



DESIGN EXCELLENCE REPORT
Chau Chak Wing Museum

CHAU CHAK WING MUSEUM

DESIGN EXCELLENCE REPORT

Date: May 2017

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1. Introduction

The new Chau Chak Wing Museum will, for the first time in the University of Sydney's history, combine museum, gallery and object-based learning spaces into a singular unique and bespoke facility, addressing such intrinsic internal functions of education, research-focused study rooms, and faculty teaching spaces, whilst managing the existing site constraints and opportunities, and complimenting (rather than impacting) surrounding development, parks and gardens and key view corridors.

Whilst a design competition process is not required for this building (being below a height of 25 metres above ground level and with a CIV less than \$100M), the University remains committed to ensuring that this new building will achieve design excellence.

The University's Campus Infrastructure & Services (CIS) sought Expressions of Interest (EOIs) from locally-based, internationally recognised, world class architects that specialised in adaptive re-use, gallery and museum design, heritage, contemporary learning spaces and civic place-making experience, on projects >\$20M, to perform the role as principal design consultant. The Tender Evaluation Committee (TEC) that reviewed the EOIs was as follows:

Scott Biggs, Project Delivery Manager, CIS

David Ellis, Director, Museums and Cultural Engagement

Juliette Churchill, Campus Planning Manager, CIS

Debra Berkout, Project Director, Urban Design, CIS

The TEC was supported by advisors from the museum end user, CIS Planning & Heritage, the project delivery team, and procurement, to assist the committee with queries or clarifications that may be necessary during the course of the meeting. The weighted mandatory criteria used to assess the EOIs were all non-price based, and focussed on demonstrated experience with:

- Adaptive re-use and heritage projects
- Gallery and museum projects
- Civic place-making projects
- Contemporary learning space projects
- Achievement of international recognition
- Projects over \$20 million, together with
- Proposed team and relevant experience

From the seven (7) EOIs received and evaluated, four (4) were interviewed, then shortlisted to three (3) firms that were then invited to respond to a Request for Proposal (RFP).

1. JPW
2. fjmt
3. Architectus

Following this detailed and rigorous tender evaluation process, the TEC selected Johnson Pilton Walker (JPW) for the concept and detailed design of the new Chau Chak Wing Museum Building. Further details of the architectural selection evaluation can be forwarded to the Department upon request.

In order to demonstrate its commitment to Design Excellence, the University then established a Design Review Panel (DRP), with the purpose of reviewing the concept design and commenting on the attainment of Design Excellence in response to the Design Excellence Criteria, project brief, budget and programme.

Terms of Reference (ToR) for the DRP were drafted and agreed to by the project's steering group, the Project Control Group (PCG). The ToR specified the objectives and purpose of the DRP, the required quorum for decisions, and method of reporting. DRP membership was established with four (4) voting members, comprising three (3) independent architects plus the CIS Campus Planning Manager. An independent chair was also appointed, together with the establishment of advisors from the museum end user, CIS Planning & Heritage, and the project delivery team to assist the DRP with queries or clarifications that may be necessary during the course of the meetings.

The Terms of Reference of the DRP is included in Appendix A.

The DRP members were as follows:

Angelo Candalepas, Independent Architect, Angelo Candalepas & Associates

Kim Crestani, Independent Architect, Order Architects

Professor Michael Tawa, Professor of Architecture, University of Sydney

Juliette Churchill, Campus Planning Manager, CIS

JPW prepared and progressed the building's design for review, comment and feedback by the DRP. A project brief was also provided to JPW to commence and progress the design from concept to final design.

Through this process JPW demonstrated how the attainment of Design Excellence has been achieved by responding to the Design Excellence Criteria in its Architectural Design Report.

Further to this, the Deed of Gift between the University and its principal donor, Dr Chau Chak Wing, required that:

“an international world class architect be associated with the project, in collaboration with a local lead architect. “

Two international architects were considered for this role:

Foster & Partners

Gehl Architects

In consultation with the donor, it was agreed to appoint Gehl Architects to perform this role to review and comment on the JPW schematic design based on its international reputation of creating spaces that embrace and create synergy with the public domain. Since the CCW Museum is a civic building, open freely to the public, its built form needs to have individual presence, whilst also being fully cognisant and work within its immediate surrounds, and embrace these surrounds in such a way that this Museum works both as an urban place and a building of design excellence.

2. Site Selection & Project Brief

2.1. Repurposing of the Macleay and Edgeworth David Buildings

It was originally the intent of the University to re-purpose both the Macleay and Edgeworth David buildings into a new museum facility, with also included a stand-alone new annexe building for temporary “travelling” exhibitions. Following intensive feasibility studies, it was found that this was not the most effective way to achieve the project brief through a complex refurbishment process of which the end result was three separate buildings, hidden away from the public face of the Camperdown Campus’ cultural precinct. This option also created programming difficulties that did not align with the principal project donor’s expectations.

2.2. Fisher Tennis Courts Site

In July 2016, the Vice-Chancellor presented to the project team the option of utilizing a site opposite the Quadrangle that was under utilised as three tennis courts, for the purposes of the new Chau Chak Wing Museum. This opportunity allowed the project team to develop a revised brief that whilst accommodating all the gallery, educational and staff functions, also provided floor space to allow the Museum’s Collections, Education, Research and Conservation (CERC) functions to be located within a new building on the Fisher Tennis Courts site.

Early concept planning commenced in July 2016, in tandem with a workshop to discuss and agree on the key aspirational aspects of the project.

2.3. Aspirational Workshop

On 27 July 2016, the project team convened an Aspirational Workshop, attended by key Museum stakeholders, the architect JPW, one of the University’s Professors of Architecture, and representatives from Campus Infrastructure & Services (CIS) that included planning, heritage and project delivery.

Key outcomes from the workshop were that the new building needs to serve as both a museum and learning space, with flexibility being an important function it must deliver. The museum's visitor experience must be unique, engaging, and world class, and encouraging return visitation. The workshop also identified the important aspects of the site which must be addressed during the early design phase, including the 'gateway' relationship with Fisher Library, axes and vistas to and from the site, blending the building into the landscape taking into account the existing significant trees, and the need for the facility to be a welcoming, open and approachable "front door" to Campus.

Minutes of the Aspirational Workshop are included in Appendix B.

3. Design Excellence Process

3.1. Design Excellence Criteria

In order to ensure design excellence is addressed and satisfied on this project, a set of Design Excellence Criteria was then established to take into account the campus context with the aim to deliver the highest standard of architectural, urban and landscape design, and also aligning with the University's Design Excellence Policy. These criteria align with the salient objectives of the design excellence principles outlined in the City of Sydney's Local Environmental Plan 2012 – Reg 6.21 Design Excellence, whilst also addressing the design excellence principles of the NSW Government Architect's DRAFT Design Policy for buildings. These criteria were also further refined to be project-specific for the CCW Museum development.

The Design Excellence Criteria is as follows:

1. **DISTINCTIVE, VISUALLY INTERESTING & APPEALING**

A high standard of architectural design, encompassing:

- a. a balanced, refined and sophisticated design expression;
- b. well-considered composition of quality materials & detailing;
- c. well resolved and legible spatial experiences, also engaging well with street interfaces

2. **EQUITABLE, INCLUSIVE & DIVERSE**

External form and massing positively contributes to:

- a. the wider public domain by the provision of well-integrated external spaces;
- b. a visible, engaging and welcoming building frontage



3. CONTEXTUAL, LOCAL & OF ITS PLACE

The proposed bulk, massing and modulation of the development is appropriate, and is in context with:

- a. existing view corridors, to and from the site;
- b. the existing land uses;
- c. the heritage and cultural environment;
- d. its relationship to neighbouring buildings

The special character of the site is enhanced by the development through:

- a. achieving appropriate interfaces at ground level between the building and the public domain;
- b. excellence and integration of landscape design

4. FUNCTIONAL, RESPONSIVE & FIT FOR PURPOSE

The building form and function will impact positively on the stakeholder's use of the facility, its operations and organisational management structure.

Appropriate functional planning that demonstrates a rational and legible utilisation of the internal layout, and can adapt to functional changes.

5. ENJOYABLE, SAFE & COMFORTABLE

Spatial arrangements invite visitation and communal activities.

Appropriate pedestrian, bicycle, vehicular, disabled and service access and circulation requirements are achieved, whilst maximising safety and avoiding conflicts.

6. VALUE-CREATING & COST-EFFECTIVE

The development demonstrates, and has the potential to achieve, innovation in design, construction and/or utilisation.

The design of the building is cost-effective, resilient and durable, whilst maintaining flexibility and encouraging social interaction.

7. SUSTAINABLE, EFFICIENT & DURABLE

The principles of ecologically sustainable development are achieved through a well-designed building, including:

- a. responsive to the local climate;
- b. internal spaces that provide capacity for change of use over time

3.2. Design Review Panel Meetings

The first of four DRP Meetings was held on 25 October 2016, and the following section outlines a summary of the issues discussed and resolutions made by the DRP.

3.2.1. Design Review Panel Meeting No.1

At the first DRP Meeting on 25 October 2016, the architect JPW addressed primarily site constraints and opportunities, with initial form evaluations suggesting a design approach with a broken down form, rather than a singular mass.

Panel discussions revolved around the museum's purpose as unique mix of arts and science, whilst being flexible and "quirky". The museum's external and internal functional requirements were also verified, and how the building should sit in the landscape, with the DRP agreeing that the architectural expression be bold and confident.

