fjmt

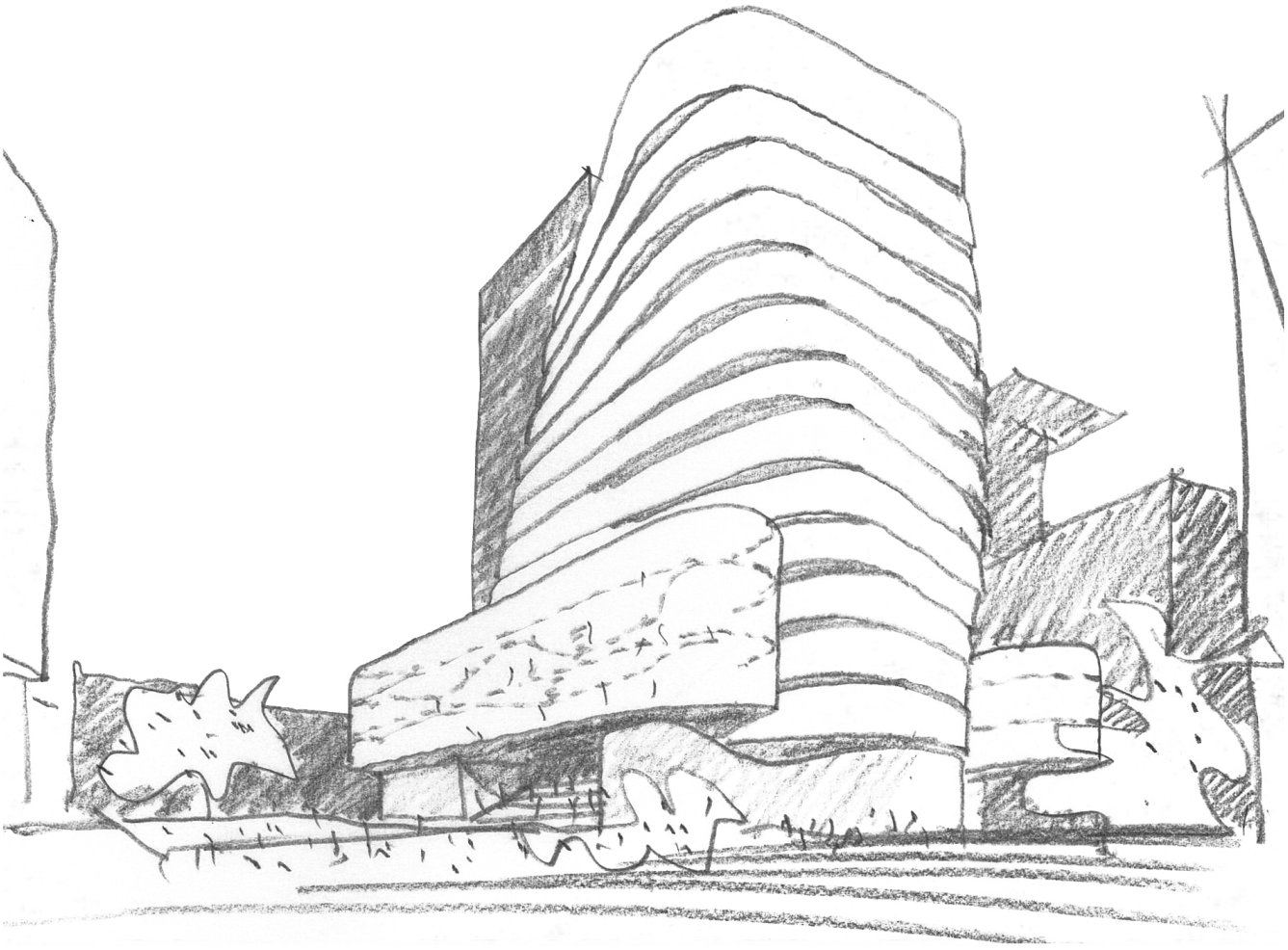
architects in association: LACOSTE + STEVENSON | DARYL JACKSON ROBIN DYKE PTY LTD

UTS Central, Broadway Precinct

University of Technology Sydney

Response to Submissions

July 2016



Introduction

The following report is a response to queries raised about the submission for the UTS Central building DA submission.

FJMT and L+S are architects in collaboration for the development of Building 1 and 2 and the Podium Extension component of the UTS Central Project.

