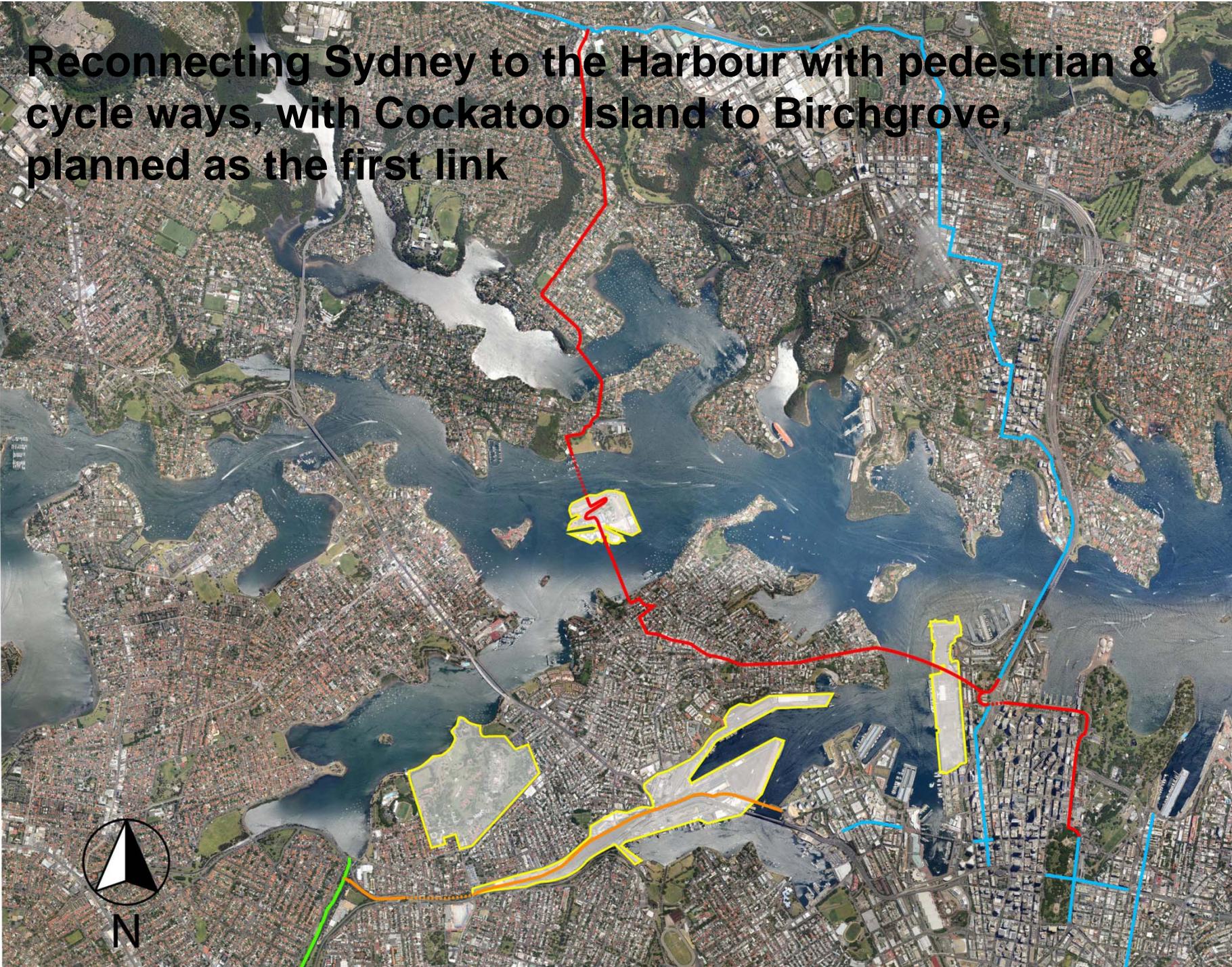
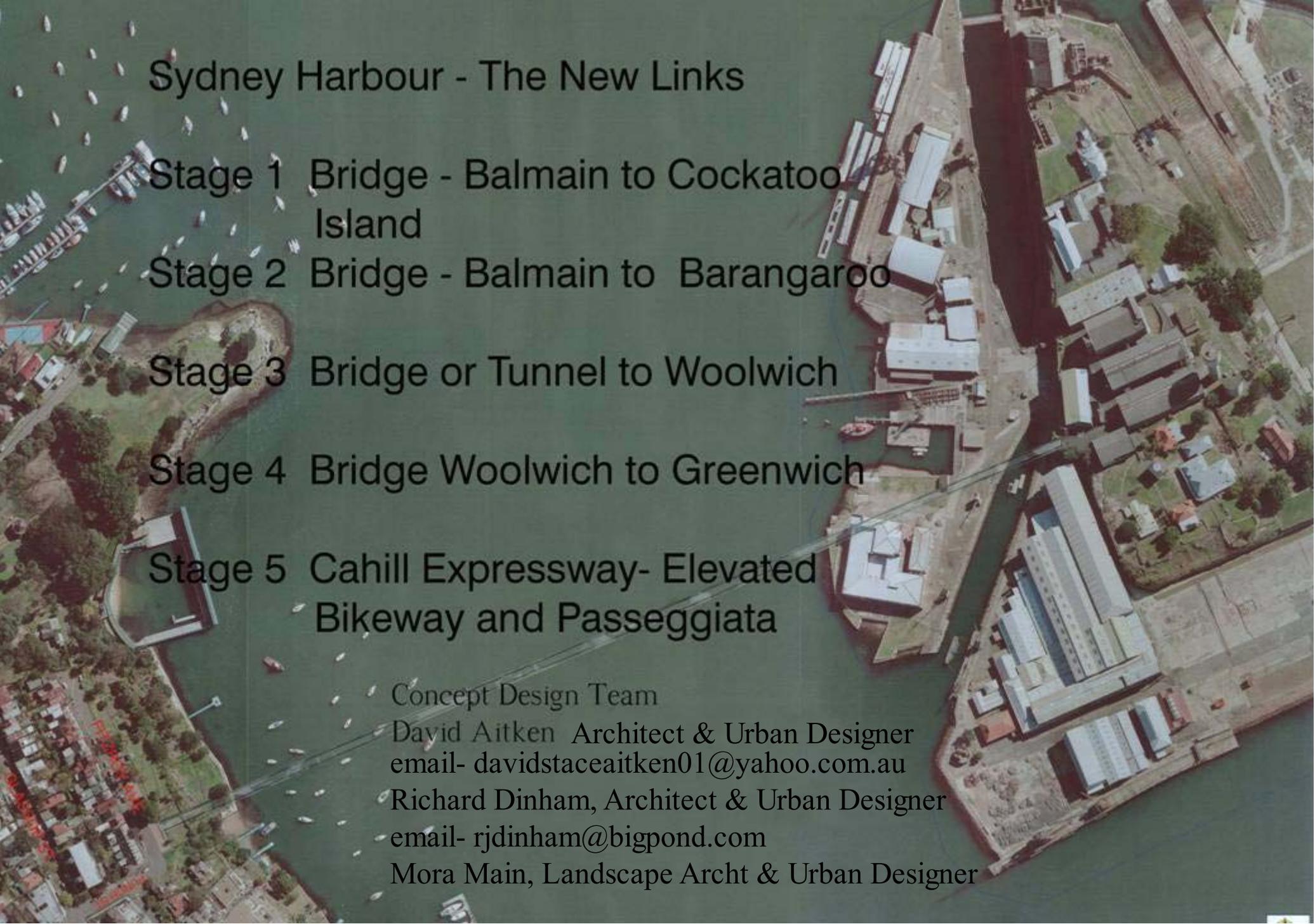


Reconnecting Sydney to the Harbour with pedestrian & cycle ways, with Cockatoo Island to Birchgrove, planned as the first link



An aerial photograph of Sydney Harbour, Australia, showing the water, surrounding land with buildings and greenery, and numerous boats. A thin, light-colored line is drawn across the water, representing a proposed bridge route connecting the northern shore to the southern shore. The route starts near Balmain and passes through Cockatoo Island, Barangaroo, and Woolwich, ending near Greenwich.

Sydney Harbour - The New Links

Stage 1 Bridge - Balmain to Cockatoo Island

Stage 2 Bridge - Balmain to Barangaroo

Stage 3 Bridge or Tunnel to Woolwich

Stage 4 Bridge Woolwich to Greenwich

Stage 5 Cahill Expressway- Elevated Bikeway and Passeggiata

Concept Design Team

David Aitken Architect & Urban Designer
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Mora Main, Landscape Archt & Urban Designer

By Richard Dinham

9 August 2011 – Linking Sydney from north to south by cycle and pedestrian bridges would be a great enhancement for connectivity, argues Richard Dinham.

The Bridges of Rome, Paris and London are an integral part of those cities. Venice made an art of them, Buda and Pest lived apart until joined centuries later by the bridge that made the city of Budapest. For Sydney, it was just short of one and a half centuries from European settlement, before the north and south shores came together and that bridge is now both a landmark, a symbol of the city and an enhancement of the cityscape.

Sydney harbour is deep and robust, it swells quietly, unlike the rush of the Bosphorous separating Europe based Istanbul to its future on the Asian shore. Our harbour can be wide, but its shores are enticingly close, unlike those of San Francisco when it takes a good day to appreciate the opposite county.

The harbour of Sydney is big enough to support a pattern of islands, punctuating the body of water, making special spaces. But now these places are generally not well used.

These and the shoreline have carried the weight of the harbour economy for 200 years, and now industrial obsolescence has changed their role in city life to places for recreation and culture and the potential for a stronger economy to support that.

Waterborne accessibility was part of maritime industry, now we have a disconnected city and inaccessible places. Ridges of land reach enticingly out from north and south, opportunities for only the local communities. The harbour shore is mostly closed to outsiders.

Linking north and south, stepping onto the islands and then to the further shore, opens paths for pedestrians and bicycles to spread the experience of harbour and for greater connectivity for communities.

