



Update on tunnelling and cross passage construction in Hillingdon

February 2024 | www.hs2.org.uk

High Speed Two (HS2) is the new high speed railway for Britain.

You can sign up for regular updates in your local area at hs2inhillington.co.uk.

Our Community Engagement team is available to answer your questions about the project and the works in Hillingdon and Northolt. Our team would like to invite you:

- **To visit the HS2 & SCSJV Information Hub**

Our Community Information Hub is open for drop-ins every **Monday** and **Wednesday** from **2pm** to **4pm**.

You can find us in the portacabin on the right of West Ruislip Portal Entrance on Ickenham Road.

- **You can book a virtual one to one appointment** at Communities@scsrailways.co.uk

Tunnels and cross passage construction update

The tunnels' route broadly follows the London Underground Central Line and the Chiltern Mainline. Since both tunnel boring machines (TBMs) were launched from the West Ruislip Portal site in autumn 2022, activities supporting tunnelling works at the Portal are ongoing. These include removing excavated material, supplying materials and maintaining tunnelling equipment.

The TBMs are progressing at a rate of approximately 150 metres per week. We expect them to have reached the Hillingdon/Ealing border as shown on the map overleaf.

We have now started building the cross passages near to Herlwyn Avenue and Roundways/West End Road. Cross passage locations and key dates are shown on the map overleaf.

If you have a question about HS2 or our works, please contact our HS2 Helpdesk team on 08081 434 434 or email hs2enquiries@hs2.org.uk

Duration of works

From late September 2022 to winter 2024

24 hours, 7 days a week

What to expect

People living near the tunnelling works may hear a faint, low rumbling noise as the tunnel boring machines pass by

It is unlikely vibration from tunnelling will cause damage to properties

Some ground borne noise during cross passage construction to link the tunnels

Surveying teams taking readings from monitoring equipment on streets near the tunnel route

What we will do

Keep you updated on progress and advise when to expect tunnelling in your area

Monitor ground movement, noise and vibration levels at all times

Be responsible should any damage occur due to our works

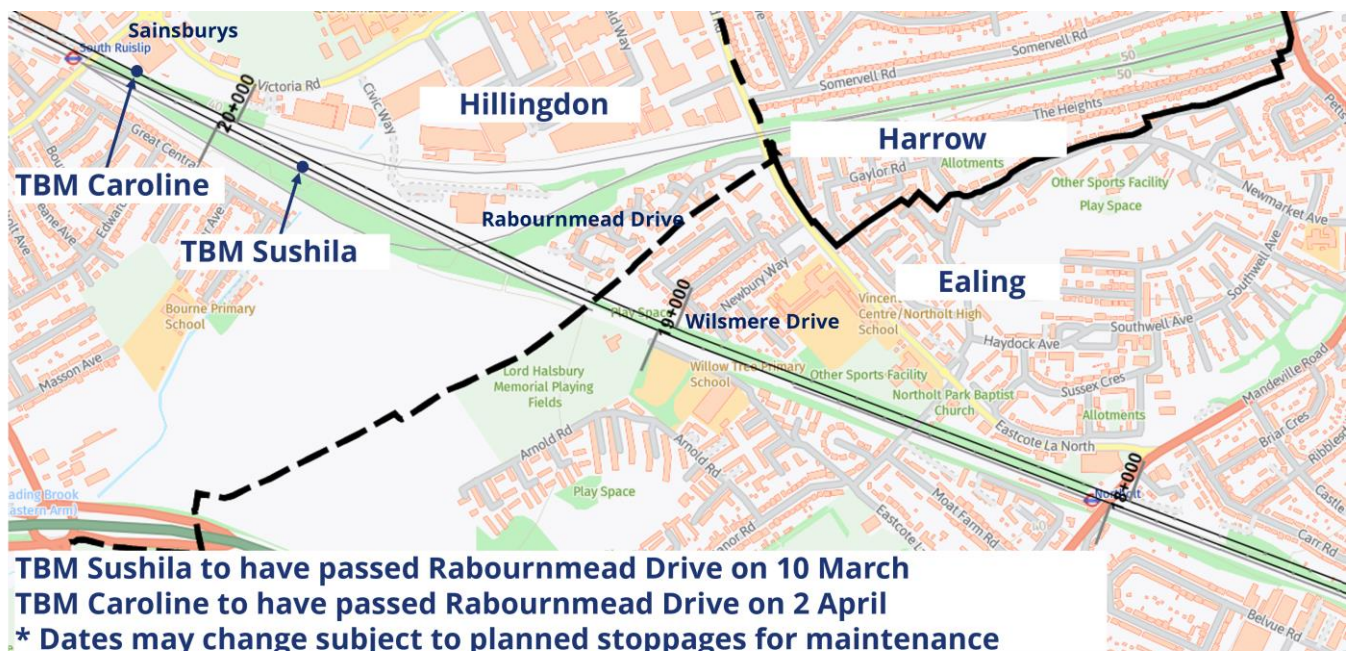
Provide updates at HS2inHillingdon.co.uk