Department of Planning & Environment Submissions:

Design Excellence:

DoP Issue Raised:

1. The Department is concerned with the design excellence demonstrated in the proposal, in particular the design integrity of the Lacoste + Stevenson podium design and integration with the proposed Building 2 tower. The Department requests that the following matters be addressed:

    a. *reintroduction of the 'lace column' element from the competition winning design;*
    b. *relocation or redesign of the Collaborative Learning Theatre to ensure that the principle of an open, activated façade is maintained along the Broadway elevation;*
    c. *review of the design of the podium veil to retain the lightness and subtlety of curve indicated in the competition winning scheme, specifically at the building corners of the podium, and in the manner in which the 'veil' meets the ground;*
    d. *review frit patterning to establish viability of use of part of the façade for projections; and*
    e. *review proposed staging to ensure delivery of a continuous integrated Broadway façade.*

2. The Department is concerned with maintaining design excellence during the construction stages, in particular podium design. The Department recommends that the application consider establishing an independent design review panel during the construction stage to ensure critical design elements, including the material quality and fine detailing of the façades, are delivered to ensure the flowing form, lightness and transparency of the design is achieved. The elements of the podium design that must be reviewed include the relationship of each 'slipped' slab to the next, the use of curved (not facetted) glass, ceramic frit and the detailing of Operable elements.

3. The Department requests that staging plans (including elevations and montages) be provided to:

    a. *illustrate how the Building 2 podium would appear upon completion of the Phase 1 Works*
    b. *demonstrate how the interim façade to Broadway would achieve design integrity with the*
    c. *final podium design; and*
    d. *demonstrate how the interim design would be integrated with the final podium design.*

FJMT / L+S DJRD Response:

The DA submission proposes a unified vision of the competition winning scheme for the podium extension to Building 1 and 2 and the new Building 2 Tower (CB02).

The principles established by Lacoste + Stevenson in their winning scheme identified a necessary integration with the existing fabric of Building 1(CB01) podium and the broader UTS campus. It identifies the very rectilinear and Brutalist architecture of the Building 1(CB01) tower and offers an approach that is organic and undulating as a counter point.
It is this approach established for the Broadway facade and podium extension that has been embraced in the design development and character of Building 2 (CB02).

During the design development phase of the DA, FJMT worked with Lacoste + Stevenson to better understand the key principles established in their scheme and to reinforce these in the response for both the podium extension to CB01 and the new CB02.

There has been a number of design reviews through the design and development process for the UTS Central Project including:

- *Presentations to the Vice-Chancellor Attila Brungs, Dean of Architecture UTS Desley Luscombe, Urban Design advisor Gabrielle Morrish (the 2009 competition jury chair) and UTS Manager Campus Development, Planning and Design Manager Clive Gunton*
- *Design review with the UTS Central Project Control Group*
- *Design review to UTS Physical Infrastructure Committee, a subcommittee of UTS Council*
- *Design review to SEM (Senior Executive Management for UTS)*

A recent consultation and design review of the scheme submitted for the Development Application (DA) was also undertaken in May of this year with Gabrielle Morrish.

There was also an additional suggestion as part of the MOD approval (Modification 5 to the UTS City Campus Broadway Precinct Concept Plan) that there is consultation with the City of Sydney as integral to the process. This has occurred including a presentation on the 11 May 2016 to Graham Jahn, the Director of City Planning, Development and Transport, who was also a member of the selection panel for the winning scheme of 2009 and author of the design excellence provisions.

The following are the responses to the points raised regarding design excellence:

a. reintroduction of the 'lace column' element from the competition winning design;

The lace columns were a proposal of an alternative expression of structure and sustainability and intended to ensure that the expectation created by the new smooth, curved glass façade as indicated on the competition winning scheme and further developed for the current DA was not just a skin-deep experience but one that continued into the building and integrated with the existing CB01. Continued study of the interface with the existing CB01 revealed that the complexity and inter-connectivity of the existing structural systems of CB01 greatly limited the opportunity of integrating complex new structural systems as represented by the conceptual intent of the 'lace columns'. As the UTS brief also evolved during the continued development of the project and to adequately address the requirement for multi-function, flexible space, the structure and servicing was rationalised to ensure future flexibility for all possible uses.

b. relocation or redesign of the Collaborative Learning Theatre to ensure that the principle of an open, activated façade is maintained along the Broadway elevation;

The two 350 seat collaborative teaching spaces which have been located along the Broadway facade are two significant spaces within the UTS Central brief and are the first of their kind in Australia. These spaces represent a clear vision of UTS to provide a new objective and opportunity for collaborative teaching within the campus and as a pioneering example of what is possible.

