17 January 2018

Juliette Churchill
Campus Planning Manager
Services Building G12
22 Codrington St
The University of Sydney
NSW 2006

UNIVERSITY OF SYDNEY ENGINEERING TECHNOLOGY PRECINCT STAGE 1
ALTERNATIVE DESIGN EXCELLENCE PROCESS

Dear Juliette,

I am writing to you in response to your request for support for an alternative design excellence process for the project above. Previous correspondence and the Design Excellence Summary Report of 27th September, 2017 (attached to this letter) have informed the comments and recommendations below.

In relationship to the request for support for an alternative design excellence process we note the following:

- The process undertaken on this project is a 'legacy' process and not one that the University will pursue on future projects that require a competitive design excellence approach
- Notwithstanding the actual weighting of design in the tender, the DERC (Design Excellence Review Committee) have confirmed that the scheme selected was the one with the highest merit in regards to design
- The DERC have endorsed the design as being capable of achieving design excellence, subject to several design issues still to be resolved
- The DERC will remain involved in the project as it develops

Further detail including the key design elements that underpin design excellence, the terms of the continuing involvement of the DERC, and the list of outstanding design issues is contained in the attached Design Excellence Summary Report.

Recommendation

Given the notes above the Government Architect is satisfied that the alternative design excellence process described in the Design Excellence Summary Report

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meets the objectives of the competitive design process of clause 6.21(6) of Sydney Local Environmental Plan 2012. The GANSW expect to review the SSDA submission as part of the planning assessment process and will provide further advice and recommendations at that time.

It should be noted that the recommendations above are specific to this project. They should not be taken as a precedent for the position the GANSW may take for other projects in other jurisdictions.

Sincerely,

Peter Poulet
Government Architect NSW

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Engineering Technology Precinct Stage 1

DESIGN EXCELLENCE SUMMARY REPORT

Campus Infrastructure & Services

27 September 2017

1. DESIGN EXCELLENCE REVIEW COMMITTEE ENDORSEMENT

The Design Excellence Review Committee hereby endorses the contents of this Design Excellence Summary Report prepared at the request of the NSW Government Architects Office [GANSW]

DERC Member Kim Crestani

Signature / / Date

DERC Member Michael Tawa

Signature / / Date

DERC Member Tony Caro

Signature Tony Caro — / / 27/9/17 Date

DERC Member / Chair Juliette Churchill

Signature / / Date

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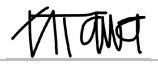

Signature 27 / 09 / 2017 Date

DERC Member Tony Caro

Signature / / Date

DERC Member / Chair Juliette Churchill

Signature / / Date

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DERC Member Michael Tawa

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DERC Member Tony Caro

Signature / / Date

DERC Member / Chair Juliette Churchill

PP

Signature 28/9/2017 Date

ALAN CROWE
MANAGER PLANNING SERVICES

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DERC Member Kim Crestani

Kim Crestani 27 09 2017

Signature / / Date

DERC Member Michael Tawa

Signature / / Date

DERC Member Tony Caro

Signature / / Date

DERC Member / Chair Juliette Churchill

Signature / / Date

2. INTRODUCTION

This Design Excellence Summary Report, responds to the GANSW's request of 12 Sept 2017 for both:

A revised design excellence summary report that includes:

- A statement confirming that the 'winning' scheme was selected on the basis of design merit, not cost, notwithstanding the weighting of design in the tender evaluation criteria. Section 3 refers.
- A statement confirming that the DERC will continue to be involved in the process as per GANSW's terms. Section 4 refers.
- A statement noting that this project is a 'legacy project' representing an approach to design excellence competitions that is no longer supported by the University. Section 5 refers.

and

A short report prepared by the DERC and signed by each member:

- Confirming that the proposed scheme to be submitted for DA achieves design excellence. Section 6 refers.
- Identifying the key design elements that underpin design excellence. Section 7 refers.
- Itemising any design issues still to be resolved or critical to the achievement of design excellence. Section 7 refers.

This Design Excellence and DERC Assessment Report also relate to:

1. The presentation to the GANSW of the design proposal by the University's preferred design team on 6 Sept 2017
2. The Design Excellence Summary Report, prepared and signed by DERC dated 8 May 2017, issued to GANSW 15 May 2017
    - This summarises the design excellence and competition process that the University and DERC have undertaken, reports on the alternative design proposals prepared by HDR/Rice Daubney and Cox and concludes with confirmation that *The DERC recommend that the Cox design is able to meet design excellence, with the ongoing involvement of the DERC team.*
3. The SEARs cover letter and report, dated 8 August 17
    - In particular, item 3. Built Form and Urban Design. *Demonstrate in consultation with, and to the satisfaction of, the Government Architect NSW that design excellence will be achieved in accordance with the provisions of Sydney Local Environmental Plan 2012.*

3. STATEMENT CONFIRMING THAT THE 'WINNING' SCHEME WAS SELECTED ON THE BASIS OF DESIGN MERIT, NOT COST, NOTWITHSTANDING THE WEIGHTING OF DESIGN IN THE TENDER EVALUATION CRITERIA

The proponents were required to provide a design excellence report demonstrating their response to the University's Design Excellence criteria outlined below:

1. A detailed analysis demonstrating how the proposed design responds to the critical components of the PPR demonstrating the appropriate design response.

