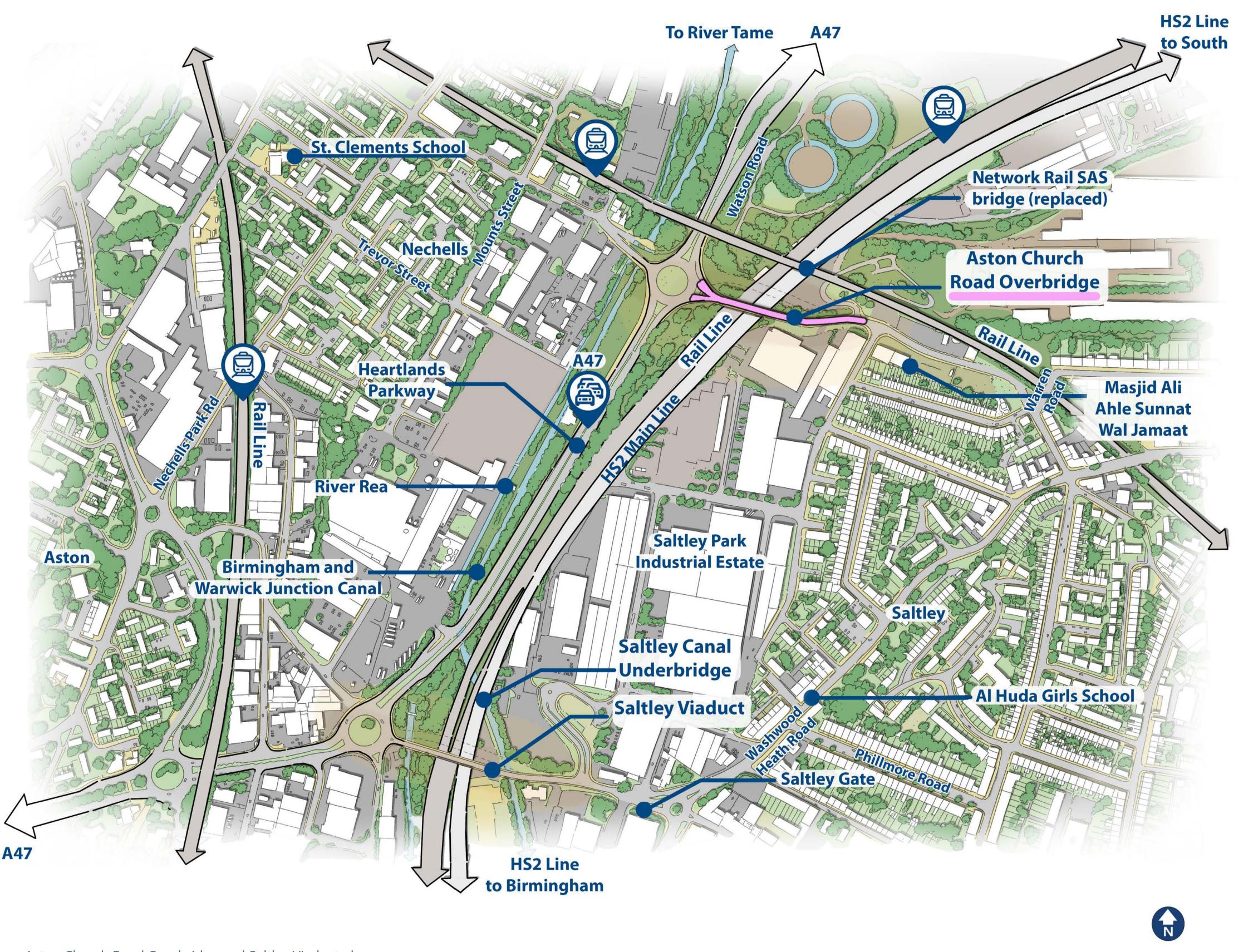


### **Aston Church Road Overbridge location**

The area in which the Aston Church Road Overbridge will be located is entirely urban, with land use comprising light industrial and commercial or infrastructure in Saltley, Washwood Heath and Nechells. These areas make use of the lower lying land close to the rivers Tame and Rea and also the historical infrastructure corridor that follows the valley. The nearest residential areas are Washwood Heath to the east, with Nechells to the west slightly further away.



