

MODIFICATION REQUEST TO CONCEPT PLAN:

Modifications to the University of Technology Sydney (UTS) Broadway Concept Plan

(MP 08_0116 MOD 5)



Secretary's Environmental Assessment Report Section 75W of the Environmental Planning and Assessment Act 1979

March 2016

ABBREVIATIONS

Applicant CIV	University of Technology Sydney Capital Investment Value
Concept Plan	Approved Concept Plan for the redevelopment of the site (MP 08_0116, as amended)
Commission	Planning Assessment Commission
Consent	Development Consent
Department	Department of Planning and Environment
EA	Environmental Assessment
EIS	Environmental Impact Statement
EP&A Act	Environmental Planning and Assessment Act 1979
EP&A Regulation	Environmental Planning and Assessment Regulation 2000
EPI	Environmental Planning Instrument
GFA	Gross Floor Area
LEP	Local Environmental Plan
LGA	Local Government Area
Minister	Minister for Planning
Part 3A	Part 3A of the Environmental Planning and Assessment Act 1979
Regulation	Environmental Planning and Assessment Regulation 2000
RtS	Response to Submissions
SEARs	Secretary's Environmental Assessment Requirements
Secretary	Secretary of the Department of Planning and Environment
SEPP	State Environmental Planning Policy
SSD	State Significant Development
UPN	Ultimo Pedestrian Network
UTS	University of Technology Sydney

Cover image: Proposed addition to Building 2 envelope (source: proponent's application)

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EXECUTIVE SUMMARY

This report provides an assessment of an application to modify the existing concept plan for the Broadway Precinct of the University of Technology Sydney (UTS) City Campus under section 75W of the *Environmental Planning and Assessment Act 1979* (EP&A Act).

The proposal seeks to modify the concept plan by:

- providing for the future demolition and construction of a new built form for Building 2;
- increasing the approved additional gross floor area (GFA) for Building 2 to 38,261 sqm, comprising an increase of 31,511 sqm;
- amending the approved building envelope for Building 2, resulting in a maximum height of 64.5 m at Broadway, comprising an increase of 34.41 m; and
- consequential amendments to the Urban Design Quality Controls/Principles for Building 2 and the Statement of Commitments.

The application was publically exhibited for 47 days between 27 August 2015 and 12 October 2015. The Department received a total of five submissions, all from public authorities. No submissions were received from the general public.

The key assessment issues considered by the Department include built form, urban design and visual impacts.

The Department supports the amendment as the modified building envelope would facilitate opportunities for the future development of Building 2 at a scale and height consistent with surrounding urban forms. The proposed amendment represents an increase in the overall additional GFA for the Broadway Precinct by 37 per cent. The increased building envelope height provides an appropriate transition and contextual fit within the existing urban context and is comparable to the scale of approved development within the precinct and the locality.

The building envelope would facilitate development that would complement the education precinct and the adjoining locality. The proposed development would alter existing views. However the Department considers that the alterations are, on the whole, reasonable and recommends an additional further assessment requirement be included in the modified concept plan approval requiring view sharing principles be addressed in the design of Building 2 tower, including orientation of the tower and separation between towers, to address outlook and views from living areas and principal private open space areas south of the site. The Department is satisfied the visual impact of the proposal can be managed during the future application for Building 2.

The Department considers that the modification to the concept plan approval would provide for an appropriate level of amenity and would not result in any unacceptable impacts. Additionally, demolition and construction of a new built form for Building 2, rather than the retention and reuse of the existing building, provides improved opportunities for integration between Buildings 1 and 2, and the approved podium.

The amendment provides for future redevelopment of Building 2 which would form an integral part of the University's Broadway Precinct and the wider area. The proposal would provide significant public benefit by facilitating the expansion of tertiary education facilities and delivery of priorities in *A Plan for Growing Sydney*. It would contribute to the delivery of improved facilities and accommodate future expected student and staff growth.

The Department concludes that the proposal is in the public interest and recommends that the application to modify the concept plan be approved subject to additional modifications to the concept plan.

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1. BACKGROUND

1.1. Introduction

This report provides an assessment of an application (MP 08_0116 MOD 5) to further modify the approved concept plan for the Broadway Precinct of the University of Technology Sydney (UTS) City Campus under section 75W of the *Environmental Planning and Assessment Act 1979* (EP&A Act).

The proposal seeks to modify the concept plan by:

- providing for the future demolition and construction of a new built form for Building 2;
- increasing the approved additional GFA for Building 2 to 38,261 sqm, comprising an increase of 31,511 sqm;
- amending the approved building envelope for Building 2, resulting in a maximum height of 64.5 m at Broadway, comprising an increase of 34.41 m; and
- consequential amendments to the Urban Design Quality Controls/Principles for Building 2 and the Statement of Commitments.

1.2. Subject Site

The UTS City Campus is comprised of three precincts – Haymarket, Broadway and Blackfriars, all of which are located on the southern edge of the Sydney CBD within the City of Sydney Local Government Area (LGA). The Broadway Precinct (refer to **Figure 1**) has an area of approximately 42,000 sqm and is located on the northern side of Broadway.

The precinct is bound by Thomas Street and the ABC Ultimo Centre to the north; the Ultimo Pedestrian Network (UPN) to the east; Broadway to the south; and Wattle Street to the west.



Figure 1: The concept plan approval site location and surrounding context (UTS Broadway Precinct shaded in blue)

(Source: nearmaps)

The Broadway Precinct is shown in **Figure 2**. The proposed modifications relate to the central portion of the precinct bounded by Thomas Street to the north, Harris Street to the east, Broadway to the south and Jones Street to the east. Redevelopment of the Broadway Precinct as envisaged under the concept plan approval has been completed, except for the approved expansion of existing Buildings 1 and 2 through the construction of a shared podium. The expansion of the approved Building 2 envelope is the subject of this modification request.



