



Phase 2b Western Leg Information Paper

D11: Track possessions for engineering work

This paper outlines HS2 Ltd's approach to engineering access "possessions" on the conventional railway that will be necessary for the construction of the Phase 2b Western Leg. It also describes the possessions that, at the time Additional Provision 2 was deposited in July 2023, were estimated to be required to implement the Proposed Scheme and provides an indication of their likely effects on existing rail passenger services.

It will be of particular interest to those potentially affected by the Government's proposals for high speed rail.

This paper was prepared in relation to the promotion of the High Speed Rail (Crewe - Manchester) Bill. Content will be maintained and updated as considered appropriate during the passage of the Bill.

If you have any queries about this paper or about how it might apply to you, please contact the HS2 Helpdesk in the first instance.

The Helpdesk can be contacted:

by email: HS2enquiries@hs2.org.uk

by phone (24hrs): 08081 434 434
08081 456 472 (minicom)

or by post: High Speed Two (HS2) Limited
2 Snowhill, Queensway
Birmingham
B4 6GA

Version 3

Last updated: 3 July 2023

1 Introduction

High Speed Two (HS2) is the Government's scheme for a new, high speed north-south railway, which is being taken forward in a number of phases. Phase One will connect London with Birmingham and the West Midlands. Phase 2a will extend the route from the West Midlands to Crewe. The Phase 2b Western Leg will connect Crewe to Manchester. As set out in the Integrated Rail Plan, published in November 2021, HS2 East is proposed to deliver a new high speed line from the West Midlands to East Midlands Parkway.

HS2 Ltd is the non-departmental public body responsible for developing and promoting these proposals. The company works under the terms of a Development Agreement entered into with the Secretary of State for Transport.

The construction and operation of Phase One of HS2 is authorised by the High Speed Rail (London – West Midlands) Act 2017 and Phase 2a by the High Speed Rail (West Midlands – Crewe) Act 2021.

In January 2022, the Government introduced a hybrid Bill to Parliament (hereafter referred to as 'the Bill'), to seek powers for the construction and operation of the Phase 2b Western Leg (the Proposed Scheme), which is called the High Speed Rail (Crewe – Manchester) Bill. The Proposed Scheme comprises the Phase 2b Western Leg from Crewe to Manchester and several off-route works. It also facilitates the delivery of Northern Powerhouse Rail by providing the Crewe Northern Connection and junctions and other infrastructure to be used in future schemes.

The work to produce the Bill includes an Equalities Impact Assessment and an Environmental Impact Assessment (EIA), the results of which are reported in an Environmental Statement (ES) submitted alongside the Bill. The Secretary of State has also published draft Environmental Minimum Requirements (EMRs), which set out the environmental and sustainability commitments that will be observed in the construction of the Proposed

Scheme. For more information on the EMRs please see Information Paper E1: Control of environmental impacts.

The Secretary of State for Transport is the Promoter of the Bill through Parliament. The Promoter will also appoint a body responsible for delivering the Proposed Scheme under the powers granted by the Bill. This body is known as the 'nominated undertaker'. There may be more than one nominated undertaker. However, any and all nominated undertakers will be bound by the obligations contained in the Bill, the policies established in the EMRs and any commitments provided in the information papers.

These information papers have been produced to explain the commitments made in the Bill and the EMRs and how they will be applied to the design and construction of the Proposed Scheme. They also provide information about the Proposed Scheme itself, the powers contained in the Bill and how particular decisions about the Proposed Scheme have been reached.

2 Overview

This information paper outlines HS2 Ltd's approach to engineering access "possessions" on the conventional railway that will be necessary for the construction of the Proposed Scheme.

It also describes the possessions that are currently estimated to be required to implement the Proposed Scheme.

HS2 Ltd will continue to explore, with the wider railway industry, what opportunities there are to undertake engineering work for the Proposed Scheme on the conventional railway at the same time as other enhancement and renewal works so as to reduce impacts on passengers and freight. Possessions that may be required for non-HS2 works are not included in this information paper.

