



Working on
behalf of

HS2

Curzon Street Station Design

October 2018

www.hs2inbirmingham.commonplace.is



Curzon Street Station

Introduction, history and context

Who are WSP?

In 2018 High Speed Two Ltd (HS2) commissioned WSP to design Curzon Street Station. WSP is a world leading engineering solutions consultancy who are working with Grimshaw, Glenn Howells and Grant Associates to design the station and surrounding areas.

History of the site

The old Curzon Street Station was originally opened on 9 April 1838 and is the former terminus for the London and Birmingham Railway which was the first direct railway line linking the two cities. Now one of the oldest surviving Rail Terminus' in the world, the building was designed to match the impressive Doric Arch at Euston Square. Both buildings were designed by Philip Hardwick, a renowned British architect who designed many rail stations and warehouses in London.

Future of the site

The new Curzon Street Station will be the first intercity station built in Britain since the 19th Century. It will be located next to the original Curzon Street Station building and will be the Birmingham terminus for HS2.

As well as enhancing Birmingham's transport connections, the station will create a new landmark to help drive forward the regeneration of Eastside and Digbeth, where job opportunities and economic benefits for local people will be created.

In addition to the new station, separate plans are being progressed to redevelop the original Grade 1 listed Curzon Street Station building. The renovated building will house a visitor centre and office space that will be used by HS2 along with other organisations. Once in place, the building will serve as a community engagement hub for HS2.

How many passengers will use the new station?

- 9 trains per hour
- 1,100 passengers per train
- 16 carriages per train
- 400m long trains
- 300,000 passengers per day anticipated by 2033



The old Curzon Station c1830, designed by Philip Hardwick.



The new Curzon station c2026
(view approaching the western entrance through station square).



The western entrance of the station, and Station Square.



Curzon Street Station

Design ambitions

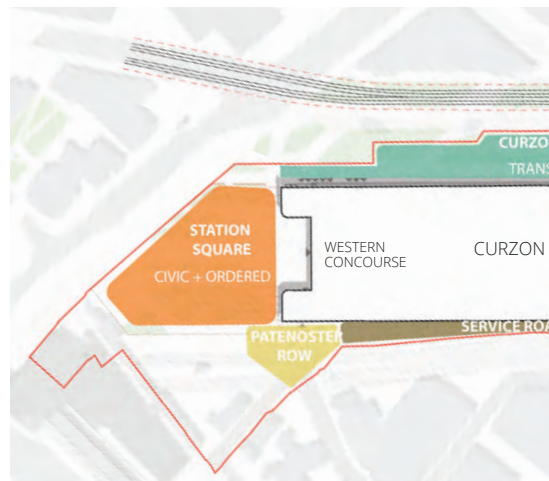
HS2 has a set of key design ambitions based around People, Time and Place. This was the starting point for WSP and its architects. In addition, following feedback from previous stakeholders and the public, other key design ambitions were also prioritised. These were:

- Creating public spaces around the new station that will enhance the character and vibrancy of the area by providing areas for recreation and leisure.
- Creating the opportunity for new shops and retail spaces.
- Installing public art projects to celebrate and reflect local culture in the station design.
- Preserving and enhancing the setting of local heritage assets, including the original Grade 1 listed Curzon Street Station building.
- Creating a station that links seamlessly with other types of transport such as the metro, bus, walking and cycling networks.

We also want the new station to link different parts of Birmingham together, and enable regeneration and growth within Digbeth and the surrounding areas.

As the station design developed, different areas within the design boundary (the red line) started to take on different characteristics as seen in the diagram below.