Following the establishment of these fundamentals, JPW was to address these in detail and present further progressed ideas to the next DRP Meeting. A tour of Museum's existing collection was also organized for DRP members.

Detailed notes from this meeting are included in Appendix C.

3.2.2. Design Review Panel Meeting No.2

The second DRP Meeting was held on 11 November 2016. JPW presented a more developed and modular design that stepped down the site in a series of plinths and platforms, with much improved gallery circulation flow. A central circulation spine was introduced which acted as a connecting element to all gallery floors, whilst allowing important views to the east and west. More work was done on massing to define forms and also to embrace the landscape in a more convincing way than before.

The design changes received positive feedback from the DRP, and from Museum's perspective, the user experience was seen to have been improved, whilst maintaining good functionality and flexibility.

There were concerns raised by the DRP that the central spine may in fact inadvertently create a disconnect between the internal functions, an issue that was taken on board by JPW to resolve and develop further. Positive aspects of the presented design were that the sectional arrangement was well considered and that the vistas through and out, work well.

Detailed notes from this meeting are included in Appendix D.

3.2.3. Design Review Panel Meeting No.3

DRP Meeting No.3 was held on 12 January 2017. The revised design prepared by JPW presented a 're-think' of several components of the building's functional arrangement and



conceptual approach, based on a thorough review and assessment of the DRP's comments arising from the first two meetings. There were also improvements made to the design to more closely align it with the project's construction budget as approved by Senate. This simplified approach allowed the building to:

- have its internal functions arranged more efficiently
- open up internal spaces to visually connect with the outside landscape
- use spatial compression as a way of opening up and accentuating larger volumes
- appear as an object "in" the landscaping, as well as a building "on" the landscape
- draw down natural light from the main entry skylight whilst experiencing middle-ground views to Lake Northam
- allow all gallery spaces to have access to natural light, including the lowest level space with its connection to an external multi-purpose amphitheatre

The DRP responded positively to the refined design concept, and was supportive of the simplified and purer form. It was noted by the panel that the base element should bleed into the landscaping and that the upper geometric prism element should be well detailed. To differentiate these two elements, the DRP suggested that structure and stair elements above and below should be investigated as an opportunity to further reinforce this distinction.

Circulation around the building and its impacts on landscaping was discussed, and it was strongly suggested by the panel that the approach to the entry from the east should not dog-leg around the loading dock entry ramp – rather visitors should be encouraged to circumnavigate the southern boundary of the site around University Avenue. The existing northern "informal" pathway is to function as a secondary pathway.

Indigenous design approaches to the site through Wingara Mura design principles was discussed, with solutions to be explored during design development utilizing elements that achieved a balance between implicit and explicit connection to the past.

The DRP's heritage advisor outlined the elements of the project that Heritage Council requested be further developed by JPW, which included the relationship of the loading area to Baxter's Lodge, and the views to and from the Quadrangle.

A series of actions were agreed by the DRP for JPW to address at the next meeting, including materiality, activation of the external spaces, and roof treatment.

Detailed notes from this meeting are included in Appendix E.

3.2.4. Design Review Panel Meeting No.4

The DRP met for a fourth time on 30 January 2017. The actions arising from the third DRP Meeting were firstly explained by JPW, with no objections raised by panel members.

JPW then expanded upon the work it had furthered on the key design elements. This included:

- reinforcement of the uninterrupted linear plane of the upper prism soffit
- confirmation that the lower base element would be a sandstone-coloured concrete element
- the selection of concrete for the upper prism box, due to structural performance and buildability difficulties with a steel trussed option
- skylight studies to reduce internal glare

In terms of internal functionality, it was agreed that JPW would work closely with the Museums team to further develop detailed design to ensure that exhibition fitout principles are achieved. The DRP agreed that the vertical connectivity was working well, as evidenced by the cross-sections, with the interconnecting stairs possibly having multiple functions.

The DRP was in agreement that the success of the upper prism element was in its detailing, and that the south eastern corner must present as a strong entry statement. The landscape terraces are to be further developed as a simple response to the existing site environment.

The DRP then endorsed the concept design as developed during the DRP process, and that JPW was to progress this design into a presentation package for endorsement by Senate's Buildings & Estates Committee.

The DRP further endorsed that the design sufficiently meets, or has a high likelihood of meeting, all Design Excellence Criteria as outlined in the ToR.

It was then agreed by the DRP that no further meetings would be required to round out the Design Excellence Process.

Detailed notes from this meeting are included in Appendix F.

3.3. Architectural Concept Design Statement

As an output from the Design Excellence Process, JPW produced an Architectural Concept Design Statement that outlined the Project Vision, Response to Site, Building Form & Functional Planning, Visitor Experience, and Materiality.

This document also addressed each one of the agreed Design Excellence Criteria, and summarised the key ways in which those criteria have been addressed in the DRP endorsed design.

The JPW Architectural Concept Design Statement is included in Appendix G.

4. International World Class Architect Association

During the course of the concept design phase, and in accordance with the Deed of Gift between the University and its principal donor, CIS and JPW collaborated and held design reviews with Gehl Architects from Denmark to further verify that the concept design was sufficiently robust. Gehl also brought to the project an international reputation for identifying and creating successful “people places” in the spaces between buildings, which was a valuable approach to understanding how the new museum sat within this cultural precinct.

This collaboration addressed not only the building concept itself; but extended to its contextual response and interface with the public realm. This process uncovered many opportunities for JPW to address during design development, and noted that the current design offered flexibility for future strategic place making initiatives in the future.

This collaboration culminated in a final review document that outlined Gehl’s support for the concept design, whilst highlighting that the proposal responded well to the Campus public domain, and therefore able to embrace the changing needs to the urban environment into the future.

The Gehl Review is included in Appendix H.



DESIGN EXCELLENCE REPORT
Chau Chak Wing Museum

Appendix A – Design Review Panel Terms of Reference

CHAU CHAK WING MUSEUM DESIGN REVIEW PANEL TERMS OF REFERENCE

CONTEXT	<p>The University realises the importance of this site situated at the primary gateway to the University Camperdown campus off Parramatta Road, and its proximity to the Quadrangle and the Fisher Library (both heritage listed buildings) consequently requiring an architectural solution that accentuates but also complements its location. This site requires a design response that is complimentary to the existing architecture and urban landscaped context, whilst being cognisant of access, transport, and infrastructure provisions.</p> <p>As a combined Museum, Gallery and Learning Space, the new F21 Chau Chak Wing Museum building will be a bespoke building due to its intrinsic internal functions of addressing the education and research focussed study rooms and auditorium, whilst addressing the existing site constraints and opportunities, and complementing (rather than impacting) surrounding development, parks and gardens and key view corridors.</p> <p>Whilst a design competition process is not required for this building (being below a height of 25 metres above ground level and with a CIV less than \$100M), the University remains committed to ensuring that this new building will achieve design excellence.</p> <p>In order to demonstrate this commitment, the University has established a Design Review Panel (DRP) to review the Johnson Pilton Walker (JPW) schematic design and confirm and certify that design excellence has been achieved.</p> <p>In selecting an appropriate architect for the new CCW Museum, CIS has already completed a robust selection process (under UoS's Design Excellence Policy 1.5 b) with directly selecting an appropriate architect to an approved procurement strategy.</p> <p>As the selected architect, JPW will prepare and progress the building's design for review, comment and feedback. A Project Brief has been provided to JPW to commence and progress the design from concept to final design.</p> <p>JPW will demonstrate & advise how the attainment of Design Excellence has been achieved through responding to the Design Excellence Criteria in its Architectural Design Report.</p> <p>Further, in accordance with the request of a major donor, Foster & Partners has been nominated as an intentionally acclaimed peer review architect and will also be engaged to review and comment on the JPW schematic design.</p>
OBJECTIVES	The objective of the Design Review Panel is demonstrate, confirm and certify that design excellence has been achieved on the CCW Museum.
PURPOSE	The purpose of the Design Review Panel is to review the design and comment on the attainment of Design Excellence in response to the CIS Design Excellence Criteria, Project Brief, Design Excellence Criteria, budget and program.
TERMS OF REFERENCE	<p>DRP's Responsibilities:</p> <p>The Design Review Panel (DRP) has a regular and on-going role in the design evolution of the concept design to final design. This process will ensure that Design Excellence has been achieved in the final design.</p> <p>Deliverables:</p> <p>The DRP will prepare an Architectural Design Review Report detailing the assessment</p>

	and rationale for the final design, and recommendations for design amendments or conditions in the attainment of design excellence. This report is intended to be provided to the consent authority as part of the Development Application.
CHAIR	Di Leeson, Independent Chair
MEMBERSHIP	<p>Members</p> <ol style="list-style-type: none"> 1. Di Leeson Independent Chair 2. Angelo Candalepas Independent Architect, Angelo Candalepas & Associates 3. Kim Crestani Independent Architect, Order Architects 4. Michael Tawa Professor School of Architecture 5. Juliette Churchill CIS Campus Planning Manager
	<p>Advisors</p> <ol style="list-style-type: none"> 1. Scott Biggs CIS Project Director, CCW Museum 2. David Watt CIS Design Manager, CCW Museum 3. David Ellis Director, Museums and Cultural Engagement 4. Paul Donnelly Associate Director, CCW Museum Content 5. Ian Kelly CIS Specialist Heritage Consultant 6. Craig Burton Independent Specialist Heritage Landscape 7. Stephane Kerr CIS Project Director, CIP <p>Advisors inform the DRP as required, but do not typically attend DRP meetings, except when expressly invited.</p>
QUORUM	50% of the Members
SECRETARIAT	CIS Administration – Ali Wilson
MEETINGS	Design review panel workshops at notionally 30%, 50% and 90% complete stages of the schematic design.
REPORTING	Following each workshop meeting
ACTION MINUTES	Circulated to all members and advisors

Design Excellence Criteria

The Design Excellence Criteria as outlined below take into account the campus context and aim to deliver the highest standard of architectural, urban and landscape design. These criteria align with the salient objectives of the design excellence principles outlined in the Sydney Local Environmental Plan 2012 – Reg 6.21 Design Excellence, whilst also addressing the design excellence principles of the NSW Government Architect's DRAFT Design Policy for buildings, and these have been further refined to be project-specific for the CCW Museum development.

