



# Update on tunnelling in Hillingdon

September 2023 | [www.hs2.org.uk](http://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](http://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](mailto:Communities@scsrailways.co.uk)

## Tunnels construction update

The tunnels' route alignments broadly follow 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.

TBM Sushila is tunnelling towards the Braintree Road Industrial Estate and expected to reach the South Ruislip Ventilation Shaft site around mid-September. TBM Caroline is currently on the approach to the West End Road playing field (see map overleaf).

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.

Due to noise transmission paths that occur naturally in the ground, it may be possible for properties approximately 100 metres away to hear the tunnel boring machines. This tends to be a very low-level rumble and will only last a few days as tunnelling progresses past properties.

**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](mailto:hs2enquiries@hs2.org.uk)**

### Duration of works

From late September 2022 to summer 2024

24 hours, 7 days a week

### What to expect

Properties near the tunnelling works may hear a faint, low rumbling noise as the tunnel boring machines passes

It is unlikely vibration from tunnelling will cause damage to properties

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 relating to our works

Provide updates at  
**[HS2inHillingdon.co.uk](http://HS2inHillingdon.co.uk)**

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Notification



## 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 in open spaces in the area and you may see our operatives carrying out checks on a daily basis.

## Map detailing locations of boreholes in the area along our TBM route



## Cross passage construction

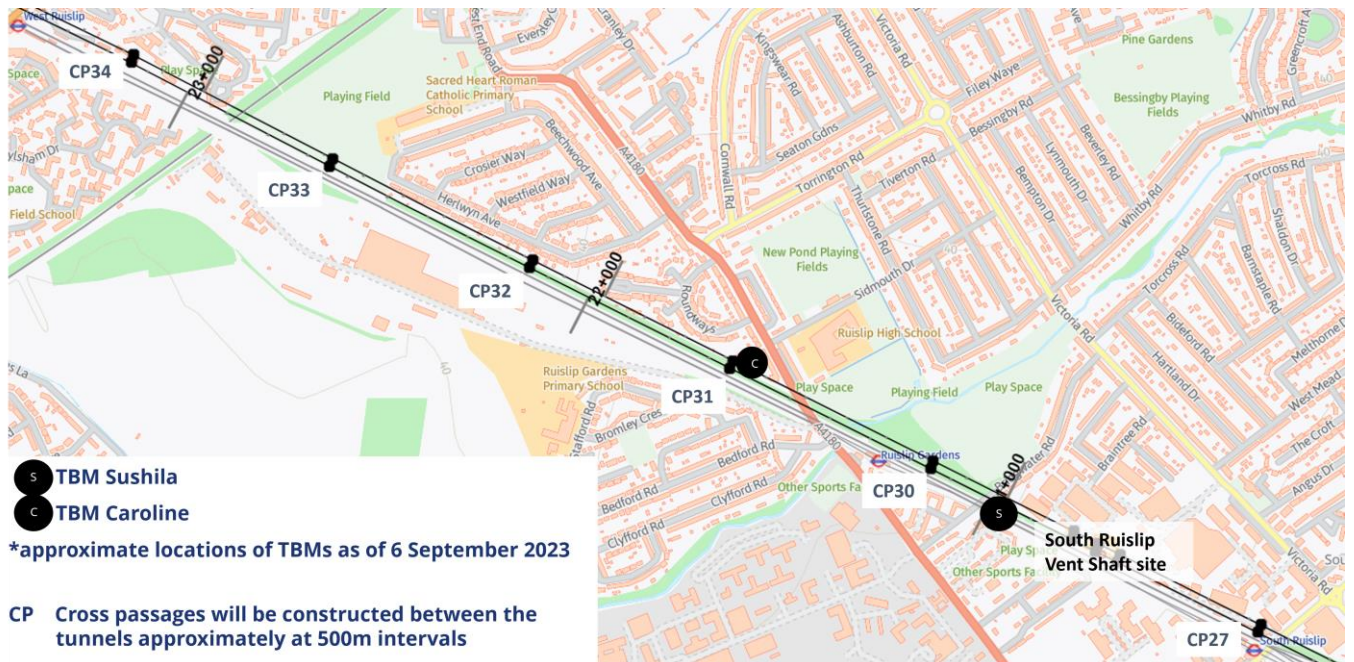
The next phase of our tunnelling works are the cross passages, which we will build approximately 500 metres apart along the route. While invisible to the travelling public, the cross passages will have a key role in providing a safe operational railway. In an emergency, they allow the safe evacuation of trains.

To build the cross passages we will break into the side of one completed tunnel to connect it to the other completed tunnel. We will then dig out ground in short lengths and use a sprayed concrete lining to form the interconnecting tunnel. After each section is mined and lined, a temporary concrete face forms the end of the cross passage. This methodology is a proven, safe way to create cross passages between the tunnels. The temporary face needs to be removed and the above cycle is repeated until the cross passage is completed. This phase generates ground-borne noise which may be heard by properties over 100 metres away. This depends on the ground conditions around the construction area, how the noise is transmitted through the ground and possibly a building's structure and foundation.

We expect to start building the first cross passage - CP34 - in mid-September. It should take about four weeks to build.

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

## Where are the tunnels and cross passages in your area?



## 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) vary 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).

If you would like specific tunnelling depth information, please get in touch by contacting the HS2 Helpdesk on 08081 434 434 or email [HS2enquiries@hs2.org.uk](mailto:HS2enquiries@hs2.org.uk)

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## 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.

We will be closely monitoring tunnelling progress and will keep you updated on when it is likely that the TBMs will be passing nearby. The duration should be no more than a few days near any one property.

## 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.

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

There are legal provisions under the HS2 Act to provide 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](mailto: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.

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



# What else is happening in your area?

[www.hs2.org.uk](http://www.hs2.org.uk)

## Contact our HS2 Helpdesk team

Our team is here to listen and respond to your enquiry, complaint or feedback to help us be a good neighbour.

You can contact our Helpdesk team all day, every day of the year on:

Freephone: **08081 434 434**

Minicom: **08081 456 472**

Email: [hs2enquiries@hs2.org.uk](mailto:hs2enquiries@hs2.org.uk)

## Keep up-to-date with your local community website

To find out more about what's happening in your area and receive regular email updates, you can sign up to our local community websites at: [www.hs2inyourarea.co.uk](http://www.hs2inyourarea.co.uk).

## About our Community and Business Funds

We are offering two funds that are available to local communities and businesses between the West Midlands and London, to help with the disruption caused by our construction work. These are the Community and Environment Fund (CEF) and the Business and Local Economy Fund (BLEF).

The CEF is designed to give communities the opportunity to share in the benefits of HS2. It is an allocated fund that communities are able to apply for, to help to support local projects that aim to improve their local area.

The BLEF is designed to support local economies that may be disrupted by the construction of HS2. BLEF grants are for local business support organisations and local authorities to help maintain business activity in local communities.

For more information about each of these funds, including how to apply, please visit: <https://www.groundwork.org.uk/hs2funds>



# 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](http://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](mailto: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](mailto: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](http://www.gov.uk/government/collections/hs2-property)

Find out if you can claim compensation at:

[www.gov.uk/claim-compensation-if-affected-by-hs2](http://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/](http://www.hs2.org.uk/in-your-area/contact-us/how-to-complain/)

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## 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](http://www.hs2.org.uk)**

To keep up to date with what is happening in your local area, visit:  
**[www.HS2inyourarea.co.uk](http://www.HS2inyourarea.co.uk)**

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