

## Giant HS2 TBM cutterhead makes journey back to start second dig in Warwickshire

September 22, 2022



A night-time operation in Warwickshire has been undertaken to take HS2 Ltd Tunnel Boring Machine (TBM) Dorothy back to Long Itchington Wood Tunnel north portal.

The 160 tonne cutterhead was moved upright on a 12 metre-long, 48-wheel Self Propelled Trailer (SPT) on its 2.5 mile journey and once reassembled, Dorothy will start its second tunnel bore later this year.

After HS2's first tunnel breakthrough by Tunnel Boring Machine Dorothy at the south portal site in July this year, the front part of the TBM has been dismantled and transported back to the tunnel's north portal in a 24/7 intricate operation, managed by the plant and logistics team at HS2's contractor Balfour Beatty VINCI (BBV).

The cutterhead, which weighs 160 tonnes and features a 10-metre diameter, was moved during the night of 21 September. Standing upright on a 12 metre-long, 48-wheel Self Propelled Trailer (SPT), it was transported from the south portal site, along the A425, through the village of Ufton and onto HS2's north portal site.



The TBM's 120 tonne tail skin, also 10 metres in diameter, was also moved in the same operation. The 2.5-mile journey took 180 minutes, with the loads arriving at their destination at 0300 hours on 22 September.

Eight other large pieces from the TBM's front shield and middle shield, have already been transported by specialist equipment, which was used specifically to avoid any temporary alterations to the road layout through Ufton.

The rest of the 120-metre long TBM will be pulled back through the one-mile tunnel by a special 'caterpillar' system, at a pace of 150 metres per day. Once all the parts are back at the north portal, the TBM will be reassembled before starting the second bore later this year.

Tom Comer, Balfour Beatty VINCI's logistics manager said: "This has been an intricately planned operation, using specialist equipment to transport these large, heavy pieces of machinery safely and carefully, over a 2.5-mile route, and onto our north portal site. The whole team was proud to see the operation culminate in such an impressive sight, as the huge TBM cutterhead completed its short journey.

"We worked closely with the local authority, Warwickshire Police and British Transport Police, and would like to thank them for helping us ensure a safe operation, carried out at night to minimise disruption to the local community as much as possible."

Alan Payne, HS2 senior project manager said: "The BBV logistics and site teams have done a great job to make this a safe and successful operation. We're now looking forward to the reassembly of the TBM over the coming weeks, and the start of the second bore of the tunnel later this year. When we celebrate the breakthrough next summer, this will be the first fully completed twin bore tunnel on the HS2 project."