Given the significance and scale of these spaces it has been an important and intentional decision to prominently locate these teaching spaces along the Broadway facade. These spaces will be setback from the Broadway façade allowing informal learning and activated areas to occupy the space adjacent to the Broadway façade which would be very visible from Broadway. The Collaborative Learning Theatres will be glazed along the back wall allowing visual connectivity to Broadway and allowing natural daylight into these spaces. The intended and designed uses for these spaces encourage non-conventional, open collaborative and active teaching and learning in a large open and flexible space which would also be visible from Broadway. The roof of the top level of the podium along Broadway is proposed to have a series of large skylights to help to lighten the top podium level uses by providing open views to the sky. These skylights will be visible from Broadway generating a connected openness for both the uses and perceived activation of the Broadway facade.

c. review of the design of the podium veil to retain the lightness and subtlety of curve indicated in the competition winning scheme, specifically at the building corners of the podium, and in the manner in which the 'veil' meets the ground;

The Broadway and Jones Street facades of CB02 as represented in the DA for UTS Central reinforces the vision that was established in the competition scheme by retaining the lightness and subtlety of curve and veil-like appearance of the building to more consistently integrate and unify the scheme. The expression of the curvilinear form is most clearly expressed on the corners of the podium and tower.
The podium facade also reinforces the competition design by retaining an elevated facade along Broadway and maintaining a clear, activated and connected facade at ground level.

d. review frit patterning to establish viability of use of part of the façade for projections;

The proposal for the treatment of the facade for the Planning Submission represents the design intent as captured in the competition submission. It is anticipated that as the design and particularly the facade on Broadway continues to develop there will be opportunity to explore how this facade is best representative of the competition design intent while still maintaining its integrity and impact along Broadway.

e. review proposed staging to ensure delivery of a continuous integrated Broadway façade.

The anticipated staging of the project is required to maintain key operations to UTS and the Broadway Campus. The opportunities to deliver an integrated Broadway facade has been carefully considered to develop a strategy of 'stitching' the facade along Broadway to deliver a seamless and continuous facade. This will be achieved by maintaining a consistent approach to the proposed facade types along Broadway allowing staging to occur with minimal to no representation of the differing timelines for the phased works.

Refer to images and drawings attached which reference staging of phase 1 and 2.

Urban Design:

DoP Issue Raised:

1. The Department is concerned with the built form impacts on pedestrian movement around and through the site given the proposed minimal setback on Broadway. In this regard, additional information is sought regarding pedestrian movement and further demonstration that location of the bus stop will not interfere with pedestrian movement.

FJMT Response:

- A pedestrian movement analysis and report has been done by GTA which is included in the UTS Response to Submissions.
- The facade line at level 4 has been setback a minimum of 1.5m from the boundary along Broadway.
- The pedestrian movement and sight lines at the junction between the Broadway Building 1 entry and the bus stop has been improved by the proposed removal of the three Plane trees that are located behind the bus stop and within the path of travel.
- New street trees are proposed in accordance with the City of Sydney's Street tree masterplan to the full extent along the Broadway frontage.

Environmental and Residential Amenity:

DoP Issue Raised:

1. The Department is concerned with the overshadowing impacts from the proposed building on the residential properties within Central Park and a further quantitative analysis of solar access to be retained and lost for all

dwelling impacts by the proposal must be provided, including additional analysis of whether the proposal would impact on any heliostat solar collectors for building within Central Park.

FJMT Response:

- There has been further study and quantitive analysis of the shadow impacts from the proposed CB02 and podium extension on the residential properties within Central Park. The additional analysis that has been completed has been attached to this report. This has been done in conjunction with and is supplementary to the analysis already completed for the current DA submission.
- The proposed development is the same height as the lower tower of No. 1 Central Park and does not impact on the roof level of the lower tower where the reflectors are located or the roof level of the higher tower where the heliostat is located.

City of Sydney Submissions:

Pedestrian Link and Public Domain Interface:

CoS Issue Raised:

1. The footpath adjacent UTS on Broadway is heavily congested by pedestrians and students. Concern is raised with the proposal further impacting upon overcrowding and public pedestrian safety. In this regard, the proponent should provide pedestrian movement modelling indicating the existing and proposed conditions with the view to increasing the pedestrian level of comfort. Informed by the modelling, the proponent should consider relocating the bus stop further west to avoid street furniture, trees and obstacles. This will allow for a generous waiting area that does not impede pedestrian flows. The building entry and perimeter adjacent the Jones Street intersection should be level with the pavement to improve building permeability and reduce overcrowding. A wider pavement should be provided at this point to accommodate people waiting at the signalised intersection and allow for better pedestrian flow.

