S 31 BURGENLAND EXPRESSWAY, VALLEY CROSSINGS SIEGGRABEN

Client: ASFINAG (Motorway Financing AG)
Development Period: 2018 to 2020

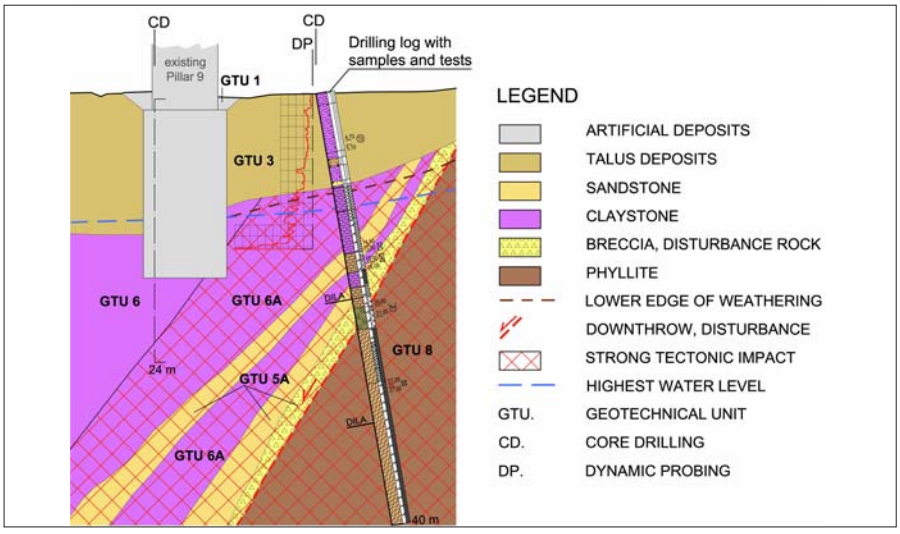
THE PROJECT

For the S 31 Burgenland Expressway, preservation works and safety improvement measures are currently under way between the junction Mattersburg and the connection point Weppersdorf/ Markt. In this process, the expressway will be extended to a dual carriageway with 2+2 lanes.
Along the Sieggraben, four valley crossings (Jüdingsau, Marzau, Groisbach and Auwiesenbach) exist with structure lengths between 400 m and 490 m. For those, complete additional structures with pillars have to be constructed next to the existing bridges.

OUR FUNCTION

BGG Consult provided for this project expertise in the field of geology in the context of the preparation of the construction tender. In close cooperation with the remaining experts, underground investigations were planned, supervised and evaluated. Based on these, a geological report has been worked out. In addition to the description and graphical mapping of the geological situation, homogeneous areas were described and assigned as well as rock and ground parameters defined.

Heterogeneous Subsoil Built-up:
The project area is characterised by highly varying geological conditions and an often significantly tectonically overprinted rock inventory. At the valley crossings Marzau and Groisbach, the rock formation "Wechsel Unit" (mostly mica schist and phyllite) of the Lower Austro-Alpine dominate. In the area of the bridges Jüdingsau and Auwiesenbach, the underground consists of miocene gravel, sand and clay with a changing solidification beside highly fragmented phyllites of the basal rock, separated by a steep fault zone. Several pillars are located at these transition areas. Therefore, the evaluation of the building ground situation from a geological point of view is of great importance for the determination of the foundation measures.



Cross section at Pillar 9, valley crossing Jüdingsau