1.1 GENERAL

1.2 Related SFU Technical Requirements

.1 Please refer to the latest SFU Backflow Prevention Assembly Test Report.

1.3 Coordination Requirements

.1 Coordinate with SFU Facilities.

1.4 Description

.1 Plumbing Specialties - Additional SFU cross-connection control requirements.

2.1 MATERIAL AND DESIGN REQUIREMENTS

2.2 Backflow/Cross Connection Control General Requirements

.1 Backflow devices are required to be registered with the City of Burnaby and with SFU – all documentation (location, project number, test certificates, type and size of device etc.) is to be submitted to Burnaby and SFU.

.2 All devices to be approved by the Mechanical Department prior to installation. No backflow prevention devices less than ¾" will be allowed – Watts is preferred supplier.

.3 All installations shall be in accordance with the recommendations contained in the latest edition of the BC Plumbing Code.

.4 All backflow prevention assemblies shall conform to the latest CSA B64 Standards and shall be certified by CSA or by a certification body recognized by the Standards Council of Canada. For the current listing of CSA certified backflow preventers refer to the CSA website http://www.csagroup.org/canada/.

.5 Vacuum breakers shall conform to the requirements of C.S.A. B64.5.

.6 Following installation, a test report completed by a certified tester shall be submitted to the Owner, indicating satisfactory operation of each device.

.7 Tests are to be conducted in the period 30 to 60 days prior to date of Substantial Completion.

.8 Provide one repair kit for every cross connection control device installed.

.9 All devices must be installed within the buildings, in accessible locations, (not in cupboards), to facilitate testing and maintenance.

.10 Test forms should include the SFU Backflow Prevention Assembly Test Report.

.11 Do not locate reduced pressure backflow devices that require regular testing any higher than 1500 mm above the floor.
2.3 Backflow/Cross Connection Control General Requirements

.1 Water Service Entry:
   .1 Two Backflow Prevention Assemblies piped in parallel are required at the water service entry to all buildings, to allow for servicing without having to completely isolate the water supply to the building.
   .2 Whether a Reduced Pressure Backflow Assembly (RPBA) or alternate type of assembly is required will depend on the hazard category of the building in question.
   .3 The parallel Backflow Prevention Assemblies must be designed to allow for peak design flow during normal operation and for one unit to be taken off line for servicing while maintaining 50% or greater peak flow.

.2 Fire Protection Service Connection:
   .1 A double check valve assembly, (DCVA), is required at Fire Protection service connections per British Columbia Building Code-Plumbing Services (part 7). An additional parallel DCVA is not required.

.3 Irrigation Systems:
   .1 A DCVA at the service connection is to be provided in accordance with the usage. Note: where a higher hazard exists (due to chemical injection), additional area protection with an RP Assembly is required.

.4 Potable Water System in Buildings:
   .1 Backflow protection is required to be installed in local areas to protect potable water systems in buildings from labs and other hazardous water uses within the building.

.5 Chemical or detergent mixing stations:
   .1 An RPBA shall be installed immediately upstream of any chemical or detergent mixing station.

***END OF SECTION***