

Transport
for NSW

Sydney Harbour Bridge Cycleway - Northern Access Project Design Competition Jury Report

February 2022







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Jury Member Endorsement

| Juror | Title | Signature | Date |
|------------------------------|--|--|------------|
| Abbie Galvin (Jury Chair) | NSW Government Architect |  | 22/02/2022 |
| Craig Kerslake | Managing Director, NGULUWAY DesignInc |  | 22/02/2022 |
| Alec Tzannes | Director, Tzannes Architecture Urban Design |  | 22/02/2022 |
| Helen Lardner | Architect, Director HLCD Pty Ltd |  | 22/02/2022 |
| Lucy Creagh | Principal, Lucy Creagh Urban Projects |  | 22/02/2022 |
| Garth Paterson | Landscape Architect, Director, Paterson Design Studio Pty Ltd |  | 22/02/2022 |

1. Introduction

1.1 Overview of Competition

The purpose of this Design Competition Report (**Competition Report**) is to inform Transport for NSW of the process and outcomes of an invited Design Competition (**the Competition**) for the Sydney Harbour Bridge Cycleway Northern Access Project (**the Project**) as evaluated by the Design Jury (**the Jury**).

Transport for NSW's Integrated Precincts of the Infrastructure and Place division (**the Proponent**) invited three competitors to participate in the Competition and prepare design proposals following an open Registration of Interest process.

The leads of the three design firms that participated in the Competition and produced a final submission for consideration by the Jury were:

- Civile
- ASPECT Studios
- REALMstudios

The teams each included urban design, designing with Country, architecture, heritage, landscape architecture, active transport and engineering specialists.

The competition was undertaken generally in accordance with the Government Architect NSW (GANSW) draft Design Excellence Competition Guidelines. This report follows the recommendations for the Competition Report:

- Summarise the competition process and include a copy of the Competition Brief;
- Outline the assessment of the design merits of each of the entries;
- Present the Jury's decision, including the rationale for the choice of a nominated design and the design excellence qualities that it exhibits; and
- Outline any recommended design amendments that are relevant to the achievement of Design Excellence through subsequent design development
- describe the design excellence qualities exhibited in the competition winning submission.

The Competition was undertaken in accordance with the Project Design Excellence Strategy and the Competition Services Brief, TfNSW Sydney Harbour Bridge Cycleway, Northern Access Project-Urban Design Team – IPD-21-9639, (**Services Brief**) as endorsed by Heritage NSW and the Government Architect NSW (GANSW) prior to the Competition in 2021.

Each Jury member has reviewed and endorsed the content contained within this report.

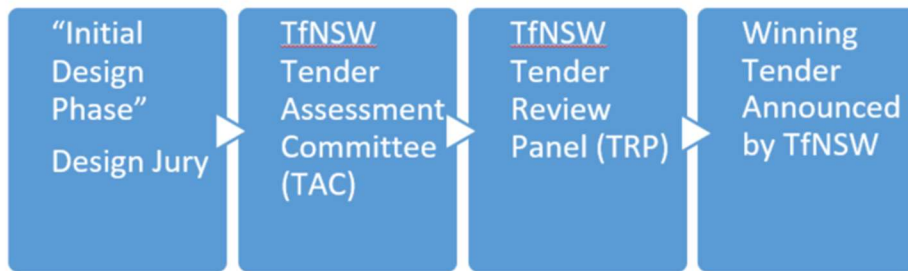
1.2 The Design Competition in the Transport for NSW process

In 2020-21, Transport for NSW developed and shortlisted two ramp options for consultation – a Linear Option landing north of Burton Street Milsons Point and a Looped Option landing south of Burton Street. The Linear Option was selected as the preferred option based on a final comparative assessment and community feedback. The Linear Option was formally supported by the Heritage Council Approvals Committee and formed the basis of the Services Brief for the Initial Design Phase (the Design Competition phase), which will lead to the appointment of a Tenderer for Concept Stage.