Key Character Areas



HS2 Station Design Ambitions



People

Design for everyone
to benefit and enjoy



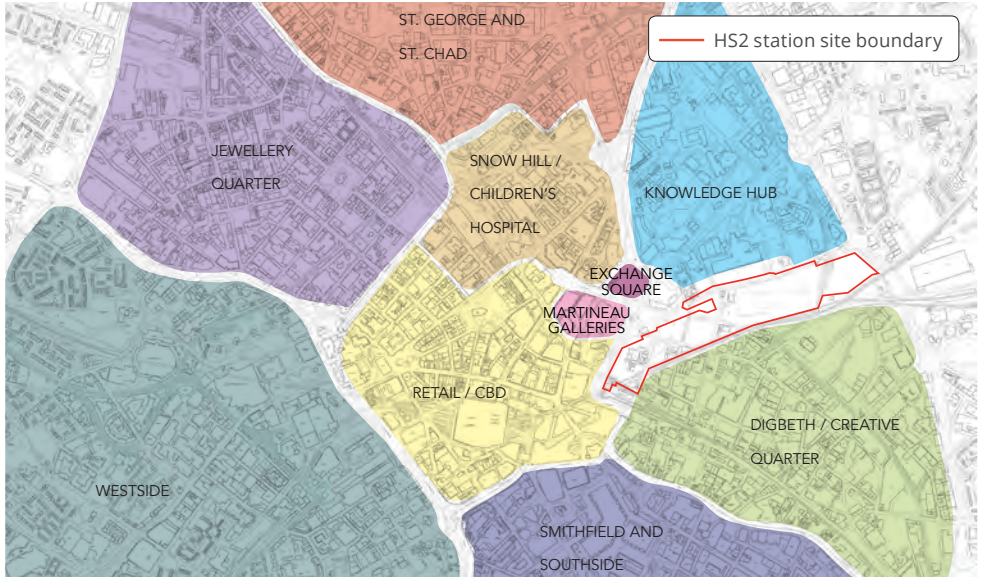
Place

Design for a
sense of place

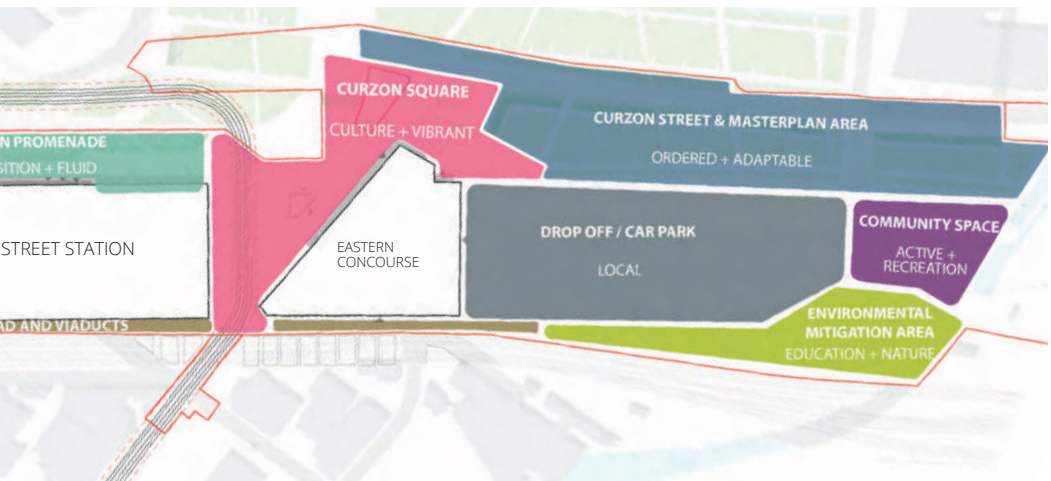


Time

Design to stand
the test of time



HS2 will bring parts of the city together.



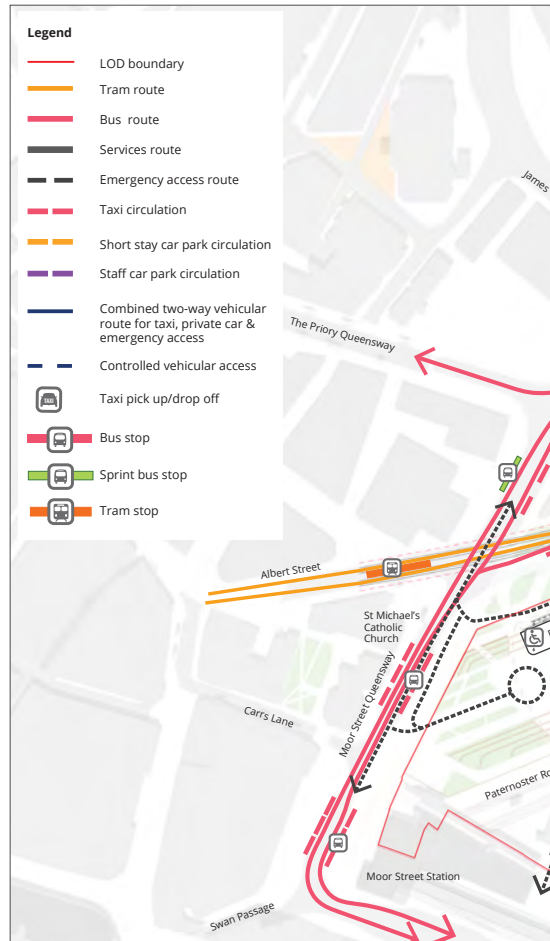
Curzon Street Station

Connectivity

It is important for the design of Curzon Street Station and the surrounding public space to integrate into Birmingham's future transport network. In the design, our aim has been to maximise the links with other forms of transport, and specific provision has been made for:

