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s. **3.G ROADS AND BRIDGES**

l. Company profile

G33 BRIDGE OVER THE RIVER SERIO IN ALBINO

The bridge spans 62 m across the Serio river in Albino, Italy. The solution chosen is a double arch bow-string structure. This solution complies with the need to avoid any pier inside the water flow, to guarantee an adequate clearance for maximum flow, and to place the carriageway at the same level of the existing roads on the embankments without the need of any ramps.
The arches are shaped as a cubic parabola, and feature triangular sections inscribed in a 90 x 90 box. The arches do not lay in a vertical plane but are slightly inclined outwards.The arches and main beams are made of grade 355 steel, while the deck is cast in place over prefabricated slabs. The whole deck works as a composite structure.
The hangers are made of MacAlloy 460 bars, without any prestressing; longitude adjustments are made in the construction phase, once the structure reaches the exact designe shape, the correct load distribution in the hangers is guaranteed.
The longitudinal beams and the arches are connected over the abutments by a prestressed concrete transversal beam, thus avoiding any complicated steel node. All the steel structure is welded.
Foundations are based on bored piles, and are designed to resist the significant actions of the seismic condition, since the bridge is to be made in a heavily seismic area.

Owner:	Municipality of Albino
Client:	Municipality of Albino
Construction firm:	Bergamelli – Albino (BG)
Year:	built 2014
Structures value:	1.300.000 €
Services supplied:	architectural and structural conception, complete design and assistance to work supervision





