HS2

Guide to ground settlement Phase 2a





Introduction

High Speed Two (HS2) is the new high-speed railway for Britain. We (HS2 Ltd) are the company set up by the Government to build HS2.

The railway will be built in phases. Phase One of HS2 is the railway between the West Midlands and London. Phase 2a is between the West Midlands and Crewe, and Phase 2b is between Crewe and Manchester and the West Midlands and Leeds.

We are committed to being a good neighbour by treating the communities we work in with respect and compassion, and building the railway with care and consideration. This means we are working hard to reduce the effects of building and operating a new railway.

Glossary

Defect survey: A visual inspection of the inside and outside of a building or property to record its condition (including any existing defects).

Excavation: Using mechanical equipment to move earth, rock or other materials.

Portals: Entrances and exits of a tunnel. They are usually circular or rectangular excavations.

Shafts: Points along a tunnel to provide surface access and emergency evacuation. They are usually circular or rectangular excavations.

Settlement: The way the ground moves around an excavation during and after the work.

Settlement report: A settlement report is written by specialist engineers and will contain information about the amount of movement a building might experience during the construction process.

Tunnel: A tunnel is an underground passageway or tube, created by an excavation, which allows the railway to travel beneath areas that are built up or hilly.

Ground settlement

As we start to build HS2, we need to carry out excavations for structures like tunnels, portals and shafts, and this work can cause small movements in the ground, called settlement.

This guide tells you about settlement on HS2 Phase 2a and provides information on:

- · how your property might be affected;
- what we will do to protect your property or pay for repairs;
- · how we will keep you informed; and
- how to apply for a settlement deed.

In building the new railway we are committed to being a good neighbour every single day, by respecting the people and communities we affect and being sensitive to their needs. This means we will try to create as little settlement as we can. We do this by controlling the way that excavation work is carried out and then, if necessary, treating the ground so that ground movement is reduced.

Recently there have been several large projects in the UK which have involved tunnelling, including the Eurostar High Speed Line (HS1), London's Crossrail and Thames Tideway's super sewer. As a result, we know a great deal about how the ground can move when tunnels and excavations are formed and how to limit the effect of this on buildings and structures.

For general information about construction plans in your area you can find the latest updates on our local community website at www. HS2inyourarea.co.uk. We will also send updated information by post and provide it at our local engagement events.

How we will manage settlement

How will you manage settlement affecting my property?

Before we start work we will assess which buildings might be affected by settlement and where we might need to carry out protective work on or around properties so that they are less likely to move. We will also carry out building defect surveys to check their condition before we start work. During construction we will use methods and equipment in a way that keeps settlement to a minimum and we will monitor the settlement to check that it is happening as we have calculated. During or after construction, if our work has caused damage, we will repair this (or pay for it to be repaired).

The diagram below shows how we will manage, minimise and monitor settlement before, during and after construction.

	Monitor	Assess	Protect	Record	Repair
Before construction		Technical settlement assessments	Carry out work to protect properties	Carry out 'defect surveys' on properties	
During construction	Monitor the ground and structures				Pay for any damage to properties
After construction				Carry out 'defect surveys' on properties	caused by the construction

Our Phase 2a 'HS2 information paper (C14 – Ground Settlement)' is our settlement policy and explains in detail how we will deal with settlement in Phase 2a. You can find this on our website at assets. publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/960659/C14_Ground_Settlement_v1.1.pdf or you can ask our Helpdesk for a copy.

Our Phase One 'HS2 information paper (C3 – Ground Settlement)' is our settlement policy and explains in detail how we will deal with settlement in Phase One. You can find this on our website at www.hs2.org.uk/documents/ground-settlement-c3 or you can ask our Helpdesk for a copy.

Before we start excavation work

How will you measure movement under my property?

We will be collecting information about ground movement before and during our work and up until a time when the settlement we cause is next to nothing. We will start collecting information several months before we start excavation in an area, to help us understand any existing trends in the ground movement.

We may need to record information about movement around buildings, which we will do by monitoring affected areas. This will begin about a month before excavation in those areas.

The ground moves naturally at anything up to 10 millimetres (mm) a year. In most cases the settlement we cause is small enough for a building to deal with. But in a few cases, buildings may be affected by a larger degree of settlement. In these cases, we will talk to you about what we plan to do to protect your property before starting the work.

What happens if my building is likely to be affected by settlement?

We will calculate how much settlement is likely to affect buildings and write this in a settlement report. If the report shows that a building could experience settlement of 10mm or more, the building is eligible for a defect survey. The defect survey is a visual record of the condition of the building, carried out by an independent surveyor, using photographs and notes of any defects, including any cracks inside or outside the building.