FJMT / L+S DJRD Response:

- A pedestrian movement analysis and report has been done by GTA which is included in the UTS Response to Submissions.
- The facade line at level 4 has been setback a minimum of 1.5m from the boundary along Broadway.
- The pedestrian movement and sight lines at the junction between the Broadway Building 1 entry and the bus stop has been improved by the proposed removal of the three Plane trees that are located behind the bus stop and within the path of travel.
- New street trees are proposed in accordance with the City of Sydney's Street tree masterplan to the full extent along the Broadway frontage.
- The new entry level on Jones Street has been set to a floor level to provide the best possible connection with the existing pavement levels along Jones Street.
- The podium building articulation on the corner of Jones Street and Broadway is curved and is considerably setback from the boundary intersection of these two streets which provides a wide zone to accomodate for pedestrian movement down Broadway and allow for a generous waiting area at the intersection.
- Additionally the proposed future pedestrianisation of Jones Street will significantly ease pedestrian flow and congestion at the signalised intersection.

Building Entries:

CoS Issue Raised:

1. Building entries should be clearly legible and distinguished by material, form and colour from the building facade.

FJMT / L+S DJRD Response:

- The new primary building entrances will be legible with a clear orientation and response to each of their locations around the site.
- The entrance off Broadway is clearly defined by the dramatic curve to the Broadway facade while also providing gradual stepping and ramps from the footpath to the existing level 4 of CB01.
- The existing entrance to CB01 from Alumni Green is retained and is clearly articulated in its existing form.
- The new primary entry to CB02 from Alumni Green is elevated on level 4 and is expressed by a grand stair case facing Alumni Green. This grand stair connects the lower level of Alumni Green (Level 3) to the main level 4 entry. This entry is clearly expressed by the significance and orientation of this grand stair differentiating this from all other facade and building form facing Alumni Green.

- The new primary entry off Jones Street is located to the north of the Broadway form providing additional protection from prevailing winds from the south. The internal floor level of the Jones Street entry has been adjusted to provide level entry from Jones Street. In maintaining a continuous floor finish between the inside and the outside it is intended there will be a legible difference in colour and transition of paving pattern geometry between the two while still maintaining clear visible connectivity.

Substation & Fire Booster Location:

CoS Issue Raised:

1. As a substation and booster valve may be required, detailed plans at a scale of 1:20 should be provided indicating the location of the structures and integration into the building design.

FJMT Response:

- As indicated on the documents submitted there is a new substation proposed on level 2 (below the level of Jones Street). There is ongoing coordination for this space to provide the required egress and performance with ongoing discussions with Ausgrid.
  Refer attached plan of the substation as developed for the DA application.

Rooftop Plant Screening:

CoS Issue Raised:

1. Any rooftop plan is to be screened and is not to be visible from the public domain. The building parapet walls are to extend to a height that screens any rooftop plant.

FJMT Response:

- As shown on the documents the roof top plant is screened by the facade which extends to the roof line on all sides of CB02. Where the roof opens to the terrace on the east side, this is screened from the plant by the lift core.

Paving:

CoS Issue Raised:

1. The paving pattern shown on the general arrangement plan mirrors the shape of the building along Jones Street. The proposal appears to include multiple paving types or finishes. As this is partly on City land the proponent will require approval from the Council as part of their Public Domain Plan.

FJMT Landscape Response:

- The proposed Jones Street forecourt design is based on a radial pattern that is flexible to incorporate and meet the City of Sydney Public Domain details.

Tree Management:

CoS Issue Raised:

1. Landscape Plans indicate new street tree planting along Broadway and Jones Street. The plans include species which are consistent with the City's Street Tree Master Plan (STMP). However, no detailed drawings have been provided demonstrating that new trees will be planted in accordance with the STMP. Accordingly, detailed plans should be submitted for consideration.

FJMT Landscape Response:

- New street trees are proposed along Broadway and Jones Street, the details of which will meet the City of Sydney Street Tree technical guidelines and can be conditioned accordingly.

Ecological Sustainable Development:

CoS Issue Raised:

1. The development proposes a substantial amount of glazing. As such, it is likely that there will be considerable heat load on the north and west facades, with the southern elevation likely to experience high levels of heat loss. A double skin facade with interstitial blinds would allow the glass aesthetic to be maintained while reducing the heating and cooling load on the building. Space zoning and efficient HVAC plant will be important components of achieving more energy efficient outcomes.

FJMT Response:

1. We are proposing a similar system to what is described above for the facades to provide the desired high performance facade as identified in the DA report to address issues of heat load, heat loss, glare and general performance of the various spaces within the building.

Public Submissions:

1. Why is Jones Street not being adjusted?
2. Could the space be more effectively developed as an entrance into the UTS Broadway Precinct?

FJMT Response:

- A more significant adjustment to Jones Street requires a Public Domain DA which is not part of this submission. It is proposed that Jones Street will become pedestrianised as part of the future development of the Public Domain.
- The current DA shows a primary entry into the Broadway Precinct off Jones Street which will activate Jones Street.