

Part 1 General**1.1 SYSTEM DESCRIPTION**

- .1 This section refers to the installation, testing, and commissioning of the following City supplied valves:
 - .1 Dry Pit Location:
 - .1 Three (3) 200 mm Iron Gate Valves – manually actuated
 - .2 Three (3) 150 mm Iron Gate Valves – manually actuated
 - .3 Three (3) 150 mm Process Check Valves
 - .2 Wet Well Location:
 - .1 One (1) 450 mm Iron Gate Valve – manually actuated
- .2 Provide installation, testing, transportation, demonstration, and commissioning.

1.2 REFERENCES

- .1 American Water Works Association (AWWA), American National Standards Institute (ANSI) / American society of Mechanical Engineers (ASME).
- .2 ASNI/ASME B1.20.1, Pipe Threads, General Purpose (Inch).

1.3 CLOSEOUT SUBMITTALS

- .1 Submit maintenance data for incorporation into manual specified in Section 01 78 00 – Closeout Submittals.

1.4 DELIVERY, STORAGE AND HANDLING

- .1 Prepare, crate, and protect equipment against shipping and storage damage.
- .2 Contractor to provide loading, transportation and offloading of equipment from:
598 Plinguet
Winnipeg, Manitoba
R2J 2W7

Part 2 Products**2.1 VALVES**

- .1 City supplied valves complete with operators as detailed in this specification and shop drawings.

2.2 QUALITY CONTROL

- .1 Assist the equipment supplier with installation verification.

Part 3 Execution**3.1 GENERAL**

- .1 Supply all necessary labour and tools for the complete installation of all valves.
- .2 Install all valves in strict accordance with the manufacturer's instructions and as specified.

3.2 INSTALLING VALVES

- .1 Construct foundations for valves (as applicable) in accordance with Division 3 and as directed by the Contract Administrator. Temporarily support the equipment as may be required. All temporary supports shall be rigid and so constructed as not to subject the equipment to any undue stresses or cause any damage.
- .2 Properly align the valves and adjacent piping with the stem truly vertical unless otherwise shown and flange bolts carefully tightened to prevent overstressing or distortion of the valve flanges or body.
- .3 The manufacturer will provide a Certificate of Installation in accordance with to the Contract Administrator when the equipment has been satisfactorily installed.
- .4 Before acceptance of the equipment by the City, it will be inspected and final adjustments made by a qualified, competent representative of the manufacturer.
- .5 The manufacturer will provide a Certificate of Installation to the Contract Administrator when the equipment has been satisfactorily installed in accordance with Section 01 33 00.

3.3 HANDLING OF VALVES

- .1 Do not place chains, cables and ropes through valve ports or attached to operating cylinders or hand wheels. Use slings either around the valve body or with bolts or rods through the flange bolt holes.
- .2 Store valves in a cool location clear of moving vehicles or other objects. Dirt and debris shall be prevented from entering the valve internals. Do not rest valves on cylinders, hand wheels or operating shafts.
- .3 Cover valves to shield them from dirt and to avoid exposing the seats to sunlight or mercury arc light.

3.4 COMMISSIONING

- .1 Provide two (2) weeks notice to the Contract Administrator prior to commencement of commissioning to witness the activities.
- .2 The Equipment Manufacturer's Technical Representative or approved alternate shall inspect the valve installation to ensure that the equipment has been installed in accordance with the manufacturer's requirements. If the installation is not in order, Equipment Manufacturer's Technical Representative shall provide instruction for the installation Contractor. The equipment shall be operated, and adjustments made at this time.

- .3 The Manufacturer's Technical Representative, installation Contractor and Contract Administrator shall jointly commission the works in accordance with the written procedure for commissioning. The installation Contractor shall provide sufficient manpower for the duration of the commissioning period. The installation Contractor shall make necessary adjustments during commissioning to put the works into continuous operation.
- .1 The Contract Administrator will request that the equipment be operated to demonstrate that it performs as specified. If the Contract Administrator notes deficiencies, the deficiency shall be corrected immediately by the installation Contractor. The installation Contractor shall advise the Contract Administrator, in writing, when the deficiencies have been corrected.

3.5 CERTIFICATES

- .1 On completion of installation and testing, submit the manufacturer's certification of the correctness of the installation to the Contract Administrator.

END OF SECTION