The criteria are ranked in order of priority:

1. **DISTINCTIVE, VISUALLY INTERESTING & APPEALING**

A high standard of architectural design, encompassing:

- a. a balanced, refined and sophisticated design expression;
- b. well-considered composition of quality materials & detailing;
- c. well resolved and legible spatial experiences, also engaging well with street interfaces

2. **EQUITABLE, INCLUSIVE & DIVERSE**

External form and massing positively contributes to:

- a. the wider public domain by the provision of well-integrated external spaces;
- b. a visible, engaging and welcoming building frontage

3. **CONTEXTUAL, LOCAL & OF ITS PLACE**

The proposed bulk, massing and modulation of the development is appropriate, and is in context with:

- a. existing view corridors, to and from the site;
- b. the existing land uses;
- c. the heritage and cultural environment;
- d. its relationship to neighbouring buildings

The special character of the site is enhanced by the development through:

- a. achieving appropriate interfaces at ground level between the building and the public domain;
- b. excellence and integration of landscape design

4. **FUNCTIONAL, RESPONSIVE & FIT FOR PURPOSE**

The building form and function will impact positively on the stakeholder's use of the facility, its operations and organisational management structure.

Appropriate functional planning that demonstrates a rational and legible utilisation of the internal layout, and can adapt to functional changes.

5. **ENJOYABLE, SAFE & COMFORTABLE**

Spatial arrangements invite visitation and communal activities.

Appropriate pedestrian, bicycle, vehicular, disabled and service access and circulation requirements are achieved, whilst maximising safety and avoiding conflicts.

6. **VALUE-CREATING & COST-EFFECTIVE**

The development demonstrates, and has the potential to achieve, innovation in design, construction and/or utilisation.

The design of the building is cost-effective, resilient and durable, whilst maintaining flexibility and encouraging social interaction.

7. **SUSTAINABLE, EFFICIENT & DURABLE**

The principles of ecologically sustainable development are achieved through a well-designed building, including:

- a. responsive to the local climate;
- b. internal spaces that provide capacity for change of use over time



Appendix B – Minutes of the Aspirational Workshop

MINUTES

ASPIRATIONAL WORKSHOP

CHAU CHAK WING MUSEUM

Date: Wednesday 27 July 2016

Time: 10.00am – 12.00 noon

Location: Abercrombie Business School H70, Seminar Room 2250

Attendees	Initials	Position / Role
Di Leeson	DL	Facilitator
David Ellis	DE	Director, Museums
Greg Robinson	GR	Director, CIS
Professor Michael Tawa	MT	Professor of Architecture
Juliette Churchill	JC	CIS Campus Planning Manager
Alistair Cook	AC	CIS Campus Planning Architect
Ian Kelly	IK	CIS Heritage Specialist Consultant
Richard Johnson	RJ	JPW Architects
Graeme Dix	GD	JPW Architects
Kiong Lee	KL	JPW Architects
Scott Biggs	SB	Project Director
David Watt	DW	Design Manager
Chris Burns	CB	Project Manager
Ali Wilson	AW	Project Administrator

UNCONFIRMED NOTES

1.	<u>Welcome & Purpose of Workshop</u> DL welcomed attendees to the workshop and noted that the purpose of the meeting was to discuss the key aspirational aspects of the project and as an output, clarify the key design principles and design excellence criteria for the Design Review Panel (DRP) to use in its assessment.		DL
2.	<u>Vision for CCW Museum</u> DE provided a comprehensive presentation outlining the University Museum's history in context with the project. Key points noted: <ul style="list-style-type: none">• Aim to triple space available for exhibitions and bring exhibition space together with learning/ teaching space in a multidisciplinary manner.• Dual purpose – for University experience and general public use.• Will allow general public insight into the university world – a place of learning and research• Intention is to present items/artefacts as “stories” – stories about people, enabling interaction with objects• The diversity of the collection and how the items will “speak” to each other will be unique in the Australian museum space, other museums tend to be highly specialised – CCWM to go the other way.		DE

3.	<u>Workshop Discussion to agree key principles</u>	
	a) Project Brief	
	<i>Total Museum Experience</i>	DE
	<p>Key themes:</p> <ul style="list-style-type: none"> > Unique experience <ul style="list-style-type: none"> » Broadly discussed during workshop – will be further defined during the design process. > 3 collections brought together in a cohesive, surprising and engaging way <ul style="list-style-type: none"> » Will enable consolidation of the current collection (700,000+ items) > Encourage return visitation <ul style="list-style-type: none"> » Broadly discussed during workshop – will be further defined during the design process. > Respond to broad audience profile and interests <ul style="list-style-type: none"> » Broadly discussed during workshop – will be further defined during the design process. > Provide facilities expected of world class cultural institution <ul style="list-style-type: none"> » Broadly discussed during workshop – will be further defined during the design process. 	
	<i>Flexibility</i>	DE
	<p>Key themes:</p> <ul style="list-style-type: none"> > Structure / services / spaces / planning modules <ul style="list-style-type: none"> » Movable walls in temporary gallery areas to facilitate regular changes in the range of objects on display, themes and ideas. » 450m² flexible space for touring exhibitions – curators adapt to space. » Exhibitions would be partly driven by University themes, and audience requirements. DE noted that a museum of this size can be more agile than larger museums. » Flexibility to allow museum to react to opportunities and thereby future proofing the museum by changing configurations of space. » Some areas will be fixed (i.e. back of house, staffing areas etc). » Front of house should be within an envelope that has the right configuration so to allow for flexibility. » Flexibility should be tied to narrative. » Flexibility of space needs to function for the exhibition areas and the lecture theatres. Learning areas may need to be shut off from other areas so not to disturb one part or another. » Spaces should operate seamlessly as part of both the museum, and the University. » Small rooms/ galleries are suitable for small artefacts and artworks. Gives you the ability to curate and change space easily. > Circulation <ul style="list-style-type: none"> » Movement around the building and to the building should be part of the experience, a journey with surprising vistas and interesting things around the corner etc. » Visitor numbers → Application that tracks movement and repeat visitors 	

	<ul style="list-style-type: none"> > Arrival experience: Ceremonial, general visitor, passer by <ul style="list-style-type: none"> » Entry to museum is important – further discussion around access required. Will the entry be at the Great Hall end or the Front end, what are the impacts of both options? » Multiple functional entries » Crowd modelling » Entrance as an important orientation point » Entry should be a little fun, noisy, dynamic, a place where talking is allowed, keep the crowd happy etc. > Character: intuitive, accessible, integral part of the experience <ul style="list-style-type: none"> » Broadly discussed during workshop – will be further defined during the design process. > Operations: FOH & BOH, modes of use, loading, collection movement, groups, waste, etc <ul style="list-style-type: none"> » Museum will be open variable hours 7 days a week – not necessarily 10-5pm - could be 8am -10pm. » Access, car parking, coach set down » Service access/ loading dock for the site may difficult/ limited due to density of surrounding trees » Conservation lab – may have some viewing options where visitors can view conservation work happening (a view into the back of house) > Lighting – natural and artificial <ul style="list-style-type: none"> » Broadly discussed during workshop – will be further defined during the design process. > Exhibitions – Diversity of collections requires high level of display flexibility <ul style="list-style-type: none"> » Broadly discussed during workshop – will be further defined during the design process. <p><u>Key take outs - Flexibility:</u></p> <ul style="list-style-type: none"> > GR noted that the project was not just a Museum per se; but a museum and a learning space. Fundamentally, we are trying to use the museum to create a unique learning experience where students are embedded in the purpose of the museum. Flexibility must lie in how these two purposes operate side by side. > Separation/integration/access by students vs. public access and entrances > Opening times will be geared towards the afternoon/evening rather than daytime – potential for structured scheduling of access i.e. school groups during a certain part of the day > Aspiration around a catering facility – café/ restaurant – encourages visitors to spend more, also enables the space to be opened up for University and corporate functions. 	
<p>b) Place & Context</p>		
	<p>Campus</p>	<p>GD</p>
	<p>Key themes:</p> <ul style="list-style-type: none"> > Site at main entry to Campus <ul style="list-style-type: none"> » Benefits for access with Westconnex/ Light Rail > ‘Gateway’ relationship with Fisher Library <ul style="list-style-type: none"> » Will be a link between the Great Hall and the Quadrangle 	

