

Immigration Bridge Submission

26th March 2009

The Secretary
Joint Standing Committee on the National Capital and External Territories
Parliament House
Canberra

Thank you for the opportunity to comment on the proposed Immigration Bridge.

I make this submission as a constructive attempt to detail why the Immigration Bridge is a short-sighted way to fulfill a great idea. I shall keep it short but hopefully persuasive.

I have been associated with Canberra since the late seventies; been News Director of one of its commercial television stations, produced the local legislature's newsletter, handled the public relations for the New Parliament house project for its first four years, and was National Director of Marketing & Information for the Royal Australian Institute of Architects for five. I speak as someone who understands this city and what makes it iconic and wonderful, and why we are so indebted to the legacy left by Burley Griffin.

I support the idea to honour the role of immigration and the people involved in this significant part of Australia's history. I am a migrant and proud to be, and delighted that the country let me come and share this wonderful place.

However, this bridge is not an appropriate way to reflect the spirit of the many millions of migrants.

- It is a poor solution to a great idea
- It has major physical limitations in terms of space and access
- It dishonors Burley Griffin's vision and does not enhance the plan
- It is imposed on the local Lake Community and would significantly and dangerously, impact on Lake use
- It will detract not complement the two significant locations it links
- It is isolated so cannot grow or meet the demands it could create; and
- It smacks of an idea trying to find a home, rather than an organic solution that makes sense in its space

I will explain my assertions in more detail.

The Griffin vision and legacy

Burley Griffin was commissioned to design a city in the bush, and few can doubt his magnificent ideas. But just as Utzon had to battle for the integrity of his Opera House, Burley Griffin battled to retain the vision of his grand plan. Faced with hostility and inertia, he even had to resort to planting trees to define where his avenues would one day come. There were those who thought they knew better – there always were and still are.

One of the key ideas that others knew better, was to build a straight bridge pretty much where the Immigration Bridge is now proposed. It is recorded that he was strongly opposed that revision of his plan.

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It is true that Burley Griffin had explored the idea of a circular basin on the lake in that area, and a small semi-circular bridge to define the open corner of it. But that idea is not in the same location and that circular basin does not exist to be defined by his circular vision. Indeed neither of his circular basins survived the development of his ideas.

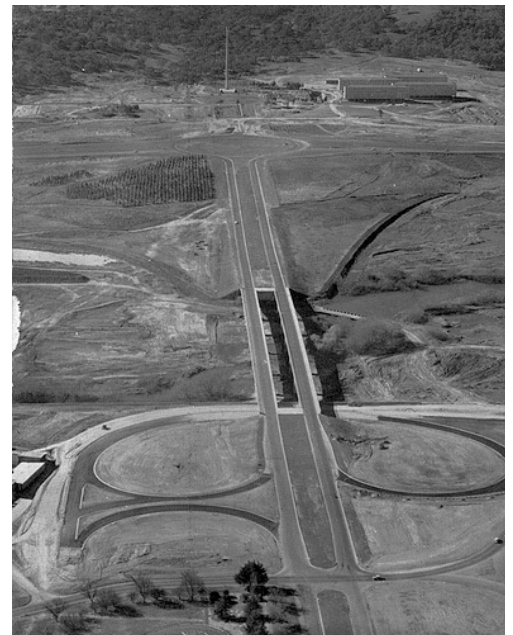


I am not one to say Canberra should be a rigid implementation of Burley Griffin's plans, but tampering with the integrity of his key dynamics is risky. On rare occasions it can work well. For example, there are two circular on/off ramps to the west end of Commonwealth Avenue bridge, close to the west landing point of the proposed Immigration Bridge. These sixties clover-leaf designs were not in his plan, but do reflect his circular dynamic for the area very well. Sadly, part of the hidden agenda for the Immigration Bridge is to remove these roads and build up the area to the rear of Albert Hall. As I will explain later, that

would compound the problems of access to the Immigration Bridge and seriously impact lake foreshore users.

Burley Griffin's vision was to cut the lake on the water axis by just Commonwealth and Kings Avenues. Just take the lift to the roof of Parliament House to see why that vision of symmetry was so inspiring. Indeed it drives the design integrity of the New Parliament House. The core of his vision was the alignments of the major features of the landscape; Mt Ainslie, Mt Pleasant, City Hill and Capitol Hill on which Parliament House now sits. There are no landforms to drive the Immigration Bridge locations which is why it does not make any design sense within Burley Griffin's landform driven alignment.

To impose any such structure on his lake will destroy the clarity of his vision. I for one feel the price is too high and the advantage of such a bridge in that location is negligible. There are plenty of other concepts and other locations where we can celebrate immigration far more effectively and sustainably.



