



Witton Park Road Bridge, County Durham

Case Study

The Witton Park Road Bridge near Bishop Auckland crosses the River Wear at the same place as the historic Witton Park Railway Viaduct, but at different angles. The main central bridging structure was being replaced as the old structure had deteriorated and become structurally unsound. The new prefabricated replacement section of the bridge is a Retro Beam Bridge design, made from thermally galvanised steel for long term durability and is 64 metres long, with a single-lane road carriageway plus a cycle path.

The new bridge section was installed in just 3 days through the Victorian brick arches of the Viaduct by Retro Bridge, then the teams from Durham County Council and St. Astier Consulting Contractors, were able to work on the bridge deck expansion joints at each end, to ensure that these had an equally durable, watertight seal. To do this quickly and efficiently, as well as ensuring the long-term durability of the exposed joints, they selected the Emseal BEJS System provided and supported by NCC (Movement Joint Systems).

The Emseal BEJS System can handle harsh environmental conditions and has greater movement capability, better low temperature flexibility and higher temperature stability than other joint movement technologies. In a single installation, BEJS provided a watertight durable seal, with a joint movement capability over 100%, including 3-dimensional movement, plus it required no invasive mechanical anchoring as it is bonded in position.



Client:
Durham County Council

Main Contractor/Manufacturer
Retro Bridge

Specialist Contractor:
St Astier Consulting Contractors

Main Products Used:
Emseal BEJS System

For More Information:
NCC Movement Joints Ltd
01257 266696
technical@nccinaction.co.uk
NCCMovementJoints.co.uk

