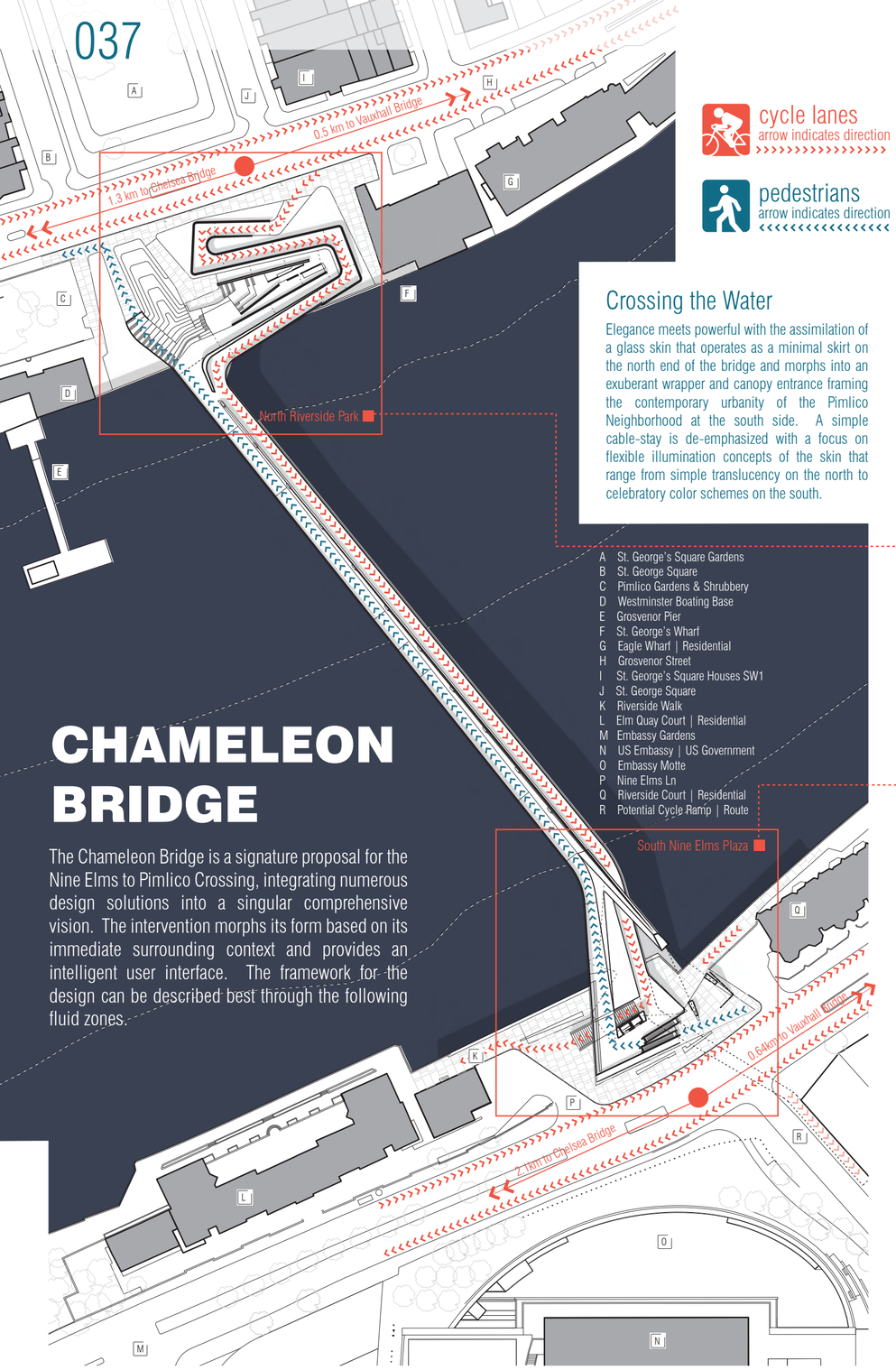
CHAMELEON BRIDGE

The Chameleon Bridge is a signature proposal for the Nine Elms to Pimlico Crossing, integrating numerous design solutions into a singular comprehensive vision. The intervention morphs its form based on its immediate surrounding context and provides an intelligent user interface. The framework for the design can be described best through the following fluid zones.



