

Network Rail retaining wall works

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High Speed Two (HS2) is the new high speed railway for Britain. Before excavations and tunnelling in the Euston Approaches, we are carrying out works to strengthen the ground behind the existing Network Rail retaining wall. These works include ground anchors in the retaining wall paired with earthworks at track level. Together this will ensure the wall can safely withstand the movement caused by HS2 works.

- Ground anchors are steel rods drilled through the wall, cemented into the earth behind and tightened from the track-side between Parkway and Granby Terrace
- A 'berm' is a supportive bank of earth and concrete built against the retaining wall at track-level.
- A large beam is added to the retaining wall to add support and strength to the ground anchors.

Anchors remain in the ground but will be de-tensioned once all movement from HS2 works has reduced sufficiently. Anchors are not visible and do not prevent building works in the area in future.

We are monitoring ground movement and will continue to do so during and after the works to ensure all movement is within safe levels.

Ground anchors in Euston Approaches from Parkway to Granby Terrace

Together with supporting structures against the retaining wall, anchors add strength prior to works that will cause movement. Anchors are designed and installed to avoid underground structures such as basements, foundations and utilities.

The ground anchors in Euston Approaches are typically about 20-25m long, but may be up to 35m long in some cases.

To install the anchors, we drill a hole from track-side to pass through the retaining wall and several metres beneath the street and foundations of properties. We then insert a steel cable into the hole, followed by a coating of concrete to protect and strengthen it. Anchors are installed in sections and each anchor is completed within one shift to protect against settlement of the ground above.

Installing the anchors creates minimal vibration, which is unlikely to be felt at ground level.

SCS FACTSHEET



- Anchors have been installed along the length of the Network Rail retaining wall from Parkway to Granby Terrace
- Anchors are up to 35 meters long and about 1-2 meters apart within land permitted through the High Speed Rail Act
- Anchor lengths, depths and spacings were confirmed following the results of test anchors at track level
- Anchors are carefully designed to avoid underground structures and services
- Anchors do not cause any meaningful changes in ground level – much less than caused by the changing seasons
- Track-level structures add support and stability and will use onsite spoil where possible to reduce the number of vehicle movements
- The trackside berm will be about 3m high and a minimum of 6m wide
- Six boreholes in the footpath or road to monitor ground water
- We are happy to provide properties above the anchors with more detail upon request

What is a berm and ground beam?

A berm and ground beam combined with ground anchors provide adequate strength to the retaining wall during HS2 works.

The berm is a permanent structure made of earth and concrete. It is built against the retaining wall at track level to add support.

The berm will be separated from the track by a safety wall, and will be used as an onsite road. We will re-use excavated material from site where possible in the berm's construction to help reduce the number of lorries removing spoil and making deliveries to and from our site.

The ground beam is a concrete support that forms part of the berm where there will be tunnels underneath.

