

Introduction

Welcome to the EKFB and HS2 feedback event showing you the design of the Thame Valley Viaduct

In February 2020, we held an event to show you our developing design for this viaduct. We asked the public to complete a questionnaire and provide us with feedback on the design. This event will display the feedback we received and show how we have developed the design of the viaduct taking into consideration your responses.

HS2 Project Overview

HS2 is a new high-speed railway that will form the backbone of Britain's transport network.

It will connect towns and cities in the South, Midlands and North with faster, easier and more reliable travel that will put more opportunities within reach for millions of people for work, business and leisure.

By increasing rail capacity, HS2 will free up space on existing lines for more commuter, regional and freight services. This will relieve overcrowding and improve reliability for millions of people using Britain's railways.

Engagement event summary

We hosted a public event for the Aylesbury community.

At the event, we presented the scheme and works planned for the area on a series of exhibition boards, which we asked for your feedback on.

234 people attended and we received 26 survey responses with comments and feedback from attendees.






An artist's impression of the Thame Valley Viaduct in 10 years time post construction

Your feedback

Public feedback

The questionnaire we asked for your feedback on covered four topics. We asked you to rank our objectives in order of priority and to tell us about anything else that was important to you. The following boards present a summary of these priorities in order and your comments that were submitted.

| | |
|--|--|
| Viaduct design  | <ul style="list-style-type: none">• Protect the local community from train noise• Reduce visibility by lowering the overall height of the structure• Pay special attention to the appearance of the viaduct in elevation, making use of piers and deck connections• Create a neat and uncluttered connection with the approach embankments• Design the viaduct simply and have consistent span lengths• Develop the barriers to be consistent with viaduct design• Embankments to hide structure and reduce noise levels |
| Construction  | <ul style="list-style-type: none">• Minimise disruption to traffic on roads• Be kept informed about the work in advance of it being carried out• Maintain access to local properties• Minimise noise generated by construction activity• Use precast elements (e.g. made off site) on viaducts wherever possible to reduce construction traffic and works duration• Reduce the amount of excavation/spoil that takes place• Colouring of the elevated viaduct and piers to be compatible with the local environment• Use materials that will not bleach as the structure ages |

| | |
|--|---|
| Viaduct landscape design  | <ul style="list-style-type: none">• Respect the landscape setting and design the viaducts to fit within the existing terrain• Protect local wildlife from train noise• Preserve existing field patterns, hedgerows, fence lines and woodland• Plant different varieties of species along the route to match existing vegetation in the local area• Enhance the biodiversity of the landscape• Maximise green infrastructure and opportunities to link ecology along the railway line• Make wildlife protection a priority |
|--|---|

| | |
|---|--|
| Social benefit, employment and training  | <ul style="list-style-type: none">• Work with local companies to support construction work activities• Provide training, employment and apprenticeship opportunities• Provide opportunities for unemployed, disadvantaged and underrepresented groups• Provide long-term job opportunities for the operational phase of HS2• Develop relationships with local authorities and Local Enterprise Partnerships• Work with local schools and colleges• Create engineering apprenticeships for youngsters |
|---|--|

We would now like to:

- Share the feedback that we have received
- Share the final designs we will be seeking consent on from your local authority

Where is the viaduct?

Will it be visible?

The Thames Valley Viaduct is located to the west of Aylesbury and sits within the Northern Vale.

Apart from some sections along the Public Right of Way to the south-west, the viaduct is obscured by the existing folds in the landscape.