	<ul style="list-style-type: none"> » Space between Baxter’s Lodge and garden area – potential for a landscaped garden as part of an exhibition space for commissioned works (secret sculptured garden). Space will be unveiled as you journey towards the museum > Key vistas to and from The Quadrangle, Great Hall and Eastern Avenue <ul style="list-style-type: none"> » Height of the building is of important consideration – the vista to the CBD from the Great Hall is important > How should the building present itself to the Campus edge and the public domain? <ul style="list-style-type: none"> » Broadly discussed during workshop – will be further defined during the design process. > Building height and setbacks – to what extent should the building impact on CBD views? <ul style="list-style-type: none"> » GD noted that the CCW Museum building should acknowledge the Fisher Library opposite; but that setbacks and alignments aren’t necessarily to be mirrored. These constraints to be further developed during the design process. 	
	<i>Landscape & Heritage</i>	GD
	<p>Key themes:</p> <ul style="list-style-type: none"> > Existing landscape character – existing trees <ul style="list-style-type: none"> » Consideration of established trees and impact on construction area » The central axis of the CCW Museum lines with the Great Hall; but the building may be offset from that. » Need to consider the “Lone Pine” tree in site planning. » The preliminary arborist report indicates that the tree protection root zone will impact on the available building area (rectangular form) to approx. 1300m². This is currently being tested by further root investigation to increase the available footprint. » The building will likely be more irregular to achieve the brief areas of 2000m² per level. > Site topography <ul style="list-style-type: none"> » The topography of the site is very important. Site forms a knoll which slopes down towards Baxter’s Lodge and Victoria Park. MT suggested potential opportunities to feather out the landscape to a more indigenous form on the lower slopes. JPW to develop principles to engage with the Wingara Mura strategy. » There should be a sense of the ancient landscape and civic landscape (Victorian?) on top of that. > Response to indigenous and non-indigenous cultural heritage of the place (living and past) <ul style="list-style-type: none"> » Wingara Mura design principles should be embedded in the building, together with the external fabric and landscaping. » The “feel” of the space should be welcoming, culturally accommodating - quality of light, materials should support this > Outline of Wingara Mura Strategy <ul style="list-style-type: none"> » Broadly discussed during workshop – will be further defined during the design process. 	<p>IK JC/MT</p>
	<i>Museum Identity</i>	GD
	Key themes:	

	<ul style="list-style-type: none"> > Iconic or deferential to context and neighbours? <ul style="list-style-type: none"> » Whether the new building is iconic will be further developed in the next stage of the design process; however it must be in context. > Welcoming, open and approachable <ul style="list-style-type: none"> » The CCW Museum must be a welcoming facility at the “front door” of Campus. How this is achieved will be further developed in the next stage of the design process. > Strong identity day and night <ul style="list-style-type: none"> » Will be further developed in the next stage of the design process. > Contemporary expression <ul style="list-style-type: none"> » Will be further developed in the next stage of the design process. > Materiality <ul style="list-style-type: none"> » Broadly discussed during workshop – will be further defined during the design process. 	
4.	<u>Workshop Conclusion – Design Excellence Criteria</u>	
	Discussion to determine what important principles should feed into the Design Excellence Criteria against which the Design Review Panel should assess the project.	
	JC & DW to circulate preliminary Design Excellence Criteria and Ranking for comment, feedback and endorsement.	JC/DW
5.	<u>Workshop Close</u> The workshop closed at 12.00 noon.	



DESIGN EXCELLENCE REPORT
Chau Chak Wing Museum

Appendix C – JPW Presentation and Notes: Design Review Panel Meeting No.1

MEETING NOTES

DESIGN REVIEW PANEL MEETING # 1 (30%)

CHAU CHAK WING MUSEUM

Date: Tuesday 25 October 2016
Time: 2.00 – 3.30pm
Location: Services Building G12, Meeting Room 5

Attendees	Initials	Position / Role
<u>Panel Members</u>		
Di Leeson	DL	Chair
Angelo Candalepas	AC	Independent Architect, Angelo Candalepas & Associates
Kim Crestani	KC	Independent Architect, Order Architects
Professor Michael Tawa	MT	Professor of Architecture, University of Sydney
Juliette Churchill	JC	Campus Planning Manager, CIS
<u>Panel Advisors</u>		
David Ellis	DE	Director, Museums
David Watt	DW	Design Manager, CCW Museum
<u>JPW Team</u>		
Graeme Dix	GD	Director, JPW Architects
Daniel Wainwright	Dw	Architect, JPW Architects

MEETING NOTES

1.	<u>Welcome & Introduction</u> DL welcomed attendees to the first Design Review Panel (DRP) Meeting, noting that this is the first in a series of meetings that will be held at 30%, 50% and 90% milestone stages in the design of the project prior to the lodging of a development application.	Note	
2.	<u>Purpose of Design Review Panel (DRP)</u> DL outlined that the purpose of the DRP is to review and provide comment on the design of the proposed Chau Chak Wing Museum project against an agreed set of Design Excellence Criteria as set out in the Terms of Reference, as well as responding to the project brief, budget and programme. DRP advisors (as noted in the Terms of Reference) will provide specialist advice to the DRP as required.	Note	
3.	<u>Terms of Reference and Design Excellence Process</u> JC provided an overview of the Design Excellence Process and that the DRP has a regular and on-going role in the design evolution from concept to final design. A key deliverable of the DRP will be an Architectural Design Review Report that will detail the assessment and rationale for the final design, including any recommendations or amendments that are deemed necessary to attain design excellence. This report will be provided to the consent authority as part of the development application. The DRP will be engaged beyond the development application lodgement to	Note	

	provide input should any value engineering issues arise that have the potential to adversely affect design excellence.	
4.	<p><u>Design Presentation</u></p> <p>GD presented the JPW Design Excellence Review 30% PowerPoint, addressing the project vision & brief, context & setting, and the current design response to place and brief.</p> <p>GD outlined how, through thorough testing and evaluation, the current approach of a more broken down mass and form is preferred over the earlier scheme of a simpler “box”.</p>	
5.	<p><u>Panel Discussion</u></p> <p>Following the JPW presentation, a brief discussion between the panel members raised various comments and points for digesting, in no particular order:</p> <p>General Purpose of Museum:</p> <ul style="list-style-type: none"> - The building should embody a narrative to encourage visitation – needs to be a meaningful and enriching experience - Should it be an object in the landscape, or be well-connected within the landscape? - The various requirements for natural light are to be considered - Museum will be a unique mix of arts and science - Objects on display range from a 4m x 4m painting, to 2-3m high 3-D objects, to items the size of a small button - Study rooms are an important component of the building - The museum exhibits will undergo constant change with flexible curatorial management - DE noted that the museum should be “quirky” and have a sense of theatre <p>Built Form & Context:</p> <ul style="list-style-type: none"> - The panel discussed whether the building should be a “good natured” urban neighbour, or intensify the potential to become a new typology - Can the museum be opaque from the outside, and be a fantastic space inside? - Various sized spaces and volumes will allow exhibits to be enjoyed at different scales - The design response should be a combination of architecture and exhibition fitout design - JPW to consider the equally valid approaches of a “landscape” or an “object” building - MT suggested that the building should “bleed” to the south into the landscaping - The visitation experience should embody the “new” and “unexpected” - The collective opinion of the DRP was that the building should be bold and confident in its expression, whilst sitting well within its context - The 3 dimensional form of the building need to be carefully considered and articulated <p>Functional Aspects:</p> <ul style="list-style-type: none"> - The relationship between gallery spaces, front-of-house, back-of-house, and collection & conservation functions, is important - Noted that the building will have primary and secondary entries - Legibility of the internal circulation space and interconnecting stairs is important – ensure that the internal circulation spaces are not too tight - Vertical transportation to be reviewed further – vertical stacking is a challenge - Agreed that expansion of the building to the east would not improve circulation to an efficient level - The ability of the building to accommodate an additional storey was discussed; however the city view aspect from the Quadrangle must be considered 	

6.	<u>Summary of Recommendations & Actions</u>	
	<p>DW to circulate the Functional Brief (for the previous Macleay site) to all DRP members, noting that the basic functions remain unchanged.</p> <p>DW to organise a tour of the existing museum collection to all DRP members.</p> <p>Agreed that JPW would digest the DRP comments and bring to the next meeting further development of the building's form and materiality.</p>	<p>DW</p> <p>DW</p> <p>JPW</p>
7.	<p><u>Next Meeting</u></p> <p>The next DRP Meeting will be held on:</p> <p>Friday 11 November 2016, 1:30pm – 3:00pm</p> <p>CIS Services Building G12, Meeting Room 3</p>	
	<p>The meeting closed at 3.30pm</p>	



THE UNIVERSITY OF
SYDNEY

Chau Chak Wing Museum

Design Excellence Review

Meeting 1
20 October 2016

JPW
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95 Pitt Street, Sydney NSW 2000 Australia
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www.jpw.com.au

ARCHITECTURE
LANDSCAPE
INTERIORS
MASTERPLANNING
EXHIBITIONS

Design Excellence Review Process

- Project Vision
- Project Brief
- Context & Setting
- Response to Place
- Response to Brief
- Delivering Design Excellence

Workshop / Presentation Stages

3 workshops with DRP at
30%, 50% & 90% completion
of schematic design

Design Excellence Criteria (aligned with NSW GAO's Guidelines)

- 1. DISTINCTIVE, VISUALLY INTERESTING & APPEALING**

A high standard of architectural design, encompassing:

 - a. a balanced, refined and sophisticated design expression;
 - b. well-considered composition of quality materials & detailing;
 - c. well resolved and legible spatial experiences, also engaging well with street interfaces
- 2. EQUITABLE, INCLUSIVE & DIVERSE**

External form and massing positively contributes to:

 - a. the wider public domain by the provision of well-integrated external spaces;
 - b. a visible, engaging and welcoming building frontage
- 3. CONTEXTUAL, LOCAL & OF ITS PLACE**

The proposed bulk, massing and modulation of the development is appropriate, and is in context with:

