



# Phase 2b Western Leg Information Paper

## F2: Manchester Airport High Speed Station

This paper outlines the proposals for the Manchester Airport High Speed Station of the Proposed Scheme. It explains the proposed location of the station, its facilities and operation.

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](mailto: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

## 1 Introduction

- 1.1 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.
- 1.2 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.
- 1.3 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.
- 1.4 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.
- 1.5 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.

1.6 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.

1.7 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**

2.1 This information paper outlines the proposals for Manchester Airport High Speed Station as part of the Proposed Scheme. It explains the proposed location of the station, its facilities and how it would operate.

## **3 Station Overview**

3.1 The proposed Manchester Airport High Speed Station, which is subject to third party funding, would be a new, intermodal, through station, occupying land west of the M56 motorway between Junctions 5 and 6 and north of the A538 Hale Road.

3.2 Manchester Airport High Speed Station would be approximately 448m in length and approximately 68m in width. The station would have two island platforms providing four platform faces for HS2 and Northern Powerhouse Rail services. The station would be constructed on two main levels:

- platform level: this would consist of two island platforms up to 415m in length and 3m below existing ground level, providing four platform faces to accommodate HS2 services and future high-speed services for Northern Powerhouse Rail (NPR); and
- ground level: this would consist of a western forecourt, including provision for public transport (buses and taxis), and an eastern forecourt, including provision for private motorised vehicular drop-offs and pick-ups and 300 bicycle bays. The forecourts would provide level access to a central concourse for interchange and access to waiting areas, passenger information and ticketing facilities. Two multi-storey car parks would be located south-west and south-east of the central concourse providing 3,700 car parking spaces.

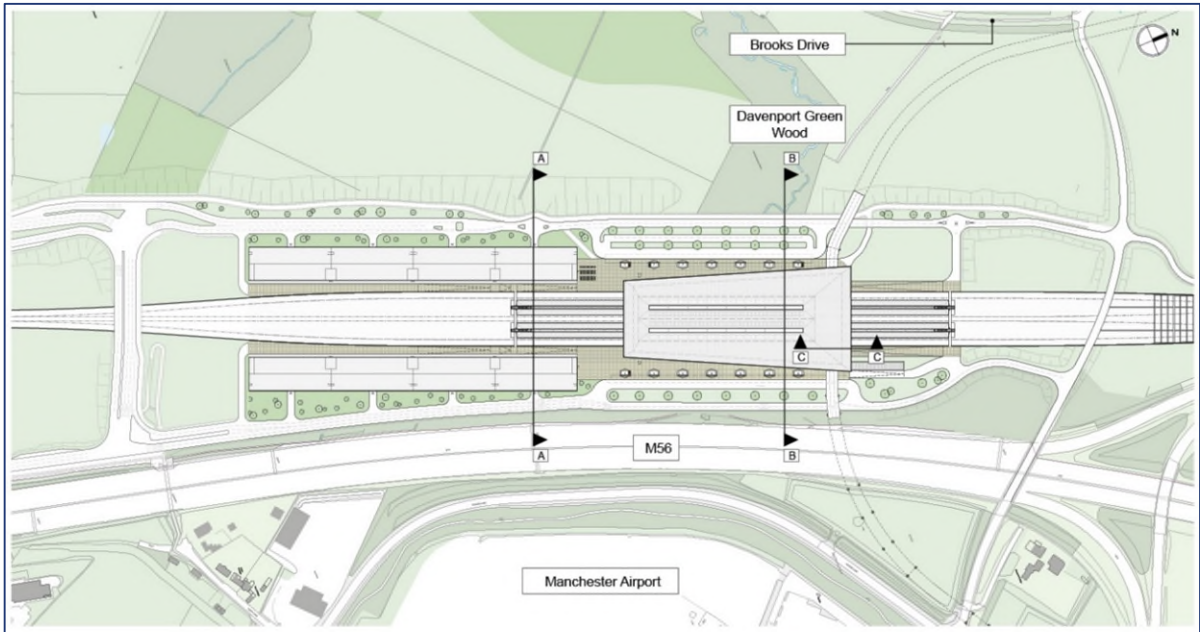
3.3 Manchester Airport High Speed Station would include public facilities, such as waiting areas, ticket machines, information, public toilets and retail, food and beverage outlets. There would also be station control rooms, as well as staff facilities including toilets and changing rooms.