A special opportunity presents for a new inner urban ring, linking Lane Cove to Northwood to Hunters Hill, under to Cockatoo, over to Balmain and from there over to Barrangaroo, to the city and the Harbour Bridge and back across to the north shore, thus achieving a more accessible harbour and a larger community connected, not revolving around a distant, little seen body of water which is the historic heart of Sydney.

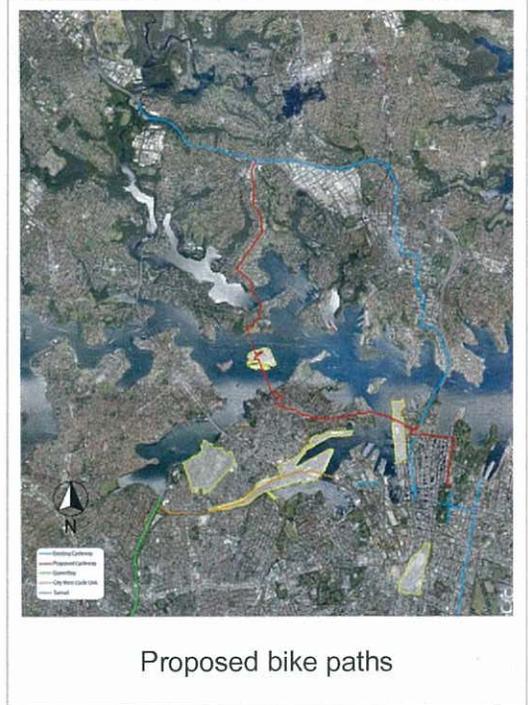
To bring such linkages together, the levels work, the roads link well, the geo and technical issues are feasible, warranted by similar recent projects in Brisbane, Singapore and London as well as special projects such as the Green Bridge in London and the High Line Park in New York.

In any place, a high level of community cooperation is needed. It requires big thinking people to frame the vision, interlinked governance, a coordinated strategy and a robust project plan for implementation.

It begs the question, could the communities around our western harbour respond with boldness to allow this to happen?

A first stage of such a plan, activating Cockatoo Island with a pedestrian and cycling connection to Balmain, would be a great start to a future better connected city.

Richard Dinham is an architect and urban designer, with a history of implementation of major projects. He is the convenor of the urban reform project at The Warren Centre for Advanced Engineering at Sydney University.



Proposed bike paths



Other Bridges joining special places



十八
本曾梅石
内
九次之
保
錦
堂

廣
重
吉
印

Man on Horseback Crossing a Bridge

Painted by the 19th Century Japanese artist, Utagawa Hiroshige

Joanna Lumley's garden bridge over the Thames gets £30m seal of approval from Government



The Government has pledged £30 million in funding for actress Joanna Lumley's vision, as it plans to sell off £20 billion state assets

Joanna Lumley's dream of a "floating paradise garden" suspended above the river Thames is set to become a reality after the Government pledged £30 million to support its construction

Offering a final seal of approval to the bridge - designed by London 2012 Olympic cauldron creator Thomas Heatherwick - the funding announcement was included in the Government's latest infrastructure plan.

Around half of the £150 million needed to bring the project to life had already been raised through private donations and a £4 million injection from Transport for London. Last month, Ms Lumley launched a trust to organise the funding and construction of the bridge.

The actress first pitched the concept 15 years ago following the death of Princess Diana, but it was not until the London Olympics that her vision began to be seen as a possibility.

Inspired by Ms Lumley's memories of the mist-covered mountain gardens of her childhood home in Malaysia, she joined forces with Mr Heatherwick last year - just as TfL announced it was looking for proposal for a pedestrian bridge to cross the Thames from Temple tube station to the South Bank. Organisers say the bridge could now be finished as early as 2017.

The Government's infrastructure plan also pledged a further £50 million to redevelop the railway station at Gatwick Airport, as part of a [£375 billion investment in the UK's infrastructure](#).

After dropping proposals for the country's first toll scheme in a decade following widespread opposition, Treasury Chief Secretary Danny Alexander said none of the schemes in the Coalition's latest plans involve payments by motorists.

The Government will however be selling off £20 billion of state owned financial and corporate assets by 2020, including its 40 per cent stake in Eurostar.

Ponte della Libertà a 4 km rail and road bridge to Venice opened in 1932



Ponte della Liberta connecting the mainland with Venice and over 4 km in length



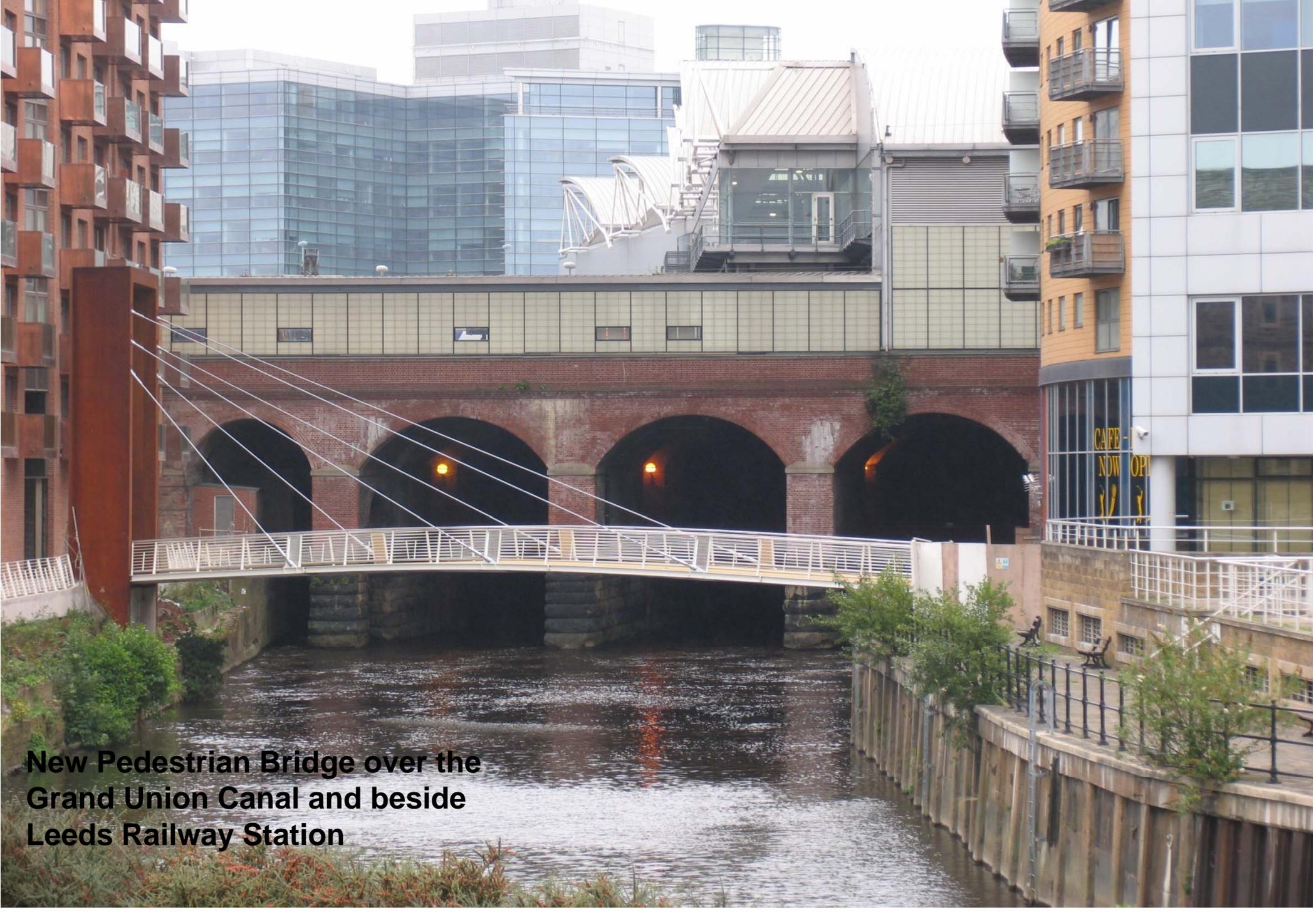
Ponte della Costituzione or Constitution Bridge, Grand Canal, Venice 2007

Designed by Santiago Calatra



Ponte della Costituzione (Constitution Bridge) and is the most modern bridge crossing on the Grand Canal, Venice





**New Pedestrian Bridge over the
Grand Union Canal and beside
Leeds Railway Station**



New South Bank Pedestrian Bridge over the Grand Union Canal, Leeds, UK

Lock 1
Leeds Lo
Aire & Co
Navigati

Gateshead Millennium Bridge, Newcastle on Tyne

World's first tilting bridge for pedestrians and cyclists



Nescio pedestrian & cycle bridge, Amsterdam



Bridge linking the World Heritage listed Fortress islands of Suomenlinna, Helsinki



Connecting Cockatoo

A new walkway and cycle way to Cockatoo Island



MAJOR DOCKYARD AND REPAIR FACILITY DURING WWII



- 1 Titan
- 2 USS LST 471
- 3 HMAS Australia
- 4 River Hunter
- 5 TSS Nairana
- 6 HMAS Hobart
- 7 HMAS Bataan
- 8 HMAS Arunta
- 9 USS Gilmer
- 10 HMAS Barcoo

Cockatoo Island - 1944

Beckholmen or Pitch Island, is Stockholm's, Cockatoo Island equivalent but has instead a pedestrian/cycle bridge to connect it to the mainland



The timber bridge linking Beckholmen or Pitch Island, Stockholm to the mainland.



The timber bridge linking Beckholmen or Pitch Island to the mainland.



