

*San Antonio Water System Standard Specifications for Construction*

**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 MATERIALS:** The materials for all gate valves shall conform to the specifications contained within the latest revision of SAWS Material Specification "Resilient Seated Gate Valves", Item No. 21-02 and AWWA with the exception that fusion bonded coating epoxy will be the only coating allowed.
- 828.3 CONSTRUCTION:** Gate valve installation shall include; valve, reaction blocking when required conforming to Standard Drawing DD-828-1, cast iron boot, valve box extension (Ductile Iron Riser Pipe), valve box, concrete collar where subjected to vehicular traffic, and valve box lid. Gate Valves constructed in 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 the Standard Drawings. Collars around such valve boxes shall be formed and finished off neatly and in a workmanlike manner.

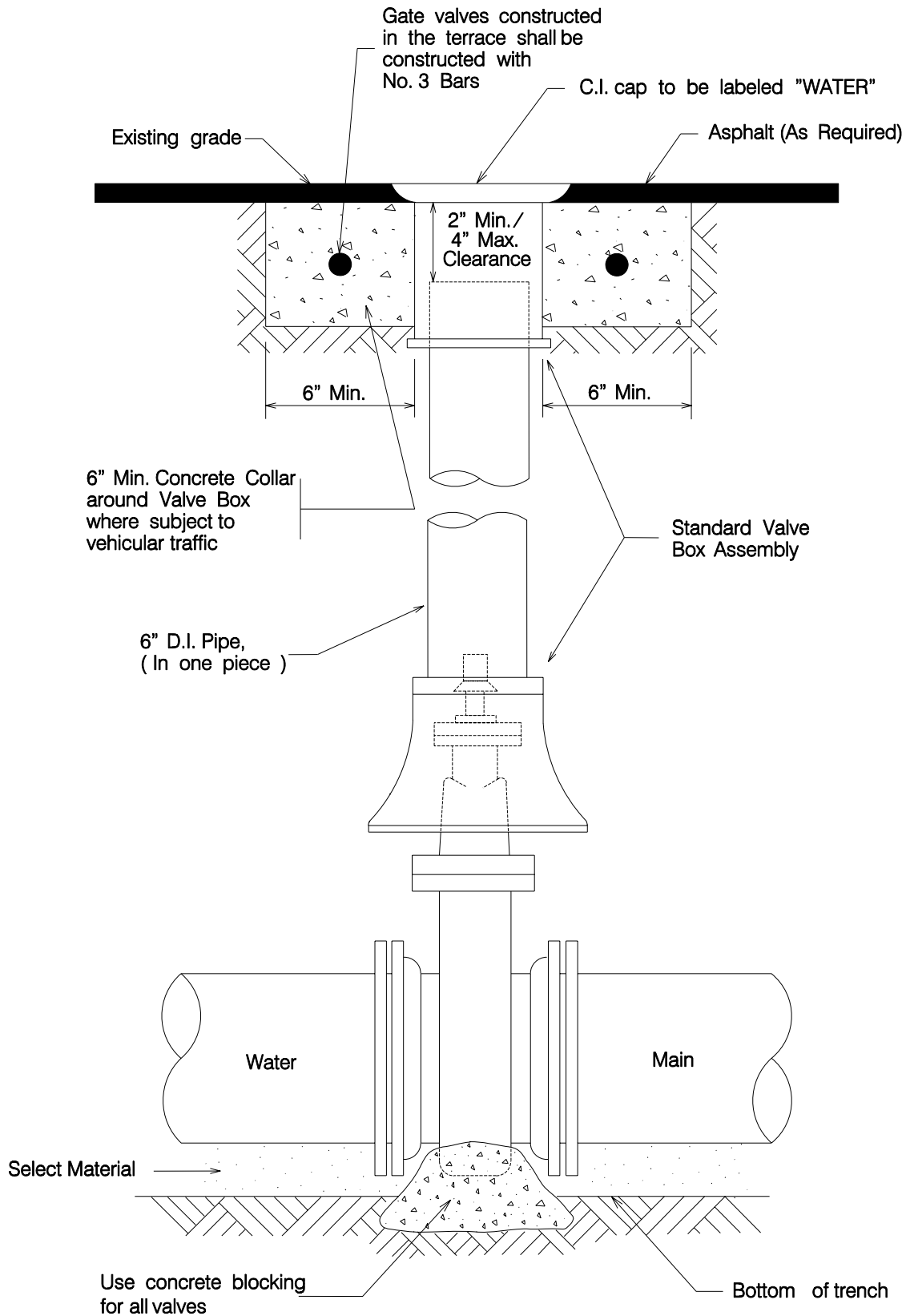
Valve pits shall be located so that the valve operating nut is readily accessible for operation through the opening in the valve box. The valve box shall be set flush with the finished pavement surface or at other finish elevations as may be specified. Pits shall be constructed in such a manner to permit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