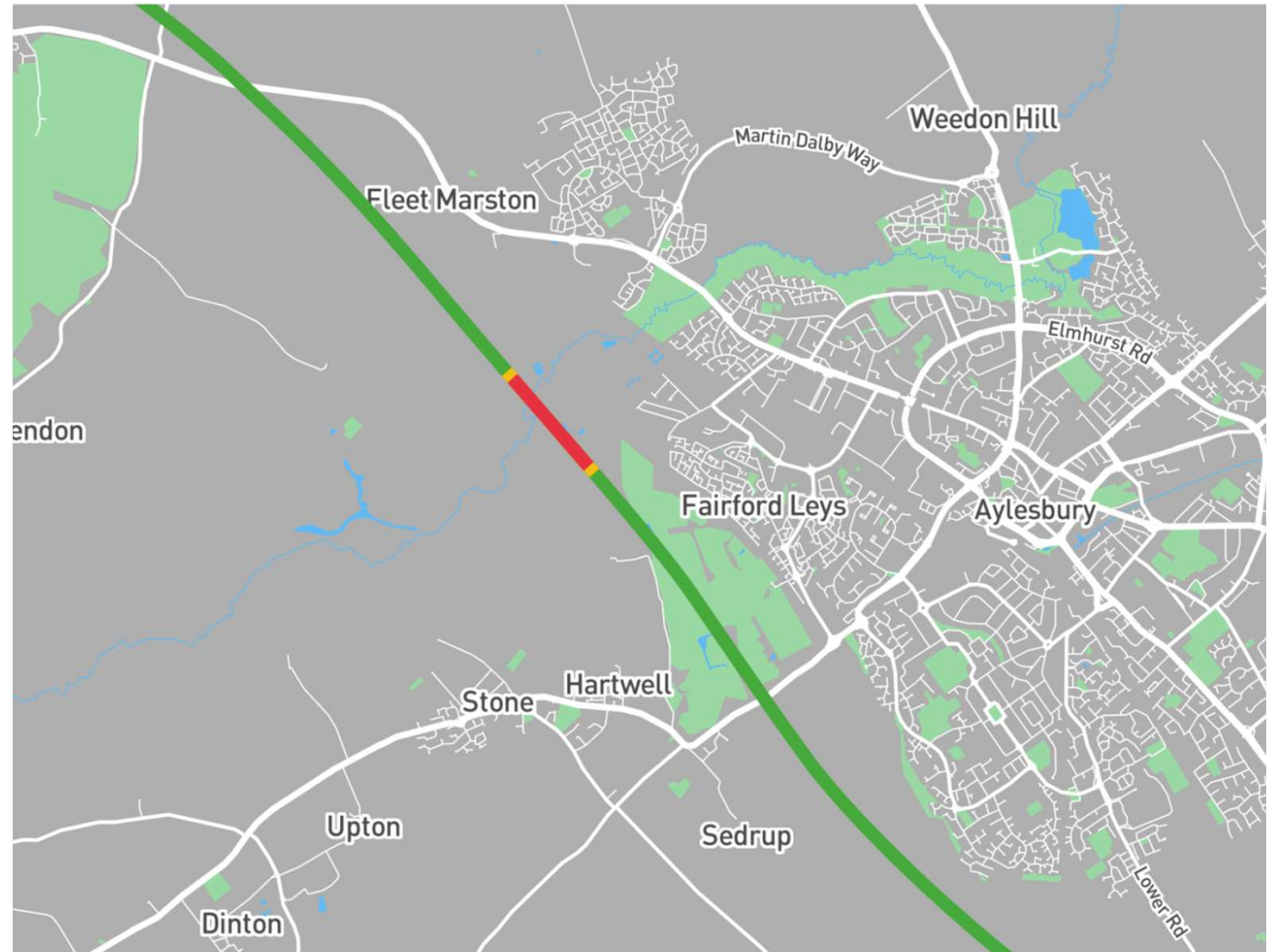
It is also screened by trees and hedgerows along its length.

The map shows the HS2 trace in green, where it will sit in a cutting as it runs west of Aylesbury.

The amber sections are where the trace starts to elevate onto an embankment.

The red area is the span of the viaduct.

The blue lines show the natural course of River Thames.