The purpose of this Competition is to provide independent, expert and impartial design review and advice during the current Initial Design Phase. This Competition Report will be provided to the TfNSW Tender Assessment Committee (TAC) for its consideration in confirming the winning design. The TAC will also consider other information and inputs in making a decision including technical assessments of the designs, 3D modelling and community and stakeholder views.

The Competition advice will be carefully and thoroughly considered by the TfNSW TAC who will have responsibility for formally evaluating the three "Design Competition" Tenders. The TAC will determine the most suitable Tender based on Evaluation Criteria, which will include design quality, deliverability and other considerations as noted above. The TAC's evaluation will be reviewed by the TfNSW Tender Review Panel (TRP), which confirms that the Tenders have been appropriately assessed in accordance with TfNSW policies (refer Figure 01).

Figure 01 Decision making process



1.3 Regulatory Framework

The project is considered to fall under the definition of “Roads and road infrastructure facilities” under State Environmental Planning Policy (Infrastructure) 2007, and would not require development consent. The project would be assessed under Part 5, Division 5.1 of the Environmental Planning and Assessment Act 1979 (EP&A Act) with Transport for NSW being the proponent and the determining authority.

Presentation to and review by expert design panels is a requirement for projects for which TfNSW is the determining authority.

1.4 Project Objectives and Site Description

Around 2,000 bike trips are taken across the Sydney Harbour Bridge cycleway on weekdays, making it one of the most heavily used bike paths in Sydney. Currently, to get on and off the cycleway at the northern end, riders need to carry or push their bikes up and down 55 steps at Bradfield Park. The steps are a safety hazard and prevent a wider group of people from riding their bikes on this route. Investigations in 2021 confirmed the cycleway will remain on the west side of the bridge and that lifts or travelators were not a suitable solution for the site or to achieve capacity. This cycleway ramp project aims to improve a critical link in Sydney’s bike network and the public domain of the Milsons Point precinct for all.

The project is seeking to respond sensitively to the site, including its heritage significance and values, landscape including retention of existing trees and usable public open space, engineering and designing with Country constraints and opportunities, as well as urban design, constructability and cycling requirements.

The project objectives are to:

- Improve cycling mode share
- Reduce number of safety incidents on the Sydney Harbour Bridge cycleway
- Respect heritage and open space amenities
- Provide equity of access

The Linear Option Reference Design developed by TfNSW in 2021 spans over Burton Street, overhead through Bradfield Park and the Station plaza and terminates just south of the tree canopy in Bradfield Park North. The Reference Design, which was provided to the design teams, demonstrated one potential ramp alignment and design. The teams were invited to develop their own alignment – or adopt the Reference Design alignment if they preferred – and design what they believed best achieved the requirements of the Services Brief, the Project objectives and responded to the site values and stakeholder briefings by Heritage NSW and North Sydney Council.

The Heritage Council Approvals Committee formally supported the Competition teams exploring and determining their own ramp alignments and design responses.

1.5 Jury Recommendations

An analysis and evaluation of the entries was undertaken by the Jury following: receipt of the Services Brief and Project documentation; briefings by technical reviewers; presentations by the design teams; site visits with the Project team; and, Jury deliberations.

The Competition process resulted in the determination of a shortlist of two schemes for further consideration by TfNSW: the ASPECT scheme and the Civile scheme. The Jury’s evaluation is provided in Section 3 of this Competition Report.

TfNSW may share the Competition Report with the Competitors by agreement with the Jury Chair and the Tender Assessment Committee once the final decision is announced. TfNSW may also share the Competition Report with Project stakeholders and the community.