3.4 Manchester Airport High Speed station would provide connections to Manchester Airport and to other transport services, including buses, coaches, private cars, taxis and provision for a future connection to Metrolink.

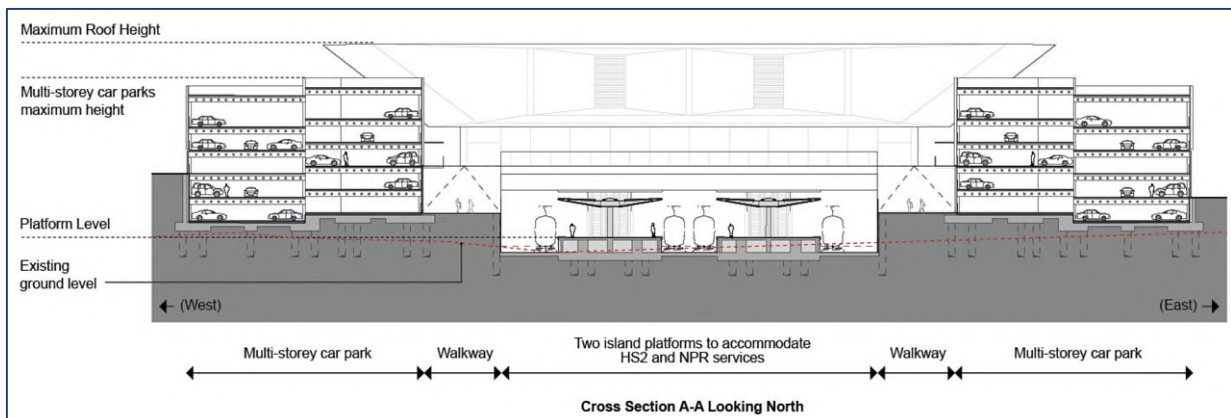
3.5 Transport for Greater Manchester has a long-term aspiration to expand the Metrolink network around Greater Manchester, including a future extension to the existing Manchester Airport Station and beyond. This could connect the high speed station with Manchester Airport and surrounding communities.

3.6 To support these aspirations and provide effective interchange between high speed rail services and Metrolink at Manchester Airport High Speed Station, the scheme includes passive provision for the future extension of Metrolink by TfGM.

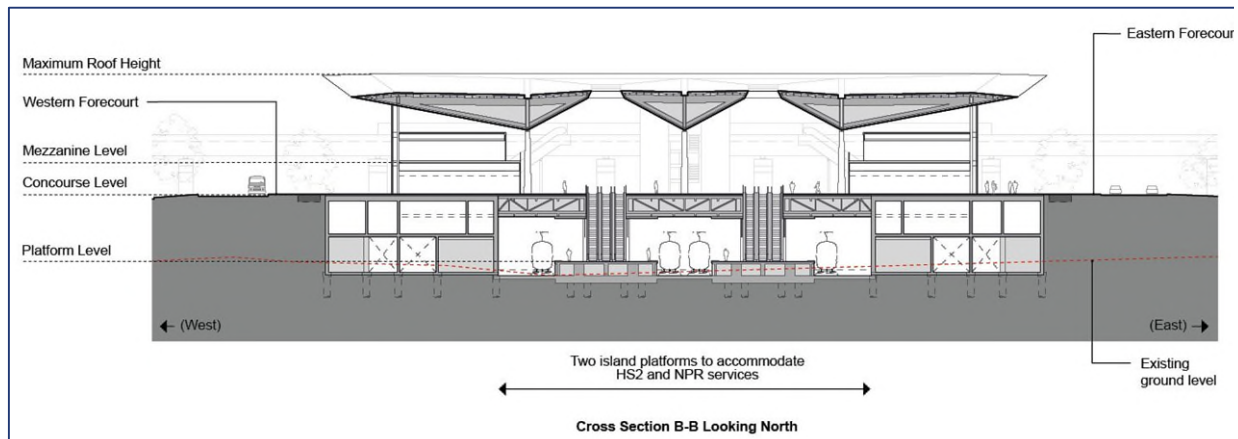
**Figure 1: Manchester Airport High Speed Station**