HS2 route map



Aston Church Road Overbridge and Saltley Viaduct plan



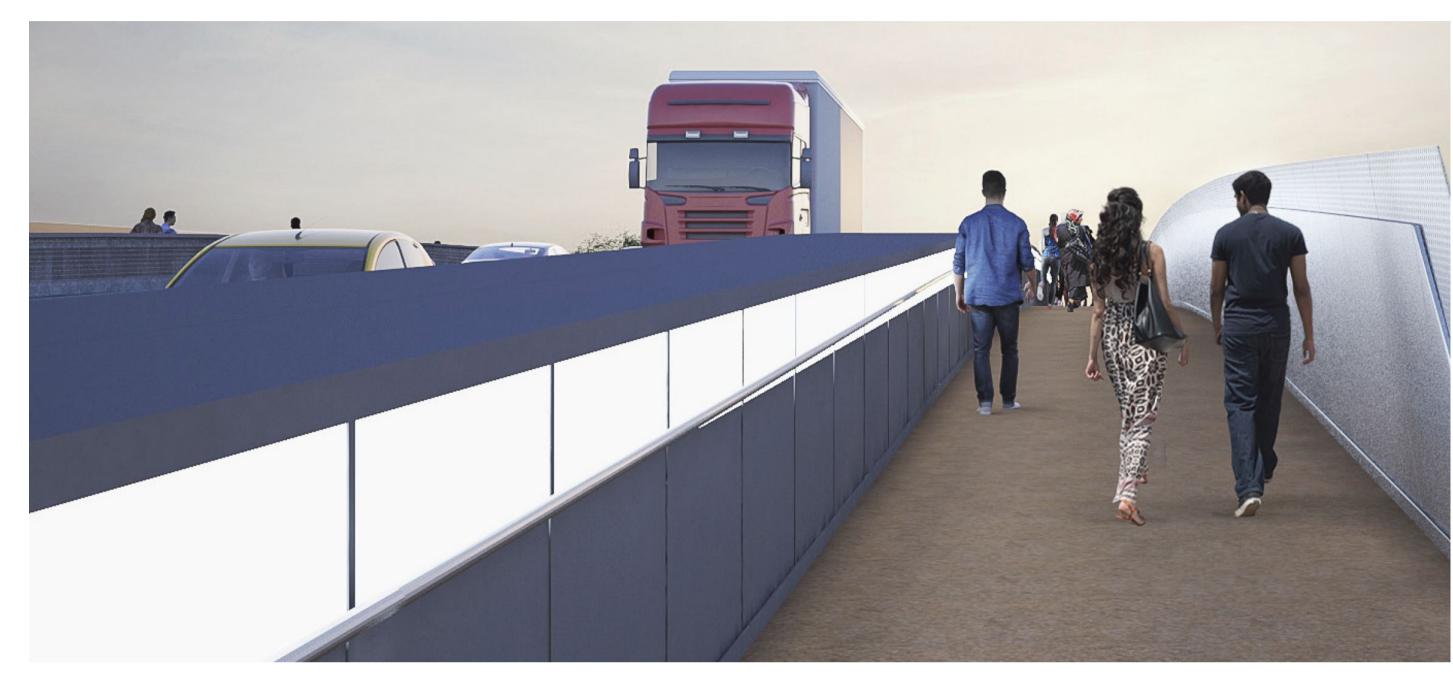






## Design development (P)

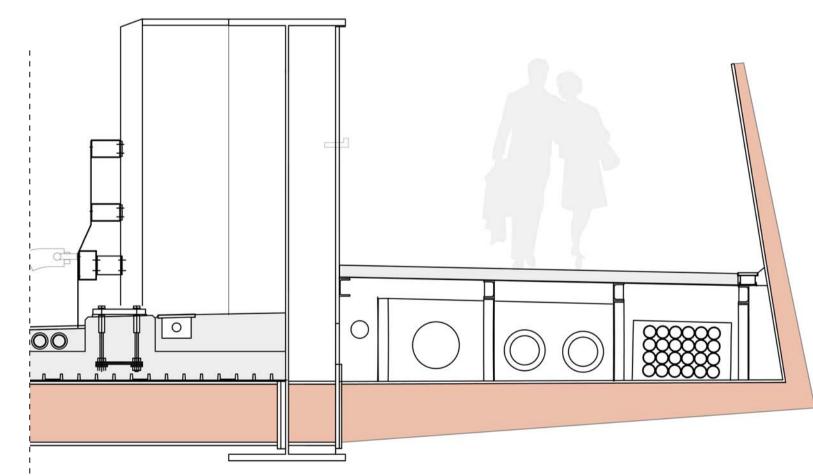
### Initial design shared with the public (February 2021): stainless steel perforated panels



