



CHPP-Composite Helical Pipe Pile **1000 ft. Guyed Tower**

A 1,000 ft. existing old guyed tower was augmented (tower upgraded) in Raceland, LA. Both compression anchors for the tower base and tension anchors for the guys were required.

The Composite Helical Pipe Pile was selected as the best choice for this project. The CHPP reduced the installed depth for the foundation by utilizing both bearing from the helices and friction from the 8-inch diameter pipe. This reduced the depth and number of anchors required for the guys compared to using standard helical guy anchors.

The tower base foundation ultimate load requirement was 100 KIP. A total of 10 helical piles were installed to a depth of 60 feet with an ultimate torque of 12,000 ft-lbs. The piles were filled with concrete for added strength.

The guy tension ultimate load was 50 KIP. Some were single installations and some required two that were bolted together with a crossbeam. A total of 45 helical piles were installed to depths ranging from 80 ft. to 100 ft. The piles were not filled with concrete.



Single and tandem installed CHPP piles for the guys.
The cross beam was bolted to the tandem anchors