Update on tunnelling and cross passage construction in Hillingdon

www.hs2.org.uk

Key tunnelling dates

Notification



TBM Sushila to have passed Rabournmead Drive on 10 March
TBM Caroline to have passed Rabournmead Drive on 2 April
*** Dates may change subject to planned stoppages for maintenance**

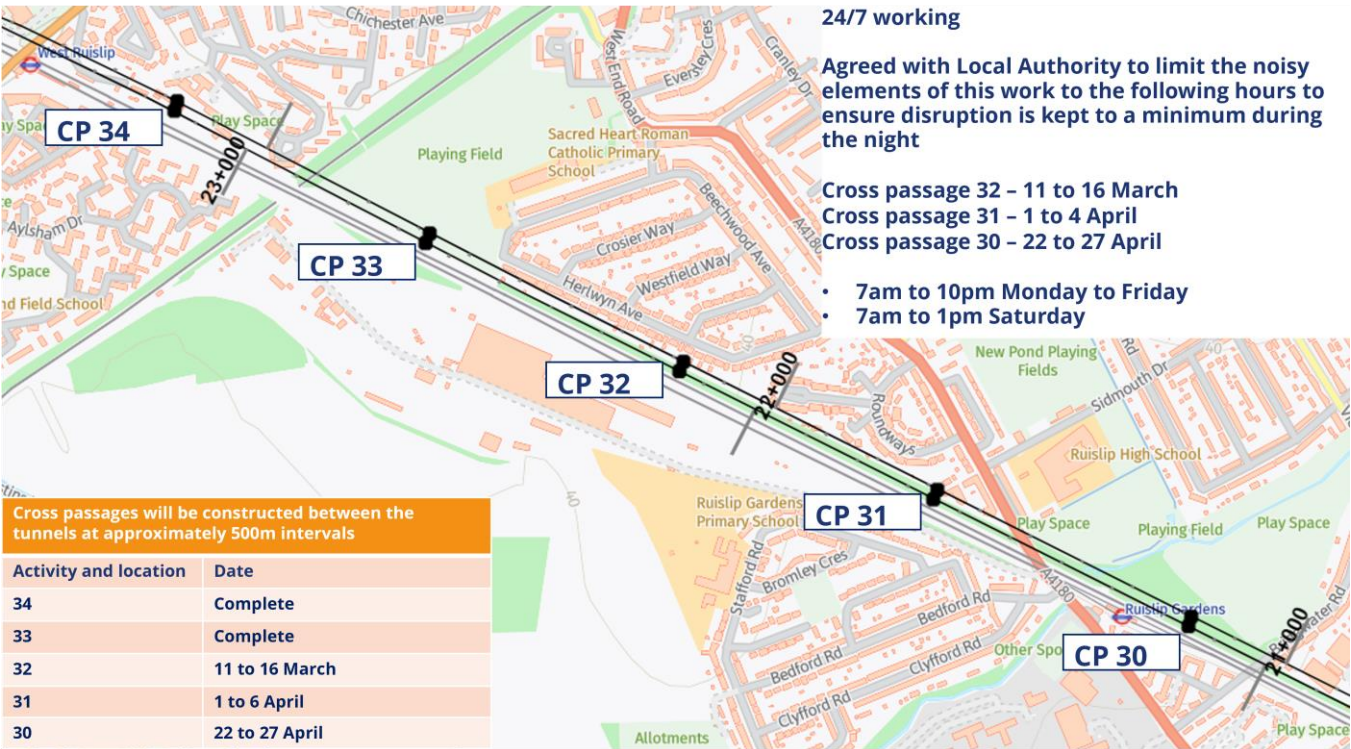
Cross passage construction

We are now progressing with the construction of cross passages, which are approximately 500 metres apart along the route. While invisible to the travelling public, the cross passages will have a key role in providing a safe operational railway. Each tunnel has an emergency walkway that allows passengers to safely evacuate the train and walk through the cross passages into the other tunnel where they can be rescued on a passenger train.

The ground above the tunnel is mostly clay and approximately 16m (52 feet) thick, with a sand channel running through the tunnel's crown. Because of the ground conditions at these locations, we will freeze the ground which is the proven, safest way to control the ground during cross passage construction. The side of the completed upline tunnel will be broken out and then a remote-controlled robotic digger will be used to dig out the frozen ground and a sprayed concrete lining will form the interconnecting tunnel. This phase generates some ground-borne noise and vibration, but because of the clay layer and the ground conditions it will be less noticeable.

