1. Domestic water is provided from the Ring Main at the following conditions: 310 – 345 kPa (45 to 50 PSI).

2. Maintain a maximum distance of eight meters from a domestic hot water recirculation pipe to the fixture.

3. Domestic water temperature can rise up to 16°C (60°F).

4. Infrared control for urinal flush valves is preferred with hardwired electrical supply (wherever possible, avoid the use of battery powered units because of added maintenance costs associated with these battery powered units). If design cannot be achieved using hardwired power then designed is to obtain a variance and approval types shall be determined with approval from U of A Maintenance Group.

5. **PROHIBITED** - Flush tanks for urinals shall not be used.

6. Plumbing fixtures to be of institutional quality and vandal proof construction.

7. Use low flush fixtures. Ensure compliance with City of Edmonton regulations in addition to other codes and standards.

8. Specifications shall require the use of hygroscopic bentonite based (ie. “Plumber’s Putty”) mastic for sealing the interface joint between countertops and sink rims instead of the common practice of using silicone sealant. Silicone sealant has been found to have sealing and adhesion issues and is unacceptable to U of A Maintenance Group.

9. All laboratory sinks shall be protected by backflow prevention. Consideration shall be given to grouping & providing central back flow prevention.

10. Backflow prevention installed in Mechanical Room with 100% redundancy.

11. Refer to AWWA Cross Connection Control Manual (latest edition) for domestic water piping practices required for the prevention of contamination in potable water.

12. For facilities having labs, a dual riser system is preferred, one for potable (drinking fountains and washrooms) and one for lab services.

13. Limited quantities of demineralized water are available from the Central Utilities Plant at: 550 kPa (80 psig). Consultants are to determine the chemical suitability of U of A demineralized water for the application being considered.