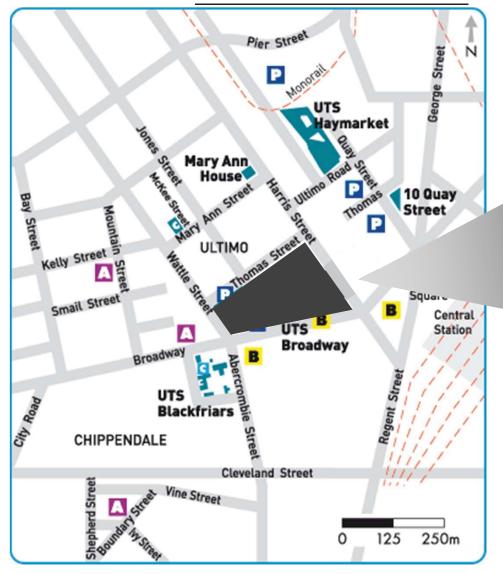
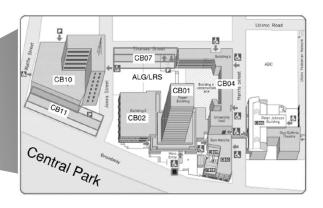
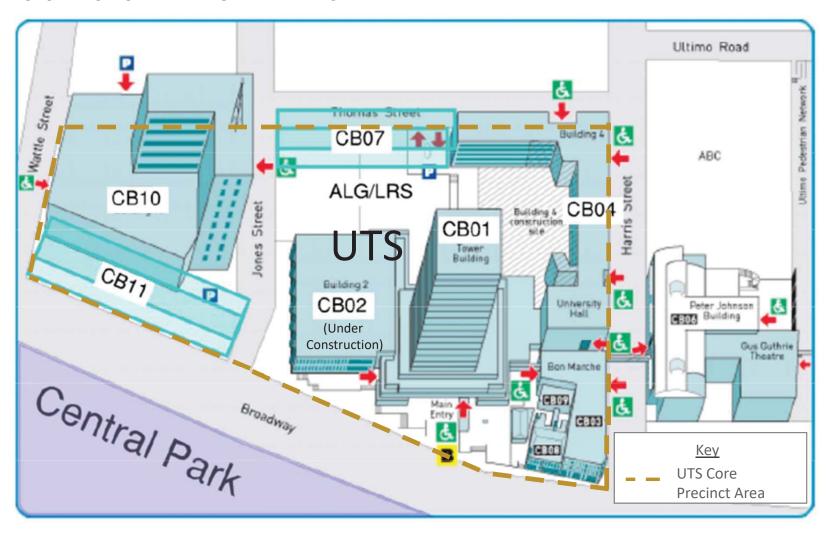
# Licence Extension Area Location







## UTS PRECINCT – DEVELOPMENT MASTERPLAN





# NEW SOUTH WALES GOVERNMENT

WATER INDUSTRY COMPETITION ACT 2006

# NETWORK OPERATOR'S LICENCE

Central Park Water Factory Pty Limited (ACN 151 072 838)



# New South Wales Water Industry Competition Act 2006

# Grant of Network Operator's Licence Licence No 12\_022

I, Greg Pearce MLC, Minister for Finance and Services, under section 10 of the Water Industry Competition Act 2006, grant a network operator's licence to:

Central Park Water Factory Pty Limited (ACN 151 072 838)

to construct, maintain and operate water industry infrastructure, subject to:

- (i) the conditions imposed by the Water Industry Competition Act 2006,
- (ii) the conditions imposed by clause 9 and set out in Parts 1, 2 and 3 of Schedule 1 to the Water Industry Competition (General) Regulation 2008,
- (iii) the conditions imposed by the Minister in the attached Schedule A, being special Ministerially-imposed licence conditions for Central Park Water Factory Pty Limited's Network Operator's Licence, and
- (iv) the conditions imposed by the Minister in the attached Schedule B, being standard Ministerially-imposed licence conditions for all licensed network operators.

Minister for Finance and Services

Dated this 4 day of Jany 20 (3

# SCHEDULE A - SPECIAL MINISTERIALLY-IMPOSED LICENCE CONDITIONS FOR CENTRAL PARK WATER FACTORY'S NETWORK OPERATOR'S LICENCE

This schedule sets out the conditions which the Minister imposes pursuant to section 13(1)(b) of the Act. In addition to these Ministerially-imposed conditions, the Licensee is subject to obligations imposed by the Act, the Regulation and the standard Ministerially-imposed licence conditions set out in Schedule B. The Minister may vary the conditions in this schedule or impose new conditions, provided there is no inconsistency with conditions imposed on the Licensee by the Act or the Regulation.

#### A1 Activities authorised – sewerage services

- A1.1 This Licence authorises the Licensee and any authorised persons specified in Table 1.1:
  - (i) to construct, maintain and operate the water industry infrastructure specified in Table 1.2;
  - (ii) for the authorised purposes specified in Table 1.3;
  - (iii) within the area of operations specified in Table 1.4, subject to the conditions imposed by or under the Act, the Regulation and this Licence.

## Table 1.1 Authorised persons

Water Factory Company Pty Limited (ABN 28 136 272 298)

Permeate Partners Pty Limited (ABN 54 130 112 257)

### **Table 1.2 Water industry infrastructure**

Infrastructure used for the storage, conveyance, reticulation or treatment of sewage

#### Table 1.3 Authorised purposes

Collection and treatment of sewage

#### Table 1.4 Area of operations

- 1. The land bounded by the following streets in Chippendale, NSW 2008:
  - Broadway (between Abercrombie Street and Kensington Street);
  - Abercrombie Street (between Broadway and O'Connor Street);
  - O'Connor Street (between Abercrombie Street and Balfour Street);
  - Balfour Street (between O'Connor Street and Wellington Street);
  - Wellington Street (between Balfour Street and Regent Street);
  - Regent Street (between Wellington Street and Kensington Street); and
  - Kensington Street (between Regent Street and Broadway).
- 2. The land bounded by the following streets in Chippendale, NSW 2008:
  - Kensington Street (between Dwyer Street and Outram Street);

- Outram Street (between Kensington Street and Goold Street);
- · Goold Street;
- Regent Street (between Goold Street and Dwyer Street); and
- Dwyer Street.
- 3. The following streets in Chippendale, NSW 2008:
  - Broadway (between Abercrombie Street and Kensington Street);
  - Abercrombie Street (between Broadway and O'Connor Street);
  - O'Connor Street (between Abercrombie Street and Balfour Street);
  - Balfour Street (between O'Connor Street and Wellington Street);
  - Wellington Street (between Balfour Street and Regent Street);
  - Regent Street (between Wellington Street and Kensington Street, and between Goold Street and Dwyer Street);
  - Kensington Street (between Regent Street and Broadway);
  - Outram Street (between Kensington Street and Goold Street);
  - Goold Street; and
  - Dwyer Street.

#### A2 Activities authorised – non-potable water supply

- A2.1 This Licence authorises the Licensee and any authorised persons specified in Table 2.1:
  - (i) to construct, maintain and operate the water industry infrastructure specified in Table 2.2:
  - (ii) for the authorised purposes specified in Table 2.3;
  - (iii) within the area of operations specified in Table 2.4,
  - subject to the conditions imposed by or under the Act, the Regulation and this Licence.

#### **Table 2.1 Authorised persons**

Water Factory Company Pty Limited (ABN 28 136 272 298)

Permeate Partners Pty Limited (ABN 54 130 112 257)

## Table 2.2 Water industry infrastructure

Infrastructure used for the production, treatment, filtration, storage, conveyance, or reticulation of non-potable water

#### **Table 2.3 Authorised purposes**

Toilet flushing

Supply of cold water to washing machine

Irrigation (including irrigation of vertical gardens)

Cooling tower make up water

Car washing

#### Table 2.4 Area of operations

- 1. The land bounded by the following streets in Chippendale, NSW 2008:
  - Broadway (between Abercrombie Street and Kensington Street);
  - Abercrombie Street (between Broadway and O'Connor Street);
  - O'Connor Street (between Abercrombie Street and Balfour Street);
  - Balfour Street (between O'Connor Street and Wellington Street);
  - Wellington Street (between Balfour Street and Regent Street);
  - Regent Street (between Wellington Street and Kensington Street); and
  - Kensington Street (between Regent Street and Broadway).
- 2. The land bounded by the following streets in Chippendale, NSW 2008:
  - Kensington Street (between Dwyer Street and Outram Street);
  - Outram Street (between Kensington Street and Goold Street);
  - Goold Street;
  - Regent Street (between Goold Street and Dwyer Street); and

- Dwyer Street.
- 3. The following streets in Chippendale, NSW 2008:
  - Broadway (between Abercrombie Street and Kensington Street);
  - Abercrombie Street (between Broadway and O'Connor Street);
  - O'Connor Street (between Abercrombie Street and Balfour Street);
  - Balfour Street (between O'Connor Street and Wellington Street);
  - Wellington Street (between Balfour Street and Regent Street);
  - Regent Street (between Wellington Street and Kensington Street, and between Goold Street and Dwyer Street);
  - Kensington Street (between Regent Street and Broadway);
  - Outram Street (between Kensington Street and Goold Street);
  - Goold Street; and
  - Dwyer Street.

#### A3 Activities authorised – drinking water supply

- A3.1 This Licence authorises the Licensee and any authorised persons specified in Table 3.1:
  - (i) to construct, maintain and operate the water industry infrastructure specified in Table 3.2;
  - (ii) for the authorised purposes specified in Table 3.3;
  - (iii) within the area of operations specified in Table 3.4,
  - subject to the conditions imposed by or under the Act, the Regulation and this Licence.

#### **Table 3.1 Authorised persons**

Water Factory Company Pty Limited (ABN 28 136 272 298)

#### **Table 3.2 Water industry infrastructure**

Infrastructure used for the treatment, storage, conveyance, or reticulation of drinking water

#### **Table 3.3 Authorised purposes**

Drinking water and other purposes for which drinking water could be used safely

#### **Table 3.4 Area of operations**

- 1. The land bounded by the following streets in Chippendale, NSW 2008:
  - Broadway (between Abercrombie Street and Kensington Street);
  - Abercrombie Street (between Broadway and O'Connor Street);
  - O'Connor Street (between Abercrombie Street and Balfour Street);
  - Balfour Street (between O'Connor Street and Wellington Street);
  - Wellington Street (between Balfour Street and Regent Street);
  - Regent Street (between Wellington Street and Kensington Street); and
  - Kensington Street (between Regent Street and Broadway).
- 2. The land bounded by the following streets in Chippendale, NSW 2008:
  - Kensington Street (between Dwyer Street and Outram Street);
  - Outram Street (between Kensington Street and Goold Street);
  - Goold Street:
  - Regent Street (between Goold Street and Dwyer Street); and
  - Dwyer Street.
- 3. The following streets in Chippendale, NSW 2008:
  - Broadway (between Abercrombie Street and Kensington Street);
  - Abercrombie Street (between Broadway and O'Connor Street);

- O'Connor Street (between Abercrombie Street and Balfour Street);
- Balfour Street (between O'Connor Street and Wellington Street);
- Wellington Street (between Balfour Street and Regent Street);
- Regent Street (between Wellington Street and Kensington Street, and between Goold Street and Dwyer Street);
- Kensington Street (between Regent Street and Broadway);
- Outram Street (between Kensington Street and Goold Street);
- Goold Street; and
- Dwyer Street.

#### INTERPRETATION AND DEFINITIONS

#### Interpretation

In this Schedule A, unless the context requires otherwise:

- (i) the singular includes the plural and vice versa;
- (ii) headings are used for convenience only and do not affect the interpretation of this Schedule A:
- (iii) a reference to a document includes the document as modified from time to time and any document replacing it;
- (iv) a reference to a person includes a natural person and any body or entity whether incorporated or not;
- (v) a reference to a clause is to a clause in this Schedule A;
- (vi) a reference to a schedule is to a schedule to this Licence; and
- (vii) a reference to a law or statute includes regulations, rules, codes and other instruments under it, and consolidations, amendments, re-enactments or replacements of them.

#### **Definitions**

Expressions used in this Schedule A that are defined in the Act or the Regulation have the meanings set out in the Act or the Regulation.

In this Schedule A:

Act means the Water Industry Competition Act 2006;

Licence means this network operator's licence granted under

section 10 of the Act;

Licensee means the person to whom this Licence is granted;

Minister means the Minister responsible for Part 2 of the Act; and

Regulation means the Water Industry Competition (General)

Regulation 2008.

#### SCHEDULE B - STANDARD MINISTERIALLY-IMPOSED LICENCE CONDITIONS FOR ALL LICENSED NETWORK OPERATORS UNDER THE ACT

This schedule sets out the standard conditions which the Minister imposes on the Licensee and all other licensed network operators pursuant to section 13(1)(b) of the Act. In addition to these standard Ministerially-imposed conditions, the Licensee is subject to obligations imposed by the Act, the Regulation and the special Ministerially-imposed licence conditions set out in Schedule A. The Minister may vary the conditions in this schedule or impose new conditions, provided there is no inconsistency with the conditions imposed on the Licensee by the Act or the Regulation.

#### **B1** Ongoing capacity to operate

B1.1 The Licensee must have the technical, financial and organisational capacity to carry out the activities authorised by this Licence. If the Licensee ceases to have this capacity, it must report this to IPART immediately in accordance with the Reporting Manual.

#### **B2** Obtaining appropriate insurance

- B2.1 Before commencing commercial operation of the Specified Water Industry Infrastructure under this Licence, the Licensee must:
  - a. obtain insurance that is appropriate for the size and nature of the activities authorised under this Licence:
  - b. provide a copy of each certificate of currency of the insurance obtained to IPART: and
  - c. demonstrate that the insurance obtained is appropriate for the size and nature of the activities authorised under this Licence by providing a report to IPART from an Insurance Expert that:
    - certifies that in the Insurance Expert's opinion, the type and level of the insurance obtained by the Licensee is appropriate for the size and nature of the activities authorised under the Licence; and
    - ii. is in the form prescribed IPART.

#### **B3** Maintaining appropriate insurance

- B3.1 The Licensee must maintain insurance that is appropriate for the size and nature of the activities authorised under this Licence.
- B3.2 The Licensee must provide a copy of each certificate of currency of the insurance maintained by the Licensee to IPART in accordance with the Reporting Manual.
- B3.3 Whenever there is a change in the type, or level of insurance held by the Licensee in relation to the activities authorised under this Licence, the Licensee must provide a copy of the certificate of currency to IPART within 10 days of the change being made.
- B3.4 From time to time when requested in writing by IPART, the Licensee must provide a report to IPART, in the manner, form and time specified by IPART, from an Insurance Expert certifying that in the Insurance Expert's opinion the type and level of the insurance held by the Licensee is appropriate for the size and nature of the activities authorised under this Licence.

#### B4 Complying with NSW Health requirements

- B4.1 The Licensee must carry out the activities authorised by this Licence in compliance with any requirements of NSW Health that:
  - (i) IPART has agreed to; and
  - (ii) are notified from time to time to the Licensee by IPART in writing.

#### B5 Complying with Audit Guidelines from IPART

B5.1 The Licensee must comply with any Audit Guidelines issued by IPART.

#### B6 Reporting in accordance with the Reporting Manual

B6.1 The Licensee must prepare and submit reports in accordance with the Reporting Manual.

#### B7 Reporting information in relation to the Register of Licences

- B7.1 Within 14 days of any change in relation to the following, the Licensee must notify IPART, and provide details, of the change in accordance with the Reporting Manual:
  - (i) any source from which the water handled by the Specified Water Industry Infrastructure is derived;
  - (ii) the Authorised Purposes of the water handled by the Specified Water Industry Infrastructure;
  - (iii) the identity of each licensed retail supplier or public water utility that has access to the infrastructure services provided by the Specified Water Industry Infrastructure for the purpose of supplying water to its customers; and
  - (iv) any other water infrastructure to which the Specified Water Industry Infrastructure is connected.
  - the identity of each licensed retail supplier or public water utility that has access to infrastructure services provide by the Specified Water Industry Infrastructure for the purpose of providing sewerage services to its customers;
  - (vi) any other sewerage infrastructure to which the Specified Water Industry Infrastructure is connected: and
  - (vii) the arrangements for the disposal of waste from the Specified Water Industry Infrastructure.

#### **B8** Monitoring

- B8.1 The Licensee must undertake any monitoring that is required for the purposes of this Licence, any Plan, or the Regulation in accordance with this clause B8.
- B8.2 The Licensee must keep the following records of any samples taken for monitoring purposes specified in the Water Quality Plan:
  - (i) the date on which the sample was taken;
  - (ii) the time at which the sample was collected;
  - (iii) the point or location at which the sample was taken; and
  - (iv) the chain of custody of the sample (if applicable).
- B8.3 The Licensee must ensure that analyses of all samples taken for the purposes of Verification Monitoring are carried out by a laboratory accredited for the specified tests by an independent body that is acceptable to NSW Health, such as the National Association of Testing Authorities or an equivalent body.

#### B9 Provision of copy of Plan

B9.1 Whenever the Licensee makes a significant amendment to a Plan, the Licensee must provide a copy of the amended Plan to IPART at the same time that it provides a copy to the approved auditor engaged to prepare a report as to the adequacy of the amended Plan, as required under the Regulation.

#### B10 Delineating responsibilities – interconnections

- B10.1 If a code of conduct has not been established under clause 25 of the Regulation, the Licensee must establish a code of conduct (**Licensee's Code of Conduct**) in accordance with this clause B10.
- B10.2 The Licensee's Code of Conduct must set out the respective responsibilities of:
  - (i) the Licensee; and
  - (ii) each licensed network operator, licensed retail supplier and/or public water utility that constructs, maintains or operates any other water industry infrastructure in the Specified Area of Operations,
  - by, at a minimum, providing for:
  - (iii) if the Specified Water Industry Infrastructure is connected to any other water industry infrastructure, who is responsible for repairing, replacing or maintaining any pipes, pumps, valves, storages or other infrastructure connecting the Specified Water Industry Infrastructure to the other water industry infrastructure;
  - (iv) who is responsible for water quality;
  - (v) who is liable in the event of the unavailability of water;
  - (vi) who is liable in the event of failure of the Specified Water Industry Infrastructure:
  - (vii) the fees and charges payable in respect of the use of the Specified Water Industry Infrastructure; and
  - (viii) who is responsible for handling customer complaints.
- B10.3 (a) Before the Licensee brings the Specified Water Industry Infrastructure into commercial operation, the Licensee's Code of Conduct must be agreed in writing between the Licensee and the other licensed network operators, licensed retail suppliers and/or public water utilities referred to in clause B10.2.
  - (b) [Not applicable]
- B10.4 The Licensee must not contravene the Licensee's Code of Conduct to the extent that it makes the Licensee responsible or liable for the matters set out in it.

#### **B11** Notification of changes to end-use

B11.1 [Not applicable]

#### **B12 Notification of changes to Authorised Person**

B12.1 If an Authorised Person ceases, proposes to cease or receives notification to cease providing any of the services relating to the activities authorised by this Licence, the Licensee must provide IPART with written notice as soon as practicable but no later than 28 days before the date of cessation of the services. The written notice must include details of how the services previously undertaken by the Authorised Person will continue to be undertaken.

#### **B13** Notification of commercial operation

B13.1 The Licensee must notify IPART in writing that it has brought the Specified Water Industry Infrastructure into commercial operation within 10 days of the Licensee bringing the Specified Water Industry Infrastructure into commercial operation.

#### INTERPRETATION AND DEFINITIONS

#### Interpretation

In this Schedule B, unless the context requires otherwise:

- (i) the singular includes the plural and vice versa;
- (ii) headings are used for convenience only and do not affect the interpretation of this Schedule B;
- (iii) a reference to a document includes the document as modified from time to time and any document replacing it;
- (iv) a reference to a "person" includes a natural person and any body or entity whether incorporated or not;
- (v) a reference to a clause is to a clause in this Schedule B;
- (vi) a reference to a schedule is to a schedule to this Licence; and
- (vii) a reference to a law or statute includes regulations, rules, codes and other instruments under it, and consolidations, amendments, re-enactments or replacements of them.

#### **Definitions**

Expressions used in this Schedule B that are defined in the Act or the Regulation have the meanings set out in the Act or the Regulation.

