

Structural type Owner Client Scope

## Bridge over Torola River

San Antonio del Mosco, El Salvador / 2017

composite bridge CEL Comisión Hidroeléctrica del río Lempa CEL Comisión Hidroeléctrica del río Lempa detailed design



It is a bridge over the Torola river with 4 spans of 32.5m each in a high seismicity area. The 9m wide deck is composite and is composed of 4 steel beams of 1.10 m height and a top slab of 0.25 m concrete.

A ford has been designed on the river bed to allow access to cranes to place the steel beams. The beams are placed on the piles and as the placement progresses they are joined together giving continuity to the structure.

Once the steel structure has been placed, the concrete slab will be disposed.

The piers of 26 m maximum height have a circular section of 2.2 m diameter, with pier cap beams to support the steel beams.

Elastomeric bearings are used to achieve an isolation of the structure in order to reduce seismic loads on the substructure and foundations.

In abutments and piers, redundant transverse stops are disposed.