2. Set out the rationale for the choice of preferred design, and clearly demonstrate how this exhibits design excellence, including but not limited to:

    (a) a high standard of architectural design and materiality,

    (b) the bulk, massing and modulation of buildings,

    (c) ensure the form and external appearance of the proposed development improves the quality and amenity of the public domain,

    (d) how the proposed development addresses heritage and streetscape constraints,

    (e) how environmental impacts are mitigated, such as achievement of sustainable design, and ensuring overshadowing and solar access, visual and acoustic privacy, noise, wind and reflectivity in accordance with *Sydney Development Control Plan 2012* requirements,

    (f) the achievement of the principles of ecologically sustainable development,

    (g) pedestrian, cycle, vehicular and service access and circulation requirements, including the permeability of any pedestrian network,

    (h) the impact on, and any proposed improvements to, the public domain,

3. An overview of the design response in relation to quality and innovation.

4. Details of any non-conformances to the University's design standards.

5. Application of safety in design principles.

The DERC was also assisted with detailed technical assistance from the University's Peer Reviewers

Notwithstanding the weightings, the University of Sydney took the view that a proponent who could not achieve design excellence should not go forward. This proved significant in the final scoring. In addition, it is confirmed that the winning scheme was the highest rating on design merit.

4. STATEMENT CONFIRMING THAT THE DERC WILL CONTINUE TO BE INVOLVED IN THE PROCESS AS PER GANSW'S TERMS

The University is committed to the ongoing involvement of the DERC to SSDA lodgement and any significant post SSDA approval design change [i.e. Section 96], together with any additional sessions determined as necessary by the DERC in consultation with the GANSW, to ensure the selected design is maintained and improved during design development process. A design report will be submitted at the SSDA lodgement stage, to support the application, explaining the design development process and summarising design evolution.

The appointed DERC members Kim Crestani, Tony Caro, Michael Tawa and Juliette Churchill will continue their involvement in the design development process, chaired by a representative of GANSW and observed by the nominated assessment planner from DoPE. Panel sessions will be held at DoPE offices.

5. STATEMENT NOTING THAT THIS PROJECT IS A 'LEGACY PROJECT' REPRESENTING AN APPROACH TO DESIGN EXCELLENCE COMPETITIONS.

The University confirms that the Engineering project design process was subject to the University's process, and the City of Sydney's LEP 2012 requirements, prior the establishment of the GSNSW's Design Excellence Review process.

The University is committed to the GANSW draft Design Excellence Process for all current and future projects, as demonstrated in the current Health Project on Campus.

6. STATEMENT CONFIRMING THAT THE PROPOSED SCHEME TO BE SUBMITTED FOR DA ACHIEVES DESIGN EXCELLENCE.

The DERC hereby confirm that that issues raised by the DERC have been genuinely addressed by Cox Architects in the spirit of attaining design excellence. The selected design by Cox Architects is supported by the DERC as able to achieve design excellence.

The DERC also confirm that in their opinion the Cox Architects design team have demonstrated sustained engagement with the design excellence process and the commnents, concerns and suggestions made by the DERC. They have have shown genuine commitment and capacity to workshop with the DERC and continually improve the project during the design development period. Notwithstanding, the DERC identified the following items that will require ongoing refinement in the next phase of design development:

- SW corner at roof and skylight is ambiguous in form and materiality, and clarification required.
- Further refinement of the plantroom, roof and atrium integration is required.
- There are further opportunities to improve the urban edge interface with the public domain.
- Clarification of northern areas as two distinct `destinational' spaces, rather than being given over too much to circulation.
- Variety in scale of gathering spaces to be developed.
- Further resolution of the atrium is required to investigate simplifying forms.
- Further detail required for the mesh to the atrium, and edge condition.
- The external ducts on north façade to be reviewed in terms of the aesthetic and materiality.
- WMBB strategy is promising in terms of integration into the building tectonics - specifically with ideas for the ground plane, its materiality and contiguity between in and out.

RECOMMENDATION

The DERC recommend that the Cox Architects design is able to meet design excellence, with the ongoing involvement of the DERC team.

