

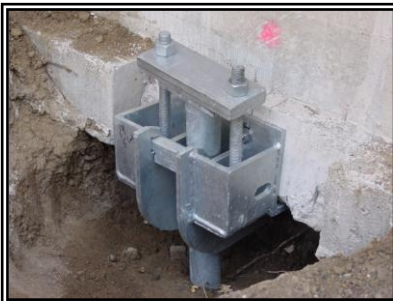
# ROCKY MOUNTAIN STEEL PIERING INCORPORATED

## CASE STUDY

**Project:** Vyas Residence - Home Addition, Cherry Hills Village, CO

**Underpinning Contractor:** Rocky Mountain Steel Piering, Inc.

**General Contractor:** Gregory / Hamill, LLC



### Project Description:

The home consists of a one-story structure with a full basement, supported on a spread footing foundation system. The proposed construction to the home consisted of partial room extensions along the front and rear portions of the home. The existing foundation system was found to be performing adequately; however, due to the additional load from the additions being applied to the existing foundation, the existing foundation walls were underpinned with a helical steel pier foundation system. The projected portions of the additions were also founded on a helical steel pier foundation system for new construction.

Anticipating soft subsurface soil conditions, the helical steel piers were installed by Rocky Mountain Steel Piering, Inc., utilizing a hydraulic torque head, which was attached to a skid steer. The helix piers consisted of either a double or triple helix configuration with a 1-1/2-inch rounded corner square steel shaft. The piers were advanced from depths of 8-1/2 to 38 feet into the ground and torqued from a minimum of 4000 to 5000 ft-lbs, depending on the designated design load of each pier. The tops of the underpinning piers were attached to standard underpinning brackets, which were fastened to the base of the foundation walls. The tops of the new construction piers were attached to new construction brackets, which are embedded in the new foundation walls for the addition.

The helical steel pier foundation system provided deep foundation support to the new and existing foundation systems of the home with minimal access requirements.