

# Wildlife transfer Neuenkirch, Luzern

2021

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In Neuenkirch, the Federal Roads Office FEDRO is already building the second wildlife bridge with a wooden overpass after the Rynetel wildlife bridge. The wildlife overpass in the canton of Lucerne has a width of 50 meters and a length of around 36 meters.

## The project

During several nights carpenters assembled the 17.5 meters long, 1.24 meters high and 8 tons heavy wooden girders. In the future, deer, foxes, stags and small mammals will walk across the new wildlife bridge near Neuenkirch. This pleases the environment in various ways. Because the wildlife bridge is a real CO<sub>2</sub>-reservoir. Around 2,500 cubic meters of wood, mostly spruce from the Entlebuch region, are being used to build it. The fact that the wood was cut in the surrounding forests and processed in regional companies is a benefit for the local economy. The environment is also pleased. After all, from an ecological point of view, local wood is clearly more advantageous than wood from abroad.

## The construction

The wildlife overpass in the canton of Lucerne has a width of 50 meters and a length of about 36 meters. The clear height is 4.80 meters. The almost man-high glulam beams were prefabricated at n'H in Lungern, pre-assembled and delivered to the construction site just in time.

## The challenge

Even during the assembly of the girders, traffic continued to roll. For around 30 nights, traffic was directed in opposite directions on a single lane. During the day, two lanes were always available in each direction.



Assembly work with single lane traffic



The second lane is covered



The girders weigh about eight tons...



...and are placed in one piece on the concrete foundations.

### Construction Data

- Width 50 meters
- Length 36 meters
- Clear height 4.80 meters
- 2500 m<sup>3</sup> Spruce wood from the region

### Construction costs

- BKP 1-9: 10.7 million Swiss francs
- BKP 214: approx. 2.7 million francs
- Planning fee: 198'000.Franken (as subplanner of the civil engineer)

### 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
- Structural analysis and design
- Cost estimation
- Technical site supervision and site inspections

### Owner

Federal Roads Office ASTRA  
4800 Zofingen

### Timber construction engineer

Timbatec Holzbauingenieure (Schweiz) AG Bern  
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### Timber construction

HUSNER AG Holzbau  
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### Civil engineer

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### GU/TU

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