# UTILITY CLEARANCE

## UTILITY CLEARANCE AND WELL INSTALLATION FOR MUNICIPAL WASTEWATER TREATMENT FACILITY

Striking unmarked subsurface utility lines is a serious potential hazard associated with drilling in most urban settings. In this project, Cascade's expert crew relied on a versatile fleet to manage the complexities of drilling in a high traffic, restricted access location. A combination of air-vac, mini sonic, and dual rotary technologies was used to conduct utility clearance and install three injection wells.

#### **CLIENT:** City of Malibu

**PROJECT:** Civic Center Wastewater Treatment Facility (CCWTF)

LOCATION: Malibu Rd./Webb Way, Malibu, CA

TECHNOLOGIES: Air-Vac, Mini Sonic, and Dual Rotary

### **PROJECT OVERVIEW**

Cascade was hired to install three injection wells, part of a larger project for the development of a centralized wastewater treatment facility. The drilling location was in a high traffic area near subsurface utility lines. Completing the work safely, on-time, and with the projected budget was essential for this public works project.









An air-vac unit was used to expose and mark an inactive water line, a process known as daylighting. Once the site was clear for drilling, the crew used a mini sonic rig to drill a pilot borehole. The lithology information gathered in that core sample was critical in designing the injection well specifications. A dual rotary drill rig was required to successful place the 168 feet average depth, 14-inch diameter wells.

#### RESULTS

Cascade implemented appropriate safety precautions to protect human health and the environment. The project was completed on time, without safety incidents. The CCWTF is scheduled for completion in early 2018. It is designed to clean and recycle wastewater using environmentally friendly processes. Once completed, the facility is expected to produce 70 million gallons of recycled water per year.



EXCELLENCE ON EVERY LEVEL<sup>™</sup> Nationwide Office Locations | Headquartered in WA