1 Possessions and blockades

Where works cannot safely be undertaken while trains are running on a section of the conventional railway, trains are diverted or stopped and possession of the line is taken for a specified period. Each closure period is known as a 'possession'. In this paper, possessions longer than a weekend (including bank holidays), are described as 'blockades'.

The locations where the Proposed Scheme interfaces with the conventional railway, which is where possessions are likely to be taken, are shown at Figure 1. There are also interfaces away from the route at Preston, Carlisle and near Gretna.

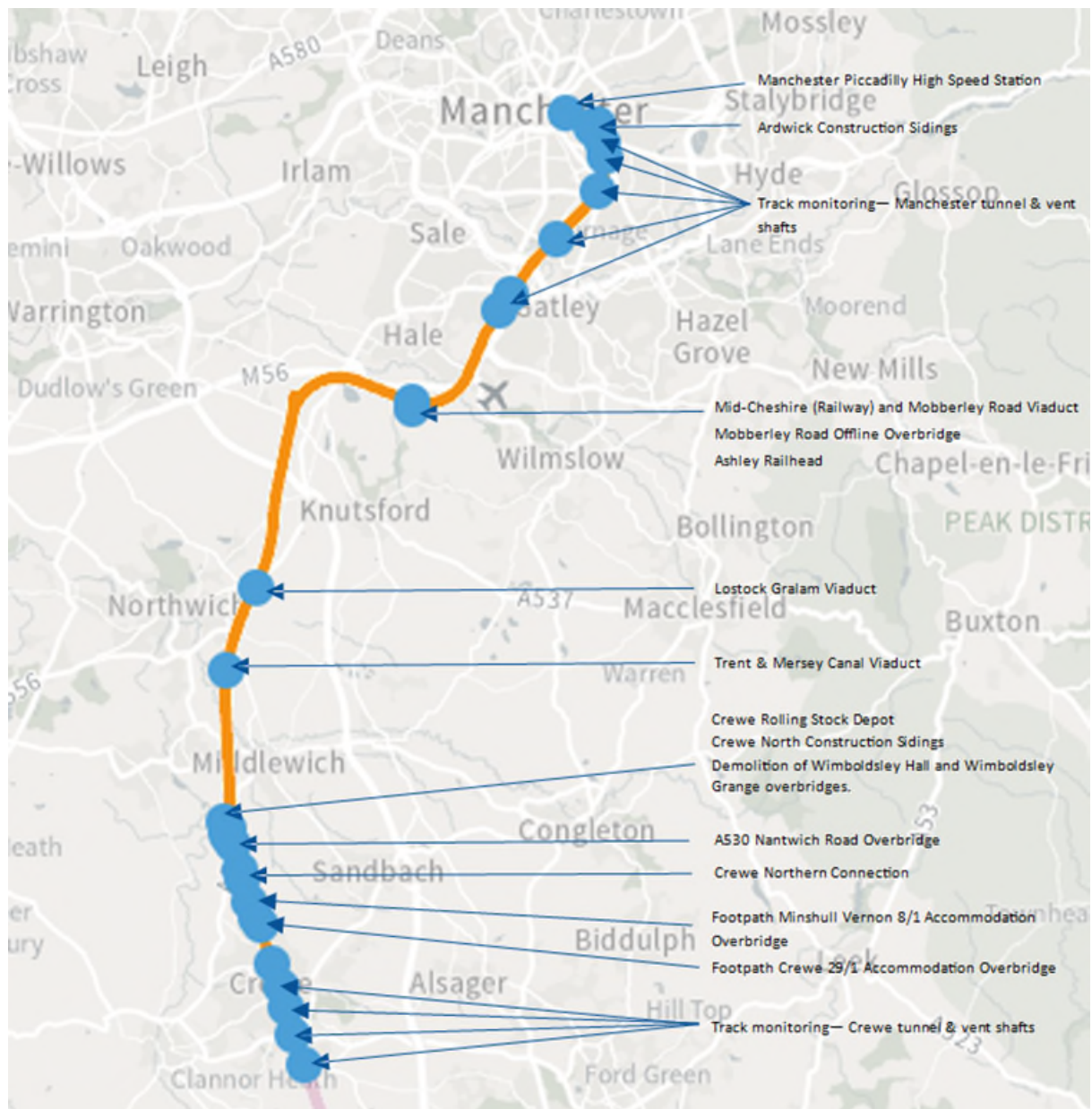


Figure 1 - Proposed Scheme Interfaces with the Conventional Railway

2 Possession Planning

The design of the Proposed Scheme sought to minimise disruption to the conventional rail network during construction. While the majority of construction works will not affect the existing railway, possessions will be needed where works on or near the existing railway cannot be done safely while trains are still running.

Where practical, these works are planned to be undertaken in existing night-time and weekend maintenance possession periods (i.e. those already planned for maintenance of the conventional network), to minimise disruption to passenger and freight services. These are known as 'non-disruptive possessions' as they do not affect scheduled passenger or freight services.

For more complex works that cannot reasonably be split up to be delivered within these existing maintenance possession periods, 'weekend possessions' of a day's duration or longer may be required. For the purpose of this analysis, weekend possessions can be:

- 24-28 hours (one day closure);
- 40-54 hours (a two day all-weekend closure);
- 72 hours (a three day bank holiday weekend closure); or
- 100 hours (e.g. a four day Easter weekend closure).

Where major works require a possession period longer than 100 hours, which cannot be accommodated in a normal or bank holiday weekend, these are referred to as 'blockades'. For information on the blockades expected to be required to construct the Proposed Scheme, see section 5 below.

Possessions will be booked through Network Rail in accordance with standard industry processes. The works will either be undertaken by Network Rail on the nominated undertaker's behalf or they will be managed in accordance with standard railway 'asset protection'

