

**CITY OF BURBANK**  
**SPECIFICATIONS FOR SEWER LATERAL REMOVAL**  
**AND REPLACEMENT**

**1) GENERAL**

This specification covers the rehabilitation of a sanitary sewer lateral in the public right-of-way by removing the damaged pipe and replacing with new pipe. The contractor must obtain all necessary permits and arrange for all required inspection prior to beginning work. All pipe replacement shall be done in accordance with "Greenbook" Standard Specifications for Public Works Construction, 2012 Edition, except where as noted herein. The contractor is required to maintain the original slope of all removed and replaced lateral pipes unless directed by the Engineer. All trenching is required to be properly backfilled, compacted to the expected standards and resurfaced with similar material to what existed prior to trenching.

The contractor shall follow all Cal-OSHA guidelines for worker safety, trench shoring and confined space entry.

The contractor shall not open or enter any City of Burbank manholes or sewer facilities unless directed by or in the presence of City personnel.

**2) CONTRACTOR'S QUALIFICATIONS**

The contractor shall possess at least one of the following State of California Licenses:

- Class A - Engineering
- C-36 – Pipeline Contractor
- C-42 – Sanitation System Contractor

The contractor shall also possess a City of Burbank Business License and satisfy all City of Burbank safety and insurance requirements.

**3) CONTRACTOR'S SUBMITTALS**

- a) Proof of valid license and insurance.
- b) If requested, the contractor shall provide shop drawings, catalog data, and manufacturer's technical data showing complete information on material composition, physical properties, and dimensions of new pipe and fittings. Include manufacturer's recommendations for handling, storage, and repair of pipe and fittings damaged.
- c) For work contracted through the City of Burbank or if requested by the City of Burbank, the contractor shall submit a copy of their written Injury and Illness Prevention Program (IIPP), safety procedures, and necessary proof to show that his/her employees are trained and certified in the use of required safety equipment. This information must be approved by the City of Burbank's Safety Officer prior to starting work.

#### **4) PERMITS**

The Contractor must obtain all necessary permits and schedule inspection prior to any construction work. The required permits include, but are not limited to:

- ◆ Plumbing Permit, obtained from the City of Burbank Building Department, for all work conducted on private property.
- ◆ Excavation Permit, obtained from the City of Burbank Public Works Department, for all work conducted in the City right-of-way, or in a public-utility-easement.
- ◆ City of Burbank Business License

The Contractor must notify USA Dig Alert and locate all underground utilities prior to beginning any work. The Contractor shall verify that all excavation procedures will not interfere with or damage existing utilities.

Access pits shall be shored per all OSHA requirements.

#### **5) MATERIALS**

All sewer service laterals shall be either SDR-35, PVC, or extra strength/ high strength VCP pipe. The material used for construction of the sewer laterals shall match the materials of construction for the adjacent sewer main (to which they are connected). The replaced pipe shall satisfy all applicable ASTM standards.

#### **6) DELIVERY, STORAGE, AND HANDLING**

The pipe materials and associated fittings shall be handled, transported, stored as recommended by manufacturer to prevent damage. If the new pipe materials and fittings become damaged before or during installation, it shall be repaired as recommended by the manufacturer or replaced as required by the Engineer at the Contractor's expense. All materials to be used shall be used within the shelf life listed by the manufacturer.

#### **7) CONSTRUCTION METHODS**

##### **a) Trench Shoring**

Trench shoring shall be constructed and installed in accordance with subsections 7-10.4.1 and 306-1.1.6 of the Standard Specifications

##### **b) Steel Plate Bridging**

Steel plate bridging is required for all trench excavations not backfilled by the end of the workday. Steel plate bridging shall conform to the following:

Approach plate(s) and ending plates (if longitudinal placement) shall be attached to the roadway by a minimum of 2 dowels pre-drilled into the corners of the plate and drilled 50 mm into the pavement. Subsequent plates are butted to each other. Fine grade asphalt concrete shall be compacted to form ramps, maximum slope 8.5% with a minimum 1-foot taper to cover all edges of the steel plates. When steel plates are removed, the dowel holes in the pavement shall be backfilled with either graded fines of asphalt concrete mix, concrete slurry, or equivalent slurry satisfactory to the inspector. The Contractor shall be responsible for maintenance of the steel plates, shoring, and asphalt concrete ramps.

