

Nine Elms to Pimlico Pedestrian and Cycle bridge

Challenge 1: integrating cycle and pedestrian traffic

The bridge will need to accommodate cyclist and pedestrian commuters, as well as leisure users, moving at a range of speeds and with different levels of confidence. To minimise the chance of collisions or disruptive experiences, we have created separate ramps for cyclist and pedestrian access on each end of the bridge. On the bridge deck, our design creates a natural protective separation between cyclists and pedestrians by guiding cyclists to the east of the cable structure and pedestrians to the west. Contrasting colours and tactile paving clearly identify the intended users for each route across the bridge.

Challenge 2: height across the river and the inherent access issues

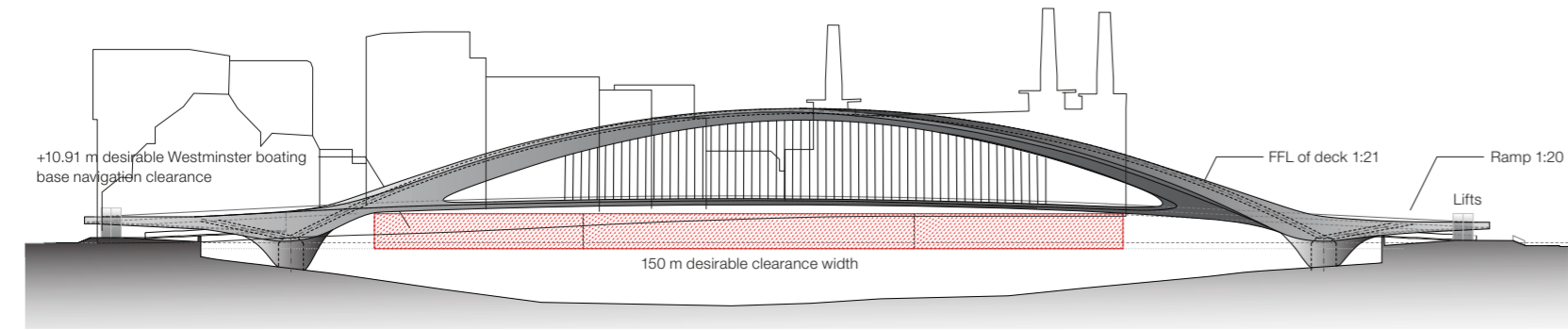
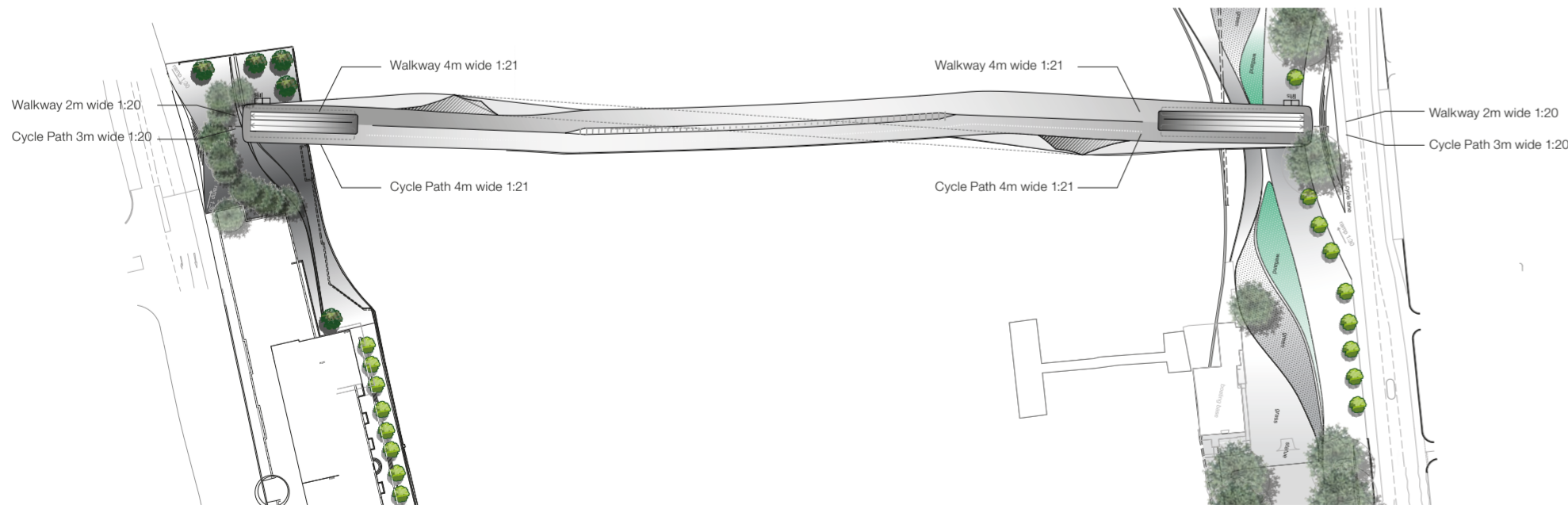
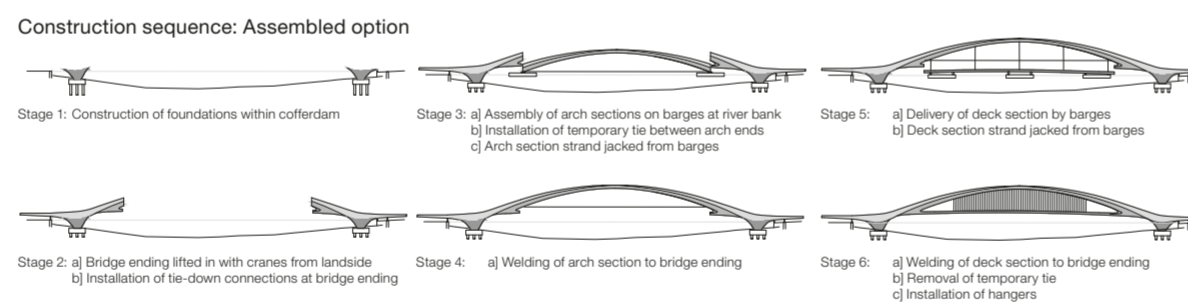