Figure 2: Project location (UTS City Campus outlined in red)

(Source: nearmaps)

The former Carlton United Brewery site (CUB site) is located to the south of the UTS Broadway Precinct across Broadway. The site is currently undergoing redevelopment and is now known as Central Park. Building 2 which is the subject of this modification application, is located north of Block 2 within the CUB site and north-east of approved locations for Block 1 and Block 4N.

Construction of Block 2 within the CUB site is complete and comprises a six storey retail podium and two residential towers of 12 and 29 storeys. The 12 storey tower within Block 2 is located immediately to the south of Building 2 directly across Broadway.

Recent approvals have been issued to amend the approved concept plan for the CUB site to allow for the conversion of the 19 and 20 storey buildings on Block 1 and Block 4N from commercial floor space to residential and serviced apartments. Development consents for the construction of the two buildings have also recently been granted. Construction works have not commenced.

1.3. Previous Approvals

Concept Approval

On 23 December 2009, the then Minister for Planning approved the concept plan (MP 08_0116) for the redevelopment of the UTS Broadway Precinct (refer to **Figure 3**). The concept plan establishes the framework for the redevelopment of the Broadway Precinct and includes the following components:

- new Broadway Building and Thomas Street Building;
- expansion of Buildings 1 and 2;
- expansion of Building 6 for student housing;
- modifications to Buildings 3, 4 and 10;
- modifications to Alumni Green, including below ground book storage vault;
- public domain improvements to Broadway, and Thomas, Harris, Wattle and Jones Streets; and
- a Multi-Purpose Sports Hall, beneath the eastern part of Alumni Green.



Figure 3: Approved concept plan layout

The concept plan approval has been modified on four occasions as summarised in **Table 1** below.

Mod No.	Description of Modification	Approved
MOD 1	Allow early bulk excavation works.	15 March 2010
MOD 2	Amend the timing for submission of pedestrian connectivity improvement strategy.	23 March 2011
MOD 3	Allow excavation, construction and operation of the Library Retrieval System and Storage Building, and bulk excavation works for the basement levels of the Thomas Street Building	29 July 2011
MOD 4	Altered truck route in the Construction Traffic Management Plan	21 March 2012

Table 2 provides a summary of the concept plan's key parameters as modified.

Table 2: Key Development Parameters		
Building	Approved Additiona	

Building	Approved Additional GFA (sqm)	Approved height (m)
Building 1	4,050	22.47
Building 2	6,750	24.24
Broadway Building	34,650	46.91
Thomas Street Building	10,000	27.10
Multi-Purposes Sports Hall	1,800	below ground
Book Vault	2,250	below ground
Building 6	25,250	69.20
Total New GFA	84,750	-

The approved building envelopes in relation to the podium expansion to Buildings 1 and 2 are provided at Figures 4 to 7.



Figure 4: Approved building envelopes for podium expansion of Buildings 1 and 2 (Broadway elevation) (Source: proponent's application)



Figure 5: Approved building envelope for expansion of Building 2 podium (viewed from Jones Street) (Source: proponent's application)



Figure 6: Approved building envelope for expansion of Building 1 podium (section through Building 1) (Source: proponent's application)

Modification Request UTS City Campus, Broadway Precinct (MP 08_0116 MOD 5)



Figure 7: Approved concept plan building envelopes (showing Council's 42 metre LEP height limit at the time) (Source: proponent's application)

Project Approvals

Redevelopment of the Broadway Precinct has been completed as provided for in the approved concept plan approval with the exception of the expansion of Building 2 and the construction of the common podium to Buildings 1 and 2.

The following individual project approvals facilitated the redevelopment of the Precinct, including the construction of Building 6, the Broadway Building and the Faculty of Science

Building (formerly Thomas Street Building), which formed part of the original concept plan approval.

On 24 December 2009, the then Minister for Planning approved the project application for the redevelopment of the Peter Johnson Building (Building 6) for additional teaching space and student housing, including construction of a 13 storey tower with 720 student beds above the seven level podium.

On 16 December 2011, the then Deputy Director-General, under delegation from the Minister for Planning, approved the project application for the 12 storey Broadway Building with 32,500 sqm of floorspace for education uses and three basement levels for car parking.

On 10 July 2012, the then Director-General, under delegation from the Minister for Planning, approved the project application for the six storey UTS Faculty of Science Building (formerly Thomas Street Building) with 11,295 sqm of floor space for education uses.

2. PROPOSED MODIFICATION

2.1 Proposed Modifications

The proposal seeks to further modify the approved concept plan by:

- providing for the future demolition and construction of a new built form for Building 2;
- increasing the approved additional gross floor area for Building 2 from 6,750 sqm to 38,261 sqm, comprising an increase of 31,511 sqm;
- amending the approved building envelope for Building 2, resulting in a maximum height of 64.5 m (RL 79.5) at Broadway, comprising an increase of 34.41 m; and
- consequential amendments to the Urban Design Quality Controls/Principles for Building 2 and the Statement of commitment.



The proposed modifications are illustrated in Figures 8 to 10.

Figure 8: Proposed amended building envelope for expansion of Building 2 (Broadway elevation) (Source: proponent's application)



Figure 9: Proposed amended building envelope for expansion of Building 2 (Jones Street elevation) (Source: proponent's application)



Figure 10: Proposed amended building envelope for expansion of Building 2 (Source: proponent's application)

2.2 Project Modification Need and Justification

The University has largely completed redevelopment of the Broadway Precinct to support the 2020 vision that was captured in the approved concept plan, except for the expansion of Buildings 1 and 2. The concept plan was based on providing facilities for an increase in students from 12,200 equivalent full-time student load (EFTSL) to 15,000 EFTSL within the Broadway Precinct by 2015. However, the student load reached 17,100 EFTSL in 2014 and the University has been required to revise its projections for 2020 to 19,500 EFTSL. Further additional floorspace to accommodate this projected growth is therefore now required.

