HS2 Interchange Station Design

October 2018
Interchange Station, Solihull
Introduction

In February 2018, HS2 Ltd appointed Arup to take forward the design of Interchange Station, the Automated People Mover (APM) and surrounding associated infrastructure.

The site is located within a triangle of land formed by the M42, A45 and A452, near the existing Birmingham International Station.
Scheme background

The new HS2 Interchange Station in Solihull will be a major gateway station for the region. It will be a part of a new public transport interchange serving Solihull, the West Midlands, Birmingham Airport and the National Exhibition Centre (NEC), with links to the UK motorway system.

On 23 February 2017 Royal Assent was granted for Phase One of HS2. The Act gives HS2 Ltd powers to construct and operate Interchange Station. We are now in the detailed design phase of the scheme and plans are being drawn up for the station building and the surrounding landscape and infrastructure.

Early next year we will submit a request for approval under Schedule 17 of the Act to the local planning authority for approval of the detailed design elements of the station.

This is your opportunity to:

• Understand our design vision for the station;
• Share your thoughts on the proposed accessibility and use of the station;
• Get more information on the next stages in the design process and planning submission; and
• Get information on how to remain involved.

Key Facts

• 9 trains per hour in each direction;
• Two 415 metre long platforms;
• Four platform sides for trains to stop at; and
• New Automated People Mover system serving Birmingham Airport, Birmingham International Station and the NEC.
Interchange Station
Design ambitions

Interchange station has been designed by HS2 by working with local stakeholders.

The emerging design is based upon the following principles, which have been influenced by local organisations. This shared design ambition aligns with the HS2 Design Vision.

**Green and blues**
Acknowledges and incorporates green spaces, landscapes, waterways and the surrounding natural environment.

**Gateway station**
Landmark site providing connectivity and access to the West Midlands.
Transport connectivity
Providing connections through different forms of transport including bus, train, cycling, walking, and an automated people mover providing access to Birmingham Airport, Birmingham International Station and the NEC.

Place-making
Creating attractive and vibrant public spaces that create a sense of place.

Permeability
A station design that provides ease of movement for people.
Interchange Station
Station design

The station will be a new gateway for the region. The design reflects its surroundings and is in keeping with the natural landscape. Connectivity will be delivered by linking seamlessly with public transport.
Interchange Station
Station design

The design has been influenced by the ‘green and blue’ elements of the existing natural landscape, and the station will benefit from views over the green open spaces of the Arden Landscape. The station roof will maximise penetration of natural light with less reliance on artificial lighting inside which will help reduce its carbon footprint.
Interchange Station

User experience

The design of the station concourse makes it easy and simple for passengers to navigate the station and access the platforms. The station will provide a pleasant environment to dwell, with food and retail offerings and seating areas providing views across the Hollywell Brook valley.
Interchange Station

Landscape

Our landscape strategy for the design of Interchange Station provides a travel experience that is both relaxing and pleasant using open spaces to enhance the travel experience. The station sits within the Arden Landscape, which is characterised by the ‘greens and blues’ of water courses, ponds, trees, hedgerows and grasslands.
The landscape strategy involves:

• A sensitive approach to design acknowledging the ‘greens and blues’ of the natural landscape, including Hollywell Brook and green open spaces;

• Integrating, where possible, existing natural features into the new landscape;

• Extensive new planting, using native species of trees, shrubs, bulbs and wildflowers;

• Including a plaza, which is a proposed public space around the station providing connectivity between the station, car parks and public transport facilities, and views across the landscape; and

• Organising the site layout to allow passengers to move efficiently and quickly. This includes providing clear and short routes to the station entrances.
Interchange Station

Environment and construction

Environment

The environmental impacts of the scheme were assessed through an Environmental Impact Assessment, and the results were reported in an Environmental Statement submitted alongside the Hybrid Bill.

The environmental statement considered the following key areas:

- Ecology and nature conservation;
- Landscape;
- Cultural heritage;
- Geology and soils;
- Road drainage and the water environment;
- Air quality;
- Noise and vibration;
- Effects on pedestrians, equestrians, cyclists, drivers, etc; and
- Community and private assets.

During the design process for the station, we have considered the following:

- The presence of protected species;
- The impact on Hollywell Brook;
- The potential changes to air quality, particularly in the local community, including residential dwellings on Middle Bickenhill Lane; and
- How to minimise the loss of as much vegetation as possible, and designing replacement planting for the future.
Construction

Construction is planned to start in 2019 with the station planned to open in 2026 along with the remainder of HS2 Phase One.

• During construction, the appointed contractor will be required to comply with HS2’s Code of Construction Practice. The Code of Construction Practice sets out a series of measures and standards of work which will seek to manage and control the effects of construction on communities and the environment.

