



Construction Notes for Off-Site Water and Sewer Plans for Public Works or Building Department Approval

Utility plans show the concept of where various water, sewer, and other utilities will be installed. They also define who is responsible for what work and define what further plans must be drawn up for Water Department approval. Please use this listing as a guide for design.

Design plan shall list all existing water and sewer mains and services, including size and material.

Public Water Construction Notes

- {3/4" 1" 1 1/2" 2"} {domestic / irrigation} water service and meter to be installed by LBWD per WDS-001 (see Note 1 below).
- 3" {domestic / irrigation} water service and meter to be installed by LBWD per WDS-002 (see Note 1 below).
- {4" 6" 8"} {domestic / irrigation} water lateral and meter to be installed by LBWD under separate project. Refer to WDS-011 for general requirements (see Note 2 below).
- {4" 6" 8"} {fireline service} to be installed by contractor under separate design approved by LBWD under separate project. Refer to WDS-006.1 for general requirements (see Note 3 below).
- Kill tap service to be performed by LBWD. Contact City of Long Beach Customer Service at 562-570-5991 to order. See note 6 below.
- Existing live water service. Verify that meters have been removed. If not, Contact City of Long Beach Customer Service at 562-570-5991 to request removal. See note 6 below.
- Proposed location of easement.
- Projects with new construction shall have separate commercial and residential meters. All meters shall be designated as Commercial, Residential, or Irrigation uses.

Private Water Construction Notes

- Install {size, manufacturer, model number} {if existing device list serial number} {reduced pressure / double check / pressure vacuum breaker} backflow preventer per California Plumbing Code requirements. See manufacturer's cut sheet on sheet ___ of ___.
- Install {RP / DC / PVC} backflow preventer per {plumbing / irrigation} plans. {Plumbing / irrigation plans shall be included with subsequent plan check submittals.}
- Install { description / model / manufacturer } cage per detail xxxx.



Sanitary Sewer Service Construction Notes

- Per the California Plumbing Code Table 721.1, minimum horizontal distance from onsite sewer to public main shall be 10 feet.
- Install new ___" x 6" VCP cut-in wye connection per LBWD WDS-513, and new 6" VCP lateral per WDS-511 (see Note 4 below).
- Install new 6" cleanout per LBWD standard WDS-506 (see Note 5 below).
- Install new manhole per WDS-502 / 503 and WDS-505 (see Note 4 below).
- Trench, install ___" VCP pipe, and backfill per WDS-406.
- Cap existing sewer lateral 2 feet from property line / easement with stopper per approved materials submittal; concrete "thrust" block may be required at the discretion of the inspector (see Notes 4 and 6 below).

Further considerations. Plan must address special conditions including but not limited to:

- Trash enclosure considerations:
 - IWP requirement – check L.A. County San requirements;
 - Grease interceptor required?
 - Consider potential for storm flows into sewer system.
- Flow rate in sewer main; contractor to install wye cut-in during low flow period (night work) or provide bypass plan where required.
- Water main supports;
- Protect 401 DIP or casing for sewer laterals & mains that cross or parallel water mains within zone of separation (refer to 22 CA ADC § 64572, "Water Main Separation", of California Code of Regulations). **Engineer SHALL check elevations of water and sewer mains.**

On-site Sanitary Sewer Construction Notes

- Install ___ gallon grease interceptor {*mfr / model #*}. See manufacturer's cut sheet on sheet ___ of ___. The maximum number of drainage fixture units which may be connected to the unit is ___.
--OR--
Install grease interceptor with sample box per approved *mechanical / plumbing* plans.

Additional Sanitary Sewer Considerations

- Capacity shall be confirmed prior to approval of sewer connections.
- Sites with deep excavations requiring shoring and tie-back anchors shall provide the shoring plan to LBWD for review. Sections shall include approximate locations of existing and proposed sewer mains. See "Shoring Plan" below.



New Utilities Adjacent to or Crossing Water and Sewer owned by LBWD

Utilities to be installed in the vicinity of existing water mains shall be installed according to the following criteria:

- Crossing conduit encasement shall be 12" below water main;
- Provide 24" horizontal separation of water main and conduit encasement;
- Backfill within 12" of water main shall follow WDS-406. Include Note 9, see below.
- Include Note 8, see below.



Demolition Plan

Demolition plan shall address the following:

- Meter removals;
- Water Service Kill Taps;
- Sewer lateral capping.

Refer to Note 6 below.

