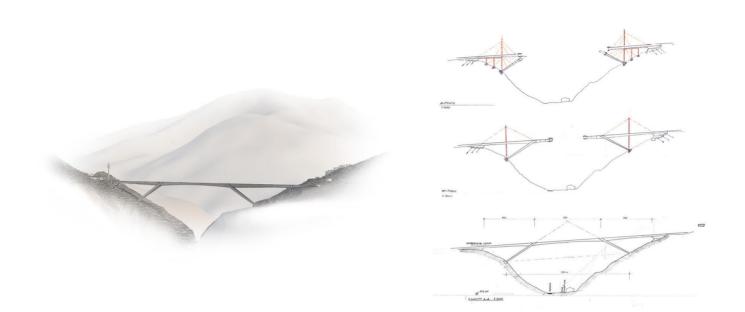


St. Luzibrücke Chur, Switzerland / 2020

Client Scope Tiefbauamt Graubünden tender design



The St. Luzibrücke is going to be one of the essential pieces of the Chur landscape. The work, due to its height and position, will be seen from multiple places and will become, whatever its solution, a dominant element in the landscape. The objective of the project is, in our opinion, to carry out a technically, economically and administratively correct work, and at the same time neat, timeless and respectful of the high landscape quality of the Plessur river valley.

The fundamental idea of the proposal is to make a resounding and at the same time clean bridge, with great structural and landscape strength, an epic solution typical of the capabilities of a 21st century engineering sensitive to social and environmental conditions. The portico is perhaps the most natural solution when it comes to bridging two rocky slopes steeply down the valley.

The proposed structure combines a classic deck of prestressed concrete and built by classic successive cantilevers, with two "blades" of reinforced concrete and a hollow section that are monolithically twinned with the deck. The gantry has a 140-190-140 light board, the distance between the start of the "blades" being approximately 350 m, these being located in a line parallel to the elevation of the deck, so that the blades are the same. The arrangement of lights has made it possible to build the bridge without batteries in the approach spans, thus generating a structure with great neatness of lines.

The structure has been made entirely of concrete and only has support devices in the abutments, so the maintenance of the work will be minimal. The stirrups have been placed slightly forward towards the valley to reduce the light from the side spans of the deck. This has the classic geometry of a straight lintel with variable depth, while blades that are hollow do not require prestressing thanks to the axial force transmitted by the deck.





C/ Barquillo 23, 2° | 28004 Madrid | España T. (+34) 917 014 460 | F. (+34) 915 327 864 www.fhecor.com | fhecor@fhecor.es