2. Architectural Design Competition Process

2.1 Overview

The Competition process undertaken is summarised as:

- Three design teams were invited to participate in the Competition following a Registration of Interest and short listing process.
- The Brief and Initial Design Phase Project Documentation was issued to competitors prior to commencement of the 4 week design on 25 October 2021.
- A briefing session was held on 25 October 2021 with an opportunity for the competitors to ask TfNSW questions and seek clarification on the Brief or procedures. The briefing session included attendance by Project stakeholders Heritage NSW and North Sydney Council.
- A Register of Enquiries was kept during the Competition to document questions and responses without revealing the questioner.
- All competitors received a briefing from local Aboriginal elders.
- All competitors received technical advice from the TfNSW Project team and Transport's designing with Country, engineering, cost and arborist advisors.
- All competitors submitted Initial Design Phase deliverables in accordance with the Brief.
- Technical reports of each scheme were made available to the Jury on 27 January 2022.
- A summary of the technical findings, project objectives, the Design Excellence process undertaken with TfNSW Design Review Panel and Heritage NSW and the qualitative feedback received from stakeholders and the community was provided to the Jury on 31 January 2022.
- Each competitor presented their proposed scheme to the Jury during the Jury Day held on 2 February 2022 at Transport offices at Ennis Road, Milsons Point. Competitors were not permitted to watch other teams' presentations. Stakeholders Heritage NSW and North Sydney Council observed the presentations. The Jury deliberated prior to the close of Jury Day, with only Jury members, Jury Convenor Tanya Vincent and Ben Nacard from TfNSW in attendance.
- A follow up Jury deliberation meeting and another site visit with comparative 3D visual material was held on 11 February 2022.
- Two schemes were shortlisted as the winning schemes on 11 February 2022. Proceedings are recorded in this report.

The Competition was undertaken in a fair, open and transparent manner in consultation and disclosure with GANSW officers (not observing), the Impartial Observers and a Transport appointed Probity Advisor, Vic Baueris.

2.2 Probity

Throughout the Competition, Vic Baueris a probity advisor from Procure Group supervised the integrity of the process and ensured accordance with the Brief, procedures and protocols.

One member of the Jury declared a potential interest during the course of the Jury proceedings but this was determined by Vic Baueris to not constitute a conflict which prevented the member participating in the Jury proceedings. The Jury Chair concurred.

2.3 Observers

Several observers attended various stages of the Competition and had access to key Competition documents. This included North Sydney Council and Heritage NSW. Selected representatives of the Proponent were also present as observers.

2.4 Participating Firms

The three design firms were:

- Civile
- ASPECT Studios
- REALMstudios

2.5 Jury

Design Jury membership is determined by TfNSW with input from GANSW and Heritage NSW. The Jury appointed by the Proponent was:

Abbie Galvin – Government Architect NSW (Chair)

Lucy Creagh

Craig Kerslake

Helen Lardner (Heritage NSW nominee)

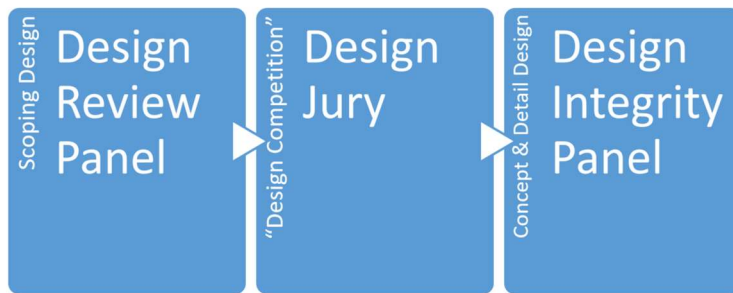
Garth Paterson

Alec Tzannes

Convening tasks including scheduling, facilitating meetings, reporting and general administration were performed by the Jury convenor Tanya Vincent, assisted by Ben Nacard, Design Manager, both from Transport for NSW.

The Design Jury is a separate entity from the TfNSW Design Review Panel (DRP) and the Project Design Integrity Panel (DIP). The DRP and DIP have a similar purpose to the Design Jury but operate at different phases of the Project (refer Figure 02).

Figure 02 Expert design review entities during Project design phases



The DRP operated during the Scoping Design Phase of the Project when the Final Business Case was being prepared. The DRP, which included Garth Paterson and Lucy Creagh, provided design input and Advice Sheets that helped the Project team to develop a quality design to around 5% design completion. The DIP will take responsibility for expert design review after the Initial Design Phase concludes. The Design Integrity Panel will review the remainder of the Concept phase, the Detail Design phase and the Delivery phase of the Project.

