



Engineering Structures for Life



TRANSPORTS - BRIDGES & VIADUCTS

Douro Interior Motorway

ABOUT

The Parcel 1 of the Douro Interior Motorway is located in the Northeastern part of Portugal and comprises 28,5 km, between the localities *Valebenfeito* and *Junqueira*.

In this project, GEG was responsible for the design of seven viaducts with a total extension of 1.110 m and a [cut-and-cover tunnel with 105 m length](#).

Structural solution

The seven viaducts have a total length between 60 m and 349 m, with current spans between 20 and 30 m.

The adopted solution for the viaducts' decks consists of [prestressed precast beams](#) (I and U sections). These beams support a cast in-situ slab over precast thin slabs. The total slabs thickness is constant along the width of the decks and equal to 25 or 30 cm.

The columns have a circular section, with diameters ranging from 1,20 to 1,50 m, and with two columns per alignment and per deck. The [foundations](#) are materialised by individual footing or piles cap for each column, depending on the mechanical characteristics of the terrain.

MORE IMAGES

FACTS

Year: 2009-2011

Client: Ascendi

Services: Detailed design, Structural Engineering, Foundations design, Geological and geotechnical studies, Bridge and Viaduct Engineering, Consulting and on-site technical support

TEAM

António Campos e Matos
Ricardo Leite

LOCATION

Valebenfeito-Junqueira,
Portugal

