



SIKA AT WORK

ANLABY ROAD RAIL BRIDGE

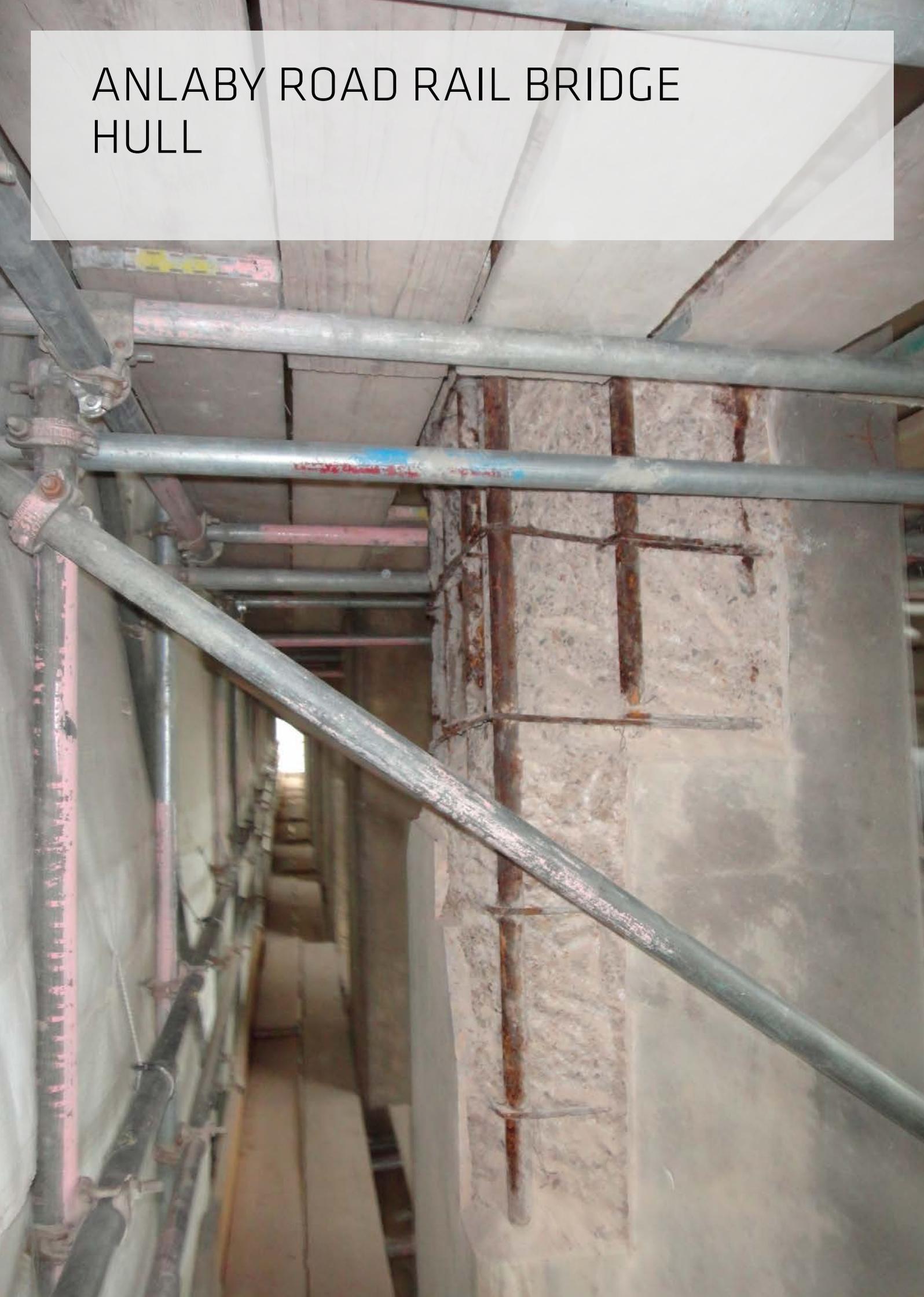
HULL

REFURBISHMENT: Sika® MonoTop® 610, Sika® MonoTop® 615, Sika® Ferrogard®-903+ and Sikagard®-550W Elastic