Lake users and usability

No single group can claim exclusivity to any part of the city; we live and play here in the spirit of sharing. The lake users do not make any claim to exclusivity of the waters and surrounds. But they are the 'local' community when it comes to the lake and its environs. Their involvement and custodianship has always been very positive. Hundreds of people use the lake for sailing, dragon boat racing, kayaking and many other sports each week. The shoreline is invariably crowded with people enjoying their walks, pushing the pram, jogging, roller-blading, cycling, kite flying and even the odd brave fisher-folk.

This high level of activity and sense of belonging ensures care for the lake, reinforces its economic value to the community, and is a social environment for children and adults pursuing healthy lifestyles. It is already close to full capacity in this location.

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I understand that some of the lake-users feedback has been heard, and we are told it is now reflected in the designer's proposals to increase the height and modify the design of the bridge. More on that later. Unfortunately there has been no listening to the fact that the bridge idea simply doesn't make sense. The proponents are determined to put it there and give the local users only a choice of compromise. This defies common sense.

It is an intrusion into the iconic Lake Burley Griffin environment to achieve an objective that in no way requires or enhances the lake. Indeed the site imposes severe limitations on what could ever be done with the otherwise noble idea of commemorating the Immigration history of Australia

It is sad that the proponents of this idea did not understand this when they made their proposal. It is hard not to come to the conclusion that their vision was locked-in very early on as 'a bridge somewhere' – anywhere. Now where to put it? The result is a bridge from nowhere to nowhere for no demonstrated community need. I believe if we are going to commemorate Immigration, it should be with something that meets many needs and has many uses, and be put in a place that could do with extra human traffic.

Negotiating on a 'done deal'

When I contacted one of the major sponsors many months ago and alerted their PR person to community and practical concerns, I was effectively told it was 'a done deal'. They had the politicians support already in the bag and the major sponsors tied up.

As this was coming from a bank with a strong 'community' identity, I was really surprised at this arrogance and lack of empathy for the community. They and the proponents are effectively imposing this structure on Canberra, not for Canberra.

I also have more respect for the politicians they name, than the proponents seem to.

Like those politicians, including the Deputy Prime Minister, I agree that commemorating immigration is a worthy concept. But worthy of a better idea! I suspect and hope the named politicians will feel much the same following this enquiry. Nice theme, wrong idea and wrong place.

The concept of a Bridge

Generally non-functional bridges like this have been big disappointments when built to commemorate something. The pedestrian one in London is a good example of something imposed unsympathetically on the historic precinct of the Thames. Community support is luke-warm, but it has one great advantage this bridge won't have. At least it goes from somewhere to somewhere where people want to move, so it does get used although the London example is not an exhibition space encouraging people explore.

This bridge does not serve a purpose to get people from somewhere they already are, to somewhere they want to be. Indeed, if it does succeed in drawing pedestrian and cycle traffic from the nearby Commonwealth Avenue Bridge, it will all but negate the ability of tourists to explore the 'tapestry of people's names' that the bridge is there to capture. Either it is a bridge doing something the community needs, or it is a memorial but it cannot successfully serve two masters.

Location, location – the wrong end of town to pump more visitors!

From nowhere to nowhere – It will go from the National Museum which already has enough visitors to tax its limited parking and access arrangements; and to the rear of the historic Albert Hall precinct which is also short of parking, expansion areas, facilities and access. There is even a proposal to further restrict that access – loosely linked to this proposal - by removing the underpass clover-leaf roads below Commonwealth Avenue.

By placing what should be a major tourist attraction in an already saturated part of town, you are not widening the appeal of Canberra to tourists, merely restricting the number of people that will visit each site. The dilution principle at work.

I was instrumental in a major growth of tourist busses to Canberra when on the new Parliament House project, so I know how the tour operators think. Tour bus drivers will choose the Bridge or the Museum but not both. They have limited time and stops to see the attractions.

It actually defeats the proponents of the Bridge's objective if they try to piggy-back on another attraction's pulling power. It actually ensures less people will visit the bridge, than if the Immigration proposal was a proper complex with displays, food and toilet stops etc. Without these it is merely a parasitic mistletoe on the Museum. Placing it here certainly does not help the Museum, or the Albert Hall.

