



CITY OF
TUCSON
TUCSON WATER
DEPARTMENT

Tucson Water Standard Specifications and Details 2011 Edition – Engineering Directive 02-2014

Effective Date: January, 2014

SUBJECT: Revise Standard Specifications - SD 300, SD-340, SD-500

STATEMENT OF PURPOSE

This Directive shall define revisions to the 2011 Tucson Water Standard Specifications for Standard Details (SD), SD-300 Valve Box Installation, SD-340 System Installation Outside Public Right-of-Way, and SD-500 Fire Hydrant or Fire Service Stub Out. The revisions are being implemented to meet the new requirements of the “Fire Service Maintenance and Isolation Valve Location” departmental procedure approved in January 2013.

REVISIONS

- **SD-300 Valve Box Installation.** Sheet 1 of 3, add 15-inch radius delineation to valve box cover and collar diagram.
- **SD-340 System Installation Outside Public Right-of-Way.** Sheet 1 of 2, add leader and text box with “new 8” pipe” to diagram. Add note No. 3 with the following text, “For Fire Services, the isolation valve located at the connection to the main will serve as the boundary between Tucson Water’s maintenance responsibility and the customer’s responsibility.”
- **SD-500 Fire Hydrant or Fire Service Stub Out.** Sheet 4 of 8, add gate valve and riser assembly detail and “refer to note # 4” text and leader in City right-of-way at the boundary. Add “Private Property” text on the customer side of the right-of-way boundary. Add a pipe spool piece and end cap on the customer side of the right-of-way boundary. Revise note No. 3 with the following text, “End caps on stub-outs shall be restrained and mechanical joint, tapped for a two inch iron pipe thread, with 2” black iron threaded plug and will be installed or adjusted to a depth of no greater than 48”. Stub outs over 5’ in length shall require a drain valve assembly in accordance with SD-400.” Add note No. 4 with the following text, “For fire service stub-outs only, a secondary isolation valve shall be required. All infrastructure up to and including this isolation valve shall be the responsibility of Tucson Water. All infrastructure on the customer side of the valve shall be considered private and therefore the responsibility of the customer.”



AUTHORITY

Arizona State Regulations, City of Tucson Ordinances, Tucson City Code and other enabling legislation which affect the production, treatment, distribution and control of potable and reclaimed water.

PROCEDURE

New water system designs shall reflect these requirements.

PROCEDURAL RESPONSIBILITY

The Engineering Administrator for Tucson Water and /or designated representative(s) are responsible for the enforcement of this Directive and the associated standards.

RECOMMEND



Jeffrey Drumm, P.E.
Construction Section Manager
Planning & Engineering Division

CONCUR



Patricia Eisenberg, P.E.
Chief Engineer
Planning & Engineering Division





Departmental Procedures

SUBJECT Fire Service Maintenance and Isolation Valve Location	Number IV-B.10	Effective Date 1/28/13	Page 1 of 2
	APPROVED BY <i>Alvin D. Funt</i>		

I. PURPOSE

To define and standardize the department's policy regarding the location of the isolation valve for private fire services and to define the maintenance responsibilities of Tucson Water and the customer.

II. DEFINITIONS

- A. "Fire Service" – An unmetered connection to the potable system used solely for fire protection.

III. BACKGROUND

Fire services have historically provided a source of confusion over where Tucson Water's maintenance responsibility ends and where the maintenance responsibility of the customer begins. New fire services have been typically installed with an isolation valve at the connection to the public distribution main and stubbed out at the approximate location of the property line. The customer would then install the private portion of the fire service to their building. The customer portion of the work is considered private plumbing and is installed without the inspection of Tucson Water staff. For many decades, the property line has been the assumed boundary between the private plumbing and public infrastructure, however, customer requests to repair leaking or damaged fire services are often forwarded to Tucson Water regardless of the location with respect to the property line; resulting in the unintended consequence of Tucson Water maintenance staff repairing private plumbing on private property at ratepayer expense.

