1.1 **GENERAL**

1.2 Related SFU Technical Requirements

.1 *Section 20 00 05 Mechanical - General Requirements*
.2 *Section 21 05 00 Fire Protection - General Requirements*

1.3 Coordination Requirements

.1 Additional SFU design and approval requirements for standpipe and house systems.

2.1 **MATERIALS AND DESIGN REQUIREMENTS**

2.2 General

.1 Do the work in accordance to the latest edition of the following standards unless specified otherwise.
   .1 ANSI/NFPA 14, Installation of Standpipe and Hose Systems.

2.3 Engineering Data

.1 Design system to ANSI/NFPA 14 and the following parameters:
   .1 Stand alone or combined with sprinkler systems (hydraulic calculations required).
   .2 Consult SFU Facilities for water information.

2.4 Pipe, Fittings and Valves

.1 Pipe
   .1 Ferrous shall be to ANSI/NFPA 14.
   .2 Copper tube shall be to ANSI/NFPA 14.
.2 Fittings and joints shall be to ANSI/NFPA 14.
.3 Valves shall be ULC listed for fire protection service.
.4 Pipe hangers shall be ULC listed for fire protection services.
.5 Drain valve shall be NPS 1", complete with hose end, cap and chain.

2.5 Cabinets

.1 To ANSI/NFPA 14 and ULC listed shall be flush type, 180° opening door with hinge same side as water supply and latching device.
.2 Cabinets to maintain fire resistive rating of construction in which they occur.

2.6 Fire Hose and Nozzle

.1 Hose shall be ULC listed, 38 mm nominal diameter, 23 m long, synthetic jacket, synthetic rubber lined.
.2 Nozzle shall be ULC listed, 38 mm nominal diameter, forged brass adjustable combination fog-straight stream with shut-off.

2.7 Angle Valves

.1 ULC listed for fire service. Where water pressure exceeds 690 kPa, provide ULC listed pressure reducing device.
2.8 Fire Department Valve

.1 ULC listed, NPS 2-1/2 forged or cast brass angle valve with thread compatible with Burnaby Fire Department, complete with hand wheel, cap and chain.

2.9 Pumper Connection

.1 To ANSI/NFPA 14, ULC listed Siamese type. Threads to be compatible with Burnaby Fire Department complete with threaded metal caps and chains.
.2 Polished bronze recessed with identifying sign cast on plate.

2.10 Finishes

.1 In finished areas, chrome plate valves, nozzles, fittings and hose rack.
.2 Cabinets
  .1 Tub shall be prime-coated.
  .2 Door and frame shall be #4 satin finished, stainless steel.

2.11 Installation

.1 Install and test to acceptance in accordance with ANSI/NFPA 14.
.3 Testing to be witnessed by Owner (SFU Facilities) and Burnaby Fire Department.
.4 Run inspectors test connections to sight glass.
.5 Specify drain pipes and valves to drain all parts of systems and so arranged that any one standpipe riser can be drained without shutting down any other parts of systems.
.6 Specify 90 mm diameter pressure gauge in accordance with Division 15 - Thermometers and Pressure Gauges at top of each riser and in accordance with ANSI/NFPA 14.
.7 Run all test and drain piping to an acceptable floor drain.
.8 Provide a flow switch on each system and connect to the building Fire Alarm system using a module specified for this use only. Module shall be programmed to cause the Fire Alarm System to activate a General Alarm when flow occurs.

***END OF SECTION***