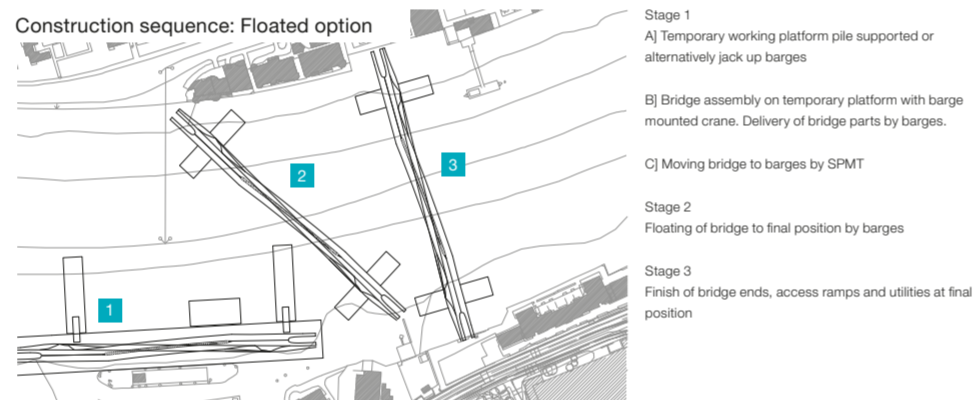
The bridge has been designed to give a clear height of approximately 11m above Ordinance Datum for the full width of the clear span, as requested by the Port of London Authority. Our design maximises ease of access for all users with compact, shallow ramps (1:20 gradient, with suitable level landings) integrated into the structure on both banks, coupled with two lifts at each landing point for those who prefer not to use a ramp. The landscaping on both sides rises gently by 1m to modulate the difference in level between the riverbank and the start of the ramps. We feel this combination strikes the appropriate balance between usability and ease of maintenance. It also makes the whole space equally accessible whether users are commuter cyclists, families with young cyclists or pushchairs, pedestrians, or individuals with sensory or mobility impairments.