2.6 Technical Advisors

Technical advice was provided to competitors throughout the process. As part of the evaluation process, a technical assessment of each scheme was made available to the Jury a week before the Jury Day. The technical advisors in the Competition are listed below:

Russell Reid, WSP – Connecting to Country

Anna Hopwood, Tree iQ – Potential Tree Impacts

Geoff Thompson, Aurecon – Technical Criteria

Lewis Haig, TfNSW Integrated Precincts – Active Transport and Open Space

3. Evaluation

3.1 Summary

Following the submission of the final competitive design schemes, a technical assessment and compliance review of the competitor's submissions were undertaken by the technical advisors. This review was provided a week before the Jury Day.

Each competitor presented their scheme to the Jury explaining their approach to the site, design concept, compliance with planning controls and the design, heritage, planning and Connecting with Country objectives of the Competition Brief, as well as the benefits of their respective schemes.

The design schemes presented by the three competitors were analysed and evaluated by the Jury with a focus on design quality and the planning, design and objectives of the Brief. An assessment of the design merits and areas for further development were also identified and discussed during the evaluation process. The Jury evaluation was extended to a second session the following week, which included another site visit, to conclude deliberations.

An issue common to all schemes was the question of future use of the existing cycle-only stairway connecting to the Sydney Harbour Bridge cycleway. The Jury recommended these stairs be retained for cycling only to cater for the 20% of cyclists travelling eastwards from this junction point in the network, and as a purposeful use of retained heritage. The evaluation comments for each scheme assumed this as the end-state condition without pedestrians at this junction. Future design development of this junction alignment and functional details would benefit from this scope clarity.

JURY STATEMENT

The Design Jury was very pleased to be invited by Transport for NSW to contribute to the pursuit of design excellence on this important Project. The submissions from the design teams were of a high calibre and the teams are to be commended for their efforts. After considered review and deliberations, the Jury shortlisted two teams: ASPECT Studios and Cville.

In progressing the Project the Jury recommends design development is required to balance the challenging and sometimes conflicting requirements of ramp alignment, heritage significant views and the project's relationship to the open space setting, which is of exceptional heritage significance. The Jury makes this recommendation to Transport on the understanding that the Transport tender evaluation panel will also consider inputs from the community and from stakeholders in making a decision.

The Jury thank Transport for a rigorous and fair process and look forward to seeing design excellence remaining a top priority on the Project.

