Context

Birmingham and Fazeley Canal Viaduct Location

The Birmingham and Fazeley Canal Viaduct is located to the north of Water Orton, about 1.1 miles west of Lea Marston. The structure lies north of Junction 9 of the M42 Motorway, adjacent to the East Midlands Spur, where the HS2 line divides to run north. The viaduct will cross over the Birmingham and Fazeley Canal after crossing the M42 Motorway to the south via the HS2 M42 Marston Box structure. Cuttle Mill and the surrounding ponds are immediately north of the viaduct.

Birmingham and Fazeley Canal Viaduct context area plan

**Landscape and Engineering design for East Midlands Spur Phase 2b is illustrative at this stage and subject to future detailed design*

0 50 100 150 200 250m

N

Birmingham & Fazeley Canal Viaduct

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Our design approach

Our approach for the detailed design phase of the scheme is focused on the principles set out in the HS2 Design Vision document. These ensure that People, Place and Time are considered in all aspects of our work. In addition, we are working in accordance with the HS2 Landscape Design Approach document. The vision and principles are summarised to the right.

Our design vision for the Birmingham and Fazeley Canal Viaduct stems from how people use and experience the canal. They are often about a journey, either by boat or on foot, with a series of points of interest along them, notably around locks. Here, users take the time to stop and appreciate the landscape surrounding them. Our aim for this viaduct is to create a new moment along this journey and one which can become a waypoint for the future. The architectural design and environmental integration have achieved this by using the principles of Conserve, Enhance, Restore and Transform.

Conserve

A sensitive setting requires a design approach that successfully screens and integrates HS2 and develops measures to conserve and enhance the area.

Enhance

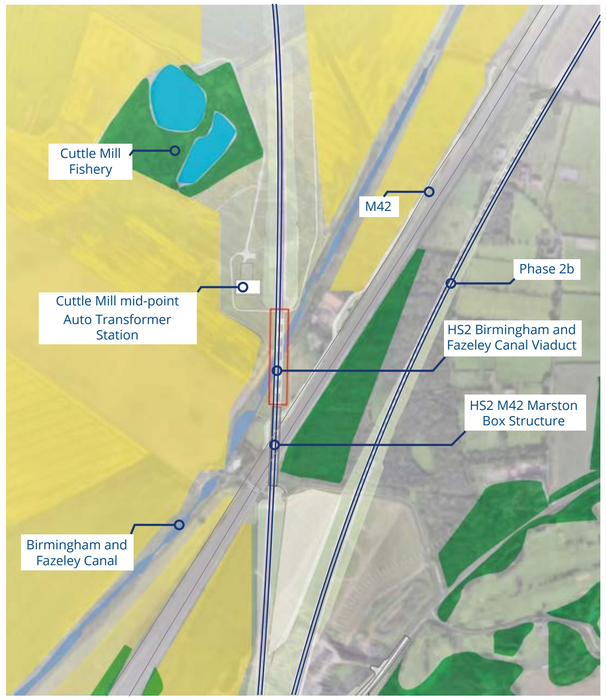
A location where HS2 may be easily visible will need a bold design approach to enhance and protect the local area.

Restore

HS2 crosses land that may have lost or is losing original features and qualities. Our opportunity is to restore and significantly improve these areas.

Transform

Some urban and rural areas where HS2 will operate may be in poor condition. We aim to bring bold transformation to these locations to provide community benefits and support local economies.



Conserve

- Conserved agricultural lands
- Conserved woodlands
- Conserved ponds
- HS2 route

Enhance

- New woodland
- Grass area
- New water features
- New hedgerows
- HS2 route

Restore

- Existing hedgerows
- Restored hedgerows
- Existing woodlands
- Restored woodlands
- Existing paths
- Restored connections
- HS2 route

Transform

- Landscape bund
- Embankment
- Cutting
- New ponds
- Ecological area
- Structure
- HS2 route

**Landscape and Engineering design for East Midlands Spur Phase 2b is illustrative at this stage and subject to future detailed design*

