

**HOUSING AUTHORITY OF THE CITY OF LOS ANGELES**  
**DESIGN AND CONSTRUCTION SERVICES**  
**2600 Wilshire Blvd., 4th Floor Los Angeles, CA 90057**

**The following is a summary of the utilities upgrade work performed by an outside contractor completed on April 2017.**

**UTILITIES UPGRADE OF 58 BUILDINGS AT RANCHO SAN PEDRO HOUSING DEVELOPMENT**

The Utilities Upgrade at Rancho San Pedro was performed in an effort to mitigate continues plumbing issues and to upgrade the immediate utilities lines in each dwelling unit as well as an improvement in energy conservation by replacing the existing water heaters in each dwelling unit for a single central type water heater per building.

The scope of work entailed additions, replacement, modifications and changes to the sewer piping, cold water piping, water heater system and gas piping as follows:

**Gas work:** The replacement of existing gas piping. The extent of the gas piping replacement is from the discharge of the tenant gas meter to the tenant gas risers within the crawl space. Provision of shut-off valves to change over to the new gas piping. Provision of new gas meter in each building. Reconfiguration of new gas rigs to accommodate new gas meters. Provision of new gas lines from each gas meter to new central water heater.

**Earthquake Valves:** Provision of new earthquake valve for the new gas meter serving the new central water heaters.

**Central Water Heater System:** Provision of new central type water heaters to serve each building and remove individual water heaters from each dwelling unit. Provision of complete central water heater with new enclosures (one per building). This work included new gas piping, expansion tank, cold water piping, hot water piping controls and new lighting system. Provision of hot water re-circulating system consisting of hot water return piping and a re-circulating pump to maintain hot water temperature within the loop at times the time-clock allows the hot water re-circulating pump to operate. Provision of new hot water piping from the central water heater to each pre-existing hot water connection in each apartment connecting to the hot water supply line that discharges from the pre-existing water heaters. Central water heaters were provided with new gas meters.

**Water Heater Enclosures Work:** Provision of new water heater enclosures with concrete floor slab. Construction of wood frame and stucco finish matching existing buildings. Provision of gas flue extending thru the roof to prevent flue gases from entering apartments through adjacent windows and door openings. Provision of lockable doors with keying system as per Housing Development system. Provision of proper clearances and air openings with air intake vents. Provision of internal and external lighting and convenience outlets. Proper roof and floor drains.

**Dryer Vent Work:** Provision of dryer vent ducts from each dryer area inside the apartments to the exterior of the building. Provision of proper round galvanized ductwork for new vents. Provision of proper vent caps at the exterior of the building made with heavy duty steel with an exhaust flapper and galvanized screen for insect intrusion.

**Sewer Work:** Replacement of existing sewer piping underneath each building. New sewer piping extended from the existing riser sewer joints to the exterior of the building. Provision of new clean outs extending the existing clean outs that are below grade to level with appropriate grade surface.

**Electrical Work:** Provision of power to new central water heater system, controls, lighting and convenience outlets to the water heater enclosures and to power the hot water re-circulating pump.

End of Report