

# REPORT

## HS2 Independent Design Panel Meeting to discuss the Schedule 17 Stage Design for Colne Valley Viaduct

15.30 – 16.30 Monday 8 July 2019

### Attendees

Prof. Sadie Morgan	Chair of the HS2 Independent Design Panel
Tony Burton	Vice chair of the HS2 Independent Design Panel
Annie Coombs	Deputy chair of the HS2 Independent Design Panel
Martin Stockley	Deputy chair of the HS2 Independent Design Panel
Billy Ahluwalia	Senior Project Manager, HS2 Ltd
Martin Short	Lead Architect for Phase One MWCC, HS2 Ltd
Robert Howard	Landscape Design Manager Central, HS2 Ltd
Kevin Roberts	Senior Project Engineer, HS2 Ltd
Matt Dormer	Town Planning Lead Phase One Technical, HS2 Ltd
James Glynn	Town Planning Area Central, HS2 Ltd
Clive Green	Senior Communications Manager, HS2 Ltd
David Smith	Lead Civil Structures Engineer, HS2 Ltd
Saeed Mahmood	South Bucks District Council
Declan Gandee	South Bucks District Council
Steve Braund	South Bucks District Council
Alan Price	Design Director, ALIGN
Erwan Vicat	Viaduct Engineer, ALIGN
Ewan Jones	Lead Architect, ALIGN
Chris Patience	Lead Architect Viaduct, ALIGN
John Woodhouse	Lead Planner, ALIGN
Simon Railton	Lead Landscape, ALIGN
Edward Bailey	HS2 Panel Manager, Frame Projects

### Apologies / copied to

Ian Thynne	London Borough of Hillingdon
Ifath Nawaz	South Bucks District Council
Robert Davis	Landscape Design Team, ALIGN
Steve Austin	Town Planning Manager, HS2 Ltd
James Dearing	Design Manager, HS2 Ltd
Ella Davies	Senior Interface Manager, HS2 Ltd
David Emms	Project Director, C1, HS2 Ltd
Alasdair Hassan	Head of Project Engineering Central, HS2 Ltd
Christoph Brintrup	Design Director, HS2 Ltd



Laura Kidd	Head of Architecture, HS2 Ltd
Tom Venner	Commercial Development Director, HS2 Ltd
Giles Thomas	Phase One Engineering Director, HS2 Ltd
Zoe Stewart	Lead Design Manager, HS2 Ltd
Mariyam Ijaz	Assistant Project Manager, HS2 Ltd
Bridget Jackson	Head of Benefits, HS2 Ltd
Alice Williams	PA to Interim Design Director, HS2 Ltd
Paul Gilfedder	Head of Town Planning, HS2 Ltd

### **Note on Design Panel process**

The HS2 Independent Design Panel was established in 2015 at the request of the Department for Transport, to help ensure that, through great design, HS2 delivers real economic, social and environmental benefits for the whole country.

The HS2 Design Vision sets out nine principles grouped around three themes: People; Place; and Time. The design uses this framework to help the HS2 Ltd leadership, project teams and other partners to make the right design choices – and this also informs its advice on designs that are to be submitted under Schedule 17 of the Phase One HS2 Act.

The panel plays an advisory role, providing impartial and objective advice, to support the design process. At a pre-application stage it is for HS2 Ltd to decide what weight to place on the panel's comments balanced with other considerations. Once a Schedule 17 application is submitted, the panel's advice may inform the local planning authority's decision making process.

The HS2 Independent Design Panel comments below follow on from five previous reviews of Colne Valley Viaduct. Further details of panel membership and process are available at:

<https://www.gov.uk/government/publications/hs2-design-panel>

### **Timing of Schedule 17 meeting**

This meeting took place in advance of Schedule 17 submission for Colne Valley Viaduct. HS2 Ltd confirmed that there will be no significant design changes prior to the application being submitted.

### **Views of the Local Planning Authority**

South Bucks District Council has had a number of meetings with the design team and noted that, overall, it does not object to the proposals. The council is in the process of developing a formal response to the latest revisions as part of the pre-application process. Important issues to be resolved are the visual impact of the noise barriers, and the response of the design to the landscape. Noise is also a concern, but the council is happy with the open engagement it has held with the design team and is confident this technical issue will be resolved during the detailed design stage.

The London Borough of Hillingdon was invited to attend, but sent their apologies.