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IV. POLICY

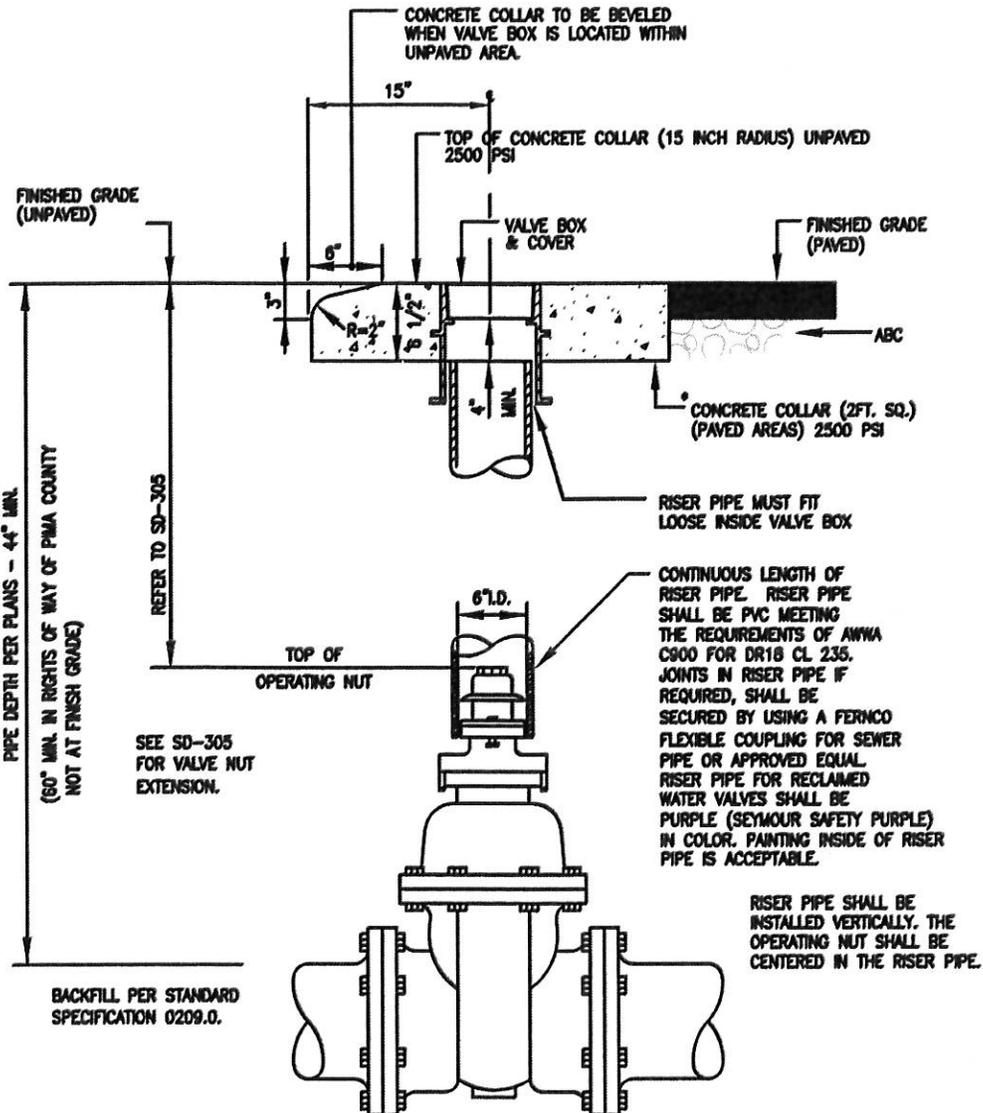
In order to define the maintenance responsibilities on fire services, the following shall be implemented:

1. For fire services located in public right-of-way, a second isolation valve shall be installed at the property line in addition to the valve located at the connection to the distribution system. All infrastructure up to and including the second isolation valve shall be the responsibility of Tucson Water. All infrastructure on the customer side of the valve shall be considered private and therefore the responsibility of the customer. Since the second isolation valve is providing a benefit to the utility, Tucson Water will pay for the installation cost of the second isolation valve.
2. When a public main is located in an easement on private property, a second valve shall not be required. The isolation valve located at the connection to the main will serve as the boundary between Tucson Water's maintenance responsibility and the customer's responsibility.

In unique cases (i.e. short distance from existing main to property line, etc.), the second isolation valve may be omitted at the discretion of Tucson Water staff