In a High Pressure Distribution System as specified in Appendix A, 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.

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**828.4**        **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.

**828.5**        **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 when specified, 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 where required.



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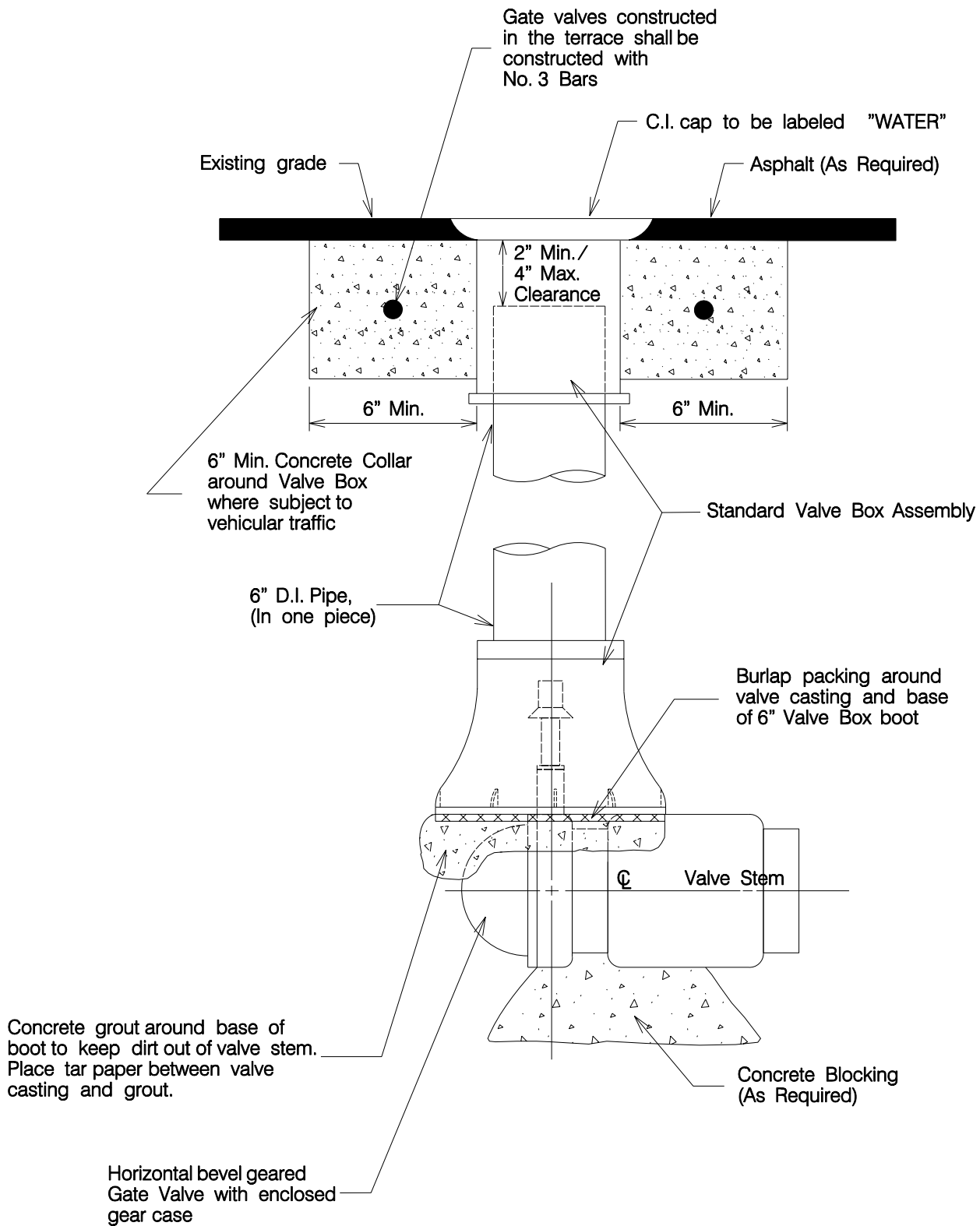
**INSTALLATION OF NON-GEARED  
 GATE VALVE WITH VALVE BOX  
 AND EXTENSION**