**Initial design:** Walkway view illustrating the design intent of the perforated stainless steel parapet

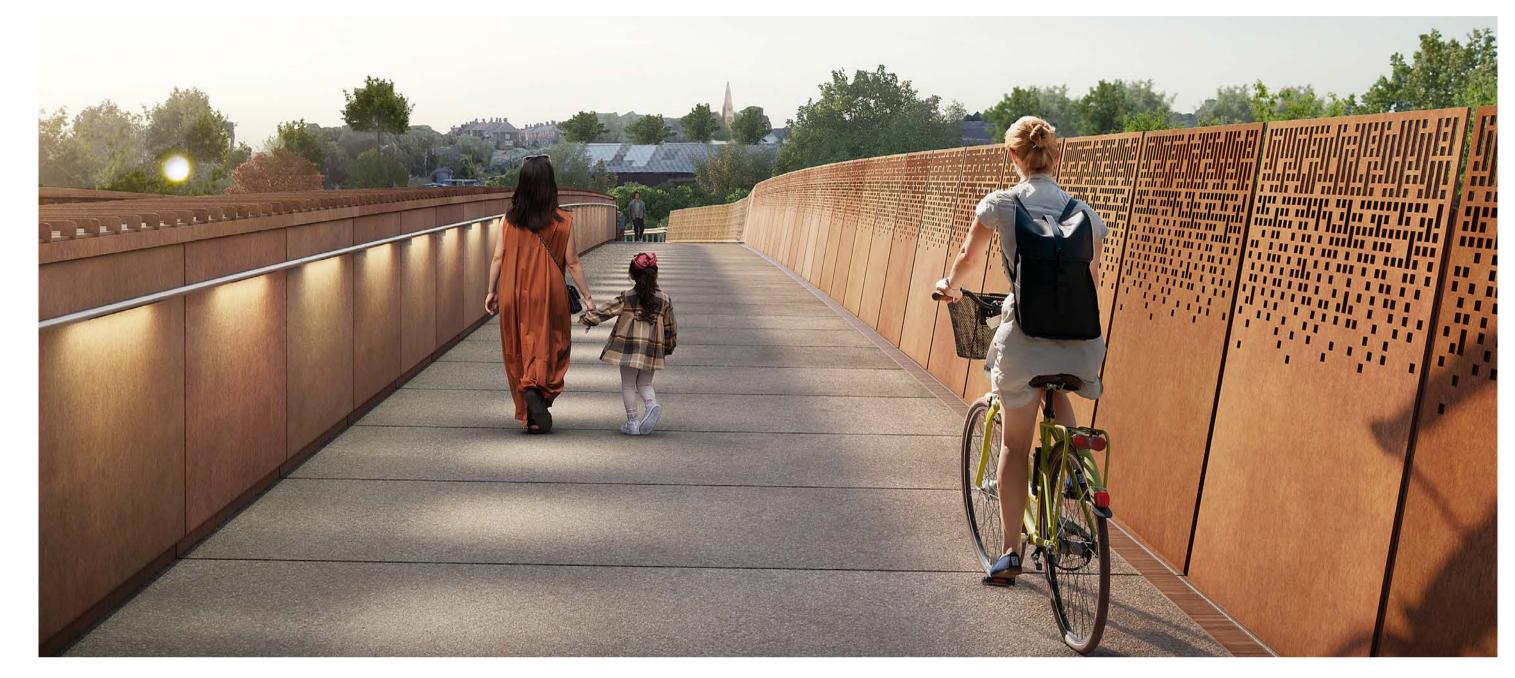
### **Design overview**

- Steel girders are used on both sides of the structure separating the highway from the pedestrian walkways
- The parapet along the edge of the walkways is made of perforated stainless steel panels designed to allow visibility beyond the viaduct
- To illuminate the walkway along the pedestrian route during night time, a light box is integrated on the top of the girder



Steel panel design: section through walkway

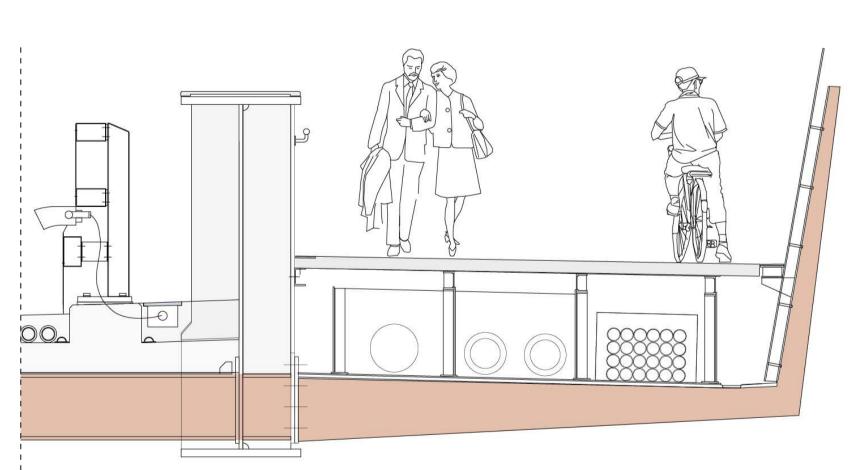
### **Current design: weathering steel perforated panels**



Current design: Aston Church Road Overbridge walkway view showing warmer weathering steel balustrade.

### **Design overview**

- We replaced the stainless steel panels with weathering steel panels and designed a perforation pattern, making the bridge warmer and improving pedestrian experience
- · Using your feedback we further developed our lighting strategy of the structure. The proposal includes low level lighting to mitigate against any light spill affecting the train lines below
- We amended the parapet to be angled outwards and extended the walkway to 4 metre creating enough space to allow for cycle provision
- The girder height has been lowered to enhance the pedestrian experience and to improve user view across the road