In this Schedule B:

Act	means the Water Industry Competition Act 2006;
Audit Guidelines	means the document entitled "Audit Guideline – Water Industry Competition Act 2006" which is produced by IPART and is available on IPART's website at <a href="https://www.ipart.nsw.gov.au">www.ipart.nsw.gov.au</a> , and any other guidelines issued by IPART in relation to audits under the Act;
Authorised Person	means the authorised persons specified in each of Schedule A, clause A1, Table 1.1; Schedule A, clause A2, Table 2.1; and Schedule A, clause A3, Table 3.1;
Authorised Purposes	means the authorised purposes specified in each of Schedule A, clause A1, Table 1.3; Schedule A, clause A2, Table 2.3; and Schedule A, clause A3, Table 3.3;
Insurance Expert	means an insurance broker which holds an Australian financial services licence under Part 7.6 of the <i>Corporations Act 2001</i> (Cth) ( <b>Corporations Act</b> ) that authorises the broker to provide financial product advice

for, and deal in, contracts of insurance within the meaning

of Chapter 7 of the Corporations Act.

IPART means the Independent Pricing and Regulatory Tribunal

of New South Wales established under the Independent

Pricing and Regulatory Tribunal Act 1992;

Licence means this network operator's licence granted under

section 10 of the Act;

Licensee means a person to whom this Licence is granted under

section 10 of the Act;

Licensee's Code of

Conduct

has the meaning given in clause B10.1;

Minister means the Minister responsible for Part 2 of the Act;

NSW Health means the Water Unit of NSW Ministry of Health and any

of the local health districts as defined by the NSW Ministry

of Health;

Plan means any infrastructure operating plan, water quality

plan or sewage management plan that the Licensee is

required to prepare under the Regulation;

Regulation means the Water Industry Competition (General)

Regulation 2008;

Reporting Manual means the document entitled "Network Operator's

Reporting Manual," which is prepared by IPART and is available on IPART's website at <a href="https://www.ipart.nsw.gov.au">www.ipart.nsw.gov.au</a>;

Specified Area of

Operations

means the area of operations specified in each of

Schedule A, clause A1, Table 1.4; Schedule A, clause A2, Table 2.4; and Schedule A, clause A3, Table 3.4;

Specified Water Industry

Infrastructure

means the water industry infrastructure specified in each of Schedule A, clause A1, Table 1.2; Schedule A, clause

A2, Table 2.2; and Schedule A, clause A3, Table 3.2;

Verification Monitoring means verification monitoring as described in the

Australian Drinking Water Guidelines or the Australian Guidelines for Water Recycling as the case may be; and

Water Quality Plan means the water quality plan that the Licensee is required

to prepare under the Regulation.



Existing NOL Proposed





## **New South Wales**

## Water Industry Competition Act 2006 (NSW)

# Notice of approval to bring new infrastructure into commercial operation

I, Andrew Constance MP, Minister for Finance and Services, have considered the request by Central Park Water Factory Pty Limited (ACN 151 072 838) (Central Park Water Factory) for approval to bring new infrastructure into commercial operation under the Water Industry Competition Act 2006 (NSW) (Act). The relevant water industry infrastructure is specified in Schedule A of Central Park Water Factory's network operator licence (12\_022) (Licence).

I have considered a report dated 14 November 2013 (Audit Report) prepared by approved auditors within the meaning of the *Water Industry Competition (General) Regulation 2008* (NSW) (Regulation). The Audit Report is included as Attachment A. I am satisfied that the Audit Report indicates that the new infrastructure identified in that report:

- complies with the requirements of the Regulation and the conditions of the Licence; and
- is capable of operating safely and in accordance with Central Park Water Factory's infrastructure operating plan, water quality plan and sewage management plan.

I therefore give my approval under schedule 1, clause 2 of the Regulation for Central Park Water Factory to commence commercial operation of the new infrastructure, as identified in the Audit Report.

Hon. Andrew Constance MP Minister for Finance and Services

Dated this 23rd day of



# New South Wales Water Industry Competition Act (NSW) 2006

# Notice of approval to bring new infrastructure into commercial operation

I, Kevin Humphries MP, Minister for Natural Resources, Lands and Water, have considered the request by Central Park Water Pty Ltd (ACN 151 072 838) (CPW) for approval to bring new infrastructure into commercial operation under the *Water Industry Competition Act (NSW) 2006*. The new infrastructure is described in Schedule A of CPW's network operator's licence (licence no. 12\_022) (Licence).

I have considered a report prepared by an 'approved auditor' within the meaning of the *Water Industry Competition (General) Regulation 2008* (NSW) (**Regulation**). The report is included as **Attachment A**. I am satisfied that the report indicates that the new infrastructure:

- 1. complies with the requirements of the Regulation and the conditions of the Licence; and
- 2. is capable of operating safely and in accordance with CPW's infrastructure operating plan and water quality plan for recycled water.

I therefore give my approval under Schedule 1, clause 2 of the Regulation for CPW to bring the new infrastructure into commercial operation.

Hon. Kevin Humphries MP Minister for Natural Resources, Lands and Water

Dated this  $28^m$  day of Feb 2015

#### **Central Park Water NOLV1**

# **EIA Summary**

NOLV1 Appendix	ın	Area	Current Folio identifier	Services			EP&A Act Part 4 consent			
Reference	"			DW	RW	ww	Folio Identifier in DA	Folio Identifier in Existing NOL (if applicable)	DA reference	Consent dates
3.5.1 (c)	А	Jones Street services trenches	N/A – Public road (Jones Street) Part Lot 2012 DP 1183894 Part Lot 2012 DP 1190337	<b>√</b>	✓	✓	N/A	N/A	D/2013/242	Consent: 15/04/2013
3.5.1 (d)	В	Broadway crossing	N/A – Public roads (Broadway and Jones Street) Lot 200 DP 1212253	<b>√</b>	<b>√</b>	<b>√</b>	Lot A DP 430090 Lot 12 DP 1194122	Public road (Broadway); Land bounded by Broadway, Abercrombie Street, O'Connor Street and Kensington Street	D/2015/1450	Consent: 06/01/2016
3.5.1 (e)	С	Connection of Broadway crossing to UTS Central	N/A – Public road (Jones Street) and Part Lot 2012 DP 1183894	<b>✓</b>	<b>√</b>	<b>√</b>	N/A	N/A	D/2016/434	Consent: 01/07/2016
3.5.1 (f)	D	UTS Central building	Part Lot 2012 DP 1183894	<b>√</b>	<b>√</b>	<b>√</b>	Lot 2012 DP 1183894	N/A	SSD 7382	Consent: 23/09/2016 MOD1: 18/05/2017 MOD2: 17/04/2018 MOD3: Application made

#### City of Sydney

ABN 22 636 550 790 GPO Box 1591 Sydney NSW 2001 Australia Town Hall House 456 Kent Street Sydney NSW 2000 Australia

Phone +61 2 9265 9333 Fax +61 2 9265 9222 council@cityofsydney.nsw.gov.au www.cityofsydney.nsw.gov.au



#### **NOTICE OF DETERMINATION - APPROVAL**

Issued under Section 80(1)(a) of the Environmental Planning and Assessment Act 1979

Development Application No.	D/2013/242				
Applicant	UNIVERSITY of TECHNOLOGY SYDNEY Building 1				
	Level 19 15 Broadway				
	ULTIMO NSW 2007				
Land to be developed	5120 JONES STREET , ULTIMO NSW 2007				
Approved development	Construction of services trenches below Jones street at University of Technology Sydney.				
Cost of development	\$499,146.00				
Determination	The application was determined under delegation of Council and was granted consent <b>subject to the conditions</b> in Schedules 1 and 2.				
Other Approvals	Before commencing building work or subdivision work, a relevant Construction Certificate must be obtained. Council must be appointed the Principal Certifying Authority for any subdivision work under the Act.				
Consent is to operate from	15 April 2013				
Consent will lapse on	15 April 2018				

#### **Reasons for conditions**

Unrestricted consent may affect the environmental amenity of the area and would not be in the public interest.

#### Right of appeal

If you are dissatisfied with this decision, Section 97 of the Environmental Planning and Assessment Act 1979 gives you the right to appeal to the Land and Environment Court within six (6) months after the date on which you receive this notice.

Section 82A of the Environmental Planning and Assessment Act 1979 provides that the applicant may request the Council to review the determination. The request must be made in writing (or on the review application form) together with payment of the appropriate fee.

city of Villages

#### **NOTICE OF DETERMINATION – APPROVAL D/2013/242**

The review must be lodged and determined within six (6) months of the date in which you received this notice.

Note: To enable the section 82A review to be considered within the six (6) month time frame prescribed under the Environmental Planning and Assessment Act 1979, it is advisable to lodge the application for review under Section 82A as soon as possible (within 4 months) to facilitate the statutory timeframes.

Section 82A does not apply to complying development, designated development, integrated development or a determination made by Council under Division 4 in respect of Crown applications. For further information please contact **Kate Bartlett on ph. 9265 9200.** 

#### **GRAHAM JAHN**

Director - City Planning, Development & Transport

#### NOTICE OF DETERMINATION - APPROVAL D/2013/242

#### **CONDITIONS OF CONSENT**

#### **SCHEDULE 1A**

# APPROVED DEVELOPMENT/DESIGN MODIFICATIONS/COVENANTS AND CONTRIBUTIONS/USE AND OPERATION

**Note:** Some conditions in Schedule 1A are to be satisfied prior to construction and some are to be satisfied prior to completion, where indicated.

## (1) APPROVED DEVELOPMENT

(a) Development must be in accordance with Development Application No. D/2013/242 dated 28 February 2013 and the following drawings:

Drawing Number	Architect	Date
CB11_AK-01850_A	Denton Corker Marshall	5 December 2012
CB11_AK-01739_H	Denton Corker Marshall	7 December 2012
CB11_AK-01741_G	Denton Corker Marshall	26 November 2012
CB11_AK-01744_C	Denton Corker Marshall	26 November 2012
CB11_AK-01807_C	Denton Corker Marshall	7 December 2012
CB11_AK-01818_A	Denton Corker Marshall	26 November 2012

and as amended by the conditions of this consent.

(b) In the event of any inconsistency between the approved plans and supplementary documentation, the plans will prevail.

#### (2) COMPLIANCE WITH CONSTRUCTION NOISE MANAGEMENT PLAN

- (a) All works conducted on site which form part of this development must be carried out in accordance with the recommended ameliorative measures within the submitted Construction Noise & Vibration Management Plan, Renzo Tonin & Associates dated 11 December 2012, reference TG061-01P01 (Rev1) CNVMP and the UTS FEIT BROADWAY Construction Management & Methodology dated 6th December 2012
- (b) Where all such noise control measures have been implemented and the resultant noise levels at any noise sensitive receiver are still in exceedance with the council's noise criteria stated in the Construction Hours/Noise Code 1992 and are giving rise to sustained complaints then the contractor must provide regular, appropriate and sustained periods of respite from the noise causing the complaints.

#### NOTICE OF DETERMINATION – APPROVAL D/2013/242

(c) Such periods should, where possible, be set and agreed with the Council and be given at times high noise levels are, or are likely, to cause most offence.

#### (3) LICENCE UNDER ROADS ACT

The owner(s) of the properties adjoining the subject portion of Jones Street are to make a separate application for a Licence under Section 139(1)(d) of the *Roads Act 1993*, in respect of the stratum below Jones Street occupied by the conduits for private service connections beneath the surface of that public road. Such Licence is to be subject to terms and conditions considered necessary to protect Council's interests and those of the public, including indemnifying Council against costs and damages arising from the proposal.

All costs associated with such Licence are to be borne by the owner(s) of the properties adjoining the subject portion of Jones Street.

#### (4) SECTION 138 APPROVAL

Prior to the commencement of any work within the public way, a separate application is to be made to Council to obtain approval for the works and installation of private conduits under Section 138 of the *Roads Act 1993*.

#### (5) DESIGN AND CONSTRUCTION OF WORKS

- (a) Detailed engineering, road, drainage and infrastructure works, design and construction plans for the construction of trenches, installation of conduits, and reinstatement of the roadway and footway within Jones Street are to be submitted to Council and approval gained prior any works commencing. The design and documentation is to include any requirements and approvals from external parties such as public utility service authorities and is to be in accordance with Council's "Development Specifications for Civil Works Design and Construction".
- (b) The submission to Council is to provide plans and specifications sufficient to describe in detail the design, scope and extent of all proposed road, drainage and infrastructure works for the construction of trenches and reinstatement of the roadway and footway prepared and certified by a Professional Engineer - the engineering plans are to include:
  - (i) Details and specifications for the roadway formation restoration works required upon installation of the private service conduits,
  - (ii) Details and design of any public stormwater system deviation or relocation as a consequence of the proposed works,
  - (iii) Details of design and specifications for the reinstatement of the footway formation, kerb and gutter and carriageway formation upon installation of the private service conduits,
  - (iv) Details of structures and conduits for the provision and installation of any public utility services and any adjustment or deviation to existing services required,

#### **NOTICE OF DETERMINATION – APPROVAL D/2013/242**

- (v) Details of structures, procedures and measures adopted to address erosion and sediment control during the earthworks and construction process,
- (vi) Details of traffic management and site management procedures during the construction process,
- (c) The certification is to include confirmation from a Professional Engineer that the design complies with Council's Development Specifications for Civil Works Design and Construction.

#### **SCHEDULE 1B**

#### PRIOR TO COMMENCEMENT OF WORK

#### (6) NO EXCAVATION PRIOR TO CONSTRUCTION

Excavation must not commence until a Construction Certificate has been issued.

#### (7) FOOTPATH DAMAGE BANK GUARANTEE

A Footpath Damage Bank Guarantee calculated on the basis of 15 lineal metres of the asphalt site frontage must be lodged with Council in accordance with the City of Sydney's adopted Schedule of Fees and Charges. The Footpath Damage Bank Guarantee must be submitted as an unconditional bank guarantee in favour of Council as security for repairing any damage to the public domain in the vicinity of the site.

The guarantee must be lodged with Council prior to commencement of works.

The Bank Guarantee will be retained in full until completion of works and any rectification works to the footway and Public Domain are completed to Council's satisfaction. On satisfying the above requirements 90% of the total securities will be released, with the remaining 10% to be retained for the duration of the 12 months Defect Liability Period.

#### (8) PROTECTION OF STONE KERBS

- (a) The existing stone kerbs on the street frontage of the site are to be retained and properly protected during excavation and construction works.
- (b) To avoid damage to stone kerbs during construction and / or excavation works for the development, temporary removal and storage of the stone kerbs may be approved by Council. Removed, serviceable stone kerbs (ie. those that are in good condition as agreed by City officers) must be reinstalled in accordance with the City's standard details and specifications after the construction and / or excavation works have been completed. Note: A temporary concrete kerb will need to be constructed to retain the footpath and road access until the stone kerbs can be reinstalled. The removed stone kerbs are to be reinstalled prior to completion of works. Note: all costs associated with the works are to be at no cost to the Council.
- (c) Damaged kerbs are to be replaced to match existing to the City's satisfaction or as otherwise advised by City officers.
- (d) Where new crossings or temporary crossings are to be constructed to access the property, the affected kerb stones should be salvaged and reused wherever possible.
- (e) Council approval is required before kerbs are removed.

#### (9) EROSION AND SEDIMENT CONTROL - LESS THAN 250SQM

Where less than 250 square metres are being disturbed, no formal plan is required however, the site is to be provided with sediment control measures and these must be implemented so that sediment, including soil, excavated material,

material, building material or other materials cannot fall, descend, percolate, be pumped, drained, washed or allowed to flow to the street, stormwater system or waterways.

# (10) TEMPORARY GROUND ANCHORS, TEMPORARY SHORING AND PERMANENT BASEMENT/RETAINING WALLS AFFECTING THE ROAD RESERVE

For temporary shoring including ground anchors affecting the road reserve, a separate application under Section 138 of the Roads Act 1993 must be lodged with Council.

For new permanent basement wall/s or other ground retaining elements (not being anchors projecting under the road reserve):-

- (a) Prior to works commencing, the following documents must be submitted to the Certifying Authority (CA) and a copy to Council:
  - (i) Dilapidation Report of adjoining buildings/structures.
  - (ii) Evidence that public utility services have been investigated.
- (b) If adjoining a Public Way:
  - (i) Evidence of a \$10 million dollar public liability insurance policy specifically indemnifying the City of Sydney, valid for at least the duration of the project. The original document must be submitted to Council.
  - (ii) Bank guarantee in accordance with the Council's fees and charges. The original document must be submitted to Council.
- (c) Prior to commencement of work:
  - (i) The location of utility services must be fully surveyed and the requirements of the relevant public utility authority complied with; and
  - (ii) The following documents must be approved by the Certifying Authority and a copy submitted to Council:
    - a. Structural drawings and certification as prescribed elsewhere in this consent.
    - b. Geotechnical report and certification as prescribed elsewhere in this consent.
- (d) Prior to completion, the Certifying Authority must receive written and photographic confirmation that the restoration of the public way has been complete in accordance with the following:
  - (i) All ground anchors must be de-stressed and isolated from the building prior to completion of the project.
  - (ii) The temporary structure, including foundation blocks, anchors and piers must be removed above and below the public way, prior to completion of project, down to a depth of 2m.

#### NOTICE OF DETERMINATION – APPROVAL D/2013/242

- (iii) All timber must be removed.
- (iv) All voids must be backfilled with stabilised sand (14 parts sand to 1 part cement).
- (v) All costs for any reinstatement of the public way made necessary because of an unstable, damaged or uneven surface to the public way must be borne by the owner of the land approved for works under this consent.
- (e) The Bank Guarantee may be released after the Certifying Authority submits certification to Council that all the works described in (d) above have been completed and that there is no remaining instability, damage or unevenness to the public domain as a result of the development. This certification is to include relevant photographs and must be to the satisfaction of the Council's Director City Planning.

#### (11) BARRICADE PERMIT

Where construction/building works require the use of a public place including a road or footpath, approval under Section 138 of the Roads Act 1993 for a Barricade Permit is to be obtained from Council prior to the commencement of work. Details of the barricade construction, area of enclosure and period of work are required to be submitted to the satisfaction of Council.

#### (12) WASTE AND RECYCLING MANAGEMENT - MINOR

The proposal must comply with the relevant provisions of Council's *Policy for* Waste *Minimisation in New Developments 2005* which requires facilities to minimise and manage waste and recycling generated by the proposal.

#### **SCHEDULE 1C**

#### **DURING CONSTRUCTION/PRIOR TO COMPLETION**

#### (13) HOURS OF WORK AND NOISE - OUTSIDE CBD

The hours of construction and work on the development must be as follows:

- (a) All work, including building/demolition and excavation work, and activities in the vicinity of the site generating noise associated with preparation for the commencement of work (eg. loading and unloading of goods, transferring of tools etc) in connection with the proposed development must only be carried out between the hours of 7.30am and 5.30pm on Mondays to Fridays, inclusive, and 7.30am and 3.30pm on Saturdays, with safety inspections being permitted at 7.00am on work days, and no work must be carried out on Sundays or public holidays.
- (b) All work, including demolition, excavation and building work must comply with the City of Sydney Building Sites Noise Code and Australian Standard 2436 - 2010 "Guide to Noise Control on Construction, Maintenance and Demolition Sites".

#### (14) USE OF INTRUSIVE APPLIANCES - TIME RESTRICTION.

- (a) The operation of high noise intrusive plant and machinery such as pile drivers, rock breakers and hydraulic hammers and those which are not listed in Groups B, C, D, E or F of Schedule 1 of the City of Sydney Code of Practice for Construction Hours/Noise 1992 and Australian Standard 2436-2010 "Guide to Noise Control on Construction, Maintenance and Demolition Sites is restricted to the hours of 9am to 12pm and 2pm to 5pm Mondays to Fridays, 9am to 12pm and 2pm to 3.30pm Saturdays or other times of use agreed with the City.
- (b) All reasonable and feasible steps must be undertaken to ensure that the work, including demolition, excavation and building complies with the City of Sydney Code of Practice for Construction Hours/Noise 1992 and Australian Standard 2436- 2010 'Guide to Noise Control on Construction, Maintenance and Demolition Sites'.

#### (15) EXTENDED HOURS OF WORK - APPROVED

- (a) Notwithstanding Conditions 13 and 14, the approved hours of construction are amended to allow works associated with the development to take place within Jones Street, Ultimo in connection with this application at UTS between the hours of 4pm to 1am the following day, Mondays to Fridays, and 4pm to 12 midnight Saturdays, with no working on Sundays and Public Holidays.
- (b) The use of intrusive appliances including jackhammers should be permitted within such extended times until 10pm Mondays to Saturdays.
- (c) All work and activities conducted during the extended hours of work must comply with the City of Sydney Code of Practice for Construction Hours/Noise 1992 (The Code) and Australian Standard 2436 - 2010 'Guide to Noise Control on Construction, Maintenance and Demolition Sites'.