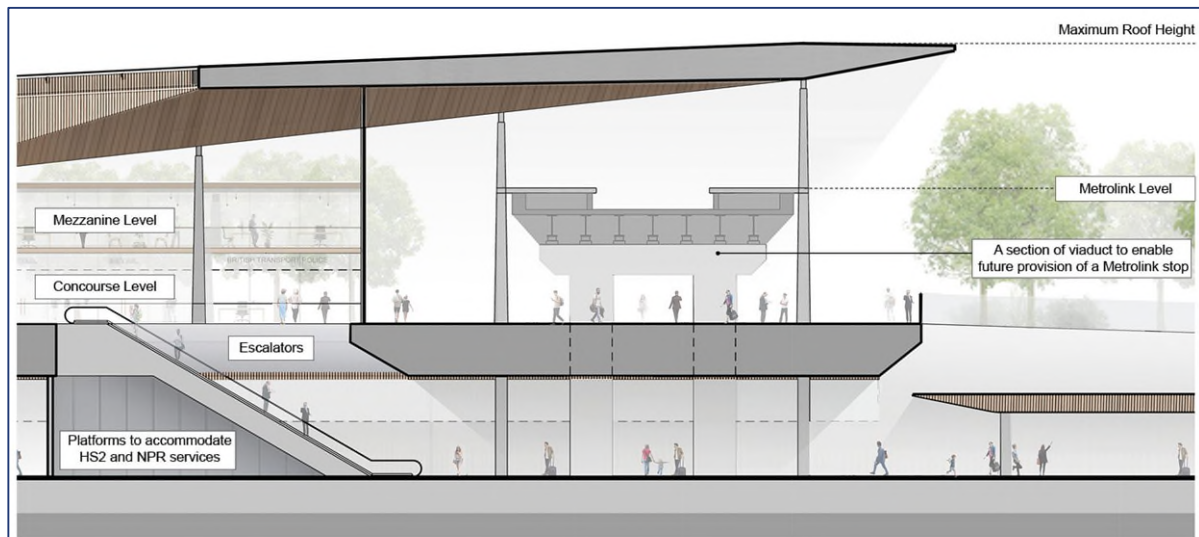
**Figure 2: Manchester Airport High Speed Station (Cross Section A-A)**



**Figure 3: Manchester Airport High Speed Station (Cross Section B-B)**



**Figure 4: Manchester Airport High Speed Station (Cross Section C-C)**



## 4 Operation

- 4.1 It is anticipated that there would be up to six HS2 trains per hour calling at Manchester Airport High Speed Station and up to four services for NPR. These services would enable passengers to travel on the high speed network to Birmingham, London, central Manchester, and with the potential delivery of NPR, also Warrington, Liverpool, Crewe and Leeds.
- 4.2 Services are expected to operate between 05:00 and midnight from Monday to Saturday and between 08:00 and midnight on Sunday.
- 4.3 Passenger demand is based on a 24hr demand for the station per day and is based on boarding and alighting numbers. For the year 2038 it is

projected that around 16,500 passengers will board and alight HS2 trains, and by the year 2051 this will have increased to over 17,500.

## 5 Why Davenport Green?

- 5.1 HS2 Ltd's remit from Government to develop Phase Two of the high speed network included consideration of options for interchange stations including access to major airports.
- 5.2 The process of generating options for routes and stations, developing and sifting them is described in detail in 'Options for phase two of the high speed network'. A link to this document can be found in the references section at the end of this paper. Assessment of options was based on four key sifting elements covering engineering, sustainability, demand and cost. An integral part of the development of station options was been the involvement of regional delivery partners - representatives of local authorities, passenger transport executives (including TfGM), the National Highways and Network Rail. Their views and advice informed the development of station options.
- 5.3 Following on from the initial sifting process, five options were considered in more detail for the provision of a high speed interchange station. The options considered were Manchester Airport Davenport Green (Option 4e), Manchester Airport north-south (Option 4c), Manchester Airport east-west (Option 4d), Knutsford - Sandbach to Golborne M6 route (Option 5) and Knutsford - Crewe to Golborne western route (Option 5a). These options and sifting process are described in more detail within the Options for Phase Two report (2012).
- 5.4 An interchange station on the outskirts of Manchester would give the benefit of time savings for passengers from the Manchester area. Services which stop at the interchange station, however, would take longer to reach the city centre station.
- 5.5 A key consideration in determining the optimum location for a Manchester interchange station was the relative access times from the

key target markets of south Manchester, Trafford, Stockport and north Cheshire.

