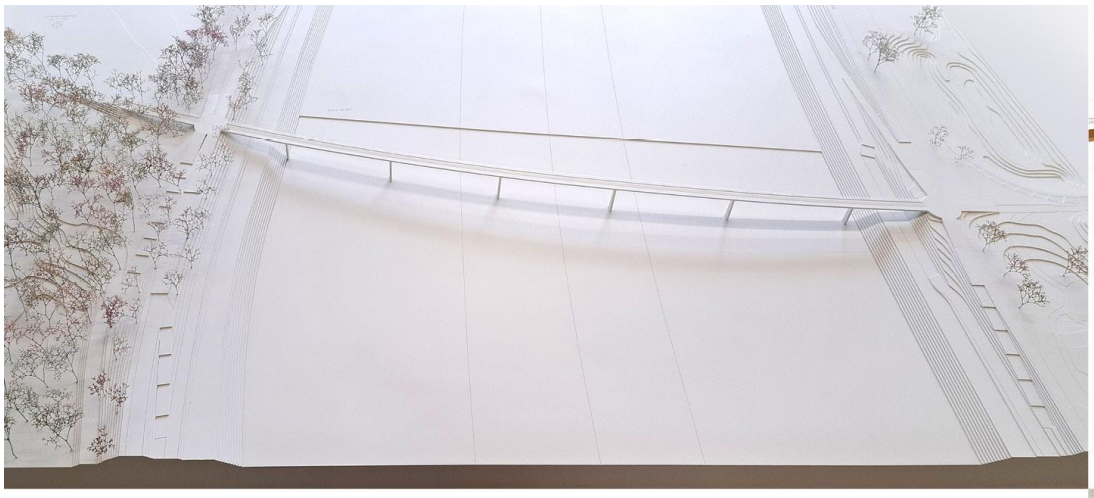
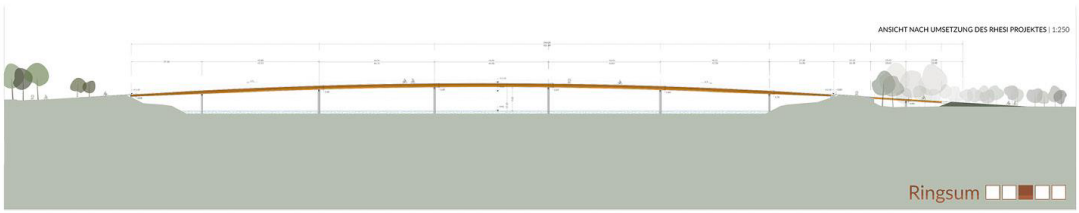
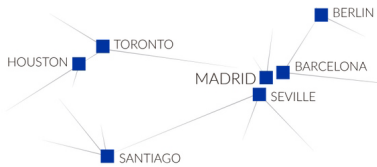
Footbrifge over the Rhine

Widnau (Switzerland) - Diepoldsau (Austria) / 2025

Owner	Ayuntamientos de Widnau y Diepoldsau
Client	Politische Gemeinde Widnau - Politische Gemeinde Diepoldsau
Scope	tender design
Architect	Equi Bridges, Francisco Domouso Dr. Arquitecto







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Ringsum is the new direct connection from the Viscosestrasse overpass across the N13 to the riverside path along the Alten Rhein. With a carefully selected circular alignment and a gradual elevation gain, it crosses the embankments of the future Rhesi flood protection project while integrating into the newly enhanced ecological area.

Ringsum creates a triple WIN-WIN-WIN situation:
- It improves the crossing from the flood relief point (vent).
- It offers pedestrians and cyclists an optimized, direct route without detours.
- It protects the sensitive northern section of the Nollen nature reserve in the Alten Rhein from traffic.

These advantages have been achieved with an understated and elegant yet technically advanced solution.

Technical Details
The shapes and dimensions of Ringsum are derived from structural requirements and the specific conditions of the construction method. This results in an economical, low-maintenance solution with minimal execution risks. It is effective in its current context and will deliver its full potential after the implementation of the Rhesi project.

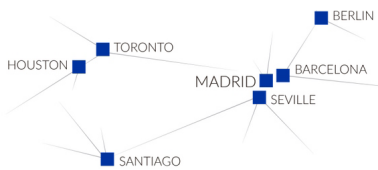
The bridge spans a total length of 283 meters, consisting of a continuous beam system with five standard spans of 45 meters and two end spans of 27.50 meters. It is designed as a composite structure of steel and concrete, utilizing low-maintenance Corten steel.
Thanks to its consistent curvature, the deck, with a mostly uniform height, can be slid into place using the incremental launching method from outside the Rhine embankment.

The bridge ends taper elegantly, allowing for greater freeboard during high water levels and featuring a maximum longitudinal slope of 6%. One end is used as a launching nose during construction, while the other is designed for a future extension in connection with the Rhesi project.

Environmentally Sensitive Construction
The assembly area is strategically located in the future excavation zone of the Rhesi project, minimizing the impact on the natural environment. Additionally, the space between the Rhesi project and the Alten Rhein is cleared of pathways, with all functions consolidated into a central traffic hub.

This hub acts as a logistical focal point, integrated with the start and end points of the new connection to form three circular plazas. These spaces not only aid in orientation and provide rest areas but also offer a cohesive spatial identity to the project.

Secondary Complementary Structure
Between the Rhesi embankment and the riverside path along the Alten Rhein, a second bridge is integrated. This structure, also a composite of steel and concrete, is installed simultaneously with an end span of the main bridge. It is specifically adapted to the varying site conditions and resolves local functional conflicts, completing Ringsum as a holistic and harmonious solution.



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