

#### CITY OF SUNNYVALE PUBLIC WORKS DEPARTMENT / ENGINEERING DIVISION & ENVIRONMENTAL SERVICES DEPARTMENT

#### November 2021

## ABANDONMENT NOTES:

## POTABLE AND RECYCLED WATER:

- 1. <u>City Valves</u>: Contractor shall not open, close, or in any way adjust any City valves including but not limited to valves on mains, laterals, and water meters. Valve operation shall <u>only</u> be performed by City crews.
- 2. <u>Backflow Preventers (BFPs):</u> Contractor shall not remove or relocate any BFPs without first obtaining a Backflow Installation, Removal, and Relocation Permit (Backflow Permit) from the Utility Billing office, City Hall Annex, 650 W. Olive Avenue (408-730-7400). This permit will provide required steps for BFP removal. After removal of an underground BFP, Contractor shall remove the vault and backfill the trench
- 3. <u>Water Meters (WMs):</u> Contractor shall not remove any WMs. Removal of WM shall only be performed by City crews. After WM removal by City, Contractor shall dispose of WM box/vault, backfill trench, and restore surface per City standards and requirements.
- 4. <u>Service Interruption:</u> Prior to abandonment, Contractor shall coordinate with the Dept of Public Works (DPW) Inspector to schedule the water shutdown. The Contractor shall submit a draft service interruption notification for Inspector review. After approval, the Contractor shall distribute the notification to all affected customers within the shutdown area as defined by the Inspector.
- 5. <u>Lateral Connections at Mains:</u> Contractor shall <u>not</u> remove any tapping saddles or tees from public mains. This task will only be done by City crews. At these locations, Contractor shall excavate access trench to the dimensions required by the DPW Inspector and shall install shoring for all such trenches, including trenches less than 5 feet deep. DPW Inspector will arrange for City crews to perform disconnection and restoration of the main. After City completes its work, Contractor shall remove any abandoned pipe within 3 horizontal feet of the main and backfill the trench.
- 6. <u>Fire Hydrants:</u> After lateral abandonment, remove the hydrant bury and any other pipe features to minimum 24-inches below grade. Deliver hydrant barrel to the City's Corp Yard at 221 Commercial St. Contact the DPW Inspector for drop-off coordination.
- 7. <u>Mains and Laterals:</u> Pipes may be abandoned in place or removed. Pipes 4" and larger to be abandoned in place shall be filled with lightweight cellular concrete (LCC) of 28-day compressive strength between 50 and 200 psi. LCC installer must first be approved by the DPW Inspector. Smaller pipe may be left in place empty.

#### SEWERS:

- 1. Lateral connections at mains:
  - (a) Disconnect lateral from main. Remove existing wye and/or segment of existing main as needed to meet the following requirement. New PVC main segment must connect to minimum 2 horizontal feet of buried & undamaged main where nearest buried joints are minimum 2 feet away from the trench wall. Use flashlight inside the main to check distance to joints. Expose and remove additional main as needed to meet this requirement.
  - (b) Install segment of new SDR 26 PVC main on ¾" crushed rock bedding. Connect new PVC to existing main via couplings with stainless steel shear bands, Mission Flex-Seal ARC or approved equal. For new lateral at same location, install PVC wye with SDR 26 PVC stubs. <u>Do not backfill before inspection and approval from the DPW Inspector</u>.
  - (c) Remove abandoned lateral within 3 horizontal feet of the active sewer main. Remove or abandon in place any remaining lateral extending to the back of walk or property line, whichever is further. Remove any property line cleanout to minimum 24" below grade, and cap remaining riser.
- 2. <u>Mains & Laterals:</u> Pipes may be abandoned in place or removed. All pipes to be abandoned in place shall be filled with lightweight cellular concrete (LCC) of 28-day compressive strength between 50 and 200 psi. LCC installer must first be approved by the DPW Inspector.
- 3. <u>Abandoned Pipe Connections at Manholes (MHs):</u> Where abandoned pipe connects to MH(s), enter MH(s) and plug the pipe hole with concrete. Plug shall be finished flush with manhole wall, and any abandoned channel shall be filled with concrete flush with the bench, such that no evidence of a previous connection remains. Repair any remaining active channel(s) as directed by the DPW Inspector. Perform the same task at any private MH to remain at the upstream end of an abandoned lateral.
- 4. <u>Manhole Abandonment:</u> Break apart existing MH base. Install new SDR 26 PVC main segment per Sewer Note 1 above. Hinged MH frames and lids shall be delivered to the City's Corp Yard at 221 Commercial St. Remove all other MH parts to 4 feet below grade. Abandon in place all deeper MH features. For hardscape surface, backfill void with Class 2 AB to 95% compaction. For unpaved surface, backfill with native soil to 85% compaction.

# STORM DRAINS:

- 1. <u>Mains & Laterals:</u> Follow Sewer Note 2.
- 2. <u>Abandoned Pipes at Manholes and Catch Basins:</u> Follow Sewer Note 3.
- 3. <u>Manhole Abandonment:</u> Follow Sewer Note 4, though restore the main with new RCP, Class III or higher.

#### **GENERAL**:

- 1. Contractor is responsible for verifying the location of all existing utilities.
- 2. Contact the City or other utility owners as needed for removal, abandonment, or relocation of their facilities.
- 3. Upon discovery of any unidentified utilities, coordinate with the DPW Inspector for direction.

- 4. See demolition plans for removal of on-site improvements.
- 5. Abandonment of all pipes and features shall be shown in the Contractor's detailed redlines. These redlines shall be provided to the engineer of record for the preparation of accurate Record Drawings.