

SECTION 5

SERVICE LINES

5-01. Location of Service Lines.

- a) The trench for the services shall have a minimum width of ten (10) inches and a depth of thirty (30) inches below the existing or finished grade throughout the length of service up to two (2) inch services. Services larger than two (2) inches shall be detailed in supplementary drawings which will be furnished to the Contractor if such larger size is specified.
- b) Services in existing, paved streets shall be installed by boring under the pavement, where practicable.
- c) Size of services shall be as shown on the plans, as specified, or as determined by the District.
- d) In general, each service shall start at the new water main and shall extend to the meter location at an elevation determined by Standard Drawing W-1 or W-1A and the existing grade at the meter location. Each service shall be connected to the corporation valve at the main and an angle valve shall be installed at its end in the meter box location.
- e) The locations of the meter boxes shall be as indicated on the plans or as directed by the Inspector. No meter box shall be installed closer than five (5) feet from the edge of a driveway apron.
- f) Single service lines shall not be less than five (5) horizontal feet from sewer laterals.
- g) In no case shall a service or other tap be made in a main closer than twenty-four (24) inches to a bell, coupling, joint, fitting, or another service tap.
- h) A single service line is required for each metered connection. However, two individual services may be installed in a single twenty-four (24) inch trench excavated approximately along the projection of a lot line common to any two (2) lots. In such cases, service taps on the main shall not be less than two (2) feet apart.
- i) Meter will be purchased from the District and installed by Contractor. Water services shall be installed by Contractor only when indicated on the plans.

j) Services shall be tested and disinfected in the same manner as specified elsewhere herein for water mains. These operations shall be performed concurrently with the testing and disinfecting of the water mains where practicable.

5-02. Corporation Valves and Angle Valves.

All corporation valves and angle valves shall be same size as the service size. Corporation valves shall have male iron pipe threads on the inlet.

All valves shall have a circular waterway of service line diameter. All nuts, washers, and contact surfaces shall be faced to a true fit. All tapers shall be carefully ground and show no leakage under hydrostatic test. All valves shall be finished in a neat and workmanlike manner, and the thickness of metal shall be equal around the axis of the circular way. All burrs on the inside of valves shall be carefully removed leaving a clean, smooth waterway. All valves, including copper tubing connections, shall be field tested with the water main as noted above.

All valves shall be sand cast of high grade bronze conforming to ASTM B62. District shall have the right to take one or more from each lot and have same analyzed.

5-03. Copper Tubing.

Copper tubing shall be required for all services. It shall be seamless copper water tube, Type K, cold drawn, and annealed of the size shown on the plans. It shall be true, smooth, clean on both inside and outside, and free from any cracks, seams, or other defects. It shall be truly cylindrical, of the full specified outside and inside diameters and of uniform thickness of metal, and shall conform to ASTM B88. The tubing shall be continuous between the main line and the meter with no splices permitted. All copper tubing shall be wrapped with 20 mil tape within 18" of the water main inclusive of corporation valve.

5-04. Fittings.

All fittings shall have copper flare connections. All joints shall be made in accordance with manufacturers recommendations.

5-05. Connections to Asbestos Cement Mains.

All connections for water services shall be made with a bronze double strap service clamp as shown on Standard Drawing W-1 and W-1A.

5-06. Connections to Cement Mortar Lined and Coated Steel Mains.

Where practical, connections for water services shall be made with 3,000 lb weld-on half coupling, welded to the pipe in the shop at time of pipe fabrication. After coupling is welded to the pipe, it shall be covered by mortar coating so no bare metal is left exposed. Where it is necessary to make the connection in the field, additional care shall be exercised to minimize the damage to mortar linings.

5-07. Connections to Polyvinyl Chloride (PVC).

All connections for water services shall be made with a bronze service saddle positioned as shown on Standard Drawing W-1 and W-1A; Jones Model No. J-969, or approved equal.

5-08. Connections to Ductile Iron Mains.

All connections for water services shall be made with double strapped malleable iron service saddles positioned as shown in Standard Drawing W-1 and W-1A. Saddles shall have female iron pipe thread one standard size larger than service tubing size. A teflon di-electric bushing shall be installed between the service corporation valve and the saddle.

5-09. Water Meters.

All water meters shall include an approved Automatic Meter Reading System. Water meters shall be purchased from the Water District. Meters must be paid for and ordered from the District a minimum of thirty days prior to date of need.

5-10. Pressure Regulators.

All services at 80 psi or greater must be equipped with pressure regulators. Regulators may not be installed within the meter box. All pressure regulators are to be maintained by the property owner.

5-11. Cross Connection Protection.

All cross connection protection shall conform to Palmdale Water District Ordinance No. 88-1. In addition, all plumbing between meter and backflow prevention assembly must be visually inspected and approved by Cross Connection Controller or District Inspector. Said assemblies shall be placed as close as practical to meter. Backflows to be tested within seven (7) days of activation of service.