Walking on water

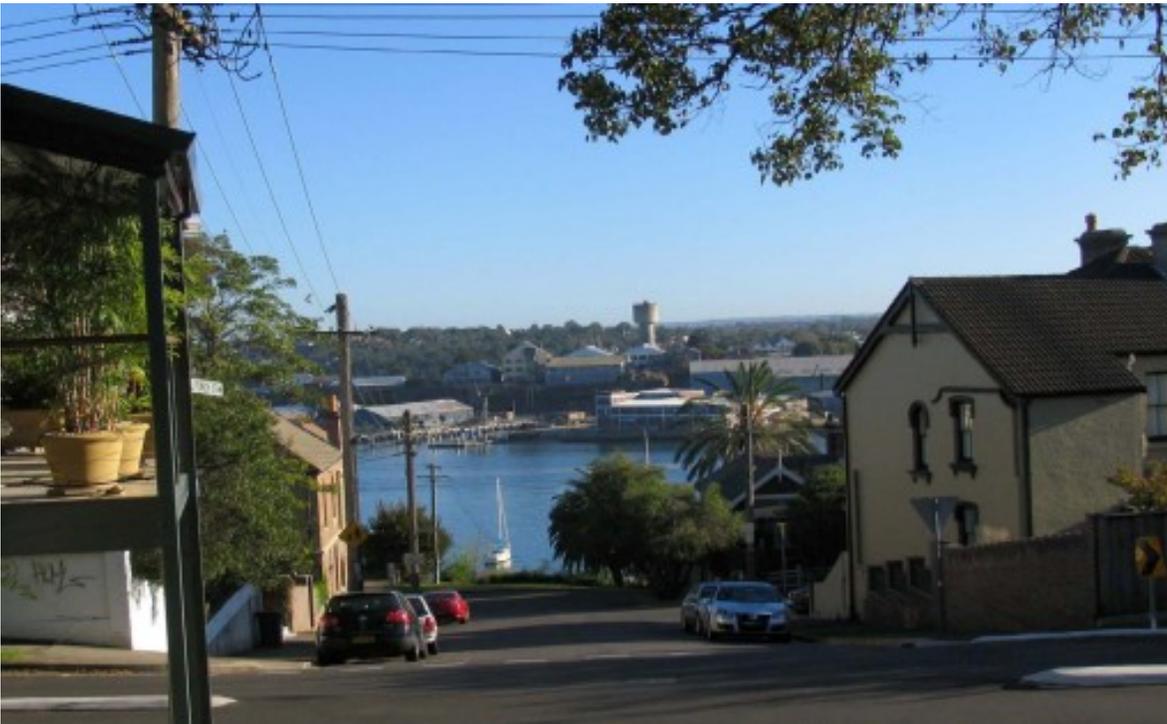
Posted January 28, 2010 by [Shant Fabricatorian](#) & filed under [Inner West Independent.inShare](#)

It was once a hive of activity, employing over 4,000 workers from Balmain and the surrounding areas. But for decades afterwards, Cockatoo Island has been silent, affected only by the sea breezes setting off the gently rusting industrial machinery and workshops which characterise this small outcrop in Sydney Harbour.

Now, however, there is a plan to reverse the stagnation and decay, and restore the vibrant atmosphere of the island's heyday. Local resident David Aitken has developed a concept proposal for a pedestrian bridge linking the island to the Balmain peninsula. Preliminary ideas revolve around an eight-to-ten-metre-wide promenade, either as a suspended or cable-tied bridge (the lack of concrete detail indicates the extent of the work remaining to see the project through to reality, of course).

Mr Aitken believes significant new employment opportunities would exist with the opening-up of Cockatoo Island. He foresees artisans' and design studios, gallery and exhibition spaces, food markets, restaurants, and even a marine research centre. "There's such a history to this site – it's so open to new development and the possibility of introducing a new type of working environment, the real possibility of putting sustainable development on the island," he said.

Clean energy generation could form a major part of the island's credentials in this respect. Mr Aitken said potential existed for wind turbines to be placed on Cockatoo, while the large fabrication halls provide an excellent opportunity to mount solar collectors, helping reduce carbon footprint.



A gap unbridged for now – but could Cockatoo Island (seen here from Punch Street in Balmain) be set for revitalisation?

At the moment, Cockatoo Island is presently owned by the Sydney Harbour Federation Trust – a Federal Government body administered by the Environment Minister's office. A preliminary estimate of the bridge's cost is between \$35 and \$40 million, according to Mr Aitken – money which would necessarily need to come

from the federal government. In this respect, the project has received the tacit support of Balmain MP Verity Firth, who indicated in a letter she would be happy to support an application for federal funding.

The idea of pedestrian bridges is one gathering steam across the world. “The Millennium Bridge in London, for example, is purely a pedestrian bridge; all through Germany now, they’re spending loads and loads of money on new pedestrian and bicycle bridges to make accessible these rather more isolated areas,” Aitken said.

The proposal envisages a cycleway and pedestrian walk, with a view towards developing the island as a model of sustainability as well as developing a vibrant arts community. According to Mr Aitken, the project – along with the Trust’s own vision – is centred on maintaining the “superb maritime and industrial heritage artifacts” on the island.

To this end, it is proposed to hold a new national or international design competition for the bridge, similar in concept to that which brought about the Opera House. Mr Aitken argues this would help introduce new, cutting-edge ideas and technology into Australia.

Perhaps even more importantly, though, the benefits to the local community should not be overlooked. “I believe this whole initiative could provide local employment for local people,” he said. “Balmain has a strong arts culture, and I really think this kind of project would be a big boost for the entire community.”



London’s Millennium Bridge is a modern icon in the venerable city, joining the north and south banks of the Thames River

The Opportunities

A sustainable link to Cockatoo Island that opens up a special place to work in or go to *on foot* or by bicycle.

New employment opportunities for residents with the establishment of:

- Artisans' and Design Studios,
- New Gallery and Exhibition Spaces in the Fabrication sheds,
- Food Markets and organic food specialists,
- Specialized Wine Cellars in the tunnels,
- Restaurants
- A Marine Research and Study Centre

Places for Galleries, Markets & Performance Squares





The hand-cut tunnels connect the north and south sides of the island

New Workshops & Studios



New uses for the buildings



***Not just a Museum but a backdrop
for future sustainability***



A Sustainability Model for the Future

Not just a Museum but a backdrop for future sustainability through:

- Re-use of the huge sheds into Galleries, artisans' studios & workshops;
- Reducing the need for motor vehicle travel by the discovery of a unique and central *place* which is readily accessible to all, including the disabled and elderly;
- A fully accessible *podium* and stage for special events e.g. as per the ongoing Sydney Biennale;
- Clean Energy- highest points will support wind turbines and the large fabrication halls will be mounted with solar collectors to drastically reduce carbon footprint;
- Reducing major dependence on fuel hungry ferry services by linking up with major City and Harbour cycle ways and walkways;
- Promote a healthy living style by creating employment opportunities within the Municipality and encouraging physical activity through cycling and walking for work and leisure.

***A place for roof mounted solar panels
& wind turbos***



Recycling of old buildings into dynamic new spaces











A top picnic spot

The Link

A 5 to 7 metre wide link to Cockatoo Island, either as a suspended or cable tied bridge or, from the park, as a 5 to 8 metre boardwalk.





The bridge begins from the top of the rock face at AHD 20.00 by the Dawn Fraser Pool



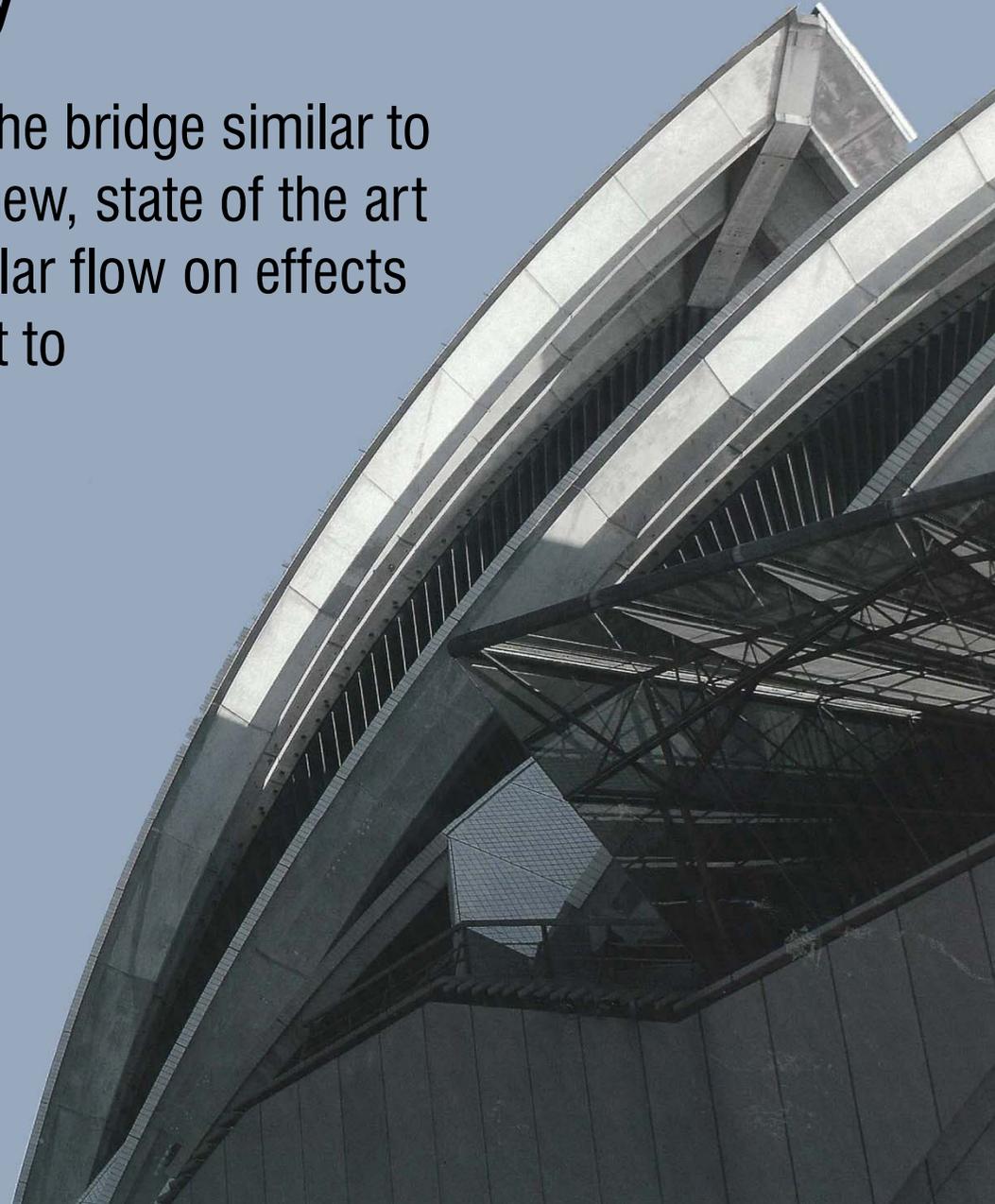
The bridge joins the island at AHD 20.00 by using the top sandstone ramp



Looking back to Balmain from the top of the sandstone ramp at AHD 20.00

A new icon for Sydney

An international design competition for the bridge similar to the Millennium Bridge would introduce new, state of the art technology into Australia; providing similar flow on effects to those which government commitment to the Opera House had with the Australian Building and Construction Industry in the Asia-Pacific region.





