

Plessey Viaduct Emergency Response

In October 2023, planned rail track works were taking place on the 180-year-old Grade II listed, five-arch Plessey Viaduct when the up main parapet started to move outwards. It subsequently fell around 36 metres taking out most of the spandrel wall.

The location of the viaduct on the East Coast Main line is of commercial and strategic importance so our Eastern Asset Maintenance team were called out to lead the response.



Our team mobilised quickly and set about preparing the area for access, site compound, lifting and scaffolding installation.

Phases one, two and three of the scaffolding were installed, access roads and tracks were cut through woodlands for transportation, and design activity was developed to ascertain the repair requirements. Blockwork, cement, and grout in loaded to the site to start the rebuild of the spandrel wall.

A big challenge was dealing with the aftermath of Storm Babet which flooded the site, making lifting very difficult and causing river levels to rise. We overcame this by laying stone in the working areas to improve working conditions around the storm.

The rope access team assisted with the installation of tie bars and pattress plates on the non-scaffolded elevation. Meanwhile, weather conditions continued to challenge the delivery of the works making the site a quagmire, but we persevered.

We continued to monitor the structure monitor and also carried out track monitoring for the track works. Pattress plates and pre-cast foundations were drilled and installed as a temporary measure until the listed building consents could be agreed and permanent fixings installed.



We faced numerous challenges with this scheme such as the down line remaining open, a height-restricted bridge and significant access challenges on top of the weather and the urgency to reopen the protected structure.

The scope of work was vast, but we were able to hand back the viaduct safely and successfully in just 21 days from the original call out and in around 17,500 hours with thanks from Network Rail. A fantastic outcome for the team, keeping passengers, freight and the economy moving.