The red area above shows the viaduct location with Aylesbury located to the east

Viaduct design feedback summary

You asked the following questions around the design. Here are our answers:

| You said | We did |
|--|--|
| 1 <i>"Can the embankments screen the structure and reduce noise?"</i> | The low-lying nature of the viaduct will provide screening and reduce noise. Noise barriers on both sides of the viaduct will provide a greater degree of noise mitigation. |
| 2 <i>"How will you reduce noise impacts?"</i> | Noise reduction and mitigation will be considered in a way that protects communities from train noise. During construction, we will make all efforts to safeguard communities from any excessive noise that is above the limits stated in the Environmental Statement and Code of Construction Practice. We will put noise monitors into place during construction to enable consistent monitoring. |
| 3 <i>"Can you minimise the impact of the structure on the natural scenery?"</i> | <p>The viaduct will sit at a low level and be screened by the natural topography and surrounding vegetation.</p> <p>Final designs will aim to preserve and enhance natural vegetation barriers. Where reasonably practicable, the design will reflect simplicity in the structure and pay attention to the viaduct's low position in order to keep the structure's fluidity against the existing setting. Concrete for construction of the viaduct will be pale in colour to better blend in with the surrounding landscape.</p> <p>We will use materials that reflect those found in a rural context, such as timber fencing and agricultural buildings. These will also have a softening effect on the viaduct structure against the existing landscape.</p> |

Viaduct design feedback

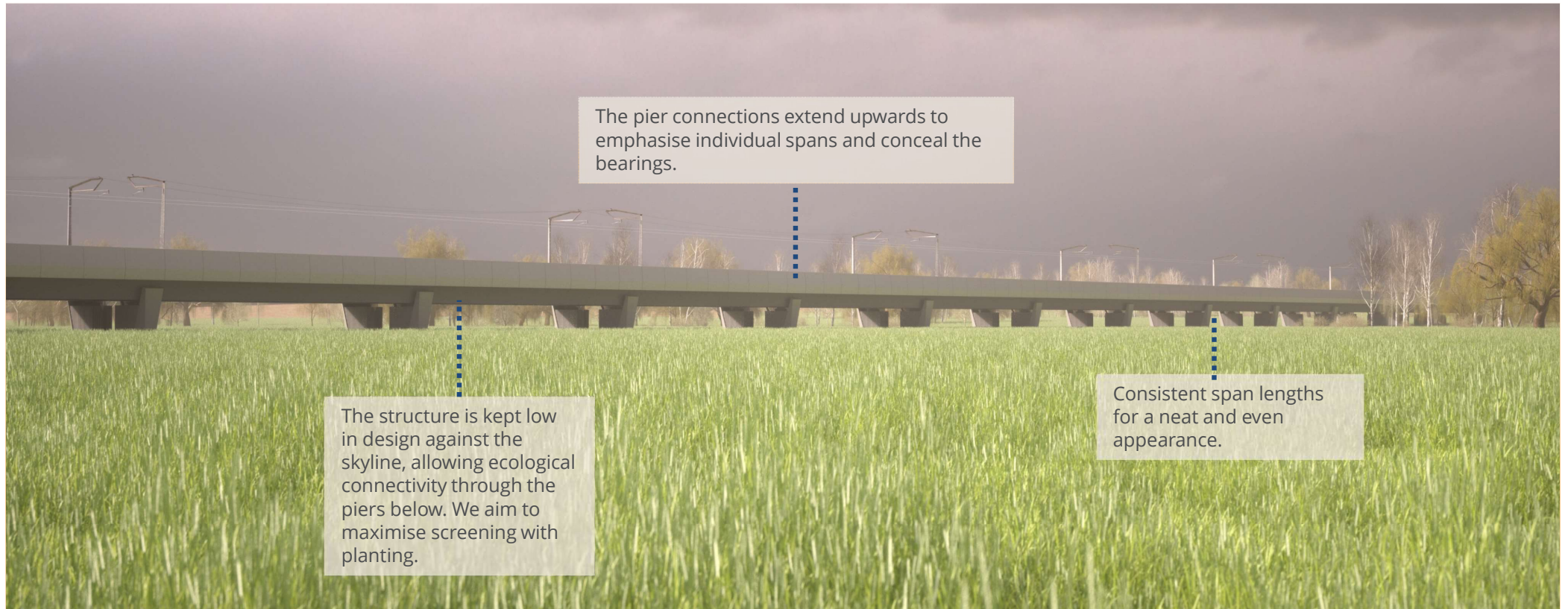


Overall height of the viaduct has been minimised by low parapets and below-deck structure.

We will maintain as much existing vegetation as possible and only remove vegetation where needed to facilitate access and to build the viaduct.