The following table shows the minimum thickness of steel plate bridging required for a given trench width:

Trench Width	Minimum Plate Thickness
0.8 ft	0.50 in
1.9 ft	0.75 in
2.6 ft	0.88 in
3.4 ft	1.00 in
5.2 ft	1.25 in

For spans greater than 5.2 ft, a structural design shall be prepared by a California registered civil engineer and approved by the State.

Steel plate bridging shall be steel designed for HS20-44 truck loading per Caltrans Bridge Design Specifications Manual. The Contractor shall maintain on the steel plate a non-skid surface having a minimum coefficient of friction equivalent to 0.35 as determined by California Test Method 342. If a different test method is used, the Contractor may utilize standard test plates with known coefficients of friction to correlate skid resistance results to California Test Method 342.

A Rough Road sign (W33), with black lettering on an orange background, may be used in advance of steel plate bridging. This sign is to be used along with any other required construction signing.

c) Joints

Joints for all pipe and fittings shall conform to all applicable ASTM standards. Field jointing shall be performed in accordance with the manufacturer recommendations.

d) Installation

All pipe and fittings shall be installed in accordance with the latest revision of applicable ASTM standards. Pipe installed shall conform to the existing grade unless authorized or directed by Engineer.

e) Backfill

Any pipe installed parallel to and with less than a 10-foot offset to a potable water service or main shall have all joints concrete encased and the trench shall be backfilled with 1 sack slurry.

The trench on the vicinity of all potable water utility crossings shall be backfilled with 1 sack slurry. The slurry backfill shall extend 5 feet on each side of the utility crossing. See Public Works Department details for additional information.

f) Resurfacing

All trenching in streets, alleys or sidewalks will require resurfacing at the completion of sanitary sewer pipe replacement. Trench resurfacing must conform to City of Burbank standards.

All trenching operations in the parkway will require resurfacing according to the following:

- Full width replacement of sidewalk (to scorelines) if any portion of the sidewalk is removed or damaged.
- Full curb ramp, driveway or alley approach replacement if any portion is removed

- or damaged.
- Replacement of removed or damaged sidewalk to scorelines of panel (or panels) to approximate a rectangle. No "L" shaped removals allowed.

The limits of all trenches must be saw-cut unless an alternate method is approved by the Engineer.

For temporary trench resurfacing, bituminous material shall be placed to the grade of existing, permanent surfaces. The contractor must place the final cap within 2 weeks of the temporary placement, except for trenches located within crosswalks, which must have the final cap placed by the end of the work day. All temporary resurfacing must be inspected daily. This will include replacing any temporary asphalt that has come unraveled, sweeping any patching materials that may have come loose, and add more material to bring the patch to grade.

## **8) INSPECTION**

The Contractor must obtain all necessary permits and schedule inspection prior to starting construction. Starting work before a permit is obtained or without a permit will result in a fine and the contractor may be barred from performing future work in the City of Burbank.

All pipe connections made must be inspected prior to backfilling and resurfacing. Photographs will not be accepted in lieu of inspection.

If the sewer lateral appears to be crushed or misaligned by a City tree and the property owner intends to file a claim for reimbursement, the Contractor shall fully expose the damaged or misaligned pipe and request an inspection. Failure to have the pipe properly inspected prior to removal will nullify any claims to the City per BMC 8-1-312. Reimbursement will be limited to the amount designated in the currently adopted Burbank Fee Schedule.

Any work in a public street will require Traffic Control as specified in the General Traffic Control Requirements for the City.

## **9) MEASUREMENT AND PAYMENT**

The price quoted for the project shall be considered full compensation for all work required to rehabilitate and restore the operating capacity of the sewer lateral. This work may include, but not be limited to the acquisition of permits, installation of the new pipe, furnishing and placing of all materials, labor, tools, equipment, cleaning, and access pit backfilling and resurfacing. The project shall not be considered complete and no payment shall be made until the sewer lateral has been proven to the resident to be free flowing, free of obstructions and operating at maximum capacity.