We will ask you if we can carry out a survey of the inside and outside of the property, which would take place before we start excavations near the building. You can ask our Helpdesk for a copy of the defects survey report.

After we start excavation work

We will continuously monitor the ground and some buildings throughout the construction process.

If you think our work has caused damage to your building, you can let us know and we will carry out a second defect survey. We will compare this with the first survey and, if it shows our work has caused damage, you can claim for reasonable costs to repair the damage. You must agree these costs with us before you start the repairs. You can make a claim up to two years from the date the railway opens to the public.

What about listed buildings?

Listed buildings are buildings of special architectural or historic interest, so we will make more detailed assessment of these structures aimed at protecting any sensitive features or features of heritage value. If you own a listed building and think you are affected by settlement, please contact our Helpdesk for more information.

Settlement deeds

What is a settlement deed and who can have one?

The High Speed Rail Act (West Midlands - Crewe) 2021 automatically protects you in the unlikely event that your property is damaged by our work. Also we offer property owners within 30 metres (m) of excavation work a settlement deed. This records the protection we provide for your property in a formal document, although you don't need a deed to benefit from the protection. We will put right any damage whether or not you have a deed.

A settlement deed is a formal legal agreement between you (the property owner) and us, which you may find useful. If the settlement policy applies to your property, you can register and apply for a settlement deed.

You can have a settlement deed if:

- your building is located in Phase One or Phase 2a of the railway and is 30m or less from our tunnels or other excavations;
- · you are an eligible owner of the building; and
- you let us know you want a deed at least 10 months before any tunnel or other excavation that may affect your property is started.

By entering into a deed, you will need to give us access to your property within 14 days, if we ask. This access will help us carry out any of the activities set out in the deed. This includes any assessment surveys, defect surveys or protective work, or work to install monitoring equipment.

How do I apply for a settlement deed?

If you are the eligible property owner and want to enter into a settlement deed, the diagram below explains what will happen.

Step 1

We will send owners a letter if their property is eligible for a settlement deed.

We will contact all eligible properties, but you can also register your interest for a deed at any time by contacting our Helpdesk.



Step 2

If you want to enter into a settlement deed with us, you must respond to the letter by contacting our Helpdesk.



Step 3

We will send you two copies of a deed for you to sign. You will need to return both copies to us within 21 days.



Step 4

When we receive your signed deeds, we will also sign them. We will send one signed copy back to you.

What happens after I receive a settlement deed?

The settlement deed may be in place several months before an excavation starts, so there may be a gap between receiving your deed and the next steps in the process. The diagram on the next page explains what these next steps are.

Our Phase 2a 'HS2 information paper (C14 – Ground Settlement)' explains the steps in the diagram in more detail, including descriptions of the damage categories used to assess possible settlement. You can find this online at assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/960659/C14_Ground_Settlement_v1.1.pdf or you can ask our Helpdesk for a copy.

If you would like to register an interest in a settlement deed, please contact our Helpdesk.

Step 1

Several months before the start of excavation work we will send you a copy of the settlement report.

The report will include a predicted damage category on a scale of 0 to 5. Most properties are predicted to experience category 2 or less.



If you accept the report you don't need to do anything else.

If you disagree with the report you can challenge it.



Step 2a

If your property is in damage category 2 or below, you can ask us to consult you on your settlement report. You must give us notice that you want this consultation no more than 20 days after we send you the report.



Step 2b

If your property is in damage category 3 or above, you can employ an 'owner's engineer', who will be qualified to review your settlement report for you. We will pay reasonable costs for your owner's engineer. Your

engineer must give us written notice telling us if they accept the report or not, within 25 days of the date we sent you the report. If your engineer does not agree with the report, they must give detailed reasons for their objections. If an owner's engineer cannot agree the report with us, someone independent will try to settle the disagreement.

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.

Our independent commissioners

We have an independent Residents' Commissioner whose job is to make sure we keep to the promises we make in our Residents' Charter.

Our independent Construction Commissioner's role is to mediate and monitor the way in which we manage and respond to construction complaints.

For more information visit www.hs2.org.uk/in-your-area

Holding us to account

If you are unhappy for any reason, you can make a complaint by contacting our HS2 Helpdesk team. For more information visit www.hs2.org.uk/how-to-complain

Property and compensation

You can find out all about HS2 and properties along the line of route by visiting our website. You can also find out if you're eligible for compensation. Visit www.hs2.org.uk/in-your-area

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:

www.hs2inyourarea.co.uk

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