The impact of the Bridge

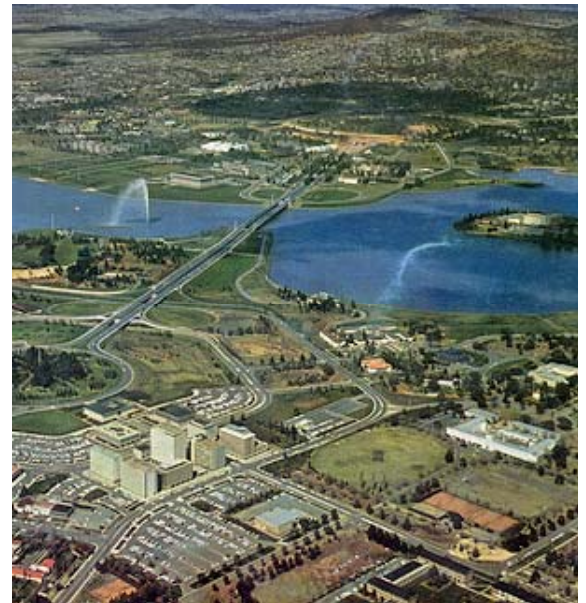
Almost certainly the existing lake community use this area in greater numbers than are ever likely to use an Immigration Bridge here. No matter how the proponents like to put it, the case is either Bridge or water use in this area, not both.

It also cuts in half the two key areas of water used by the sailing and dragon boat community. They and many others use this area of the Lake – West Lake and West Basin - extensively. It is where the young kids learn to sail as it is sheltered, close to the sailing school and has predictable winds, something notoriously scarce on the rest of the lake. This means the area is the safest for the novice sailors to use.

The yacht racing community often gather here before the regular sailing races that happen several times a week during season; and which are extended by the inter-state regattas. This spot is one of the few convenient collection areas away from the main racing course.

There are three critical dimensions to this issue – space around any pylons, the effect of the structure on wind flows, and height underneath the bridge deck.

Space - Sailing is nothing like power boating or driving a car. It requires skill and space to use the wind to get where you want to go. Space is a critical feature, especially if you have more than one boat in any given area. So the intrusion of pylons is going to



severely limit the space a boat may safely use in that region.

In the case of novices, the space they need is significantly bigger. If you have four or five boats in a student class, the area becomes practically unusable with any margin of safety, if there are bridge pylons there.

Even dragon boats have limits to their maneuverability and put a number together in a race, and open water again becomes essential.

Space on this lake is deceptively scarce. If you doubt the issue of usable space, just check how rare it is to see anything other than a windsurfer on any of the other lakes in Canberra. Virtually all sailing is on West Basin and West Lake for good reason.

Wind flows – as someone who has sailed this area of the lake since the seventies, the various buildings on the museum peninsula, have had an impact on the wind patterns at various wind directions. For a skilled sailor, this can be fun mastering yet another quirk of the lake. But none of those buildings have rendered the wind-flows potentially dangerous. This is because they are land based structures and some distance from the water's edge.

The proposed bridge is a double aerofoil across the water (platform and roof) with structural complexity interweaved between the decks and beneath. Having what is effectively a large parked aircraft across the water, cannot do anything but render the wind-flows exceptionally challenging.

This is an extra risk for the novices, and I believe if it was your child learning to sail there – you would understandably think twice. That means the disturbing bridge wind-flows will probably remove the training ground for our future sailors.

Height – Even relatively small sailing dinghies and catamarans have tall masts. Seven to ten metres clearance is a minimum for even the smaller ones. The more highly rated racing boats and the trailer-sailers, all require significantly more, as they have higher rigs.

The bridge designers are now trying to negotiate on height. They say “maybe high in the middle and lower at the ends?” This just tells us they know very little about sail craft performance. Height is not just the clearance for the mast. It is clearance PLUS a significant space above and around it to ensure smooth consistent airflow. Stealing the wind from a sail as it goes beneath the bridge means the craft becomes instantly vulnerable and uncontrollable. Padded pylons is a small compensation! No wind no control!

All this unfortunately means that no matter how gifted and visionary are the designers, it will still be a huge biplane suspended probably 15 metres up (around 5 storeys or getting close to museum roof height) and 15 metres across. There is no compromise solution to that large massing which leaves anything but very marginal use of the space around it.

I do not think that compromise is worth making for an Immigration Bridge that ought to be elsewhere and not a bridge in the first place.

The functionality of a Bridge as a commemoration

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Commemoration means people pausing, exploring and finding their names and those of others. It means a slow progress of people chatting, taking photos and looking other than where they are going.

Having designed and installed many large-scale exhibitions, and having guided the team for the New Parliament house project's very popular exhibition building and innovative site open days, I can speak with some authority on what makes for a good and safe exhibition space. Unfortunately it is not a long skinny display.

I will not bore you with too much detail, but would point out just some of the obvious flaws. Long skinny designs need to be circular, so that people enter one end and go out the other. As soon as you introduce two-way traffic it turns into clumps of frustrated people trying to go against the flow while exploring the displays. Very soon you have grumpy children and even less enthusiastic parents just wanting to get out of there.