The Millennium Bridge by the Turbine Hall,
Tate Modern, South Bank, London

The funding for this Project could be raised by a combination of Federal and State grants such as an economic stimulus package to promote sophisticated bridge technology and new sustainable technology. It would become an international model for sustainable living and in effect a new tourist icon that would demonstrate Australia's commitment to dealing with *global warming*.

The huge ongoing costs of maintaining the Island could be vastly offset by the adoption of such a scheme.

The following Concept Design Sketches for Cockatoo Island Bridge are by members of the staff of Arup Engineers, Sydney



Day



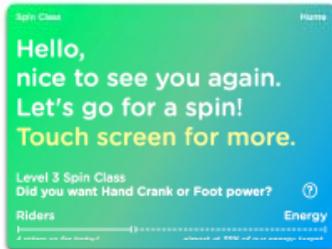
Energy Games

Each Ring becomes an energy game! Pedestrians interact with the Rings, creating energy, reducing the long walk into a series of fun stages.

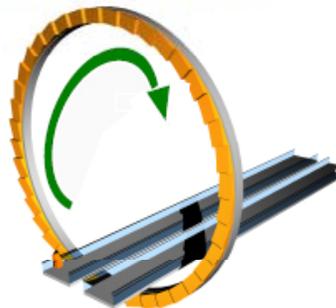
The first time you cross the bridge a Radio Frequency Identifier (RFID), will identify either your mobile phone or a digital chip provided by Cockatoo Island. At Node 1 you can then create a profile so the bridge will know who is interacting with it from then on!

Each node will identify you through your phone / chip and then provide guidance on how to produce energy. Frequent users will be shown plots of their energy stats against time, other users or their very own energy target!

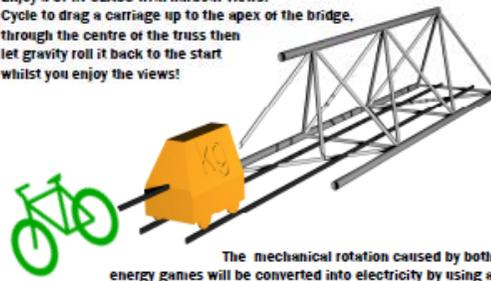
Example Digital Screen



Challenge yourself with the HAND CRANK!
Turn the handle to rotate the giant cog!



Enjoy a SPIN CLASS with harbour views!
Cycle to drag a carriage up to the apex of the bridge, through the centre of the truss then let gravity roll it back to the start whilst you enjoy the views!



The mechanical rotation caused by both energy games will be converted into electricity by using a dynamo. The electricity will be stored on site then used to light the bridge at night, demonstrating to all how active the pedestrians have been!

FOOT POWER
Just walking creates energy!

Piezoelectric Floors create energy as you squash them:



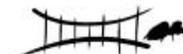
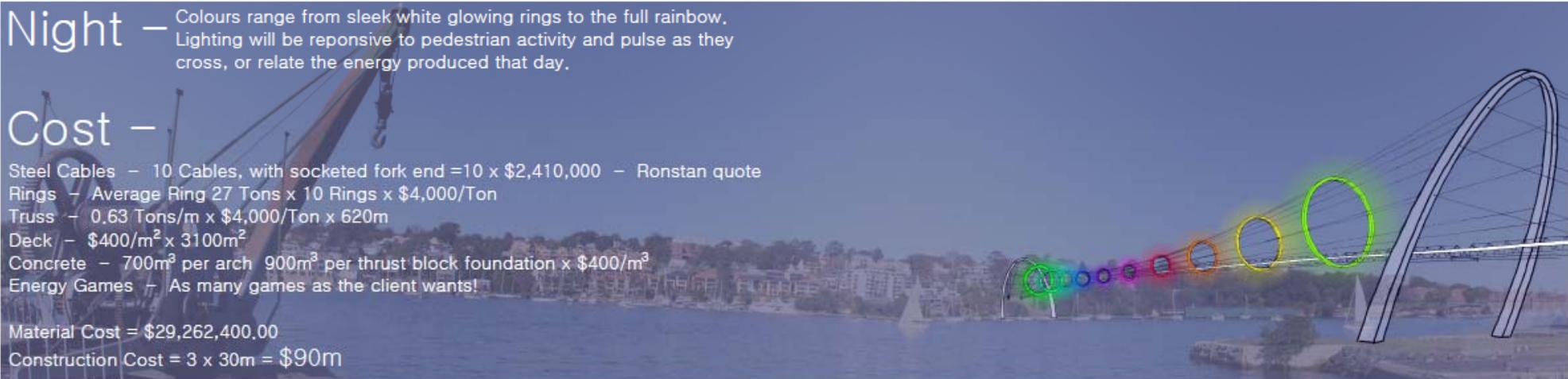
Night – Colours range from sleek white glowing rings to the full rainbow. Lighting will be responsive to pedestrian activity and pulse as they cross, or relate the energy produced that day.

Cost –

- Steel Cables – 10 Cables, with socketed fork end = 10 x \$2,410,000 – Ronstan quote
- Rings – Average Ring 27 Tons x 10 Rings x \$4,000/Ton
- Truss – 0.63 Tons/m x \$4,000/Ton x 620m
- Deck – \$400/m² x 3100m²
- Concrete – 700m³ per arch 900m³ per thrust block foundation x \$400/m³
- Energy Games – As many games as the client wants!

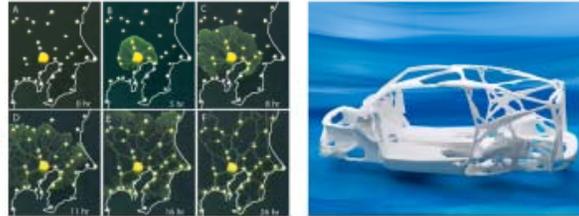
Material Cost = \$29,262,400,00

Construction Cost = 3 x 30m = \$90m



Biomimicry

"After 3.8 billion years of research and development, failures are fossils, and what surrounds us is the secret to survival" - Janine Benyus



Slime Mould constructs efficient highways between nutrient hot spots. An simple experiment, pictured above, highlights it's efficiency. Oats represented key Japanese cities, the slime mould started at Tokyo. Engineers spent many months planning a rail network; their solution is remarkably similar to what slime mould created in 26 hours.

The networking principles displayed by slime mould were used to create a structural allithogram, in turn used by Mercedes Benz to form the structure of their "Bionic Car" pictured above. The car's shape also mimics that of the highly aerodynamic box fish.

Application to the Cockatoo Bridge: The initial form mimicked a nutrient highway, as the Cockatoo Bridge is the 'nutrient highway' for the island. Parts of the structure could be designed using the slime mould allithogram.



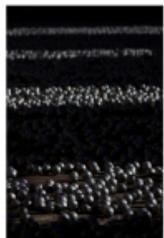
Spider silk has five times the tensile capacity when compared to structural steel. Yet is created in a factory smaller than our little finger with only eco-friendly byproducts. With this incredible material spiders have perfected the art of spanning from A to B, across gaps.

Application to the Cockatoo Bridge: The funnel web, created by the Sydney funnel web spider, is the core of the structural design. When research is completed spider silk could replace the cables.



Galera Cements have "borrowed the recipe from the coral reefs and are using carbon dioxide as a building block" - Jason Beeson sequestering, rather than emitting, half a ton of CO₂ per ton of concrete.

Application to the Cockatoo Bridge: All concrete will use Galera cement

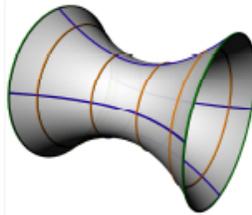


Cockatoo Circles

Cockatoo Island is packed full of circular forms which are reflected in my design through the repetitive rings

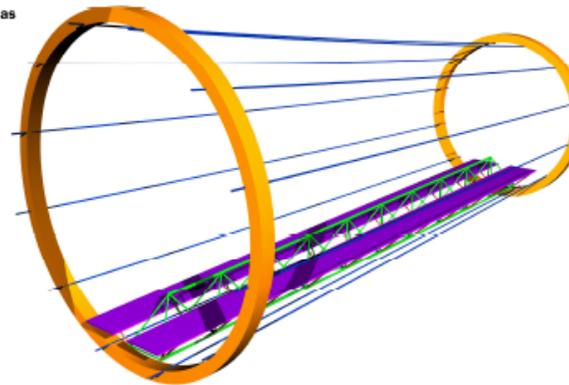
Concept

The structure mimics the elegant structure created by the Sydney funnel web spider. A simplified version is shown below:



When tension is applied from either end the elements in blue (my cables) go into tension. The orange elements (my rings) restrain them and are themselves also in tension. On plan and in elevation the blue elements oppose each other and create double curvature, stiffening the structure.

The Green elements, concrete arches in my proposal, are in compression.