The University has identified that the Building 2 site is the only remaining area of the Broadway Precinct that could be developed to provide the necessary additional floor space. Development on the remainder of the Precinct has already been optimised with development having been undertaken within the other approved building envelopes whilst addressing the site constraints, including retaining green open space (Alumni Green) and solar access to Alumni Green.

The enlarged building envelope would facilitate the future development of a tower element of eight additional floors above the approved Building 2 podium envelope (as illustrated within **Figure 10**) and would accommodate a range of educational uses.

The redevelopment is consistent with *A Plan for Growing Sydney* which identifies supporting the delivery of education-related land use and infrastructure within the Broadway and Camperdown Education and Health Precinct. The additional floor space would assist with delivering this priority for the Central Region.

3. STATUTORY CONTEXT

3.1 Modification of the Minister's Approval

Section 75W of the EP&A Act provides for modification of a Minister's approval including 'revoking or varying a condition of the approval or imposing an additional condition of approval.

Section 75W(2) of the EP&A Act provides that a proponent may request the Minister to modify the Minister's approval of a project. The Minister's approval of a modification is not required if the approval of the project as modified would be consistent with the original approval. As the proposed modifications seek to increase the size of the approved building envelope, the modifications will require the Minister's approval.

3.2 Secretary's Environmental Assessment Requirements

Section 75W(3) of the EP&A Act provides that the Secretary may notify the proponent of the SEARs with respect to the proposed modification that the proponent must comply with before the matter will be considered by the Minister. No additional requirements were issued with respect to the proposed modification to the concept approval, as sufficient information was provided to the Department in order to consider the application and the issues raised remain consistent with the key assessment requirements addressed in the original SEARs.

3.3 SEPP (State and Regional Development) 2011

A future application for construction of Building 2 and the common podium for Buildings 1 and 2 would be classified as State significant development because it would be development for the purpose of an educational establishment with a capital investment value (CIV) in excess of \$30 million in accordance with clause 15 (Educational establishments) of Schedule 1 of State Environmental Planning Policy (State and Regional Development) 2011. A request for SEARs for the detailed design of Building 2 and shared with Broadway Precinct has been lodged and SEARs have been issued.

4. CONSULTATION AND SUBMISSIONS

4.1 Exhibition

In accordance with section 89F of the EP&A Act and clause 83 of the EP&A Regulation, the Department publicly exhibited the modification application for 47 days from Thursday 27 August 2015 until Monday 12 October 2015. The application was publicly available on the Department's website and exhibited at the Department's Information Centre and at the City of Sydney Council office.

The Department placed a public exhibition notice in the Sydney Morning Herald and Daily Telegraph on the 26 August 2015 and notified adjoining landholders and relevant State and local government authorities in writing. The Department received a total of five submissions from public authorities. No submissions were received from the general public.

4.2 Public Authority Submissions

A total of five submissions were received from public authorities in response to the exhibition, with Environment Protection Authority (EPA), Heritage Division of the Office of Environment and Heritage (OEH), Transport for NSW (TNSW) and Sydney Water raising no issues with the proposal. A submission has been received from City of Sydney Council (Council) providing general support for the proposal but objected to the removal of the competitive design process for the future Building 2.

A summary of the issues raised in Council and agency submissions is provided below.

City of Sydney Council (Council) provided the following comments for consideration:

- the proposal includes a 19.5 metre height and 27,091 sqm floorspace exceedance of Council's controls in Sydney Local Environmental Plan 2012 and whilst Council does not object to the exceedances, the future built form should be designed to respect and respond to the surrounding context;
- Building 1 (UTS Tower) and Building 10 (former John Fairfax Building) are the earliest high rise buildings in Ultimo and have considerable heritage significance;
- Building 1 and a similarly scaled tower (eastern tower of Block 2 on the CUB site) on the
 opposing side of Broadway form a western gateway to the CBD. This setting should be
 respected and the 10 metre separation between the tower of Building 1 and proposed
 tower of Building 2 should be increased to ensure that Building 1 is more clearly defined
 within the local context and from wider contextual viewpoints;
- a low scale street wall and setback of upper levels should be maintained to respond to the scale of the local heritage listed Sydney Technical College Building and improve separation to Building 10;
- a more detailed wind impact assessment is required given the potential negative impacts along Broadway and Jones Street and consideration of impacts on Alumni Green should also be detailed;
- the proposal should be modified to acknowledge the eastern alignment of the former Balfour Street, which contains the heritage significant aspects of the CUB site, and retain more sky views above the Building 2 podium given the view corridor and connections along the former Balfour Street, which forms a western corridor from southern suburbs to the CBD;
- elevation shadow diagrams are required and clearer delineation of existing approved Building 2 envelope shadow to determine whether the proposed amendments would overshadow residential apartments on the CUB site;
- integrated, visible and accessible bicycle parking facilities should be provided to address the increase in student population; and
- the detailed design should ensure Building 2 integrates with the winning Lacoste + Stevenson design for the extension of the podium for Buildings 1 and 2.

The Council objects to the removal of the design competition process from the Urban Design Principles and considers a competitive design process is appropriate for the detailed design of Building 2 to demonstrate design excellence.

