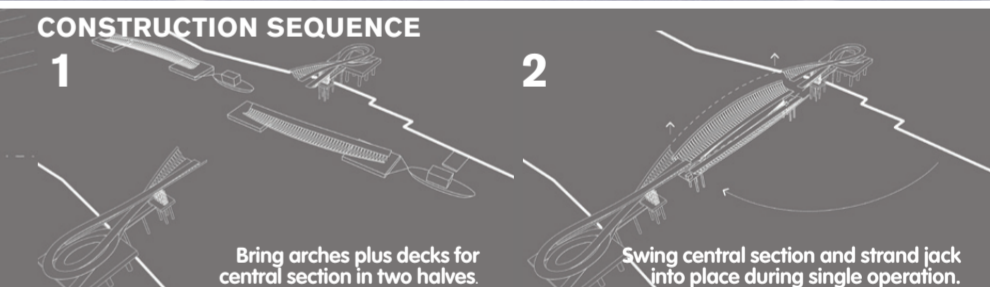




Challenge: Integrate cyclists and pedestrians
SEPARATE YET INTERWOVEN CIRCULATION

Challenge: Height across river and access issues
ACCESS FOR ALL, NO LIFTS OR STAIRS

Our bridge combines two separate routes, one for cyclists and one for pedestrians, intertwined as two ribbons. The bridge consists of two identical halves rotated through 180 degrees in relation to each other. Each ribbon is supported by an arching, single span structure. These gently sloping routes, each 4m wide, create a rich and varied experience, touching at the mid-span to create a focal point, also 4m wide - a new meeting



Challenge: Place making
A NEW MEETING PLACE



Challenge: Construction and minimal impact on river traffic
SINGLE SPAN, NO PIERS IN THE RIVER





Description of bridge

The concept of our bridge is to combine separate routes for cyclists and pedestrians as two intertwined ribbons.

The bridge is made of **two identical halves**, each comprising a ribbon which weaves up over a gentle slope and leaps across the river supported by its arching structure. By rotating one half 180 degrees with relation to the other, the routes intertwine to create an extraordinary experience of crossing, where each route is at once separate from the other, and yet twists around it.

At the centre of the span, the two sides are joined, creating a **new public space** over the river. This new space is accessible by either route whilst being sheltered from the throughflow of cycle and pedestrian traffic.

The structure is the **most minimal manner** to support the ribbons, and a direct reflection of the routes and spaces on the bridge. Each ribbon is supported by an inclined arch. The two arches lean away and are supported by one another through the deck structure that crosses under the central meeting space. The vertical loads of the bridge are supported by these arches, which transfer the loads to each abutment. The double curvature of the bridge deck structure provides both buckling stiffness to the arches, and lateral stiffness to the overall structure as the ramps are tied back to the foundations at each abutment.

The ramps at each bank provide **equal access for all** – there are no stairs to separate the flow, no lifts to be maintained and mended, (although these can be added if required). The ramps conform with DDA requirements throughout their length.

There are **no piers** in the river, the bridge spans in one, avoiding time-consuming and costly construction, as well as damage to the intertidal foreshore and obstructions to shipping. The PLA's brief requirements for the navigation channel are met in full.