3.2 Civile Team

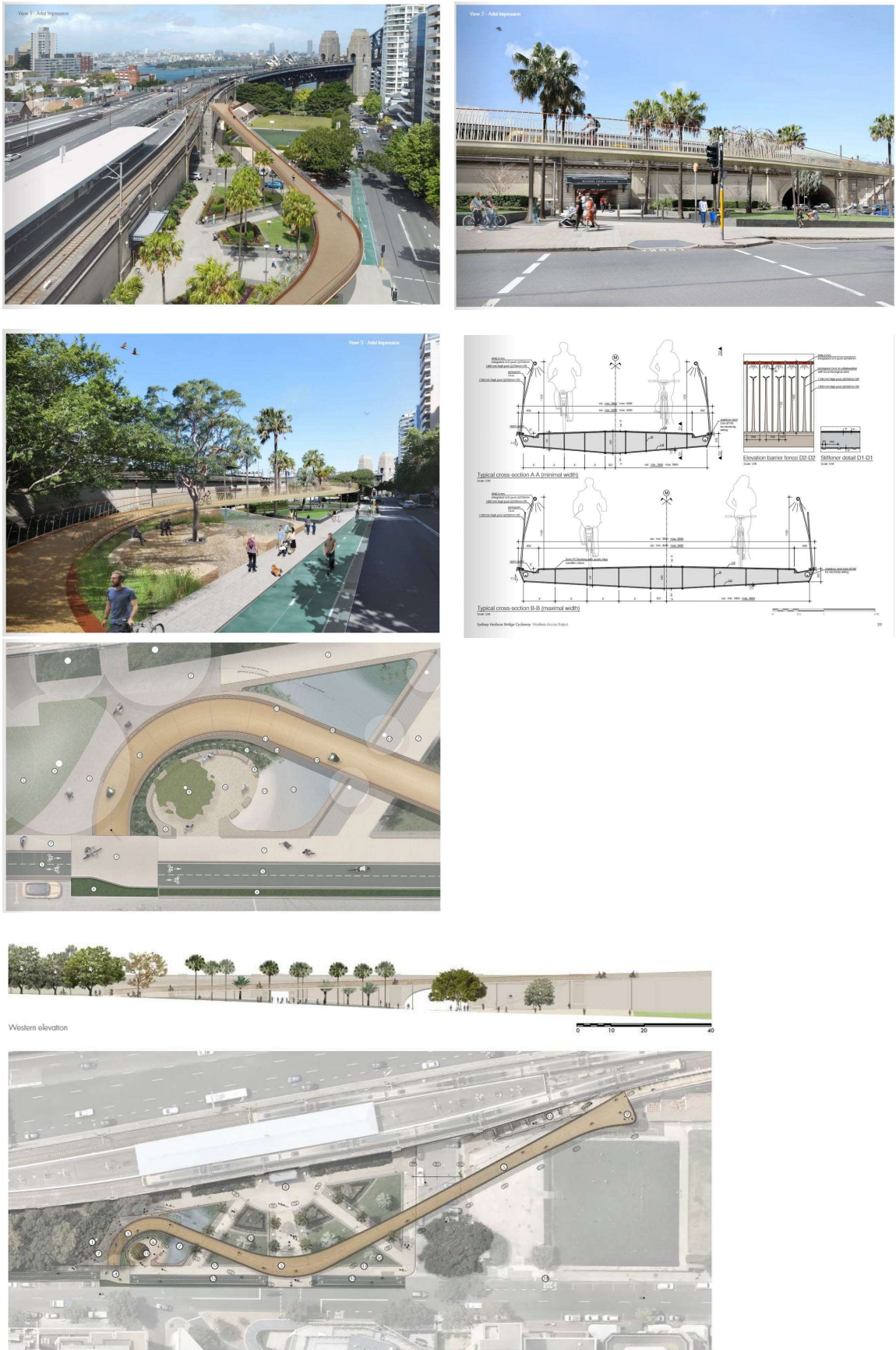


Figure 03 Design entry images from Civile team

The Jury summarised their consideration of the Civile scheme under 3 headings, design elements supported, design elements deliberated and design areas requiring development.

Design elements supported.

The Jury notes the Civile scheme as:

- A well resolved and confident design with a dynamic form that sweeps away from the Bridge viaduct and into Bradfield Park Plaza.
- Having a thorough appreciation of the cycling and pedestrian movements in the precinct, which informed the alignment of the ramp, junction with the existing Sydney Harbour Bridge cycle path and the landing arrangement at the Alfred Street footpath.
- Offering a new meeting place through the provision of seating at the ramp landing in Bradfield Park plaza with minimal impact to existing trees, with the exception of an historic Jelly Palm, which could likely be transplanted. Note: this Jelly palm is separate to the Jelly Palm in the plaza lawn terrace that has recently died.
- Further extending the Reference Scheme heritage strategy of staying clear of the Bridge viaduct wall structure and Railway Station entry, developing a sweeping curve with an alignment that echoes the radial plaza layout whilst ensuring that the ramp is read as an element separate from the Bridge.
- Providing a refined structure and balustrade detailing
- Minimising the visual impact of the ramp structure on the viaduct wall and station entry once inside the 'sweep' of the ramp's curve
- Minimising the impact on Bradfield Park North whilst maintaining the pleasant and well-used pedestrian pathway and view along the curved northern viaduct approach wall, through the ramp's alignment in the plaza and the position of the landing.
- Including several designing with Country themes that would add to the user experience and understanding of place. In particular, the proposals at the ramp landing that integrate water, sandstone and landscape. Integration of water also provides a visible expression of water sensitive urban design.

