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CHISWICK PARK FOOTBRIDGE – IMPORTANCE OF BRIDGE DESIGN IN URBAN ENVIRONMENT

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The design and construction of the Chiswick Park Footbridge was a long process started in 2003 and finally opened in 2019. The project was stopped and restarted a number of times and challenges arose from maintaining and adapting a design in the face of changing circumstances during this time including the world financial crisis from 2008, a change in client and adopting local authority, development of codes of practice and operation requirements for key infrastructure stakeholders, advances in digital technologies and advances in the application of the theory of pedestrian dynamics.

The resulting bridge, both beautiful and highly efficient, is the first 'network arch' pedestrian bridge in the UK, a design decision that enabled a lightweight design without the otherwise required dampers for pedestrian comfort. The increased buckling restraint to the arches provided by the close centred cross cables allowed the primary members to be shaped into a cruciform cross section which changes profile constantly along the length of the arches providing delight and an ever-changing experience for the users.

Designed for zero maintenance, and from the outset for the key construction stage of erection of a railway track, the proposals maximised off-site fabrication and 'kit of parts' principals and the use of a site factory to erect all three spans in a safe site environment removed from the final siting in the live Chiswick Business Park – used by 10,000 people a day. The resulting high quality of finish and simple detailing allied to the calm sweep of the bridge as it passes nature reserve, over the railway, road and landscaping provides a journey to work described as 'joyful' and 'uplifting' by Business Park users and is an important example of the positive benefit that bridges can have on the design of public realm.



Credit Jill Tate