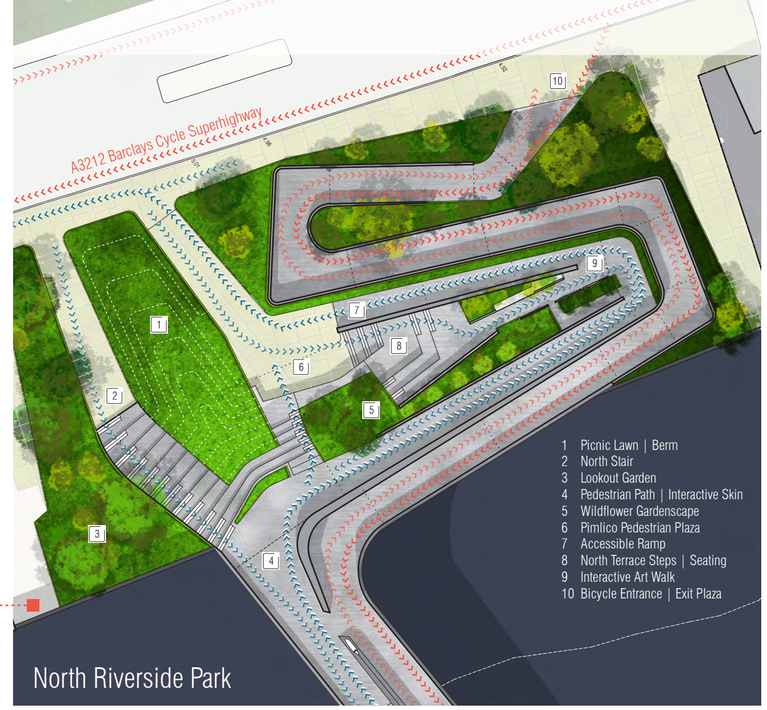
cycle lanes
arrow indicates direction

pedestrians
arrow indicates direction

Crossing the Water

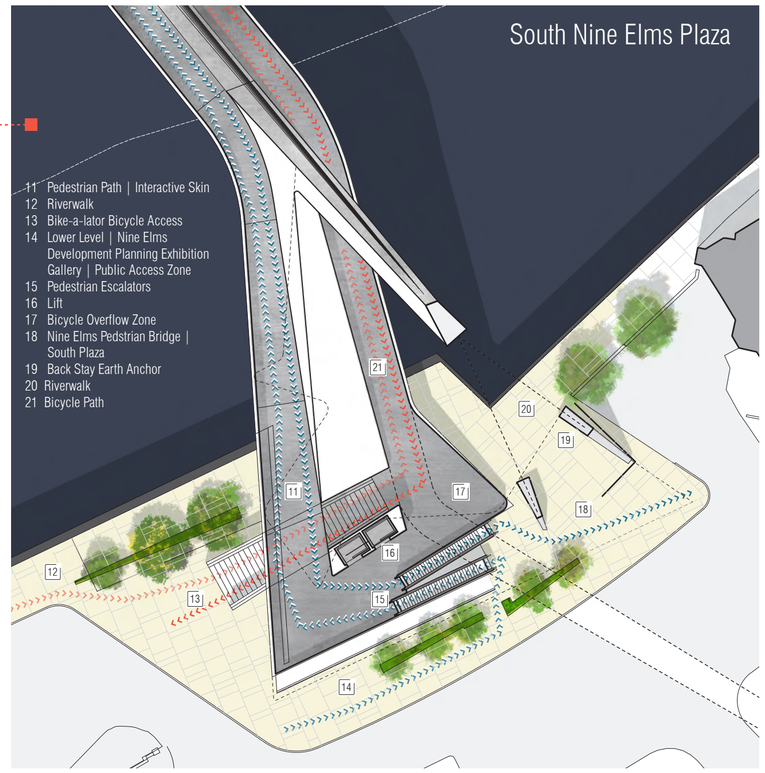
Elegance meets powerful with the assimilation of a glass skin that operates as a minimal skirt on the north end of the bridge and morphs into an exuberant wrapper and canopy entrance framing the contemporary urbanity of the Pimlico Neighborhood at the south side. A simple cable-stay is de-emphasized with a focus on flexible illumination concepts of the skin that range from simple translucency on the north to celebratory color schemes on the south.

