

11,000 tonne tunnel to be installed on the railway

January 11, 2021



A massive 11,000 tonne curved concrete box is to be pushed under one of the country's most famous railway lines.

The structure, which weighs more than the Eiffel Tower, is being installed in a painstaking nine-day operation as part of the £1.2bn upgrade of the East Coast Main Line.

Engineers have spent the last nine months building the new tunnel by the side of the East Coast Main Line as trains have sped past between London and Edinburgh.

And now the massive concrete construction is ready to be pushed into place along pre-installed guiding supports, after the three tracks above have been temporarily removed.

Using a traditional method of installing a tunnel on the crucial stretch of the line would have meant closing it completely for about a month. But the pre-constructed structure will be installed in just nine days – and means a reduced level of service will be able to operate at the same time.

Paul Rutter, Route Director for Network Rail's East Coast Route, said: "This is a massive engineering challenge, but it will avoid hundreds of hours of closure on one of the most important lines in the country.

"This is industry leading work that really puts the needs of passengers first in how we approach improvement work.

"In the past, Network Rail might have approached this problem by thinking about the easiest way to do the engineering. Instead, I'm proud to say we have come up with a creative and innovative solution that will deliver massive benefits while keeping disruption to a minimum."

Rail Minister, Chris Heaton Harris, said: "This is an astonishing feat, underlining this country's reputation for pioneering engineering and delivering major upgrades for passengers.

"By undertaking a project of this magnitude now we are making the most of our railways being quieter, putting in place vital new infrastructure that will improve our railways for when passengers are safe to return."

The work is being carried out at Werrington, north of Peterborough, where the East Coast Main Line is crossed by a slow-moving east-west freight route. Installing the tunnel will take slower freight trains off the fast route, speeding up services and improving reliability, while also reducing the amount of maintenance required on that section of track.

The new tunnel is a 155-metre curved concrete box that will be painstakingly pushed at 150cm per hour, using massive jacks to propel and steer it into place. It will be the first time this construction technique has been used in this way in the UK.

While the line will be kept open during the work, it will mean limited services on the East Coast Main Line for nine days (Saturday 16 to Sunday 24 January) and passengers travelling to/from Scotland may need to change trains at Newcastle and complete part of their journey by bus replacement services.

Network Rail is also continuing with essential work at London King's Cross, which will impact on train services on weekends throughout January. Teams will be installing new overhead line equipment and improving the signalling. The work is being carried out safely, in line with Government guidance.

People should continue to follow the latest Government guidance and must stay at home except for limited reasons. If you need to travel, you should walk or cycle where possible, and plan ahead to avoid busy times and routes on public transport. Passengers are strongly advised to check their journeys via National Rail Enquiries, at EastCoastUpgrade.co.uk or on their train operator's website and allow plenty of time.

A spokesperson on behalf of train operators on the route said: "The work will mean changes for passengers travelling between Scotland and anywhere further south of Grantham on the East Coast Main Line and people should only travel during these nine days if they have to. We strongly advise people to check before they travel and allow plenty of time as journeys will take longer.

"We thank our passengers for their patience whilst this essential work on the East Coast Upgrade, which

will bring more services and a more reliable railway for passengers, is carried out.”

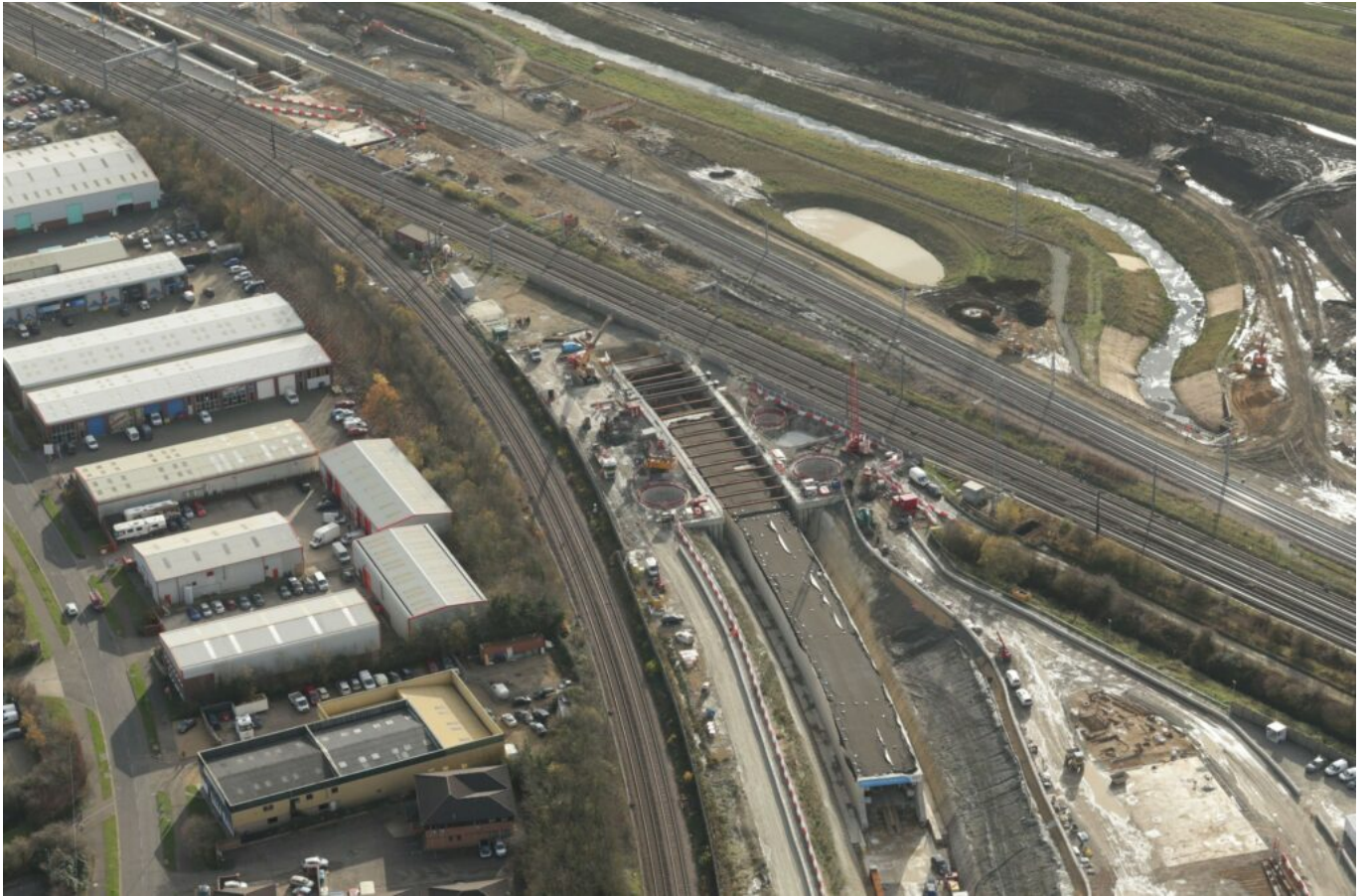


Photo credit: Network Rail Air Operations – Werrington, north of Peterborough