Design elements deliberated

- One interpretation of this ramp alignment approach (of minimising visual impact of the viaduct wall and station entry from 'inside' the ramp) is that the ramp frames the public open space, enabling the plaza to 'belong' to the Station entry and protecting it from the street. Another interpretation of this outcome is the ramp interrupts State-listed significant views to the curved northern approach of the Bridge (SHR00781) and diminishes the spatial integrity and open sky experience of the plaza, visually cutting it off from the street. It is noted that the Bradfield Park setting has "Exceptional" heritage grading (per the SHB Conservation Management Plan) and includes Milsons Point Station, entrance, canopies and plaza area and Bradfield Park North.

Design elements requiring development

The Jury notes the Civile scheme as:

- Encroaching over the Alfred Street footpath, affecting State-listed significant view to the Harbour Bridge particularly from a southern approach on Alfred Street. A narrowing of the wide ramp deck could reduce this impact.
- Affecting heritage significant views of the plaza, Bridge wall, the date and cartouche above the Station canopy and Station from Alfred Street, when outside the 'sweep' of the ramp's curve.
- Requiring further design development to ensure that the slender ramp structure, slender columns and crafted balustrade are achievable. Despite assurances of previous European precedents, the Jury considered the design would need to address structural and vibration requirements to develop column sizing and connection details, consider footing constraints that may affect column spacing and further develop soffit details/materials/finishes.
- Requiring further review of the generous ramp width. Whilst acknowledging the benefit of having extra cycling space on curves and on steeper gradients, the ramp widening up to approximately 5.8m at Alfred Street at a relatively low height could be overbearing for pedestrians and impact views down Alfred Street toward the Bridge pylons and arch.
- Requiring further review of the ramp height over the northern diagonal pedestrian path, which at approximately 2.4m to the underside of the ramp is not a height suitable in a public space and could feel overbearing. The ramp could be increased in height at this location through steepening the ramp gradient. It is acknowledged that a steeper gradient could have implications on reducing the ramp width as suggested in the preceding point.
- Investigate the ramp alignment both in the plaza and at the ramp landing to minimise impacts to existing trees including the historic Jelly Palm and the mature Chinese Elm which has a raised rootzone in the landing area.

3.3 ASPECT Studios Team

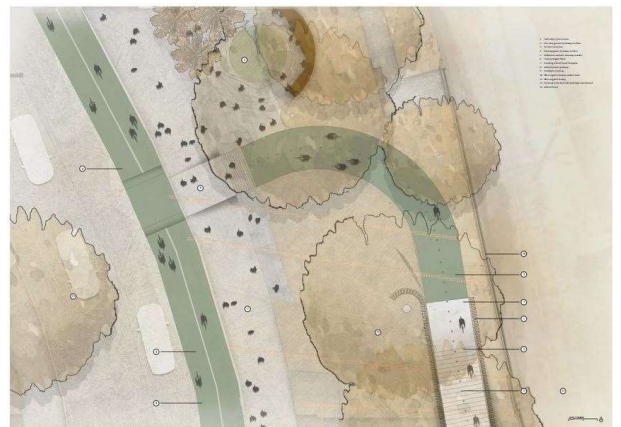
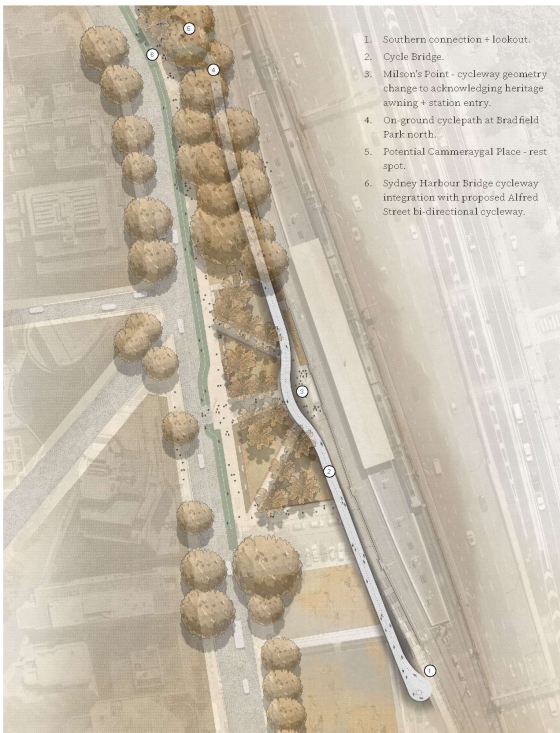
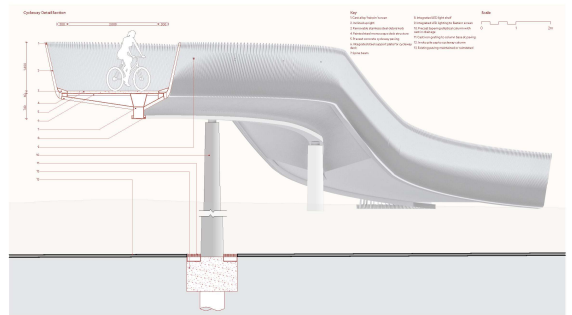