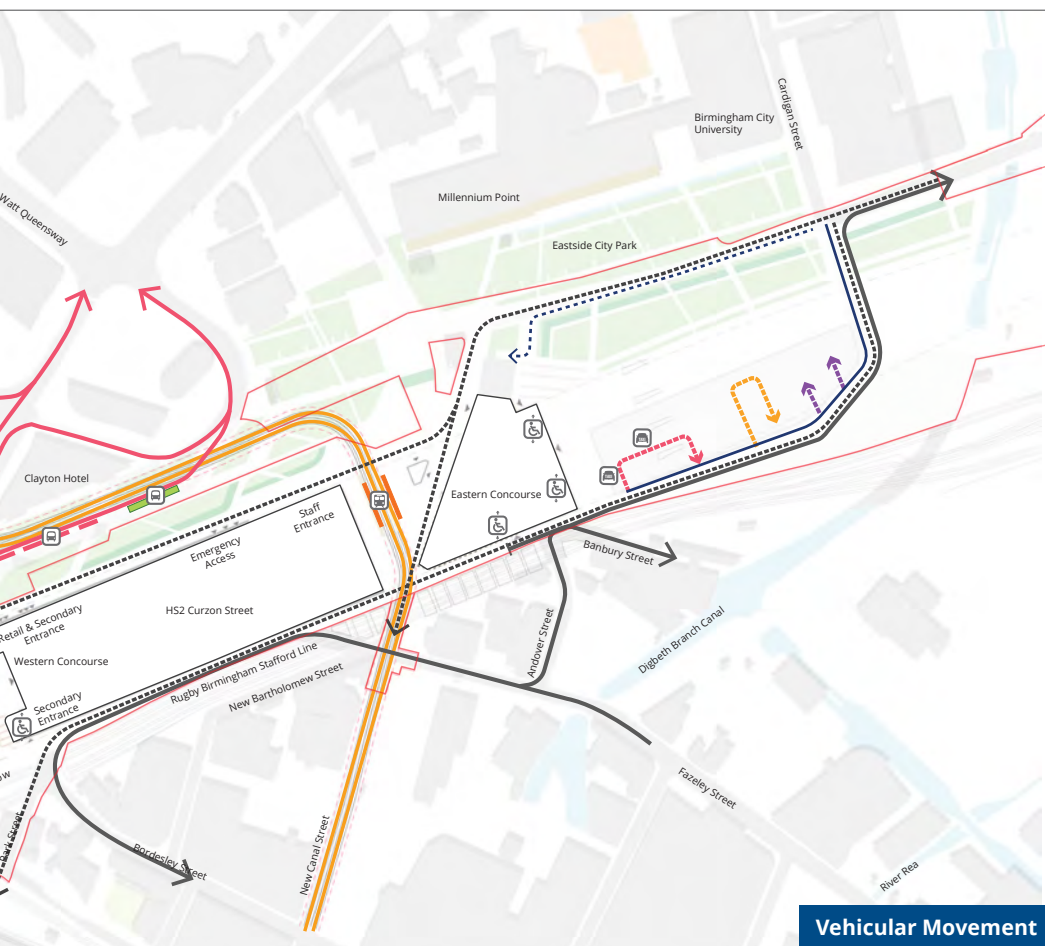
- Integration of the Midland Metro 'Birmingham Eastside Extension', with a stop in Albert Street, serving the Western and Eastern concourse.
- A simple and seamless connection to Moor Street Station.
- Pedestrian routes to local bus services, Sprint (a rapid transit bus service) and onwards to other train services.
- Provision of safe, convenient cycle access and cycle parking.
- Generous station square public space with good public transport, walking and cycling links into Digbeth and the City Centre.

We have also created a secondary public space along New Canal Street, and an eastern entrance for passengers wishing to enter and exit the station towards the university and Digbeth.



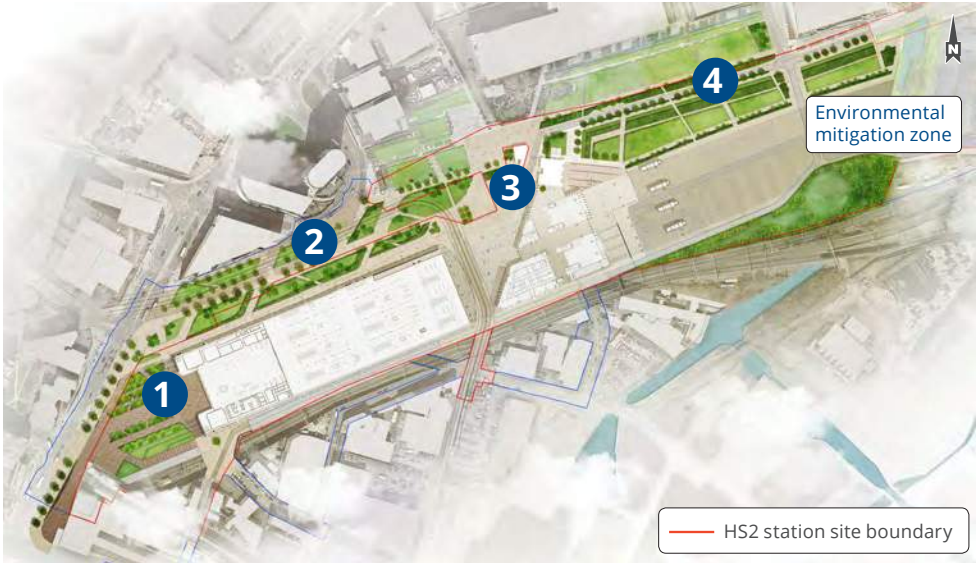
The eastern entrance also gives good access to passengers being dropped off or picked up by friends and family.