#### **NOTICE OF DETERMINATION – APPROVAL D/2013/242**

- (d) Should the City receive substantiated complaints concerning offensive noise from any works conducted outside standard category 1 construction hours which are not satisfactory resolved then the approved hours shall revert back to the standard construction approval hours, namely 07.30am to 5.30pm Monday to Friday, and 07.30am to 3.30pm on Saturdays only with no Sundays or public holiday working.
- (e) Resumption of extended working hours referred to in Condition 15(a) shall not be permitted until the applicant can demonstrate to Council that appropriate ameliorative measures recommended by their acoustic consultant have been fully implemented and that the complaints are satisfactorily resolved.

#### **NOTICE OF DETERMINATION – APPROVAL D/2013/242**

#### **SCHEDULE 2**

#### PRESCRIBED CONDITIONS

The prescribed conditions in accordance with Division 8A of the *Environmental Planning and Assessment Regulation 2000* apply:

Clause 98A Erection of signs

Clause 98E Conditions relating to shoring and adequacy of adjoining property

Refer to the NSW State legislation for full text of the clauses under Division 8A of the *Environmental Planning and Assessment Regulation 2000*. This can be accessed at: http://www.legislation.nsw.gov.au

#### IMPORTANT ADDITIONAL INFORMATION

A Review of this determination by the *Small Permits Appeal Panel* must be made in writing. An application form is available at the One Stop Shop.

#### The Environmental Planning and Assessment Act 1979 requires you to:

- Obtain a Construction Certificate prior to the commencement of any works. An
  accredited certifier must obtain Council's approval to certain conditions of this
  development consent, where indicated before issuing the Construction Certificate.
- 2. Nominate a *Principal Certifying Authority* (PCA) which may be either Council or an accredited certifier and notify Council of that appointment. You **cannot lawfully** commence works without complying with this requirement.
- 3. Give Council at least two days notice of your intention to commence the erection of a building **before** commencing construction works. You cannot lawfully commence works without complying with this requirement.

#### You may also need to:

- 4. Lodge an *Application for Approval* under Section 68 of the *Local Government Act 1993* for an activity under that Act, including the **erection of a hoarding.**
- 5. Contact Sydney Water, Rockdale (Urban Development Section) regarding the water and sewerage services to this development.
- 6. Carry out critical stage inspections in accordance with Section 109E of the EP&A Act 1979 and clauses 162A, 162B and 163 of the EP&A Regulation 2000.

Applications and submissions referred to in this consent may be lodged at:

CBD Level 2, Town Hall House, 456 Kent St, Sydney.

KINGS CROSS 50-52 Darlinghurst Rd, Kings Cross.

GLEBE Customer Service Centre, 186 Glebe Point Rd, Glebe.

If you have any enquiries on any aspect of this consent, contact Kate Bartlett ph. 9265 9200, email kbartlett@cityofsydney.nsw.gov.au.

## **DEVELOPMENT APPLICATION ASSESSMENT**

Application No: D/2013/242

Date of Lodgement 28-Feb-2013

Applicant UNIVERSITY OF TECHNOLOGY SYDNEY

Application Site: 5120 JONES STREET, ULTIMO NSW 2007

Proposal: Construction of services trenches below Jones

street at University of Technology Sydney.

The application is Crown Development under the EP&A Act. Accordingly, the draft conditions were submitted to the applicant for review on 5 April 2013. The final conditions of consent have been

agreed to by the applicant.

#### SITE AND SURROUNDING DEVELOPMENT

A site visit was carried out on 2 April 2013.

5120 Jones Street runs north to south from Broadway through Ultimo and Pyrmont. The subject area of the site is between Jones and Thomas Streets in Ultimo, with UTS owning the land to the east, west and south. Jones Street is closed at Broadway for vehicular traffic. The services trenches are for the purpose of running services between the UTS buildings to the east and west.

Photos of the site and surrounds are provided below:



Figure 1: Jones Street looking north



Figure 2: Jones St looking south.

#### **PROPOSAL**

Construct four services trenches underneath Jones Street between Building 2, Building 10 and the Broadway Building at UTS.

#### HISTORY RELEVANT TO THE DEVELOPMENT APPLICATION

#### **ECONOMIC/SOCIAL/ENVIRONMENTAL IMPACTS**

The application has been assessed under Section 79C of the Environmental Planning and Assessment Act 1979, including consideration of the following matters:

#### (a) Environmental Planning Instruments and DCPs.

#### Sydney LEP 2012

The site is located within the mixed uses zone. The proposed works are permissible and consistent with the objectives of the zone as services trenches are necessary for the educational uses associated with UTS.

The proposed trenches are considered generally consistent with the aims, objectives and controls of the LEP

#### Sydney DCP 2012

The proposed trenches are considered generally consistent with the aims, objectives and controls of the DCP.

The proposed trenches will not be visible from the public domain and will not detract from the public domain or public domain elements.

The application was accompanied by a Construction Methodology Plan that adequately addresses pedestrian access and traffic management during the construction of the trenches.

Works are proposed to be undertaken between 4pm and 1am the following day, with noisier works to be undertaken by 10pm. The application was accompanied by an

acoustic report. The proposed extended trading hours are considered acceptable as the street is encompassed by University buildings to the east and west and Central Park development to the south, which is still under construction. Accordingly, it is not considered that any residents will be affected by noise from construction works. Appropriate noise management conditions have been imposed on the consent.

The relevant matters to be considered under Sydney Development Control Plan 2012 for the proposed development are outlined below.

#### (b) Other Impacts of the Development

It is considered that the proposal will have no significant detrimental effect relating to environmental, social or economic impacts on the locality, subject to appropriate conditions being imposed.

#### (c) Suitability of the site for the Development

The proposal is of a nature in keeping with the overall function of the site. The premises are in a commercial/residential surrounding and amongst similar uses to that proposed.

## (d) CONSULTATION

#### Internal Referrals

The conditions of other sections of Council have been included in the proposed conditions.

The application was referred to Council's Health, Public Domain and Surveyor Units, who raised no objection subject to conditions.

Council's Building Surveyor advised that no building conditions are required as the works are not considered building works under the BCA.

#### **NOTIFICATION, ADVERTISING AND DELEGATION (No Notification)**

In accordance with Schedule 1, the proposed development is not required to be notified or advertised development under the Sydney DCP 2012. As such the application was not notified as it is by way of scale, character and operation is likely to have minimal or acceptable impacts.

#### FINANCIAL IMPLICATIONS/S94 CONTRIBUTION

#### **Section 94 Contributions**

The development is not subject to a Section 94 Contribution.

#### **CONCLUSION**

Having regard to all of the above matters, it is considered that the proposal for construction of services trenches generally satisfies the relevant strategy, objectives and provisions of the Sydney LEP 2012 and the Sydney DCP 2012, is acceptable and is recommended for approval subject to conditions as shown in the attached Decision Notice.

## The application is Approved under delegated authority of Council.

The undersigned declare, to the best of their knowledge that they have no interest, pecuniary or otherwise, in this development application or persons associated with it and have provided an impartial assessment.

Report Prepared by: Application determined by:

Kate Bartlett Andrew Rees

Specialist Planner Area Planning Manager

City of Sydney Town Hall House 456 Kent Street Sydney NSW 2000

Telephone +61 2 9265 9333 Fax +61 2 9265 9222 council@cityofsydney.nsw.gov.au GPO Box 1591 Sydney NSW 2001 cityofsydney.nsw.gov.au



## **NOTICE OF DETERMINATION - APPROVAL**

Issued under Section 80(1)(a) of the Environmental Planning and Assessment Act 1979

D/2015/1450	
BROOKFIELD ENERGY AUSTRALIA	
62-98 BROADWAY, CHIPPENDALE NSW 2008; 4050 BROADWAY AND 5120 JONES STREET, ULTIMO NSW 2007	
Lot A DP 430090, Lot 12 DP 1194122	
Construction of a thermal energy and recycled water link between Central Park and UTS City Campus Building 1, involving borehole drilling and installation of pipes under Broadway and Jones Street.	
\$2,000,000	
The application was determined under delegation of Council and was granted consent <b>subject to the conditions</b> in Schedules 1 and 2.	
Before commencing building work or subdivision work, a relevant Construction Certificate must be obtained from Council or an Accredited Certifier. Council must be appointed the Principal Certifying Authority for any subdivision work under the Act.	
6 January 2016	
6 January 2021	

## **Reasons for conditions**

Unrestricted consent may affect the environmental amenity of the area and would not be in the public interest.

## Right of appeal

If you are dissatisfied with this decision, Section 97 of the Environmental Planning and Assessment Act 1979 gives you the right to appeal to the Land and Environment Court within six (6) months after the date on which you receive this notice.

Section 82A of the Environmental Planning and Assessment Act 1979 provides that the applicant may request the Council to review the determination. The request must be made in writing (or on the review application form) together with payment of the appropriate fee. The review must be lodged and determined within six (6) months of the date in which you received this notice.



Note: To enable the section 82A review to be considered within the six (6) month time frame prescribed under the Environmental Planning and Assessment Act 1979, it is advisable to lodge the application for review under Section 82A as soon as possible (within 4 months) to facilitate the statutory timeframes.

Section 82A does not apply to complying development, designated development, integrated development or a determination made by Council under Division 4 in respect of Crown applications. For further information please contact **Silvia Correia on ph. 9246 7598.** 

#### **GRAHAM JAHN AM**

Director - City Planning, Development & Transport

#### **CONDITIONS OF CONSENT**

#### (1) APPROVED DEVELOPMENT

(a) Development must be in accordance with Development Application No. D/2015/1450 dated 9 October 2015 and the following drawings:

Drawing Number	Architect	Date
Figure 3-1 (Concept Design)	WSP / Parsons Brinckerhoff	21/08/15
WSP-001 P1	WSP	24/08/15
WSP-002 P1	WSP	24/08/15

and as amended by the conditions of this consent.

(b) In the event of any inconsistency between the approved plans and supplementary documentation, the plans will prevail.

## (2) LICENCE UNDER ROADS ACT

Prior to the commencement of works, the owner(s) of the properties adjoining the subject portion of Broadway and Jones Street are to make a separate application for a Licence under Section 139(1)(d) of the *Roads Act 1993*, in respect of the stratum below Broadway and Jones Street occupied by the conduits for private service connections beneath the surface of that public road. Such Licence is to be subject to terms and conditions considered necessary to protect Council's interests and those of the public, including indemnifying Council against costs and damages arising from the proposal.

All costs associated with such Licence are to be borne by the owner(s) of the properties adjoining the subject portion of Broadway and Jones Street.

## (3) SECTION 138 APPROVAL

Prior to the commencement of any work within the public way, a separate application is to be made to Council to obtain approval for the works and installation of private conduits under Section 138 of the *Roads Act 1993*.

## (4) DESIGN AND CONSTRUCTION OF WORKS

(a) Detailed engineering, road, drainage and infrastructure works, design and construction plans for boring of lateral holes, the construction of pits and trenches (if required), installation of conduits, and reinstatement of the roadway and footway within Broadway and Jones Street are to be submitted to Council and approval gained prior any works commencing. The design and documentation is to include any requirements and approvals from external parties such as public utility service authorities and is to be in accordance with Council's "Development Specifications for Civil Works Design and Construction".

- (b) The submission to Council required under (a) above is to provide plans and specifications sufficient to describe in detail the design, scope and extent of all proposed road, drainage and infrastructure works for the lateral boreholes, the construction of trenches (if required) and reinstatement of the roadway and footway prepared and certified by a Professional Engineer. The engineering plans are to include:
  - (i) Details and specifications for the roadway formation restoration works required upon installation of the private service conduits,
  - (ii) Details and design of any public stormwater system deviation or relocation as a consequence of the proposed works,
  - (iii) Details of design and specifications for the reinstatement of the footway formation, kerb and gutter and carriageway formation upon installation of the private service conduits,
  - (iv) Details of structures and conduits for the provision and installation of any public utility services and any adjustment or deviation to existing services required,
  - (v) Details of structures, procedures and measures adopted to address erosion and sediment control during the earthworks and construction process,
  - (vi) Details of traffic management and site management procedures during the construction process,
- (c) The certification is to include confirmation from a Professional Engineer that the design complies with Council's Development Specifications for Civil Works Design and Construction.

#### (5) PUBLIC DOMAIN DAMAGE DEPOSIT

A Public Domain Damage Deposit calculated on the basis of 18.8 lineal metres of asphalt footway along Broadway must be lodged with Council in accordance with the City of Sydney's adopted Schedule of Fees and Charges. The Public Domain Damage Deposit must be submitted as an unconditional bank guarantee in favour of Council as security for repairing any damage to the public domain in the vicinity of the site.

The guarantee must be lodged with Council prior to the commencement of works.

The Bank Guarantee will be retained in full until the final Occupation Certificate has been issued and any rectification works to the footway and Public Domain are completed to Council's satisfaction. On satisfying the above requirements 90% of the total securities will be released, with the remaining 10% to be retained for the duration of the 12 months Defect Liability Period.

#### (6) COMPLIANCE WITH CONSTRUCTION TRAFFIC MANAGEMENT PLAN

All works conducted on site which form part of this development must be carried out in accordance with the Traffic Management and Access Plan (Central Thermal Plant and Recycled Water Plant connection between Central Park and

UTS) Revision D, prepared by Brookfield Energy Australia and dated 10 December 2015.

## (7) COMPLIANCE WITH DEMOLITION, EXCAVATION & CONSTRUCTION NOISE AND VIBRATION MANAGEMENT PLAN

- (a) All works conducted on site which form part of this development must be carried out in accordance with the Noise and Vibration Management Plan prepared by Brookfield Energy Australia, 26<sup>th</sup> August 2015, 2269592A-ENV-REP-001 Rev A.
- (b) Where all such control measures have been implemented and the resultant noise and/ or vibration levels at any sensitive receiver still exceed the council's applicable criteria stated in the Construction Hours/Noise Code 1992 and are giving rise to sustained complaints then the contractor must provide regular, appropriate and sustained periods of respite in consultation with Council's Health and Building unit. Approval to vary the authorised noise and vibration levels must be received in writing by the proponent from Council prior to activities being undertaken that exceed sanctioned emission levels. (Use where respite periods not specified under the approved DEC NMP)

Such periods must be set and agreed to by Council's Health and Building Unit.

## (8) ROADS AND MARITIME SERVICES (RMS) REQUIREMENTS

- (a) Any road crossings should be by underboring and are to be maintenance free.
- (b) Prior to the commencement of works / issue of the Construction Certificate, whichever is earlier, the following information shall be submitted for RMS approval:
  - (i) Ground condition, the geotechnical investigation within the vicinity of the underbore location.
  - (ii) Typical longitudinal and cross sections of the proposed underbore (diameter and depth of the proposed underbore).
  - (iii) Detail analysis and predicted surface settlement of the underbore works.
  - (iv) Proposed monitoring plan that required before, during the underbore work.

Based on the information the RMS will determine whether a detailed review will be required. If detail review is required the proponent is to meet the cost for the review

(c) The Utility Owner or their agent is to ensure all work is performed to the relevant construction standards and work practices. Design of bore pits, shoring and bracing or other supports must be undertaken by a qualified professional Engineer (CP Eng–Aust) belonging to the Institute of Engineers, Australia. or other Engineering qualification acceptable to the

RMS. A copy of the documentation & certification must be held by the Contractor on-site.

(d) A site meeting must be conducted with Roads and Maritime Service Provider prior to the commencement of work.

Contact details:

Ventia Boral Amey Joint Venture Stewardship Maintenance Contract – Sydney South 422 West Botany Street Rockdale NSW 2216

E: nswenguiries@lbajv.com.au

T: 1800 677 700

- (e) If the works will have an impact on Roads and Maritime assets the Service Provider will determine the amount of Bank Guarantee required for the proposed work.
- (f) Roads and Maritime Services (RMS) approval for the construction work will only be issued when we receive the Bank Guarantee and Copy of Public Liability Insurance and agreement to the following conditions. The Bank Guarantee and the copy of the Public Liability Insurance must be mailed to: Project Engineer External Works, Asset Sydney PO Box 973, Parramatta CBD 2124, prior to the commencement of work.

### **Bank Guarantee requirements:**

- (g) An unconditional Bank Guarantee, original with no end date and issued in favour of the Roads and Maritime Services must be submitted to the RMS Sydney Asset Project Engineer External Works prior to the work. The amount of the Bank Guarantee will be advised by Service provider.
  - (i) Site location and details of proponent address are to be included in the Bank Guarantee.
  - (ii) The Bank Guarantee is to cover a defects liability period of 12 or 6 months will be determined by Service provider
  - (iii) The proponent to contact Service provider to obtain the date of practical completion, which is issued by Service provider. At the end of the defects liability period, the proponent contact Service provider to inspect the site.
  - (iv) The RMS will, on written request from you return the Bank Guarantee or balance thereof subject to any deduction which may have occurred to rectify any unacceptable work by our Service provider or its Agent

## Insurances:

(h) The Public Liability Insurance in the amount of not less than 20 million dollars should be affected and extended to cover the interest of the RMS, or its agent and Council by any contractor engaged on the construction and/or maintenance of the work. Evidence of such insurance must be submitted to the RMS prior to commencement of work.

#### Indemnities:

- (i) The RMS shall be indemnified by the Utility Owner against any suit, action, claim etc, which may arise from the presence of the utility within the Authority's road or median or generally within the road boundaries.
- (j) The RMS shall be indemnified by the Utility Owner from and against all actions, suits, proceedings, losses, costs, damages, charges, claims and demands in any way arising from the proposed work.

#### RMS Assets:

(k) Restoration and any modification of RMS assets will need to be carried out to Roads and Maritime standards or as agreed by the Service provider and no cost to the RMS.Generally the pavement restoration will need to be carried out in accordance with Specification No. M209. You must note that the extent to which restoration is required will be determined by the service provider and may extend beyond the limits of the contractors excavation. A copy of M209 is available on the website

#### Other Authorities to be Contacted:

- (I) The appropriate Local Government Authority's approval must be obtained.
- (m) Please contact Dial Before You Dig (telephone 1100) prior to the commencement of work to ascertain whether other utility services may be involved.

## **Road Occupancy Licence – Traffic Management:**

(n) All Road Occupancy Licence Applications (ROLA) are now processed through this new online system called OPLINC 2 and we are no longer accepting applications through TMC inbox or fax. To submit ROLA the proponent must first register online. The proponent must use Google Chrome as your web browser (there is a map function that only work in Chrome)Please access the following link and proceed to register <a href="https://myrta.com/oplinc2">https://myrta.com/oplinc2</a>

Any clarification on the above matter, please contact the Road Occupancy Unit on T: 02 8396 1513 during normal business hours.

## (9) SYDNEY TRAINS / RAILCORP REQUIREMENTS

- (a) Prior to the commencement of works, the Applicant shall undertake a services search to establish the existence and location of any rail services. Persons performing the service search shall use equipment that will not have any impact on rail services and signalling. Should rail services be identified within the subject development site, the applicant must discuss with the RailCorp as to whether these services are to be relocated or incorporated within the development site.
- (b) For future West Metro tunnels design and construction, as-built plans and information is to be submitted to Sydney Trains Property (Transport for NSW) within 60 days of the completion of works.

## (10) TRANSGRID REQUIREMENTS

- (a) All works will need to be carried out in accordance with the NSW WorkCover 'Work Near Overhead Powerlines' Code of Practice (link below) and TransGrid's Easement Guidelines for Third Party Development <a href="http://www.workcover.nsw.gov.au/health-and-safety/industry-safety/electrical-and-power/power-lines/publications/work-near-overhead-power-lines-code-of-practice-2006">http://www.workcover.nsw.gov.au/health-and-safety/industry-safety/electrical-and-power/power-lines/publications/work-near-overhead-power-lines-code-of-practice-2006</a>
- (b) 'Dial Before you Dig' is to be contacted prior to commencement of works.

#### (11) AUSGRID REQUIREMENTS

- (a) The developer is required to make a formal submission to Ausgrid by means of a duly completed Preliminary Enquiry and/ or Connection Application form, to allow Ausgrid to assess any impacts on its infrastructure and determine the electrical supply requirements for the development (eg. whether a substation is required on site).
- (b) In general, works to be considered by Ausgrid include, but are not limited to, the following:
  - Changes in electrical load requirements
  - Changes to Ausgrids infrastructure (ie. asset relocations, decommissioning substations etc.)
  - Works affecting Ausgrids easements, leases and/ or right of ways
  - Changing the gradients of any roads or paths
  - Changing the level of roads or foot paths
  - Widening or narrowing of roads
  - Closing roads or laneways to vehicles
  - In all cases Ausgrid is to have 24 hour access to all its assets
- (c) Any work undertaken near Overhead Power lines needs to be done in accordance with:
  - Workcover Document ISSC 23 "Working Near Overhead Power Lines"
  - -Ausgrids Network Standards
  - -Ausgrids Electrical Safety Rules
- (d) The developer is to ensure that the proposed works do not contravene Ausgrid's technical standards and statutory requirements, in regards to the safe and reliable operation and maintenance of Ausgrid's network.