Contact our HS2 Helpdesk team on **08081 434 434**

Where are the cross passages in your area?



Keeping you informed

Due to noise transmission paths that occur naturally in the ground, it may be possible for people living approximately 100 metres away to hear or even feel something intermittently as the tunnel boring machines are passing. Not everybody will experience this but if you do, this tends to be a very low-level rumble and will only last a few days as tunnelling progresses past properties.

Our community engagement team have been contacting residents and businesses whose properties are along the line of route to let them know when to expect tunnelling near their properties. We're also checking in with residents and businesses after each TBM has gone past ensuring that you are being kept well informed and updated.

We have also been contacting the occupants of properties who are closest to the cross passage locations. There is a period of the construction works that involves breaking through the side of one tunnel to connect it to the other. This might generate some vibration which may be heard as ground-borne noise in nearby buildings. Whenever possible, in order to minimise disruption to residents, we will limit this activity to extended daytime hours (Monday to Friday, 7am to 10pm and Saturday 7am to 1pm).

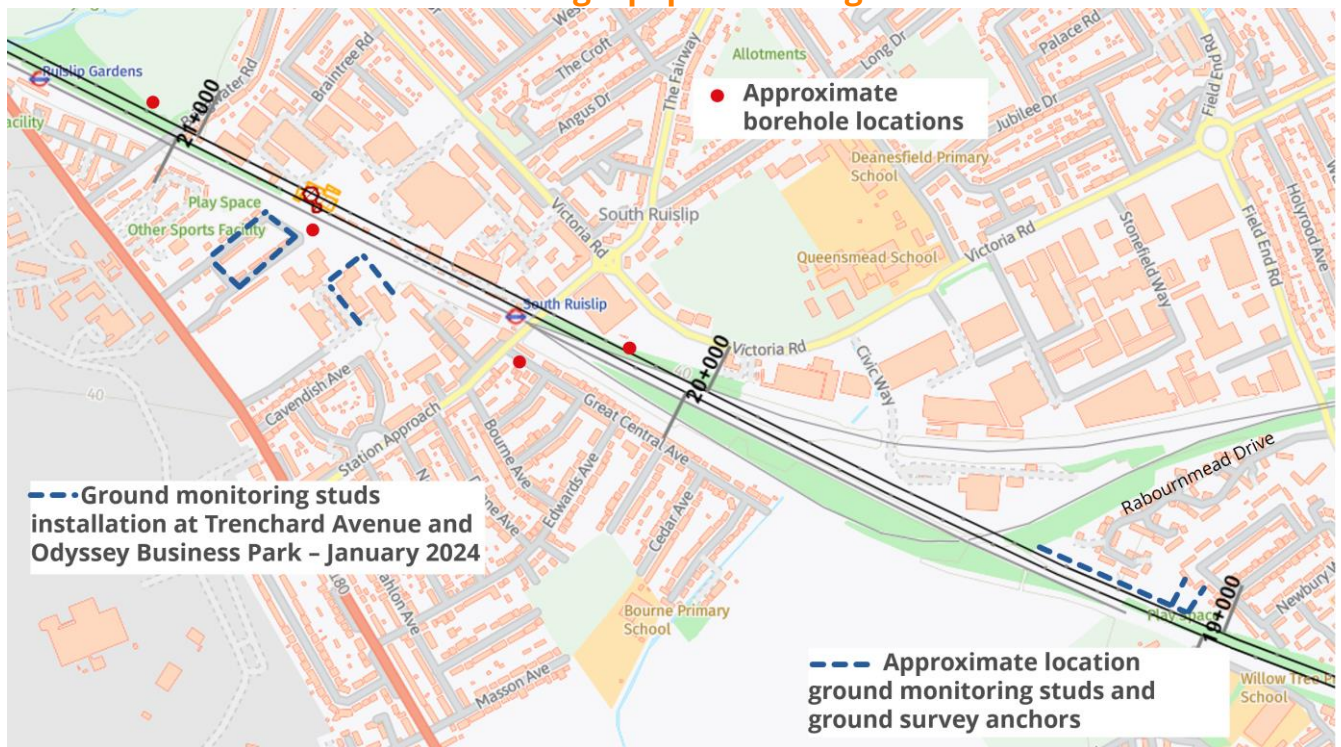
Monitoring taking place during tunnelling

We have installed specialist equipment in multiple locations along the tunnelling route to monitor ground movements before, during and after construction. The surveying team will be out and about in Hillingdon to take regular readings from the studs located in the pavements or to take readings from the equipment mounted on buildings. You may see members of the team assembling a tripod to mount monitoring equipment in order to take readings. This activity will be quiet, for a short duration and will not affect access to footpaths and driveways. We apologise in advance should this activity inconvenience or disturb you.