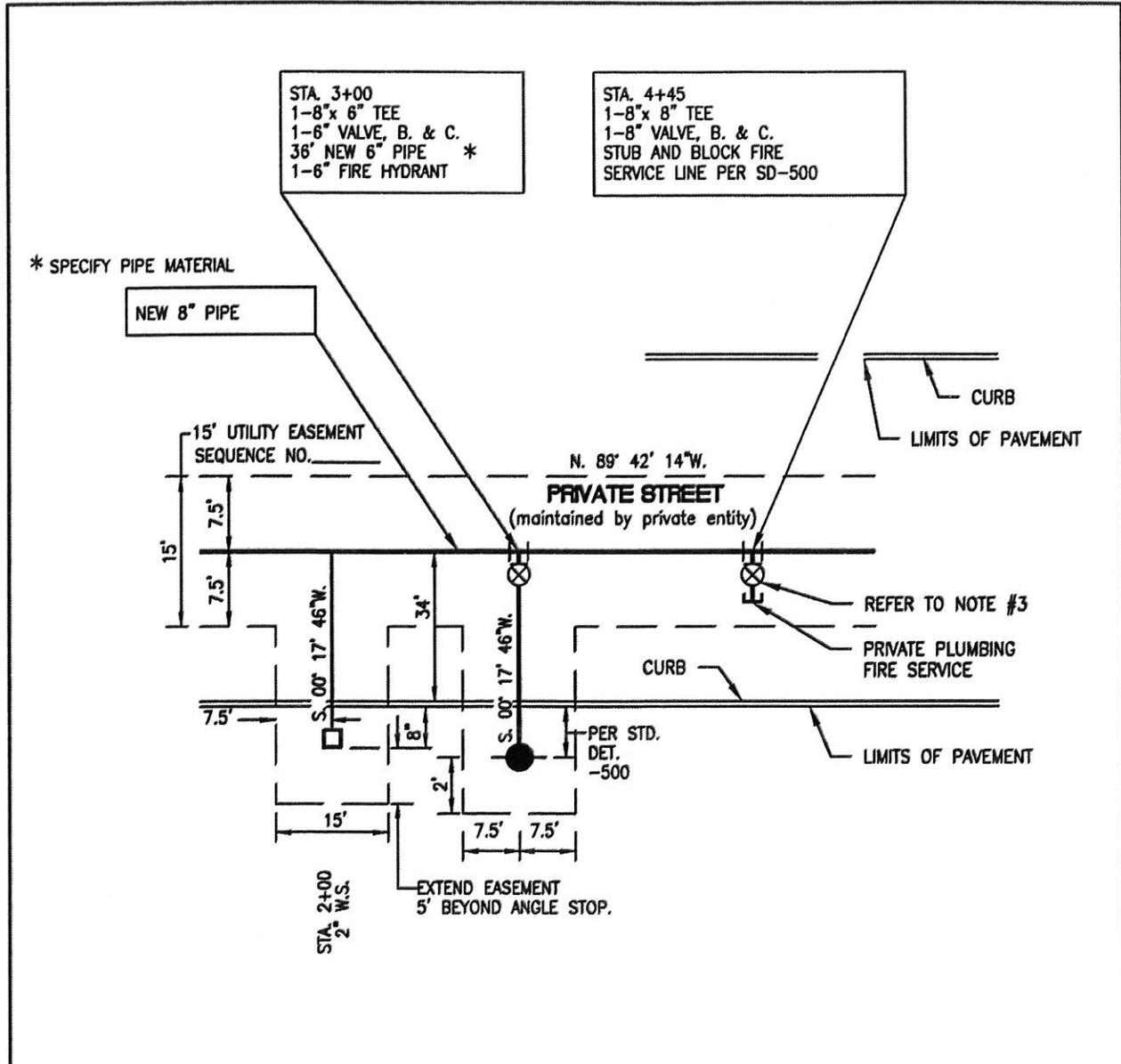
IV. RESPONSIBILITY FOR REVIEW

Tucson Water, New Area Development is responsible for the review of this procedure annually on the procedure anniversary date or as necessary.



* CONCRETE COLLAR TO EXTEND TO FINISHED GRADE WHEN INSTALLED IN CONCRETE PAVEMENT OR PAVED AREAS. (1/2" BITUMINOUS JOINT MATERIAL SHALL BE INSTALLED BETWEEN CONCRETE COLLAR AND CONCRETE PAVEMENT.)

