



Design opportunities for Phase One civil engineering

During November and December the Design Panel took part in several site visits and meetings to discuss civil engineering for the Phase One route. Three of the civil engineering consortiums took part in these sessions: Carillion Eiffage Kier (CEK); Balfour Beatty VINCI (BBV); and Align. These meetings took place at an early stage, but the panel emphasised the importance of the engineering solutions responding to the distinctive landscapes along the route. A sensitive design approach is needed to integrate these significant structures into their contexts.

For example, the River Tame Viaduct is located at the point where trains emerge into an open view, and has potential to become a gateway into Birmingham. The panel encouraged BBV to design the viaduct to introduce drama and interest into the setting that captures this significant moment.

The panel was intrigued by CEK's proposals for a bat protection structure in Sheephouse Wood. It welcomed the creative design thinking by the team, including Moxon Architects. However, the panel suggested that other approaches to re-directing the protected bats should be explored, with the aim of avoiding a large structure enclosing the tracks.

Skanska Costain Strabag (SCS), contractors for HS2 Area South will meet with the panel in January.

Design Panel activities November and December 2017

5

- Two chair's reviews of HS2 Ltd responses to Design Panel recommendations with Tony Burton
- Sam Richards and Jan Kroes lunchtime talk for HS2 Ltd staff on the work of Crossrail's urban integration team
- HS2 Ltd project leads briefing
- Inclusive Design Approach document

Chair's reviews and mentoring

6

- Station common design elements
- Phase One station operations
- Customer experience: rolling stock
- Euston Station: masterplan
- Area Central: Sheephouse Wood bat protection
- Area North: Washwood Heath Depot

Workshop reviews

8

- Area Central: Edgecote Viaduct; Lower Thorpe Viaduct; and Colne Valley Viaduct
- Area North: River Tame Viaduct; Balsall Common and River Blythe Viaducts
- Area North: Manchester Spur; River Cole and Delta Junction; Curzon Street Viaduct

Full reviews

4

- November Design Panel team meeting attended by the chair, vice chair, secretariat and HS2 Ltd staff
- December Design Panel team meeting
- HS2 Independent Design Panel annual meeting, attended by panel members, the DfT, and HS2 Ltd staff
- Briefing session with Area South team

Governance meetings

HS2 Independent Design Panel annual meeting 2017

On Tuesday 21 November the HS2 Independent Design Panel held its second annual meeting, to reflect on the panel's work over the past year. Speakers at the meeting included: Mark Thurston, CEO of HS2 Ltd; Cavendish Elithorn, Strategy Director for High Speed Rail at the DfT; Kate Hall, Design Director at HS2 Ltd; Prof. Sadie Morgan, Chair of the Design Panel; Deborah Denner, Principal of Frame Projects; Tom Venner, Commercial Development Director HS2 Ltd; and David Smith, Lead Discipline Engineer, HS2 Ltd.

The annual meeting provided an opportunity to discuss the lessons learned through Design Panel meetings in 2017. A plenary discussion on this was chaired by Tony Burton, Vice-Chair of the panel. Design work is at different stages for HS2 Phase One (from London to Birmingham) and Phase Two (to Manchester and Leeds). This creates an opportunity for the experience gained from Phase One to inform work on Phase Two.

The top priority highlighted by the panel is the need for HS2 Ltd to develop a stronger approach to urban integration. Collaborative working with local planning authorities and other key stakeholders will be essential to integrate stations and civil engineering structures into their contexts. The panel sees this as essential for HS2 to deliver on its promised regeneration benefits, and the ambition to be a 'catalyst for growth'.



Prof. Sadie Morgan, Chair of the Design Panel



Mark Thurston
Chief Executive Officer
HS2 Ltd

People's stories

Mark Thurston is CEO at HS2 Ltd and joined in March 2017. Mark started his career on the railway as a technician apprentice on the London Underground, specialising in telecommunications. However, Mark has spent the last twenty years working in and around major infrastructure projects, including the London 2012 Olympics and Crossrail. His most recent role was Managing Director for Europe at CH2M.

Mark strongly believes in and recognises the importance of sustaining high quality design for HS2, and sees this as one of the ways a new railway for the country will be acceptable to and embraced by the many communities it will impact. Mark accepts that it is HS2 Ltd.'s responsibility to deliver the highest standards of civil engineering, architecture, landscape design and the use of innovative technologies in railway operations. The support of HS2's Design Panel in identifying, understanding and responding to the needs of HS2's diverse audience has been integral to this.

HS2 rolling stock

As part of the Design Panel's role advising on customer experience, a meeting was held to discuss the rolling stock procurement process. The panel welcomed the emerging train specification presented by the Railway Operations team, encouraging them to embed this in the procurement process. A further session on this topic is planned for January, focusing on train interiors.



Frame Projects
Secretariat to the
HS2 Independent
Design Panel

**HS2 INDEPENDENT
DESIGN PANEL**