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## Lancashire County Council St Michaels & Carnforth Footbridges

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Lancashire County Council in UK are a forward thinking and innovative local authority with a significant number of bridges in their asset stock. They commissioned Jacobs to carry out a detailed options study for eight footbridges following concerns that were raised during principal inspections. The options reports considered refurbishment and replacement options and the recommendations for all footbridges was replace them with Fibre Reinforced Polymer.

Lancashire County Council divided the eight bridges into packages of two according to their budget constraints and issued tender documents to contractors for the first two packages.

APB Group won the first package and have successfully delivered two replacement FRP Footbridges of 28m span over railway in Ormskirk. These are the longest simply supported FRP footbridges in the UK

The second tender package to be issued to tender was for St Michaels and Carnforth Footbridges at 37m and 31m spans. The Council wanted FRP Bow String Trusses for these bridges that crossed a River and a Canal. Nothing like this type and scale of footbridges had ever been realized in the UK.

APB Group won this tender with an alternative proposal. We were obliged to submit a compliant bid for FRP but also submitted a proposal to replace these footbridges with an aluminium solution explaining to the client in doing so the risks and costs involved in designing and fabricating these structures in FRP would be significantly greater. We believe this experimentation in the longest aluminium footbridges in the UK will see more of this type in future



*Fig. 1. Carnforth Footbridge Fabrication*