Weathering steel perforated panel design: section through walkway







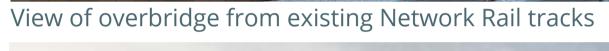


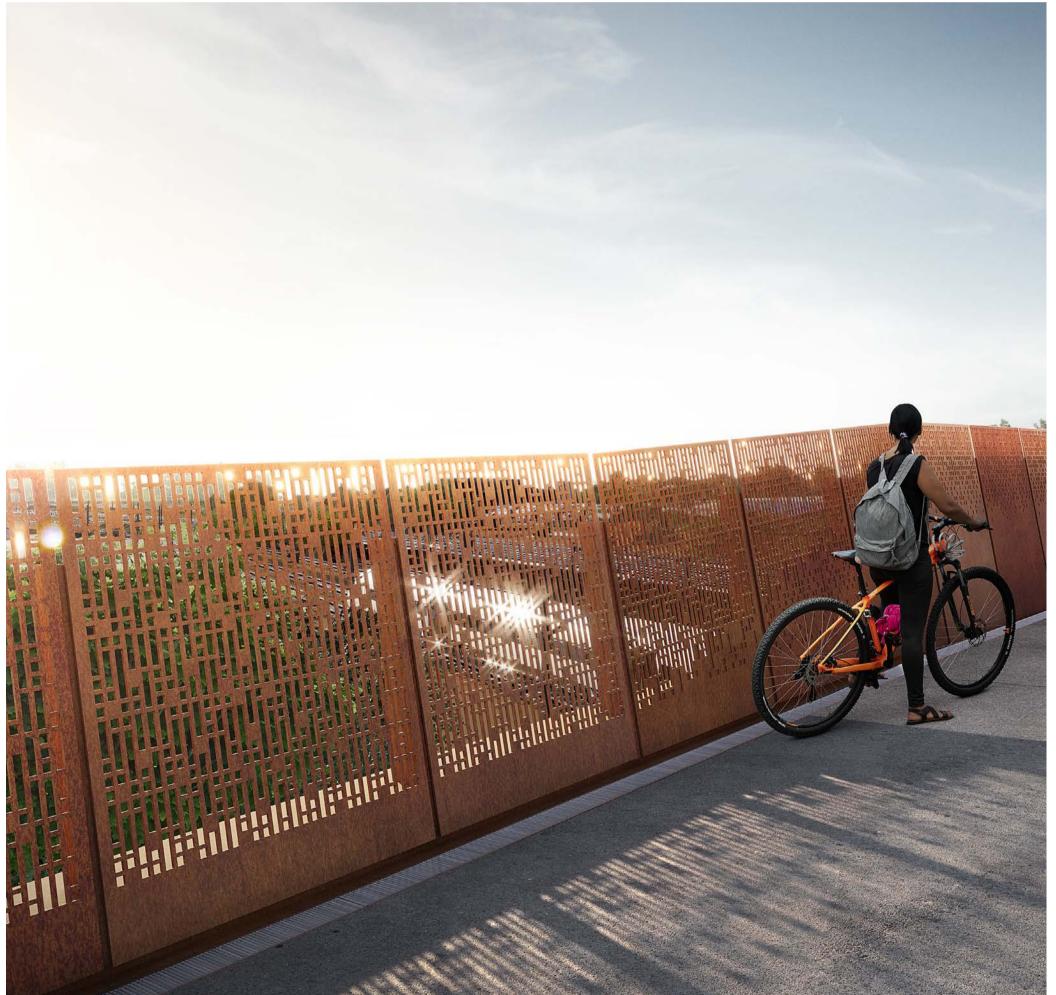
# Key views





Walkway view looking towards the east side of the bridge





1.5 metre fully perforated parapet when not over electrified lines



1.8 metre parapet with 0.3 metre high level perforations when over electrified lines

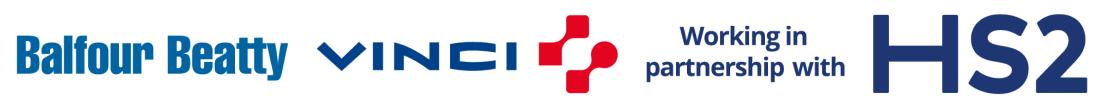












# Components (T)

Section A: Aston Church Road Overbridge

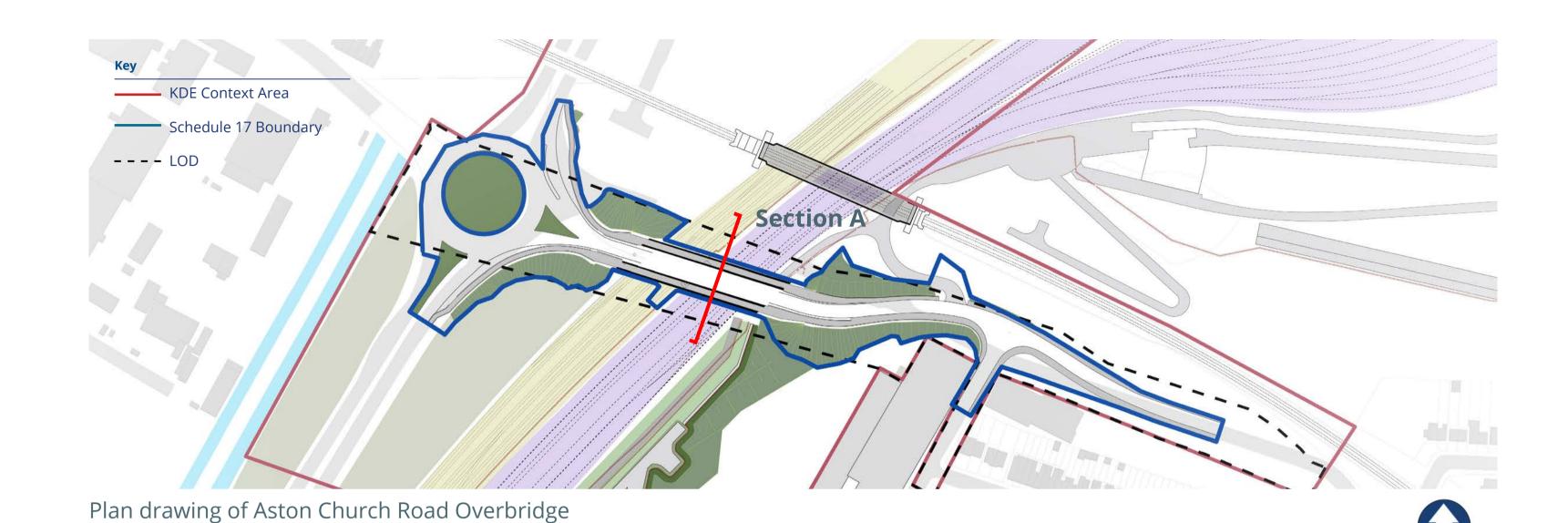
The design of the bridge has been informed by a series of discussions with the public. We developed each component of our design to respond to your feedback.