Figure 04 Design entry images from ASPECT Studios

The Jury summarised their consideration of the ASPECT scheme under 3 headings, design elements supported, design elements deliberated and design areas requiring development.

Design elements supported.

The Jury notes the ASPECT scheme as:

- An elegant and streamlined design that prioritises the open space setting of Bradfield Park plaza, consistent with the Design Principles defined in the Services Brief.
- Providing a relationship between the historic Bridge and new transport infrastructure through aligning with the approach curve of the viaduct and offsetting at the Railway station entry portico.
- Retaining legibility and sightlines to the Railway Station entry portico from different viewpoints through the soft curved alignment with the radial plaza layout and height of the ramp. Whilst clearly an intervention, the existing uses of the Bradfield Station plaza mostly remain intact.
- Offering a gentle cycle grade and a clear and direct route for the majority of cyclists moving through the precinct to or from the north.
- Locating the landing point of the ramp further north, where the pedestrian traffic is not as heavy as it is further south around the plaza and pedestrian crossing.
- Minimising impact to existing trees, paths and gardens within Bradfield Park plaza and minimising the visual impact of the ramp structure on views along Alfred Street toward Harbour Bridge through the ramp's alignment with the viaduct
- Creating a sophisticated design response through the thoughtful detailing of the structure and balustrade.
- Providing a not overtly literal response to designing with Country themes, primarily the whale inspiration for the balustrade concept.

Design elements deliberated

- One interpretation of this ramp alignment approach (of minimising impact on Bradfield plaza and the Alfred Street views) is that the plaza, and in particular the landscaped terraces, is able to be a predominantly uninterrupted landscaped space that is open to the sky and a clear part of the public realm of the street, with views retained to the Harbour Bridge arch from Alfred Street footpath. Another interpretation of this outcome is the ramp impacts the reading and full appreciation of the viaduct wall and the station entry and interrupts the significant view along the northern approach as seen in Bradfield Park North. The aesthetic significance of the curved northern approach with continually changing views of the Bridge and harbour is identified in the statement of significance as part of the State heritage listing of the Sydney Harbour Bridge, approaches and viaducts (road and rail) SHR00781. It is noted that the Bradfield Park setting has "Exceptional" heritage grading (per the SHB Conservation Management Plan) and includes Milsons Point Station, entrance, canopies and plaza area and Bradfield Park North.