The **Heritage Division of the Office of Environment and Heritage** (OEH) advised that the modified Building 2 envelope would not impact on the heritage significance of the nearby State listed heritage items as they are located a sufficient distance from Building 2. Whilst the modifications would not impact on the heritage significance of the Glebe Island Bridge given views to the landmark from numerous vantage points, the modified envelope may impact on views to the bridge from the residential apartments on the CUB site. The Heritage Division also noted that located in close proximity to the site are a number of local heritage items and the trees along Jones Street would not permanently obscure views to the modified Building 2 envelope.

The **NSW Environment Protection Authority** (EPA) identified that the following issues would need to be addressed:

- potential site contamination;
- demolition and construction impacts, including dust, sediment, air quality and noise;
- operation noise and vibration impacts;
- potential operational waste management requirements for special waste and operational radiation control associated with research facilities; and
- operational energy efficiency and water conservation.

Transport for NSW advised that the modified Building 2 envelope would not impact on the CBD Metro rail corridor given the setbacks to Broadway. Transport for NSW requested that bicycle parking facilities and end-of-trip facilities for pedestrian and cyclist be provided in accordance with local controls and in secure, convenient and accessible locations.

Sydney Water advised that the water and wastewater systems have adequate capacity to serve the proposed development and detailed requirements would be provided with future applications for Section 73 Certificates.

The Department has considered the comments raised in the public authority submissions during the assessment of the application and has given specific consideration to the key issues raised in **Section 5** of this report.

4.3 Applicant's Response to Submissions

The proponent provided a Response to Submissions (RtS) report which addresses the issues raised in submissions and incorporates the following changes to its modified proposal:

- an indicative design for the modified Building 2 envelope, featuring a stepped and angled setback on all levels to progressively reduce and re-orientate the tower and achieve a more slender and separated tower element;
- further modifications to the design quality controls encapsulating the additional separation to the UTS Tower and Jones Street setback provisions illustrated in the indicative design; and
- inclusion of the Building 2 podium as part of the Building 2 envelope.

The proponent also provided further consideration of view impacts and wind impacts. The proponent also confirmed that the environmental management issues raised by the EPA would be addressed in the detailed design and construction of Building 2.

The Department is satisfied that the issues raised in all submissions have been addressed through the RtS, this report and the relevant appendices of the modification request and EIS.

5. ASSESSMENT

In its assessment of the modification request, the Department has considered the following:

- the Environmental Assessment (EA) provided to support the proposed modification;
- the existing concept plan approval (as previously modified);
- submissions received by the Department (see Appendix B); and
- the Department's assessment report for the original concept plan application.

The Department considers that the key issues associated with the proposed modification are:

- built form and urban design;
- visual impacts; and
- other matters.

These key issues are assessed in sections 5.1 to 5.3 of this report.

5.1 Built Form and Urban Design

Building 2 has an existing GFA of 22,096 sqm and the approved concept plan allowed for expansion of the existing envelope by an additional 6,750 sqm of GFA. The approved envelope for the podium included one additional level of floorspace and extension of the footprint of the podium to the site boundaries and towards Alumni Green. The approved building envelope also incorporated a six metre plant level. The approved building envelope increased the building height to 24.24 metres and 30.09 metres when the plant level is included.

The proposed modifications seek to alter the built form by incorporating an additional tower element above the approved Building 2 envelope (refer to **Figures 8** to **10**). The enlarged envelope would allow for the development of a nine storey tower element above the approved podium height or eight storey tower above the approved plant level.

Bulk and Scale

The proposed expansion of the Building 2 envelope would allow for an increase in the height of Building 2 by 34.41 metres from 31.09 metres to 65.5 metres above the lowest assumed ground level of RL 14 (maximum RL 79.5).

The proponent has provided details of an indicative building design which could be delivered within the proposed envelope. The design of any future building would be the subject of a separate application. The additional tower element and height of the tower as shown by the indicative design is consistent with the original University 1966 vision and design for the UTS campus, which incorporated three tower buildings (refer to **Figure 11**). Although the UTS Tower was built, the addition of the remaining towers were not originally sought as part of the concept plan. The proponent also contends that the additional tower element would be consistent with the transition in heights along Broadway achieved within the CUB site as shown in **Figure 12**.



Figure 11: Michael Dysart original 1966 design

(Source: proponent's application)



Figure 12: CUB Site - Broadway Elevation

Council raised no concerns regarding the height of the proposed envelope, however raised concerns with the proposed 10 metre separation between the proposed envelope and the existing UTS Tower. Council also maintains that a competitive design process is required given the exceedance of the 45 metre height control in SLEP 2012, formerly a 42 metre height control in the SLEP 2005 that was in force at the time of the determination of the concept plan. These controls do not apply to Part 3A concept plans.

The proponent provided an indicative design in its RtS (refer to Figure 13) illustrating the further refinement of the design within the building envelope and demonstrating that the

⁽Source: Applicant's Response to Submissions for SSD 6554)

evolving design for Building 2 responds to the issues raised regarding separation, setback to Jones Street and enhancing sky views (refer to **Figures 14** to **16**).

Whilst the indicative design demonstrates that the future Building 2 would address a number of the bulk and scale issues raised by Council, the proponent has retained the proposed modified building envelope to maintain flexibility. The proponent has encapsulated the increased separation to UTS Tower and setbacks to Jones Street in the design quality controls for Building 2. The proponent would therefore need to demonstrate that the proposal is consistent with these controls and the indicative design as part of any future application for Building 2.

The Department supports the proposed concept plan amendments for Building 2 and considers that the proposed height and massing of the modified building envelope is consistent with built form within the surrounding area, both within the UTS campus and within adjacent CUB site. The Department considers the indicative design demonstrates that a building can be constructed within the proposed building envelope with an appropriate separation from UTS Tower, which would provide a distinctive and visually interesting design that positively responds to the interface with the solid and structured design of UTS Tower.