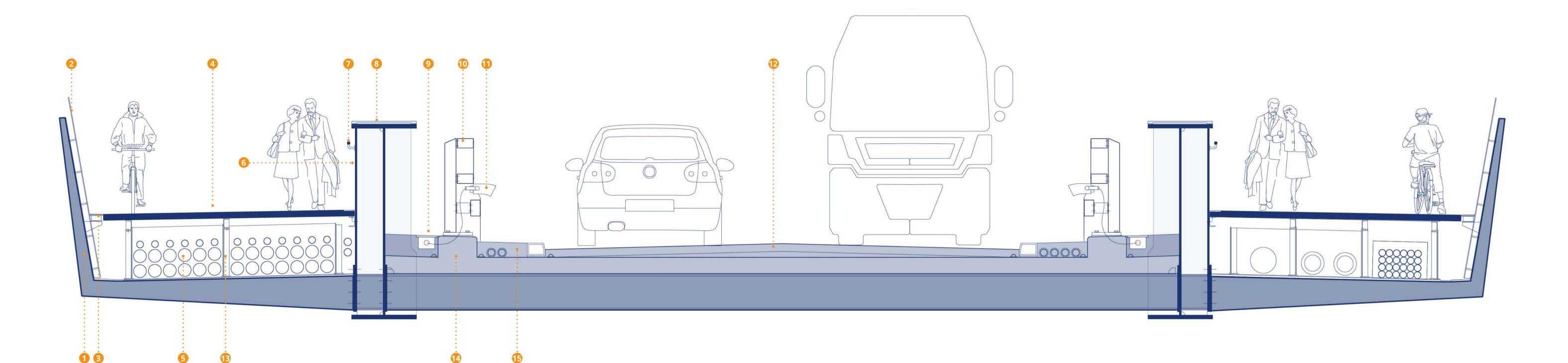
- The pedestrian walkway will be made of removable panels with an anti-slip finish.
- Weathering steel panels will enclose the utilities to the underside of the cantilevered walkway to achieve a cohesive, seemless design.
- Low level road lighting will be installed on the sides of the carriageway to reduce its environmental impact.

### Key

- Weathering steel rib
- Weathering steel parapet panels
- Orainage channel
- 4 Cantilevered walkway/cycleway
- Utilities

- 6 Weathering steel infill panels
- Integrated handrail lighting
- 8 Half through girder with walking deterrent
- Maintenance walkway
- **10** Vehicle Restriction Safety barrier
- 11 Low level road lighting
  - Carriageway
  - Secondary steelworks
  - Concrete slab
  - 15 Verge infill and services















## Integrated lighting (\*)

### You said...

77% of the responses to the questionnaires show a preference for the introduction of **LED lighting** in addition to the street lighting.

"Ensure lighting is bat friendly. Bats were extensively using the underside of the old viaduct by the canal for foraging."

"Please consider **female safety when designing** - otherwise go wild! Our city benefits from a great mix of tradition and modernity - it's what makes Brum fabulous".

### We did...

We have designed an LED lightling system that will seemlessly integrate with the design elements of the structure on each side of the pedestrian walkway to ensure the safety of the pedestrians at all times.

Positioning part of the lighting system underneath the handrail avoids glare and mitigates light spill, reducing the bridge's environmental impact. This also ensures visual comfort for pedestrians, cyclist and road users.

We also widened the pedestrian and cyle walway and included a second source of lighting on the parapet side of the walkway, mounted on the parapet itself, to allow for better visibility during night time.

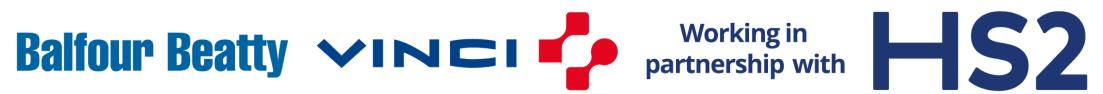


View of Aston Church Road Overbridge walkway at night









### Roadside landscape infrastructure (\*)



### You said...

"It is important to include green spaces in the area"

### We did...

We have conducted thorough research on which spaces surrounding the structure would be optimal for planting and what types of vegetation would be most appropriate. We have identified areas where we will plant woodland trees and shrubs species, part of larger National Vegetation Classification (NVC) palettes which contain a range of plant species present in this part of England.

The eastern approach embankment of the Aston Church Road Overbridge provides the opportunity to give more space to vegetation in this area. Both the north and south-facing sides of the eastern approach embankment will provide sufficient space for woodland.

In other locations, where there are localised constraints on the soil depth or where visibility lines are required, lower growing plants will be used.