BUILDING TRUST

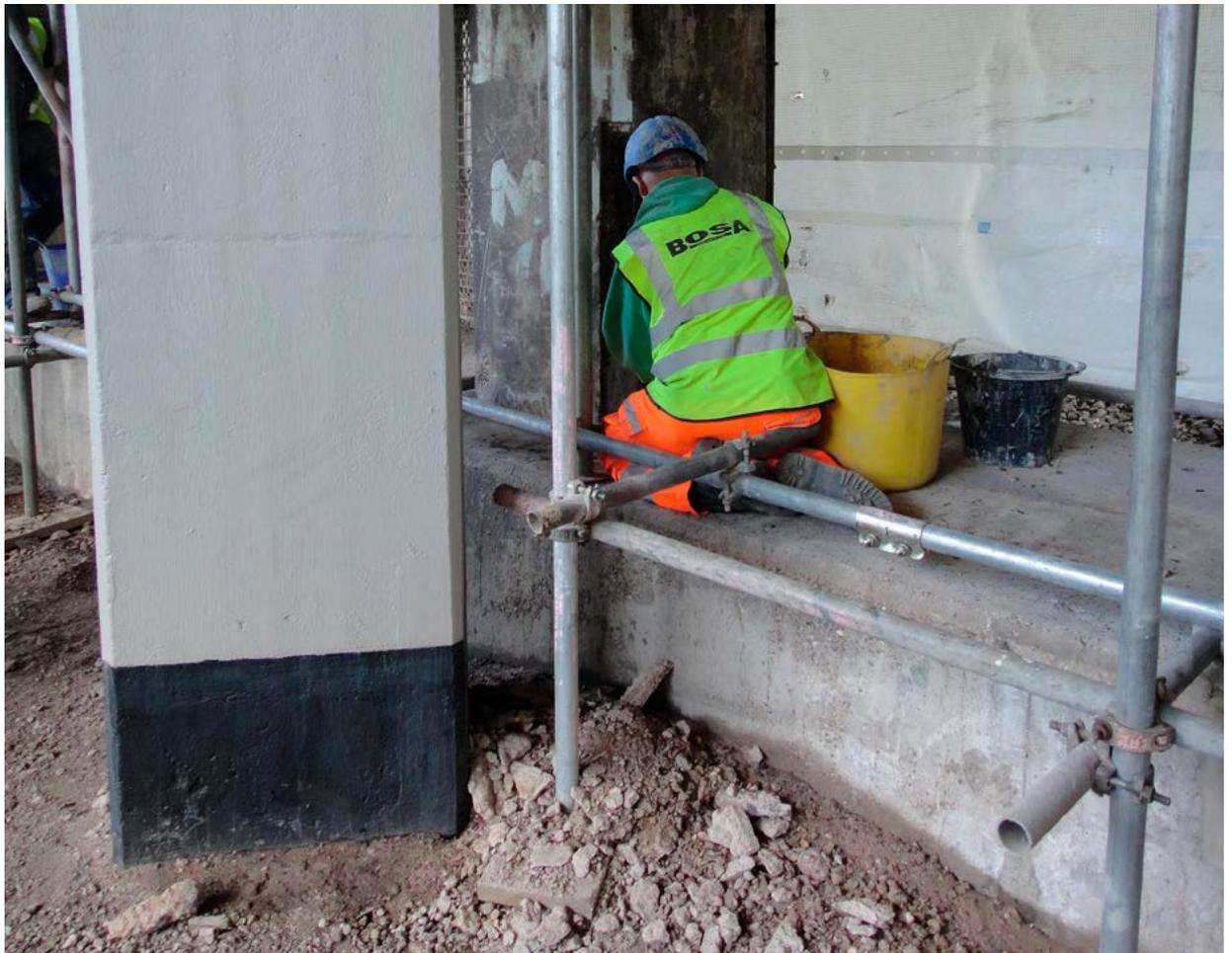


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SIKA CONCRETE REPAIR AND CORROSION MANAGEMENT SYSTEM ENSURES FLYOVER'S LONG-TERM FUNCTION AS VITAL CITY CENTRE ROAD LINK. Sika supplied the concrete repair and total corrosion management system to extend the lifespan of a city centre flyover, with the products' effective and easy-use enabling the vital refurbishment to be carried out with minimal disruption to the thousands of commuters who use the route daily.

Anlaby Road flyover is a four-lane carriageway road bridge on one of the main commuter routes to Hull central, spanning the main network rail route into the city centre.



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The concrete bridge, built in 1964, displayed major signs of carbonation-induced spalling to columns and deck soffits above the rail lines. Contractors, BOSA Contracts, on behalf of Hull City Council, required a practical repair solution which extended the lifespan of one of the city's arterial routes without impacting on daily road and rail commuter journeys or impeding pedestrians.

Work on the bridge's repair began in March 2016. The full refurbishment involved structural [concrete repairs](#), corrosion inhibitors, [anti-carbonation coatings](#) and safety fencing. Global product manufacturer, Sika, supplied the project's concrete repair and [total corrosion management](#) system.

Richard Snow, Director at BOSA Contracts, said: "Sika products were specified due to their excellent historical performance, giving all those involved in the flyover's refurbishment peace of mind. As a manufacturer, Sika was able to supply a full range of materials to solve the whole range of repair issues.

"The [Sika® MonoTop®](#) range is a particularly good performer when applied to soffits, especially where limited time is a factor. This not only helped coordinate a smooth-running works programme that enabled repairs to be completed to the highest quality and without disruption to vital road and rail routes, it assisted with administrative issues such as Quality Assurance paperwork."

