

Halton Borough Council Bridge Maintenance Partnership Widnes Approach Viaduct - Concrete Repairs and Cathodic Protection



Operative Checking Mesh and Cable Installation



Widnes Approach Viaduct

Concrete Repairs and Cathodic Protection Installation at Widnes Approach Viaduct.

As Principal Contractor, Balvac carried out Concrete Repairs and Cathodic Protection installation works to a selection of structural members on the underside of the Widnes Approach Viaduct, as part of the Bridge Maintenance Partnership for Halton Borough Council.

These works involved the breaking-out and reinstatement of over 4m³ of structural concrete. The reinstatement works consisted of either Hand Repair or Spray Concrete and were completed utilising a mixture of elevated access platforms and scaffold access. A specialist Corrosion Inhibitor was also applied to the immediate 500mm perimeter of each repair.

Cathodic Protection was installed to three piers and four beams. This was a 'Mesh & Overlay' system designed by Mott MacDonald. The total area of concrete protected by the CP system was 486m². In addition refurbishment of the bearings was also carried out.

A key complication associated with the execution of these work was the project's close proximity to 3rd parties. The site was positioned next to a residential area and much of the work's activity had to be carried out next to a local primary school. Balvac were sure to make early contact with those affected by the works and to establish a good working relationship. Hand breakout of the concrete repair areas was chosen over hydro-demolition so to keep noise pollution to a minimum, and an independent drama group was employed to perform a bespoke play to the school's children, warning them of the dangers associated with a building site.

Client:	Halton Borough Council
Designer:	Mott MacDonald
Principal Contractor:	Balvac
Contact:	NEC3 Term Services Option C
Commencement:	October 2010
Value:	£370k