

Tunneling and geotechnics

Tabor and Barnica tunnels

Project type

two-pipe two-line tunnel

Location

Razdrto - Vipava, Slovenia

Investment value

220.000,00 €

Year(s)

2004

Services

building permit design,
tender design
electro mechanical installation,
architecture,
landscape architecture...

Investor

DARS d.d.



Expressway section through Rebernice, 10,6 km long, is part of expressway Razdrto - Vipava. As the result of complex geology situation at the crossing area this part represents the most pretentious section at the new road connection in the direction of Nova Gorica. Two short double tube tunnels Barnica L=300 m and Tabor L=600 m had to be designed. Geological structure of wider area is characterized by overthrust of carboniferous rocks (limes) over flysch layers of Vipavska dolina. Tunnel excavation will run on flysch layers (pre-dominating marl) along whole length. Weathered and rubble layers above flysch bedding are in movement by nature, so construction intervention into these layers should be limited to minimum. Both tunnels are double tube, two lane tunnels with the standard profile of the roadway width 2x3.50m and the 0.35m curb at the each side. Together with Rebernice cut&covers they represent series of four short tunnels only with viaducts in between. The tunnels are designed according to the new Austrian method (NATM) and corresponding to the valid Austrian and Slovenian guidelines and European regulations. Total length of all tubes is 1850m. At the time of designing we were offering the full spectrum of services from the additional geologic research till the execution of the project for the building permit and tender design for the tunnels, including the excavation, civil works, electro mechanical installation of the tunnels and the functional auxiliary structures.