## (12) ROAD OPENING PERMIT

A separate Road Opening Permit under Section 138 of the *Roads Act 1993* must be obtained from Council prior to the commencement of any:

- (a) Excavation in or disturbance of a public way, or
- (b) Excavation on land that, if shoring were not provided, may disturb the surface of a public road (including footpath).

## (13) BARRICADE PERMIT

Where construction/building works require the use of a public place including a road or footpath, approval under Section 138 of the *Roads Act 1993* for a Barricade Permit is to be obtained from Council prior to the commencement of work. Details of the barricade construction, area of enclosure and period of work are required to be submitted to the satisfaction of Council.

## (14) UTILITY SERVICES

To ensure that utility authorities are advised of the development:

- (a) Prior to the commencement of works a survey is to be carried out of all utility services within and adjacent to the site including relevant information from utility authorities and excavation if necessary, to determine the position and level of services.
- (b) Prior to the commencement of work the applicant is to obtain written approval from the utility authorities (e.g. Energy Australia, Sydney Water, and Telecommunications Carriers) in connection with the relocation and/or adjustment of the services affected by the construction of the underground structure. Any costs in the relocation, adjustment or support of services are to be the responsibility of the developer.

#### (15) WASTE AND RECYCLING MANAGEMENT - MINOR

The proposal must comply with the relevant provisions of Council's *Policy for Waste Minimisation in New Developments 2005* which requires facilities to minimise and manage waste and recycling generated by the proposal.

## (16) SPILLAGE-MATERIALS AND EQUIPMENT TO CONTAIN & CLEAN UP

Appropriate materials and equipment are to be available on site at all times to contain and clean up spills of potentially polluting materials. An inventory of all clean up and containments materials and equipment, and clean up procedures must be kept on site.

## (17) WASTE LIQUIDS

All storage areas where spillages may reasonably occur shall be bunded. The capacity of the bunded area shall be calculated as being equal to 110% of the largest vessel or container in the area or 10% of the total volume of vessels/containers accommodated in the area, whichever is greater. All bunded areas shall be graded to a blind sump to facilitate testing of collected wastewater and provide a low point for pump out. Bunded areas shall be suitably treated to prevent the ingress of water.

#### (18) NOISE - GENERAL

(a) The emission of noise associated with the use of the premises including the cumulative operation of any mechanical plant and equipment, and air conditioning shall comply with the following:

- (i) The L<sub>Aeq, 15 minute</sub> noise level emitted from the use must not exceed the project specific noise level for that receiver as determined in accordance with the *NSW EPA Industrial Noise Policy*. Noise must be measured in accordance with the Industrial Noise Policy and relevant requirements of Australian Standard AS 1055-1997 Acoustics Description and measurement of environmental noise.
- (ii) Project specific noise levels shall be determined by establishing the existing environmental noise levels, in complete accordance with the assessment L<sub>A90, 15 minute</sub> / rating L<sub>A90, 15 minute</sub> process to be in accordance with the requirements for noise monitoring listed in the *NSW EPA Industrial Noise Policy* and relevant requirements of Australian Standard AS1055-1997 Standard AS 1055-1997 Acoustics Description and measurement of environmental noise.
- (ii) Modifying factors in Table 4.1 of the *NSW EPA Industrial Noise Policy* are applicable.
- (b) An L<sub>Aeq,15 minute</sub> noise level emitted from the use must not exceed the L<sub>A90, 15 minute</sub> noise level by more than 3dB in any Octave Band Centre Frequency (31.5 Hz to 8 kHz inclusive) when assessed inside any habitable room of any affected residence or noise sensitive commercial premises provided that:
  - (i) Where the L<sub>A90, 15 minute</sub> noise level is below the threshold of hearing, Tf at any Octave Band Centre Frequency as defined in Table 1 of International Standard ISO 226 : 2003- Normal Equal-Loudness-Level Contours then the value of Tf corresponding to that Octave Band Centre Frequency shall be used instead.
  - (ii) The L<sub>Aeq,15 minute</sub> noise level and the L<sub>A90,15 minute</sub> noise level shall both be measured with all external doors and windows of the affected residence closed;
  - (iii) The relevant background noise level (L<sub>A90, 15 minute</sub>) is taken to mean the day, evening or night rating background noise level determined in complete accordance with the methodology outlined in the *NSW EPA Industrial Noise Policy* and Australian Standard AS1055.1997 Acoustics – Description and measurement of environmental noise.
  - (iv) Background noise shall be established in the absence of all noise emitted from the use but with the ventilation equipment normally servicing the affected residence operating. Background noise measurements are to be representative of the environmental noise levels at the affected location.
  - (v) Modifying factors in Table 4.1 of the NSW EPA Industrial Noise Policy are applicable. Internal Noise measurements are not to be corrected for duration.

### (19) EMISSIONS

(a) The use of the pipes must not give rise to the emission of gases, vapours, dusts or other impurities which are a nuisance, injurious or prejudicial to health.

(b) Gaseous emissions from the development must comply with the requirements of the Protection of the *Environment Operations Act, 1997* and Regulations. Uses that produce airborne particulate matter must incorporate a dust collection system.

### (20) ASBESTOS REMOVAL WORKS

All works removing asbestos containing materials must be carried out by a suitably licensed asbestos removalist duly licensed with Workcover NSW, holding either a Friable (Class A) or a Non- Friable (Class B) Asbestos Removal Licence which ever applies.

## (21) CLASSIFICATION OF WASTE

Prior to the exportation of waste (including fill or soil) from the site, the waste materials must be classified in accordance with the provisions of the Protection of the Environment Operations Act 1997 and the NSW DECC Waste Classification Guidelines, Part1: Classifying Waste (July 2009). The classification of the material is essential to determine where the waste may be legally taken. The Protection of the Environment Operations Act 1997 provides for the commission of an offence for both the waste owner and the transporters if the waste is taken to a place that cannot lawfully be used as a waste facility for the particular class of waste. For the transport and disposal of industrial, hazardous or Group A liquid waste advice should be sought from the EPA.

## (22) DISCHARGE OF CONTAMINATED GROUNDWATER

Prior approval must be sought form the City's Public Domain Department to discharge any groundwater into the City's stormwater drainage system.

Other options for the disposal of groundwater include disposal to sewer with prior approval from Sydney Water or off-site disposal by a liquid waste transporter for treatment/disposal to an appropriate waste treatment/processing facility.

#### (23) IMPORTED FILL MATERIALS

All fill imported onto the site shall be validated to ensure the imported fill is suitable for the proposed land use from a contamination perspective. Fill imported on to the site shall also be compatible with the existing soil characteristic for site drainage purposes.

The City may require details of appropriate validation of imported fill material to be submitted with any application for future development of the site. Hence all fill imported onto the site should be validated by either one or both of the following methods during remediation works:

- (a) Imported fill should be accompanied by documentation from the supplier which certifies that the material is not contaminated based upon analyses of the material for the known past history of the site where the material is obtained; and/or
- (b) Sampling and analysis of the fill material shall be conducted in accordance with NSW EPA (1995) Sampling Design Guidelines.

## (24) NOTIFICATION - NEW CONTAMINATION EVIDENCE

Any new information which comes to light during remediation, demolition or construction works which has the potential to alter previous conclusions about site contamination shall be notified to the City's Area Planning Manager and the Principal Certifying Authority immediately.

#### (25) STOCKPILES

- (a) No stockpiles of soil or other materials shall be placed on footpaths or nature strips unless prior approval has been obtained from the City's Construction Regulation Unit.
- (b) All stockpiles of soil or other materials shall be placed away from drainage lines, gutters or stormwater pits or inlets.
- (c) All stockpiles of soil or other materials likely to generate dust or odours shall be covered.
- (d) All stockpiles of contaminated soil shall be stored in a secure area and be covered if remaining more than 24 hours.

## (26) HOURS OF WORK AND NOISE - OUTSIDE CBD

The hours of construction and work on the development must be as follows:

- (a) All work, including building/demolition and excavation work, and activities in the vicinity of the site generating noise associated with preparation for the commencement of work (eg. loading and unloading of goods, transferring of tools etc) in connection with the proposed development must only be carried out between the hours of 7.30am and 5.30pm on Mondays to Fridays, inclusive, and 7.30am and 3.30pm on Saturdays, with safety inspections being permitted at 7.00am on work days, and no work must be carried out on Sundays or public holidays.
- (b) All work, including demolition, excavation and building work must comply with the City of Sydney Code of Practice for Construction Hours/Noise 1992 and Australian Standard 2436 - 1981 Guide to Noise Control on Construction, Maintenance and Demolition Sites.

Note: The City of Sydney Code of Practice for Construction Hours/Noise 1992 allows extended working hours subject to the approval of an application in accordance with the Code and under Section 96 of the Environmental Planning and Assessment Act 1979.

#### (27) USE OF HIGH NOISE EMISSION APPLIANCES / PLANT

- (a) The operation of high noise emission appliances, plant and/or machinery such as pile – drivers, rock breakers and hydraulic hammers and those which are not listed in Groups B, C, D, E or F of Schedule 1 of the City of Sydney Code of Practice for Construction Hours/Noise 1992 and Australian Standard 2436-2010 Guide to Noise Control on Construction, Maintenance and Demolition Sites is restricted to the hours of:
  - (i) 8:30am -12:00pm and 1:00 pm- 4:30pm Mondays to Friday

- (ii) 9:00am 1:00pm on Saturdays
- (iii) No work is permitted on Sundays or Public Holidays
- (b) The approved hours may be varied on receipt of written notification from the City's Area Planning Manager.
- (b) All reasonable and feasible steps must be undertaken to ensure that the work, including demolition, excavation and building complies with the City of Sydney Code of Practice for Construction Hours/Noise 1992 and Australian Standard 2436- 2010 Guide to Noise Control on Construction, Maintenance and Demolition Sites.

#### (28) CONNECTION TO SEWERS OF SYDNEY WATER CORPORATION

Waste water arising from the use must be directed to the sewers of the Sydney Water Corporation (SWC) under a Trade Waste License Agreement. The pretreatment of wastewater may be a requirement of the Corporation prior to discharge to the sewer. Details of the Corporation's requirements should be obtained prior to the commencement of construction work.

## (29) COVERING OF LOADS

All vehicles involved in the excavation and/or demolition process and departing the property with demolition materials, spoil or loose matter must have their loads fully covered before entering the public roadway.

## (30) HAZARDOUS AND INDUSTRIAL WASTE

Hazardous and/or industrial waste arising from the demolition/operational activities must be removed and/or transported in accordance with the requirements of the NSW Work Cover Authority pursuant to the provisions of the following:

- (a) Protection of the Environment Operations Act 1997
- (b) Protection of the Environment Operations (Waste) Regulation 2005
- (c) Waste Avoidance and Resource Recovery Act 2001
- (d) Work Health and Safety Act 2011
- (e) Work Health and Safety Regulation 2011.

## (31) COVERING OF LOADS

All vehicles involved in the excavation and/or demolition process and departing the property with demolition materials, spoil or loose matter must have their loads fully covered before entering the public roadway.

## (32) VEHICLE CLEANSING

Prior to the commencement of work, suitable measures are to be implemented to ensure that sediment and other materials are not tracked onto the roadway by

vehicles leaving the site. It is an offence to allow, permit or cause materials to pollute or be placed in a position from which they may pollute waters.

## (33) COMPLIANCE WITH BUILDING CODE OF AUSTRALIA

The proposed work must comply with the Building Code of Australia (BCA).

## (34) OCCUPATION CERTIFICATE TO BE SUBMITTED

An Occupation Certificate must be obtained from the Principal Certifying Authority and a copy submitted to Council prior to commencement of occupation or use of the whole or any part of a new building, an altered portion of, or an extension to an existing building.

## **SCHEDULE 2**

## PRESCRIBED CONDITIONS

The prescribed conditions in accordance with Division 8A of the *Environmental Planning and Assessment Regulation 2000* apply:

Clause 98	Compliance with <i>Building Code of Australia</i> and insurance requirements under the <i>Home Building Act 1989</i>
Clause 98A	Erection of signs
Clause 98B	Notification of Home Building Act 1989 requirements
Clause 98C	Conditions relating to entertainment venues
Clause 98D	Conditions relating to maximum capacity signage
Clause 98E	Conditions relating to shoring and adequacy of adjoining property

Refer to the NSW State legislation for full text of the clauses under Division 8A of the *Environmental Planning and Assessment Regulation 2000*. This can be accessed at: <a href="http://www.legislation.nsw.gov.au">http://www.legislation.nsw.gov.au</a>

#### IMPORTANT ADDITIONAL INFORMATION

**Advisory note**: The State Government has commenced planning for the construction of the CBD South East Light Rail (CSELR). You may need to consider the potential impacts of this project in programming your development. The CSELR route includes Alfred St, George St, Rawson Place, Eddy Ave, Chalmers St, and Devonshire St. For construction and programming information contact the Transport for NSW Infoline on 1800 684 490 or www.transport.nsw.gov.au/projects.

#### The Environmental Planning and Assessment Act 1979 requires you to:

- Obtain a Construction Certificate prior to the commencement of any works. An
  application may be lodged with Council, or you may apply to a private accredited certifier
  for a Construction Certificate. An accredited certifier must obtain Council's approval to
  certain conditions of this development consent, where indicated before issuing the
  Construction Certificate.
- 2. Note: it is compulsory to lodge digital copies of applications, including plans and documentation if lodging an application with Council. Please refer to the link below for any further information about digital requirements and electronic files.
  - http://www.cityofsydney.nsw.gov.au/development/application-guide/application-process/digital-requirements.
- 3. Nominate a *Principal Certifying Authority* (PCA) which may be either Council or an accredited certifier and notify Council of that appointment. You **cannot lawfully** commence works without complying with this requirement.
- 4. Give Council at least two days notice of your intention to commence the erection of a building **before** commencing construction works. You cannot lawfully commence works without complying with this requirement.
- 5. Obtain an *Occupation Certificate* before commencing occupation or commencing to use the building or on the completion of other works including the erection of a sign. You cannot lawfully commence occupation or the use of a building without complying with this requirement.

#### You may also need to:

- 6. Lodge an *Application for Approval* under Section 68 of the *Local Government Act 1993* for an activity under that Act, including the **erection of a hoarding.**
- 7. Lodge an *Application for Subdivision* to obtain a *Subdivision Certificate* if a land (including stratum) subdivision is proposed and an Application for Subdivision to obtain *Strata Title Subdivision* under the relevant Strata Titles Act, if strata title of the development is proposed.
- 8. Comply with the Food Act 2003, the Australia New Zealand Food Standards Code, Australian Standard 4674 2004, and register the business with Council if the premises is used for the manufacture, preparation, packing, storing, conveying or delivering of food or beverage for sale.
- 9. Contact Sydney Water, Rockdale (Urban Development Section) regarding the water and sewerage services to this development.
- 10. Carry out critical stage inspections in accordance with Section 109E of the EP&A Act 1979 and clauses 162A, 162B and 163 of the EP&A Regulation 2000.

Applications and submissions referred to in this consent may be lodged at:

CBD Level 2, Town Hall House, 456 Kent St, Sydney.

KINGS CROSS 50-52 Darlinghurst Rd, Kings Cross.

GLEBE Customer Service Centre, 186 Glebe Point Rd, Glebe.

If you have any enquiries on any aspect of this consent, contact Silvia Correia ph. 9246 7598, email scorreia@cityofsydney.nsw.gov.au.

## **DEVELOPMENT APPLICATION ASSESSMENT**

Application No: D/2015/1450

Date of Lodgement 9 October 2015

Applicant / Developer BROOKFIELD ENERGY AUSTRALIA

Application Site: 62-98 BROADWAY, CHIPPENDALE; 4050

**BROADWAY & 5120 JONES STREET, ULTIMO** 

Proposal: Construction of a thermal energy and recycled

water link between Central Park and UTS City Campus Building 1. The works involve borehole drilling and installation of pipes under Broadway

and Jones Street.

#### SITE AND SURROUNDING DEVELOPMENT

The site comprises three allotments, including two roads (Broadway and Jones Street) and 'Block 1' in Central park, currently under development. Surrounding land uses are educational, residential and commercial. The site is not a heritage item or located in a conservation area.

A site visit was carried out on 18 November 2015. Photos of the site and surrounds are provided below:



Figure 1: Aerial plan of combined sites.



Figure 2: The general location of the proposed works (to be constructed underground). Looking west on Broadway.



Figure 3: The general location of the proposed works (to be constructed underground). Looking west on Broadway to Central Park.



Figure 4: The general location of the proposed works (to be constructed underground). Looking east on Broadway from Jones Street.



Figure 5: The general location of the proposed works (to be constructed underground) on Jones Street. The pipeline terminates underground.

#### **PROPOSAL**

The proposal is for the construction of a thermal energy and recycled water link between Central Park and UTS City Campus Building 1.

UTS propose to use the existing trigeneration (CTP) plant and recycled water treatment plant (RWTP) which is currently operating in Central Park. In order to serve UTS, four high density polyethylene pipes and an optical fibre cable conduit are proposed under Broadway to connect the two sites.

The link would comprise two flow and return pipes to allow the transfer of chilled water and two pipes to carry recycled water and grey water (return sewer).

The link is to be constructed horizontally by drilling four boreholes into bedrock (Hawkesbury sandstone) about 9 metres below Broadway.

The boreholes are proposed to be drilled from a temporary compound installed on the concrete basement slab of Block 1 in Central Park.

Images of the proposed development are provided below.

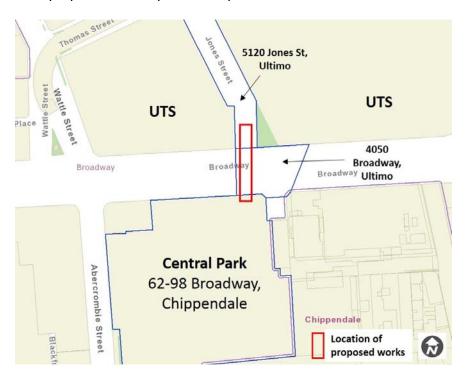


Figure 6: The site comprises three allotments. The location of the proposed works is shown boxed.

The works are contained wholly underground.

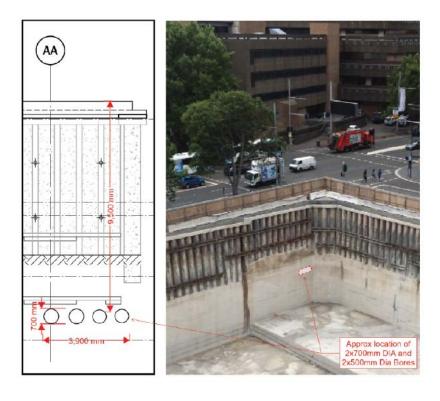


Figure 7: The bore construction commences on Block 1 at Central Park.

#### **Compliance Action**

The development site is comprised principally of roads that are not subject to a current compliance action.

#### **ECONOMIC/SOCIAL/ENVIRONMENTAL IMPACTS**

The application has been assessed under Section 79C of the Environmental Planning and Assessment Act 1979, including consideration of the following matters:

## (a) Environmental Planning Instruments and DCPs.

## State Environmental Planning Policy No 55—Remediation of Land

The aim of SEPP 55 is to ensure that a change of land use will not increase the risk to health, particularly in circumstances where a more sensitive land use is proposed. The City's Health Unit is satisfied that subject to conditions, the proposal is satisfactory in regard to contamination (from the use).

## State Environmental Planning Policy (Infrastructure) 2007 (Infrastructure SEPP)

## Electricity corridors and infrastructure

The provisions of Clauses 44 and 45 of the *Infrastructure SEPP*, relating to impacts on electricity corridors and infrastructure, have been considered in the assessment of the development application. Conditions from Transgrid and Ausgrid have been incorporated in the conditions, as required.

#### Sydney Trains / RailCorp

Under Clause 88 of the *Infrastructure SEPP*, as the projected excavation/ground penetration is within 25 metres and below 2 metres of ground level of a future corridor (Sydney Metro), RailCorp/Sydney Trains' concurrence is required. Concurrence was provided and conditions have been included.

## Roads and Maritime Service (RMS)

The application was submitted as integrated development and referred to the RMS for concurrence. The RMS advised Council that the development was not integrated development under Section 91(3) of the *Environmental Planning and Assessment Act*, as Council is both the consent authority and the approval authority for Broadway.

