



## S 37 KLAGENFURT MOTORWAY, MÖLBLING - KLAGENFURT NORTH SECTION

Client: ASFINAG Bau Management GmbH (Motorway Financing GmbH)

Development Period: 11/2007 to 8/2010

### THE PROJECT

The federal road B 317 between Scheifling and Klagenfurt North is to be upgraded to a four-lane motorway ("S 37 Klagenfurt Motorway").

By this, the following improvements are to be achieved:

- a better connection between Carinthia, Upper Styria and Upper Austria with economic impulses for the districts Klagenfurt City and Greater Klagenfurt;
- an increase of the traffic safety;
- a relieve of the transit traffic for the adjacent villages;
- an improved noise and environment protection.

The section 3 (Mölbling - Klagenfurt North) comprises the most southern part with a route length of 29 km, 13 interchanges, subsurface segments and numerous bridges.

### OUR FUNCTION

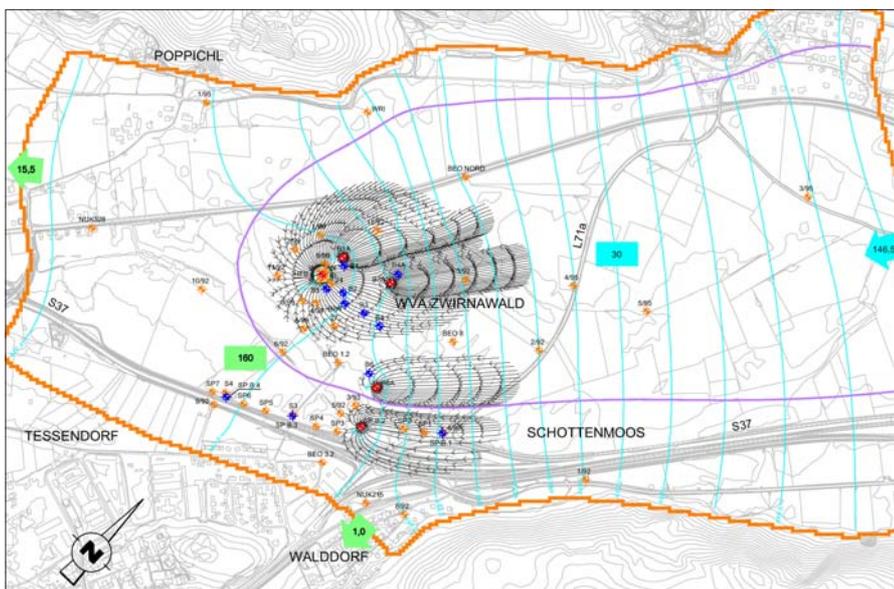
For this project, BGG Consult was entrusted with the workmanship in the fields of geology, hydrogeology and soil mechanics in the preliminary design study and permission phase, including the environmental impact assessment study.

The processing covers the establishment of the basic information with the planning, supervision and evaluation of subsoil explorations. Based on these, the expertises for the respective fields were compiled.

#### *Waterworks Facility Zwirnawald:*

The current project allows for construction measures within the wider ground water protection zone of the waterworks facility Zwirnawald. For an accordant realization of the project, the valid permission decree for this facility has to be amended.

As a basis for this, ground water model calculations with unsteady flow were run in reconciliation with the demands of the authorities. With the help of these calculations, the extent of the catchment area of the Zwirnawald facility was initially determined for the current operating situation and conclusions concerning flow time and flow limits were drawn. Subsequently, scenarios have been developed for the operation of the wells, which serve as a basis for the necessary amendment of the permission decree. This permits the carrying out of the project according to the planned design.



*Ground water model Zwirnawald;  
 Example of an illustration of the  
 calculation results with flow times*