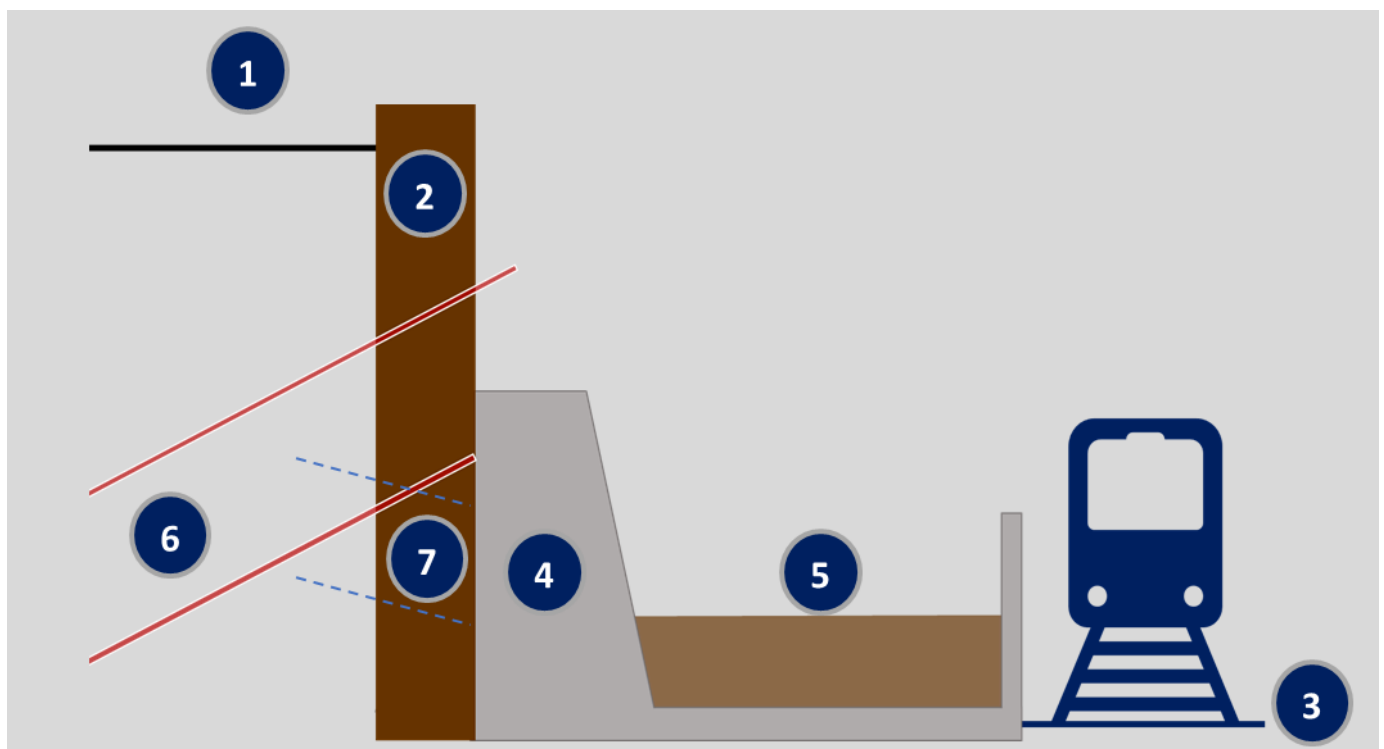
The berm and ground beam will be visible from the trackside so we will ensure their appearance is similar to the railway cutting's surroundings.

Additional drainage

When ground gets wet, it gets heavier. We are improving the drainage of the earth behind the Network Rail retaining wall by inserting short drainage pipes to let any excess water escape. This water will be channeled away via existing drainage systems.

To help monitor water levels in the ground behind the wall, a small number of holes are required on Park Village East for monitoring equipment. These will be covered.

Network Rail retaining wall works—indicative layout



- | | |
|---|------------------------------------|
| 1. Park Village East street level | 4. Ground beam |
| 2. Existing Network Rail retaining wall | 5. Berm made of concrete and earth |
| 3. Track level | 6. Ground anchors |
| | 7. Drainage boreholes |

Keeping you informed

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

Residents' and Construction Commissioner

The independent Residents' and Construction Commissioner oversees and monitors our

community engagement strategy, making sure we fulfil our commitments to you.

The commissioner monitors the way we manage and respond to complaints about construction and advises members of the public how to make complaints.

The commissioner helps settle disputes involving individuals and organisations that we can't resolve.

You can find the commissioner's report and our responses at:

www.gov.uk/government/collections/independent-hs2-commissioner

The commissioner can be contacted on:

hs2commissioner@dft.gov.uk

Property and compensation

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

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

Find out if you're eligible for 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 our HS2 Helpdesk team.

For more details on our complaints process, please visit our website:

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

Contact us

Our HS2 Helpdesk team are available all day, every day. You can contact them by:



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 area, visit:

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

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

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