#### Typical woodland shrubs



(Common dogwood)



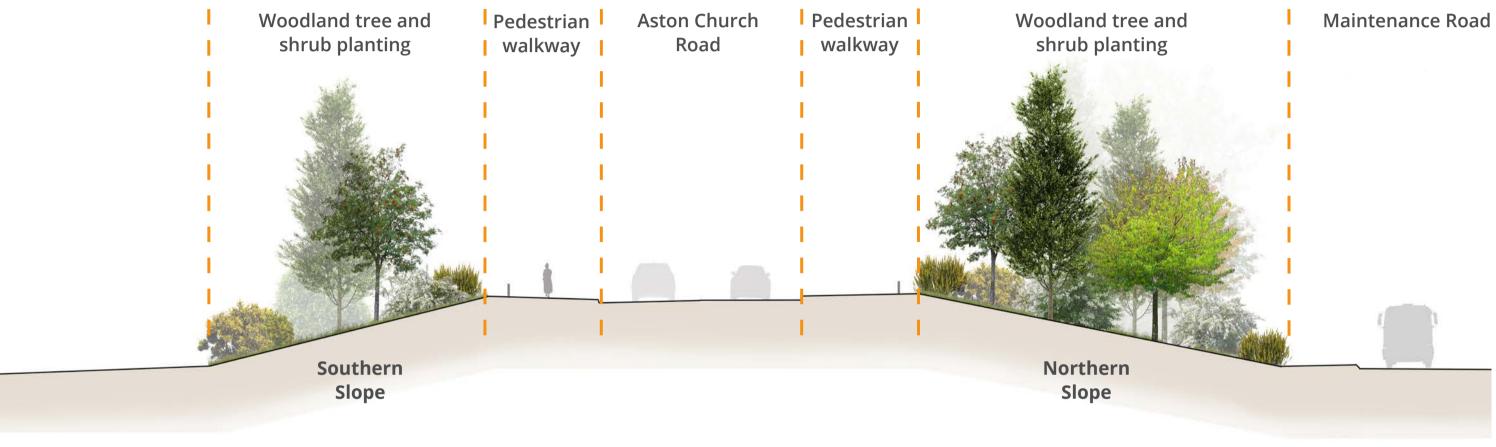
Corylus avellana (Hazel)



Prunus spinosa (Blackthorn)



Euonumus europaeus (Spindle)



Section B: Aston Church Road Overbridge landscaping plan







View of bridge showing the rich vegetation that will surround the area











## Local mosque engagement (=

#### You said...

On 12 August 2022 a community workshop was held at the mosque with a group of participants from the islamic community and users of the mosque.

They were asked to think about what a landscape in front of the mosque could provide for them and also what conditions and specifications to be aware of.

Below are the outcomes from the workshop:

- A simple and low maintenance design with connection with the Inslamic culture
- Seating areas for gatherings and elderly to be flexible for use in community events
- Flexible landscape that can be programmed for different uses
- Potentially incorporating features for wildlife for educational purposes
- Imaginary play space can be incorporated but not a formal playground
- Pathway that leads to Mosque entrance should provide a landscape pause for all users
- Community dining area could be useful to think into the space for larger events like Ramadan - space for stalls and setups
- It is important to incorporate lighting within the design as late night use of the mosque is very common

"We were really pleased to be involved in the workshop with HS2's Landscape Architects, which gave us a great opportunity to contribute to the design of the space outside the

Our creative ideas, such as mosaic tiles and Islamic calligraphy being incorporated, as well as making sure the space can be used for celebrations and events, have been taken on board and we're looking forward to seeing the end result"

