works" permit from Senior Fire Fighter for hot works in construction area. Frequency of renewal for hot works permits is at discretion of the Senior Fire Fighter.
- . 3 When work is carried out in dangerous or hazardous areas involving use of heat, provide fire watchers equipped with sufficient fire extinguishers. Determination of dangerous or hazardous areas along with level of protection necessary for Fire Watch is at discretion of the Senior Fire Fighter.
- . 4 Provide fire watch service for work as directed by Senior Fire Fighter and as defined in Fire Department Briefing. Provide fire watchers trained in use of fire extinguishing equipment.
- . 5 Hot work areas
  - . 1 Hot work must be carried out in an area free from combustible and flammable materials.
  - . 2 When paragraph 1.14.5.1 cannot be complied with:
    - . 1 All flammable materials located within 15 m of hot work must be protected in accordance with the National Fire Code of Canada;
    - . 2 A fire watch must be present during hot work and for a period of at least 60 minutes, unless otherwise specified by the Chief of the fire department;
    - . 3 A final inspection of the hot work area must be carried out not less than four (4) hours after completion of the work, unless otherwise specified by the Chief of the Fire Department.
- . 6 When there is a risk of sparks hitting combustible materials in adjacent areas where hot work is being carried out, you should:
  - . 1 cover or close openings in walls, floors or ceilings to prevent the passage of sparks to adjacent areas;
  - . 2 Section 1.14.5.2 applies to all of these areas.
- . 7 Protection of flammable and combustible materials
  - . 1 All flammable and combustible materials, dust or residues must be:
    - . 1 removed from area where hot work is carried out;
    - . 2 protected against ignition by non-combustible materials.
- . 8 Portable fire extinguishers
  - . 1 Provide a portable fire extinguisher 3 m from hot work. It should be at least 20 pounds and ABC type, unless directed otherwise by the fire chief.

**1.15 HAZARDOUS SUBSTANCES**

- . 1 Perform work involving the use of toxic or hazardous materials, chemicals or explosives, or otherwise creating hazard to life, safety or health, in accordance National Fire Code of Canada (NFC).
- . 2 Provide adequate ventilation and eliminate all sources of ignition in areas where flammable liquids, such as varnishes and urethane products, are used. Inform the fire chief before and after carrying out work requiring the use of such products.

**1.16 PARTIAL OCCUPANCY**

- . 1 Implement partial occupancy procedures as defined in General Conditions of the Contract. Partial occupancy is defined as when construction occurs adjacent to work areas occupied by Departmental or Canadian Forces personnel. This includes:
  - . 1 Phased new construction.
  - . 2 Early or partial occupancy of new construction.
  - . 3 New construction being added onto an existing building.
  - . 4 Renovation or recapitalization of an existing building.
  - . 5 Phased renovation or recapitalization of an existing building.
- . 2 Where partial occupancy occurs, implement requirements as indicated in drawings and specifications. This may include construction of a rated fire separation between occupied and construction areas as required by National Fire Code.
- . 3 If work is carried out in an occupied building, provide regular inspections every hour, throughout entire period of demolition.
- . 4 If work is carried out in an occupied building and where building does not have a Fire Alarm system or similar automatic monitoring or protection equipment, provide regular inspections every hour for entire period of construction.

**1.17 QUESTIONS AND/OR CLARIFICATION**

- . 1 Direct questions or clarification on Fire Safety to Departmental Representative.
- . 2 Departmental Representative will obtain clarifications from Senior Fire Fighter. Do not contact directly with Senior Fire Fighter for notification, authorization or any requests unless situation constitutes an immediate emergency.

**1.16 FIRE INSPECTION**

- .1 Co-ordinate site inspections by Senior Fire Fighter through Departmental Representative.
- .2 Allow Senior Fire Fighter unrestricted access to work site.
- .3 Co-operate with Senior Fire Fighter during routine fire safety inspection of work site.
- .4 Immediately remedy unsafe fire situations observed by Senior Fire Fighter.

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**PART 2        PRODUCTS**

**2.1            NOT USED**

. 1    Not Used.

**PART 3        PRODUCTS**

**3.1            NOT USED**

. 1    Not Used.

**END OF SECTION**