Shoring Plan

All shoring plans shall be reviewed by the Long Beach Water Department prior to the issuance of a Building or Public Works permit. They shall include the following:

- All water and sewer mains in horizontal proximity to the proposed tie-backs shall be depicted on the plan view of the tieback plan;
 - o Label each water or sewer main by size, material, alignment from centerline, drawing number, and owner;
- Approximate location of the sewer main shall be depicted on section or elevation views of the tie-backs or pilings etc.;
- LBWD shoring notes shall be included on the shoring plan;
- L.A. County Sanitation District signature is required prior to LBWD signature, if LACSD sewer mains are potentially impacted by the tie-backs.

LBWD Shoring Notes

1. Prior to start of excavation or shoring work, all sewer laterals, whether shown on LBWD record information or not, shall be capped per the approved demolition or off-site utilities plan. Information provided by LBWD to the design engineer or contractor is subject to field verification.
2. LBWD does not mark gravity sewer in response to Dig Alert tickets. It is the responsibility of the shoring contractor to determine the locations of all sewer mains or laterals prior to the start of work.
3. Shoring contractor shall notify the LBWD Engineering Bureau, Development Services group, at 562-570-2419, or the LBWD project engineer {NAME} at {phone #} at least two weeks prior to start of shoring excavation.
4. Contractor shall pay applicable fees prior to approval of design plan by LBWD Engineering.
5. Upon completion of shoring work, the shoring contractor shall notify LBWD engineering.
6. Project owner or contractor shall be responsible to repair all damage discovered to sewer or water facilities to the satisfaction of the facility owner.
7. Review by L.A. County Sanitation Districts **IS / IS NOT** required. {Shoring Engineer shall state IS or IS NOT.}

LONG BEACH WATER DEPARTMENT REVIEW	
<input type="checkbox"/> NO EXCEPTION TAKEN <input type="checkbox"/> CORRECT AS NOTED, RESUBMITTAL NOT REQUIRED <input type="checkbox"/> CORRECT AND RESUBMIT <input type="checkbox"/> REJECTED – SEE REMARKS	
REVIEWED BY:	

NAME: _____	DATE: _____



Notes:

1. For the installation of potable water services 3 inches and smaller, Developer or Contractor shall follow instructions as listed at: <https://lbwater.org/customer-services/water/domestic-3-or-smaller/>
2. For the installation of potable water services 4 inches and larger, Developer or Contractor shall follow instructions as listed at: <https://lbwater.org/customer-services/water/domestic-larger-than-3/>
3. For the installation of fireline services 4 inches and greater, Developer or Contractor shall follow instructions as listed at: <https://lbwater.org/customer-services/water/fire-service-larger-than-3/>
4. The installation of sewer service connections and capping of existing sewer laterals requires a sewer permit and inspection by LBWD. Contractor shall follow instructions listed at: <https://lbwater.org/customer-services/sewer/sewer-service-request/>
5. Actual location of cleanout shall be verified in the field with LBWD Inspector prior to installation.
6. All sewer abandonments and water service kill taps shall be performed prior to site demolition and new installations of any kind.
7. SECTION 302 OF LBWD RULES AND REGULATIONS, "CONSTRUCTION IN WATER DEPARTMENT EASEMENTS," STATES THE FOLLOWING:
AT NO TIME WILL THE DEPARTMENT APPROVE PLANS THAT INCLUDE LANDSCAPING (EXCEPT GRASS OR SHALLOW ROOT PLANTINGS) OR STRUCTURES (SUCH AS WALLS, DRAINAGE SYSTEMS, OR PERMANENT STRUCTURES OF ANY TYPE) PLACED WITHIN EASEMENTS.
8. Contractor shall notify LBWD Chief Inspector at (562) 244-9334 at least 48 hours prior to start of construction.
9. Water pipes exposed during excavation shall be wrapped with Versil-Pak #4, encased with 8-mil minimum polyethylene, secured with 10-mil pipe wrap tape; and sand-shaded, compacted to 90% relative density.

Design requirements:

Projects with no setbacks ("zero-property-line buildings") require special attention to locate fireline backflow devices and water meters sized four inches and greater. Typical requirements are as follows:

- DCDA and meter assembly must be outside the building with sufficient clearance;
- Riser must be located within 5 feet of the property line;
- Device must be accessible for maintenance by LBWD crews.

In addition, please refer to the LBWD Water and Sewer Design Guidelines at:

- <https://lbwater.org/wp-content/uploads/2018/09/2.0-Potable-Water-distribution-System-Design-Criteria.pdf>
- https://lbwater.org/wp-content/uploads/2018/09/3.0-Sanitary-Sewer-Design-Criteria_v2.pdf

Additional Considerations:

- Pavement cut moratoria;