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Public engagement feedback

Previous Engagement

- Booklet distribution - July 2021
- Online event - July 2021

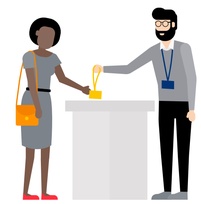
You said

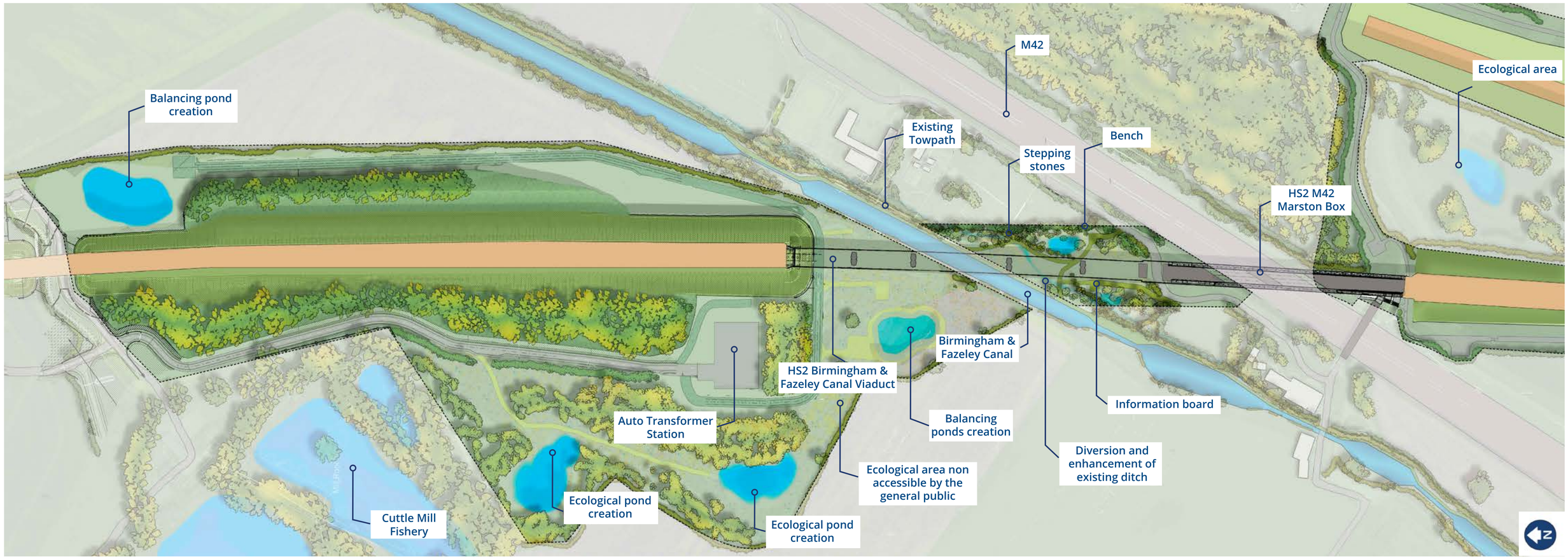
“Community garden, somewhere for school children to learn about local ecology – pond dipping, beehives, butterflies, bird boxes, etc.”

“Planting/ wildlife meadow for bees and shielding view of M42 with trees.”

“There could be benches and a picnic area for people walking the towpath.”

“It would be better for wildlife and noise screening from the M42 if the towpath hedge were reinstated under the viaduct rather than being replaced by a fence.”





Birmingham and Fazeley masterplan

** Area to the north of the canal will not be publicly accessible*

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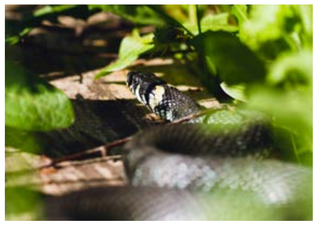
Preserving nature - Landscape proposal (North)

Responding to: “Possible opportunities for bird watching and preserving nature in the area.”

The North area will be closed off from public access, but is easily visible from the towpath on the southern bank of the canal. Within this inaccessible zone we have taken the opportunity to create a diverse ecological area. Notably, ponds with different water levels and various planting zones, including woodlands, woodland edges and hedgerows to create different habitats for flora and fauna.

The proposed planting forms an ecological corridor, connecting the Cuttle Mill fishery ponds and woodlands to the HS2 green corridor and the East Midlands Spur site on the southern side of the canal.