processes, which ensure that Network Rail and its customers are appropriately protected. It is anticipated that Network Rail's existing obligations will influence the way the works are undertaken. This includes the obligations in its network licence issued by the Office of Rail and Road.

The possession planning process includes consultation with the wider railway industry, including operators, to ensure that the relevant information is provided, that the possessions are considered in the context of wider railway operations, and that appropriate mitigation measures are put in place. Where compensation is due for the impacts of possessions on operators, it is anticipated such compensation will be provided in accordance with standard industry processes.

3 Estimated requirement for weekend possessions

Table 1 in Appendix A shows a high-level estimate of possessions required, the lines affected and a general indication of the likely disruption that is anticipated to result in each case. The number and duration of possessions required is only an estimate at this stage. Factors such as revisions to the engineering design, changes resulting from the Parliamentary process, more detailed construction planning, feedback from operators, possessions required on the conventional railway for other works or unforeseen delays during construction can all affect the timing and duration of possessions.

As part of the possession planning process, HS2 Ltd will work closely with Network Rail to coordinate the above possessions with other planned maintenance or renewals works, to reduce overall disruption to the travelling public and freight industry.

4 Blockades

The information below summarises the high level estimate of blockades required for the Proposed Scheme as amended by Additional Provision 2. Factors such as revisions to the engineering design, more detailed construction planning, feedback from operators, possessions required on

the conventional railway for other works or unforeseen delays during construction can all affect the timing and duration of blockades.

Crewe North WCML: Crewe Northern Connection

Crewe Northern Connection is a proposed connection between the HS2 main line and the West Coast Main Line (WCML) north of Crewe. This connection will enable future Northern Powerhouse Rail (NPR) services to connect with HS2 but will also link the proposed HS2 Rolling Stock Depot in Wimboldsley to the WCML.