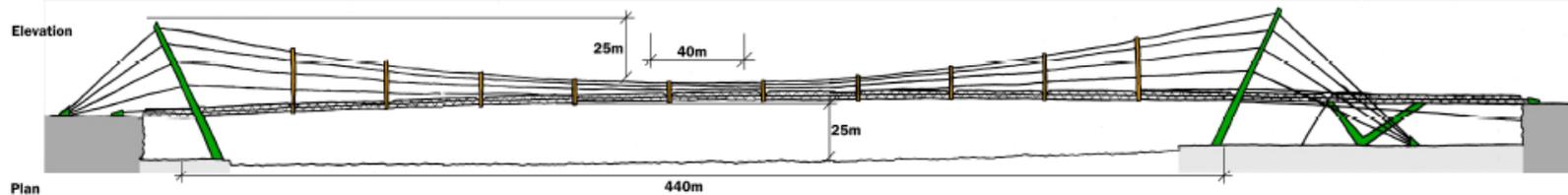


ORANGE - 10 Steel rings spaced at 40m centre to centre. Range in radius from 7.5m to 30m

BLUE - 10 Steel Cables, diameter 80mm, beaking force 400 tons

GREEN - 40m truss simply supported, spans between every ring. Truss depth = 40m/15 = 2.7m. Triangular in section to resist torsion.

PURPLE - Lightweight Deck supported on steel struts so deck load goes into bottom truss chord rather than truss web. Deck either side of truss, one side for pedestrains, the other for cyclists. The truss is simply supported so you can sway sides at each ring. Each deck has a minimum width of 3m.





Bike path: 3m

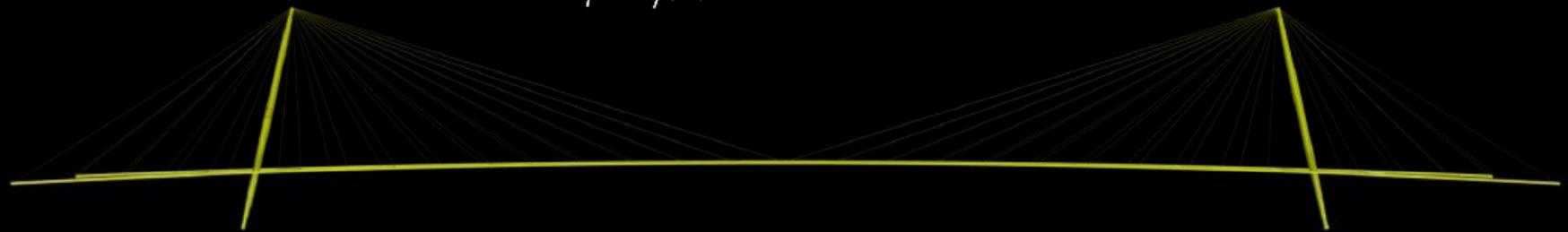
Foot path: 3m

Multiple cable stays;
-smaller members
-efficient connections

Single, tapered
tubular masts, do
not touch decks;
-makes decks
seem to fly!

Curved box-section decks;
-restrain each other
-resist side forces
-cables attach to side of deck

Principle:
Separate cyclists
from pedestrians!



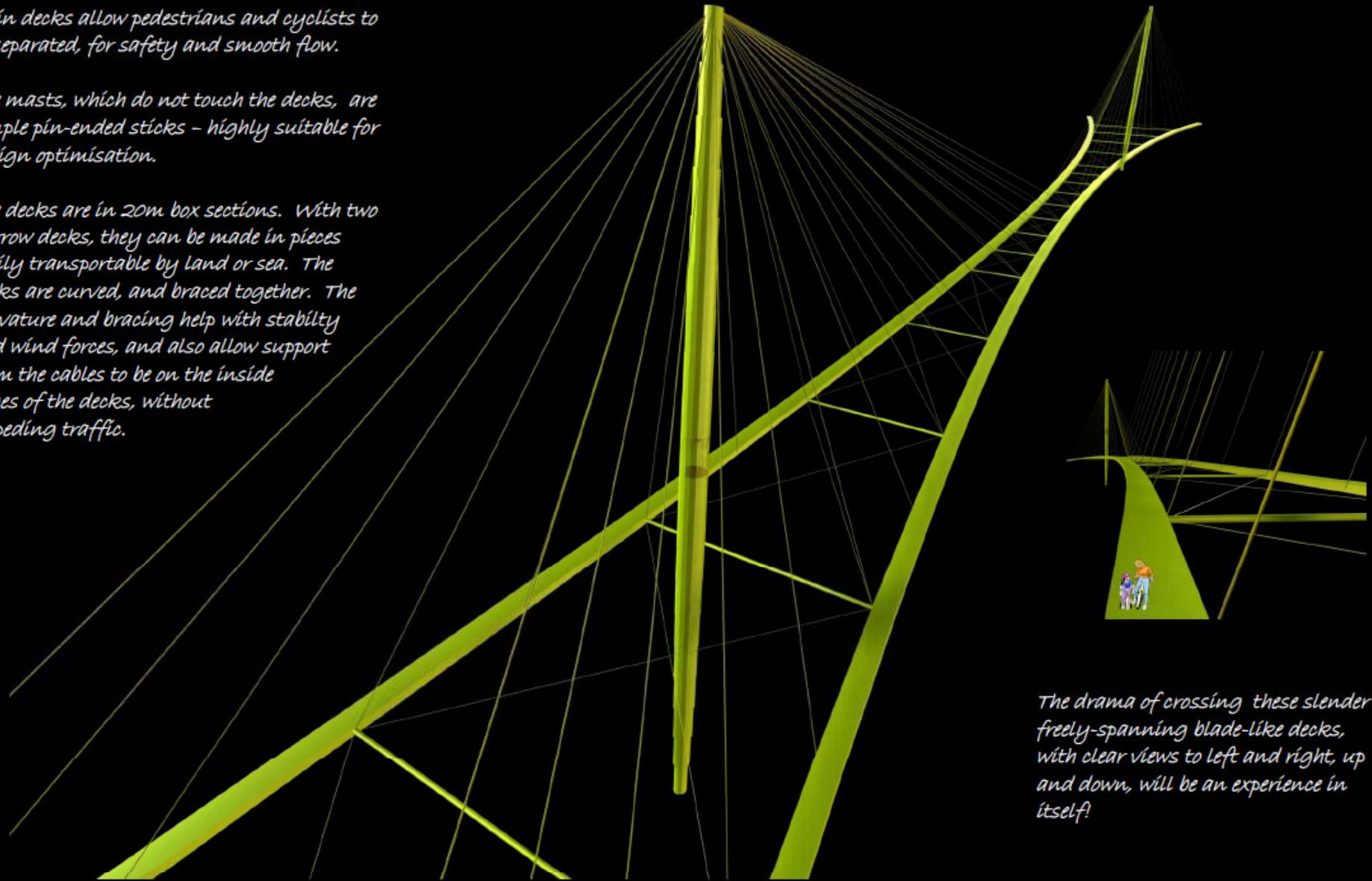
The Cockatoo Bridge

by John and Alex Hewitt

Twin decks allow pedestrians and cyclists to be separated, for safety and smooth flow.

The masts, which do not touch the decks, are simple pin-ended sticks – highly suitable for design optimisation.

The decks are in 20m box sections. With two narrow decks, they can be made in pieces easily transportable by land or sea. The decks are curved, and braced together. The curvature and bracing help with stability and wind forces, and also allow support from the cables to be on the inside edges of the decks, without impeding traffic.



The drama of crossing these slender freely-spanning blade-like decks, with clear views to left and right, up and down, will be an experience in itself!

The Cockatoo Bridge

by John and Alex Hewitt

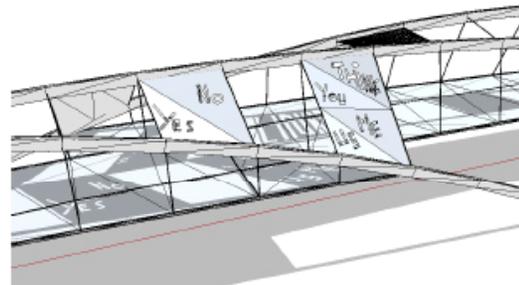
Daylight Responsivity

Passive User Experience

gettyimages®

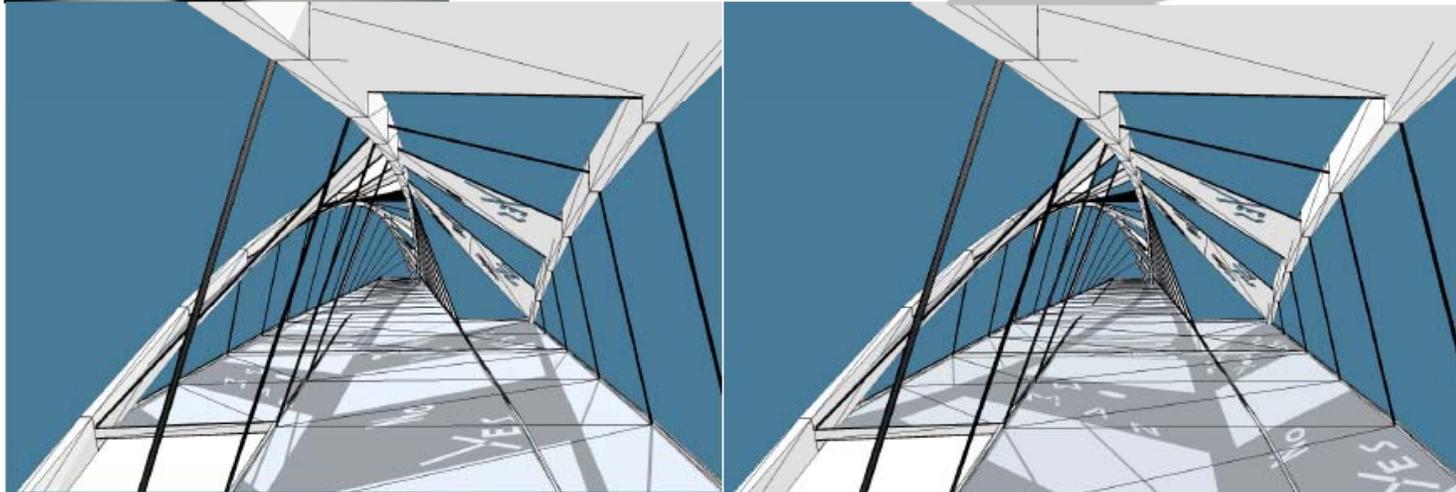


This Bridge will respond to its environment through daylight responsivity. Stencils hanging from select cables will create messages on the deck. Sun angles at different times of the day create various messages of varying strength.



