

K2b Greppen – Weggis – Vitznau, Hinter Lützelau – Acher (Sparen)

Client

Lucerne Canton Construction Directorate
 Office for Transport and Infrastructure,
 Road Inspectorate (KSI)

Consultant

IUB Engineering AG in consortium

Construction period

2008

Construction costs

CHF 350,000

Scope of services

- Construction period
- Tendering
- Implementation project
- Site supervision

Description

In the area of Hinter Lützelau - Ächerli there have been several occurrences of rock movement with plummeting rock falls. Various hazard scenarios were created, and in some sections measuring gauges were installed for monitoring purposes and control measurements were periodically taken. Following further measurements by the Roads Inspectorate in autumn 2007 in section 8.5, increasing movement was detected in the rock formation. IUB and Keller+Lorenz were retained to investigate the conditions and based on the hazard assessment to make a proposal for securing the structure. The rock formation was secured with 4 deep-anchored concrete bars. The existing wooden columns were replaced with a high strength safety net with steel plaiting. This considerably improves protection against falling stones and small blocks.

Main technical data

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|---------------------------|-------------------|
| - Concrete | 15 m ³ |
| - Swiss-Gewi anchors | 18 pcs. |
| - Rockfall protection net | 80 m |