Figure 13: Aerial view of indicative building design - stepped façade

(Source: proponent's application)



Figure 14: Perspective of indicative design from Alumni Green within building envelope shown in red outline (Source: proponent's application)



Figure 15: Perspective of indicative design from Alumni Green within building envelope shown in red outline (Source: proponent's application)



Figure 16: Perspective of indicative design from Broadway within building envelope shown in red outline (Source: proponent's application)

Site Density

The proposed increase in additional GFA for Building 2 is 31,511 sqm. This increases the approved additional GFA for Building 2 from 6,750 to 38,261 sqm. This would result in an overall GFA of 60,357 sqm for Building 2, taking into account the GFA of the existing Building 2 (to be demolished) of 22,096 sqm. The proposal would result in an increase in the total additional GFA for the entire redevelopment of the UTS City Campus Broadway Precinct from 84,750 sqm to 116,261 sqm (37 per cent).

The additional GFA permitted under the approved concept plan resulted in a total GFA of 197,453 sqm and a FSR of 5.3:1 for the educational core of the university precinct (excluding Building 6). The additional GFA proposed for Building 2 would increase the total GFA for the precinct by 16% to 228,964 sqm and would equate to an FSR of 6.2:1 for the educational core.

The proposed modifications would therefore exceed the permissible 5:1 and 2.5:1 controls under the current SLEP 2012 and 5:1 FSR under the superseded SLEP 2005, which was in force at the time of lodgement and determination of the concept plan. The FSR also exceeds the FSR 5.5:1 permissible under the bonus provisions where buildings demonstrate design excellence. However, these controls do not apply to the concept plan approvals.

The concept plan approval is a "Transitional Part 3A project" and the terms of the approval for the concept plan prevail over environmental planning instrument's or development control plans.

Council raised no concerns with the additional GFA, however, advised that given the GFA exceedances are above that which is permissible under the bonus provisions for buildings demonstrating design excellence through a competitive design process, it is imperative that a competitive design process be required for the future Building 2.

The Department considers that the increased site density is acceptable given the overall improved amenity on the campus with the improved Alumni Green, additional recreation facilities and improved interfaces with the public domain and therefore the additional student population is supported. The site is considered suitable for further education infrastructure given its location within a recognised education and health precinct, accessibility to public

transport, appropriate built form and acceptable amenity impacts (refer to Sections 5.2 and 5.3 of this report).

Design Excellence

The achievement of design excellence for new development across the Broadway Precinct (and Haymarket Precinct) has been an important theme in the planning process for the redevelopment of the UTS City Campus since it first started back in the 2000s, and is clearly linked to the long term strategic vision for UTS "to be one of the world's leading Universities of Technology".

UTS is committed to design excellence for new development in the concept plan. Whilst the Sydney LEP's competitive design process did not apply to the original Part 3A application, the proponent's statement of commitments for the proposal provided urban design principles for the concept plan identifying that a design competition process would be undertaken for the Broadway, Thomas Street Buildings and Buildings 1 and 2 podium extension.

Design competitions have been undertaken to deliver:

- Faculty of Engineering and IT Building;
- The Faculty of Science and Graduate School of Health Building;
- The Great Hall and Balcony Room Upgrade; and
- Alumni Green.

In its delivery and completion of all of these projects within the Broadway Precinct, the UTS has demonstrated its commitment to achieving design excellence.

A *Lacoste* + *Stevenson* design was the winning design for the extension of the podium of Buildings 1 and 2 and is shown in **Figure 17**. Given that a portion of the Building 2 envelope forms part of the winning Lacoste + Stevenson design and the need to provide design synergises between the winning design and any future proposal for Building 2, the proponent has advised that they do not intend on undertaking a further competitive design process for the future building to be contained within the enlarged Building 2 envelope.



Figure 17: Lacoste + Stevenson design for expansion of Buildings 1 and 2 (as it presents to Broadway) (Source: proponent's application)

Instead the proponent proposes to modify the urban design principles in relation to high quality design as follows:

Achieve design excellence. UTS is committed to achieving design excellence on the campus through a design competition process or direct appointment of a renowned architect with a record of achieving design excellence.

With Lacoste + Stevenson winning the design competition for the extensions to the Building 1 and Building 2 podium expansion, UTS has directly engaged architectural firm *Francis-Jones Morehen Thorp* (fjmt) to work in collaboration with Lacoste + Stevenson to design and deliver the remainder of the expanded Building 2 design. Francis-Jones Morehen Thorp is a preeminent architectural firm with a record of design excellence and is well placed to further develop the design of Building 2 in collaboration with the winning architectural team for the podium, Lacoste + Stevenson.

The Department is aware of the complexities required in the final design for Building 2 in terms of its integration with Building 1 and the winning design for the podium extension for Buildings 1 and 2, functional requirements and constraints regarding impacts on the residential areas to the south. Due to these constraints, the competitive design process may not provide a superior outcome as design options and solutions would be restricted. The indicative design conceptually demonstrates that the design would provide a superior and diverse built form outcome for the campus. The Department considers adequate urban design principles and design quality controls have been developed to guide development and any future application for Building 2. In this regard, the Department is supportive of the proposed changes to the urban design principles for the concept plan.

The Department has considered the proponent's reasons for not undertaking an additional competitive design process for Building 2 and accepts that, under these circumstances, it would be unwarranted and unnecessary as design excellence can still be achieved as the University has selected a pre-eminent firm with a record of design excellence. The proponent has included a commitment confirming the use of the architects for the future design of Building 2. Additionally, the Department would refer the application for Building 2 to the NSW Government Architect to ensure design integrity is maintained through the future application process for the winning podium design and that the tower element has been integrated with the winning podium design excellence exhibited by the winning podium design, whether the final design demonstrates architectural excellence and whether the building presents a well-designed building that fits sensitively into the streetscape as well as providing architectural diversity along a prominent frontage to the site and gateway to the CBD.

