

## UNDERPINNING ANCHORING REPORT

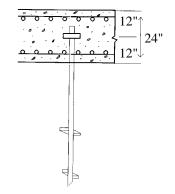
## A CASE HISTORY

**Project:** 

Lake Austin Resorts Austin, Texas **Engineer:** Walter Snowden Snowden, Inc. Austin, Texas **Contractor:** Hargrave & Hargrave, Inc. Wylie, Texas

## Job Description:

A new gymnasium was to be constructed by Hillman Constructors, Inc., Austin, Texas. The gymnasium is 63 x 65 ft. utilizing 16 pile caps, each with four HELICAL PIER® Foundation Systems anchor placements, installed to a capacity of 30 Kips per anchor (or 120 Kips per pile cap). Each anchor placement was positioned midway in the 24"-thick concrete slab (or 12" from the surface). The bearing plate was a 5" x 5" square plate, 1/2"-thick with a square hole in the center to allow the helix shaft to protrude. The plate was welded to the helix shaft. Seventy-two anchors, each with 8" and 10" helices on a  $1^{1/2}$ "-square, 7-ft.-long shaft, were installed to depths ranging from 24 to 28 ft. Torque was monitored by a shear pin indicator attached to an Eskridge drive unit mounted on a 7438 Bobcat loader with bail and jib extender. All anchors were installed to a minimum of 30 Kips with many anchors installed, to 35 Kips to compensate for the placement of the shafts in the pile cap. Some shafts had to be cut off because of the hard limestone encountered at depth. All anchors were installed, the site was cleaned up and equipment removed in two days.





 $1_{/_{A}}$ "

 $1^{1/2}$ 

5" x 5" x <sup>1</sup>/2" Plate