Chairman of Masjid Ali Mosque









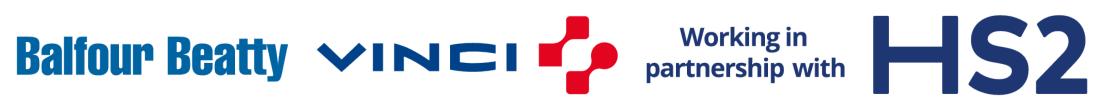










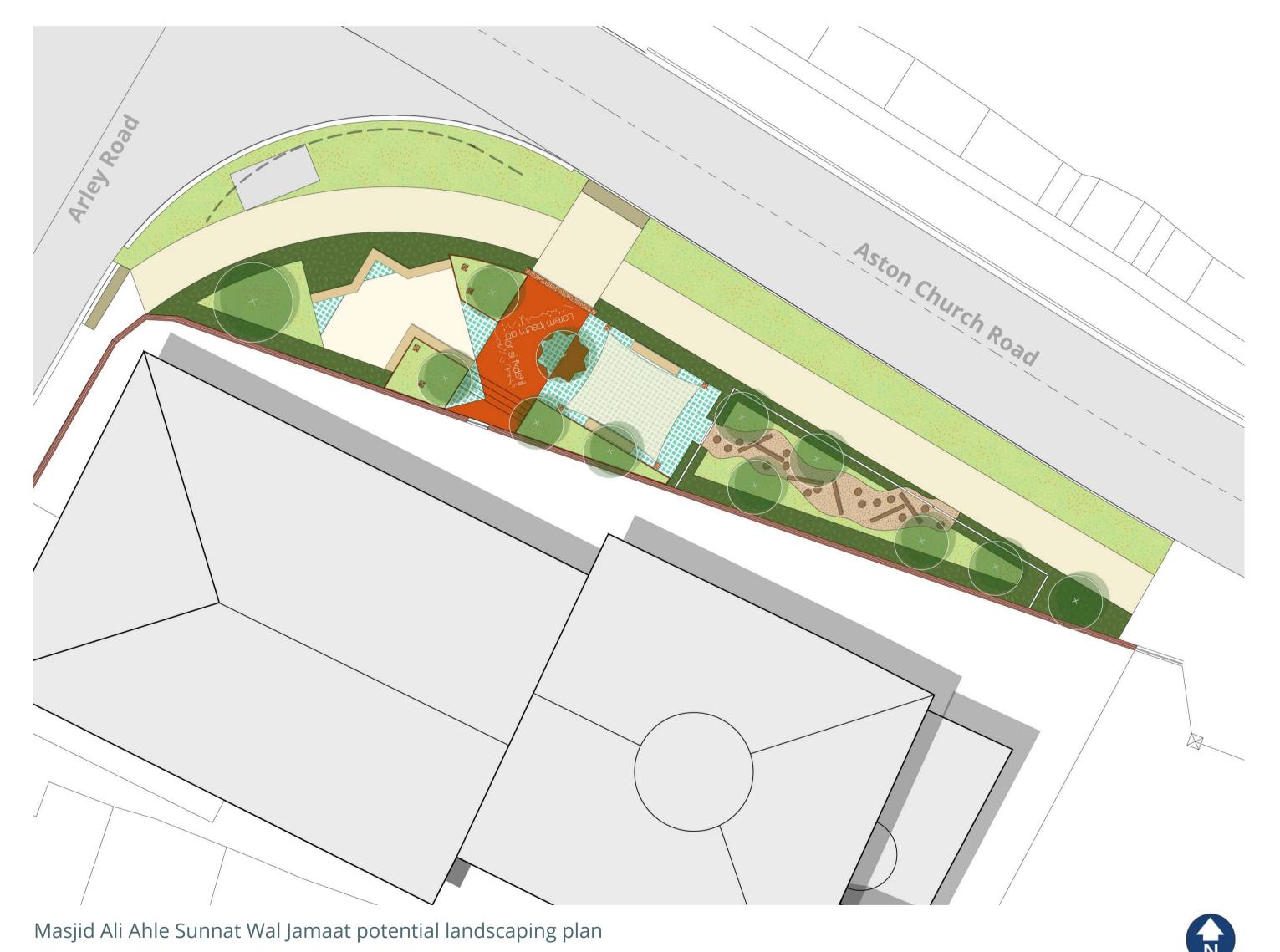


### Local mosque engagement (=)

#### We did:

The new alignment of Aston Church Road Overbridge with the creation of safe pedestrian crossing points has provided an opportunity to create a new public space fronting the local mosque. This space will also be next to the cycle and footway crossing of Arley Road, providing a link to the wider cycle network. It consists of a paved central area with seating which could act as an overspill space when the mosque is busy. It will also accommodate a cyclist crossing point providing a link to the wider cycle networks.

The space will be surrounded by low maintenance ornamental shrub planting, species rich grassland, along with much needed tree planting to provide shading and separation from the highway.

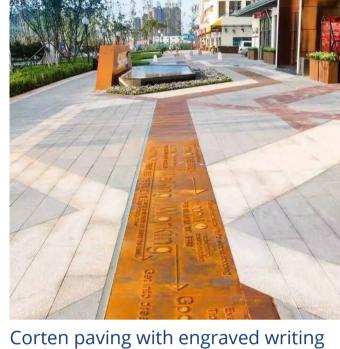


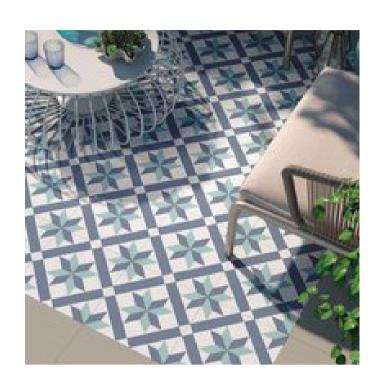
### Examples of elements we are considering as part of the ongoing design





Corten pillars with climbers





Mosaic tiles



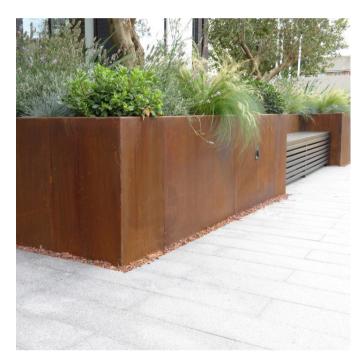
Entrance gate



Canopy/Cover



Weathering steel tree planting grills



Weathering steel planter

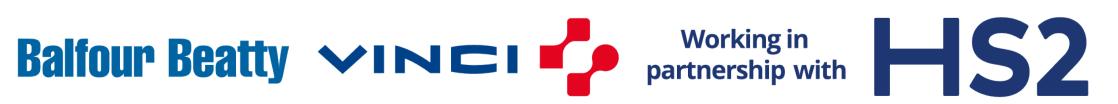


Masjid Ali Ahle Sunnat Wal Jamaat street view









### Construction activity and timeline (ES)











### **Aston Church Road Overbridge construction overview and timeline**

The new structure will be constructed offline, to the south of the existing bridge, with the bridge superstructure fabricated on-site and then driven into its final position.

The new bridge will be constructed whilst the existing structure is maintained. However, Aston Church Road will be closed to traffic to allow the approach embankments to the new overbridge and utility diversions to be constructed and new highway alignment to be completed.

Once construction is complete, traffic will be diverted on to the new structure. The remaining section of the existing bridge will then be demolished.

The expected duration for the traffic closure of the Aston Church Road will be 15 months.

