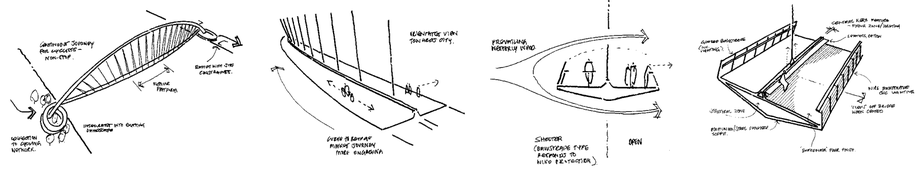
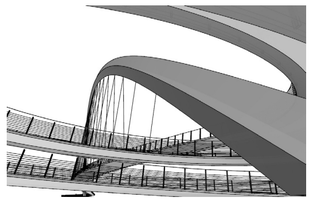
CHALLENGE 1 : INTEGRATING CYCLE AND PEDESTRIAN TRAFFIC

- Provides a continuous solution for cyclists to cross the bridge without the need for dismounting.
- Curving ramp solution acts to minimise visual impact on surrounding properties.
- Central spine provides physical separation of cycling and pedestrian lanes.
- Materiality of the two lanes reflects corresponding use - tactile timber for pedestrians, utilitarian hard wearing materials for cyclists
- Glazed screen to cycle side as wind breaker





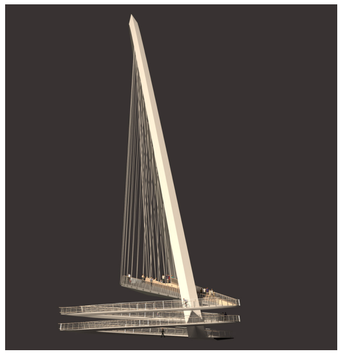
CHALLENGE 2 : PLACE MAKING ACROSS THE BRIDGE AND ITS LANDING POINTS

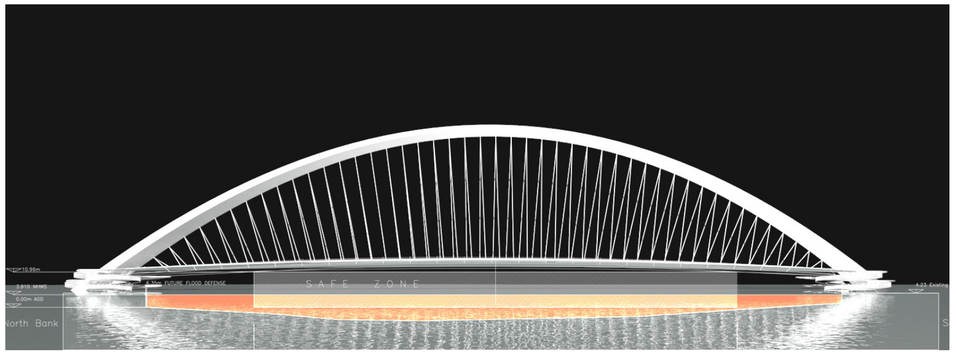
- Curved deck in plan embraces views toward the city
- Pedestrians orientated to the 'city' side of the bridge
- Vertical hanging cables in the centre of the deck naturally separates functions, resulting in uninterrupted views of skyline for pedestrians
- Integrated seating solutions provide places to sit and linger in the centre of the span.
- Curving helix naturally holds and wraps space at the base, this would be suitable for possible small business uses such as cafe or gallery as well enjoying high footfall for buskers and people watchers.

CHALLENGE 3 : HEIGHT ACROSS RIVER AND THE INHERENT ACCESS ISSUES

- Clear span from bank to bank increases clear span over the river and minimises access issues for river traffic.
- Minimum clearance of +10.96 AOD achieved across the central 150m span of the waterway.
- Minimise duration of navigation possessions of the river;
- Minimise work over the river and at height;

Utilise the cable-stayed nature of the design to avoid temporary supports within the water, through the use of floating docks, cranes and barges.





CHALLENGE 4 : APPROACH TO CONSTRUCTION TO MINIMISE IMPACT ON RIVER TRAFFIC

- **Proposed Construction Sequence**
- Establish temporary floating docks for assembly of parts.
- Build abutments foundations and abutments walls on each side
- Arch constructed in prefabricated sections including internal longitudinal stiffeners, bracing and anchor plates for the hangers to minimise the need for on-site welds.
- Box section similarly brought to site in prefabricated pieces, including internal longitudinal stiffeners, diaphragms, bracing and hanger anchor plates already installed.
- Hangers installed on site while arch and deck are resting on floating dock
- Arch and deck lifted into final positions using floating cranes, lifting arch and deck simultaneously.