History

The O'Connor Tract Co-Operative Water Company has been providing water from deep, excellent wells since its incorporation in 1921.

The wells were originally dug to supply the Charles Weeks Poultry Colony. Weeks was a visionary who bought up plots of land and then subdivided them into one-acre parcels in what was then the outskirts of Palo Alto and is now a part of Menlo Park and East Palo Alto. With his back-to-the-land ethos, he inspired settlers to buy the plots with the motto "One Acre and Independence."

He knew that the high water table would provide easy access to water for poultry farmers. Indeed, the wells have served the area with generously flowing water to this day.

The one-acre parcels were subdivided many times to become the pleasant semi-urban community it is today, although the Water Company site itself remains as an intact one-acre open space.

Read the article "One Acre and Independence."

Facilities

Well #1, 550 feet deep, was dug in 1966. It is located at the west side of the property. Well #2, 365 feet deep, was dug in 1937, and is located below the berm. Recently, an exceedance of manganese above the secondary standard (for taste and appearance) has been a concern for the State. Well #1 has the lower level of manganese, and we take about 90% of our water from this well.

We have two emergency connections to adjacent water agencies. The East Palo Alto connection operates automatically if our system pressure drops below a set-point. The Menlo Park connection is manually operated. Each connection is large enough to meet normal needs if our operations are interrupted. The annual average water demand in 2014 was 274,000 gallons per day (gpd) or 190 gallons per minute (gpm).

Water Delivery System

The Company's steel water storage-tank capacity is 100,000 gallons. Current well pumping capacity is 465 gpm (well #1) and 270 gpm (well #2). The capacity of East Palo Alto's

connection is 1500 gpm. The capacity of Menlo Park's connection has not been determined. The two wells pump to the steel water tank, which was built in 1953 by Chicago Bridge & Iron Company, and relocated to Oak Court in 1988. Water is pumped from the tank into the water plant's distribution pipes using booster pumps in an adjacent pump-station outbuilding. Pumps start and stop based on system pressure. Water flows into the two main pipes feeding the system; each pipe is connected to its own 3,000 gallon surge protection tank for system pressure stabilization.

The distribution system has 343 customer service connections, which are fed by approximately 19,000 feet of piping (8", 6", 4", and some 2"). There are 28 mainline valves to control and isolate water flow, and there are 20 hydrants, rated at 650 gpm.

The company's water plant includes an emergency generator which is designed to power the wells and pumps in case of a power emergency. It is flex-mounted to its foundation and is run regularly. An in-line chlorination system is used as necessary.

Tank seismic details: Prior to tank installation in 1988, a geotechnical analysis and structural engineering specification were done. The 11/87 soils report states "Seismic hazards on the site, such as liquefaction, lurch cracking, and subsidence are rated as low to very low." and "The site is considered geotechnically suitable . . . " The foundation plan was designed by Palo Alto structural engineer, David J. Hammond. The foundation and installation were completed by Anderson Pacific Company of Santa Clara, CA. Records are available for review. The connection from the bottom of the tank to the pump house includes a flexible rubber coupling.

Water-plant piping seismic details: In 1988, the water plant's piping system was upgraded as part of the tank installation. The ductile iron pipes in the water plant area have bell-and-spigot, rubber-gasket harness joints. Connections to and from the tank and to and from the system pumps are with rubber couplings. Both surge tanks were seismically retrofitted in 2009.