Messages transmitted via sunlight

Plates are arranged to capture sun angles

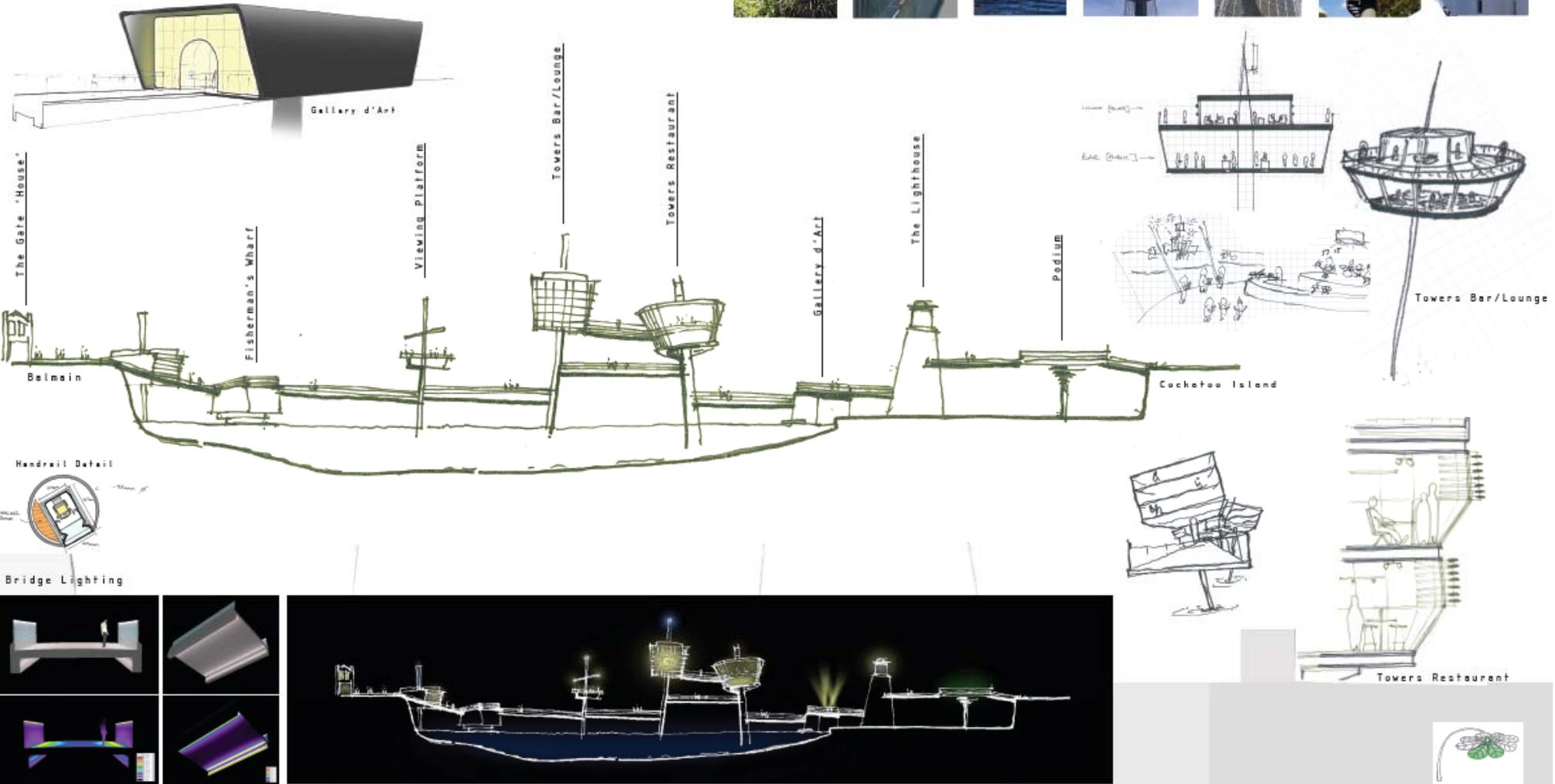


Certain words will be intentionally strong at particular times of the day when they receive direct sun. At other times these words will be skewed.

The user experience will vary depending on the time of travel.



Bernard Tschumi's parc de la villette creates a series of events.



The Highpark Bridge

Concept

To create an urban park. A space in it's own right worthy of visiting. A green bridge.

The Highpark Bridge is an idea created from two great urban spaces, the Highline Park, New York and the Green Bridge, London.



The Highline park, New York



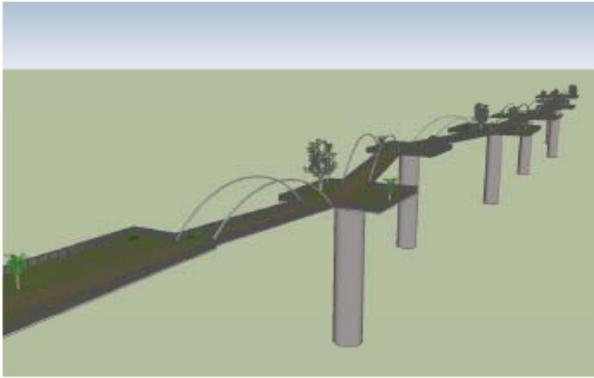
The Green Bridge, London



The Highpark Bridge, Sydney

The Highpark Bridge

Main parks supported by concrete/steel pillars rising from the harbour bed.

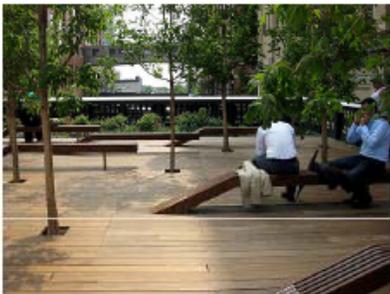


Path made from local timbers.



Lighting provided by floor mounted halogen uplighters in the span bridges and low level path lights through the parks areas.

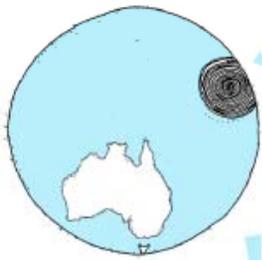
Plants consisting of local shrub, succulents, and flora.
Coastal grasses line the span bridges.



Seating made from local timbers.

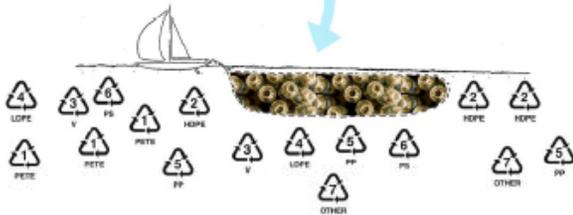


One Earth: The no more single use plastic bridge.

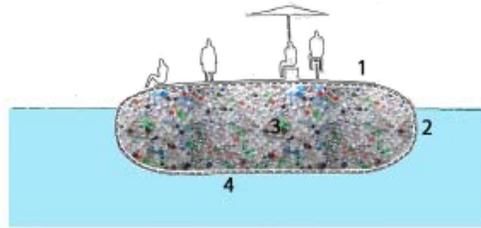
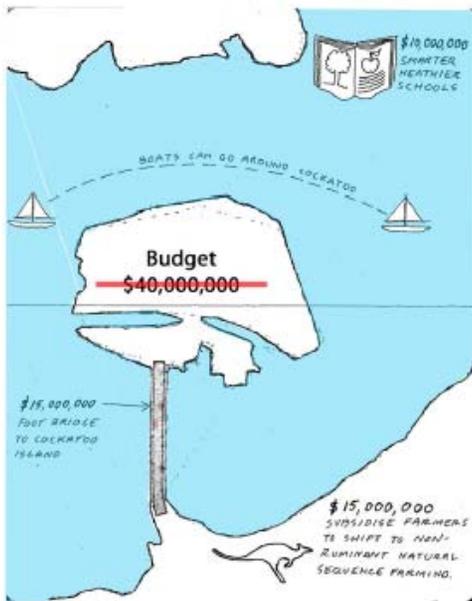


Plastic Soup: Continent sized plastic soup, 10m in depth floating in the north pacific gyre currents.

Plastic mining

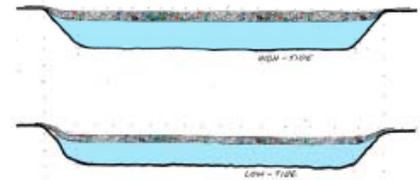


Plastic waste bridge



- 1: Re-composed Slip-proof plastic Decking
- 2: Re-composed Plastic Binding Structure & Protection
- 3: Plastic Bottle / Container byonancy
- 4: Habitat for marine life

Floats up and down with the tide



Connection to Cockatoo

Pedestrian Cycle bridge



Precedent: 4 storey building in Taiwan

Building



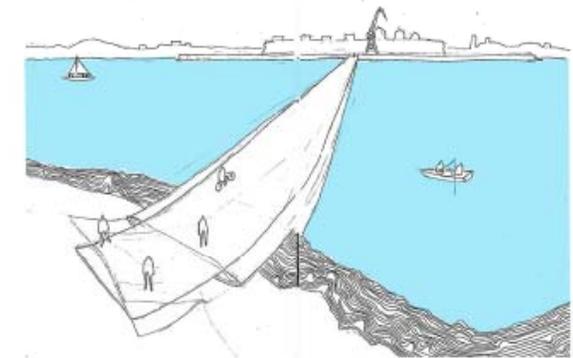
Precedent: PlastiCI - Sailed from San-Francisco to Sydney

sailing boat

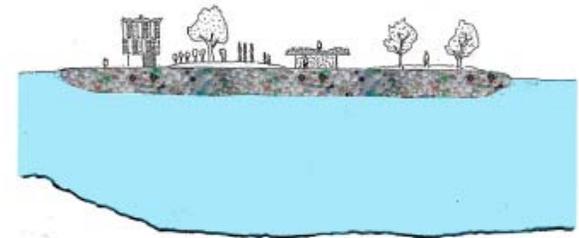


Precedent: Floating Island Hawaii (Whim Architecture)

Floating island



Future proof bridge



**Letter to Editor in regards to Deborah Snow's article, *Public spaces, private interests*
Sydney Morning Herald, News Review - see below**

In regards to Deborah Snow's article, Public spaces, private interests (SMH News Review, p.29, March 29-30 2014), it has long been understood that transport to Cockatoo Island will make or break the successful regeneration of this wonderful asset. Ferrying workers to the island for a long day's work is quite a different matter to bringing short stay visitors in large numbers to enjoy the events, entertainment and tours offered by its history, and hence bolster its income and relevance.