Notwithstanding, the concurrence of the RMS was provided as required under Section 138 of the *Roads Act 1993*. The terms of that concurrence has been included in the consent conditions.

## Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005 (Deemed SEPP)

The site is located within the designated hydrological catchment of Sydney Harbour and is subject to the provisions of the above SREP. The development is consistent with the controls contained with the deemed SEPP.

#### Sydney LEP 2012 and Sydney LEP 2005

The development site comprises three (3) allotments. The zoning of the allotments and the applicable LEP is as follows:

- 62-98 Broadway, Chippendale zoned City Edge under the Sydney LEP 2005;
- 4050 Broadway, Ultimo zoned SP2 Infrastructure (Classified Road) zone under the Sydney LEP 2012; and
- 5120 Jones Street, Ultimo zoned B4 Mixed Uses under the Sydney LEP 2012.

The proposed use is permissible in each of the zones.

The proposal is limited to works underground. It does not alter the height or FSR of any buildings.

None of the sites are listed heritage items or located in a conservation area.

The development does not impact on any existing trees or vegetation.

## Sydney DCP 2012

The proposal has been considered against the relevant matters to be considered under Sydney Development Control Plan 2012. The proposal is limited to underground works. The infrastructure will not be visible or detract from the public domain.

#### (b) Other Impacts of the Development

The proposed development is capable of complying with the BCA.

It is considered that the proposal will have no significant detrimental effect relating to environmental, social or economic impacts on the locality, subject to appropriate conditions being imposed.

## (c) Suitability of the site for the Development

The proposal is of a nature in keeping with the overall function of the site. The premises are in a commercial/residential surrounding and amongst similar uses to that proposed.

#### (d) CONSULTATION

#### **External Referrals**

Comments were received from:

- Transgrid;
- Ausgrid;

- · RMS; and
- Sydney Trains / RailCorp.

The requirements of those external authorities have been included as consent conditions, where relevant.

#### Internal Referrals

The conditions of other sections of Council have been included in the proposed conditions.

Council's Properties Unit has provided owner's consent for works under roads and footpaths under Council's ownership.

Conditions recommended by other units of Council have been incorporated in the consent conditions, including requirements for a licence under the Roads Act and compliance with a Construction Traffic Management Plan during works.

### NOTIFICATION, ADVERTISING AND DELEGATION (No Submissions received)

The application submitted as integrated development and as such notified and advertised for 30 days in accordance with the provisions of Environmental Planning and Assessment Regulations 2000.

During the exhibition period, the integrated referral authority (RMS) advised that the DA was not integrated development.

No submissions were received.

Comments received from external authorities are discussed above.

#### (e) Public Interest

It is considered that the proposal will have no detrimental effect on the public interest, subject to appropriate conditions being proposed.

## FINANCIAL IMPLICATIONS/S94 CONTRIBUTION

#### **Section 94 Contributions**

The development is not subject to a Section 94 Contribution.

#### CONCLUSION

Having regard to all of the above matters, it is considered that the proposal generally satisfies the relevant strategy, objectives and provisions of the Sydney LEP 2012 and the Sydney DCP 2012, is acceptable and is recommended for approval subject to conditions as shown in the attached Decision Notice.

#### The application is approved under delegated authority of Council.

The undersigned declare, to the best of their knowledge that they have no interest, pecuniary or otherwise, in this development application or persons associated with it and have provided an impartial assessment.

Report Prepared by	<b>/</b> :	Application	determined by	<b>/</b> :

Silvia Correia Chris Corradi

Senior Planner Area Planning Manager

City of Sydney Town Hall House 456 Kent Street Sydney NSW 2000

Telephone +61 2 9265 9333 Fax +61 2 9265 9222 council@cityofsydney.nsw.gov.au GPO Box 1591 Sydney NSW 2001 cityofsydney.nsw.gov.au

1 July 2016

BROOKFIELD ENERGY AUSTRALIA Level 26 135 King St SYDNEY NSW 2000

NOTICE OF DETERMINATION - APPROVAL APPLICATION NO: D/2016/434

Dear Sir/Madam,

Please find enclosed the Notice of Determination and advisory notes relating to your development application for 5120 Jones Street, ULTIMO NSW 2007.

A copy of the DA Assessment Report can be viewed online at the City of Sydney's website http://development.cityofsydney.nsw.gov.au/DASearch/or if you would like to purchase a copy please visit Council at one of the following locations:

CBD/One Stop Shop Town Hall House Level 2, 456 Kent Street Sydney; Kings Cross Neighbourhood Service Centre 50-52 Darlinghurst Road Kings Cross; Glebe Customer Service Centre, 186 Glebe Point Rd, Glebe; Redfern Neighbourhood Service Centre 158 Redfern St Redfern.

If further information is required, please contact Alistair Smith ph. 9265 9112, email asmith1@cityofsydney.nsw.gov.au.

Yours faithfully

ALISTAIR SMITH SENIOR PLANNER

city of Villages

City of Sydney Town Hall House 456 Kent Street Sydney NSW 2000

Telephone +61 2 9265 9333 Fax +61 2 9265 9222 council@cityofsydney.nsw.gov.au GPO Box 1591 Sydney NSW 2001 cityofsydney.nsw.gov.au



## **NOTICE OF DETERMINATION - APPROVAL**

Issued under Section 80(1)(a) of the Environmental Planning and Assessment Act 1979

Development Application No.	D/2016/434
Applicant	BROOKFIELD ENERGY AUSTRALIA
Land to be developed	5120 JONES STREET , ULTIMO NSW 2007
Approved development	Construction of services trenches below Jones St (between Broadway & Thomas St) containing new pipes to provide thermal energy, recycled water and data link between Central Park and UTS City Campus Building CB02.
Cost of development	\$259,600.00
Determination	The application was determined under delegation of Council and was granted consent <b>subject to the conditions</b> in Schedules 1 and 2.
Other Approvals	Before commencing building work or subdivision work, a relevant Construction Certificate must be obtained from Council or an Accredited Certifier. Council must be appointed the Principal Certifying Authority for any subdivision work under the Act.
Consent is to operate from	1 July 2016
Consent will lapse on	1 July 2021

## **Reasons for conditions**

Unrestricted consent may affect the environmental amenity of the area and would not be in the public interest.

## Right of appeal

If you are dissatisfied with this decision, Section 97 of the Environmental Planning and Assessment Act 1979 gives you the right to appeal to the Land and Environment Court within six (6) months after the date on which you receive this notice.

Section 82A of the Environmental Planning and Assessment Act 1979 provides that the applicant may request the Council to review the determination. The request must be made in writing (or on the review application form) together with payment of the appropriate fee. The review must be lodged and determined within six (6) months of the date in which you received this notice.

city of Villages

Note: To enable the section 82A review to be considered within the six (6) month time frame prescribed under the Environmental Planning and Assessment Act 1979, it is advisable to lodge the application for review under Section 82A as soon as possible (within 4 months) to facilitate the statutory timeframes.

Section 82A does not apply to complying development, designated development, integrated development or a determination made by Council under Division 4 in respect of Crown applications. For further information please contact **Alistair Smith on ph. 9265 9112.** 

per.

**GRAHAM JAHN AM** 

Director - City Planning, Development & Transport

#### **CONDITIONS OF CONSENT**

#### **SCHEDULE 1A**

## APPROVED DEVELOPMENT/DESIGN MODIFICATIONS/COVENANTS AND CONTRIBUTIONS/USE AND OPERATION

#### (1) APPROVED DEVELOPMENT

(a) Development must be in accordance with Development Application No. D/2016/434 dated 13 April 2016 and the following drawings prepared by WSP Buildings Pty Ltd:

Drawing Number	Drawing Name	Date
WSP-M-01 Rev B	Mechanical Services Plan Layout	24.03.2016

and as amended by the conditions of this consent.

(b) In the event of any inconsistency between the approved plans and supplementary documentation, the plans will prevail.

## (2) LICENCE UNDER ROADS ACT

Prior to the commencement of works, the owner(s) of the properties adjoining the subject portion of Jones Street are to make a separate application for a Licence under Section 139(1)(d) of the *Roads Act 1993*, in respect of the stratum below Jones Street occupied by the conduits for private service connections beneath the surface of that public road.

Such Consent is to be subject to terms and conditions considered necessary to protect Council's interests and those of the public, including indemnifying Council against costs and damages arising from the proposal and is subject to the Councils fees and charges.

All costs associated with such Licence are to be borne by the owner(s) of the properties adjoining the subject portion of Jones Street.

#### (3) SECTION 138 APPROVAL

Prior to the commencement of any work within the public way, a separate application is to be made to Council to obtain approval for the works and installation of private conduits under Section 138 of the *Roads Act 1993*.

## (4) DESIGN AND CONSTRUCTION OF WORKS

(a) Detailed engineering, road, drainage and infrastructure works, design and construction plans for boring of lateral holes, the construction of pits and trenches (if required), installation of conduits, and reinstatement of the roadway and footway within Jones Street are to be submitted to Council and approval gained prior any works commencing. The design and documentation is to include any requirements and approvals from external

parties such as public utility service authorities and is to be in accordance with Council's "Development Specifications for Civil Works Design and Construction".

- (b) The submission to Council required under (a) above is to provide plans and specifications sufficient to describe in detail the design, scope and extent of all proposed road, drainage and infrastructure works for the lateral boreholes, the construction of trenches (if required) and reinstatement of the roadway and footway prepared and certified by a Professional Engineer. The engineering plans are to include:
  - (i) Details and specifications for the roadway formation restoration works required upon installation of the private service conduits,
  - (ii) Details and design of any public stormwater system deviation or relocation as a consequence of the proposed works,
  - (iii) Details of design and specifications for the reinstatement of the footway formation, kerb and gutter and carriageway formation upon installation of the private service conduits,
  - (iv) Details of structures and conduits for the provision and installation of any public utility services and any adjustment or deviation to existing services required,
  - (v) Details of structures, procedures and measures adopted to address erosion and sediment control during the earthworks and construction process,
  - (vi) Details of traffic management and site management procedures during the construction process,
- (c) The certification is to include confirmation from a Professional Engineer that the design complies with Council's Development Specifications for Civil Works Design and Construction.

## (5) COMPLIANCE WITH DEMOLITION, EXCAVATION & CONSTRUCTION NOISE AND VIBRATION MANAGEMENT PLAN

(a) All works conducted on site which form part of this development must be carried out in accordance with the submitted Demolition, Excavation and Construction Noise Management Plan prepared by PND Civil Group Pty Ltd dated 31/03/2016 (Ref: IMS-D-008 Noise Management Plan V1).

## (6) COMPLIANCE WITH CONSTRUCTION TRAFFIC MANAGEMENT PLAN

All works conducted on site which form part of this development must be carried out in accordance with the Traffic Management Plan prepared by PND Civil Group Pty Ltd, dated 31/03/2016 (Ref: IMS-D-008 Traffic Management Plan V1).

#### **SCHEDULE 1B**

## PRIOR TO CONSTRUCTION CERTIFICATE/COMMENCEMENT OF WORK/HEALTH AND BUILDING

## (7) PUBLIC DOMAIN DAMAGE DEPOSIT

A Public Domain Damage Deposit calculated on the basis of 7 lineal metres asphalt footway along Jones Street must be lodged with Council in accordance with the City of Sydney's adopted Schedule of Fees and Charges. The Public Domain Damage Deposit must be submitted as an unconditional bank guarantee in favour of Council as security for repairing any damage to the public domain in the vicinity of the site.

The guarantee must be lodged with Council prior to an approval for demolition being granted or a Construction Certificate being issued, whichever is earlier.

The Bank Guarantee will be retained in full until the final Occupation Certificate has been issued and any rectification works to the footway and Public Domain are completed to Council's satisfaction. On satisfying the above requirements 90% of the total securities will be released, with the remaining 10% to be retained for the duration of the 12 months Defect Liability Period.

#### (8) COUNCIL TREE PROTECTION

- (a) All trees within the site compound must be protected in accordance with the Australian Standard 4970 Protection of Trees on Development Sites and as follows:
- (b) All staff working on the contract shall be adequately inducted to ensure they are aware of all tree protection requirements described below.
- (c) Tree trunk and major limb protection shall be installed on all trees within the site compound and certification provided to Council's Area Planning Manager prior to the issuing of the Construction Certificate. The protection shall be installed by a qualified Arborist (AQF 3) and must include;
  - (i) An adequate clearance, minimum 500mm, must be provided between any structure and/or machinery and tree branches, limbs and trunk at all times,
  - (ii) Tree trunk/s and major branches must be protected by wrapped hessian or similar material to limit damage, and
  - (iii) Timber planks (50mm x 100mm or similar) shall be placed around tree trunk/s. The timber planks shall be spaced at 100mm intervals, and must be fixed against the trunk with tie wire, or strapping. The hessian and timber planks must not be fixed to the tree in any instance, or in any fashion.
  - (iv) Tree trunk and major branch protection is to remain in place for the duration of construction and development works, and shall be removed by the contractor at the completion of the project.
- (d) Temporary signs, or any other items, shall not be fixed or attached to any street tree.

- (e) Excavation must be undertaken using non-destructive methods (such as by hand or with a hydro vacuum) in any area known to, or suspected of having roots larger than 50mm diameter.
- (f) During any excavation works, the use of mechanical equipment must be adequately placed away from existing trees to ensure damage does not occur during operation. Machinery must stop and Council's Street Tree Coordinator or Tree Management Officer must be contact immediately, if tree roots greater than 50mm diameter are encountered during the works.
- (g) The consent from Council's Street Tree Coordinator or Tree Management Officer must be obtained prior to the undertaking of any tree pruning works, including tree roots greater than 50mm in diameter. Only minor pruning works will be approved by Council.
- (h) Stockpiling, storage or mixing of materials, washing of equipment, vehicle parking, disposal of liquids, machinery repairs and refuelling, disposal of building materials such as cement slurry, must not occur within 5 metres of the trunk of any tree.
- (i) Siting of temporary structures and site amenities require during the works must not be placed on any trees pits or garden areas surrounding existing trees. A minimum clearance of 1.5 metres must be provided between by any temporary structures and site amenities and tree trunks and/or branches.
- (j) Any damage sustained to any trees is to be immediately reported to the Council's Street Tree Contract Coordinator or Tree Management Officer, to determine required remedial action.
- (k) Any damage caused to Council's trees as a result of the works which cannot be rectified, as directed by Council's Street Tree Coordinator or Tree Management Officer, will result in the applicant being responsible for full replacement of trees, and all associated costs recovered by Council.

#### (9) TRANSGRID REQUIREMENTS

- (a) All works when working within a TransGrid easement/and or directly above an underground cable/stratum tunnel must be planned and carried out in accordance with the following documentation:
  - (i) Requirements for Working In the Vicinity of TransGrid's Underground Cables (please refer to the attached)
  - (ii) NSW WorkCover Work Near <u>Underground</u> Assets Guide 2007 (please refer to the attached)
  - (iii) NSW WorkCover 'Work Near Overhead Power Lines' Code of Practice 2006 (link attached below): <a href="http://www.workcover.nsw.gov.au/health-and-safety/industry-safety/electrical-and-power/power-lines/publications/work-near-overhead-power-lines-code-of-practice-2006">http://www.workcover.nsw.gov.au/health-and-safety/industry-safety/electrical-and-power/power-lines/publications/work-near-overhead-power-lines-code-of-practice-2006</a>
- (b) No excavation and drilling (for example rock anchors) are undertaken near TransGrid's easement and subterranean infrastructure under the abovementioned subject lot. Any work on the subject site must not damage the structural integrity of TransGrid's nearby subterranean tunnel

that is imminently close thereto. Please note, if any damage arises to TransGrid's tunnel and the high voltage infrastructure situated therein on account of the development, TransGrid will seek full reimbursement of costs from the developer. This would include penalty fees arising from any outages to the transmission cables caused by the development.

Note: TransGrid's Asset Management Contact Representative: Jeffree Cairns
Transmission Lines and Cables Asset Strategist
(02) 9620 0639

(c) The applicant/developer is to conduct a 'Dial before you dig' (DBYD) prior to commencement on site and carry out due diligence.

## (10) ROAD OPENING PERMIT

A separate Road Opening Permit under Section 138 of the *Roads Act 1993* must be obtained from Council prior to the commencement of any:

- (a) Excavation in or disturbance of a public way, or
- (b) Excavation on land that, if shoring were not provided, may disturb the surface of a public road (including footpath).

# (11) APPLICATION FOR HOARDINGS AND SCAFFOLDING INSTALLED ON OR ABOVE A PUBLIC ROAD AND OPERATING HOISTING DEVICES INCLUDING BUILDING MAINTENANCE UNITS OVER A PUBLIC ROAD

- (a) A separate application under Section 68 of the Local Government Act 1993 and Section 138 of the Roads Act 1993 is to be made to Council to erect a hoarding and/or scaffolding (temporary structures) on or above a public road (footway and/or roadway).
- (b) Where an approval (Permit) is granted allowing the placement of temporary structures on or above a public road the structures must comply fully with Council's *Hoarding and Scaffolding Policy; Guidelines for Hoardings and Scaffolding;* and the conditions of approval (Permit) granted including:
  - (i) maintaining a current and valid approval for the full duration that the temporary structure/s is in place;
  - (ii) maintaining temporary structure/s in a structurally sound and stable condition for the full duration of installation (Clause 2.11.1);
  - (iii) bill posters and graffiti being removed within 24 hours of their placement (Clause 2.11.2);
  - (iv) maintaining temporary structures and the public place adjoining the work site in a clean and tidy condition including repainting and/or repair of graphics (Clauses 2.11.1, 2.11.4, 2.14.1 and 3.9.3);
  - (v) maintaining a watertight deck (Type B hoardings) to prevent liquids including rainwater, falling onto the footway/roadway surfaces (Clauses 3.9.1 and 3.9.4);

- (vi) approved site sheds on the decks of a Type B hoarding being fully screened from the public place (Clause 3.9.5);
- (vii) material and equipment not being placed or stored on the deck of Type B hoardings, unless specifically approved by Council (Clause 3.9.4);
- (viii) providing and maintaining operational artificial lighting systems under Type B hoardings including at high-bay truck entry points (Clause 3.9.9); and
- (ix) ensuring all required signage is provided and maintained (Clauses 3.9.3, 3.9.6, 3.9.8, 3.10.1 and 4.2).

If it is proposed to operate a hoisting device including a building maintenance unit above a public road which swings, hoists material/equipment and/or slews any part of the device over the public road, a separate application under Section 68 of the *Local Government Act 1993* and Section 138 of the *Roads Act 1993* must be made to Council to obtain approval.

**Note**: 'Building maintenance unit' means a power-operated suspended platform and associated equipment on a building specifically designed to provide permanent access to the faces of the building for maintenance (*Work Health and Safety Regulation 2011*).

## (12) UTILITY SERVICES

To ensure that utility authorities are advised of the development:

- (a) Prior to the issue of a Construction Certificate a survey is to be carried out of all utility services within and adjacent to the site including relevant information from utility authorities and excavation if necessary, to determine the position and level of services.
- (b) Prior to the commencement of work the applicant is to obtain written approval from the utility authorities (e.g. Energy Australia, Sydney Water, and Telecommunications Carriers) in connection with the relocation and/or adjustment of the services affected by the construction of the underground structure. Any costs in the relocation, adjustment or support of services are to be the responsibility of the developer.

#### (13) WASTE AND RECYCLING MANAGEMENT - MINOR

The proposal must comply with the relevant provisions of Council's *Policy for Waste Minimisation in New Developments 2005* which requires facilities to minimise and manage waste and recycling generated by the proposal.

## (14) EMISSIONS

- (a) The use of the premises must not give rise to the emission of gases, vapours, dusts or other impurities which are a nuisance, injurious or prejudicial to health.
- (b) Gaseous emissions from the development must comply with the requirements of the Protection of the *Environment Operations Act*, 1997

and Regulations. Uses that produce airborne particulate matter must incorporate a dust collection system.

### (15) ASBESTOS REMOVAL WORKS

(a) All works removing asbestos containing materials must be carried out by a suitably licensed asbestos removalist duly licensed with Workcover NSW, holding either a Friable (Class A) or a Non- Friable (Class B) Asbestos Removal Licence which ever applies.

## (16) CLASSIFICATION OF WASTE

Prior to the exportation of waste (including fill or soil) from the site, the waste materials must be classified in accordance with the provisions of the Protection of the *Environment Operations Act 1997* and the *NSW DECC Waste Classification Guidelines, Part1: Classifying Waste (July 2009).* The classification of the material is essential to determine where the waste may be legally taken. The *Protection of the Environment Operations Act 1997* provides for the commission of an offence for both the waste owner and the transporters if the waste is taken to a place that cannot lawfully be used as a waste facility for the particular class of waste. For the transport and disposal of industrial, hazardous or Group A liquid waste advice should be sought from the EPA.

