



## VIENNA INTERNATIONAL AIRPORT, 3<sup>RD</sup> RUNWAY

Client: Flughafen Wien AG (Vienna Airport AG)

Development Period: since 1999

### THE PROJECT

The Vienna International Airport is an essential economic driver of the eastern region of Austria. In order to cope with the rising number of passengers and facilitate economic development in the future, a third runway is planned. In consideration of the needs of the population of the adjacent communities, an amicable project alternative was devised by means of a mediation process. This project variant is now approved by the neighbouring communities, citizens' initiatives and the client. The agreement was achieved after 5 years of negotiations. The environmental impact assessment procedure for this alternative is currently in process. The project comprises of the runway with a length of 3.7 km, 27.5 km of taxiway, 40 km of roads, as well as underpasses and operational buildings. The earthworks mount up to a total of 49 million m<sup>3</sup>.

### OUR FUNCTION

Already in 1999, during an evaluation phase of possible alternatives, BGG Consult was commissioned with the geotechnical and hydrogeological consulting. During that time, comprehensive underground exploration works were conducted within and without of the airport premises. Based on the results, a geological-hydrogeological expert's report has been established. In 2005, the workmanship continued during the environmental impact assessment phase. After another exploration campaign, expert's reports on the geology, hydrogeology and geotechnics were compiled for this procedure.

#### *Hydrogeological considerations:*

The project is situated in the southern part of the Vienna Basin, (between the "Mitterndorf depression", the *Danube* plains, the *Fischa River* and the *Schwechat River*) in the area of a miocene fault ridge, the so-called "Rauchenwarth plate". The knowledge of the hydrological situation in this area was little-known until now and has been significantly expanded by the recent explorations.

The main focus of the impact analysis was the assessment on how the extensive earthworks and the sealed surfaces influence the recharging of the ground water in the region. Based on thorough studies, BGG Consult was able to prove the environmental compliance of the project for the respective fields.



aerial picture with the situation of the 3<sup>rd</sup> runway