 - a. existing view corridors, to and from the site;
 - b. the existing land uses;
 - c. the heritage and cultural environment;
 - d. its relationship to neighbouring buildings

The special character of the site is enhanced by the development through:

 - a. achieving appropriate interfaces at ground level between the building and the public domain;
 - b. excellence and integration of landscape design
- 4. FUNCTIONAL, RESPONSIVE & FIT FOR PURPOSE**

The building form and function will impact positively on the stakeholder's use of the facility, its operations and organisational management structure.
Appropriate functional planning that demonstrates a rational and legible utilisation of the internal layout, and can adapt to functional changes.
- 5. ENJOYABLE, SAFE & COMFORTABLE**

Spatial arrangements invite visitation and communal activities.
Appropriate pedestrian, bicycle, vehicular, disabled and service access and circulation requirements are achieved, whilst maximising safety and avoiding conflicts.
- 6. VALUE-CREATING & COST-EFFECTIVE**

The development demonstrates, and has the potential to achieve, innovation in design, construction and/or utilisation.
The design of the building is cost-effective, resilient and durable, whilst maintaining flexibility and encouraging social interaction.
- 7. SUSTAINABLE, EFFICIENT & DURABLE**

The principles of ecologically sustainable development are achieved through a well-designed building, including:

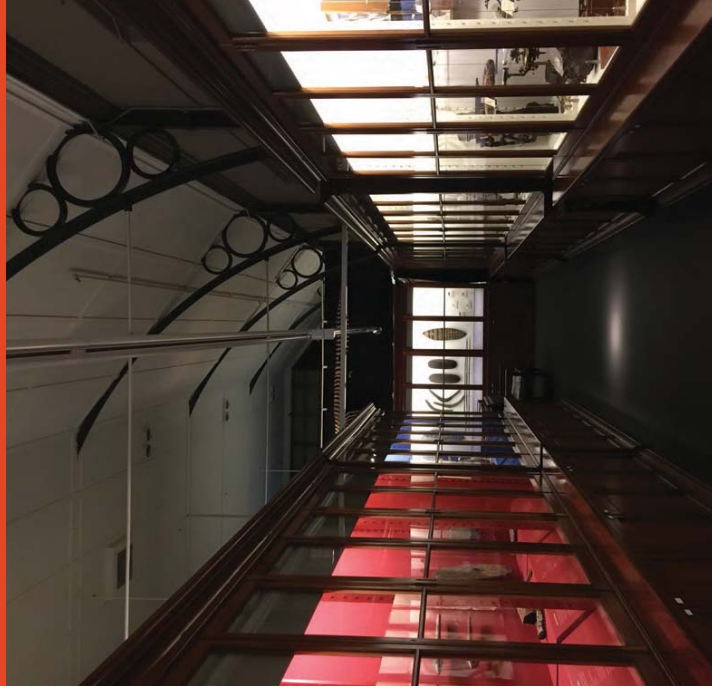
 - a. responsive to the local climate;
 - b. internal spaces that provide capacity for change of use over time

Project Vision

“A multi-disciplinary museum where the arts and sciences meet and ancient worlds encounter contemporary art and ideas...”

David Ellis

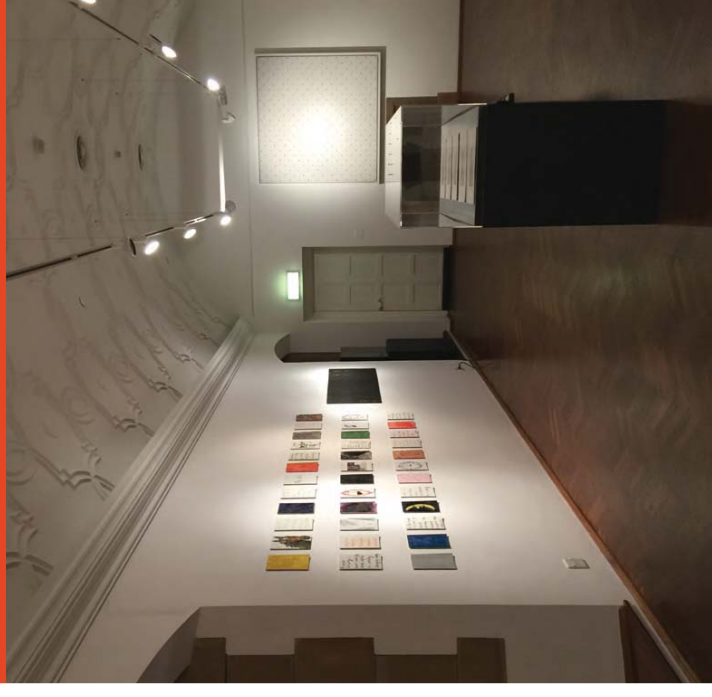
Macleay Museum



Nicholson Museum



University Art Gallery



Transformational Project

Co-location of the Macleay and Nicholson Museums with the University Art Gallery will capitalise on their unique collections to create a new world class cultural destination, and a new heart for the University's Cultural Precinct.

Project Brief

Front of House Facilities

Entry & Foyer: 150 m²
Shop & Cafe*: 200 m²
FOH Stores & Prep Areas: 50 m²
Total: 400 m² Nett

Back of House Facilities

Collection Access Room: 250 m²
Quarantine Room: 70 m²
Staff Offices: 410 m²
Exhibition Prep Workshops & Stores: 100 m²
Loading Dock: 100 m²
Total: 930 m² Nett

Exhibition Spaces

Temporary Exhibition Space: 450 m²
Semi-Permanent Exhibition Space: 1,450 m²
Total: 1,900 m² Nett

Circulation / Plant / Visitor Amenities

As required for design solution

Research / Study Spaces

Research / Study Rooms: 250 m²
Lecture Theatre: 350 m²
Reference Resource Room: 50 m²
Children's Project & Education Rooms: 150 m²
Total: 800 m² Nett

Collections Education, Research and Conservation (CERC) Facility

2,000 m²

Area, Budget and Programme

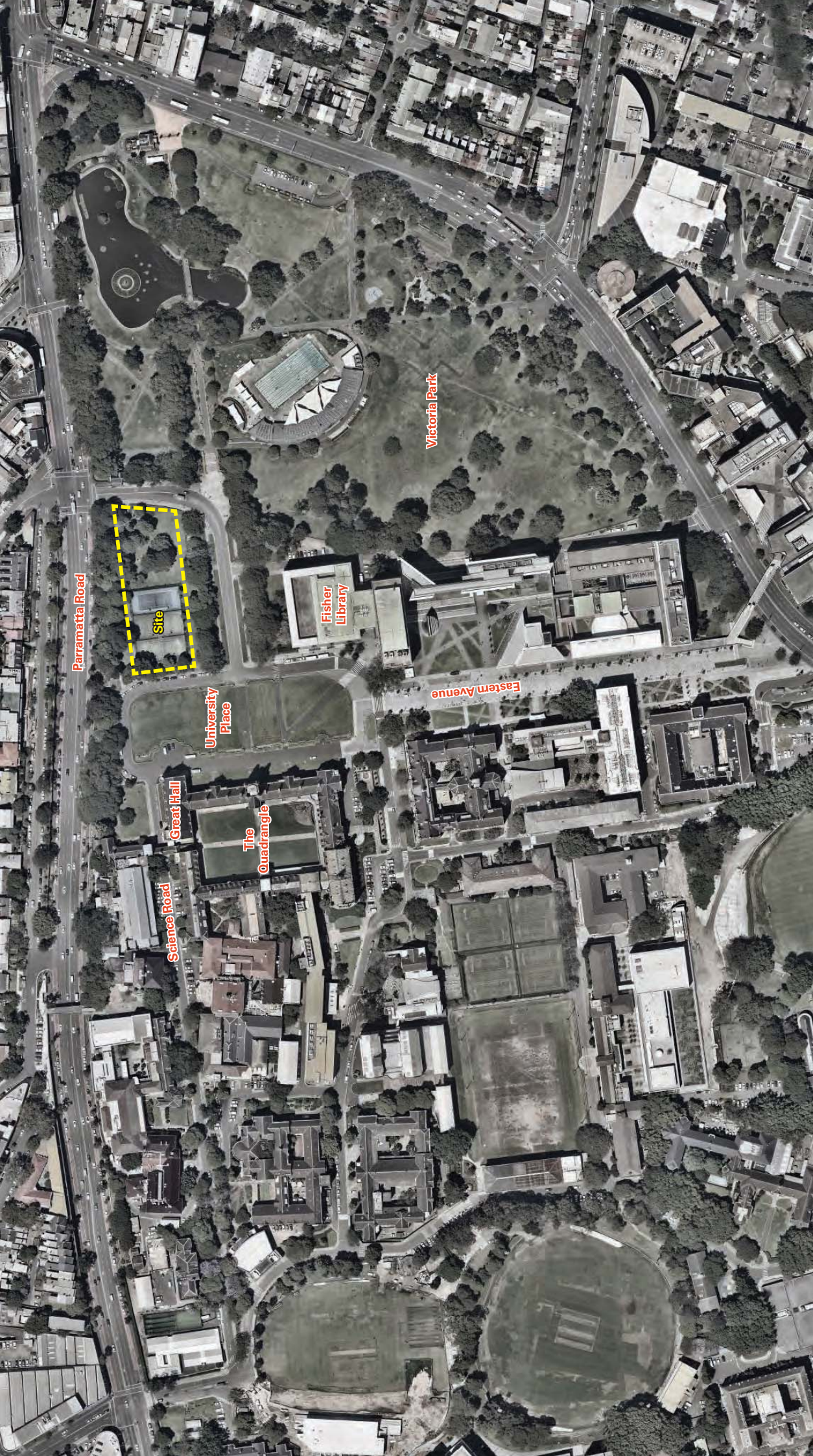
Briefed Room Area: 6,030 m² excluding circulation, plant, risers and amenities