Design elements requiring development

The Jury notes the ASPECT scheme as:

- Having a long extension and therefore encroachment into Bradfield Park north due to the gentle ramp gradient. Further review is required which could consider steepening the ramp once beyond the plaza to minimize this encroachment.
- Impacting the continuity of the State-listed heritage significant view along the viaduct approach wall, when approaching through Bradfield Park North, and obscuring part of the design detailing at the top of the approach wall and the date and cartouche above the station canopy.
- Creating two potential points of pedestrian/cyclist conflict – one in Bradfield Park North and one at the footpath on Alfred Street (as opposed to just Alfred Street). Further review is required to resolve the interface with the pedestrian park within the path, and enable its continuity.
- Removing a significant portion of the well-used pedestrian pathway that runs along the viaduct wall in Bradfield Park north, requiring pedestrians to divert and join the footpath on Alfred Street. A closer or further offset alignment to the viaduct wall could enable this path to be reshaped or maintained. It is acknowledged that a closer alignment may create a requirement for review of throw screens on the ramp or potentially atop of the wall, in addition to removal of a number of Poplar trees. (It is noted that these trees are not significant and provide current technical challenges due to their proximity to the rail corridor.)
- Requiring refinements to the balustrade such as the cycling bump rail, or consideration of a vertical rather than angled alignment. Future design development could also consider a recessed structural beam.
- Requiring more meaningful Designing with Country expression to ground the design in 'belonging' to the park and the Bridge.

3.4 REALMstudios Team



Figure 05 Design entry images from REALMstudios

The Jury summarised their consideration of the REALMstudios scheme as:

- A bold design with forward thinking ambitions for pedestrian and cycling behaviour at key junction points.
- Providing a multitude of opportunities and proposals to respond to and represent Country with many metaphors, motifs and poetic themes in the design concept. Answering Uncle Allen Madden's challenge "How do we slow people down" informed the design in critical junctions at the Bridge and the landing point.
- Skillfully handling the interface between the top of the ramp and the viaduct wall through allowing the two elements to rest side by side rather than intersect, with an interesting in-situ reuse of the removed heritage parapet.
- Offering a new meeting place in the Bradfield Park Plaza at the ramp's landing point
- Further extending the Reference Scheme heritage strategy of staying clear of the Bridge viaduct wall structure and Railway Station entry, through a consistent curved alignment following the park's radial layout.
- Minimising the visual impact of the ramp structure on the viaduct wall and station entry once within the ramp's curve
- Affecting heritage significant views of the plaza, viaduct wall and Station from Alfred Street, when outside the ramp's curve.
- Providing a visually complex structure and balustrade proposal, with the potential to overwhelm the heritage setting. The architectural resolution was considered diagrammatic.

Design elements deliberated

- One interpretation of this ramp alignment approach (of minimising visual impact of the viaduct wall and station entry from 'inside' the ramp) is that the ramp frames the public open space, enabling the plaza to 'belong' to the Station entry and protecting it from the street. Another interpretation of this outcome is the ramp interrupts State-listed significant views to the curved northern approach of the Bridge (SHR00781) and diminishes the spatial integrity and open sky experience of the plaza, visually cutting it off from the street. It is noted that the Bradfield Park setting has "Exceptional" heritage grading (per the SHB Conservation Management Plan) and includes Milsons Point Station, entrance, canopies and plaza area and Bradfield Park North.

4. Jury Recommendation

Of the three design schemes presented, the Civile and ASPECT schemes were determined to be the most successful responses to the design, planning, and heritage objectives of the Brief. In the professional opinion of the Jury, these two schemes, with further development, are the most capable of achieving design excellence and are recommended to be shortlisted for further consideration by Transport's Tender Assessment Committee. The Jury understands that the committee will also consider inputs from the community and from stakeholders in making a decision.

Understanding that the winning scheme will change as it is developed, the Jury recommends considered design development is required to balance the challenging and sometimes conflicting requirements of ramp alignment, heritage significant views and the project's relationship to the open space setting, which is of exceptional heritage significance.

The Jury acknowledges Transport's work in creating and facilitating a professional and fair competition process.

The Jury confirms that this report is an accurate record of the Competitive Design Process and endorses the assessment and recommendations.



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