

Contact author: Héctor Beade-Pereda, h.beade@knightarchitects.co.uk

CONTEXTUAL FOOTBRIDGE DESIGN

Authors: Héctor BEADE-PEREDA¹

Affiliation: ¹ Knight Architects, High Wycombe, United Kingdom

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Footbridges provide pedestrian links in previously separate areas, connecting people and inviting interaction and integration. Furthermore, bridges are a paradigmatic case of human transformation of the environment, being extremely powerful tools for placemaking, with the potential of becoming landmarks or even icons. The design of such emotional and long-lasting constructions should go beyond their main function as pieces of infrastructure, always aspiring to improve the quality of the built world.

The ideal footbridge should be not only functional, structurally coherent, durable, sustainable and buildable with an appropriate economic investment, but also aesthetically pleasing, with a positive user experience and respectful of its context. The context for the design of a new footbridge involves many different aspects as the types of traffic being carried (potentially also cyclists and/or equestrians), the nature and headroom requirements of the obstacle being crossed, the characteristics of its location (landscape, orography, geotechnics, climatology and seismicity, hydraulics, or the existence of other bridges in the vicinity, among many others), or the historical, cultural, socio-economic and political background.

How a design relates to the context and its evolution through time can make the footbridge range from being a fitting addition to a valuable environment or a catalyser for the transformation of a declining area, to just a piece of infrastructure that does not contribute to the site or, in the (unfortunately not unusual) worst-case scenario, an element in conflict with the built environment from a visual, cultural, historic and/or even functional point of view. This article explains different strategies to successfully respond to the particularities of different contexts in footbridge design, using examples of the author's experience (Fig. 1) ranging from first designed pieces of ambitious urban transformation projects, to a footbridge in a natural environment nearby a historic crossing, or a movable footbridge in one of the main financial districts in the world.



Fig. 1. Some of the designs used in the article to explain contextual footbridge design strategies