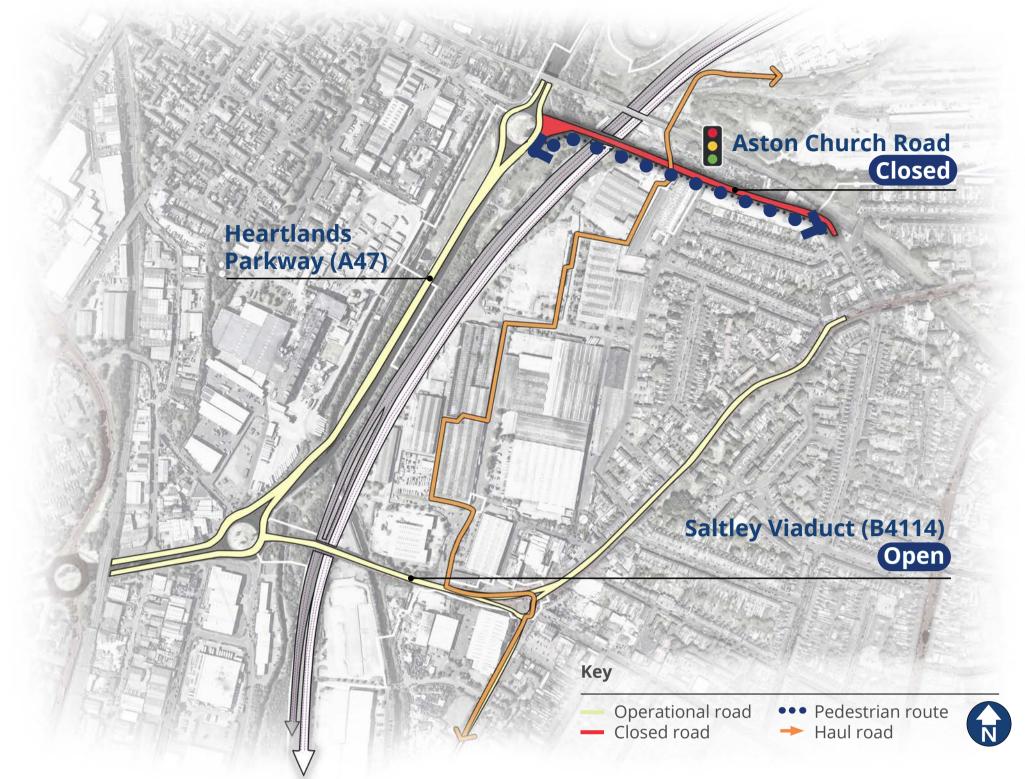


Anticipated timeline for Aston Church Road Overbridge

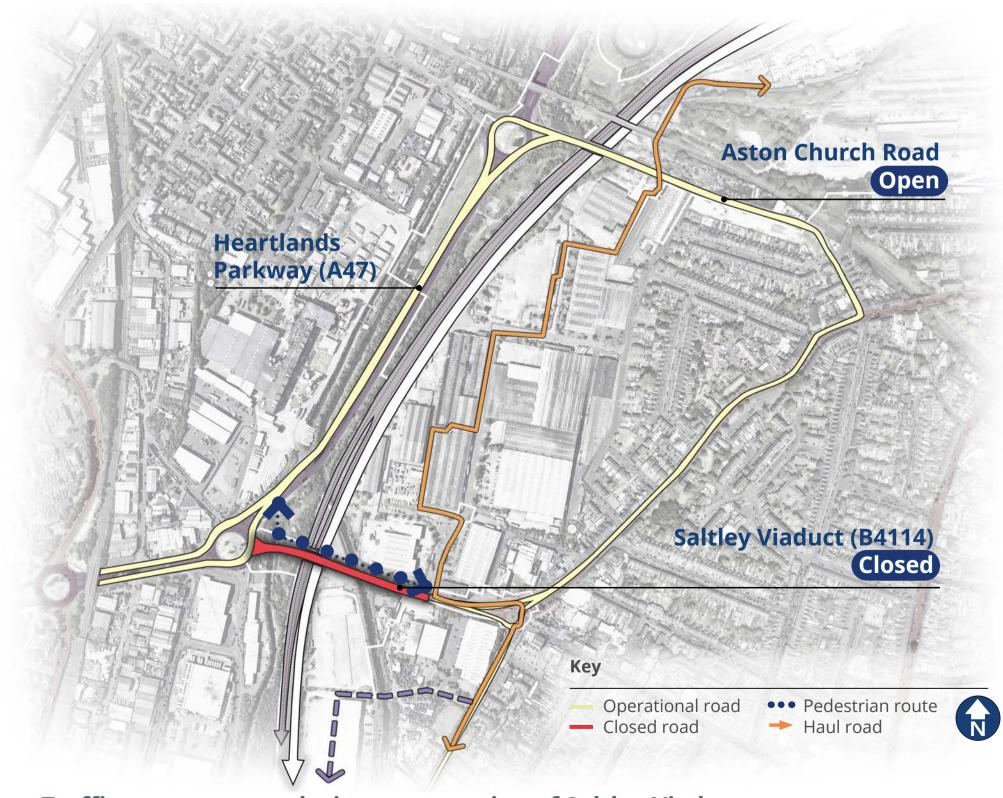
### **Construction methodology**

Our approach to rebuilding the Viaduct and Overbridge in Saltley will help to keep the community moving during construction. We will do this by:

- Creating our own private haul roads that we will use wherever possible, 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
- Piers are created first and then the steel deck will be transported and lifted into position
- This method of construction will reduce the time taken for the works
- A pedestrian route will be provided.



**Traffic management during construction of Aston Church Road Overbridge** 



**Traffic management during construction of Saltley Viaduct** 