The University is committed to the ongoing involvement of the DERC to a minimum of SSDA lodgement, to ensure the selected design is maintained and improved during design development process. A design report will be submitted at the SSDA lodgement stage to support the application, explain the design development process and summarising evolution and resolution of the final design.

To this end, the DERC can confirm that the University has instructed for the following meetings to take place:

- Pre SSDA, planned for 3 Oct 2017, 24 Oct 2017 and 14 Nov 2017.
- Post SSDA if required as part of approval process.
- Prior to Construction Certificate
- As part of approval to any post approval design change.
- Such other meetings as required relating to design developments.

7. STATEMENT IDENTIFYING THE KEY DESIGN ELEMENTS THAT UNDERPIN DESIGN EXCELLENCE AND ITEMISING ANY DESIGN ISSUES STILL TO BE RESOLVED OR CRITICAL TO THE ACHIEVEMENT OF DESIGN EXCELLENCE.

Terms of Reference Criteria	Positive Attributes	Concerns to be addressed in order to achieve design excellence
1 A detailed analysis demonstrating how the proposed design, responds to the critical components of the PPR demonstrating the appropriate design response.	The space and services layout strategy works well and provides good future flexibility for alternative laboratory combination. This may be of particular interest to the bespoke requirements for World Class researchers. Generally, the strategy to provide major reticulation in the spine of J03 and keep new services off the existing building is supported. Provided the walls/doors separating flexible support rooms are glazed, the floor to ceiling glazing of the façade will provide good daylight penetration and views out. The relocation of newly constructed space from on top of the existing South Tower retains the opportunity for future redevelopment. The interplay of different levels between the two towers greatly improves the massing of the building. Exploiting the raw aesthetic of the existing South Tower, respecting it's scale and heritage and making it the driver of the palette of internal materials is supported. Connection of the goods lift to the Level 1 loading dock support area and to the laboratories is supported.	Hazard management could be improved by moving the goods lift closer adjacent to the labs. The relocation and extension of 1 lift to serve as a back up to Level 1 would be beneficial. The usage of the zone from office to atrium void edge requires further development. Complying with the PPR floor-to-floor levels requirement of 4.5m is resulting in generally difficult/challenging new to old floor level transitions which have the effect of separating adjacent levels. Requires further design development. The variety and diversity in the scale of gathering spaces, necessary to the socio-cultural performance of these areas, is yet to be developed.
2 A A high standard of architectural design and materiality,	LOR have designed a "machine" aesthetic for the new construction, with services engineering on display, through the bris soleil veil of the northern façade and the polycarbonate plank walls of the plant rooms.	The success of this architectural approach will depend on the quality of its detailing. Consider clarification and articulation of northern areas as two distinct `declinational' spaces, rather than being given over too much to circulation.

	The scheme has been distilled to express a clarity between retained and new building areas, and a consciously transparent link in the middle. The new wing is expressed with consistent façade elements including an extended bris-soleil which effectively serves both north and western facades. The proposed internal mesh baluster is supported in principal however more detail is required to fully support this initiative.	There is more detail required within the circulation spaces. The external ducts on north façade need to be reviewed in terms of function, aesthetics and materiality.
2 B The bulk, massing and modulation of buildings,	The building has been configured with a clear tripartite scheme in which existing and new volumes are separated by the void zone, expressed through from eastern to western façades. This provides clear expression of the retained structure, the new building and the link in between which provides circulation and meeting spaces. The palette of façade elements has been distilled to three essential types, with north and western facades of the new building adopting common elements. The attention to the northern façade has developed and its themes extended around to the east and west facades. The shade screen has been extended to meet the glazed void zone to assist simplify the palette and enhances the tripartite scheme.	Formal and material resolution of the SW corner at roof and skylight is ambiguous and clarification required. Further refinement of volumetric and performance integration of plant room, roof and atrium is required. Further resolution of the atrium is required to simplify the complexity of different elements and achieve legibility for the user.
2 C Ensure the form and external appearance of the proposed development improves the quality and amenity of the public domain,	The scheme addresses the public domain revealing the textural richness of the campus setting and celebrating the “place”. The raw, self-finished brick, glass and timber of the engineering precinct has been reinterpreted with the form and colour of fibre cement panels, extruded glass planks translucent glass louvres and closed cavity façades. The building’s engineering is to be on display with exhausts running behind the veil on the north	There are further opportunities to improve the urban edge interface with the public domain. •

