

SECTION 4 - LARGE SERVICES AND FIRE LINES

4-01 GENERAL

All services four (4) inches and larger in diameter installed for the purpose of obtaining water from the public system for domestic, irrigation, commercial or industrial consumption, or for fire protection shall be defined as large services. Large services installed for the purpose of providing fire protection only shall be further defined as fire lines.

Unless otherwise specified on the plans approved by the SBMWD, all materials, construction methods and controls shall conform to the applicable sections of the Standard Specifications, which this section is a part thereof, including, but not limited to, testing, disinfection, and flushing.

4-02 METERS

All large service installations shall include a meter. Meters shall conform to size, type and manufacturer as shown on the Standard Drawing W1.15. Meters shall be compound type unless otherwise approved by the SBMWD. The SBMWD reserves the right to specify the type of meter if, in its sole opinion, a specific type of meter is best suited for the proposed application. Meters shall be provided with direct reading registers with a full circle sweep hand, a leak indication dial, and shall read in hundreds of cubic feet.

Minimum registration shall be as follows for the meter sizes stated:

2-3 inch meters	CF X 100
4-8 inch meters	CF X 100
10 inch and greater	CF X 100

All large service installations, except fire lines, shall include provisions for a temporary bypass line per the Standard Drawings. All valves and fittings on the bypass line shall be flanged and shall conform to Sections 2-05 and 2-08 of these specifications, respectively, unless otherwise approved by SBMWD.

The SBMWD at its sole discretion, may require the bypass line to have OS&Y valves with handwheel operators and a permanent bypass spool. When OS&Y gate valves and spools are required by the SBMWD on the bypass line, the hand wheel operators shall be secured in the closed position by a lock and chain.

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4-03 VAULT INSTALLATIONS

All large services installed underground shall be installed in a fiberglass or precast concrete vault with a composite cover or as otherwise specified on the construction drawings. The dimensions of the vault, location of knock-out sections and the cover details shall be in strict conformance with this section and the application Standard Drawings contained in these specifications or as otherwise specified on the construction drawings.

The vault cover shall consist of one or two doors in one channel frame and shall open over the entire length and width of the vault per Standard Drawing W6.20 and W6.21. Door leaf shall be 1/4-inch aluminum diamond pattern plate to withstand an HS-20 live load. Channel frame shall be 1/4-inch aluminum. Door shall be equipped with hinges, pins, spring operators for easy operation, and an automatic hold open arm with release handle. A snap lock with removable handle shall be provided. Unless noted otherwise on the plans, hardware shall be mill finish with bituminous coating applied to the exterior of the frame. Stainless steel hardware may be required for installations in a highly corrosive environment. Manufacturer shall guarantee against defects in material and workmanship for a period of at least five years.

All vaults installed in areas subject to incidental vehicular traffic shall be steel reinforced concrete with an aluminum cover designed to meet a minimum traffic bridge loading of H-20, as defined by the American Association of State Highway Officials. As to type, materials, and hardware, traffic covers shall conform to the requirements specified in the preceding paragraph.

When vaults are installed in areas subject to pedestrian traffic, the cover shall consist of nonskid materials as approved by the City Engineer.

4-04 COATINGS - ABOVEGROUND INSTALLATIONS

After ALL testing and disinfection has passed, but prior to final acceptance by the SBMWD, all aboveground large service installations shall be coated in accordance with Section 2-14.

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4-05 AESTHETICS - ABOVEGROUND INSTALLATIONS

Aboveground large services shall be screened from public view by landscape plants, walls, or other appropriate means as directed by the SBMWD. Landscape plants shall incorporate perennial thornless varieties, chosen from the accepted list shown below, which blend with the local environment. Size of the landscape plants shall be approved by the SBMWD. If a screen wall is proposed, landscaping including clinging vines shall be planted to soften the wall and discourage graffiti. If such wall is adjacent to a structure, the wall may also be required to be painted to match the exterior of the structure, if determined necessary by the Utility. The aboveground service will be shielded from view on at least three sides, including the street side and the two adjacent sides. Whichever method of concealment is used, it shall not obscure or hinder access to the Fire Department's pumper connections.

Within the confines established by the SBMWD, the owner/developer shall locate all aboveground large services in a manner, which is aesthetically pleasing. Additional conditions may be required for specific projects in order to comply with local ordinances and zoning codes.

It shall be the owner's responsibility to irrigate and maintain planted landscape screening in a healthy state and to trim and prune them such that access to the device is not impaired. If owner fails to maintain landscape plants and paint in the desired state, SBMWD will cause such work to be performed and owner will be billed for the actual cost of performing the work plus 28.9 percent for overhead and administration. Failure to pay for said work, when due, shall be cause for termination of service.

Acceptable Landscape Plants:

- Abelia grandiflora
- Eugenia myrtifolia 'Compacta'
- Escallonia rubra
- Eunymous japonica
- Hibiscus 'Brilliant' (San Diego Red)
- Ligustrum japonicum 'Texanum' (Wax leaf Privet)
- Ligustrum ovalifolium (California Privet)
- Pittosporum Tobira
- Photinia fraseri 'Indian Princess' (Fraser's photinia)
- Or approved equal.

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Acceptable Clinging Vines:

Ficus Pumila (Creeping fig)
Parthenocissus tricuspidata (Boston ivy)
Cissus rhombifolia (Grape ivy)
Or approved equal.