## (17) DISCHARGE OF CONTAMINATED GROUNDWATER

Prior approval must be sought form the City's Public Domain Department to discharge any groundwater into the City's stormwater drainage system.

Other options for the disposal of groundwater include disposal to sewer with prior approval from Sydney Water or off-site disposal by a liquid waste transporter for treatment/disposal to an appropriate waste treatment/processing facility.

#### (18) IMPORTED FILL MATERIALS

All fill imported onto the site shall be validated to ensure the imported fill is suitable for the proposed land use from a contamination perspective. Fill imported on to the site shall also be compatible with the existing soil characteristic for site drainage purposes.

The City may require details of appropriate validation of imported fill material to be submitted with any application for future development of the site. Hence all fill imported onto the site should be validated by either one or both of the following methods during remediation works:

- (a) Imported fill should be accompanied by documentation from the supplier which certifies that the material is not contaminated based upon analyses of the material for the known past history of the site where the material is obtained; and/or
- (b) Sampling and analysis of the fill material shall be conducted in accordance with NSW EPA (1995) Sampling Design Guidelines.

## (19) NOTIFICATION - NEW CONTAMINATION EVIDENCE

Any new information which comes to light during remediation, demolition or construction works which has the potential to alter previous conclusions about site contamination shall be notified to the City's Area Planning Manager and the Principal Certifying Authority immediately.

## (20) STOCKPILES

- (a) No stockpiles of soil or other materials shall be placed on footpaths or nature strips unless prior approval has been obtained from the City's Construction Regulation Unit.
- (b) All stockpiles of soil or other materials shall be placed away from drainage lines, gutters or stormwater pits or inlets.
- (c) All stockpiles of soil or other materials likely to generate dust or odours shall be covered.
- (d) All stockpiles of contaminated soil shall be stored in a secure area and be covered if remaining more than 24 hours

#### **SCHEDULE 1C**

#### **DURING CONSTRUCTION/PRIOR TO OCCUPATION/COMPLETION**

### (21) HOURS OF WORK AND NOISE - OUTSIDE CBD

The hours of construction and work on the development must be as follows:

- (a) All work, including building/demolition and excavation work, and activities in the vicinity of the site generating noise associated with preparation for the commencement of work (e.g. loading and unloading of goods, transferring of tools etc.) in connection with the proposed development must only be carried out between the hours of 7.30am and 5.30pm on Mondays to Fridays, inclusive, and 7.30am and 3.30pm on Saturdays, with safety inspections being permitted at 7.00am on work days, and no work must be carried out on Sundays or public holidays.
- (b) All work, including demolition, excavation and building work must comply with the City of Sydney Code of Practice for Construction Hours/Noise 1992 and Australian Standard 2436 - 2010 Guide to Noise Control on Construction, Maintenance and Demolition Sites.

Note: Works may be undertaken outside of hours, where it is required to avoid the loss of life, damage to property, to prevent environmental harm and/or to avoid structural damage to the building. Written approval must be given by the Construction Regulation Unit, prior to works proceeding

The City of Sydney Code of Practice for Construction Hours/Noise 1992 allows extended working hours subject to the approval of an application in accordance with the Code and under Section 96 of the Environmental Planning and Assessment Act 1979.

## (22) NOTIFICATION OF EXCAVATION WORKS OR USE OF HIGH NOISE EMISSION APPLIANCES/PLANT

The immediately adjoining neighbours must be given a minimum of 48 hours notice that excavation, shoring or underpinning works or use of high noise emission appliances / plant are about to commence.

### (23) USE OF HIGH NOISE EMISSION APPLIANCES / PLANT

- (a) The operation of high noise emission appliances, plant and/or machinery such as pile drivers, rock breakers and hydraulic hammers and those which are not listed in Groups B, C, D, E or F of Schedule 1 of the City of Sydney Code of Practice for Construction Hours/Noise 1992 and Australian Standard 2436-2010 Guide to Noise Control on Construction, Maintenance and Demolition Sites is restricted to the hours of 7:30am to 12:30pm and 1:30pm to 5:30pm Monday to Friday only.
- (b) All reasonable and feasible steps must be undertaken to ensure that the work, including demolition, excavation and building complies with the City of Sydney Code of Practice for Construction Hours/Noise 1992 and Australian Standard 2436- 2010 Guide to Noise Control on Construction, Maintenance and Demolition Sites.

#### NOTICE OF DETERMINATION – APPROVAL D/2016/434

### (24) CONNECTION TO SEWERS OF SYDNEY WATER CORPORATION

Waste water arising from the use must be directed to the sewers of the Sydney Water Corporation (SWC) under a Trade Waste License Agreement. The pretreatment of wastewater may be a requirement of the Corporation prior to discharge to the sewer. Details of the Corporation's requirements should be obtained prior to the commencement of construction work.

### (25) COVERING OF LOADS

All vehicles involved in the excavation and/or demolition process and departing the property with demolition materials, spoil or loose matter must have their loads fully covered before entering the public roadway.

### (26) HAZARDOUS AND INDUSTRIAL WASTE

Hazardous and/or industrial waste arising from the demolition/operational activities must be removed and/or transported in accordance with the requirements of the NSW Work Cover Authority pursuant to the provisions of the following:

- (a) Protection of the Environment Operations Act 1997
- (b) Protection of the Environment Operations (Waste) Regulation 2005
- (c) Waste Avoidance and Resource Recovery Act 2001
- (d) Work Health and Safety Act 2011
- (e) Work Health and Safety Regulation 2011.

#### (27) VEHICLE CLEANSING

Prior to the commencement of work, suitable measures are to be implemented to ensure that sediment and other materials are not tracked onto the roadway by vehicles leaving the site. It is an offence to allow, permit or cause materials to pollute or be placed in a position from which they may pollute waters.

#### **NOTICE OF DETERMINATION – APPROVAL D/2016/434**

### **SCHEDULE 2**

### PRESCRIBED CONDITIONS

The prescribed conditions in accordance with Division 8A of the *Environmental Planning and Assessment Regulation 2000* apply:

Clause 98	Compliance with <i>Building Code of Australia</i> and insurance requirements under the <i>Home Building Act 1989</i>
Clause 98A	Erection of signs
Clause 98B	Notification of Home Building Act 1989 requirements
Clause 98C	Conditions relating to entertainment venues
Clause 98D	Conditions relating to maximum capacity signage
Clause 98E	Conditions relating to shoring and adequacy of adjoining property

Refer to the NSW State legislation for full text of the clauses under Division 8A of the *Environmental Planning and Assessment Regulation 2000*. This can be accessed at: <a href="http://www.legislation.nsw.gov.au">http://www.legislation.nsw.gov.au</a>

#### IMPORTANT ADDITIONAL INFORMATION

**Advisory note**: The State Government has commenced planning for the construction of the CBD South East Light Rail (CSELR). You may need to consider the potential impacts of this project in programming your development. The CSELR route includes Alfred St, George St, Rawson Place, Eddy Ave, Chalmers St, and Devonshire St. For construction and programming information contact the Transport for NSW Infoline on 1800 684 490 or www.transport.nsw.gov.au/projects.

#### The Environmental Planning and Assessment Act 1979 requires you to:

- 1. Obtain a *Construction Certificate* prior to the commencement of any works. An application may be lodged with Council, or you may apply to a private accredited certifier for a Construction Certificate. An accredited certifier **must obtain Council's approval** to certain conditions of this development consent, where indicated before issuing the Construction Certificate.
- 2. Note: it is compulsory to lodge digital copies of applications, including plans and documentation if lodging an application with Council. Please refer to the link below for any further information about digital requirements and electronic files.
  - http://www.cityofsydney.nsw.gov.au/development/application-guide/application-process/digital-requirements.
- 3. Nominate a *Principal Certifying Authority* (PCA) which may be either Council or an accredited certifier and notify Council of that appointment. You **cannot lawfully** commence works without complying with this requirement.
- 4. Give Council at least two days notice of your intention to commence the erection of a building **before** commencing construction works. You cannot lawfully commence works without complying with this requirement.
- 5. Obtain an *Occupation Certificate* before commencing occupation or commencing to use the building or on the completion of other works including the erection of a sign. You cannot lawfully commence occupation or the use of a building without complying with this requirement.

### You may also need to:

- 6. Lodge an *Application for Approval* under Section 68 of the *Local Government Act 1993* for an activity under that Act, including the **erection of a hoarding.**
- 7. Lodge an *Application for Subdivision* to obtain a *Subdivision Certificate* if a land (including stratum) subdivision is proposed and an Application for Subdivision to obtain *Strata Title Subdivision* under the relevant Strata Titles Act, if strata title of the development is proposed.
- 8. Comply with the Food Act 2003, the Australia New Zealand Food Standards Code, Australian Standard 4674 2004, and register the business with Council if the premises is used for the manufacture, preparation, packing, storing, conveying or delivering of food or beverage for sale.
- 9. Contact Sydney Water, Rockdale (Urban Development Section) regarding the water and sewerage services to this development.
- 10. Carry out critical stage inspections in accordance with Section 109E of the EP&A Act 1979 and clauses 162A, 162B and 163 of the EP&A Regulation 2000.

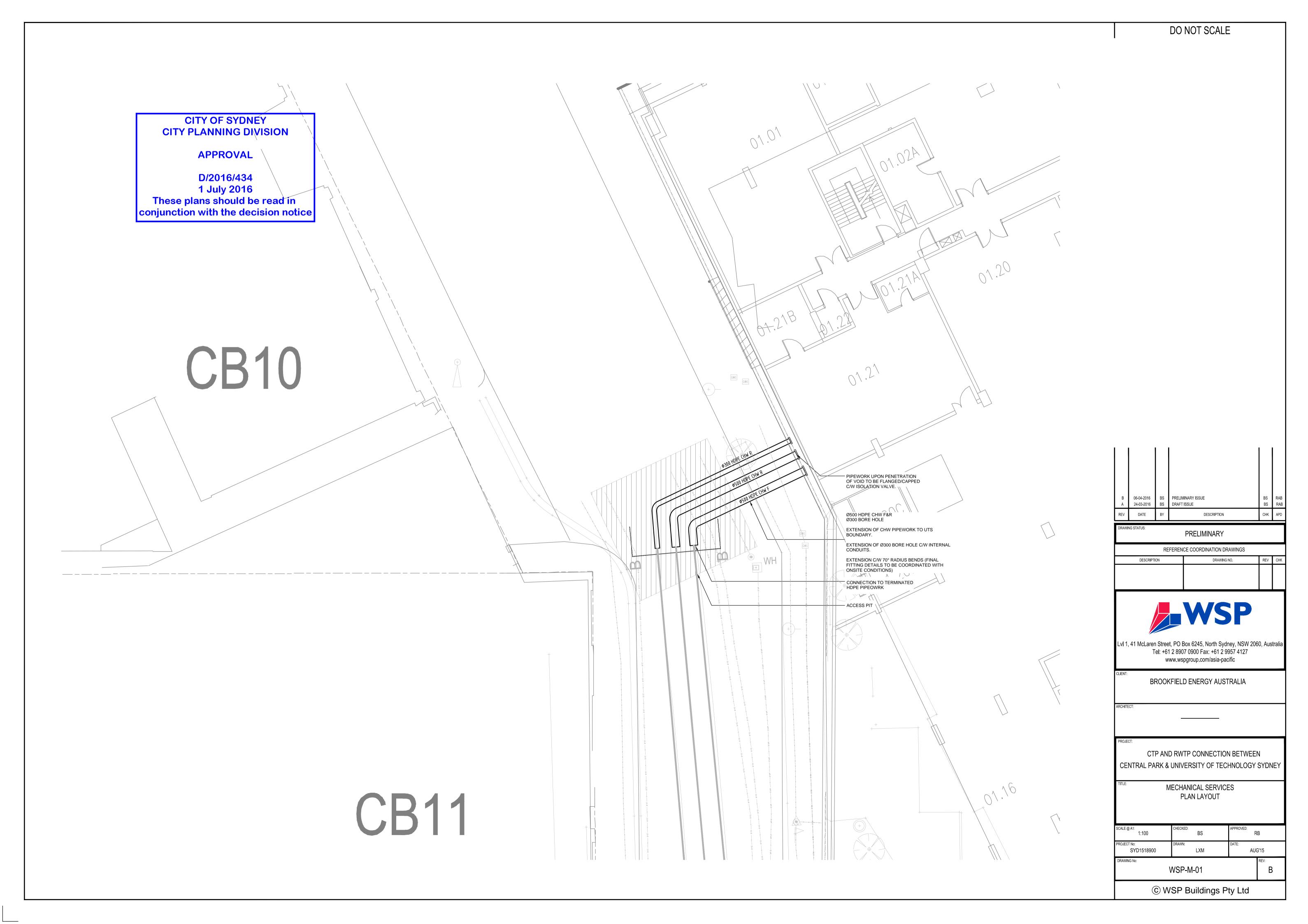
Applications and submissions referred to in this consent may be lodged at:

CBD Level 2, Town Hall House, 456 Kent St, Sydney.

KINGS CROSS 50-52 Darlinghurst Rd, Kings Cross.

GLEBE Customer Service Centre, 186 Glebe Point Rd, Glebe.

If you have any enquiries on any aspect of this consent, contact Alistair Smith ph. 9265 9112, email asmith1@cityofsydney.nsw.gov.au.



### **DEVELOPMENT APPLICATION ASSESSMENT**

Application No: D/2016/434

Date of Lodgement 13-Apr-2016

Applicant BROOKFIELD ENERGY AUSTRALIA

Architect WSP BUILDINGS PTY LTD

Developer BROOKFIELD ENERGY AUSTRALIA

Application Site: 5120 JONES STREET, ULTIMO NSW 2007

Proposal: Construction of services trenches below Jones St

(between Broadway & Thomas St) containing new pipes to provide thermal energy, recycled water and data link between Central Park and UTS City Campus Building CB02. Proposed construction hours are 7.00am to 6.00pm Mondays to Fridays.

#### SITE AND SURROUNDING DEVELOPMENT

The site comprises one allotment, which forms part of Jones Street, Ultimo. Surrounding land uses are educational, residential and commercial. The site is not a heritage item or located in a conservation area.

A site visit was carried out on 3 May 2016. Images of the site and surrounds are provided below:

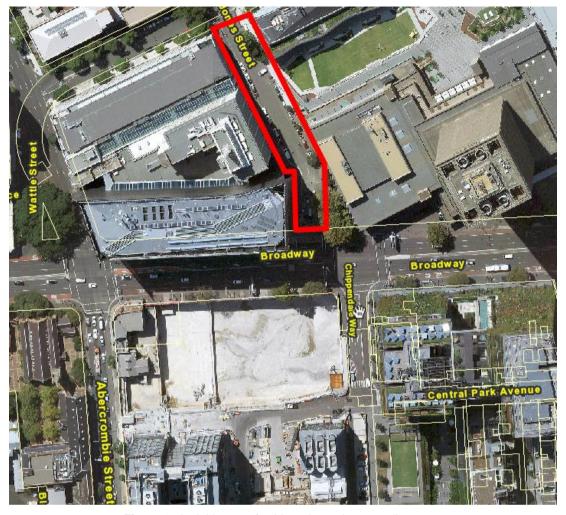


Figure 1: Aerial image of subject site and surrounding area.



Figure 2: Location of proposed works (Source: applicant's SEE).



**Figure 3:** View from the site looking south towards Broadway and Central Park. The general location of the proposed excavation works marked with a cross and proposed bore works and underground services marked in a dashed line.



**Figure 4:** View from the site towards the western elevation of UTS Building CB02 (1-73 Broadway, Ultimo). The general location of the proposed excavation works marked with a cross and proposed bore works and underground services marked in a dashed line.

#### **PROPOSAL**

UTS propose to use the existing trigeneration (CTP) plant and recycled water treatment plant (RWTP) which is currently operating in Central Park. In order to serve UTS.

The works are a continuation of the works approved and constructed under D/2015/1450 (discussed below). The proposal is for the construction of service trenches below Jones Street, containing new pipes to provide a thermal energy and recycled water link between Central Park and UTS City Campus Building CB02. The link will comprise two flow and return pipes to allow the transfer of chilled water and two pipes to carry recycled water and grey water (return sewer), as well as a fibre optic data link cable.

The proposed development works include:

- Excavation of a 5m x 5m wide pit to a depth of 5.5m within Jones Street to locate the existing pipes (installed under D/2015/1450);
- Horizontal bed bore drilling from the excavated pit, below the road surface, to a void area at the boundary between the UTS basement brick wall of Building CB02 and bedrock of Jones Street. At this point the services will be temporarily capped in preparation for connection (Figure 5); and
- Proposed hours of construction works Monday to Friday 7:00am to 6:00pm, for a duration of 15 working days.

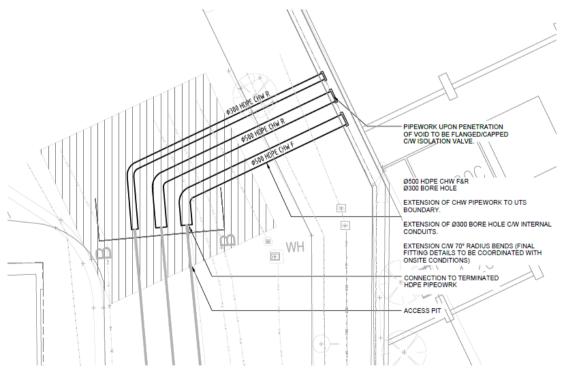


Figure 5: View from the site looking south towards Broadway and Central Park.

#### HISTORY RELEVANT TO THE DEVELOPMENT APPLICATION

D/2013/242 – approved 15 April 2013, Construction of services trenches below Jones Street at University of Technology Sydney. The consent provided for chilled and hot water reticulation as part of the decentralised energy network connecting the UTS campus.

D/2015/1450 – approved 6 January 2016, Construction of a thermal energy and recycled water link between Central Park and UTS City Campus Building 1, involving borehole drilling and installation of pipes under Broadway and Jones Street. Four high density polyethylene pipes and an optical fibre cable conduit have been installed under Broadway to connect the two sites

### **Development Application**

#### Compliance Action

The site is comprised of a road and is not subject to a current compliance action.

#### **ECONOMIC/SOCIAL/ENVIRONMENTAL IMPACTS**

The application has been assessed under Section 79C of the Environmental Planning and Assessment Act 1979, including consideration of the following matters:

### (a) Environmental Planning Instruments and DCPs.

#### State Environmental Planning Policy No 55—Remediation of Land

The aim of SEPP 55 is to ensure that a change of land use will not increase the risk to health, particularly in circumstances where a more sensitive land use is proposed. The City's Health Unit is satisfied that subject to conditions, the proposal is satisfactory in regard to contamination.

### State Environmental Planning Policy (Infrastructure) 2007

The provisions of SEPP (Infrastructure) 2007 have been considered in the assessment of the development application.

The application site does not affect a classified road, is not located within 25m of a rail corridor or within an interim rail corridor. The works are not anticipated to impact on any existing utility distribution network or facilities.

# Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005 (Deemed SEPP)

The site is within the Sydney Harbour Catchment and eventually drains into the Harbour. However, the site is not located in the Foreshores Waterways Area or adjacent to a waterway and therefore, with the exception of the objective of improved water quality, the objectives of the SREP are not applicable to the proposed

development. The development is consistent with the controls contained with the deemed SEPP.

### Sydney LEP 2012

The development site comprises 5120 Jones Street, Ultimo, which is zoned B4 Mixed Use under the Sydney LEP 2012.

The proposed use is defined as a 'water reticulation system' and is permissible with consent in the zone.

The proposal is limited to works underground. It does not alter the height or FSR of any building.

The site does not contain any listed heritage items and is not located in a heritage conservation area.

Appropriate conditions of consent are recommended by Council's Tree Management Officer, to ensure the development does not impact on any existing trees or vegetation.

### Sydney DCP 2012

The proposal has been considered against the relevant matters to be considered under Sydney Development Control Plan 2012. The proposal is limited to underground works. The infrastructure will not be visible or detract from the public domain.

#### **ISSUES**

#### Noise

The proposed works are predicted to exceed the 'noise affected' criteria from the NSW Interim Construction Guidelines, but comply with the 'highly affected' criteria. The application includes a Construction Noise Management Plan, which includes specified respite periods to restrict the exposure to the noise levels predicted. The City's Health and Building Unit, have reviewed the plan and are satisfied that the noise effects will be acceptable. A condition is recommended requiring compliance with the Construction Noise Management Plan.

#### Access

The proposal requires the closure of the eastern footpath along Jones Street for the 15 day work period. An alternative footpath is located on the western side of Jones Street and appropriate signage will be installed.

