

## TECHNICAL SPECIFICATIONS

### PS 20 Furnishing of Plug Valves RFP No. 25-44

City of Mercer Island

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## Division 15

# Mechanical

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### 15.30 VALVES

#### 15.32 Isolation Valves

##### 15.32.05 Eccentric (Plug) Valves

*[CSI 40 05 62.16]*

#### Part 2 – Products

##### Manufacturers

Valves equal to M&H/Kennedy Valve Eccentric Plug Valve, or Dezurik PEF.

##### Manufactured Units

Eccentric plug valves meeting the requirements of AWWA C517 unless otherwise specified. Port opening area no less than the area of an equivalent nominal diameter round pipe (100% port).

Valves shall be of the non-lubricated eccentric type with resilient faced plugs and furnished with end connections as shown on the Plans.

Valve bodies shall be ASTM A126 Class B cast iron or ductile iron. The valve seat shall meet one of the following two requirements: 1) seat shall have a 1/8-inch welded overlay of not less than 90 percent pure nickel, with a raised seat area, so that the plug face contacts only nickel; or 2) seat shall be factory-coated with heat-fused thermoset epoxy or thermoplastic nylon in accordance with AWWA C550.

The valve plug shall be ASTM A536 ductile iron, faced with neoprene with a cylindrical seating surface eccentrically offset from the center of the plug shaft. Interference between the plug face and the body seat shall be externally adjustable in the field with the valve under pressure and the plug in the closed position. Valves shall have sleeve-type metal bearings and shall be of sintered, oil impregnated, permanently lubricated type 316 ASTM A743 Grade CF-8M.

Valves shall be equipped with gear actuators oriented as shown on the Plans. Gearing shall be enclosed in steel housing suitable for direct bury and for running in a lubricant with seals provided on all shafts to prevent entry of dirt and water into actuator. Actuator shaft shall be supported on permanently lubricated bronze bearings and indicate valve position. An adjustable stop shall be provided to set closing torque and provide seat adjustment. Valves shall have a position indicator to show the position of the plug.

Valve surfaces shall be coated internally and externally with a heat-fused thermoset epoxy or thermoplastic nylon.

Exposed nuts, bolts, springs, and washers for buried service valves shall be stainless steel.

Include a 2-year, non-pro-rated, manufacturer's warranty.