Grass Snake

Otter

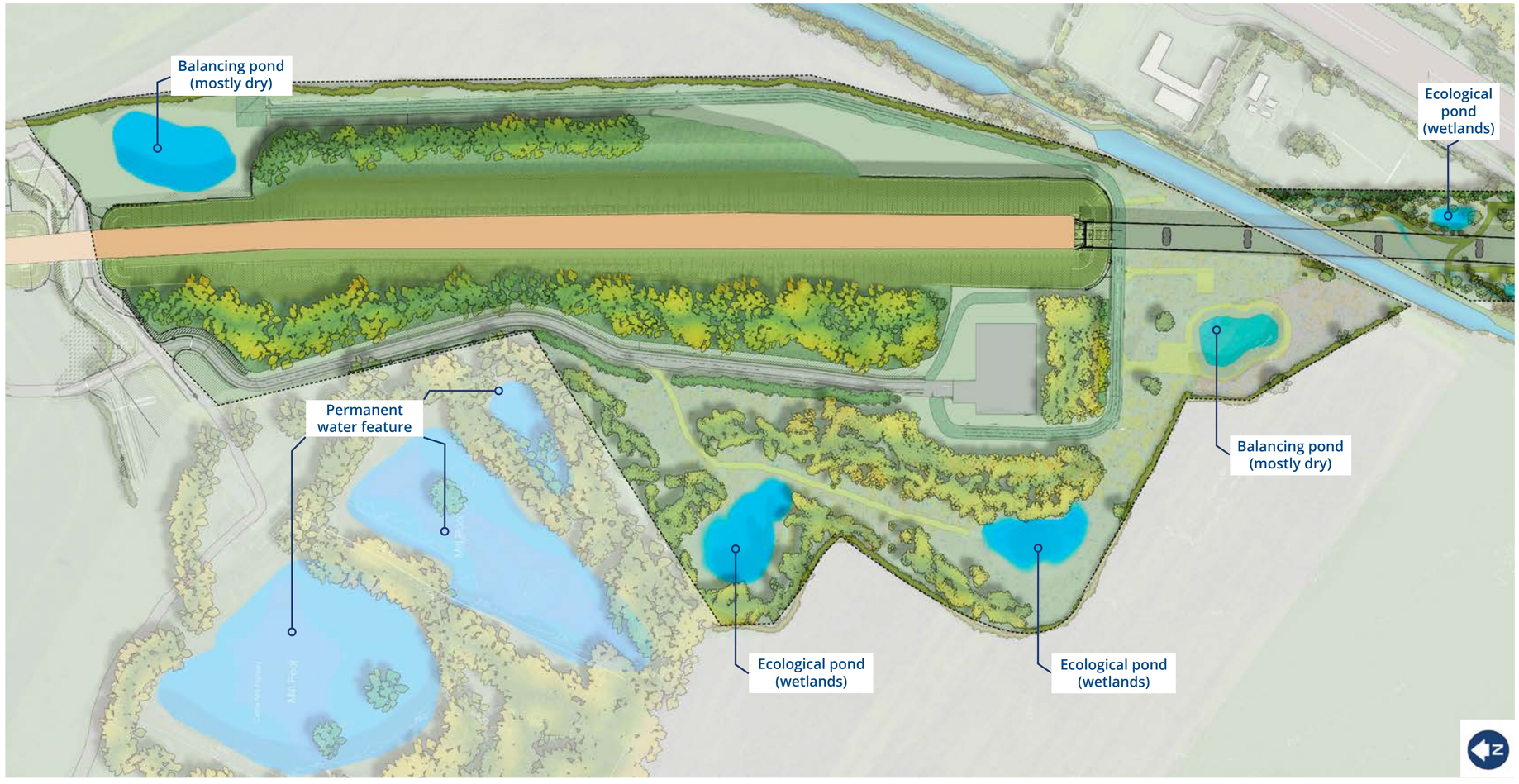
Marsh frog

Bat

Badger

Wet season ecological pond

Dry season ecological pond



Landscape proposal masterplan (North)

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Communal spaces - Landscape proposal (South)

Responding to: “There could be benches and a picnic area for people walking the towpath. Also, possibly an information display so everyone can understand and respect the area.”

The South area, in contrast to the Northern one, will be entirely open to public. We introduced informal paths between the towpath and Seeney Lane to enhance connectivity. The existing small ditch running along the towpath will be slightly diverted and enhanced, and will create an informal border between the towpath and the area south of the canal. Ecological ponds will be set to reinforce the ecological purpose of the green corridor and provide enhancement to the public. Finally, the hedgerow running along the towpath will be reinstated on a new alignment and will enhance the public’s experience, while maintaining bat corridors along the canal.

Example image of grass path

Example image of wet areas

Example image of ditch (after rainfall)

Landscape proposal masterplan (South)

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Planting types

Responding to “Planting/Wildlife meadow for bees and shielding view of M42 with trees.”

The planting palette will be mostly made up of woodland planting on the North area, to smoothly integrate and extend the existing woodlands of the Cuttle Mill Fishery. On the southern side, mainly bushes and isolated trees will be used due to the reduced scale of the area. They will highlight the architecture of the viaduct whilst screening most of the views towards the M42.

Existing hedgerow networks will be reinstated and completed to reinforce ecological corridors. Species rich grassland will be used to provide habitats and food for bees and insects. Wet planting will be set in the ecological ponds.