Whilst most of the works are expected to be undertaken in non-disruptive or weekend possessions, two blockades of 9 days each are expected on the WCML between Crewe and Winsford.

The timing of this blockade and detailed mitigation measures, including diversion routes or alternative means of transport, will be agreed through close working with Network Rail to ensure that disruption is minimised, and where practicable, aligned with any renewals or maintenance works in this area.

Manchester area: Ardwick Construction Sidings connection

Construction sidings connected to the conventional railway are proposed near to the Manchester tunnel north portal at Ardwick. These provide the ability to transport tunnel arisings by rail to reduce road transport in this area.

To connect these construction sidings, there is a single 4 day blockade envisaged to be required near Ardwick on the Ashburys to Miles Platting Line and Glossop Line. Manchester Piccadilly station would remain open.

The timing of this blockade and detailed mitigation measures, including diversion routes, will be agreed through close working with Network Rail to ensure that disruption is minimised, and where practicable, aligned with any renewals or maintenance works in this area.

Preston Station (WCML): 400m platforms

To allow 400m HS2 trains to call at Preston, two platforms will require extensions, and a presently disused platform is proposed to be brought into passenger use. Alterations to the track layout, signalling, and electrification systems, as well as a new footbridge and lift are required.

Whilst most of the works are expected to be undertaken in non-disruptive or weekend possessions, a 9 day blockade is expected for some of the more complex areas.

The timing of this blockade and detailed mitigation measures, including diversion routes, ways to keep some parts of the station open, or alternative means of transport, will be agreed through close working with Network Rail. Where practicable, HS2 proposals will be aligned with any renewals or maintenance works in this area.

Carlisle Station (WCML): 400m platforms

To allow 400m HS2 trains to call at Carlisle, two platforms will require extensions, and a new platform is proposed to be constructed. Alterations to the track layout, signalling, and electrification systems, as well as a new footbridge and lift are required.

Whilst most of the works are expected to be undertaken in non-disruptive or weekend possessions, a 9 day blockade is expected for some of the more complex areas.

The timing of this blockade and detailed mitigation measures, including diversion routes, ways to keep some parts of the station open, or alternative means of transport, will be agreed through close working with Network Rail. Where practicable, HS2 proposals will be aligned with any renewals or maintenance works in this area.

5 More information

More detail on the Bill and related documents can be found at www.gov.uk/hs2-phase2b-crewe-manchester.

Appendix A:

Table 1: Estimate of weekend possession requirements to construct the Proposed Scheme

Works	Total weekend possessions (1 or 2 day duration)	Indicative date	Lines affected
Crewe Northern Connection; Crewe Construction Sidings; accommodation and footbridges north of Crewe; Utilities	16 (Civils/Utilities) 49 (Rail Systems) Total: 65	2028-2036	West Coast Main Line (WCML) Crewe to Winsford.
Trent and Mersey Canal Viaduct	1 (Civils)	2029-2030	Sandbach to Northwich Line
Lostock Gralam Viaduct; Mid-Cheshire (Railway) and Mobberley Road Viaduct; Mobberley Road Offline Overbridge; utility diversions and Ashley railhead connection	9 (Civils and utilities) 15 (Rail Systems) Total: 24	2027-2036	Mid Cheshire Line (Altrincham and Chester)
Ardwick Construction Sidings	4 (Rail Systems)	2027-2032	Ashburys to Miles Platting Line / Glossop Line (Ardwick area)
Altrincham Road Vent Shaft – Utilities	1 (Civils)	2027-2028	Northenden Jn and Skelton Jn
Preston Station	20 (Rail Systems) (partial and full blocks)	2032-2034	West Coast Main Line (Preston)
Carlisle Station	18 (Rail Systems) (partial and full blocks)	2034-2035	West Coast Main Line (Carlisle)
Annandale rolling stock stabling connection	3 (Civils/ Utilities) 11 (Rail systems) Total: 14	2029-2035	West Coast Main Line (near Gretna)