For information on pedestrian connectivity and cycle routes please visit: **www.hs2inbirmingham.commonplace.is**



Curzon Street Station

Public space around the station



Curzon Street Station location map.



The eastern entrance of the station from under the viaduct in New Canal Street, showing the old station building.

When developing the different designs for each area, we have sought to ensure that:

1. Station Square

- It marks the beginning of a journey;
- It gives a sense of arrival into Birmingham;
- It provides easy links into the City Centre and Digbeth;
- It provides views of Birmingham on arrival;
- It reflects a sense of local pride and identity;
- This is the most important space outside the station.

2. Curzon Promenade

- It provides an active and interesting space to be;
- It complements the other public spaces that link into it;
- The space encourages people to stop, and spend time here;
- It complements the setting of Eastside park;
- It provides views of Old Curzon Street Station;
- Other types of public transport are accessible to passengers.

3. Curzon Square

- This space reflects the historic setting and buildings;
- It links well to Digbeth;
- It complements the setting of Eastside park;
- It provides good links to Digbeth, the University and beyond;
- There is space for outdoor public events;
- This is the second most important space outside the station.

4. Curzon Street

- It provides a flexible lawn space that can be used in different ways as the city develops;
- It links into wider plans for the future development of the area;
- It recognises Birmingham City Council's Eastside masterplan;
- It will provide an extension of Eastside Park;
- It is sympathetic to Old Curzon Street Station.



View of Curzon Promenade from the Woodman pub looking west.



Curzon Street Station

Internal visualisations of the station

The architect has designed the station with six key features in mind, which are:

- The design is elegant and simple, and is instantly recognisable as a railway station.
- The design is sensitive to the historic surroundings, especially the Grade 1 listed former Curzon Street Station.
- The design allows for a spacious and welcoming entrance.
- The internal roof is warm with the internal structures becoming an aesthetic feature.
- The design provides clarity of route and destination.
- The design includes clear pedestrian routes.



The view of Birmingham as passengers leave the station through the western exit.

Additionally this is a station that connects easily with the city, enabling local people to see the train from the city, and the passengers to see the city from the train. There is a clear view and route into Birmingham from point of arrival.

Station facts

▲ **Height:** 34.57m

▶ **Length:** 477.30m

● **Total station area:** 48,455.30 sq.m

■ **Area of station square:** 6,345 sq.m



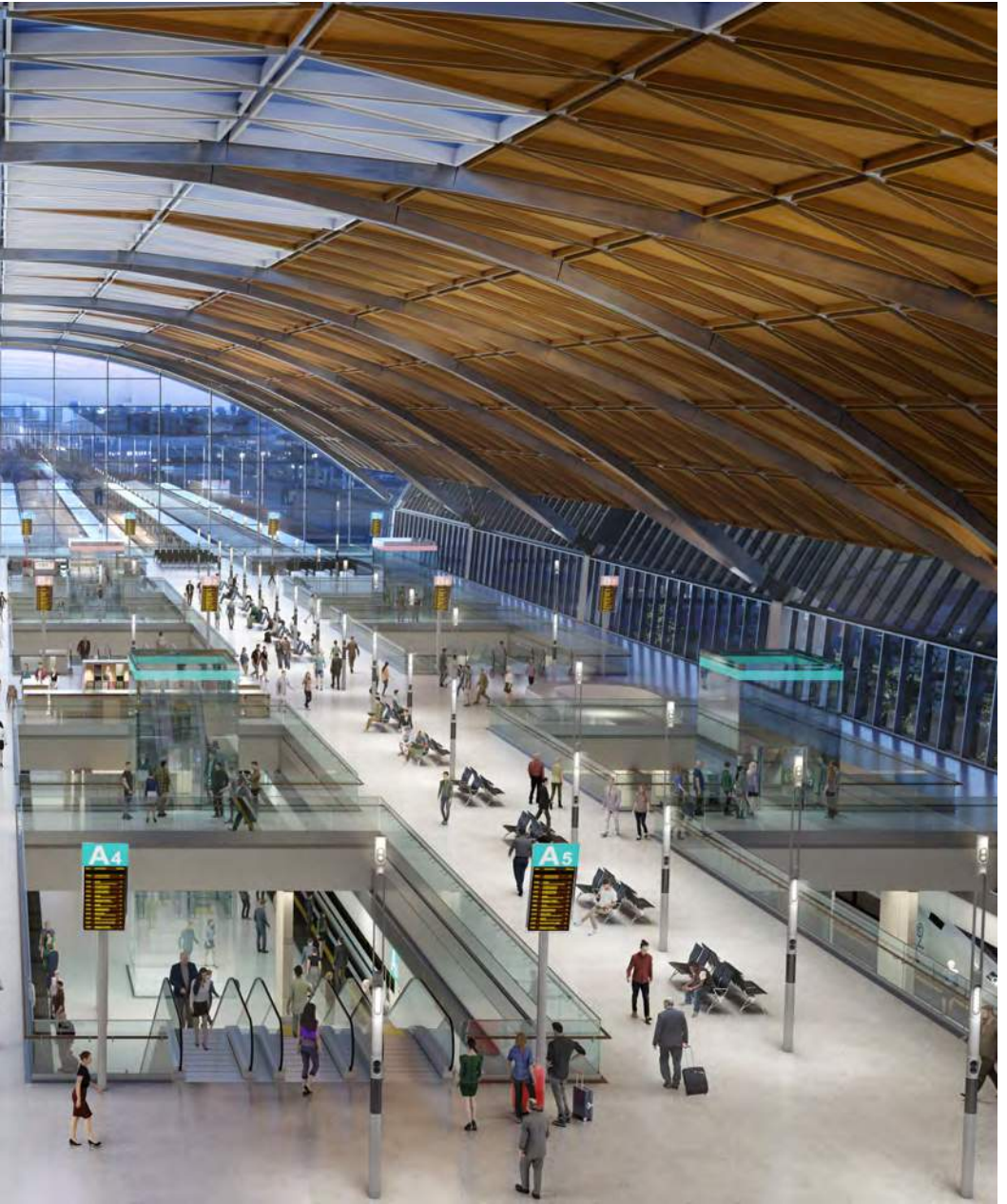
An internal timber roof will give the station a sense of warmth.



