PART 1 - GENERAL

1.01 Provide all equipment, piping, accessories and controls for a complete deionizing system that will produce demineralized water of ASTM Type II quality as a minimum. Product water parameters: Conductivity = max. 1.0 micro-mhos/cm; Silicate = max. 3.0 ppb; Na = max. 5.0 ppb. (NOTE: this is NOT high purity water; evaluate need, and use more stringent parameters as warranted.)

1.02 Obtain most current parameter of central plant furnished DI water from UAF Facilities Service Division of Utilities Water Treatment Plant. If central plant DI water is used in the facility, provide filters and add minerals as needed at the point of use instead of at the point of connection for the building.

1.03 Provide FS/DDC with analysis as to estimated flow for facility to ensure existing central plant capacity is not exceeded.

PART 2 - PRODUCTS

2.01 Storage tank: Dish-bottom and dome-topped, sealable to atmosphere and equipped with air vent filter of 0.02 micron and supply water filter of 0.02 micron.

2.02 Acceptable manufacturers and products: U.S. Filter, Millipore, or other manufacturer identified by the consultant meeting these design standards.

PART 3 - EXECUTION

3.01 Install DI water piping to maintain minimum of 1 inch clearance from all other piping and ductwork. Where piping or ductworks are insulated this requirement applies to surface of insulation.

3.02 Use continuous deionization process (CDI) which applies a direct current across feed water. Dissolved minerals are separated from the product stream and flushed to waste. System should operate at 85% recovery or greater.

END OF SECTION