

VIENNA - SALZBURG RAILWAY LINE, REMODELLING OF THE NEULENGBACH-TOWN STOP

Client: Austrian Railways Infrastructure AG
Development Period: 2018 to 2020

THE PROJECT

The railway stop Neulengbach-Town, situated at the old Western Railway Line, has been thoroughly renewed in order to increase the quality and comfort for the passengers and to create barrier-free access to the platforms. For this, two new stairways with elevators and connected engineering rooms have been built at both sides of the tracks. Furthermore, platform roofs were prepared. Since the railway runs on a high embankment in this section and the line had to be kept in operation at all times, comprehensive temporary and permanent retaining structures were necessary.

OUR FUNCTION

For this project, BGG Consult has been in charge of the geotechnical consulting during the planning and implementation. Based on the results of core drillings, dynamic probings and soil mechanical laboratory analyses, a geotechnical expert's report was prepared and numerous stability analyses were conducted in order to determine the required retaining structures and building pit support systems. Subsequently, the phase of the tender preparation has been accompanied intensively, in particular with regard to the special heavy construction works. During construction, the protection and foundation measures have been supervised from a geotechnical point of view.

Building Pit Support Systems:

For the construction of the stairway buildings and retaining walls, which are situated directly beside the tracks, almost vertical building pit walls with heights of up to 6 m had to be prepared in the immediate vicinity of the railway line. In some areas, the building pit walls are used at the same time for permanent retaining walls.

As the most suitable and economical support method, anchored shotcrete walls were implemented. For the two topmost anchor rows, bar anchors, stressed together from both sides of the embankment in order to minimise the deformation, were used. The lower sections of the shotcrete walls were braced with grouted self-drilling anchors.



*Building pit support system,
northern side*