ISSUED:		STANDARD DETAIL VALVE BOX INSTALLATION		DETAIL NO.
6/97				SD-300
REVISED:				SHEET 1 OF 3
4/13				



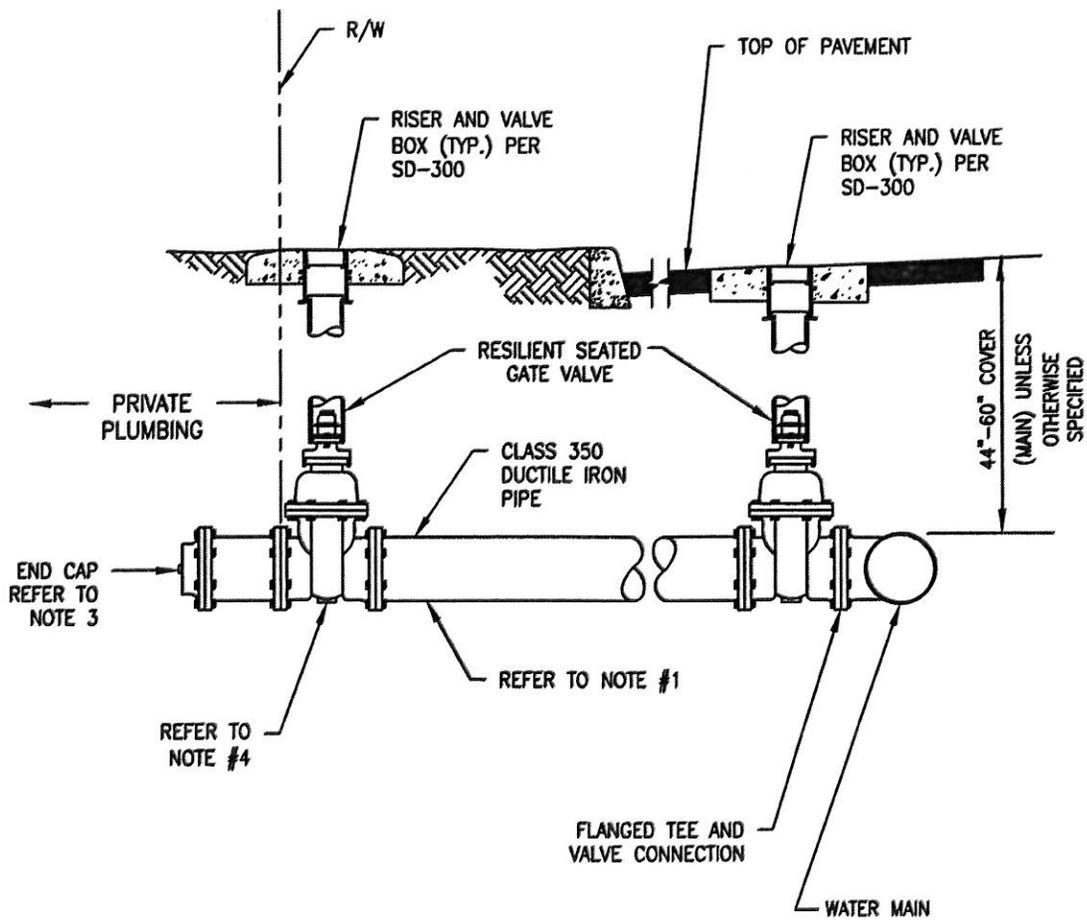
* SPECIFY PIPE MATERIAL

NEW 8" PIPE

NOTES:

1. Details as shown reflects the minimum amount of information which shall be required prior to acceptance of plans. Coordinate with Tucson Water for additional requirements.
2. Bearings and distances shall be shown on the plans exactly as described in the legal descriptions. Plans shall also show the "true point of beginning" per the legal description.
3. For fire services, the isolation valve located at the connection to the main will serve as the boundary between Tucson Water's maintenance responsibility and the customer's responsibility.

ISSUED:		STANDARD DETAIL SYSTEM INSTALLATION OUTSIDE PUBLIC RIGHT-OF-WAY		DETAIL NO.
6/97				SD-340
REVISED:				SHEET 1 OF 2
4/13				



NOTES:

1. Mechanically restrained joint connection shall be in accordance with Standard Specification 1406 and shall extend from water main tee to end cap. Mainline to be restrained per SD-600.
2. Concrete thrust block per SD-610 shall only be used for extending existing pipe, which is not mechanically restrained, between the cap and the main tee or when approved by the engineer.
3. End caps on stub-outs shall be restrained mechanical joint, tapped for a two inch iron pipe thread, with 2" black iron threaded plug and will be installed or adjusted to a depth of no greater than 48".

Stub outs over 5' in length shall require a drain valve assembly in accordance with SD-400.
4. For fire service stub outs only, a secondary isolation valve shall be required. All infrastructure up to and including this isolation valve shall be the responsibility of Tucson Water. All infrastructure on the customer side of the valve shall be considered private and therefore the responsibility of the customer.

ISSUED:		STANDARD DETAIL		DETAIL NO.
6/97		FIRE HYDRANT OR FIRE SERVICE STUB OUT		SD-500
REVISED:				SHEET 4 OF 8
11/13				