

Chinese Bridge at Dumfries House Recreates Original 1899 Design

A bridge what was originally designed in 1899 but never built has finally been brought to fruition by CTS Bridges in time for a visit by Prince Charles who is the patron of Dumfries House, Cumnock.

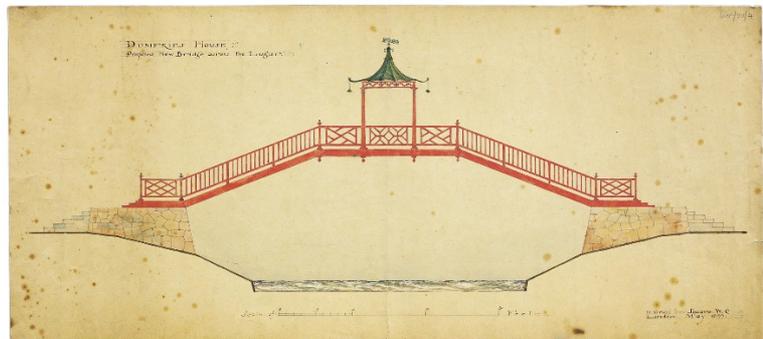
CTS Bridges were appointed to undertake fabrication modelling, manufacture, delivery and installation of the bespoke three span bridge.

Chinese Bridge at Dumfries House, Scotland



Land Engineering came to CTS Bridges after securing the contract to provide an ornamental Chinese Footbridge over the Lugar Water at Dumfries House, Cumnock, Scotland. They had a very short programme as the bridge had to be installed in time for a visit by Prince Charles who is the patron of Dumfries House. They also had stringent architectural aspirations to ensure the original vision was realised.

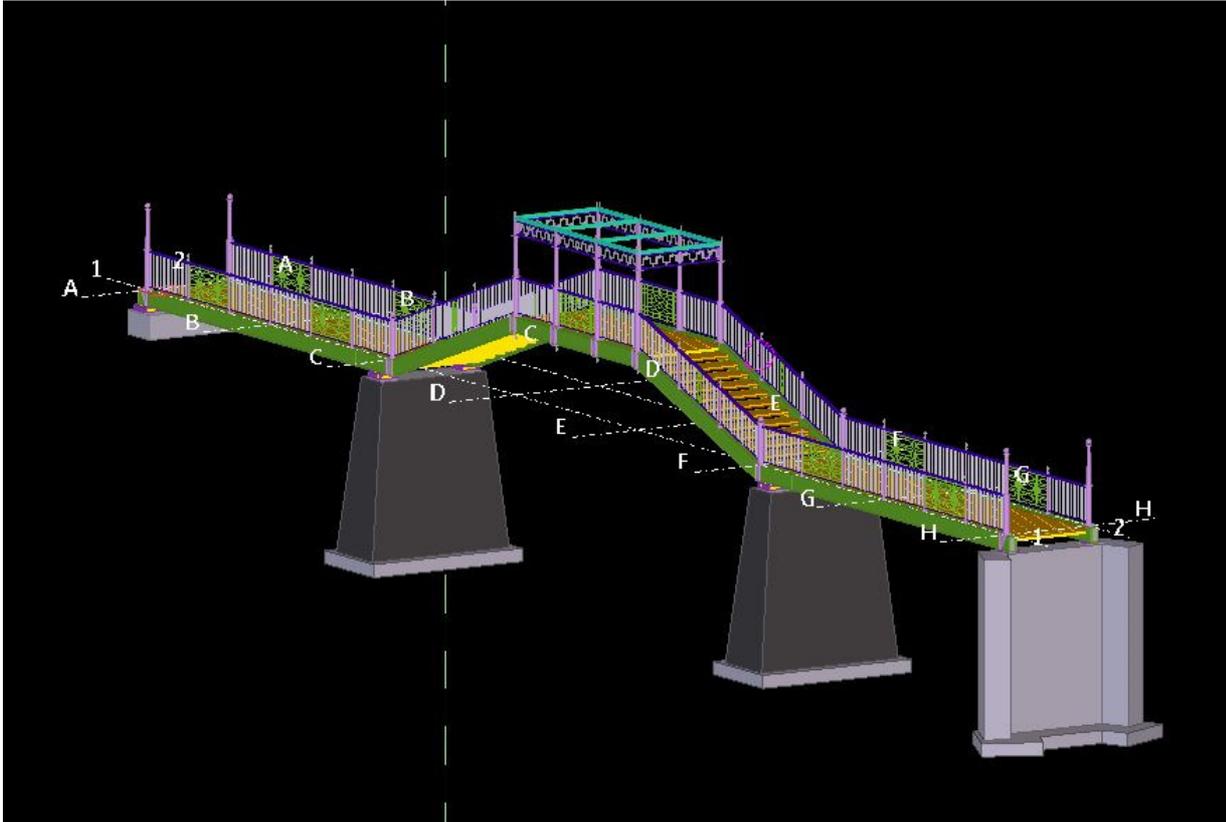
The design for the bridge was taken from an original drawing submitted by Scottish architect Robert Weir Schultz in 1899. This original bridge was never built, but now 118 years later, it has been realised thanks to funding from the Dunard Fund.



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CTS used their expertise to recreate a structure to modern design whilst keeping the style of the original design. At the initial design team meeting between Contractor, Engineer, Architect and CTS it became clear that CTS could offer value with regards to detailing, buildability and installation process to enable the project to be delivered.



Due to the large deflections in service, CTS advised pre-sets of the structure were defined to allow CTS to create a structure which maintained the true geometry in-situ. Limitations with the current design were discussed, with CTS drawing on their own structural and manufacturing experience to advise alternatives.

The time frame for delivery was a challenge. This required a detailed pre-plan to be delivered to ensure that all the components of the bridge came together at the right time, and sequencing of the fabrication considered the lead time of each and every element to mitigate any delay to the fabrication process. CTS successfully delivered the bridge to site on time.



The main central span was lifted onto the two stone piers using a 350t crane. The two side spans were then placed and site welded into position.

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The decorative canopy was manufactured by Jonny Briggs Joinery under a separate contact and once in place, the Chinese Bridge was complete.

CTS Bridges employ both skilled joiners and fabricators and can therefore provide an extensive range of bridges in a variety of materials including steel and FRP or using a combination of steel, timber or FRP materials.

Please contact us for more details on our design, build and installation service for bridges and structures on 01484 606416 or visit our website at www.ctsbridges.co.uk or by email enquiries@ctsbridges.co.uk



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