BBV SYSTEMS
WIR SORGEN FÜR SPANNUNG | WE STRESS FOR STRENGTH

Reference

Tower 99







SHORT DESCRIPTION

As part of the high-rise project Tower 99 West in Frankfurt am Main with 4 basement floors, a 17 meter deep excavation pit was created.

THE PROJECT

A back-anchored, overlapping bored pile wall was planned for the 135 m long watertight construction pit enclosure. The project area on Robert-Mayer-Straße is opposite the Senckenberg Museum and is in the core zone of the so-called Frankfurter Tons. The optimization of the construction pit planning with BBV-multibond® staggered anchors by Implenia Spezialtiefbau GmbH resulted in the following significant advantages:

- Saving of an entire anchor layer (135 anchor units) against pressing water.
- Saving an (anchor) intermediate excavation level.
- Enables an earth lift level of 7 m.
- Savings of approx. 5-6 weeks in total construction time
- No anchor fees for the client

Anchor test forces of up to 1,000 kN were required to implement the statically optimized implementation planning. This means a 2-fold increase in the load-bearing capacity compared to the current empirical values of classic anchor systems in the Frankfurt clay (approx. 500-600kN).

SERVICES IN DETAIL

Procedure:

- 325 BBV-multibond® multi-strand anchors

FACTS

Location	Frankfurt a.M. , Germany
Status	completed
Start of construction	January 2019
Completion	December 2020
Contracting entity	Implenia Spezialtiefbau GmbH
Planning	Implenia Spezialtiefbau GmbH

SERVICES

Excavation pits