Challenge 3: approach to construction to minimise impact on river traffic

Our design could be built using either of two construction techniques, which both minimise disruption to river traffic. The first method constructs the bridge on jack-up barges or a temporary platform on piles by the Nine Elms riverbank between Vauxhall and Chelsea Bridge. The completed bridge can then be floated into place in a single piece, which we anticipate would close the river for approximately 6 hours. The second method assembles the bridge in its final location, lifting the bridge ends into place on either side of the river using land-based cranes, before delivering the arch and deck by barge in sections. Deck and arch will then be assembled on the water and strand lifted into place. With this option, a temporary tie will be needed to support the ends of the bridge until the deck can be lifted into place.

Challenge 4: place making across the bridge and at its landing points

Our bridge is both a destination and a transport route. Clearly defined separate routes for pedestrians and cyclists, each wide enough for several users abreast, facilitate safe and efficient movement at different speeds across the bridge. At either end, viewing platforms give users a place to linger safely, exploring the new vistas across London offered by the bridge. On the northern bank, Pimlico Gardens is extended into a bucolic riverfront park prolonging the riverside walk and enhancing the local ecosystem by planting species which were once common along the Thames but are increasingly disappearing. On the southern bank, a new hard and soft landscaped area links the riverside pedestrian route with the new residential developments in Battersea and the US Embassy building. Nine elm trees will be planted here as a reference to the original elms (dating back to 1645) which give the neighbourhood its name. Permanent and temporary installations of public art will feature in both landscaped areas, featuring twinned commissions from US and UK artists, as well as art-related temporary events developed in partnership with local creative hubs and community groups. All areas are fully inclusive and accessible, with contrasting surface materials and colours, shallow grades, plenty of seating, and clear signage and wayfinding indicators.



North Riverside

South Riverside

North Riverside

- 1) Rushes to shallow wetland pools
- 2) Small cascades to pool edges
- 3) Water lilies in open water areas
- 4) Reeds adjacent to paths will provide spatial definition
- 5) Weir to wetland pools to regulate water level
- 6) Overflow edges to wetland pools
- 7) Shallow pools form part of SUDS system
- 8) Wetland vegetation
- 9) Water hyacinth will add colour and purify water
- 10) Circulation spaces will closely integrate with wetland pools and planting areas

South Riverside

- 10/15/16) A grove of Elm trees will define the southern bridge landing
- 12) Ramps will integrate with seating edges and steps
- 13) Textured paving to riverside plaza
- 14) Contrasting paving inlays and lighting will provide guidance





Design Statement

Our bridge is both a transport route and a destination in its own right.

Its defining feature is a single supporting arch which swoops diagonally across the river from northeast to southwest, anchored at each end by gentle access ramps and viewing platforms which give users a place to linger and explore new vistas of London. The bridge's support cables run down the centre of the bridge deck at an ever-changing angle, creating a gentle curve across the river and ensuring that every step along the bridge offers a different perspective. The central cables also define separate routes for pedestrians and cyclists, each wide enough for several users abreast, facilitating efficient movement across the bridge at a range of different speeds and safely accommodating families with children, casual strollers, individuals with sensory or mobility issues, and fast-moving commuters.

On the northern bank, Pimlico Gardens is extended into a bucolic riverfront park prolonging the riverside walk and enhancing the local ecosystem by planting species which were once common along the Thames but are increasingly disappearing. On the southern bank, a new hard and soft landscaped area links the riverside pedestrian route with the new residential developments in Battersea and the US Embassy building. Nine elm trees will be planted here as a reference to the original elms (dating back to 1645) which give the neighbourhood its name.

Permanent and temporary installations of public art will feature in both landscaped areas, highlighting twinned commissions from US and UK artists, as well as art-related temporary events developed in partnership with local creative hubs and community groups. All areas on and around the new bridge will be fully inclusive and accessible, with contrasting surface materials and colours, shallow grades, plenty of seating, and clear signage and wayfinding indicators.

We know that commuters will appreciate a new and efficient link from Nine Elms to Pimlico; we hope that our design will ensure that the most affected communities also get a sculptural new landmark that will become an emblem and a catalyst for friendship between the two sides of the river.