The trains are underneath the main concourse to allow passengers to see both levels and make it easier to find their way around the station.



Inside the main station building, showing the trains on the second level below the main concourse.



Curzon Street Station

Sustainability and the environment

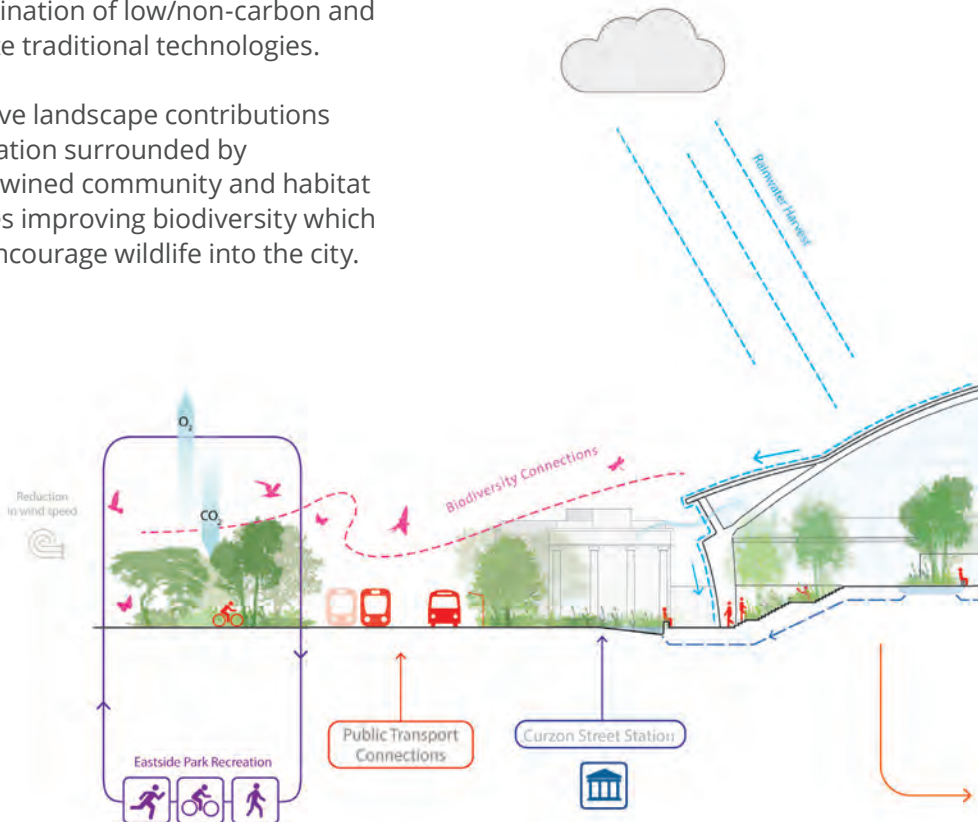
Our station will be designed to meet the requirement of BEEAM Excellent – an industry recognised standard for sustainable lifetime performance.

The station will be net zero carbon – meaning it will be highly efficient, generating energy with a combination of low/non-carbon and on-site traditional technologies.

Positive landscape contributions – a station surrounded by intertwined community and habitat spaces improving biodiversity which will encourage wildlife into the city.

