

**San Antonio Water System Standard Specifications for Construction**

**ITEM NO. 1109  
SANITARY SEWER SERVICE  
STUBS OR RECONNECTIONS**

**1109.1 DESCRIPTION**

1. Installation of service stubs in sanitary sewers serving areas where sanitary sewer service did not previously exist.
2. Reconnection of existing service connections along parallel, replacement, or rehabilitated sanitary sewers.

**1109.2 CONSTRUCTION**

1. Performance Requirements:
  - A. Provide a minimum of 72 hours notice to customers whose sanitary sewer service will potentially be interrupted.
  - B. Accurately field locate service connections, whether in service or not, along the rehabilitated sanitary sewer main. For parallel and replacement sewers, service connections may be located as pipe laying progresses from downstream to upstream.
  - C. Properly disconnect existing connections from the sewer and reconnect to the rehabilitated liner, as described in this Section.
  - D. Reconnect service connections, including those that go to unoccupied or abandoned buildings or to vacant lots, unless directed otherwise by SAWS Engineer.
  - E. Complete reconnection of service lines within 24 hours after disconnection for slip-lining, parallel, or replacement sanitary sewer mains.
  - F. Reconnect services on cured-in-place liner at 12 feet depth or less by the excavation method. The SAWS Construction Inspector reserves the right to require service connections by excavation when a remote cut service connection damages the lines.
  - G. Reconnection by the excavation method shall include the stack and fittings and required pipe length to reconnect service line.

## *San Antonio Water System Standard Specifications for Construction*

2. Preparation:
  - A. Determine the existing sewer locations and number of existing service connections from closed-circuit television (CCTV) inspection DVD or from field survey. Accurately field locates existing service connections, whether in service or not. Use existing service locations to connect or reconnect service lines or liner.
  - B. For rehabilitated sanitary sewer mains, allow liner to normalize to ambient temperature and recover from imposed stretch. For cured-in-place liners, verify that liner is completely cured.
  - C. For new parallel and replacement sanitary sewer mains, complete testing and acceptance of downstream sewers as applicable. Provide for compliance with requirements of Paragraph 3.01E.
3. Reconnection by Excavation Method:
  - A. Remove a portion of existing sanitary sewer main or carrier pipe to expose the liner pipe. Provide sufficient working space for installing a prefabricated pipe saddle.
  - B. Carefully cut the liner pipe making a hole to accept the stub out protruding from the underside of the saddle.
  - C. Strap on the saddle using a stainless steel band on each side of the saddle. Tighten the bands to produce a watertight seal of the saddle gasket to the liner pipe.
  - D. Remove and replace cracked, offset, or leaking service line for up to 5 feet, measured horizontally, from the center of the new liner.
  - E. Make up the connection between liner and service line using PVC sewer pipe and approved fittings and couplings.
  - F. Encase the entire service connection in cement stabilized sand as shown on Drawings.
  - G. Test the service connections before backfilling.
4. Reconnection by Remote Method:

## **San Antonio Water System Standard Specifications for Construction**

- A. Make service reconnections using remote-operated cutting tools on cured-in-place liners at depth greater than 12 feet.
  - B. Employ method and equipment that restore the service connection capacity to not less than 90 percent of original capacity.
  - C. Immediately open any missed connections and repair any holes drilled in error using a method approved by SAWS Construction Inspector.
5. Reconnection on Parallel or Replacement Segments:
- A. Install service connections on the sewer main.
  - B. Remove and replace cracked, offset or leaking service line for up to 5 feet, measured horizontally, from the centerline of the sanitary sewer main.
  - C. Make up the connection between the main and the existing service line using PVC sewer pipe and approved couplings, as shown on the Drawings.
  - D. Test service connections before backfilling.
  - E. Embed the service connection and service line as specified for the sanitary sewer main as shown on the Drawings. Place and compact trench zone backfill in compliance with SAWS Specification Item No. 550.
6. Installation of New Service Stubs:
- A. Install service connections on sanitary sewer main for each service connection. Provide the length of stub indicated on the Drawings. Install plug or cap on the upstream end of the service stub as needed.
  - B. Test service connections before backfilling.
  - C. Embed the service connection and service line as specified for sanitary sewer main, and as shown on the Drawings. Place and compact trench zone backfill in compliance with SAWS Specifications Item No. 550. Install a minimum 2 foot length of magnetic locating tape along the axis of the service stub and 9 inches to 12 inches above the crown of the pipe, at the end of the stub.

## *San Antonio Water System Standard Specifications for Construction*

### **1109.3 MEASUREMENT AND PAYMENT**

1. Unit Prices.
  - A. Payment for sanitary sewer service stubs or service reconnections with stacks located within 5 feet of the sanitary sewer main centerline is on a unit price basis for each stub or reconnection. Payment will be made for each service stub or reconnection installed complete in place, including service connections, couplings, adapters disconnecting existing services, reconnecting new service, fittings, excavation, and backfill.
  - B. Payment for sanitary sewer service stubs or service reconnections without stacks located within 5 feet of the sanitary sewer main is on a unit price basis for each stub or reconnection. Payment will be made for each service stub or reconnection installed complete in place, including service connections, couplings, adapters disconnecting existing services, reconnecting new service, fittings, excavation, backfill, and testing.
  - C. Payment for sanitary sewer service lines more than 5 feet laterally from the sewer main shall be governed by SAWS Specifications, "Sanitary Sewer Laterals", Item No.854.
  - D. One or more connections discharging into a common point are considered one service connection. The Contractor shall not add service reconnections without approval of the SAWS Construction Inspector. The SAWS Construction Inspector may require connections to be relocated to avoid having more than two service connections per reconnection.
  - E. Protruding service connections which must be removed to allow liner insertion are paid as a service reconnection when connected.
  - F. No direct payment will be made for plugged abandonment of service connection. No separate payment will be made for abandonment of service connection unless excavation is required. No separate payment will be made for excavation of sanitary sewer services within the new or replacement sewer trench.
  - G. No separate payment will be made for removal of existing sanitary sewer service stubs.
  - H. No separate payment will be made for a plugged and abandoned service connection if the service to be abandoned is within 4 feet of an active connection. Payment for abandoned service connection will not be allowed.

**San Antonio Water System Standard Specifications for Construction**

- I. If a faulty remote cut is later corrected using the procedures specified for reconnection by excavation, only one reconnection will be allowed for payment.
- J. No direct payment will be made for hand excavation and backfill when authorized by SAWS Construction Inspector in locations where excavation by machine is not suitable.