5.2 Visual impacts

The proposed building envelope for Building 2 establishes the worst case scenario in terms of potential visual impacts. The proponent has already further developed the design to provide an indicative design that would address concerns raised by Council in relation to visual impacts. Therefore, whilst the view impacts are considered in the following sections based on the Building 2 envelope, detailed view impact analysis would be required for the future building proposed within the modified envelope.

Public Domain Visual Impacts

This section addresses and considers the impacts of the bulk and scale of the proposal from key public places. The proponent undertook a visual analysis from a range of viewpoints, as illustrated in **Figure 18**. The proponent concluded that the impact on public domain views would be low as the building form is consistent with the surrounding context and the modified envelope would not block any views to any significant landmarks or important vistas. The most significant impacts would be from Chippendale Green (V5) where existing views to the sky may be blocked. The visual analysis concluded that as the scale of the modified building

envelope remains significantly below the scale of development on the CUB site and the UTS Tower and is setback from Broadway, the impacts would be low and acceptable.



Figure 18: Visual Analysis Vantage Points

(Source: proponent's application)

Council requested that the proposed Building 2 tower adopt a greater separation to UTS Tower to ensure the UTS Tower setting is more clearly defined, as the UTS Tower and the tower on Block 2 of the CUB site visually present as the western gateway to the CBD from wider contextual viewpoints. Council also requested the visual impact from the former Balfour Street (V5), which terminates at Building 2, be further considered and greater sky views be retained.

The proponent has provided additional information in the RtS to address this issue and to support the conclusion that the impacts on views and vistas to the site from Chippendale Green and the former Balfour Street corridor (refer to **Figure 19**) would be acceptable, as the proposal provides a stepped setback massing above a transparent podium design. The indicative design in the RtS demonstrates that a more slender rotating form that provides more sky views and greater openness at the Jones Street/Broadway intersection within the modified envelope can be provided.

The Department is satisfied that the proponent has provided a comprehensive visual analysis from public areas and the visual impacts from the public domain would be acceptable. The Department considers the UTS Tower would be a key landmark and appreciation of the UTS Tower from wider contextual viewpoints can be maintained as demonstrated by the greater separation adopted in the indicative design.

The modified proposal would not have a significant impact on viewpoints in close proximity to the site as the proposed development would be situated in front or behind similarly scaled development and no significant views to the UTS Tower would be blocked as it requires greater distances to be able view and appreciate the tower. The proposed site planning and historical design provides a sound basis for the location of the second tower and the future building would contribute to the further evolution and improvement of the built form at south-

western end of the CBD. The Department is satisfied the visual impact of the proposal and future building can be managed during the future application for Building 2.



Figure 19: Perspective of indicative design from Chippendale Green within building envelope shown in red outline (Source: proponent's application)

Private View Impacts

The modifications to the building envelope would impact on district views of residents of the apartments to the south of the development within the CUB site. The buildings within Block 2 would be most significantly affected, whilst a number of columns in Block 1 would also be impacted and units within Block 4N to a lesser extent. It is important to note that at the time of formation of the concept plan for the CUB site and the campus, Blocks 1 and 4N were identified for commercial uses. At the time of lodgement of the modification application Blocks 1 and 4N were still approved as commercial buildings.

In order to ascertain whether or not the proposed development's view sharing is reasonable the Department has followed a four-step assessment in accordance with the principles established by Tenacity Consulting Vs Warringah [2004] NSWLEC 140. The steps/principles adopted in the decision are:

- assess what views are affected and the qualitative value of those views (Tenacity principles note that 'water views are valued more highly than land views. Iconic views are valued more highly than views without icons. Whole views are valued more highly than partial views, eg a water view in which the interface between land and water is visible is more valuable than one in which it is obscured'.);
- 2. consider from what part of the property the views are obtained;
- 3. assess the extent of the impact (Tenacity principles establish a spectrum of impacts from 'negligible' to 'devastating'.); and
- 4. assess the reasonableness of the proposal that is causing the impact. (i.e. a development that complies with all planning controls is more reasonable than one that breaches them).

An assessment of potential view impacts in accordance with the Tenacity principles is outlined below.

The views from these apartments towards the site include expansive city views, inclusive of the horizon in many instances, and with distant views of parts of Sydney Harbour and the Anzac

Bridge in some instances. The proponent's analysis identifies that 41 existing apartments would have their views highly obstructed by the proposed modified building envelope, and of these, 10 apartments are single aspect with no alternative views of the city and horizon line from their living rooms. The proponent concludes that the overall visual impact of the proposal on public and private views is acceptable given the public interest of supporting the proposed development and importance and benefits to the higher education sector, which are well documented in State and Federal Government policy. Furthermore, the indicative design illustrates that an iconic building and place would be delivered to provide a pleasant outlook for residents.

The Department has included in **Table 3** its consideration of the first three Tenacity steps for the properties to the south of the development site. Units located below Level 7 on Block 2 and Levels 9 on Block 1 and 4N were not considered as these units would have negligible view impacts from the modified envelope as views would already be blocked by the approved podium extensions.

