

## R3 ORAVSKÝ PODZÁMOK

### HORNÁ LEHOTA, BANSKÁ BYSTRICA, SLOVAKIA

#### Mass Gravity Retaining Walls

##### Problem

Speedway R3 is a part of the important European traffic route E77 (south - north) in direction Hungary-Šahy-Trstená-Poland. First realised part of this corridor is passage Oravský Podzámok - Horná Lehota. The passage length is 6,441 km. Built in a half profile. Passage contains 9 bridges. The longest one is 717 m long and it replaces road I/59 in length of 8,4 km. The average annual day traffic intensity on the road I/59 Oravský Podzámok-Horná Lehota in 2005 achieved 5463 vehicles in 24 hours (in 2000 achieved 4024 vehicles in 24 hours). In accordance to the new project speedways and highways construction from 21.2.2001 should it be finished in 2005. The construction has started in November 2004.

This passage is in use since November 26th. A part of the project is also several passages, which was necessary to resolve with wall retaining systems, because of collisions with civil parcels boundaries or the closeness of Orava river. Wall retaining systems in contact with Orava river had to be proposed like constructions able to resist energy of water flow and also had to be flexible

##### Solution

Consultants decided to resolve the constructions close to the Orava river with gravity retaining walls made with gabions. They choose technology double twisted wire mesh in the highest protection level Galfan (Zn + 5% Al + MM) and plastic coating. Construction was built with the face view without stepping in angle of 6°, stepped back side and back protected by separation geotextile. Height of retainment walls in some parts is 7 m.

**Client:** Slovakian roads administration

**Designer / Consultant:** ISPO

**Contractor:** Váhostav, a.s.

**Products used (Qty.)**

- Gabion 999

**Date of construction:** 03/2006 - 09/2006



During construction



During construction



Po dokončení



Po dokončení