Example of meadow planting

Example of low hedgerows

Example of high hedgerows

Example of bushes

Example of woodland

Plan overview showing planting types

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Key Views

View of Pier 3 from the footpath looking north east - 10 years post-construction

Aerial view of Northwood embankment and Auto Transformer Station - 10 years post-construction

View of the Birmingham and Fazeley Canal Viaduct from the Canal looking north east - 10 years post-construction

Birmingham & Fazeley Canal Viaduct

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Key Views

View of Pier 3 looking south east - 10 years post-construction

View of Pier 3 from footpath - 10 years post-construction

View of the Birmingham and Fazeley Canal Viaduct from footpath looking south west - 10 years post-construction

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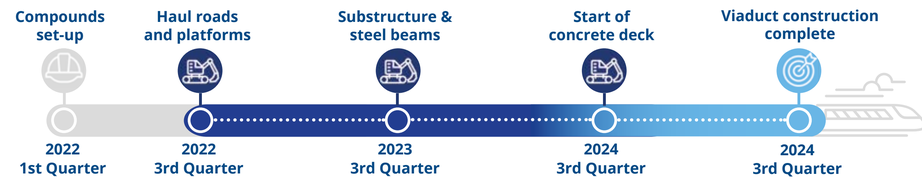
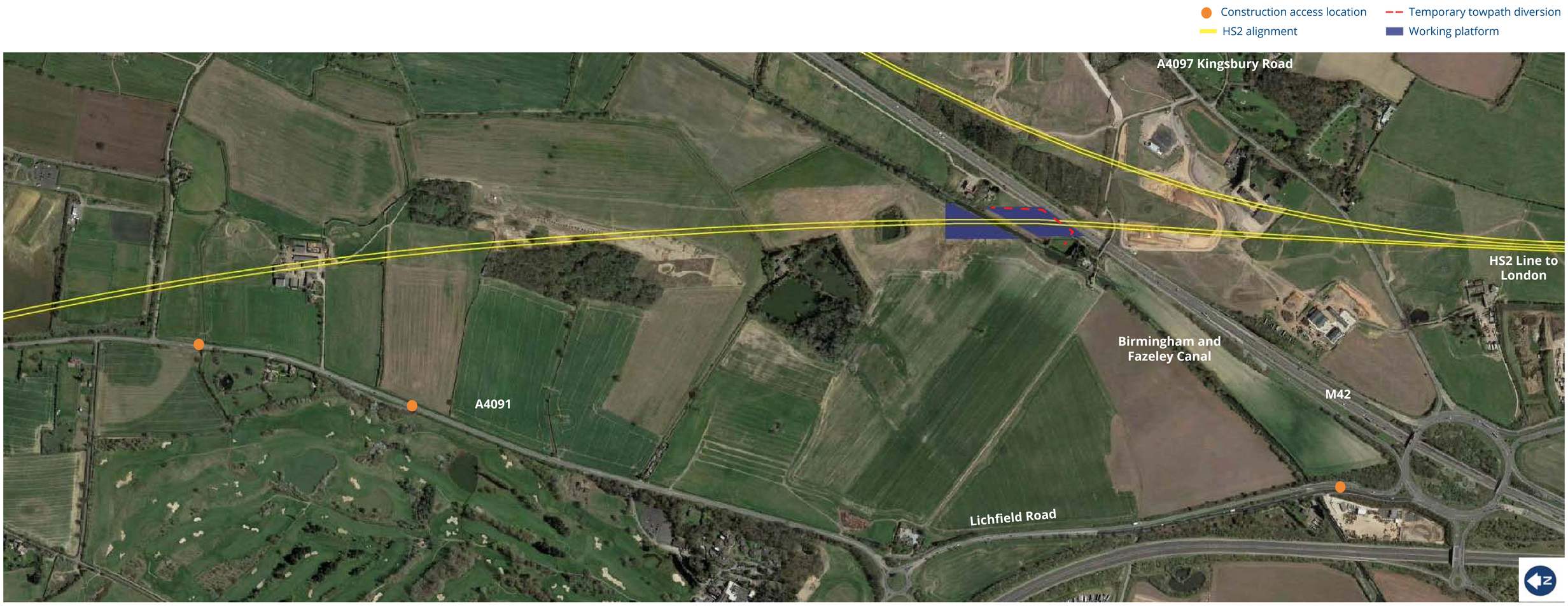
Construction activity and timeline

To reduce the impact of the construction of the Birmingham and Fazeley Viaduct on the canal users and walkers, several measures have been taken, such as:

- Creating private haul roads to cut down our use of public roads
- Creating pre-assembled steel deck segments away from the structure to make best use of the space
- Use of protective measures to ensure the stability of the canal during the works
- Performing works in the proximity of the canal only during the “stoppage period” (November to March), minimising the effect of the works to the use of the canal and the towpath. We will keep canal boat and towpath users informed of future closures.
- The piers will be created first, then the steel beams over the canal will be transported and lifted into position. Precast concrete slabs at the bottom of the steel beams will create a smooth underside finish, preventing bird perching. This method of construction will reduce the time taken for the works.

Programme of work for the Birmingham & Fazeley Canal Viaduct
(Anticipated timeline - this could be subject to change)





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