

Innovative designs in bridges and footbridges

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Summary

In times of economic austerity, especially in Spain, the bridge designing is a tough job, the administrations don't allow any deviation in budget neither delays in planning. In this context the challenge is to design bridges and footbridges that accomplish it's functional and structural purposes, but using the structural formalism to bring personality to the design without forgetting the environment integration. All to make attractive bridges according to the society demands.

These points are shown in these works selection of our office:

- Farigola Footbridge placed in Cerdanyola del Vallès, Barcelona, and finished in 2012.
- The footbridge over 'Raval de la Mar' road in Vila-Seca, Tarragona and finished in 2013.
- The railway bridge over 'Raval de la Mar' road in Vila-Seca, Tarragona and finished in 2013.
- Llobatona Footbridge in Viladecans, Barcelona, the construction is scheduled for the 2014.
- New Bridge in Caldes Montbui, Barcelona, currently under construction.

Keywords: Aesthetics, Structural Shapes and Forms, Innovative Structural Systems, Bridges, Footbridges, Composite structures, Concrete, Steel, Prestressing

1. Farigola footbridge



Fig. 1: 'Farigola' footbridge view from the new square

The "Farigola" (thyme) footbridge is part of a new strategic urbanism upgrading in Cerdanyola del Vallès, 15 kilometres north Barcelona. The surface of 6 ha, previously used for the industry and stock of fibre cement, will be transformed. The program, managed and designed by Area Metropolitana de Barcelona, Montserrat Periel architect chief, includes the construction of a school, a public tennis club, a pedestrian street, a bridge and a square. This program aims to improve the connectivity between this new area and the surrounding districts. Our office designed the footbridge which is placed in the north, where spans the railway line and Frederic Puig Street connecting a residential suburb known as the Farigola quarter as well