APPROVED  
 March 2008

REVISED

**DD-828-01**

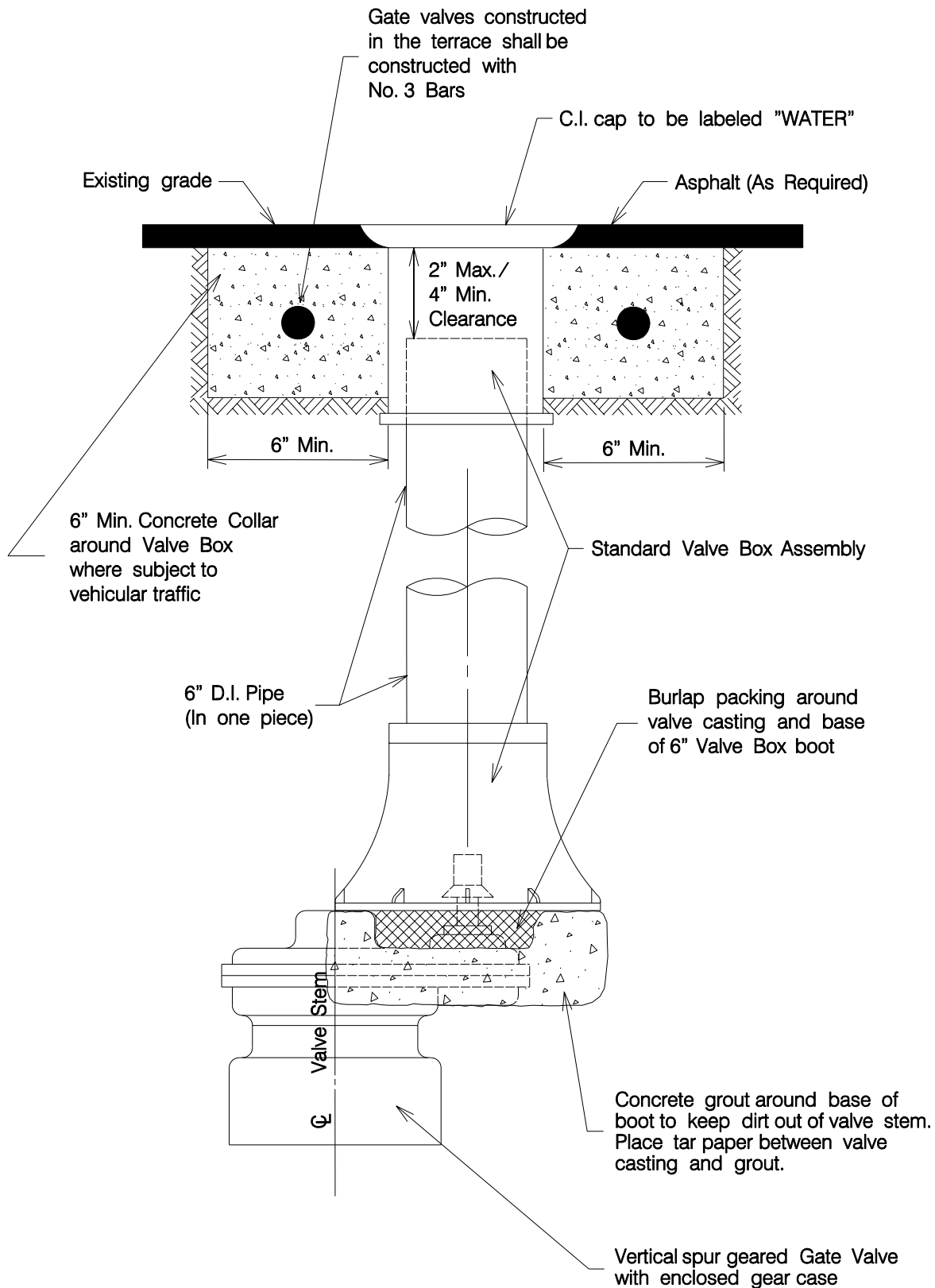
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 1 OF 1

