

Wildlife transfer Rynetel, Suhr

2021



It took a long time to convince people: more than 20 years ago, Stefan Zöllig demonstrated that wood is the right choice of construction material for wildlife bridges. Today, the wooden bridge over the A1 highway between Suhr and Hunzenschwil is impressive.

The project

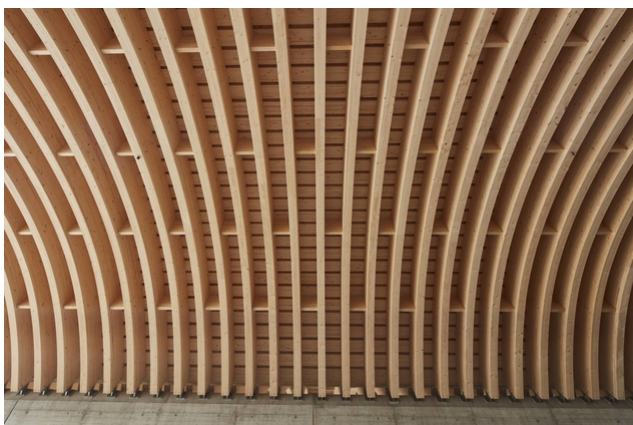
Because traffic routes cut through the habitats of wild animals, the Federal Office for the Environment defined wildlife corridors of supraregional importance. The corridor "AG6" connects the Jura region with the Central Plateau and runs between Gränichen and Suhr over the A1 national road. Here today, the new 50-meter-wide arched wooden structure allows wildlife to cross the highway safely. During the planning phase, various construction methods were tested and compared with each other. The renewable building material came out best in this comparison - the decisive factors were the better ecological balance and the faster execution.

The construction

The wildlife overpass is constructed of 156 prefabricated glulam arches. The girders, each weighing two tons, are 17.4 meters long, have a cross-section of 24 by 76 centimeters and are mounted on the cast-in-place concrete walls with steel joints. The girders are made of Swiss spruce boards and an RF adhesive bonded to keep their shape.

The challenge

Construction projects over traffic routes are always challenging, as the highway was reduced to two lanes from 9:30 p.m. to 4 a.m. each night for just 24 nights to install the structure. Furthermore, a lot of pioneering work was done for the planning of this lighthouse project.



The wooden structure remains visible from below



Assembly work at night



Assembly work during the day



Aerial view during assembly

Construction Data

- Spans: 2 x 17.4 meters
- Length: 35.6 meters (across the carriageway)
- Width: 54 meters (lengthwise to the carriageway)
- Bridge area: 1'922 m²
- Structural timber: 850 m³ Spruce
- Origin Switzerland

Construction costs

- 13.9 million francs

Services of Timbatec

- SIA Phase 31 Preliminary design
- SIA Phase 32 Construction project
- SIA Phase 41 Tendering and comparison of offers
- SIA Phase 51 Implementation project
- SIA Phase 52 Execution
- SIA Phase 53 Commissioning
- Fire protection planning

Client

Federal Roads Office ASTRA
4800 Zofingen

Timber construction

Häring AG
5074 Eiken

Photography

NILS SANDMEIER
2501 Biel/Bienne

Planning

Ingenieurgesellschaft WUEF;
Bänziger Partner AG, 5400 Baden and
Timbatec Holzbauingenieure

Master builder

Aravia Bau AG
5303 Würenlingen

Glulam supplier

Hüsser Leimbau AG
5620 Bremgarten