ITEM NO. 828
GATE VALVES

828.1 DESCRIPTION: This item shall consist of gate valves installed in accordance with these specifications and as directed by the Engineer.

828.2 SUBMITTALS: Contractor shall submit manufacturer's product data, instructions, recommendations, shop drawings, and certifications.

828.3 MATERIALS: The materials for all gate valves shall conform to the specifications contained within the latest revision of SAWS Material Specification Item No. 21-02, "Resilient Seated Gate Valves and Tapping Valves."

828.4 CONSTRUCTION: Gate valve installation shall include: valve, reaction blocking (conforming to Standard Drawing DD-828-1), cast iron boot, valve box extension (having ductile iron riser pipe), valve box, concrete collar (where subjected to vehicular traffic), and valve box lid. Gate valves constructed in the terrace shall be constructed with No. 3 bars all around.

The valve box shall be placed in such a manner to prevent shock or stress being transmitted to the valve. All valves located 6 feet and deeper shall include valve key extensions inside the valve box. The Contractor has the option to install fully adjustable valve box and valve key extension systems, on all valves located between 6 feet and 13 feet. Adjustable valve box and valve key extension systems shall be centered over the valve’s operating nut with the box cover flush with the finished pavement surface or located at another level as directed by the Engineer. Valve boxes located in streets or other area subject to vehicular traffic shall be provided with concrete collars as shown in these standard drawings. Collars around such valve boxes shall be formed and finished off neatly and in a sound workmanlike manner.

Valve pits shall be located so that the valve operating nut is readily accessible for operation through the opening in the valve box. The valve box shall be set flush with the finished pavement surface or at other finish elevations as may be specified. Pits shall be constructed in such a manner to permit minor valve repairs and provide protection to the valve and pipe from impact (where penetrating through pit walls).

In Pressure Zones 9-16, all valves 6 inches and larger shall be supported on a concrete pad in accordance with Standard Drawings DD-828-2 and DD-828-3.

828.5 MEASUREMENT: Gate valves and valve boxes will be measured by the unit of
each such assembly of the various sizes of gate valves and valve boxes installed to the finished grade.

828.6 PAYMENT: Payment for gate valves, complete with valve box, will be made at the unit price bid for each assembly of the various sizes of gate valves and valve boxes installed. Payment shall also include: excavation, selected embedment material, anti-corrosion embedment, hauling, and disposition of excavated surplus material, backfill, concrete collar at the valve box (where subjected to vehicular traffic), riser pipe, cast iron boot, packing, tar paper, concrete grout, concrete reaction blocking, protective coating material for bolts, nuts, and ferrous surfaces, and polyethylene sleeve.

- End of Specification -
Gate valves constructed in the terrace shall be constructed with No. 3 Bars.

C.I. cap to be labeled "WATER" or "DIVISION VALVE" (when specifically indicated).

Existing or proposed grade

2" Min. / 4" Max. Clearance

6" Min.

6" D.I. Pipe

6" Min. Concrete Collar around Valve Box, where subject to vehicular traffic

Standard Valve Box Assembly

Water

Main

Select Material

Use concrete blocking for all valves

Bottom of trench

NOTE: All Concrete to be 3,000 psi.

Note: For all work associated with recycled water valves, refer to DD-110-10, Sheet 1 of 1.
Gate valves constructed in the terrace shall be constructed with No. 3 Bars

C.I. cap to be labeled "WATER" or "DIVISION VALVE" (When Specifically Indicated)

Existing or Proposed grade

6" Min. Concrete Collar around Valve Box, where subject to vehicular traffic

2" Min. / 4" Max. Clearance

6" D.I. Pipe

Standard Valve Box Assembly

Burlap packing around valve casting and base of 6" Valve Box boot

Concrete grout around base of boot to keep dirt out of valve stem. Place tar paper between valve casting and grout.

Horizontal bevel geared Gate Valve with enclosed gear case

Concrete Blocking (As Required)

Note: All Concrete to be 3,000 psi.

Note: For all work associated with recycled water valves, refer to DO-110-10, SHEET 10F1.
Gates valves constructed in the terrace shall be constructed with No. 3 Bars
C.I. cap to be labeled "WATER" or "DIVISION VALVE" (When Specifically Indicated)

Existing or Proposed grade

2" Max. / 4" Min. Clearance

6" Min. Concrete Collar around Valve Box, where subject to vehicular traffic

6" D.I. Pipe

Standard Valve Box Assembly

Burlap packing around valve casting and base of 6" Valve Box boot

Concrete grout around base of boot to keep dirt out of valve stem. Place tar paper between valve casting and grout.

Vertical spur geared Gate Valve with enclosed gear case

Note: For all work associated with recycled water valves, refer to DO-110-10, SHEET 10F1.

Note: All concrete to be 3,000 psi.
VALVE MARKER

Notes:
1. Valve Marker is 3" Steel pipe painted as shown
2. Valve Measurements shall be referenced to Marker
3. SAWS Decal shall be noted on the marker and facing the direction of the valve.

SECTION A-A