

NEW MOTORWAY MAINTENANCE FACILITY STOCKERAU, LOWER AUSTRIA

Client : ASFINAG Construction Management GmbH Development Period: 10/2013 to 9/2015

THE PROJECT _____

The existing motorway maintenance facility is to be completely reconstructed. The project comprises an office building, workshops, halls for maintenance trucks, salt silos, retaining walls, flying roofs and traffic areas.

OUR FUNCTION ____

BGG Consult has been commissioned for this project with geotechnical consulting during the planning and construction phases. For the identification of the underground and groundwater situation, subsoil investigations, soil mechanical analyses and hydraulic field tests were determined, tendered, supervised and evaluated. Based on these, a geotechnical expert report was worked out. Furthermore, documents had to be prepared for the permission procedure pertaining water rights concerning a groundwater extraction and seepage, which was designed also for a thermal groundwater use.

During construction, the works were supervised from a geotechnical point of view.

Measures regarding soil improvement: The underground in the project area consists superficially of fill and cover layer material with unfavourable bearing capacity. Furthermore, the underlaying gravel stratum contains zones with very loose density. For a safe foundation of the buildings, a soil improvement by means of vibro replacement has been proposed and implemented. In the traffic areas, the bearing capacity has been increased by soil stabilization, using limecement mixture.

Ground water use:

For the supply with process water, an extraction well has been built. The well will be used at the same time for a thermal groundwater energy recovery ("gentle cooling"). The processed water will be discharged into a seepage pile. For the submission documents, the effects of the utilisation on the hydrogeological environment, including the possible extent of the temperature plume, were examined.



Setting up of the vibro replacement piles; in the foreground lowering of a dynamic probing for the verification of the achieved compaction

Reference Sheet