Our landscape design plans also include:

- Parkland lawns, herbaceous shrubbery, tree planting and sustainable urban drainage (in particular, rain gardens) across the site;

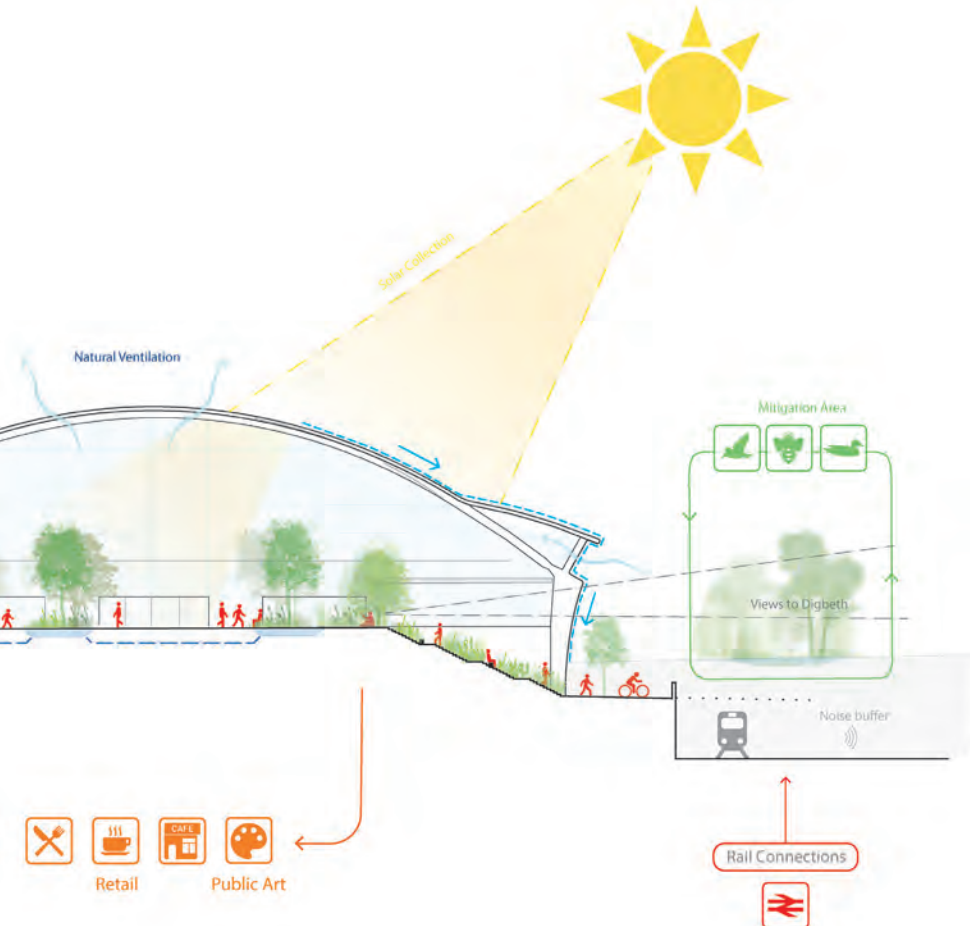


Combined Ecological Systems Concept Diagram

- Proposals to create open green space and damp grassland habitats between Curzon Street and the viaduct to the east;
- An environmental zone of broadleaf woodland to the south of the car park and viaduct, which will be accessible to schools, colleges and interest groups, to encourage an understanding of and engagement with nature;

- Extensive provision of facilities for cyclists wishing to use the station; and
- Electric vehicle charging points.

We will maximise the benefits of natural resources such as sunlight and water, and provide seamless connections between different transportation modes, Birmingham's communities, and green habitats.