After the repairs had been carried out, [Sika® FerroGard®-903+ corrosion inhibitor](#) was applied to the areas outside of the repair areas. The corrosion inhibitor extends the service life of any reinforced concrete structure without the need for actual concrete removal. Once applied, it penetrates the surface and diffuses in vapour or liquid form to the concrete's embedded reinforcing bars, forming a protective layer on the steel surface to control corrosion caused by the presence of chlorides as well as by carbonation.

Sika® Armorcrete®, a one-part, flowable, cementitious, micro-concrete was then used for shutter and pour repairs to large sections of the supporting columns and piers. For smaller, hand-placed repairs, the majority of which were carried out to deck soffits and abutments, [Sika® MonoTop®-610](#), a high-performance, cementitious steel reinforcement protective coating and bonding primer was applied in preparation for concrete repair mortar, [Sika® MonoTop®-615](#).

To all sections of the structure, except the lower supporting column sections, Sikagard®-552W, a one component, water-dispersed, adhesion-promoting primer and [Sikagard®-550 W Elastic](#), a solvent-free, crack-bridging, plasto-elastic anti-carbonation coating, were applied. The lower column sections were coated with Sika® Poxitar®, an epoxy-anthracene oil-combination coating with mineral fillers to form tough, splash protection against passing traffic.

The flyover repairs, along with the corrosion management system, were completed in October 2016. These were finalised to the client's strict deadline and full satisfaction. The superb works programme drawn-up by BOSA, which included staggered shift patterns and out-of-hours working, ensured travel disruption was minimalised for road and rail commuters.

Thanks to the superb experience and diligence of BOSA's on-site teams and the proven quality of Sika's [concrete repair](#) and [total corrosion management system](#), Anlaby Road flyover has been given a new lease of life, allowing it to remain a landmark part of Hull city centre's travel network for many years to come.

For further information call 0800 112 3863