Property	View Impacted	View Type	Department's View Impact Assessment
Block 2 East Tower – Eastern units above Level 17	Partial Anzac Bridge and horizon	Oblique front views	These units are situated above the height of the modified envelope. The modified envelope would have a negligible impact on these views. Views to the city skyline would be retained.
Block 2 East Tower – Central units above Level 17	Partial Anzac Bridge and horizon	Oblique front views	These units are situated above the height of the modified envelope. The modified envelope would have a negligible impact on these views. Partial views to the city skyline would be retained.
Block 2 East Tower – Western units above Level 17	Anzac Bridge and horizon	Oblique front views	These units are situated above the height of the modified envelope. The modified envelope would have a negligible impact on these views. Partial views to the city skyline would be retained.
Block 2 East Tower – Eastern units between Level 7 and Level 17	Partial Anzac Bridge and horizon	Oblique front views	The modified envelope would have a minor impact on these views. Views to the city skyline would be retained.
Block 2 East Tower – Central units between Level 7 and Level 17	Partial Anzac Bridge and horizon	Oblique front views	The modified envelope would have a minor impact on these views. Partial views to the city skyline would be retained.
Block 2 East Tower – Western units between Level 7 and Level 17	Anzac Bridge and horizon	Oblique front views	These units would have views to Anzac Bridge and the horizon. The modified envelope would have a severe impact on these views. Partial views to the city skyline would be retained.
Block 2 West Tower – Eastern units above Level 7	Western edge of CBD, Anzac Bridge and horizon	Front views	The modified envelope would have a devastating impact on views to Anzac Bridge and horizon. Oblique partial views to city skyline would be retained.
Block 2 West Tower – Central units above Level 7	Western edge of CBD, partial Anzac Bridge and horizon	Front views	The modified envelope would have a devastating impact on the views.
Block 2 West Tower – Western units above Level 7	Western edge of CBD, partial Anzac Bridge and horizon	Front views	The modified envelope would have a devastating impact on views to the western edge of the CBD. Oblique partial views to Anzac Bridge and the horizon the west would be retained.

 Table 3: Private Property View Impacts - CUB site

Property	View Impacted	View Type	Department's View Impact Assessment
Block 1 – Eastern	Partial City	Oblique	The modified envelope would have a
units	skyline	front views	severe impact on these views. Partial
			oblique views to the southern edge of the
			CBD and horizon to the east would be
			retained. Uppermost levels would also
			retain views of the top of the city skyline.
Block 1 – Central	Partial City	Oblique front views	The modified envelope would have a
above Level 16	skyline	front views	moderate impact on these views. Views to the top of the city skyline would be retained.
			Oblique views to the Anzac Bridge and
			horizon to the west would be retained.
Block 1 – Western	Partial City	Oblique	The modified envelope would have a
units above Level	skyline	front views	moderate impact on these views. Oblique
16			views to the top of the city skyline would be
			retained. Oblique views to the Anzac Bridge
			and horizon to the west would be retained.
Block 1 – Central	Partial City	Oblique	Views are generally blocked by UTS
units between Level	skyline	front views	Broadway building and UTS Tower. The
9 and 16			modified envelope would have a moderate
			impact.
Block 1 – Western	Partial City	Oblique	Views are largely blocked by UTS
between Level 9	skyline	front views	Broadway building and UTS Tower. The
and 16			modified envelope would have a moderate
	Destiel Oite	Ohlinun	impact.
Block 4N – Above Level 16	Partial City	Oblique front views	Views would already be largely blocked by the UTS Tower. Any views to Anzac Bride
Lever to	skyline	nonit views	and horizon to the west would be
			unaffected by the modified building
			envelope. The modified envelope would
			have negligible impacts .
Block 4N –	Partial City	Oblique	Views would already be largely blocked by
Between Level 9	skyline	front views	the UTS Broadway building and the UTS
and 16			Tower. Any views to the west would be
			unaffected by the modified building
			envelope. The modified envelope would
			have negligible impacts .

Note: Only north facing columns of units considered in the above assessment

The views enjoyed by the residents are generally partial views given the interruptions by existing development, including the UTS Tower and Broadway Building. The views to the city skyline would also be oblique views. In relation to the devastating view loss on front facing views for the units located immediately south of the modified envelope, these are currently partial views to the city skyline, the western edge of the CBD. A high proportion of other units affected would retain oblique views to Anzac Bridge and the western horizon. Where views to Anzac Bridge and the western horizon are lost, the more highly valued views to the city skyline would be retained.

The fourth Tenacity step in considering the view impacts relate to the reasonableness of the impact with consideration of compliance with the development controls. Whilst the height of the modified envelope seeks to introduce an increased height control above the SLEP 2012 control, the development is consistent with the built form on the campus and the transition in height of buildings on the CUB site. Further, the strict application of the height control is not considered appropriate in this instance given the growing demand for social infrastructure and site constraints. Existing development and approved envelopes already exceed the height limit. It would also be reasonable to expect that the subject site would be developed for the purpose of providing education facilities and that such development is of the scale and form necessary to accommodate these facilities.

The impacts are not considered unreasonable given that views from the apartments with a northern outlook within the CUB site are already obstructed by the approved building envelopes. Private views cannot be guaranteed and protected, but need to be considered in determining the public benefits of the proposal. In this regard, view corridors and vistas along significant streets and pedestrian connections have been protected. The modification of the controls reflects the changing demands and increasing student population since 2008. The site is considered suitable for the development given it is an identified education and health strategic centre and the associated public benefits outweigh the view impacts to these residences.

It is also worth noting that the proposed building envelope represents the maximum potential building mass that can be achieved on the site and view impacts are likely to be less in net terms as evidenced by the improvements achieved with the indicative design. View sharing would be further strengthened through the revised design quality controls. In this regard, there is an opportunity for future applications to design buildings in a manner that considers views and outlook and accommodate view corridors where possible.

The Department concludes that the view impacts are reasonable given: view sharing can be maintained for a large proportion of the units located to the south as these units would retain either partial views or enjoy alternate views to the Anzac Bridge/horizon to the west or southern or western edge of the CBD; the modified building envelope would facilitate development that would complement not only the education precinct but would be an appropriate contextual fit within the existing urban context; the bulk and scale is consistent with the urban character of the site and surrounds; and the development is for the purpose of social infrastructure.

