

FOOTBRIDGE OVER THE SEC RIVER

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Summary

The footbridge over the Sec River, built in Cerdanyola del Vallés a suburbia city close to Barcelona, is a Bow String structure, of 29,29 meters span, with parallel lowered arches.

The main characteristic of this footbridge is that structure and finishing merge in perfect harmony. Finishing are not used to hide the structure but to emphasize it.

The footbridge was projected to resolve the connection problems between the two riversides, really penalized.

Keywords: footbridge, arch, lateral buckling, harmony.

1. Background and motivation.

In november 2004 the Association of Towns of the Barcelona Metropolitan Area assign to Enginyeria Reventos, S.L. the design of a new footbridge over the Sec River (Dry River).

The unique footbridge that connected the Fontetes neighbourhood with the closer Service Clinique Center was demolished, due to its interference with a new RENFE railway bridge that had to be built, since then the habitants of this neighbourhood have used the railway bridge for crossing to the other side of the river.

The city council awared of the problem of public security and knowing that the increasing demand of people circulation between the two riversides was not resolved, promoted the project of this new pedestrian bridge.



Fig. 1 General view.