People who travel by coach or car will all leave from the same end that they entered - that will be the overwhelming proportion of the users.

Introduce prams, disabled and pets, then cyclists and the super fit joggers or optimistic on roller-blades; and I for one would not want to be the Immigration Bridge's insurance company. I doubt they would get cover even if it is made 15 metres wide to accommodate the volumes. Of course the wider and longer it is, the more people and thus weight it will need to carry, and the more pylons and steel to support it and torsionally stiffen it. The drawings are a very optimistic rendition of what will be a large mass of steel and concrete.

If the proponents of the bridge say it is only a commemorative event for tourists, not a transit link; then the need for it to be a bridge falls away completely. If it is to be a transit route, then the commemorative justification is secondary and there needs to be demonstrated need for this transit link. There isn't one.

The bridge doesn't meet the needs for either use. Just having etched names on a handrail doesn't do it for me! They are only there to pay for the project. The immigrants deserve better than that.

A good architect given a decent site somewhere else, could design a fabulous year round complex, that commemorates all the diversity of immigration and where it can stand on its own merits and have space for the required expansion and infrastructure. Imagine the school children exploring replica pioneer houses, early city streetscapes, the ships cabins on the long voyages, understanding the challenges and differences of the pioneers of each era – even just not having mobile phones and television! The rich tapestry of Immigration needs more than names in a handrail!

The bridge has no expansion capability. It locks up forever the idea of understanding the role of Immigration and prevents justice being done to this part of our history, anywhere else.

The design of the Bridge

I only intend to comment on the practical challenges, not reflect unkindly on the aesthetics of the proposal.

If we are to have a bridge that has at least 15 metres clearance under the deck, then the

approaches to this bridge are going to have to be long and take up a lot of space. It is a simple mathematical equation involving ramp angle and overall height.

At one metre vertical for ten horizontal it will need a 150 metre long ramp up at each end. There simply isn't that much space at either end of the proposed location. To meet the emergency and disabled access needs there will probably need to be stairs and lifts, or some curling corkscrew structure to let people walk up to the deck height. Even on a tight radius it would still need to be at least 45 metres across the spiral and therefore look very solid, almost claustrophobic from within.

Then the twisting effect on long narrow structures in high wind areas is going to need engineering solutions to damp the twisting. These days this is often done with tensioned cables. That means anchoring points at each end and along the structure, that need enough distribution and space to work.

Either way there is almost certainly going to have to be a major structure or pylons at each end. The chances of these contradictory needs being made into an aesthetically pleasing compromise and not disruptive to the precinct, becomes highly unlikely.

Assuming the bridge designer has managed to overcome all these very effectively, there will be a significant impact on cost, partly capital and partly running costs. Unless this 'biplane' is built of stainless steel, it will need a lot of expensive maintenance! Estimates for devices exposed to water, wind and sun are usually of 15 to 20% of the build cost annually in the early years – rising later as the structure ages and the materials fatigue. What guarantees do the people of Canberra have that they are not going to inherit this cost?

What sailors love, tourists loathe

This brings us to the final challenge for the bridge proponents, the weather. Canberra is very hot in summer and cold in winter. A purely outdoor attraction, suspended in a high wind-flow area, is going to have many marginal days. It will also need suitable protection from the wind for the strollers and other devices and people using it. Yet this protection potentially increases wind effect on the structure, and demands more weight and rigidity to damp the movement of the structure in those winds.

The tourist numbers in winter will reduce to the hardy and zealous explorers looking for a name. The rain will inevitably blow under any roofing so it is going to be a wet place. Not dissimilar to the covered walkways at airport carparks that tease you to thinking you will stay dry.

In the heat, only the middle of the day will provide significant shade, and the bridge's NW to SE alignment reduces this shading effect further.

In summary

The idea of commemorating immigration as part of the fabric of Australia is too important to be marginalised with a bridge from nowhere to nowhere, with just names on a handrail!

The concept is structurally, practically and functionally flawed. Above all it detracts from the amenity of the Museum, the Albert Hall precinct and the large number of lake users who currently act as unofficial custodians of this magic spot.

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The for/ against equation simply doesn't have anything like enough positives to outweigh these show stopper problems.

Please commend the idea of commemorating Immigration, but indicate clearly that it deserves greater vision and scope. Finally do not 'torment' the proponents by taking the 'non-decision' of asking them to come up with ever more compromised solutions; when the basic concept is too flawed to ever do justice to or help explain a significant part of our history.

Thank you

Simon Johnstone