A detailed Construction Traffic Management Plan has been submitted, reviewed and approved by City Infrastructure & Traffic Operations. A condition of consent is recommended to address compliance with this plan.

### (b) Other Impacts of the Development

The proposed development is capable of complying with the BCA.

It is considered that the proposal will have no significant detrimental effect relating to environmental, social or economic impacts on the locality, subject to appropriate conditions being imposed.

### (c) Suitability of the site for the Development

The proposal is considered to be suitable for the site. The proposal supports the surrounding commercial and educational uses.

### (d) CONSULTATION

#### **External Referrals**

The application was referred to Ausgrid and Transgrid, each for a period of 21 days.

No comments were received from Ausgrid.

Transgrid advised, the subject site will be situated well away from Transgrid's two underground cables. Transgrid provided conditions that have been incorporated into the recommended conditions of consent.

#### Internal Referrals

The application was discussed with the Environmental Health; Public Domain; Surveyors; Transport and Access; Tree Management; and Properties Unit who advised that the proposal is acceptable subject to the recommended conditions.

Council's Properties Unit has provided owner's consent for works under roads and footpaths under Council's ownership.

Conditions from the Construction and Building Unit and Surveyors imposed on D/2014/1450 are recommended to be replicated on this proposal.

Conditions recommended by other units of Council include, requirements for a licence under the Roads Act and compliance with a Noise Management Plan and Construction Traffic Management Plan during works.

### NOTIFICATION, ADVERTISING AND DELEGATION (No Submissions received)

In accordance with Schedule 1 of the Sydney DCP 2012, the proposed development is required to be notified. As such the application was notified for a period of 14 days, no submissions were received.

### (e) Public Interest

It is considered that the proposal will have no detrimental effect on the public interest, subject to appropriate conditions being proposed.

#### **FINANCIAL IMPLICATIONS**

#### **S94 CONTRIBUTION**

The development is exempt from the provisions of the Ultimo Pyrmont Contributions Plan 1994 as it provides for infrastructure and does not result in additional demand for public amenity or services.

#### CONCLUSION

Having regard to all of the above matters, it is considered that the proposal for an extension to the existing 'water reticulation system' generally satisfies the relevant strategy, objectives and provisions of the Sydney LEP 2012 and the Sydney DCP 2012, is acceptable and is recommended for approval subject to conditions as shown in the attached Decision Notice.

### The application is Approved under delegated authority of Council.

The undersigned declare, to the best of their knowledge that they have no interest, pecuniary or otherwise, in this development application or persons associated with it and have provided an impartial assessment.

Report Prepared by: Application determined by:

Alistair Smith Sue McMahon

Senior Planner Area Planning Manager

## **Development consent**

### Section 89E of the Environmental Planning and Assessment Act 1979

As delegate of the Minister for Planning, under delegation dated 16 February 2015, I approve the development referred to in schedule 1, subject to the conditions in schedule 2.

These conditions are required to:

- prevent, minimise, and/or offset adverse environmental impacts including economic and social impacts;
- set standards and performance measures for acceptable environmental performance;
- require regular monitoring and reporting; and
- provide for the ongoing environmental management of the development.

David Gainsford

**Executive Director** 

**Priority Projects Assessments** 

Sydney 23rd September 2016

**SCHEDULE 1** 

**Application No.:** 

SSD 7382

Applicant:

The University of Technology Sydney

**Consent Authority:** 

Minister for Planning

Land:

Broadway Precinct, UTS City Campus, Ultimo (Lot

2012 DP 1183894)

**Development:** 

Construction and use of an education building, including:

- site preparation works, including demolition of existing Building 2 to ground level and associated tree removal;
- construction of a new 15 storey Building 2, including a part five storey podium and one level of plant, above an existing two level basement;
- construction of a four storey extension of podium of Building 1 along Broadway;
- public domain improvements works;
- landscaping works;
- staged construction of the two buildings; and
- extension and augmentation of physical infrastructure/utilities.

### **DEFINITIONS**

**Advisory Notes Applicant** 

Advisory information relating to the consent but do not form a part of this consent

The University of Technology Sydney

Application

The development application for a concept proposal and the accompanying

building envelope drawing plans and documentation described in Condition A2.

Building Code of Australia **BCA** 

Construction

Any works, including earth and building works

Council

City of Sydney Council

Certification of Crown

**Building works** 

Certification under s109R of the EP&A Act

Certifying Authority Means a person who is authorised by or under section 109D of the EP&A Act to

issue a construction certificate under Part 4A of the EP&A Act; or in the case of Crown development, a person qualified to conduct a Certification of Crown

**Building works** 

The period from 7 am to 6 pm on Monday to Saturday, and 8am to 6pm on Day time

Sundays and Public Holidays

Department

Department of Planning and Environment or its successors

Evening

The period from 6 pm to 10 pm

**Environmental Impact** Statement (EIS)

Environmental Impact Statement titled State Significant Development Application, SSD 7382 Environmental Impact Statement, University of Technology Sydney, UTS Central Project, prepared by JBA Urban Planning

Consultants Pty Ltd, May 2016.

**EPA EP&A Act**  Environment Protection Authority, or its successor Environmental Planning and Assessment Act 1979

EP&A Regulation or

Environmental Planning and Assessment Regulation 2000

Regulation

Minister for Planning, or nominee

Minister Night time

The period from 10 pm to 7 am on Monday to Saturday, and 10pm to 8am on

Sundays and Public Holidays

**OEH** 

Feasible

Office of the Environment and Heritage, or its successor

Reasonable and

Reasonable relates to the application of judgement in arriving at a decision, taking into account: mitigation benefits, cost of mitigation versus benefits

provided, community views and the nature and extent of potential improvements. Feasible relates to engineering considerations and what is practical to build Response to Submissions report titled Response to Submissions, State Significant Development Application 7382, University of Technology Sydney,

UTS Central Project, prepared by JBA Urban Planning Consultants Pty Ltd.

Response to Submissions (RtS)

August 2016.

**RMS** Secretary

Secretary's approval,

agreement or satisfaction

Roads and Maritime Services Division, Department of Transport or its successor Secretary of the Department of Planning and Environment, or nominee/delegate A written approval from the Secretary (or nominee/delegate). Where the Secretary's approval, agreement or satisfaction is required under a condition of this consent, the Secretary will endeavour to provide a response within one month of receiving an approval, agreement or satisfaction request. The Secretary may ask for additional information if the approval, agreement or satisfaction request is considered incomplete. When further information is

the one month period.

Sensitive receiver

Residence, education institution (e.g. school, university, TAFE college), health care facility (e.g. nursing home, hospital), religious facility (e.g. church) and

requested, the time taken for the Applicant to respond in writing will be added to

children's day care facility.

Site preparatory works

Site preparation works, including demolition of existing Building 2 to ground level

and associated tree removal

Subject Site Zone of Influence Broadway Precinct, UTS City Campus, Ultimo (Lot 2012 DP 1183894).

The horizontal distance from the edge of the excavation site or any construction zone (including on-site haulage routes) to twice the maximum excavation depth

#### **SCHEDULE 2**

### A ADMINISTRATIVE CONDITIONS

### **Development Description**

A1. Except as amended by the conditions of this consent, development consent is granted only to carrying out the development as described in Schedule 1.

### **Development in Accordance with Plans and Documents**

- A2. The Applicant must carry out the project in accordance with the conditions of consent and generally in accordance with the:
  - a) State Significant Development Application SSD 7382;
  - a) State Significant Development Application, SSD 7382 Environmental Impact Statement, University of Technology Sydney, UTS Central Project, prepared by JBA Urban Planning Consultants Pty Ltd, May 2016, except where amended by the Response to Submissions, State Significant Development Application 7382, University of Technology Sydney, UTS Central Project, prepared by JBA Urban Planning Consultants Pty Ltd, August 2016;
  - b) The conditions of this consent; and
  - c) The following drawings, except for:
    - i) any modifications which are Exempt or Complying Development; and
    - ii) otherwise provided by the conditions of this consent.

Drawing No.	Issue	Dyke Pty Ltd Architects  Name of Plan	
			Date
DA1001	Α	Site plan Location plan	05/2016
DA1002	Α	Ground plane and Level 4	05/2016
DA2001	Α	General Arrangement Demolition – Level 1	05/2016
DA2002	Α	General Arrangement Demolition – Level 2	05/2016
DA2003	Α	General Arrangement Demolition – Level 3	05/2016
DA2004	Α	General Arrangement Demolition – Level 4	05/2016
DA2005	Α	General Arrangement Demolition – Level 5	05/2016
DA2006	Α	General Arrangement Demolition – Level 6	05/2016
DA2007	Α	General Arrangement Demolition – Level 7	05/2016
DA2008	Α	General Arrangement Demolition – Level 8	05/2016
DA2201	Α	General Arrangement Proposed – Level 1	05/2016
DA2202	Α	General Arrangement Proposed – Level 2	05/2016
DA2203	Α	General Arrangement Proposed – Level 3	05/2016
DA2204	Α	General Arrangement Proposed – Level 4	05/2016
DA2205	Α	General Arrangement Proposed – Level 5	05/2016
DA2206	Α	General Arrangement Proposed – Level 6	05/2016
DA2207	Α	General Arrangement Proposed – Level 7	05/2016
DA2208	Α	General Arrangement Proposed – Level 8	05/2016
DA2209	Α	General Arrangement Proposed – Level 9	05/2016
DA2210	Α	General Arrangement Proposed – Level 10	05/2016
DA2211	Α	General Arrangement Proposed – Level 11	05/2016
DA2212	Α	General Arrangement Proposed – Level 12	05/2016
DA2213	Α	General Arrangement Proposed – Level 13	05/2016

DA2214	Α	General Arrangement Proposed – Level 14	05/2016			
DA2215	Α	General Arrangement Proposed – Level 15	05/2016			
DA2216	Α	General Arrangement Proposed – Level 16	05/2016			
DA2217	Α	General Arrangement Proposed – Level 17	05/2016			
DA2218	Α	General Arrangement Proposed – Roof Level	05/2016			
DA3010	Α	South (Broadway) Elevation 1:250	05/2016			
DA3011	Α	North (Alumni Green) Elevation 1:250	05/2016			
DA3012	Α	West (Jones Street) Elevation 1:250	05/2016			
DA3013	Α	East (CB01) Elevation 1:250	05/2016			
DA3014	Α	Section A 1:250	05/2016			
DA3015	Α	Section B 1:250	05/2016			
DA3016	Α	Section C 1:250	05/2016			
DA8010	Α	Materials Sample Board	05/2016			
1	Α	Broadway Façade – Elevation and Views	07/2016			
Landscape (or Design) Drawings prepared by FJMT and Lacoste + Stevenson and Daryl Jackson Robin Dyke Pty Ltd Architects						
Drawing No.	Issue	Name of Plan	Date			
DA	Α	Landscape Site Plan	05/2016			
DA	Α	Landscape – Level 4	05/2016			
DA	Α	Landscape – Level 8	05/2016			
DA	Α	Landscape – Level 8 & Level 17	05/2016			
DA	Α	Landscape – Sections	05/2016			

### Inconsistency between documents

- A3. If there is any inconsistency between the plans and documentations referred to above, the most recent document shall prevail to the extent of the inconsistency. However, conditions of this consent prevail to the extent of any inconsistency. Where there is an inconsistency between approved elevations and plans, the elevations prevail.
- A4. The Applicant must comply with any reasonable requirements of the Secretary arising from the Department's assessment of:
  - a) any strategies, plans, programs, reviews, audits, reports or correspondence that are submitted in accordance with this consent; and
  - b) the implementation of any actions or measures contained in these documents.

#### **Design Quality Excellence**

- A5. In order to ensure the design quality excellence of the development is retained:
  - a) the design architects (FJMT and Lacoste + Stevenson and Daryl Jackson Robin Dyke Pty Ltd Architects) are to have direct involvement in the design documentation, contract documentation and construct stages of the project;
  - b) the detailed design of the podium during each stage of construction must be designed by the original competition winning architects, *Lacoste + Stevenson*;
  - c) the design architect is to have full access to the site and is to be authorised by the Applicant to respond directly to the consent authority where information or clarification is required in the resolution of the design issues throughout the life of the project;
  - d) evidence of the design architect's commission is to be provided to the Department prior to certification of any Crown building works, except for site preparatory works;

- e) the detailed design of the podium during each stage of construction must be submitted to the NSW Government Architect prior to certification of any Crown building works, except for site preparatory works; and
- f) the following design elements must be clearly identified in the detailed design drawings and any changes to materials or design in relation to these elements must be approved by the Secretary or the NSW Government Architect:
  - the operable awning windows forming part of the clear flush glazing used for the central north facing 'winter gardens';
  - ii) the relationship of each 'slipped' slab to the next;
  - iii) the curvature, form and frit of the glass; and
  - iv) the location and enclosure of the Collaborative Learning Theatre.
- A6. The design architects for the project are not to be changed without prior notice and approval of the Secretary.

### **Building Code of Australia Compliance**

- A7. All aspects of the building design shall comply with the applicable performance requirements of the Building Code of Australia so as to achieve and maintain acceptable standards of structural sufficiency, safety (including fire safety), health and amenity for the ongoing benefit of the community. Compliance with the performance requirements can only be achieved by:
  - a) complying with the deemed to satisfy provisions, or
  - b) formulating an alternative solution which:
    - i) complies with the performance requirements, or
    - ii) is shown to be at least equivalent to the deemed to satisfy provision, or
    - iii) a combination of a) and b).

### **Development Expenses**

A8. It is the responsibility of the Applicant to meet all expenses incurred in undertaking the development, including expenses incurred in complying with conditions imposed under this consent.

#### Lapsing of approval

A9. This consent will lapse five years from the date of consent unless the works associated with the development have physically commenced.

### **Prescribed Conditions**

A10. The Applicant shall comply with all relevant prescribed conditions of development consent under Part 6, Division 8A of the Regulation.

#### **Dispute Resolution**

A11. In the event of a dispute between the Applicant and a public authority, in relation to an applicable requirement in this consent or relevant matter relating to the Development, either party may refer the matter to the Secretary for resolution. The Secretary's resolution of the matter shall be binding on the parties.

#### Long Service Levy

A12. For work costing \$25,000 or more, a Long Service Levy shall be paid. For further information please contact the Long Service Payments Corporation on their Helpline 13 1441.

#### **Legal Notices**

A13. Any advice or notice to the consent authority shall be served on the Secretary.

### B PRIOR TO COMMENCEMENT OF WORKS

### **Underground Petroleum Storage Systems**

B1. A validation report shall be submitted to the Certifying Authority prior to the commencement of any works, except for site preparatory works, to verify that the Underground Petroleum Storage Systems have been removed in in accordance with the requirements of *Protection of the Environment Operations (Underground Petroleum Storage Systems) Regulation 2014.* 

### **Public Domain Damage Deposit**

- B2. Prior to commencement of any works, a Public Domain Damage Deposit (calculated on the basis of a total of 4 lineal metres of asphalt footway on the Broadway and Jones Street site frontages) must be lodged with Council in accordance with the City of Sydney's adopted Schedule of Fees and Charges.
- B3. The Public Domain Damage Deposit must be submitted as an unconditional bank guarantee in favour of Council as security for repairing any damage to the public domain in the vicinity of the site.

#### **Demolition**

B4. All demolition work shall comply with the provisions of Australia Standard AS2601: 2001 The Demolition of Structures. The work plans required by AS2601: 2001 shall be accompanied by a written statement from a suitably qualified person that the proposals contained in the work plan comply with the safety requirements of the Standard. The work plans and the statement of compliance shall be submitted to the satisfaction of the Certifying Authority prior to the commencement of works.

#### **Future Rail Corridor**

- B5. Prior to the commencement of works, except for site preparatory works, the Applicant is to submit to Transport for NSW for review and endorsement:
  - a) the design and construction of the basement levels, foundations and ground anchors for the approved development; and
  - b) detailed building foundation designs and construction measures.
- B6. No modifications may be made to the approved design in B5 without the consent of Transport for NSW.
- B7. Transport for NSW, and persons authorised by it for this purpose, are entitled to inspect the site and all structures to enable it to consider whether those structures on the site have been or are being constructed and maintained in accordance with these conditions of consent, on giving reasonable notice to the principal contractor for the approved development or the owner or occupier of the part of the site to which access is sought.

### **Certified Plans**

B8. Plans certified in accordance with section 109R of the EP&A Act are to be submitted to the Certifying Authority and the Department prior to commencement of each stage of the works and shall include details as required by any of the following conditions.

#### **Ecologically Sustainable Development**

B9. Prior to the commencement of the works (excluding site preparatory works), the Applicant shall submit details of all design, operation and construction measures to the Certifying Authority demonstrating that the proposed new building has been designed to achieve a minimum 5 star Green Star Design rating.

#### **Public Domain Works**

- B10. Prior to the commencement of any footpath or public domain works, the Applicant shall consult with Council and Transport for NSW and demonstrate to the Certifying Authority that the streetscape design and treatment meets the requirements of these authorities, including addressing pedestrian management. The Applicant shall submit documentation of approval for each stage from Council and Transport for NSW to the Certifying Authority.
- B11. Prior to the commencement of any footpath or public domain works, the Applicant shall consult with Council to prepare a Public Domain Lighting Plan and demonstrate to the Certifying Authority that the plan addresses Council's requirements.

### **Landscaped Terrace**

- B12. Prior to the commencement of any works, except for site preparatory works, a detailed plan of the northern roof terrace to Level 8 must be prepared by a qualified landscape architect. The plan must be submitted to and approved by the Certifying Authority and must include the following details:
  - c) evidence that the terrace has been assessed as part of the structural certification provided for the development; and
  - d) evidence that the terrace has been assessed as part of the waterproofing certification provided for the development

#### **Notice of Commencement of Works**

B13. The Certifying Authority and Council shall be given written notice, at least 48 hours prior to the commencement of each stage of works on the subject site.

### Reflectivity

B14. The building materials used on the facades of the buildings must have a maximum normal specular reflectivity of visible light of 20 per cent and must be designed so as not to result in glare that causes any discomfort or threatens the safety of pedestrians or drivers. A statement demonstrating compliance with these requirements or where compliance cannot be met a report that demonstrates that the exceedance would not result in glare that causes any discomfort or threatens the safety of pedestrians or drivers is to be submitted to the satisfaction of the Certifying Authority prior to the commencement of works, except for site preparatory works.

### **Outdoor Lighting**

B15. All outdoor lighting within the site shall comply with, where relevant, AS/NZ1158.3: 1999 Pedestrian Area (Category P) Lighting and AS4282: 1997 Control of the Obtrusive Effects of Outdoor Lighting. Details demonstrating compliance with these requirements are to be submitted to the satisfaction of the Certifying Authority prior to commencement of works, except for site preparatory works.

### **Access for People with Disabilities**

B16. The building must be designed and constructed to provide access and facilities for people with a disability in accordance with the Building Code of Australia. The Certifying Authority must ensure that evidence of compliance with this condition from an appropriately qualified person is provided and that the requirements are referenced on any construction drawings.

#### **Erosion and Sedimentation Control**

B17. A soil erosion and sediment control plan must be developed in accordance with the document *Managing Urban Stormwater—Soils & Construction Volume 1* (2004) by Landcom. Details are to be submitted to the satisfaction of the Certifying Authority prior to commencement of works involving vegetation removal or soil disturbance.

### **Pre-Construction Dilapidation Reports**

B18. The Applicant is to engage a qualified structural engineer to prepare a Pre-Construction Dilapidation Report detailing the current structural condition of all retained existing and adjoining buildings within the site, infrastructure and roads within the 'zone of influence' or public domain areas adjoining the site. The report must be submitted to the satisfaction of the Certifying Authority prior to the commencement of any works.

### **Bicycle Parking**

- B19. Plans demonstrating compliance with the following bicycle parking requirements shall be submitted to the satisfaction of the Certifying Authority prior to commencement of works, except for site preparatory works:
  - the provision of an additional minimum 150 bicycle spaces, 17 showers and 150 lockers on the campus;
  - b) the layout, design and security of bicycle facilities must comply with the minimum requirements of Australian Standard AS 2890.3 Bicycle Parking Facilities, and be located in easy to access, well-lit areas that incorporate passive surveillance;
  - c) appropriate pedestrian and cyclist advisory signs are to be provided; and
  - d) all works/regulatory signposting associated with the proposed developments shall be at no cost to the relevant roads authority.

### **Noise Management Measures**

B20. Prior to commencement of works, the Applicant must incorporate the noise mitigation recommendations in the *UTS Central Project Acoustic Report for State Significant Development* prepared by Acoustic Studio, dated 27 April 2016, in the detailed design drawings and submit to the Department documentation demonstrating that the noise impacts have been adequately mitigated to not exceed the recommended operational noise levels for mechanical plant identified in the report.