Target Area: Maximum GFA 7,600 m²

Construction Budget: \$52M (includes fitout and fees)

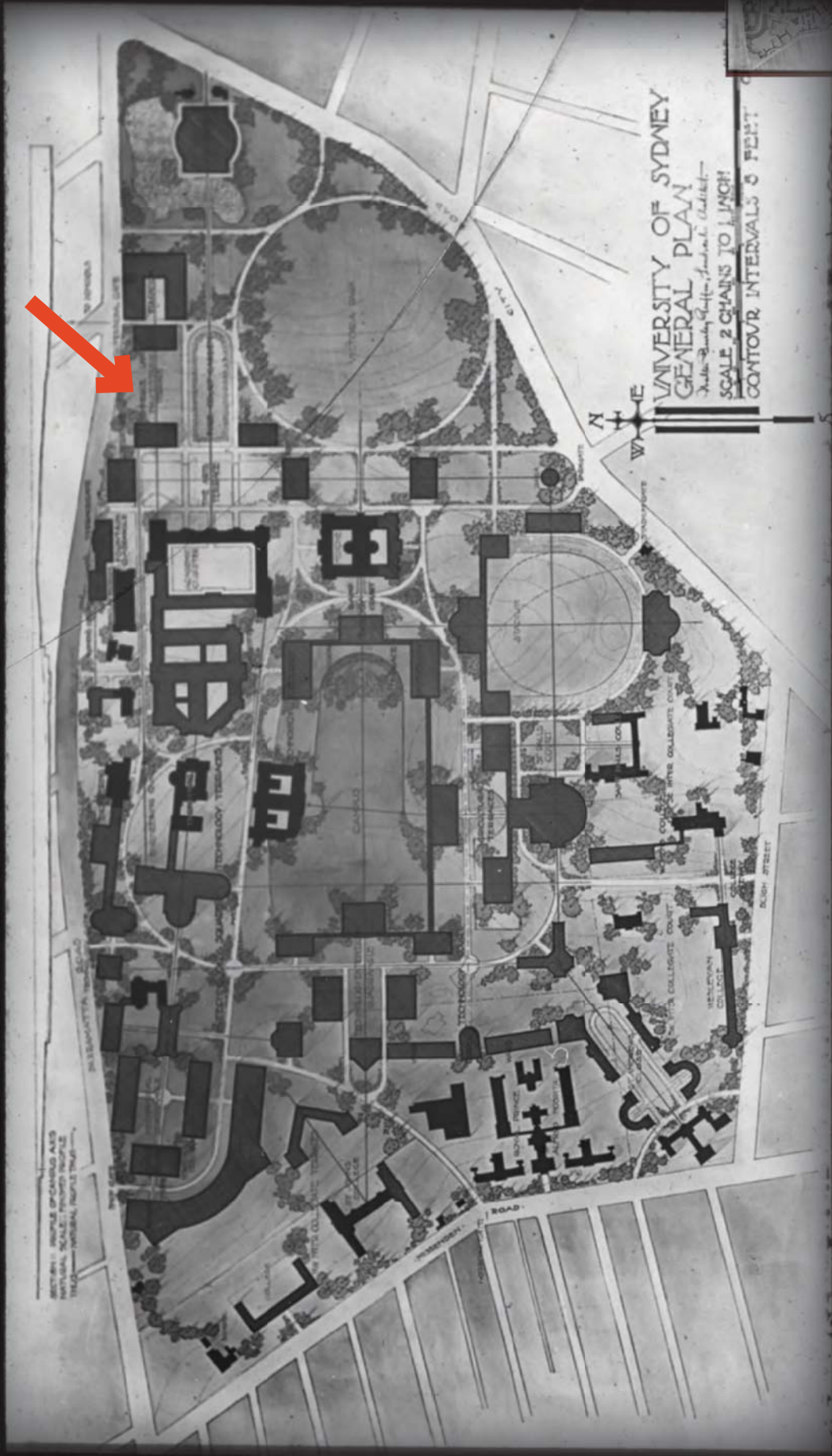
Delivery Programme: Building to be complete by mid 2018

Context & Setting



Chau Chak Wing Museum Proposed Site Location

Site is the existing Tennis Courts and surrounding landscape to the east of University Place and the Great Hall, close to the entrance to the Campus off Parramatta Road.

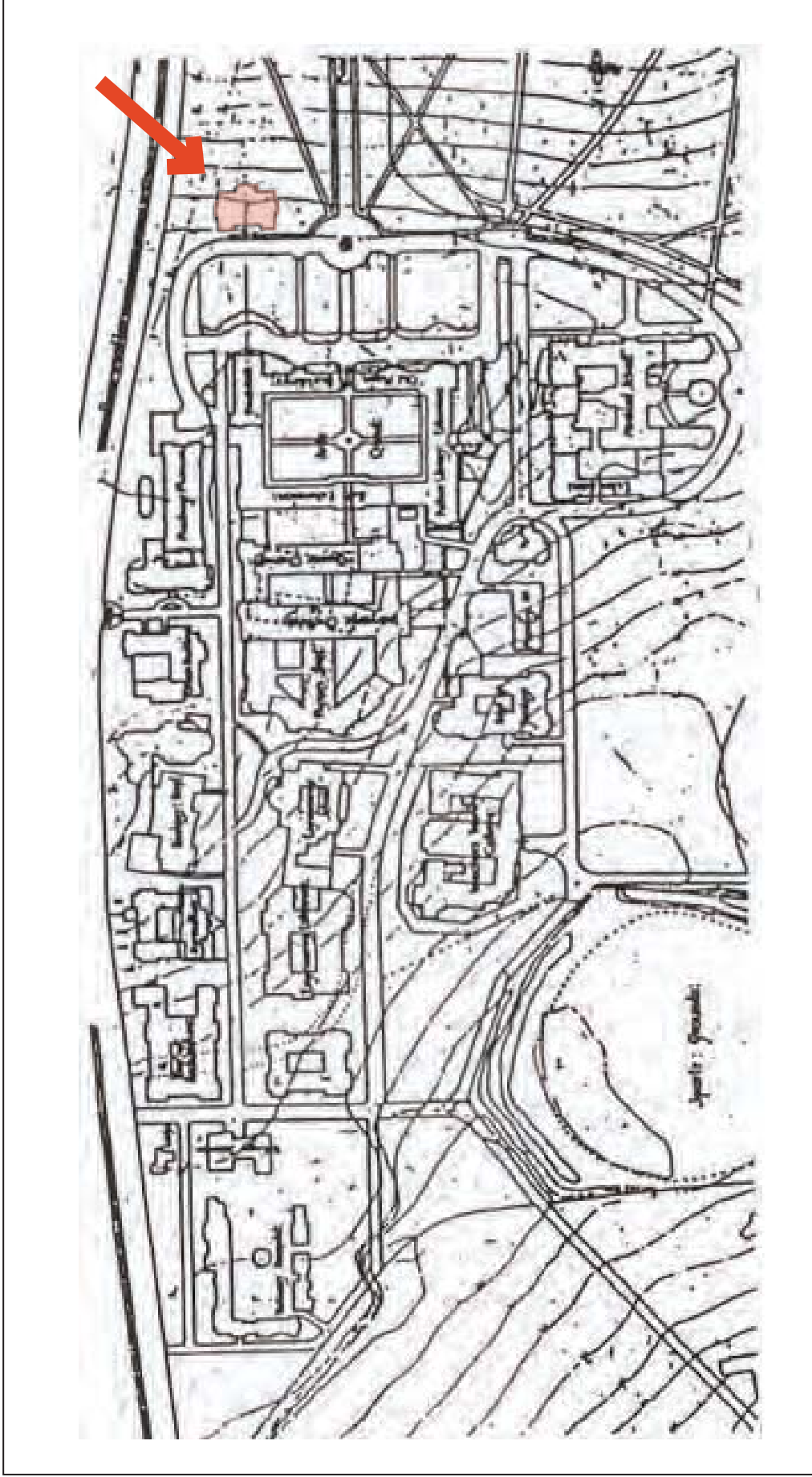


Campus Plan by Walter Burley Griffin, 1915

Griffin proposed a series of buildings to define "The Arts Terrace" now known as University Lawn

Chau Chak Wing Museum Site Suitability

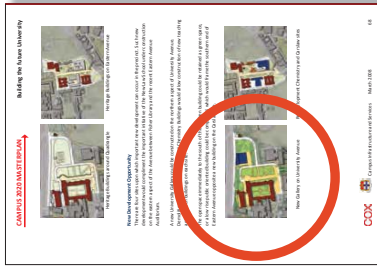
A building on the Tennis Court site has been considered in several previous Campus Masterplans.



Plan by Government Architect (George McRae) for extension of Quadrangle, 1917
Illustrates potential future building facing the Great Hall, to eastern side of University Lawn

Chau Chak Wing Museum Site Suitability

A building on the Tennis Court site has been considered in several previous Campus Masterplans.



