



The crossings are inspired by the work of Swiss architect Fritz Haller and electronic music group The Chemical Brothers

ART INFRA

The winners of a footbridge competition in Switzerland where landscape designers, artists, engineers and architects were required to work hand in hand has just been announced, finds out **José María Sánchez de Muniáin**

After considering landscape and construction constraints the team behind the winning design for new footbridges along the shores of Lake Geneva took their inspiration from Swiss design and popular culture.

The Nyon Prangins and the Bois-Bougy footbridges are located in the municipality of Nyon in the Canton of Vaud, around 25km north of Geneva. The 300m-long footbridges, sited 1.5km apart and separated by Nyon Railway Station, are planned to facilitate access into wooded areas to the north and south of the town. Placed between the shores of Lake Geneva and rail tracks, they will enable people to enjoy an area characterised by steep slopes and stunning views of the lake, as well as encourage regeneration.

The winning design was announced in April and was submitted by an all-French team composed of Explorations Architecture, artist Xavier Veilhan, structural engineer Bollinger & Grohmann and landscape architect Mari Baron.

"The idea was not to put a piece of art on the bridge," remembers Yves Pagès of Explorations Architecture, "but to have different ideas from the beginning. It was almost experimental. The city is very involved in installing pieces of art in the public realm and they wanted to try to design

a piece of infrastructure with artists."

During the initial workshops it became clear very quickly that the structure should be lightweight and modular, due to the low construction budget and the limitations of the site, which is only accessible via paths approximately 1.5m-wide. With the rail tracks of the main line connecting Lausanne and Geneva only 5m away from the bridges in some sections, safety was also a factor. "The bridge supports are in the embankment of the railroad so there was a geotechnical issue. We don't want to destabilise the embankment so we are using mini-piles," comments Pagès.

The structure design was partly inspired by the adaptability and simplicity of the tubular steel furniture pioneered by Swiss architect and furniture designer Fritz Haller. The result is a transparent modular lightweight steel truss that is repeated in the piers and the 20m-long spans. Along the concrete deck, which sits on corrugated steel plates, a series of asymmetric cantilevering viewing platforms enable the scenic views on both sides to be enjoyed without being obstructed by cyclists and pedestrians. The materials were chosen both for aesthetics and practical reasons: "We wanted it to be as slender as possible so we used steel rather than aluminium, says Pagès, adding: "We considered timber for the deck, as the client had some lumber stock, but there are maintenance issues with wood."

The artistic vision for the bridges attempts to bring together themes of transition between city and nature and of different perceptions, as dictated by the contrasting speeds of pedestrians and passing trains. The result was partly inspired by a music video created for the song Star

Guitar composed by The Chemical Brothers. The music video splices together footage taken from a fast moving train to create a series of identical, repetitive landscapes. "We started from the idea that perception of a landscape differs according to the speed of the observer," says Pagès.

The concept is artistically expressed in the bridges through the colour of the superstructure itself. At the entrance to both bridges from the city side, the colour is bluish grey, which gradually changes to white along the length of the structure as the world of nature gets closer. "The gradual change will only be noticeable to the passengers on the train. The people on the bridge and the people underneath the bridge will not notice the colour is changing because they will be walking too slowly," says Pagès.

Also playing with the notion of differing perceptions is the intention to retain the existing pathways under the bridges, which will have to be slightly widened to enable access to construction equipment. "The construction path will remain as a secondary colonnade to enjoy the underside of the bridges, because they will offer the most interesting view. The landscape and construction sides have been integrated from the very beginning, when we were looking at site constraints," he says.

One of the challenges to be resolved relates to managing the complex colour graduation of the structure during future maintenance, something that will be required both to maintain the artistic nature of the bridges and to protect the steel members.

The first bridge is expected to be delivered in 2022, and the team is due to start on the detailed design in 2020 ■

Nyon-Prangins and Bois-Bougy footbridges

Competition organisers: Municipality of Nyon, Municipality of Prangins, District of Nyon
Architects: Explorations Architecture
Artist: Xavier Veilhan
Structural engineering: Bollinger & Grohmann
Landscape architects: Marti Baron