

380 KV-Pylon Pöppinghausen – Wanne

Project Owner:

Amprion GmbH

Client:

GA Hochspannung Leitungsbau GmbH

Quick Info:

Enhancement of a 380 kV-Pylon by means of TITAN-piles.

Technical Information:

System:	TITAN-pile, type 73/53
Quantity:	12 pcs.
Length:	12,50 m
Service Load:	up to 491 kN
Technique:	self-bore flush drilling
Building Ground:	Sands and clay
Time Frame of Works:	July – August 2011

Because of new technical regulations regarding the engineering design of electricity pylons in Germany, an old pylon foundation plate had to be enhanced with 12 TITAN-piles. The exceptionally small gap between pole legs and pile heads had to be increased by 10 – 15 cm after undertaking extensive tests on the foundation. Before beginning our piling works, the 5m stacked foundation plate was perforated by core drillings \varnothing 200 mm.

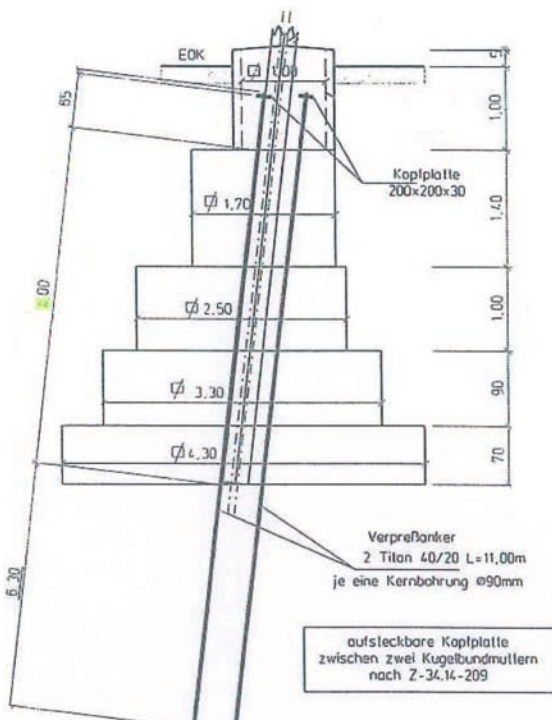


Image 1



Image 2

The extraordinarily low quality of the concrete caused major challenges to those activities, as the removal of the concrete core pieces turned out to be much more timeconsuming and heavy on the drill tools than anticipated. Afterwards, each of the core drill holes was tested for warfare agents. The actual piling works went with no further surprises. In total, we produced 12 TITAN-piles of type 73/53 and in lengths of 12,50 m each to support the foundation and make it ground-proof for the next decades.