

Bridge over "El Burguillo" reservoir

El Tiemblo, Avila, Spain / 1999

Structural type Characteristics Client Constructor Scope concrete Arch Bridge main span 165.0m Construcciones Sobrino - Tapusa ute construcciones sobrino y tapusa detailed design and construction support



The Bridge over the El Burguillo Reservoir comprises a reinforced concrete arch 165.00m in span with a reinforced concrete upper deck 287.00m in total length. The solid arch is a constant 4.00m in width and has a variable depth running from 3.10 m at the abutments to 1.75 m at the crown. The deck comprises a solid slender 0.90 m deep section which consists of a 4.00m wide central core, coinciding with the width of the arch, and two large variable depth cantilevers each 4.00m in width.

The deck is rigidly supported on the piers of the approach viaducts and on the piers upon the arch which are spaced 13.75 m apart. The piers are a constant 4.00m wide, as the arch, and their depth varies with height from 0.90m to 0.35 m at the lowest piers. The arch is embedded in the deck construction.

A cantilever construction with provisional stays was used to build the arch. A launching beam system was used to build the deck.





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