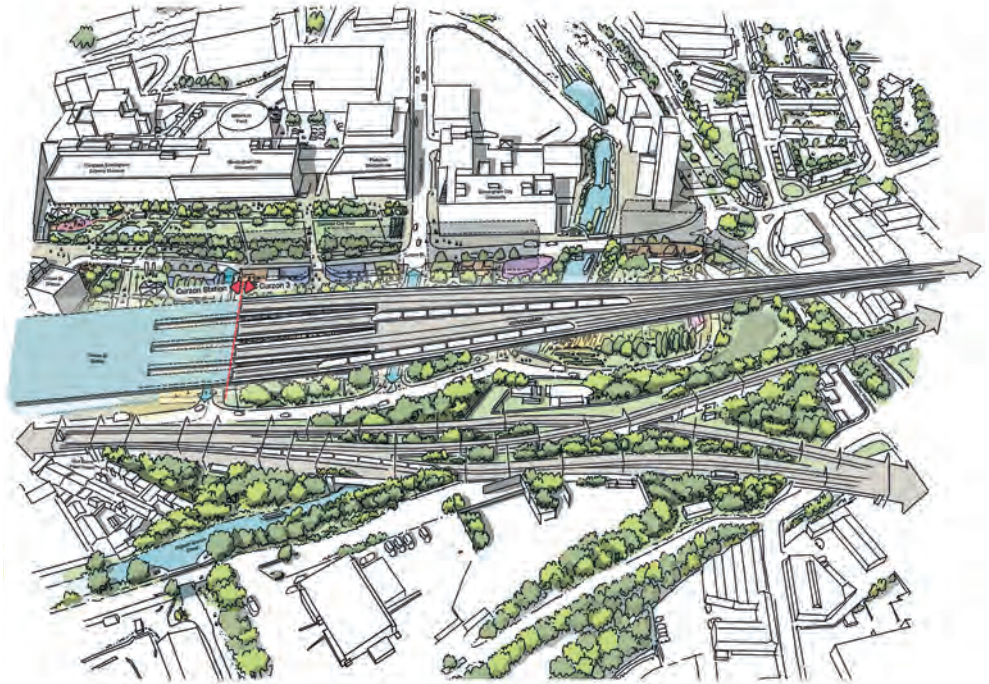
Curzon Street Station

Curzon viaduct design vision

The Curzon Approach Viaducts, which run into Curzon Street Station, are crucial elements of what will be HS2's built legacy in central Birmingham. A team of architects, engineers and construction managers are developing viaduct designs which aim to maximise the benefit an infrastructure project of this scale can bring to Birmingham and the UK.

The Curzon Approach Viaduct design vision centres on:

- maximising natural daylight;
- creating high quality outdoor spaces; and
- delivering an elegant structural form.



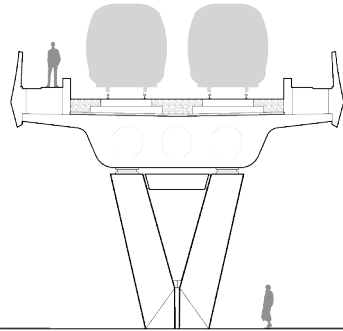
Curzon approach viaduct design vision

This is achieved through:

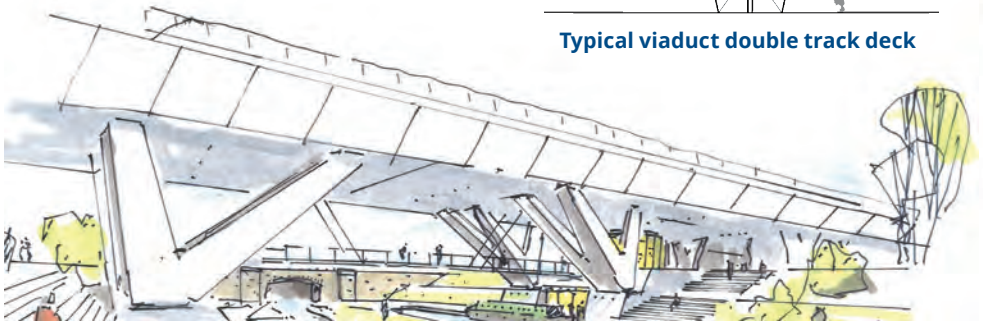
- maximising natural light underneath the viaducts by minimising the deck width;
- introducing light slots where possible;
- minimising the volume of concrete needed through sculpting of the deck;
- minimising the footprint of supporting piers by utilising a 'V' form which brings pairs of piers together as one and allows the structure to touch the ground lightly.

Through this approach we make the space under the viaduct as usable as possible.

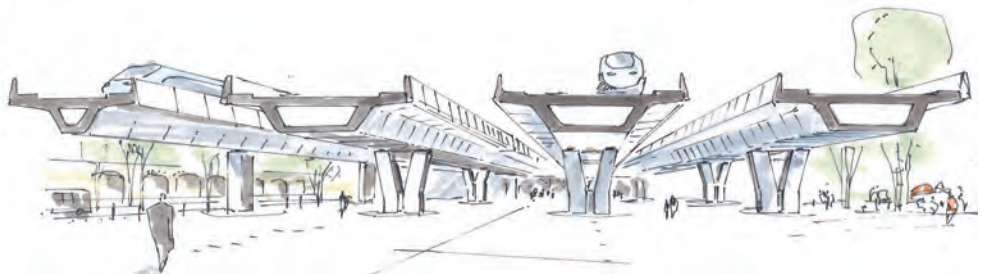
The vision is to accommodate temporary activities such as pop-up markets, as well as more permanent pavilions and buildings that help create accessible and vibrant public spaces.



Typical viaduct double track deck



Digbeth branch canal bridge showing tripod piers



Curzon Street Station

How to get involved

This is the first brand new intercity station built in Britain since the 19th century, and has been inspired by the best station designs of the past. We are seeking the views of local people to help deliver a new landmark for Birmingham that will stand the test of time - inspired by Britain's pioneering railway and industrial heritage.