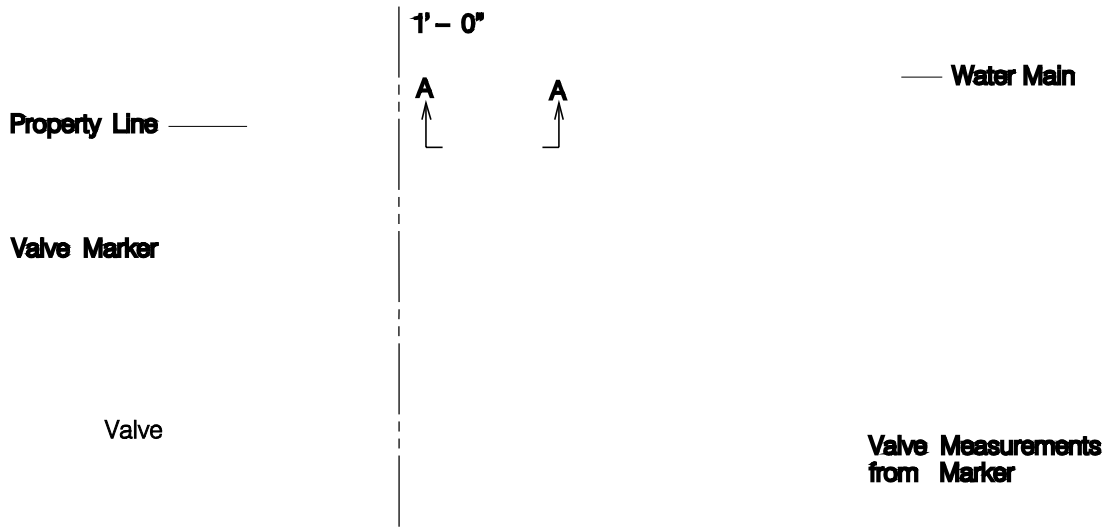


PROPERTY OF  
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 SAN ANTONIO, TEXAS

**INSTALLATION OF GEARED  
 HORIZONTAL GATE VALVE  
 WITH VALVE BOX COMPLETE**

APPROVED	REVISED
March 2008	
<b>DD-828-02</b>	
SHEET 1 OF 1	





**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.

— Top closed and welded

**Mound**

ete —

1'-0"  
Yellow

1'-0" Black  
3'-0"

1'-0"  
Yellow

2'-0"  
2" Min.

±1'-0"

**SECTION A-A**