

Case Study

AN **idom** GROUP COMPANY

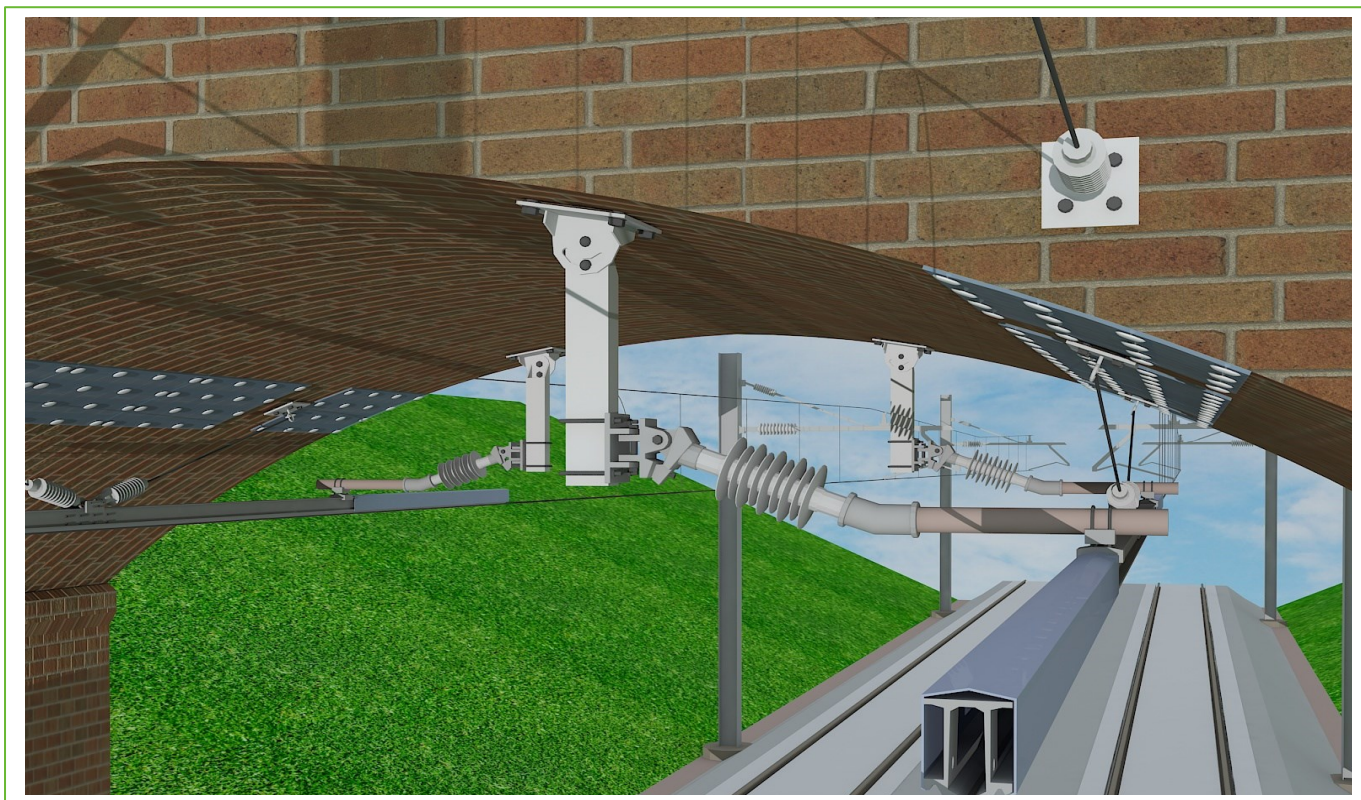
Project

*Avoidance of Bridge
Reconstruction Competition*

Overview

As part of the electrification programme in the UK, Future Railway, Network Rail and the Department for Transport launched a competition to help develop technology enabled solutions which address the avoidance of bridge reconstruction. The competition was seeking solutions and ideas to develop novel methods of increasing the clearance below the bridge whilst avoiding reconstruction, minimising the cost and disruption to the service beneath and across the bridge. We provided a novel design by using overhead conductor rail components which reduced considerably the depth of the catenary.

The scope of it was to develop innovative solutions regarding the OLE or Civils to accommodate the new OLE equipment necessary for the National Electrification Programme and avoid the bridge reconstruction on dozens of them. The current issue facing the network is that the British railway lines were the first ones in the world to be built, and due to this the majority of the structures and bridges on the line are historical and listed bridges that were not conceived to accommodate the new electrical equipment. This is even more the case with the 25kV AC electrification system, which requires big electrical clearances. IDOM Merebrook is one of the nine companies awarded in this competition, and we are designing and developing an OLE innovative solution which will gain clearance avoiding the bridge reconstruction and keeping intact the historical and listed bridges along the British railway line.



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