I, along with fellow Urban Designers and Planners, have put up a proposal for a pedestrian and cycle bridge from Balmain to Cockatoo to anyone who will listen. The proposal is backed by the Australian Institute of Architects, local, state and federal MPs, Leichhardt Council and Arup Engineers. It is a goer with enormous potential to open up Cockatoo's sustainable objectives, and could become a centre of excellence for leading edge creativity. As Elizabeth Farrelly has succinctly written:

What an opportunity to establish a thriving sustainable-arts island and glorious transport object, worthy of the Thames or Seine, to grace our Sydney Harbour dreaming. Only connect. (Get connected: protection is a bridge over troubled waters, January 3, 2013). Yet Management of the Sydney Federation Harbour Trust has been unwilling even to consider this idea.

It's time that they were reminded of the obvious: that without exciting, active transport access, the island will never perform at its potential. Let government provide leadership here and drive a visionary solution to sustaining the island's future.

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Public spaces, private interests

The body managing prime harbour sites faces a funding crunch, writes Deborah Snow.

'It's not our task to make a lot of money.' Geoff Bailey

When a man fell to his death after toppling over a Cockatoo Island cliff face last March, it capped what had been a horror stretch for the island's owner, the Sydney Harbour Federation Trust.

For months there had been internal angst over another, less public disaster for the trust: the staging of what was meant to be the inaugural Cockatoo Island Film Festival in October 2012. On paper the idea looked brilliant. Proponents said the festival would draw tens of thousands of visitors to the former penal establishment and shipbuilding yard, now tourist attraction and culture hub, which sits in the Parramatta River west of the Harbour Bridge.

Trust chief Geoff Bailey wrote excitedly in his 2012 report that it would be a “cinematic extravaganza”, allowing patrons to gorge on all manner of filmic delights over five days. But several months later, the dream had turned to dust. Despite a heavily promoted opening night, paying visitors turned out to be less than a third of the number predicted. The trust lost heavily on trying to run its own ferry service for the festival. And the company which partnered with it to run the event collapsed, leaving the trust bearing total losses on the venture of nearly \$600,000.

Some dissenters on the trust’s staff had tried to warn of the financial and reputational risks involved, former insiders say, but were seemingly ignored.

The couple behind the operating company, Allannah Zitserman and Stavros Kazantzidis, had previously run the smaller Dungog Film Festival, but had no experience of the island, and underestimated the logistical difficulties of getting people and supplies there. A creditor’s report blamed both sides for the fiasco, finding there was “very little documentation that shows any agreement behind the company and the trust in regard to the terms of the festival and sharing of costs and responsibilities”.

“It was a clash of cultures,” says one film industry source. “It was a fabulous idea, but how were you going to get those people on and off the island?”

Eighteen months later, a lingering question remains for those trying to make sense of the trust’s latest moves: is there a link between the film festival failure, and a recent pitch to Chinese investors to avail themselves of prime leasehold spots in some of Sydney’s most well-known headland parks?

As Fairfax Media revealed a week ago, the trust was recently advertising – via the NSW Trade and Investment office in Shanghai – several sites on Middle and North Head for long lease and development. The online brochure talked glowingly of “unique development opportunities” for “the creative investor” and highlighted the spectacular Sydney Harbour outlooks and lush parkland surroundings as having potential for things like a boutique hotel.

The revelation caused uproar among those who insist the trust’s primary responsibilities are not commercial, but enhancing the amenity of the former Defence land it has custodianship of, with an emphasis on conserving environmental and heritage values.

The trust’s vision statement says its prime role is to “provide a lasting legacy for the people of Australia by helping to create the finest foreshore park in the world and provide places that will greatly enrich the cultural life of the city and the nation”. This sits in jarring contrast to the minutes of a trust meeting of June last year, which said “the trust will be focusing on its core business – leasing – in the coming months”.

Set up by the Howard government in 2001 to take over the former defence sites around the harbour, the trust now has stewardship of Cockatoo Island, the Headland Park at Middle Head, the North Head sanctuary, Woolwich dock and parklands, Snapper Island, and sites at Watsons Bay and Neutral Bay.

Many of these require extensive remediation. But capital grants from the federal government ceased several years ago, putting increasing onus on the organisation to be self-funding. So far, it has done this from interest earned on the original government grants, supplemented by putting small-scale tenants in many of the ex-army buildings scattered around the former defence sites, and temporary event revenue.

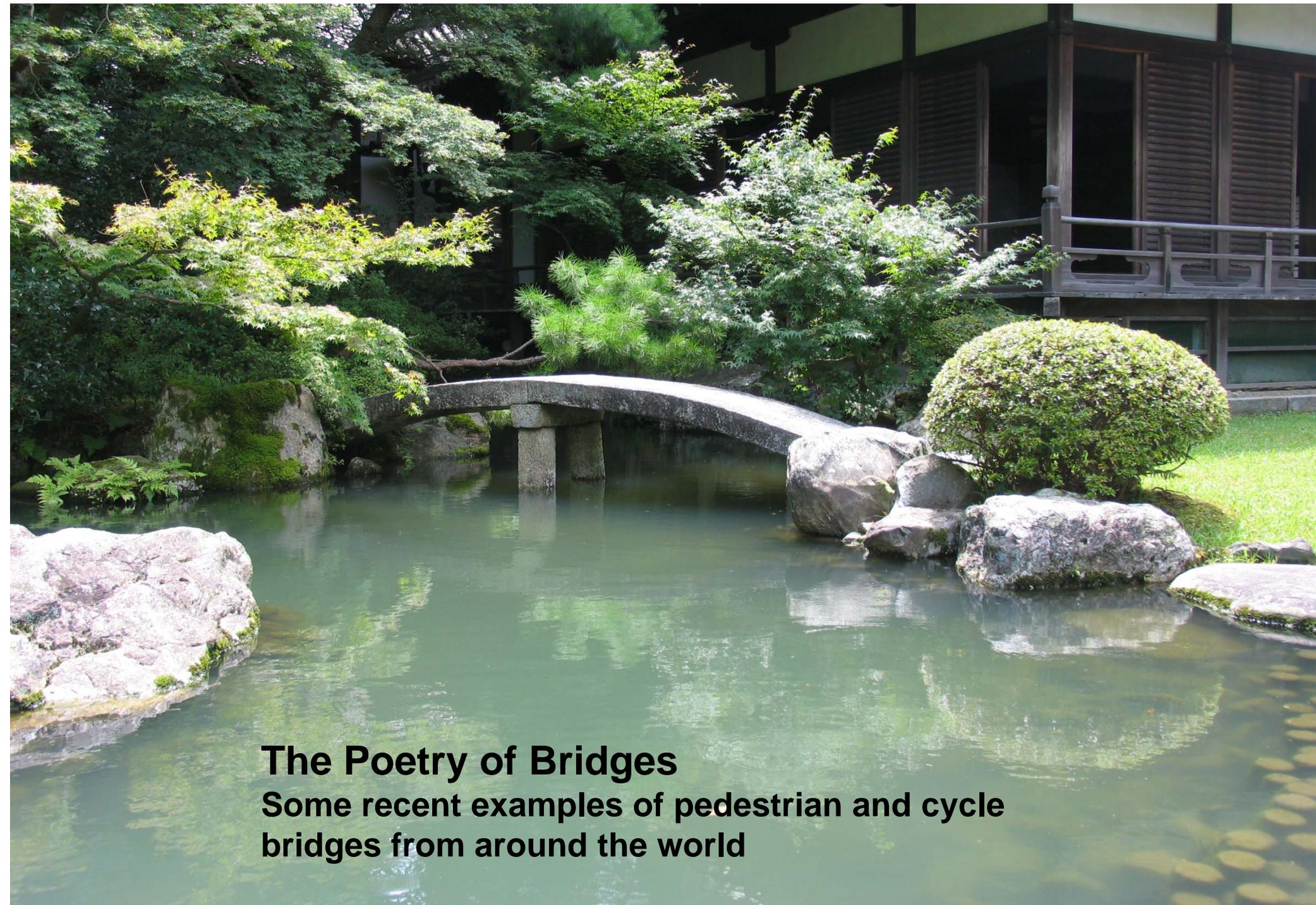
Yet it is still feeling the squeeze. As the June minutes last year warned, “all efforts are being made to reduce the trust’s dependence on interest revenue as the trust’s cash reserves reduce”. Its bottom line was also hit by losing a healthy income from TV show *The Biggest Loser* which recently vacated a site it had been leasing at North Head.

This week a spokesman insisted the film festival losses and the exodus of the show had had “minimal effect” on the trust’s capacity to self-fund. The accounts suggest otherwise. Annual surpluses went from \$3.8 million in 2011, to \$1.2 million in 2012 and just \$49,000 last year. It seems no coincidence that the trust recently hired former investment banker Tim McKay to put more grunt into its leasing division.

Bailey says the trust has – for now – pulled the sites being marketed in China because “we had enough on our plate already”. He insists the trust is in a healthier financial position. “It’s not our task to make a lot of money – ideally we would be line-ball each year because the purpose of generating the revenue is to put it back into the sites,” he says.

