

Big Push – Network Rail installs 11,000 tonne railway tunnel

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An 11,000 tonne curved concrete box has been successfully pushed under the East Coast Main Line near Peterborough.

Over the past nine days, Network Rail teams reached this major milestone in the project to build a new tunnel at Werrington, north of Peterborough, which will enable slower moving freight trains to dive underneath the famous passenger route and use an adjacent line northwards.

Newly released time-lapse footage shows the 155-metre curved concrete box tunnel, which is heavier than the Eiffel Tower, being pushed into place at just 150cm per hour, using four hydraulic jacks.

This is the first time that a curved concrete box has been installed using this industry-leading engineering technique in the UK.

It took nine days, but using this cutting-edge technique avoided hundreds of hours of passenger disruption on this vital part of the East Coast Main Line and meant that services could continue running throughout.

Teams removed three of the tracks, lifted the overhead wires and dug out spoil from the site. Once the tunnel was eventually underneath, they then put everything back in place ready for regular services to resume. The work was carried out safely, in line with Government Covid guidance.

Paul Rutter, Route Director for Network Rail's East Coast Route, said: "Our teams have completed this challenging piece of engineering in a creative way, which also allowed a reduced train service to continue for those who still had to travel.

"Over the nine days, we've made major progress on this vital project which will bring faster, more reliable journeys for passengers on the East Coast Main Line.

"I'm so proud that this project has shown itself to be one which is industry leading and that our teams have had the opportunity to use this new technique for the first time in the UK on one of the country's most famous railway lines."

David Horne, LNER Managing Director, said: "This essential part of the East Coast Upgrade will allow faster, more frequent LNER services between London, the North of England and Scotland by creating a new and improved route for slower trains to cross the main line.

"We look forward to working with Network Rail on the remaining East Coast Upgrade engineering works in the first half of this year, so that we can deliver the benefits for our customers and communities of this significant investment."

The next stage of the project at Werrington involves work to install two new tracks inside the new tunnel and the associated signalling system, ready for it to come into use at the end of 2021.

The project is part of the £1.2billion East Coast Upgrade. Once complete, it will bring a more reliable railway with more choice for passengers, as well as faster journeys between London, the North of England and Scotland.

Further south, teams are continuing with major work to install overhead line equipment and improve the signalling in and around London King's Cross. For this work to take place safely, there will be no trains to or from King's Cross on Saturday 30 and Sunday 31 January.

Passengers travelling to or from the north on the East Coast Main Line that weekend will need to transfer at Peterborough for rail replacement coaches, which connect to Thameslink services between Bedford and St Pancras International.

People must continue to follow the latest Government guidance and stay at home, except for limited reasons. Those who must travel 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.

Photo credit: Network Rail