A St. George's Square Gardens
B St. George Square
C Pimlico Gardens & Shrubbery
D Westminster Boating Base
E Grosvenor Pier
F St. George's Wharf
G Eagle Wharf | Residential
H Grosvenor Street
I St. George's Square Houses SW1
J St. George Square
K Riverside Walk
L Elm Quay Court | Residential
M Embassy Gardens
N US Embassy | US Government
O Embassy Motte
P Nine Elms Ln
Q Riverside Court | Residential
R Potential Cycle Ramp | Route



North Riverside Park

1 Picnic Lawn | Berm
2 North Stair
3 Lookout Garden
4 Pedestrian Path | Interactive Skin
5 Wildflower Gardenscape
6 Pimlico Pedestrian Plaza
7 Accessible Ramp
8 North Terrace Steps | Seating
9 Interactive Art Walk
10 Bicycle Entrance | Exit Plaza

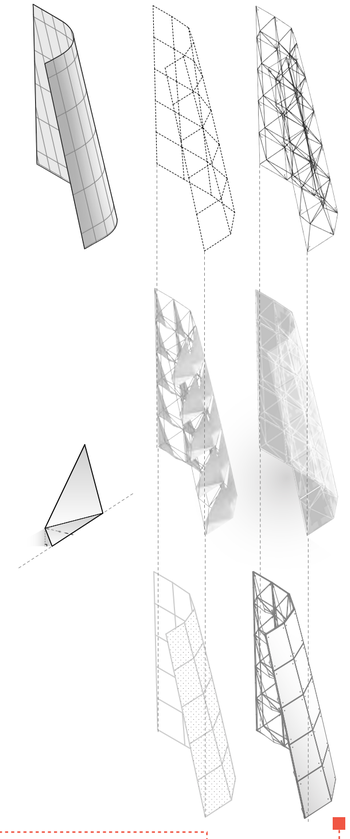


South Nine Elms Plaza

11 Pedestrian Path | Interactive Skin
12 Riverwalk
13 Bike-a-lator Bicycle Access
14 Lower Level | Nine Elms Development Planning Exhibition Gallery | Public Access Zone
15 Pedestrian Escalators
16 Lift
17 Bicycle Overflow Zone
18 Nine Elms Pedstrian Bridge | South Plaza
19 Back Stay Earth Anchor
20 Riverwalk
21 Bicycle Path

Riverside Park

St. George's Square flows seamlessly into the Pimlico Gardens defining an important natural character along the Thames River. A topographical manipulation and modification to the park maintains a critical greenspace for the neighborhood while introducing a comfortable progression from the street at 5.0 meters to the elevated surface over the water at 11.0 meters. The reconfigured park space introduces new program space such as a sloped lawn and amphitheater terracing while re-situating important locations for historically important elements such as the white marble statue of William Huskisson MP.



Heat Glass

Float glass panels generate radiating heat energy through an electrically conductive coating that is subjected to an electric current. The heat created can be used to melt snow and ice in significant locations, and provide a subtle thermal curtain at the entrances to vertical circulation components and programmed spaces.