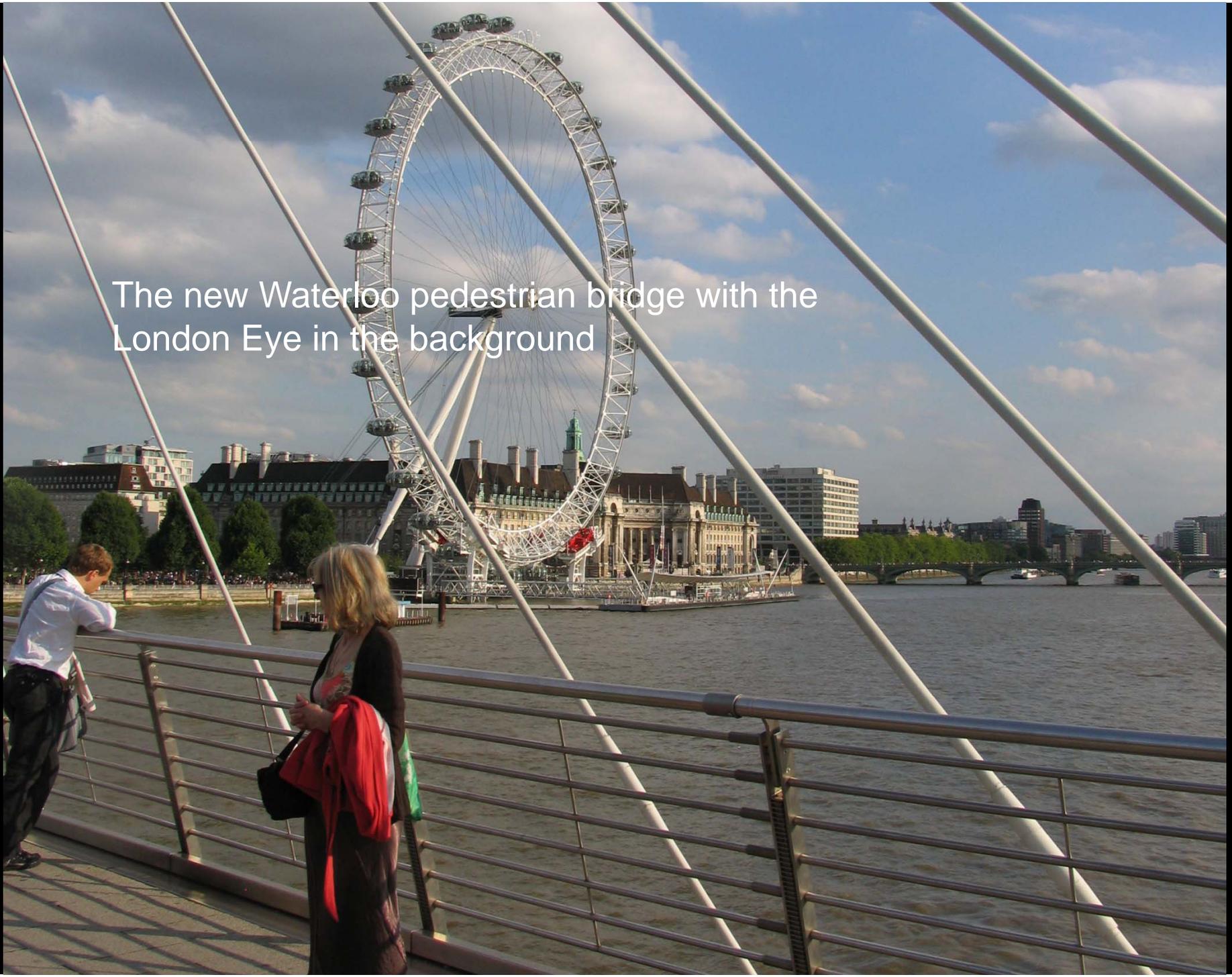
But defenders of the original vision for the trust fear it is being forced to pursue ever more aggressive commercial leasing opportunities to keep itself running. Fierce local opposition to a proposal for an aged care home on Middle Head on trust land has been another sign of the mounting tension between the the body’s original goals, and its increasing financial constraints.

Bailey insists “we are not doing anything differently to what we have always done”. But Linda Bergin, president of the Headland Preservation Group, says the trust’s recent floating of a “greenfield” development opportunity for a boutique hotel at Middle Head is evidence to the contrary. “That plus aged care would be a completely inappropriate use for public parkland,” she says.



The Poetry of Bridges
Some recent examples of pedestrian and cycle
bridges from around the world

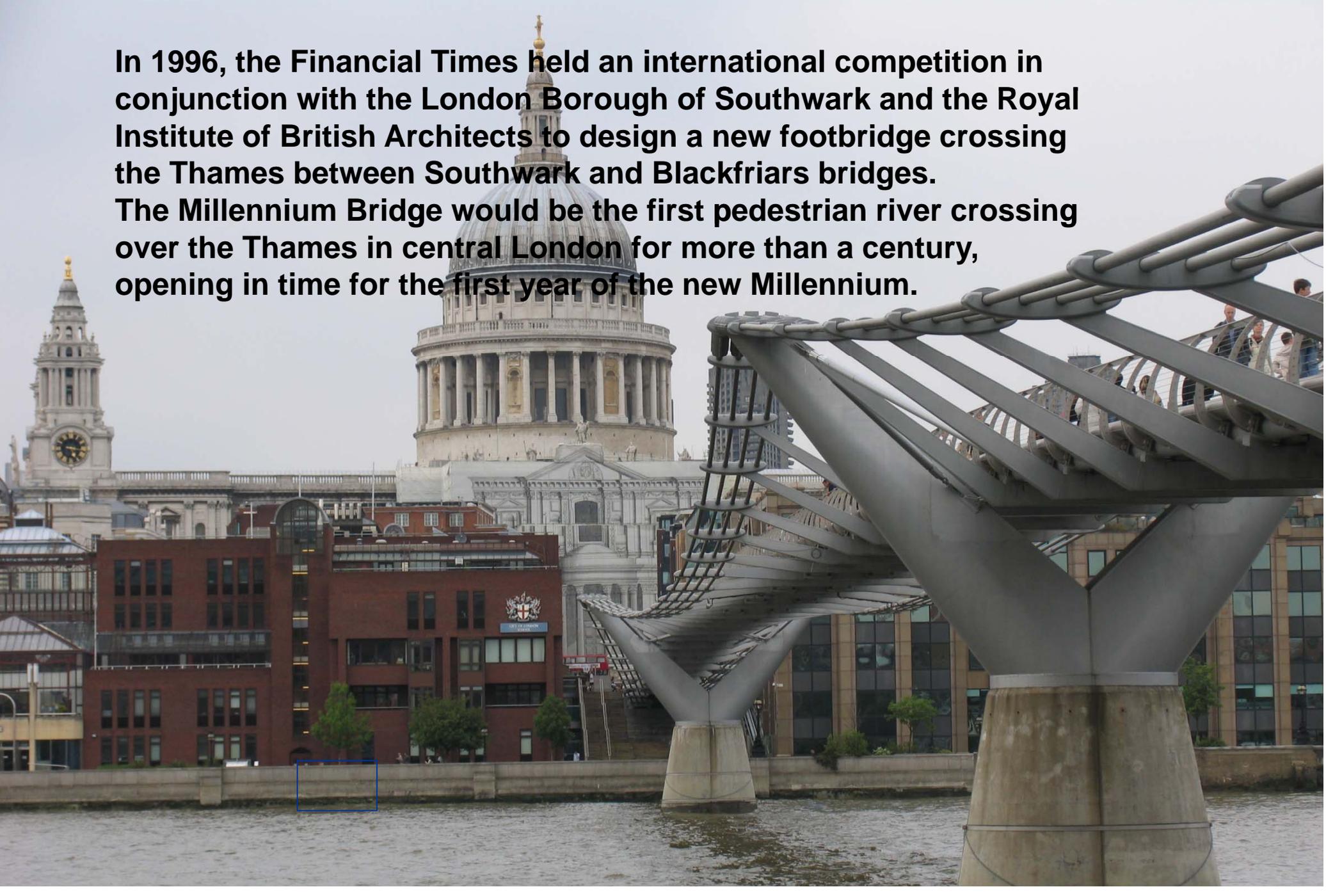
The new Waterloo pedestrian bridge with the London Eye in the background





The new Waterloo pedestrian bridge built 2002 beside the Waterloo rail bridge

In 1996, the Financial Times held an international competition in conjunction with the London Borough of Southwark and the Royal Institute of British Architects to design a new footbridge crossing the Thames between Southwark and Blackfriars bridges. The Millennium Bridge would be the first pedestrian river crossing over the Thames in central London for more than a century, opening in time for the first year of the new Millennium.



The Millennium Bridge designed by Norman Foster & Assocs. and Arup Engineers is a 330m steel bridge linking the City of London at St. Paul's Cathedral with the Tate Modern Gallery at Bankside.



**Pedestrian & Cycle Bridge across the Seine, Paris.
Designed by Dietmar Feichtinger Architects, Paris**



Pedestrian & Cycle Bridge across the Seine, Paris. Designed by Dietmar Feichtinger Architects, Paris





New Pedestrian Bridge to Mont St Michel (with service vehicle access) in place of the existing tidal causeway. Designed 2013 by Dietmar Feichtinger Architects, Paris

The Helix Bridge, Singapore, a design by Australian Architects, Cox Architecture with Architects 61 and Arup Engineers





The Helix Bridge, Singapore, a design by Australian Architects, Cox Architecture with Architects 61 and Arup Engineers

The Helix Bridge, Singapore
2012 designed by Australian
Architects, Cox Architecture
with Architects 61 and Arup
Engineers



Kurilpa Pedestrian Bridge, Brisbane 2009
Designed by Cox / Rayner Architects with Arup Engineers



Kurilpa Pedestrian Bridge, Brisbane 2009
Designed by Cox / Rayner Architects with Arup Engineers



The Web Bridge, a walkway/cycleway across the Yarra River
by Australian Architects, Denton Corker Marshall



Sydney Harbour – The New Links

A circular pedestrian and bicycle link across the harbour joining the City, Barangaroo, Balmain, Cockatoo Island, Hunters Hill, Lane Cove and around to North Sydney.

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And most of all, special thanks to Richard Dinham who has invested so much time, thought and energy into the project and was instrumental in extending the Cockatoo bridge project to include the other harbour links and show case the project as Reconnecting Cockatoo in the SAF2012.