• HS2 is committed to being a good neighbour by putting community engagement at the heart of everything we do. We launched the community engagement strategy in September 2017, which includes 10 community commitments which set out how we will engage with communities at all stages of the project including during construction.
Interchange Station
Transport and accessibility

We have designed the station to be easy to use with connections provided to different forms of transport including:

- Private cars, including car parking and car drop-off;
- Taxis;
- Buses;
- The proposed Automated People Mover; and
- Bicycle and pedestrian access.
We have considered access by road in and out of the station area. There will be three main access points for cars and other vehicles. This includes two routes running on each side of the railway line bringing traffic from the north and a route from the east leading from the A452.

The routes from the north will provide a ‘boulevard’ entrance into the site with a view of the station. The A452 will be the main approach to the station.
Interchange Station
Programme and next steps

- **Beginning of 2017**
- Royal assent granted by Parliament
- **Summer 2018**
  - Meet the team events June 2018
- **Autumn 2018**
  - Public events to share scheme design
  - Scheme design
Winter 2018 / 2019 — Public events pre-submission

Spring 2019 — Schedule 17 submission

Summer 2019 — Schedule 17 approval

2019 — Construction phase

Late 2026 — First passengers travel on HS2 phase 1 London - Birmingham

Pre-submission

Construction
HS2 has asked Arup to look at extra elements put forward by the UK Central Urban Growth Company in Solihull.

These extra elements aim to support the local growth agenda being delivered by the Urban Growth Company on behalf of Solihull Council, with the HS2 Interchange Station at the heart of a new, sustainable, urban quarter.

The Urban Growth Company has predicted the creation of thousands of new jobs, 775,000 square metres of new commercial space and up to 4,000 new homes across the wider area known as The Hub, which also includes Birmingham Airport, the National Exhibition Centre, Birmingham Business Park and Jaguar Land Rover. It is anticipated that The Hub could add £4bn to the economy each year.

Arup is looking at these extra elements to the HS2 Interchange Station in parallel, which includes six aspirational outcomes:

- **Multi-modal transport connectivity:** Modify the area adjacent to the HS2 Interchange Station to include future transport connectivity for Metro trams and Sprint buses.

- **Parking:** Have the majority of car parking, including multi-storey car parks, to the east of the HS2 line so that land to the west can be used for development.

- **Storm water management:** Reconsider the location of drainage ponds associated with the car parking to free up land for development.

- **Automated People Mover (APM):** Modify the alignment of the APM to fully integrate with the soon-to-be redeveloped Birmingham International Station.

- **Utility crossings:** Provide for crossings over and under the HS2 line to facilitate future development at the wider site known as Arden Cross.

- **New pedestrian connection:** Provide a new pedestrian link between the south-eastern and south-western parts of Arden Cross.
We are continuing to develop options and costs based on these outcomes. HS2 and the Urban Growth Company are working together through the design process to take forward the key outcomes that will help deliver further sustainable growth for Solihull and the wider West Midlands region.

The High Speed Rail Act (London – West Midlands) Act 2017 ("the Act") has granted deemed planning permission for HS2 Phase One, however some of the extra elements are outside of the consent granted by the Act. The Urban Growth Company will submit a Town and Country Planning application for some of the extra elements, separate to the Schedule 17 submission planned for spring 2019 by HS2 Ltd. The Urban Growth Company will undertake its own separate consultation on these works.

A further agreement will be needed between HS2 and relevant parties in order to take these outcomes through to construction.
Interchange Station
How to get involved

As the first stop outside of London, the new HS2 Interchange Station will be a major gateway for the region. The station has been designed in accordance with the HS2 Design Vision principles, and we would like to hear your views.

We want to hear your views on the following:
• Station design;
• User experience;
• Landscaping;
• Transport and accessibility; and
• Future-proofing.

How?
To give us your feedback, please complete a questionnaire and give it to a member of staff at one of our events or return it via freepost to Freepost HS2 COMMUNITY HUB. Closing date for surveys is 11pm Friday 9th November 2018
Alternatively you can visit our website and complete a short questionnaire to tell us more:
www.hs2insolihull.commonplace.is
There will be a range of events and activities over the coming months, and we will promote these locally and on our website:
www.hs2insolihull.commonplace.is
If you have any other comments or question about HS2, please contact:
HS2enquiries@hs2.org.uk
24/7 Freephone helpline: 08081 434 434
Minicom service: 08081 456 472
What happens next?

Your feedback will be carefully considered and passed on to the design team.

We will hold a final series of pre-submission events in early 2019.

The Schedule 17 submission documents will provide details of all feedback received. They will also explain how, where possible, the final station design has responded to feedback.
Contact us

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