Boreholes in nearby open spaces

As part of our continued investigative work, we are routinely checking the boreholes along the route. Some of the boreholes are located in open spaces in the area and you may see our operatives carrying out checks on a daily basis.

Location of boreholes and monitoring equipment along the tunnel route



Update on tunnelling in Hillingdon

www.hs2.org.uk



How we are managing the impacts of tunnelling

TBMs are the best method for safely excavating tunnels of this type because they build the tunnel as they dig. This reduces the risk of settlement (the way ground moves around a hole after it has been dug) and minimises potential for any damage to nearby properties. The TBMs can operate 24 hours a day, 7 days a week until the construction of the tunnels is complete.

Continuous tunnelling by TBMs has been used successfully on major projects such as Crossrail, Thames Tideway and the Northern Line Extension. Extensive knowledge and data gathered from tunnelling in similar conditions enables us to accurately predict ground-borne noise and vibration levels. Our assessments did not predict significant ground-borne noise and vibration impacts. However, it may be possible to hear a low-level sound from the TBMs during quieter periods. It is unlikely vibration from tunnelling will cause damage to nearby buildings.

How deep are the tunnels?

The depth of the Northolt Tunnels West in these locations (from the ground surface to the crown of the tunnel) varies between 13.6m at its shallowest and 18m at its deepest (approximately the height of three and four double decker buses stacked on top of each other respectively).

How are properties protected from the potential impact of our tunnelling works?

There are legal provisions under the HS2 Act to ensure protection should any damage occur from HS2 tunnelling works or excavations.

If, during or following tunnelling, you believe that damage has occurred, you can contact us to let us know. As part of the assessment of a damage claim, a second comparison survey of a property may be undertaken. You can contact the HS2 Helpdesk on 08081 434 434 or email HS2enquiries@hs2.org.uk

Keeping you updated

We will provide updates on the TBMs' locations at <https://www.hs2.org.uk/in-your-area/map/>. As tunnelling progresses eastwards, the team will ensure people living at the locations shown on the map are kept up to date on approximate timings and location of the TBMs and when cross passages are being constructed.

If you would like any further information on tunnelling activities, please get in touch by contacting the HS2 Helpdesk on 08081 434 434 or email HS2enquiries@hs2.org.uk

Keeping you informed

We are committed to keeping you informed about work on HS2. This includes ensuring you know what to expect and when to expect it, as well as how we can help you.

The Residents' Commissioner

The independent Residents' Commissioner oversees and monitors our commitments to you.

The commissioner's reports and our responses can be found at www.gov.uk/government/collections/hs2-ltd-residents-commissioner

The Residents' Commissioner makes sure we fulfil the commitments in the HS2 Community Engagement Strategy (<https://bit.ly/3oOA25j>).

The Residents' Commissioner can be contacted on: residentscommissioner@hs2.org.uk

Construction Commissioner

The independent Construction Commissioner regularly meets our Chief Executive Officer to raise any concerns or emerging trends across HS2.

The Construction Commissioner's role has been developed to monitor the way we manage and respond to construction complaints.

The commissioner mediates on disputes about construction, involving individuals and organisations, that we can't resolve. The commissioner advises members of the public about how to make a complaint about construction.

The Construction Commissioner can be contacted on: complaints@hs2-cc.org.uk

Property and compensation

You can find out about HS2 and properties along the route by visiting:

www.gov.uk/government/collections/hs2-property

Find out if you can claim compensation at:

www.gov.uk/claim-compensation-if-affected-by-hs2

Holding us to account

If you are unhappy for any reason you can make a complaint by contacting the HS2 Helpdesk. For more details on our complaints process, please visit:

www.hs2.org.uk/in-your-area/contact-us/how-to-complain/

Reference number: HS2-EW-SCS-Ph1-Ar-So-S2-Tun-1-19/02/2024_09

Contact us

Contact our HS2 Helpdesk team all day, every day of the year on:

 Freephone **08081 434 434**

 Minicom **08081 456 472**

 Email **HS2enquiries@hs2.org.uk**

Write to:

FREEPOST

HS2 Community Engagement

Website **www.hs2.org.uk**

To keep up to date with what is happening in your local area, visit:
www.HS2inyourarea.co.uk

Please contact us if you'd like a free copy of this document in large print, Braille, audio or 'easy read' format. You can also contact us for help and information in a different language.

HS2 Ltd is committed to protecting personal information. If you wish to know more about how we use your personal information please see our Privacy Notice: <https://www.gov.uk/government/publications/high-speed-two-ltd-privacy-notice>

High Speed Two (HS2) Limited, registered in England and Wales.

Registered office: Two Snowhill, Snow Hill Queensway, Birmingham B4 6GA.

Company registration number: 06791686. VAT registration number: 888 8512 56