NOTE OF CHANGES as at November 2013

Amendments noted are to the Fire Protection Guidelines Rev 00 date March 05 '09.

The revised Guidelines, Nov 2013, identifies amendments by an arrow (➡) in the left margin.

1. **General**
   - Change (#1.1): All materials utilized shall be Underwriters Laboratories and Underwriters Laboratories of Canada (UL & ULC) listed and approved.
   - Addition: The preferred manufacturers for fire water backflow preventers are Cold, Ames, Conbraco and Watts.

2. **Sprinkler System**
   - Addition (Table F): Pipe material for over 2" inside sprinkler water to be Sch10, thin wall.

New Section: Standpipes
- Addition: Standpipes installed in new construction, and in retrofits where possible, must include a tamper, check, flow and test drain valve.

New Section: Fire Pumps
- Addition: Horizontal fire pumps must be installed in all new construction as opposed to vertical fire pumps.

Fire Protection Guidelines

	C	NC	NA
1.0 General	☐	☐	☐
2.0 Sprinkler System	☐	☐	☐
3.0 Standpipes	☐	☐	☐
4.0 Fire Pumps	☐	☐	☐

Mechanical (Sprinkler) Consultant's Signature: _____

Mechanical (Sprinkler) Consultant's Name: _____

1. **General**

1.1. All materials utilized shall be Underwriters Laboratories and Underwriters Laboratories of Canada (UL & ULC) listed and approved.

1.2. All materials installed shall adhere to the manufacturer's installation guidelines.

1.3. Materials used shall be listed and approved for such application.

1.4. All sprinkler system components are to be interfaced with the Fire Alarm System.

1.5. Preferred Manufacturers

Fire Water Backflow Preventers	Cold, Ames, Conbraco, Watts

2. Sprinkler System

2.1. Design of sprinkler systems shall be in accordance with current NFPA requirements and the following University requirements.

2.2. Dalhousie requires a water sprinkler suppression system in all areas except as noted in 2.3 and 2.4.

2.3. In specialized areas, including but not limited to server rooms, art galleries, and libraries a pre-action design is preferred. Coordinate with Dalhousie University for other options available.

2.4. Kitchens shall have a dedicated suppression system specially designed for the specific area.

2.5. Antifreeze loops will only be accepted where it can be demonstrated that other options such as installing a dry pipe system or heating the area would be prohibitively expensive.

2.6. A building sprinkler riser is required with supervised isolations valves, check valve, and flow switch and a drain valve installed on each floor for ease of floor isolation. Associated with this sprinkler riser is a drain line adjacent to the riser capable of handling the full flow.

2.7. A complete set of as-built drawings shall be compiled and submitted, showing locations of all sprinkler lines and devices.

2.8. Pipes and fittings

Table A (Fire Services)			
Service	**Pipe Material**	**Fittings**	**Joints**
Sprinkler water (interior), 2" and under	Sch-40	Cast Iron	Screwed or Grooved
Sprinkler water (interior), over 2"	Sch-10	Rolled/ Grooved	Mechanical
Fire water buried	Ductile Iron	Ductile Iron	Mechanical Joint

3. Standpipes

3.1. Standpipes installed in new construction, and in retrofits where possible, must include a tamper, check, flow and test drain valve.

4. Fire Pumps

4.1. Horizontal fire pumps must be installed in all new construction as opposed to vertical fire pumps.

End of Section