Artist's impression of the viaduct 10-15 years post operation

Viaduct design feedback



Artist's impression of the viaduct 10-15 years post operation

Landscape design feedback summary

You asked the following questions around the landscape design. Here are our answers:

| You said | We did |
|--|--|
| 1 <i>"How can you preserve existing field patterns when you have to follow the designated railway line?"</i> | <p>Our design will reinforce the character of the field hedge enclosures and introduce new pockets of woodland where possible to strengthen and reconnect the vegetation pattern. We will retain the open character of the landscape in rural views and connect existing and proposed woodland areas and hedgerow habitats to the north and south of the viaduct, as well as to the new local wildlife site to the east.</p> <p>We will retain as much vegetation as possible and only remove what is necessary for construction of the viaduct. We will plant new hedgerows to complement and reinstate existing field patterns. The tree species that we will plant are associated with this riparian/wetland landscape and include black poplar, oak and willow, following the River Thame and its tributaries. Wildflower wetland meadow species will also be encouraged to maintain the clear, open views across this low-lying vale.</p> <p>The landscape is designed to flow beneath the viaduct. All tracks are at grade to facilitate this.</p> |
| 2 <i>"How will you protect wildlife?"</i> | <p>During construction, we will put the highest levels of mitigation into place to ensure all existing ecology is recorded and relocated to areas away from the main works.</p> <p>We will plant hedgerows, wildflowers and trees, such as black poplar, willow and oak, to replace what is removed and to enhance connectivity and biodiversity. Views beneath the viaduct are maintained through the use of wetland meadows, which allow visual connection beneath the viaduct.</p> |

Landscape design feedback summary

You asked the following questions around the landscape design. Here are our answers:

| You said | We did |
|--|---|
| 3 <i>"How can you enhance biodiversity of the landscape?"</i> | <p>We will retain as much local flora and fauna as possible within the landscape design. All additional mitigation planting and landscaping will incorporate species specific to the area, while also enhancing and creating ecologically important wetland areas.</p> <p>Working with our specialist landscape architects, we continue to develop our landscape proposals to provide both screening and enhancement. Where possible, we will begin planting in advance, particularly black poplar, to help screen the viaduct. We will also include bird and bat boxes within the landscape.</p> <p>We will enhance biodiversity further by creating new habitats beneath the viaduct that will link to the new local wildlife site to the east. We will replace low-value arable land with high-value areas of wetland and woodland. Local species including willow, black poplar and oak trees are rich in biodiversity and offer connectivity between different habitat types. The new wet meadow species may include wild carrot, cowslip, self heal, yarrow and lady's bedstraw, which will enhance the biodiversity of the low-lying clay vale and promote biodiversity.</p> |

Landscape design feedback



Artist's impression of the viaduct 10-15 years post operation

Landscape design feedback



Existing habit retained with marshland and along riverbanks.

Artist's impression of the viaduct 10-15 years post operation

Gallery images



Artist's impression of the viaduct in autumn 10-15 years post operation

Gallery images



Artist's impression of the viaduct in autumn 10-15 years post operation

Gallery images



Artist's impression of the viaduct in summer 10-15 years post operation

Gallery images



Artist's impression of the viaduct in summer 10-15 years post operation

Gallery images



Artist's impression of the viaduct in summer 10-15 years post operation

Construction feedback summary

You asked the following questions around construction. Here are our answers:

| You said | We did |
|--|--|
| 1 <i>"How will you minimise disruption on the local roads?"</i> | We have to adhere to the Environmental Statement and Code of Construction Practice in relation to noise, dust and vibration. Where we can, we will put mitigation into place, such as acoustic barriers, to help reduce local impacts. An internal access road will also be created, keeping heavy construction vehicles off the local road networks. The location of strategic batching plants in the wider area will reduce the need for concrete deliveries and other vehicle movements. We have implemented a new traffic guide, which shows the local permitted traffic routes and compound entrances with expected number of vehicle movements in these locations at peak times. |
| 2 <i>"Can you make the colours of the elevated viaduct and piers compatible with the colours of the local environment?"</i> | The lighter colour of the viaduct is chosen for its low maintenance and natural weathering over time. Vegetation, together with the natural folds of the landscape will screen the viaduct from most vantage points. There will be natural screening from trees such as black poplar, oak and willow, with advance planting taking place as early as possible. Weathering steel will also be used, which fits into the rural landscape. |
| 3 <i>"How are you maintaining access to local properties?"</i> | We will take care to provide access to local properties wherever possible. Where it is necessary to alter or remove access roads or tracks, we will provide temporary alternatives. We will engage with communities and speak with affected landowners where necessary. |