The Department recommends an additional further assessment requirement be included in the modified concept plan approval requiring view sharing principles be addressed in the design of Building 2 tower, including orientation of the tower and separation between towers, to address outlook and views from living areas and principal private open space areas south of the site. The Department is satisfied the visual impact of the proposal and future building can be managed during the future application for Building 2.

5.3 Other Matters

Overshadowing

Broadway is already impacted by overshadowing as a result on the existing development on the campus and approved building envelopes. The modified Building 2 envelope would facilitate future development that could marginally increase the overshadowing in areas where solar access is provided for small sections of Broadway for brief periods of the day during mid-winter. The improved built form along Broadway is considered to provide improved overall amenity for pedestrians through more active building frontages, better defined street edges, and improved planting and other public domain works along Broadway which would appropriately offset the loss of solar access along this corridor.

Shadow diagrams prepared in respect of the modified Building 2 envelope indicate potential overshadowing of Blocks 2, 1 and 4N located to the south of the site within the CUB site. Potential overshadowing would be restricted to the lower levels during mid-winter between 9 am and 3 pm when overshadowing is most significant. The overshadowing would have limited impact on residential units within Block 4N as the lower levels are comprised of retail, commercial and hotel uses. The overshadowing would also largely fall on the retail levels of Block 2, however, may potentially affect residential units in the afternoon on the lower residential levels. The most significant potential overshadowing of residential uses could occur on the recently approved residential units of Block 1, as only one level of retail exists on the ground floor.

The Department notes that the building envelope would represent the worst possible scenario in relation to potential overshadowing impacts. As demonstrated by the indicative design which provides a more tapered tower design, the overshadowing impacts can be further minimised. Accordingly, the Department recommends an additional further assessment requirement be included in the modified concept plan approval requiring a detailed overshadowing analysis be undertaken to address the solar access impacts of Building 2 and that adequate solar access would be maintained at all residential units impacted by the modified proposal.

Wind Impacts

The proponent has acknowledged that uncomfortable wind conditions are currently experienced around the campus, especially on Broadway, and that wind impacts would need to be carefully considered in the future design of Building 2. A further wind impact assessment was provided to consider the impacts from the indicative design. It was identified that the indicative design would improve wind impacts when compared to the building envelope through the stepped massing of the building and careful consideration will be given to impacts on Broadway, Jones Street and Alumni Green in the future detailed design.

The approved Statement of Commitments require more detailed wind impact studies at the detailed design, in addition to measures such as additional planting of mature trees and shrubs, and articulation of facades of buildings to ameliorate impacts. These measures are considered to be satisfactory by the Department.

Transport and Traffic Impacts

The modified concept plan proposes no changes to the number of car spaces provided on the campus, which would be maintained at 420 spaces. The surrounding streets include restrictions on parking and therefore, whilst the proposal would support an increased student population, it is not envisaged that there would be any increase in traffic generation.

Council and Transport for NSW raised no issue with parking or traffic but did recommend that bicycle parking facilities be provided in accordance with Council's controls.

The proponent has advised that 288 bicycle spaces, 260 lockers, 28 showers and 14 toilets are provided in Building 10 to support cyclists and therefore no additional facilities would be required for Building 1 and 2.

The Department notes that the site benefits from extensive public transport provisions in the vicinity of the site, which would be complemented with the future light rail, and limited car parking spaces on site. This ensures that non-car transport would be the predominant mode of travel to the site. The Department is satisfied that adequate capacity is available to support the increased student population as travel would be dispersed throughout the day.

The Department considers that as the bicycle parking provisions and end-of-trip facilities are below that required by NSW Planning guidelines for walking and cycling and the proposal would support a significant increase in student population, the proponent must demonstrate that adequate bicycle parking and end-of-trip facilities would be provided to support the increased student population. The Department has recommended an additional further assessment requirement be included in the modified concept plan approval that requires the proponent demonstrate that adequate bicycle parking facilities are provided to support the increased student population.

6. CONCLUSION AND RECOMMENDATION

The Department has considered the key issues associated with the modification request to the approved concept plan to enlarge the building envelope for Building 2 and increase the allowable GFA. The modifications are considered acceptable as the building envelope is comparable to the scale of the development originally approved within the precinct and will facilitate future development that is an appropriate contextual fit within the existing urban context. The modified building envelope would facilitate development that would complement not only the education precinct but also the adjoining locality.

The Department acknowledges that the proposed development would alter the existing views, particularly from Central Park to the south. However, the Department considers that the alterations are, on the whole, reasonable and recommends an additional further assessment requirement be included in the modified concept plan approval requiring view sharing principles be addressed in the design of Building 2 tower, including orientation of the tower and separation between towers, to address outlook and views from living areas and principal private open space areas south of the site. The Department is satisfied the visual impact of the proposal and future building can be managed during the future application for Building 2.

The Department's assessment concludes that the project's benefits are substantial. The modification would facilitate further development of an education precinct to support additional student demand and delivery of priorities in *A Plan for Growing Sydney* and the proposal would not result in any long term adverse effects. It is therefore in the public interest and should be approved, subject to modifications.

The Department has recommended additional further assessment requirements to address view and overshadowing impacts and to require the provision of adequate bicycle parking facilities. The Department therefore recommends the modification application be approved, subject to additional modifications to the concept plan.

Karen Harragon Director Social and Other Infrastructure Assessments

David Gainsford 7/3/ Executive Director Priority Projects Assessments

APPENDIX A **MODIFICATION REQUEST**

See the Department's website at http://majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=7202.

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APPENDIX C RECOMMENDED MODIFYING INSTRUMENT