



Engineering Structures for Life



TRANSPORTS - BRIDGES & VIADUCTS

Viaduct Cândido dos Reis

ABOUT

This project carried on by Vila Nova de Gaia Municipality, intended to widen the existing viaduct over Cândido dos Reis street.

The existing viaduct allows rail traffic and the widening was designed to incorporate car traffic using a deactivated railway corridor in that zone.

The [new viaduct](#) has a total length of 160,00 m. Columns have a circular (0,80 m) solid section and are founded on several foundations types, like footings, piles, micropiles and shafts, as the geotechnical parameters and the local constraints vary along its extension.

The existing viaduct consists of cast "in situ" concrete slabs with a thickness of 0,55 m. The [new structures](#) were designed to have the same structural solutions with the purpose of minimising visual impact and matching the structural behaviour of both structures (old and new). The connection between the old and new deck parts was ensured by the application of a low shrinkage concrete, to avoid shear internal forces at the interface.

MORE IMAGES

FACTS

Year: 2006-2011

Client: V. N. Gaia Municipality

Services: Detailed design, Structural Engineering, Foundations design, Ground support and earth retaining structures, Rehabilitation and refurbishment design, Coordination of the engineering disciplines

TEAM

LOCATION

Vila Nova de Gaia, Portugal