Construction feedback summary

You asked the following questions around construction. Here are our answers:

You said

We did

4

"Can you use high-quality materials, concrete etc. that are less susceptible to bleaching as the structure ages?"

All materials will be of the highest quality, ensuring low maintenance needs and a long lifespan. Materials will also allow for natural weathering, such as weathering steel.

5

"What will you do to minimise dust generated by construction activity?"

Site access roads and wheel washing methods will minimise dust generation. When aggregate is delivered to site, vehicles will be sheeted. The Code of Construction Practice contains control measures and standards that we have to adhere to on all work sites. We have air quality monitors in place across the scheme and in instances where dust is created, we will employ water bowsers and dampening techniques where necessary. When work sites are established, this information is reported on a monthly basis.

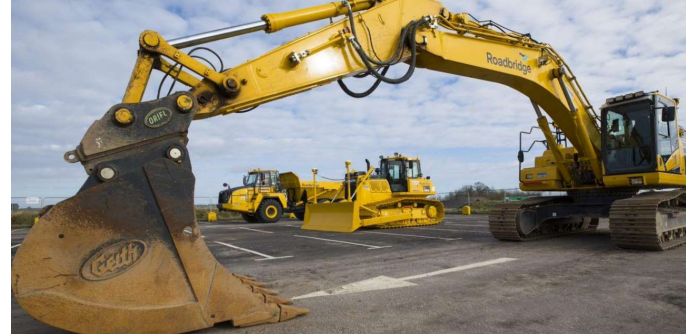
We will use precast elements to construct the viaduct, which will be brought to site and lowered into place. This offers a higher-quality product and reduces material deliveries.

6

"There has been limited information about construction work so far, how can we be kept better informed?"

There are 3 monthly construction lookaheads published on the HS2 in your area section on the website. This is also where you'll find our advanced works notices which give you further information and timescales for works which may affect you. You can also come to one of our online or in person drop in sessions at our Mobile Visitor Centre.

Construction progress photos



These photos show our site progress in the Aylesbury area (anticlockwise): stockpile formations being created, steel reinforcement structures being prepared for concrete pouring to create a solid slab, large plant machinery arriving on site and wheel washing systems in action.

Social benefit, employment and training

You asked the following questions around what HS2 means for your community. Here are our answers:

| You said | We did |
|---|---|
| 1 <i>"How will the local area and the people who live here benefit?"</i> | <p>We will have clear information about jobs and careers on our website and at community meetings. We will also include information about supply chain opportunities for local businesses and support, where we can.</p> <p>We are already working with some businesses to make them part of our catering facilities and 65% of our suppliers are SMEs (small and medium-sized enterprises). Our teams recently exhibited at the Bucks Skills Show, Buckinghamshire's largest skills and careers event. We were on hand to talk about career opportunities, EKFB's new apprenticeship intake, and to offer advice on how to break into the construction industry.</p> <p>We are also working with local Jobcentre Plus branches in Aylesbury and Milton Keynes to organise "Insight Days". This is an opportunity to showcase the project and discuss job roles with residents. We will also attend an employment fair organised by the Healthy Living Centre in Aylesbury this spring.</p> |
| 2 <i>"Will you provide training, employment opportunities and apprenticeships?"</i> | <p>Working alongside our supply chain, our aim is to create employment and provide training opportunities to local people and those from underrepresented groups. During the peak of our construction activity, we will need a lot of staff with a wide range of skill sets, from operational support to technical specialists, including apprentices. Please visit our careers page for the latest vacancies: careers.ekfb.com.</p> |

