USask Master Specification Directions: The master specifications are intended to be incorporated into the Consultant's final, project specific specification package. The project specific specifications are expected to include any and all sections or portions of sections (Part 1, Part 2, Part 3) that are required to create a fully executable project specification. USask Master Specs only provide information that USask requires be a part of the final specification package. Components or sections not included in the Master USask Specifications may still be required for a complete, well-designed project. It is the consultant's responsibility to ensure all specifications match USask requirements. Any deviations or revisions to any section included in the master specifications requires written consent from the USask Engineering department. The consultant is liable for any omissions, errors, or incorrect equipment or components supplied to site.

The Master Specifications shall be used in conjunction with USask's Design Guidelines. Any conflicts shall be brought to the attention of USask Engineering staff for clarification.

#### Part 1 General

#### 1.1 REFERENCE STANDARDS

.1 Current Codes and Standards as required.

### 1.2 APPROVAL OF CONTRACTOR

.1 The work shall be completed by an experience and recognized sprinkler contractor who has completed at least one installation commensurate to the size and complexity of the current project, to the approval of the Insurance Underwriters and Owner's Representative.

# 1.3 GUARANTEE OF WORK

.1 The Contractor shall furnish an acceptable guarantee covering the work from any defect in installation or material for a period of one year from the date of substantial performance. The Contractor shall replace forthwith any part or parts which may prove defective during the warranty period.

### 1.4 TIE-INS TO UNIVERSITY SERVICES

- .1 All tie-ins and connections to existing University services, capping of same, etc. shall be done in off hours. If such work will require more time than one night, then the work shall be done on a weekend.
- .2 Tie-ins must be carried out in a non-stop manner with sufficient personnel to ensure the work is completed with no impedance to normal operating hour procedures.
- .3 The Contractor shall make the necessary allowances for any overtime necessary. No extras will be paid for this.
- .4 All tie-ins and connection shall be done only with the knowledge and approval of the University and all work times must be suitable to the University. Where assistance will be required from University forces (service shutdowns, etc.) arrangements shall be made at least ten (10) working days in advance of the requirement.

### Part 2 Products

#### Part 3 Execution

# 3.1 EXAMINATION

- .1 Verification of Conditions: all tests shall be completed by the contractor in the presence of an inspector of the Authority Having Jurisdiction. When an inspector is not available, and permission is granted by the authority having jurisdiction, testing may be witnessed by the Owner's Representative and test certificate signed by same.
  - .1 Visually inspect fire protection systems in presence of Authority Having Jurisdiction.
  - .2 Inform Owner Representative of unacceptable conditions immediately upon discovery.
  - .3 Proceed with installation only after unacceptable conditions have been remedied and after receipt of written approval to proceed from Owner Representative.
- .2 All testing required shall be completed to NFPA requirements.
- .3 The sprinkler subcontractor shall arrange for the flow test of the municipal water system serving the building. This testing shall be coordinated with Owner's representative. The test results shall be included with approval of submission drawings to the Consultant and Fire Commissioner. The cost of the conducting the flow tests shall be included in this tender.

## 3.2 CONTRACTOR COORDINATION

- .1 Sprinkler contractor shall consult and cooperate with all other trades, in both planning and executing the work to avoid conflict with other pipes, ducts, electrical systems or structural elements, and to secure a neat and professional-like appearance to the finished job.
- .2 Large trunk ductwork has priority in ceiling spaces. This contractor is expected to jog sprinkler piping as necessary to accommodate ducting.

### 3.3 DEMONSTRATION

- Owner's Representative will use equipment and systems for test purposes prior to acceptance. Supply labour, material, and instruments required for testing.
- .2 Supply tools, equipment and personnel to demonstrate and instruct operating and maintenance personnel in operating, controlling, adjusting, trouble-shooting and servicing of all systems and equipment during regular work hours, prior to acceptance.
- .3 Use operation and maintenance manual, as-built drawings, and audio visual aids as part of instruction materials.
- .4 No time limit is implied in this requirement. The Owner shall be the judge as to the adequacy of the training.