

N8 Giswil North – Ewil / Zollhaus Tunnel

Client

Obwalden Canton

Consultant

IUB Engineering AG
 IM Maggia Engineering AG

Construction period

2007–2011

Construction costs

CHF 50 million

Scope of service

- Tendering, Phase 41
- Implementation, Phase 51
- Construction supervision, Phase 52
- Commissioning/Completion, Phase 53

Description

The North Giswil-Ewil national road will close the gap between Sachseln Tunnel and the Giswil Bypass. This road section has a length of 1380m and includes the 420m Zollhaus cut-and-cover tunnel with the associated electrical power supply unit, the 530m long northern section as well as the 430m long southern section and Giswil Junction. Zollhaus Tunnel has a box file design with 7.75 x 5.30m structure gauge and 1.30m wide walkways on either side. The open route is partly cut into the slope and partly located on an embankment and is bordered by protective walls. The crossing for wild animals over the tunnel and the semi-natural landscaping ensure that the scenic and ecological targets are met.

Geology:

Hard moraine deposits to poorly supporting stream debris deposits.

Main technical data

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|--|---------------------------|
| - Excavation | 100,000 m ³ |
| - Excavation support (back anchored bored pile wall) | L = 300 m |
| - Foundation pit enhancement | Vibro-displacement method |
| - Backfill/Fill | 85,000 m ³ |
| - Concrete | 14,000 m ³ |