Social benefit, employment and training

You asked the following questions around what HS2 means for your community. Here are our answers:

| You said | We did |
|--|--|
| 3 <i>"Will you provide opportunities for unemployed, disadvantaged and underrepresented groups?"</i> | We are working alongside local charities such as Transitions UK Partnership to provide mentoring to young adults in Aylesbury at risk of criminal activity to help provide support and guidance into future careers. As part of our local community outreach, we are commissioning research through the Healthy Living Centre charity to talk to local residents about jobs and training opportunities in Southcourt and Walton Court, Aylesbury. We are also establishing working partnerships with the Shaw Trust, Youth Build UK, Buildforce and Young Adult Carers (Aylesbury) to tap into local unrepresented talent. |
| 4 <i>"Can you work with local schools and colleges?"</i> | We provide a supportive schools programme aimed at those of school-leaver age to promote apprenticeship schemes. Some recent work includes delivery of a virtual work experience at Pebble Brook School (Aylesbury), a careers talk at the Mandeville School (Aylesbury) and a competition and STEM workshop at the Misbourne School (Great Missenden). We will be also supporting the "Dear Humanity" project at Ashmead primary school (Aylesbury) during the summer term. We are starting to work with both Bucks and Milton Keynes colleges on pre-employment and training programmes. |

Apprenticeship case study

Throughout the project, we are always looking to recruit young people to our apprenticeship schemes who want to kickstart their engineering careers.

Let us introduce one of our EKFB apprentices, Liam.

Liam has started his apprenticeship journey with EKFB and is part of our Aylesbury team.

Before he applied for a career with us he was working within the retail sector and completing his A-Levels.

He applied to the scheme as he was interested in seeing how projects work from start to finish and how each team works to produce the final product.



After completing my apprenticeship, I would like to stay with the company and progress through my career, continuing to learn and develop my skills.



What are the key things you have learnt so far?

- *An active approach to innovation and construction. The site work I have been involved in so far has included setting out, surveying, and liaising with subcontractors.*
- *Communication is key, and networking is important to learn and progress. You have to throw yourself at every opportunity to get the best outcome.*
- *How much I enjoy being out on site with the subcontractors and finding solutions to problems.*

Liam is just one of many apprentices who will be helping to deliver the Thame Valley Viaduct along with other structures in the Aylesbury area.



Liam in his personal protective equipment on site in Aylesbury

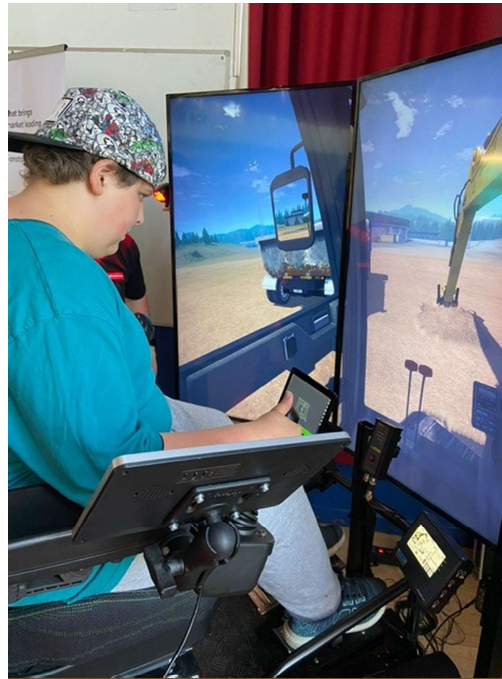
Community projects

You asked us what HS2 can do for your communities

We have already been involved in many local community projects, from building wildlife ponds for local schools to taking our plant simulator in for school open days and providing timber for local community groups to reuse.

From March 2022, there is a new mobile visitor centre in use in Aylesbury, where you can come and find out more information about the project and speak to our local engagement managers.

We provide newsletter updates, local traffic route guides and advanced works notices, all of which are available on the HS2 website to keep you up to date with the works in the Aylesbury area.



These photos show how we engage with local communities (anticlockwise): community timber reuse programme, our recruitment stands at the Bucks Skills Show 2022, our new mobile visitor centre, wildlife pond volunteer programme for Waddesdon Primary school, and earthworks simulator at Pebble Brook School.