



EXTENSION OF THE VIENNA-STADLAU - MARCHEGG RAILWAY LINE

Client: Austrian Railways Infrastructure AG

Development period: since 2009

THE PROJECT

The Railway Line Vienna-Stadlau - Marchegg is part of the connection Vienna - Bratislava and is therefore situated at the intersection of three European core network corridors: The Baltic-Adriatic corridor, the Rhein-Danube corridor and the Orient-Eastern-Mediterranean corridor.

The existing single-track, non-electrified line with a length of 37.5 km is already used to capacity. In order to increase the design speed and the capacity, a double-track extension and an electrification in sections is under way. All the work has to be done during regular railway operation. In the course of the project, 13 existing railway crossings along the track will be replaced by over- or underpasses, 8 stations modernised and comprehensive noise protection measures implemented.

OUR FUNCTION

For this project, BGG Consult is commissioned with the expertise in the field of geology, geotechnics, hydrogeology and abandoned waste sites. First, comprehensive underground investigation works and surveys were attended to in the years 2009 to 2011. Subsequently, the expert's report for the environmental assessment and the partly concentrated permission procedure was compiled. In the further course of the project, geotechnical and hydrogeological expert's reports were specified for the tender documents of the different contract sections.

During construction, the works are supervised with regard to geotechnics and hydrogeology. The contract further includes a hydrogeological preservation of evidence.

Temporary Protection Measures:

At all the contract sections, the works have to be carried out while at least one track has to be kept under operation.

For this reason, comprehensive temporary protection measures towards the operating track are required over long distances. These are realized in the form of anchored shotcrete walls or sheet pile walls.

As an example, the area between the Auparkweg and the Hirschstettner Straße is mentioned. Here, the track under operation was secured by means of a sheet pile wall, partly anchored, during the construction of a 300 m long retaining wall.

BGG Consult provided the geotechnical input parameters for all the temporary and permanent structures, and partly conducted the static calculations.



Sheet pile wall during the construction of the retaining wall between Auparkweg and Hirschstettner Straße