



## PARKING DECK AMSTETTEN RAILWAY STATION

Client: ÖBB-Infrastruktur Bau AG (Austrian Railways Infrastructure Construction AG) Development Period: 2002 to 2008

## THE PROJECT \_\_\_\_

In order to make the use of the railways more attractive, a parking deck has been established at the railway station of Amstetten.

The structural design with a length of 150 m and a width between 20 m and 30 m gives room for 650 vehicles. The building features five parking levels above ground. The height of the building is 15 m.

## OUR FUNCTION \_

BGG was performing geotechnical and hydrogeological consulting for this project during all planning and execution phases. In the course of this, subsoil exploration works were coordinated, supervised and evaluated. Based on the results, a geotechnical expert's report has been compiled for the documents of the application for building permit. The scope of work also included the geotechnical supervision on site during construction.

## Deep Foundation:

During the investigations by means of core drillings and dynamic probings, it emerged, that in the area of the parking deck, material of very unfavourable properties (artificial deposits, cover layer) exists down to a depth of 5 m. This excluded a shallow foundation for economic reasons.

The expert therefore recommended a foundation by micropiles and alternatively one by cast-in-place bored piles. Because of the early involvement of the geotechnical expert, the foundation design could be channelled into the right direction from the beginning.



Excerpt of the longitudinal section with foundation options (schematic)