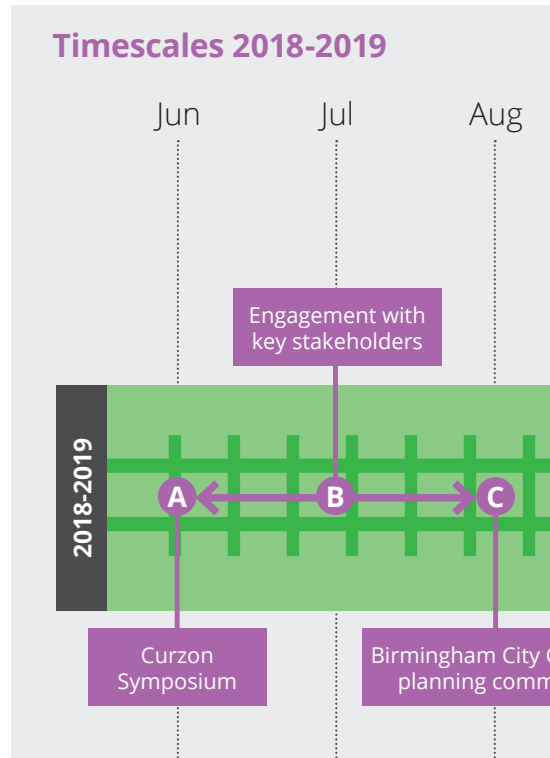
Our design takes into account previous public engagement activities, however the station is still being developed, and we want to hear your views, particularly on the following:

- **Station design**
- **User experience**
- **Environment and landscape**
- **Transport accessibility**
- **Future proofing**

Planning permissions

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 detailed design is subject to further approval.

Schedule 17 of the Act puts in place certain processes for the approval of these matters; this helps to ensure there is an appropriate level of local planning control over the HS2 Phase One construction works while not unduly delaying or adding cost to the project.



What next?

To share your feedback, please complete a form and leave it with a member of staff, or visit: **www.hs2inbirmingham.commonplace.is** and complete a short questionnaire to tell us more.

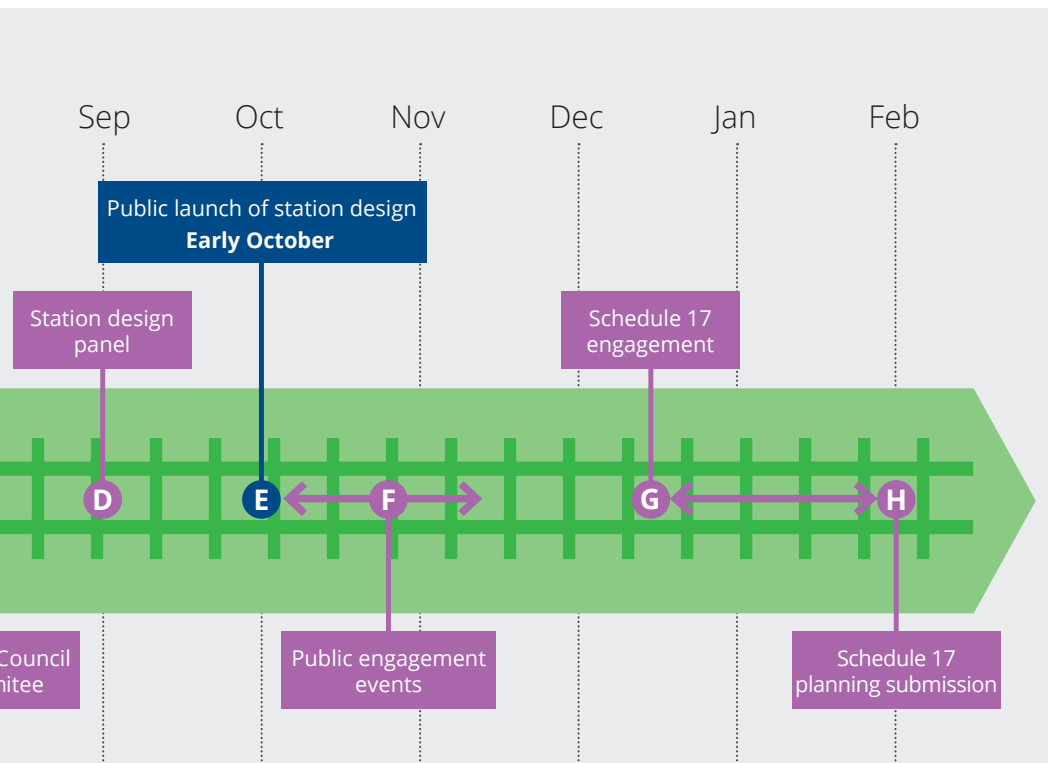
There will be a range of events and activities over the coming months, and we will advertise these locally and on our website: **www.hs2inbirmingham.commonplace.is**

If you have any other comment or question about HS2, please contact:

@ **HS2enquiries@hs2.org.uk**

 **24/7 freephone helpline: 08081 434 434**

 **Minicom service: 08081 456 472**





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Enquiries and alternative format

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