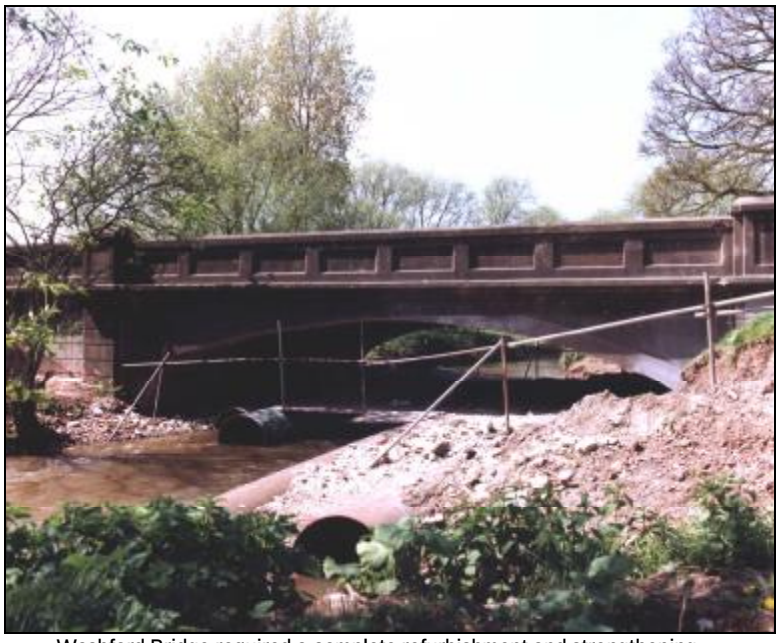
Balvac

A435 Washford Bridge, Warwickshire - Strengthening by Plate Bonding



Washford Bridge required a complete refurbishment and strengthening

Partnering delivered project cost savings

Washford Bridge is a single span structure, which carries the A435 over the River Avon in Warwickshire. The structure comprises a reinforced concrete semi-elliptical arch, and was built in 1924.

A full partnering project was set up between the Client, Engineer and Main Contractor, and Balvac were later invited to participate in the project.

The main strengthening work was carried out in two phases, and despite a significant unforeseen increase in structural repairs, the works were completed on programme. The main strengthening works comprised bonding 6mm thick, 250mm wide, 9m long steel plates to the prepared soffit of the bridge.

To avoid drilling into existing reinforcing steel, an accurate survey was carried out to locate steel and a drill pattern marked out. Templates were used to accurately position bolts prior to bonding of the steel plates. The curved profile required extreme accuracy in setting out which was achieved by Balvac's methodology.

Client	Warwickshire County Council
Consultant	WS Atkins Transportation Engineering
Principal Contractor	Birse
Specialist Contractor	Balvac
Project Value	£500,000
Specialist Value	£130,000
Overall Programme	10 weeks 1999
Specialist Works	38 days Completed April 1999

Balvac's early involvement in planning and Engineering, in particular the change to sprayed concrete rather than hand applied repairs, contributed significantly to the successful project delivery

Balvac
Sherwood House, Gadbrook Business Centre, Rudheath,
Northwich, Cheshire. CW9 7TN
Tel: 01606 333 036 Fax: 01606 812 497
Email: enquiries.balvac@balvac.co.uk
www.balvac.co.uk