	facade. Internally the self-finished palette continues and is supplemented and softened by the recycled brick and sustainable timber.	
2 D How the proposed development addresses heritage and streetscape constraints,	The scheme respects the values of retained building fabric and landscape in the precinct. This includes the preservation and creation of important views. The openness of the new glazed entry to Maze Crescent will reveal the Old School heritage building in its setting on Cadigal Green. The massing of the new building is intended to introduce a finer scale to the current building ensemble facing Maze Crescent, with the separate elements of retained concrete form, new glazed atrium form and finely louvered new façade each articulating the built form. WMBB strategy is promising in terms of integration into the building tectonics - specifically with ideas for the ground plane, its materiality and contiguity between in and out.	WMBB strategy needs further development, in the consideration of shifting away from a machine aesthetic that could produce a cld and alienating environment and compromise the WMBB design principles.
2 E How environmental impacts are mitigated, such as achievement of sustainable design, and ensuring overshadowing and solar access, visual and acoustic privacy, noise, wind and reflectivity in accordance with *Sydney Development Control Plan 2012* requirements,	The proposal will meet the University's Gold Standard Sustainability Framework. The design has been led by its key themes and the desire for maximum natural light. The shade screen façade provides the building with high energy performance and enables maximum natural light into the laboratories whilst providing glare protection. The atrium sky light will provide an additional source of natural light into the floors from the atrium for both the new and existing sides enabling a constellation of informal learning and collaboration spaces. These spaces are intended to stimulate thought, ideas and innovation whilst being highly visible. The highly glazed laboratories and interior will provide transparency of work that promotes the key themes	Further passive and active engineering systems will need to be implemented and integrated into the design to address [for example] temperature, glare, and solar gain to ensure for comfort of the occupants in all parts of the atrium.

	of engineering and learning on display.	
2 F The achievement of the principles of ecologically sustainable development,	The key initiatives proposed in the scheme include: • 20% Whole building Energy reduction target • High performance façade • Daylight harvesting • Rainwater harvesting • Sustainable and recycled materials • Bicycle and end of trip facilities • Solar hot water panels • Solar PV generation.	The implementation of ESD initiative will need to be monitored and tailored as throughout design development. End of trip facilities have been provided but need further detailed review.
2 G Pedestrian, cycle, vehicular and service access and circulation requirements, including the permeability of any pedestrian network,	The scheme acknowledges and reinforces links in the master plan, which support the distinct circulation and access requirements across the precinct. In particular: Engineering Walk is retained as a major thoroughfare linking each building in the precinct, and providing a significant entry point to the building. The creation of the new atria enables a visible entry sequence from both the Walk and Maze Crescent Maze Crescent, as the future dominant pedestrian spine linking the buildings in the precinct is reinforced with a new building entry connecting to Cadigal Green and the campus wide cycle network Direct access to the northern and southern landscaped space from the entry level. The plan also seeks to reinforce the key campus linkages to: Shepherd St Residential, Redfern Station, Cadigal Green, Abercrombie Precinct and City Road Precinct.	Direct access from Shepherd Street to service the loading bay is inadequate and needs to be addressed.
2 H The impact on, and any proposed improvements to, the public domain,.	The public domain plan references the first maps of Sydney “Kangaroo Ground”, European occupation ‘Grose Farm’. Suggesting an environmentally sustainable and fertile ground for reflection, socialisation, reverie and study, a place where the productive and sustainable cultivation of the land is	The landscaping proposal will require some reorganisation of the ‘services’’ spaces that currently separate the School Hub and the Southern courtyard adjacent.

	a setting for the cultivation of the mind. Flexible outdoor courtyards allow for everyday use, as well as small events and study groups. Seating, benches, tables, terraces and lawn allow a myriad of ways of being outdoors. An expanse of lawn allows water to percolate beneath ground and be captured, stored and cleansed in a linear, living water system.	
4 Details of any non-conformances to the University's design standards.		No direct access for trucks to loading dock from Shepherd Street included, instead a contorted route is offered. Liquid Nitrogen [LN2] is not integrated with the Loading Dock design Limited information on any structural alteration works [e.g. no new floor slab at Level 3]. No over cladding or roofing. BCA compliance upgrades limited, ie assumption that Levels 4, 5 and 7 are BCA compliant.
5 Application of safety in design principles.	Provided a detailed description of their approach to Safety in Design.	Safety in Design to be continually monitored as the design develops.

8 SUMMARY

COX RICHARDSON

Issues raised by the DERC have been genuinely addressed by Cox Richardson and the current design has been substantially improved as a result of the engagement process. The design is supported in terms of being able to achieve design excellence.

The DERC also confirm that in their opinion the Cox Architects design team have demonstrated sustained engagement with the design excellence process and the commnents, concerns and suggestions made by the DERC. They have have shown genuine commitment and capacity to workshop with the DERC and continually improve the project during the design development period. Notwithstanding, the DERC identified the following items that will require ongoing refinement in the next phase of design development:

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RECOMMENDATION

The DERC recommend that the Cox Richardson design is able to meet Design Excellence, with the ongoing involvement of the DERC team as outlined in this Report.