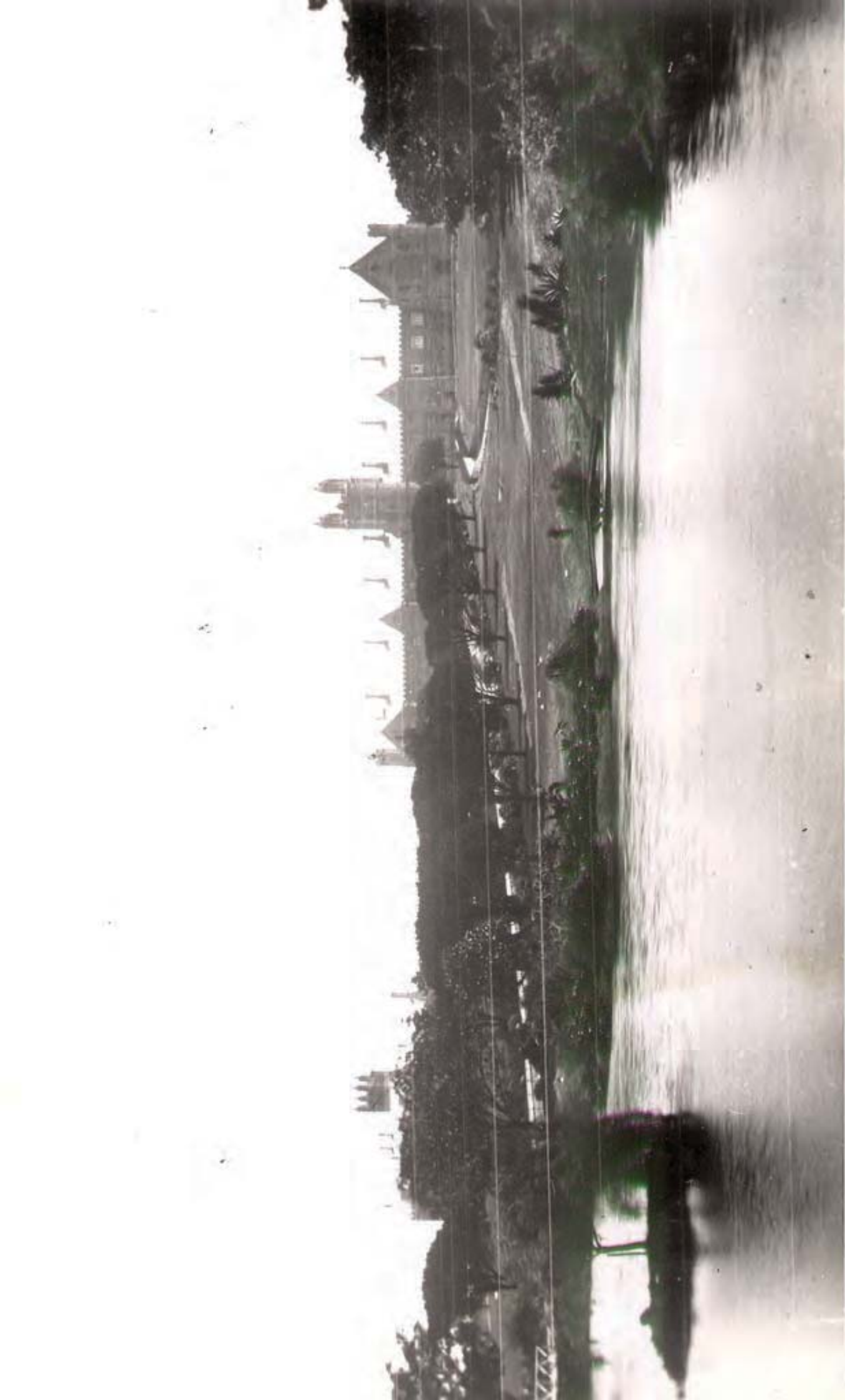
Campus 2020 Masterplan, 2008
Identified Site as suitable for 6 level "University Gallery"

Chau Chak Wing Museum Site Suitability

A building on the Tennis Court site has been considered in several previous Campus Masterplans.



The Quadrangle and Great Hall circa 1870 - 1874



View from Victoria Park, circa 1890
Note the open space between avenue planting on main axis to The Quadrangle and along Parramatta Road



Parramatta Road, looking towards The Quadrangle circa 1930



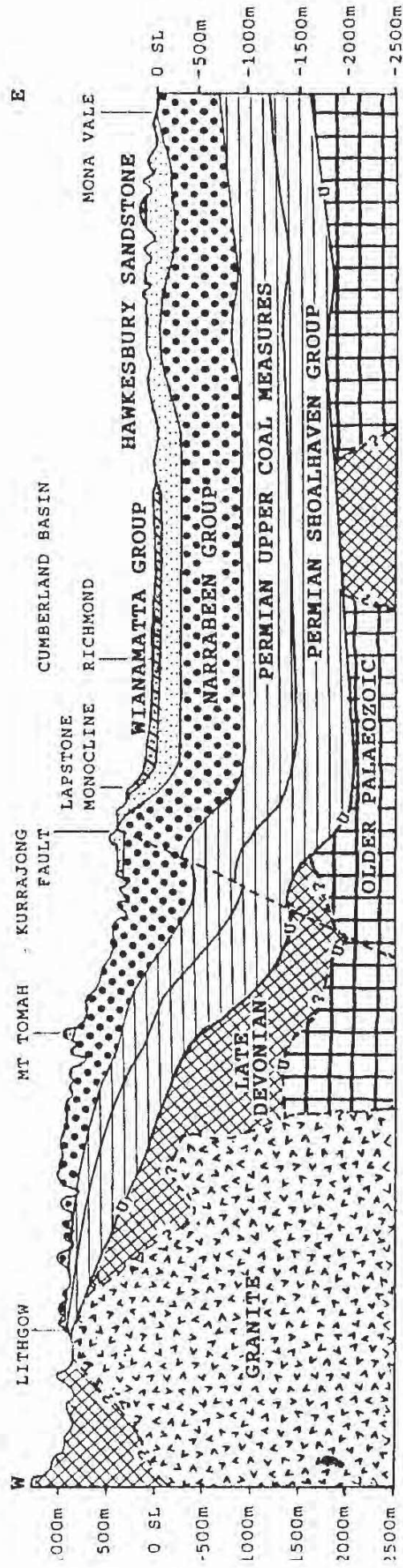
View within Victoria Park, looking towards The Quadrangle circa 1930



View within Victoria Park, looking towards The Quadrangle, 2016



View from Parramatta Road

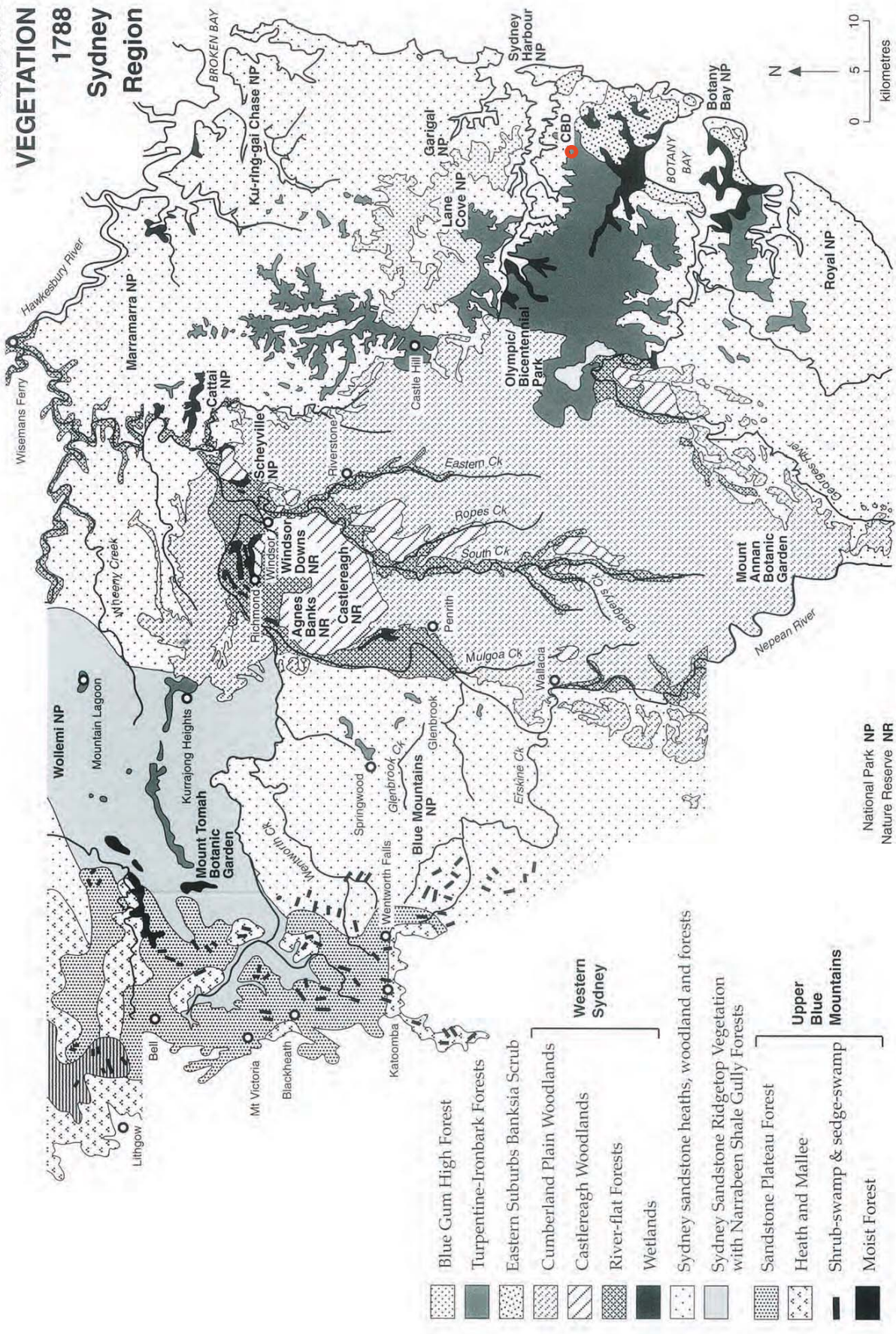


Geological map of the Sydney Basin, and a W-E section from Lithgow to Monna Vale. Boundaries marked U in the section are major unconformities.

