

## RECONSTRUCTION OF THE WALDEGG PROVINCIAL VOCATIONAL SCHOOL

Client: Grund-, Pfahl- und Sonderbau GmbH

Development Period: since 10/2011

### THE PROJECT

The buildings of the Waldegg Provincial Vocational School (Lower Austria) are currently under a thorough reconstruction.

Parts of the new building complexes have to be cut into the slope, which requires slope protection measures during construction.

These measures are carried out in form of bored pile walls with anchoring at one or two levels. The pile diameter is 90 cm and the pile lengths up to 18 m.

### OUR FUNCTION

BGG Consult was commissioned by the contractor with consulting regarding the optimization of the foundation system on the one hand, and with the detailed design of the slope protection measures on the other hand.

The latter included earth statical analyses as well as the dimensioning and the design of the bored pile walls.

*Optimization Foundation and Building Pit Protection for Construction Phases 1 and 2:*

In close cooperation with the technicians of the contractor, a concept with non-reinforced bored piles was developed for the foundation of the structure, which replaced the originally planned underpinning by means of jet grouting.

For the protection towards the existing building, jet grouting was also omitted and a tangent pile wall established.

Thus, all special heavy construction could be carried out with one system. By this value engineering, a technical optimization was done with namable cost benefits for the client as well as for the contractor.

*Building Pit Dormitory*