Touch Glass

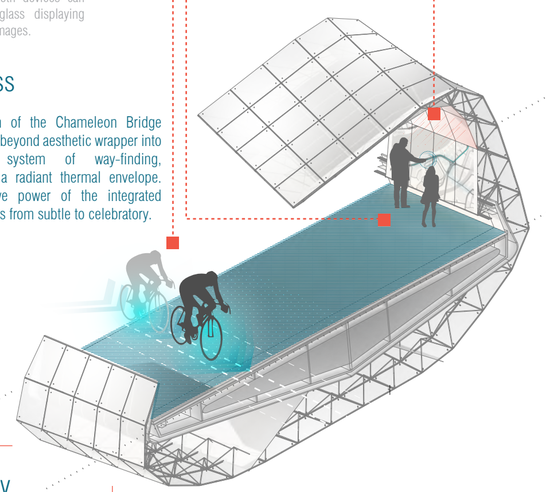
Optic technology detects touch points on the surface allowing users to interface with a multitude of information, including mass transportation schedules and routes to nearest stations. Maps of London can be accessed by residents and tourists to obtain desired information.

Movement Glass

Pre-programmed images, text, logos or animation are controlled through LED's placed within transparent glass and create moving light. Directional information can be displayed along bike or walking paths for enhanced safety while Bluetooth devices can interact with the glass displaying movement-related images.

Intelli-glass

The integral skin of the Chameleon Bridge elevates its status beyond aesthetic wrapper into an intelligent system of way-finding, informatics, and a radiant thermal envelope. The transformative power of the integrated illumination ranges from subtle to celebratory.



Nine Elms Urbanity

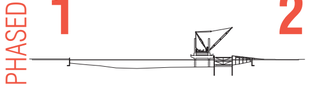
The south landing forms an urban energy befitting the future planning of the new urban fabric. Escalators and the bike-alator move pedestrians and bicyclists efficiently through a very tight site to the elevated platform with overlooks to the river and the city. The vertical transit elements integrate into an architectural structure with information and exhibition space introducing visitors and locals to the Nine Elms District

PHASED CONSTRUCTION

1 Thames remains 85% open

Construction begins utilizing a crane located on a jack-up barge to begin construction of a cofferdam to provide access and working bearing at the location of the pylon base foundation adjacent to the south shore.

Upon completion of the cofferdam a site-access platform will be constructed link the south shore and provide a means of access for personnel, power and concrete pump lines.

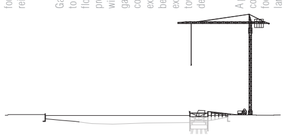


2 Thames remains 80-85% open

A tower crane is erected on independent tubular steel piled foundations to provide steel reinforcement, formwork, concrete and muck skips.

Gate valves are installed close to the low tide level. A concrete floating dock system will provide a working platform within the cofferdam. Once the gate valves are closed and the cofferdam is dewatered, excavation of the river bed will begin utilizing a small tracked excavator lowered from the tower crane. Debris will be deposited onto barges and removed from the site.

A pilling rig will be lifted into the cofferdam. The elevated footing will be supported by large-diameter steel tubular rock-socketed piles.



Once the piles and piling cap are complete, the river pier will commence construction.

3 Thames remains 70-75% open

River barges will deliver steel components of the bridge beam box and pylon.

Construction of North and South shore abutments commences.

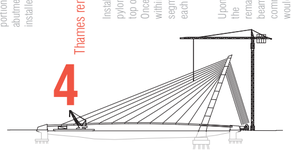
Construction begins with the construction of the steel jacket segment to the concrete pier structure. Steel jackets containing the ducting, cable and high-strength steel are placed within the first segment and filled with concrete. The first pylon segment will contain an internal manway to allow for future inspections within the pylon and access to the top cable-stay anchorages.

Once the first level of pylon is installed, the steel box beam and portion of deck from the south abutment out to the pylon is installed utilizing the tower crane and barge crane

4 Thames remains 70-75% open

Installation of the remaining pylon segments proceeds on completion of the first pylon segment. Once the form is positioned within the steel jacket, both segments are posttensioned to each other and to the pier through all the cables.

Upon completion of the pylon, the installation of the remaining portions of the box beam and deck would commence. Sections of steel deck would be delivered by barge and packed into position. Each portion of deck and box beam will be connected to each subsequent completed section. Stay cables and back stay cables would be installed in sequence and the operation would be repeated section-by-section across the span to the north abutment.



NAVIGATION CLEARANCE


HERSINA