5.6 A station located towards the northern extent of this catchment would offer better access to the core market than one further south at a location such as Knutsford. However, the station options in Knutsford would benefit from connectivity to the M6.

5.7 In terms of the station options, Manchester Airport Davenport Green offered the best connectivity and proximity to Manchester Airport and could be delivered at the lowest cost. The combination of a high speed station at Manchester Piccadilly and an interchange station to the south of Manchester in the vicinity of Manchester Airport would attract the largest number of passengers compared to other combinations of station options.

5.8 The passenger terminal area would be the ideal location for an interchange station because it would be directly connected with the existing railway serving the Airport and would provide a direct interchange for Airport passengers. However, the construction of a route and station directly to the terminal buildings would be challenging as it would involve tunnelling directly under the operational airport and engaging in underground construction, while minimising impacts at the surface. It is likely that such options would be costly, require demolition of Airport infrastructure and interfere with Airport operations.

5.9 In addition to seeking to avoid such impacts at Manchester Airport, the HS2 route and station has sought to:

- avoid demolition of properties in the Mobberley Conservation Area just south of the runway;
- avoid interacting with the Airport runway and the surrounding public safety area;
- avoid the Airport strategic site extension areas as part of Manchester City Council's core strategy; and



- achieve a level and flat location for locating any station box and the associated track work in order to follow the tunnelled approach to Manchester Piccadilly.

## 6 Station requirements

6.1 The layout and configuration of Manchester Airport High Speed Station in the Proposed Scheme was identified through a process of sifting and public consultation.

6.2 In order to identify potentially suitable layouts and configurations, the key requirements HS2 Ltd has assessed include:

- Multiple entrances and exits to ensure minimum distances when interchanging between transport modes;
- Step free access from all local transport connections;
- Circulation to minimise conflicting pedestrian movement;
- Clear lines of sight;
- As near as possible to straight platforms;
- The inclusion of four dedicated platforms to support 400m high speed services;
- Orientation dictated by expected approach and departure routes of the track alignment;
- Ensuring that designs respond to their locations, create a sense of place and recognise stakeholders' aspirations; and
- Ensuring that the designs support the local authority's plans for Public Realm.

6.3 Until the Bill is enacted, the station design is at 'concept' stage. The layout has been planned so that it would comply with operational requirements and statutory regulations. It defines the scale and massing of the buildings and structures so that their environmental effects can be

assessed. Detailed designs for both the station building and the external areas will be prepared in due course. They will be submitted to the local planning authority for approval before construction.

## 7 Highway Works

7.1 Changes to the existing road network, which would provide access to and accommodate Manchester Airport High Speed station, include:

- realignment of the A538 Hale Road;
- closure of a section of Hasty Lane;
- a new M56/A538 Wilmslow Road offline underbridge;
- the junction of the realigned A538 Hale Road, M56 junction 6 northbound slip roads, and A538 Wilmslow Road would be changed from a roundabout to a signalised crossroad;
- the junction of the A538 Wilmslow Road, the M56 junction 6 southbound slip roads and Runger Lane would be changed from a roundabout to a signalised crossroad; and
- realignment of Thorley Lane.

7.2 The following changes to the Public Right of Way network would also be required to accommodate Manchester Airport High Speed station:

- Extension of M56 Hasty Lane underpass
- A new M56/A538 Wilmslow Road offline non-motorised user underpass
- diversion of Footpath Ringway 9
- closure of Footpath Ringway 7
- closure of Footpath Hale 16

7.3 Further information regarding these changes, including their environmental impact assessment, can be found in Environmental

Statement Volume 2 Community Area report MA06 Hulseheath to Manchester Airport.

## **8 Environmental impacts**

8.1 As part of the preparation of the Bill, the potential environmental impacts of the Manchester Airport High Speed station have been assessed and are set out in the Environmental Statement. This details the impacts and mitigation measures for both construction and operation of the Proposed Scheme, including for Manchester Piccadilly Station.

## **9 More information**

10 More detail on the Bill and related documents can be found at [www.gov.uk/hs2-phase2b-crewe-manchester](http://www.gov.uk/hs2-phase2b-crewe-manchester).

## References

Options for phase two of the high speed rail network

[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/68965/options-for-phase-two-of-the-high-speed-rail-network.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/68965/options-for-phase-two-of-the-high-speed-rail-network.pdf)