Geology

The site's geology is based on Wianamatta Shale, which overlies Hawkesbury Sandstone bedding.

NATIVE VEGETATION 1788 Sydney Region



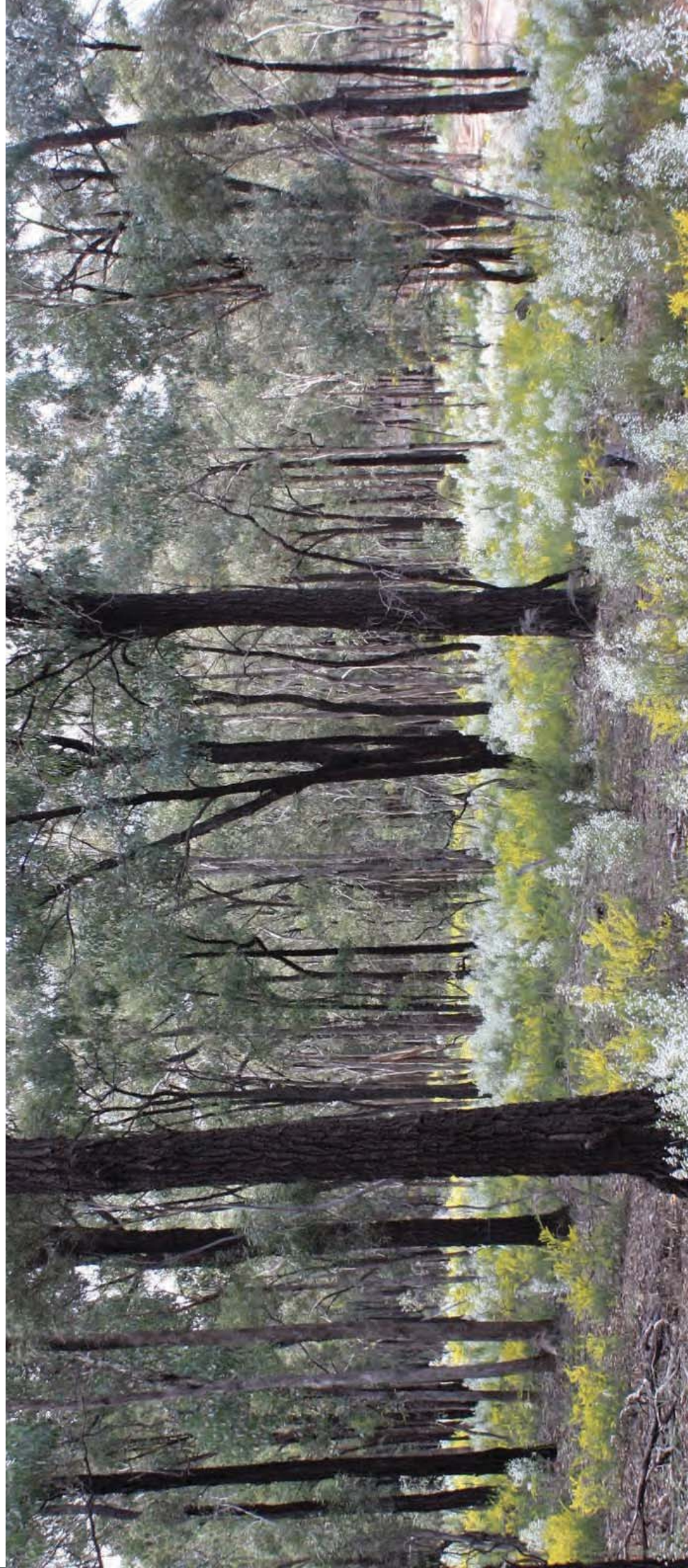
National Park NP
Nature Reserve NR

Pre Settlement Landscape

The University is on the edge of the Wianamatta Shale geology, which is characterised by Turpentine-Ironbark Forests.

“ ... The trees growing at the distance of from 20 to 40 feet from each other, and in general entirely free from under-wood, which was confined to the stony and barren spots.”

Governor Arthur Phillip, April 1788



Wianamatta Landscape Turpentine - Ironbark Forest

The Turpentine-Ironbark Forest typically occurs in moderately wet sites, with an annual rainfall of 800-1100mm per year, and on clay soils derived from Wianamatta shale. The forest has several vegetation layers in its undisturbed state.

The tree canopy is dominated by Turpentine and a variety of eucalypt species, depending on location in the landscape.

Smaller trees and shrubs grow underneath the tree canopy. The vegetation on the ground is a mix of herbs and grasses.



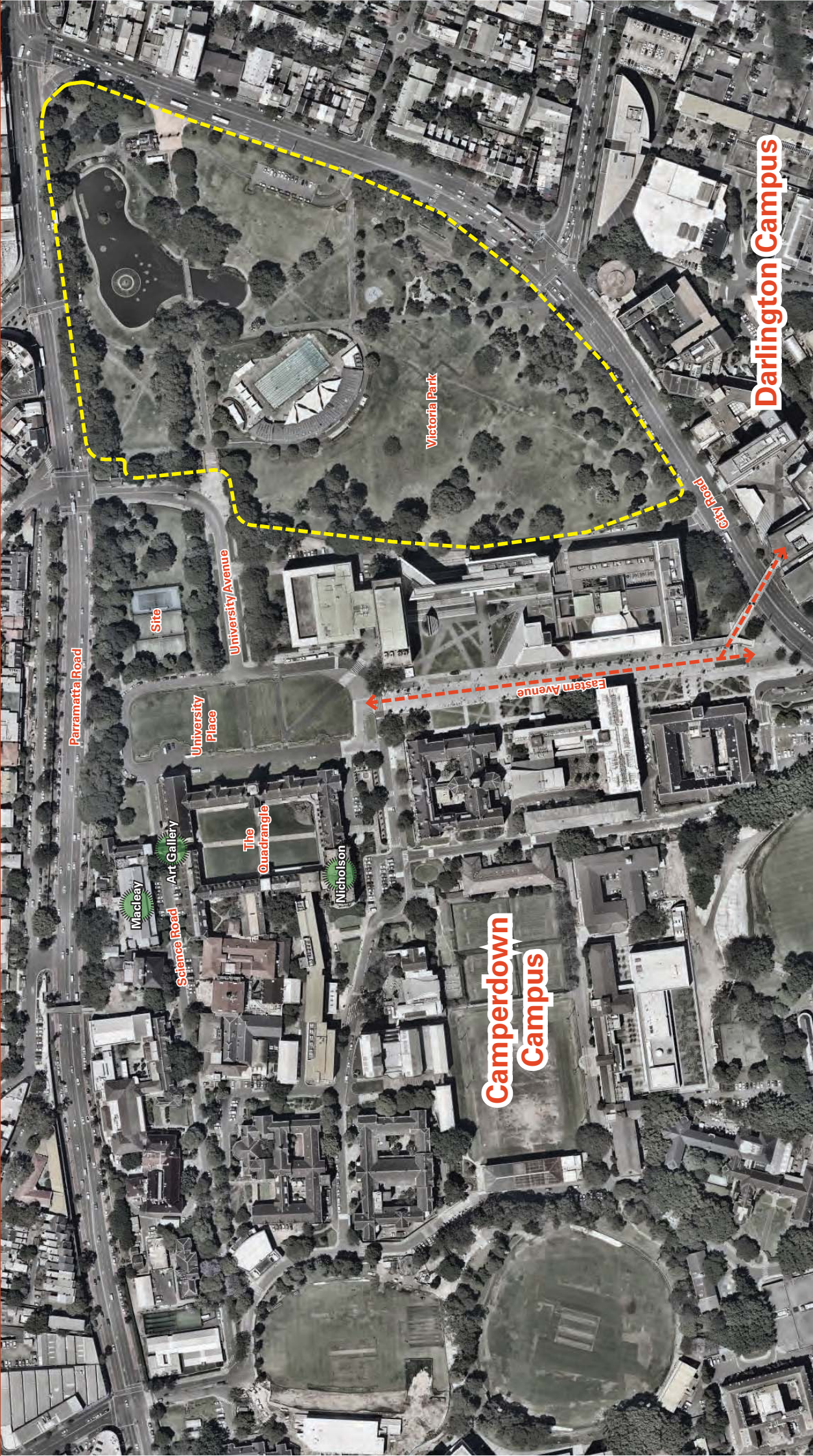
Hydrology

Site of new University, 1854 by James Glen Wilson shows Parramatta Road tollhouse and the embankment that forms the northern side of the Old Dam.

Harbour along what is now Wentworth Park to Blackwattle Bay (Fish Markets).

The western side of the Campus drains to Johnston's Creek, through Harrold Park to Rozelle Bay.

Response to Place



Relationship to Campus

The site is located on the northern edge of the Camperdown Campus, but screened from Parramatta Road by landscape.

The site can form a gateway and entrance to the Campus, provided the building is connected to the Campus pedestrian network and visible from certain positions so that it can act as a destination.