## HS2 Independent Design Panel's views

### Summary

The panel recognises the huge challenges faced in designing the Colne Valley Viaduct including: its necessary scale; the requirements for noise barriers; the technical demands of high speed rail; the sensitivity of the landscape; and its significance within the route as a whole. The panel is supportive of the overall approach and feels the Schedule 17 stage designs meet the aspirations of the HS2 Design Vision - subject to the continuation of design work through to delivery. It welcomes the intention to include the indicative landscape proposals within the Design and Access Statement and the Indicative Mitigation Details document, which will help give confidence on what will be delivered. As detailed design work progresses following the Schedule 17 (plans and specifications) approval process, a key area of focus will be the refinement of the landscape approach and the detailing of the viaduct – particularly in those parts of the structure which will be in close proximity to the public. There is also scope for further refinement of the abutment design through detailed design. The panel highlights the importance of a holistic design approach to manage the relationship between elements delivered by other contractors, such as overhead line equipment, and the viaduct. The panel strongly supports the decision not to use fencing around the viaduct piers, and the efforts to conceal fencing behind the staircase walls of the abutments. It urges HS2 Ltd to consider what wider design lessons can be learnt from the Colne Valley Viaduct, and how the quality of the proposals can influence the rest of the route.

### Viaduct

- The panel finds much to admire in the Schedule 17 stage design for Colne Valley Viaduct. It thinks the proposals, including the landscape vision which is to be subject to subsequent Schedule 17 requests (Bringing into Use and Site Restoration Agreements), meet the aspirations of the HS2 Design vision – subject to continuing further design work through to delivery. It offers comments for consideration as detailed design work progresses towards construction.
- In general, the efforts made to minimise the scale and visual impact of the viaduct, in this sensitive landscape context, are to be applauded. It urges HS2 Ltd to explore how this standard of design, can be championed across the route.
- The panel understands the challenges presented by changing water levels, and welcomes the attention given to minimising the visual impact of the pedestals supporting viaduct piers located in the lakes.
- It welcomes the focus on expressing and celebrating the structure, particularly through the design of the piers, as well as efforts made to refine the proposals through, for example, subtle shaping of the haunches. It encourages the team to ensure this design story is clearly expressed within the Schedule 17 submission material, for example, within the Design and Access Statement.

- The panel supports the consideration being given to the design of abutments and the focus on expressing them. Further refinement is needed during the detailed design stage to ensure this complex element can be delivered to the high level of quality promised by the Schedule 17 submission.
- The attention to detail gives the scheme elegance and the panel congratulates the design team on its achievement. The panel highlights the importance of ensuring detailed design continues to be refined through to construction. The panel asks for clarity from HS2 Ltd about which design assurance mechanisms are in place beyond Schedule 17 stage to protect design quality. These mechanisms should also address the interface with elements to be delivered under different contracts, such as overhead line equipment.
- The panel strongly favours the alignment of catenary masts with the centre point between viaduct piers. It urges HS2 Ltd to give careful consideration to how it can control the location of catenary, so that it positively contributes to the design as a whole.

## **Landscape**

- Overall the panel welcomes and commends the thoughtful indicative landscape designs presented and offers its support as this critical area of the scheme is developed.
- The quality of the landscape design around the viaduct will be fundamental to its success – the panel’s support is intrinsically linked to the delivery of the indicative landscape presented. Therefore, it welcomes the intention to provide the local planning authorities with a level of assurance on the landscape through the Design and Access Statement and the Indicative Mitigation Details document.
- The panel recognises the efforts made to ‘highlight’ the point where the viaduct crosses over Moorhall Road. It suggests the team further considers how the landscaping could develop to celebrate this crossing, for example through more tree removal to open up views of the piers.
- Links with the wider landscape, such as cycle paths, will help make this scheme ‘more than a railway’. The panel would welcome further clarity on how these aspirations will be progressed.
- As part of any submission, it is essential that all information gives an accurate, consistent and clear representation of the scheme to be delivered. This includes aspects such as the ‘naturalistic’ ground modelling and landforms proposed.

## **Fencing**

- The panel warmly welcomes the confirmation that there will be no fencing around the piers across the viaduct, and that where fencing is required at the abutments, they will be concealed behind the walls which frame each staircase.

## **Next steps**

Overall, given the enormous technical constraints, the panel feels the Schedule 17 scheme for Colne Valley Viaduct meets the aspirations of the Design Vision. It trusts that this level of design quality will be followed through as detailed design work continues towards construction, and that the comments outlined above can help inform this process.

The panel suggests the Design and Access Statement included within the Schedule 17 submission refers to issues raised in this report and responds to them.

The panel would welcome further discussions on the detailed design of the scheme, including landscape, and other elements of HS2 not yet designed e.g. catenary masts, at an appropriate moment – to ensure they support the holistic design response generated to date.