#### Structural Details

- B21. Prior to the commencement of works, the Applicant must submit to the satisfaction of the Certifying Authority structural drawings prepared and signed by a suitably qualified practising Structural Engineer that demonstrates compliance with:
  - a) the relevant clauses of the BCA; and
  - b) the development consent.

#### **Mechanical Ventilation**

B22. All mechanical ventilation systems must be installed in accordance with Part F4.5 of the Building Code of Australia and must comply with the Australian Standards AS1668.2 and AS3666 *Microbial Control of Air Handling and Water Systems of Building*, to ensure adequate levels of health and amenity to the occupants of the building and to ensure environment protection. Details must be submitted to the satisfaction of the Certifying Authority prior to the commencement of works.

#### Stormwater and Drainage Works Design

B23. Final design plans of the stormwater drainage systems, prepared by a qualified practicing professional and in accordance with the requirements of Council must be submitted to the Certifying Authority prior to the commencement of works, except for site preparatory works. The hydrology and hydraulic calculations must be based on models described in the current edition of Australian Rainfall and Runoff.

#### **Construction Environmental Management Plan**

B24.

a) Prior to the commencement of works on the Subject Site, a CEMP that addresses those works must be submitted to the Certifying Authority. The Plan must address, but not be limited to, the following matters where relevant:

- i) hours of work;
- ii) 24 hour contact details of site manager:
- iii) traffic management, in consultation with the local Council, including a designated off-street car parking area for construction related vehicles;
- iv) construction noise and vibration management, prepared by a suitable qualified person;
- v) management of dust to protect the amenity of the neighbourhood;
- vi) erosion and sediment control;
- vii) measures to ensure that sediment and other materials are not tracked onto the roadway by vehicles leaving the Subject Site;
- viii) external lighting in compliance with AS4282:1997 Control of the Obtrusive Effects of Outdoor Lighting;
- ix) an Unexpected Finds Protocol (UFP); and
- x) waste classification (for materials to be removed) and validation (for materials to remain) during construction to confirm the contamination status in these areas of the site.
- c) The CEMP must not include works that have not been explicitly approved in the development consent. In the event of any inconsistency between the consent and the CEMP, the consent shall prevail.
- d) The Applicant must submit a copy of the CEMP to the Department and to the Council, prior to commencement of work.
- B25. The CEMP (as revised from time to time) must be implemented by the Applicant for the duration of the construction works.

### **Construction Noise and Vibration Management Plan**

- B26. The Applicant must prepare a Construction Noise and Vibration Management Plan (CNVMP) and the plan must:
  - a) be prepared by a suitably qualified expert and submitted to the Certifying Authority;
  - b) be prepared in consultation with all noise sensitive receivers where noise levels exceed the construction noise management level, in accordance with EPA guidelines;
  - c) describe the measures that would be implemented to ensure:
    - best management practice is being employed;
    - ii) compliance with the relevant conditions of this consent;
  - d) describe the proposed noise and vibration management measures in detail:
  - e) include strategies that have been developed to address impacts to noise sensitive receivers where noise levels exceed the construction noise management level, for managing high noise generating works;
  - f) describe the consultation undertaken to develop the strategies in e) above;
  - g) evaluates and reports on the effectiveness of the noise and vibration management measures; and
  - h) include a complaints management system that would be implemented for the duration of the project.
- B27. The CNVMP (as revised from time to time) must be implemented by the Applicant for the duration of the construction works.

### **Construction Waste Management Plan**

B28.

- a) Prior to the commencement of works on the Subject Site, a Construction Waste Management Plan (CWMP), prepared by a suitably qualified person in consultation with the Council, must be submitted to the Certifying Authority. The Plan must address, but not be limited to, the following matters:
  - i) recycling of demolition materials including concrete; and

- ii) removal of hazardous materials and disposal at an approved waste disposal facility in accordance with the requirements of the relevant legislation, codes, standards and guidelines, prior to the commencement of any building works.
- b) Details demonstrating compliance with the relevant legislative requirements, associated with the removal of hazardous waste, particularly the method of containment and control of emission of fibres to the air, are to be submitted to the satisfaction of the Certifying Authority prior to the removal of any hazardous materials.
- c) The Applicant must submit a copy of the plan to the Department and to the Council prior to the commencement of work.
- d) The Applicant must notify the Roads and Maritime Authority's Traffic Management Centre (TMC) of the truck route(s) to be followed by trucks transporting waste material from the Subject Site, prior to the commencement of the removal of any waste material from the Subject Site.
- B29. The CWMP (as revised from time to time) must be implemented by the Applicant for the duration of the construction works.

## Construction Traffic and Pedestrian Management Plan

B30.

- a) Prior to the commencement of works on the Subject Site, Traffic and Pedestrian Management Plan (TMP) prepared by a suitably qualified person must be submitted to the Certifying Authority. The Plan must be prepared in consultation with the Council, CBD Coordination Office within Transport for NSW and RMS.
- b) The Plan must address, but not be limited to, the following matters:
  - i) ingress and egress of vehicles to the Subject Site, including Swept path analysis;
  - ii) impacts on cyclists and pedestrians and bus services;
  - iii) cumulative construction impacts of projects, including Sydney Light Rail Project;
  - iv) loading and unloading, including construction zones;
  - v) predicted traffic volumes, types and routes; and
  - vi) pedestrian and traffic management methods.
- c) Any alterations to the public road, involving traffic and parking arrangements, must be referred to and approved by the relevant traffic committee.
- d) The Applicant must submit a copy of the final plan to the Council, prior to the commencement of works.
- B31. The TMP (as revised from time to time) must be implemented by the Applicant for the duration of the construction works.

### **Utility Services**

- B32. Prior to the commencement of work the Applicant is to negotiate with the utility authorities (e.g. Ausgrid and Telecommunications Carriers) in connection with the relocation and/or adjustment of the services affected by the construction of the building structure.
- B33. Prior to the commencement of works, except for site preparatory works, written advice must be obtained from the electricity supply authority, an approved telecommunications carrier and an approved gas carrier (where relevant) stating that satisfactory arrangements have been made to ensure provisions of adequate services.

### C DURING CONSTRUCTION

#### **Hours of Work**

- C1. The hours of construction, including the delivery of materials to and from the subject site, shall be restricted as follows:
  - a) between 7 am and 6 pm, Mondays to Fridays inclusive;
  - b) between 7.30 am and 3.30 pm, Saturdays; and
  - c) no work on Sundays and public holidays.

Works may be undertaken outside these hours where:

- the delivery of materials is required outside these hours by the Police or other authorities; or
- ii) it is required in an emergency to avoid the loss of life, damage to property and/or to prevent environmental harm; or
- iii) variation is approved in advance in writing by the Secretary or her nominee.

### **Erosion and Sediment Control**

C2. All erosion and sediment control measures, are to be effectively implemented and maintained at or above design capacity for the duration of the construction works and until such time as all ground disturbed by the works has been stabilised and rehabilitated so that it no longer acts as a source of sediment.

### **Disposal of Seepage and Stormwater**

C3. Any seepage or rainwater collected on-site during construction or ground water shall not be pumped to the street stormwater system unless separate prior approval is given in writing by Council.

### Approved Plans to be On-site

C4. A copy of the approved and certified plans, specifications and documents incorporating conditions of consent and certification shall be kept on the subject site at all times and shall be readily available for perusal by any officer of the Department, Council or the Certifying Authority.

#### **Site Notice**

C5.

- a) A site notice(s) must be prominently displayed at the boundaries of the Subject Site for the purposes of informing the public of project details including, but not limited to the details of the Builder, Certifying Authority and Structural Engineer.
- b) The site notice(s) is to satisfy all but not be limited to, the following requirements:
  - i) minimum dimensions of the notice are to measure 841 mm x 594 mm (A1) with any text on the notice to be a minimum of 30 point type size;
  - ii) the notice is to be durable and weatherproof and is to be displayed throughout the works period;
  - iii) the approved hours of work, the name of the site/project manager, the responsible managing company (if any), its address and 24 hour contact phone number for any inquiries, including construction/noise complaint are to be displayed on the site notice; and
  - iv) the notice(s) is to be mounted at eye level on the perimeter hoardings/fencing and is to state that unauthorised entry to the Subject Site is not permitted.

#### **Protection of Trees**

C6.

- a) No street trees are to be trimmed or removed unless it forms a part of this development consent or prior written approval from Council is obtained or is required in an emergency to avoid the loss of life or damage to property.
- b) All street trees shall be protected at all times during construction. Any tree on the footpath, which is damaged or removed during construction due to an emergency, shall be replaced, to the satisfaction of Council.
- c) All trees on the Subject Site that are not approved for removal are to be suitably protected by way of tree guards, barriers or other measures as necessary are to be provided to protect root system, trunk and branches, during construction.

#### **Protection of Stone Kerbs**

C7.

- a) The existing stone kerbs on the sites frontages are to be retained and properly protected during excavation and construction works.
- b) Temporary removal and storage may be approved by Council to avoid damage.

### **Construction Noise Management**

- C8. The development must be constructed with the aim of achieving the construction noise management levels detailed in the Interim Construction Noise Guideline (Department of Environment and Climate Change, 2009). All feasible and reasonable noise mitigation measures must be implemented and any activities that could exceed the construction noise management levels must be identified and managed in accordance with the Construction Noise and Vibration Management Plan.
- C9. If the noise from a construction activity is substantially tonal or impulsive in nature (as described in Chapter 4 of the NSW Industrial Noise Policy), 5 dB(A) must be added to the measured construction noise level when comparing the measured noise with the construction noise management levels.
- C10. The Applicant must schedule rock breaking, rock hammering, sheet piling, pile driving and any similar activity only between the following hours unless otherwise approved by the Secretary:
  - a) 9 am to 12 pm, Monday to Friday;
  - b) 2 pm to 5 pm Monday to Friday; and
  - c) 9 am to 12 pm, Saturday.
- C11. Wherever practical, and where sensitive receivers may be affected, piling activities are completed using bored piles. If driven piles are required they must only be installed where outlined in a Construction Noise and Vibration Management Plan.
- C12. Any noise generated during the construction of the development must not be offensive noise within the meaning of the *Protection of the Environment Operations Act, 1997* or exceed approved noise limits for the Subject Site.

### **Vibration Criteria**

- C13. Vibration caused by construction at any residence or structure outside the Subject Site must be limited to:
  - a) for structural damage vibration, German Standard DIN 4150 Part 3 Structural Vibration in Buildings. Effects on Structures; and
  - for human exposure to vibration, the evaluation criteria presented in British Standard
     BS 6472 Guide to Evaluate Human Exposure to Vibration in Buildings (1 Hz to 80 Hz) for low probability of adverse comment.

- C14. Vibratory compactors must not be used closer than 30 metres from residential buildings unless vibration monitoring confirms compliance with the vibration criteria specified above.
- C15. These limits apply unless otherwise outlined in a Construction Noise and Vibration Management Plan, approved by the Secretary.

### **Work Cover Requirements**

C16. To protect the safety of work personnel and the public, the work site must be adequately secured to prevent access by unauthorised personnel, and work must be conducted at all times in accordance with relevant Work Cover requirements.

### **Hoarding Requirements**

- C17. The following hoarding requirements must be complied with:
  - a) no third party advertising is permitted to be displayed on the subject hoarding/ fencing; and
  - the construction site manager shall be responsible for the removal of all graffiti from any construction hoardings or the like within the construction area within 48 hours of its application.

### No obstruction of public way

C18. The public way (outside of any construction works zone) must not be obstructed by any materials, vehicles, refuse, skips or the like, under and circumstances. Non-compliance with this requirement will result in the issue of a notice by the relevant Authority to stop all works on site.

### Impact of Below Ground (sub-surface) Works - Non-Aboriginal Relics

C19. If any unexpected archaeological relics are uncovered during the course of the work, then all works must cease immediately in that area and the OEH Heritage Division contacted. Depending on the possible significance of the relics, an archaeological assessment and management strategy may be required before further works can continue in that area. Works may only recommence with the written approval of Heritage Division of the Office of Environment and Heritage.

### **Discovery of Aboriginal Heritage**

C20. In the event that surface disturbance identifies a new Aboriginal object, all works must halt in the immediate area to prevent any further impacts to the object(s). A suitably qualified archaeologist and the registered Aboriginal representatives must be contacted to determine the significance of the objects. The site is to be registered in the Aboriginal Heritage Information Management System (AHIMS) which is managed by OEH and the management outcome for the site included in the information provided to AHIMS. The Applicant must consult with the Aboriginal community representatives, the archaeologists and OEH to develop and implement management strategies for all projects/sites.

### D PRIOR TO OCCUPATION OR COMMENCEMENT OF USE

### **Green Travel Plan**

D1. Prior to the occupation of any stage of the building, the Applicant shall submit to the Department a copy of a Green Travel Plan, prepared by suitably qualified person(s) in consultation with Council, to promote the use of active and sustainable transport modes.

#### **Public Domain Works**

D2. Prior to the occupation of each stage the building, the Applicant shall submit to the Council works-as-executed plans for each stage of the public domain works. Prior to occupation of each stage of the building, the Applicant must submit documentation to the Certifying Authority demonstrating that the works have been completed to Council's satisfaction.

### Jones Street Upgrade Works

D3. Prior to the occupation of any stage of the building, the Applicant shall submit to the Department documentation of consultation with Council and a final endorsed plan for the upgrade of Jones Street. The works must be completed in accordance with the undertaking made in Appendix I of the RtS dated 14 July 2016, unless otherwise approved by the Secretary.

### **Damage to Stone Kerbs**

D4. Any damaged stone kerbs must be replaced and any removed stone kerbs must be reinstated to the satisfaction of Council prior to the commencement of use of each stage of the construction unless works have commenced on the next stage.

#### **Street Trees**

D5. New trees on Broadway and Jones Street must be consistent with the species selection in Council's Street Tree Master Plan (STMP). The trees must be planted in accordance with Council's requirements and must be planted prior to commencement of use of the relevant stage of the building.

### **Ecologically Sustainable Development**

D6. Prior to the occupation of Building 2, the Applicant shall submit details to the Certifying Authority demonstrating that the subject building has achieved a minimum 5 star Green Star Design rating.

#### **Mechanical Ventilation**

- D7. Following completion, installation and testing of all the mechanical ventilation systems, the Applicant must provide evidence to the satisfaction of the Certifying Authority, prior to commencement of use of each stage of the building, that the installation and performance of the mechanical systems complies with:
  - a) the Building Code of Australia:
  - b) Australian Standard AS1668 and other relevant codes;
  - c) the development consent and any relevant modifications; and
  - d) any dispensation granted by the New South Wales Fire Brigade.

#### **Road Damage**

D8. The cost of repairing any damage caused to Council or other Public Authority's assets in the vicinity of the Subject Site as a result of construction works associated with the approved development is to be met in full by the Applicant prior to commencement of use of the each stage of the building.

### **Compliance Certificate**

D9. A Section 73 Compliance Certificate under the Sydney Water Act 1994 must be obtained from Sydney Water Corporation.

Application must be made through an authorised Water Servicing Coordinator. Please refer to the "Your Business" section of the web site <a href="www.sydneywater.com.au">www.sydneywater.com.au</a> then follow the "e-Developer" icon or telephone 13 20 92 for assistance.

The Section 73 Certificate must be submitted to the Certifying Authority prior to commencement of use of each stage of the building.

### **Post-construction Dilapidation Report**

- D10. Prior to commencement of use of each stage of the building:
  - a) The Applicant must engage a suitably qualified person to prepare a postconstruction dilapidation report at the completion of the construction works. This report is to ascertain whether the construction works created any structural damage to adjoining buildings, infrastructure and roads.
  - b) The report is to be submitted to the Certifying Authority. In ascertaining whether adverse structural damage has occurred to adjoining buildings, infrastructure and roads, the Certifying Authority must:
    - compare the post-construction dilapidation report with the pre-construction dilapidation report required by these conditions; and
    - ii) have written confirmation from the relevant authority that there is no adverse structural damage to their infrastructure and roads.
  - c) A copy of this report is to be forwarded to the Council.

### **Fire Safety Certification**

D11. Prior to commencement of use of each stage of the building, a Fire Safety Certificate must be obtained for all the Essential Fire or Other Safety Measures forming part of this consent. A copy of the Fire Safety Certificate must be submitted to the relevant authority and Council. The Fire Safety Certificate must be prominently displayed in the building.

#### **Structural Inspection Certificate**

- D12. A Structural Inspection Certificate or a Compliance Certificate must be submitted to the satisfaction of the Certifying Authority prior to commencement of use of each stage of the building. A copy of the Certificate with an electronic set of final drawings (contact approval authority for specific electronic format) must be submitted to the approval authority and the Council after:
  - a) the site has been periodically inspected and the Certifier is satisfied that the structural works is deemed to comply with the final design drawings; and
  - b) the drawings listed on the Inspection Certificate have been checked with those listed on the final Design Certificate/s.

### Signage

D13. Wayfinding signage for pedestrians and cyclists must be installed prior to commencement of use of each of the stages.

### **Registration of Easements**

D14. Prior to commencement of use, the Applicant must provide to the Certifying Authority evidence that all matters required to be registered on title including easements required by this consent, approvals, and other consents have been lodged for registration or registered at the NSW Land and Property Information.

### **Food Preparation Areas**

- D15. All food premises must be designed and constructed to comply with Food Safety Standard 3.2.3 Food Premises and Equipment of the Food Standards Code.
- D16. The Applicant is to obtain a certificate from a suitably qualified tradesperson, certifying that the kitchen, food storage and food preparation areas have been fitted in accordance with Australian Standard AS4674 *Design, construction and fit-out of food premises*. The Applicant shall provide evidence of receipt of the certificate to the satisfaction of the Certifying Authority prior to the occupation of the building(s) or commencement of the use.

### **E POST OCCUPATION**

#### **Green Travel Plan**

E1. The Green Travel Plan required by condition D1 of this consent must be updated annually and implemented.

### **Street Trees**

E2. Each street tree planted on Broadway or Jones Street must be maintained for a minimum period of 12 months (from the date of planting for each tree) and written approval received from Council prior any tree being handed-over to Council.

### Loading and Unloading

E3. All loading and unloading of service vehicles in connection with the use of the premises shall be carried out wholly within the subject site at all times.

#### Noise Control - Plant and Machinery

- E4. Noise associated with the operation of any plant, machinery or other equipment on the Subject Site, must not exceed 5 dB(A) above the rating background noise level when measured at the boundary of the sensitive receiver.
- E5. The Applicant must carry out a noise monitoring program for a minimum period of one week where valid data is collected following the commencement of use of each stage of the development. The monitoring program must be carried out by an appropriately qualified person and a monitoring report must be submitted to the Secretary within two months of commencement use of each stage of the development to verify that operational noise levels do not exceed the recommended noise levels for mechanical plant identified in UTS Central Project Acoustic Report for State Significant Development prepared by Acoustic Studio, dated 27 April 2016.

Should the noise monitoring program identify any exceedance of the recommended noise levels referred to above, the Applicant is required to implement appropriate noise attenuation measures so that operational noise levels do not exceed the recommended noise levels or provide attenuation measures at the affected noise sensitive receivers.

### Storage of Hazardous or Toxic Material

E6. Any hazardous or toxic materials must be stored in accordance with Workcover Authority requirements and all tanks, drums and containers of toxic and hazardous materials shall be stored in a bunded area. The bund walls and floors shall be constructed of impervious materials and shall be of sufficient size to contain 110 per cent of the volume of the largest tank plus the volume displaced by any additional tanks within the bunded area.

### **Public Way to be Unobstructed**

E7. The public way must not be obstructed by any materials, vehicles, refuse, skips or the like under any circumstances.

### **External Lighting**

E8. External Lighting shall comply with AS4282: 1997 Control of the Obtrusive Effects of Outdoor Lighting. Upon installation of lighting, but before it is finally commissioned, the Applicant shall submit to the consent authority evidence from an independent qualified practitioner demonstrating compliance in accordance with this condition.

### **Fire Safety Certification**

E9. The owner must submit to Council an Annual Fire Safety Statement, each 12 months after the final Safety Certificate is issued. The certificate must be on, or to the effect of, Council's Fire Safety Statement.

#### **ADVISORY NOTES**

#### **Appeals**

AN1 The Applicant has the right to appeal to the Land and Environment Court in the manner set out in the *Environmental Planning and Assessment Act 1979* and the *Environmental Planning and Assessment Regulation 2000* (as amended).

### Other Approvals and Permits

AN2 The Applicant must apply to the relevant authority for all necessary permits including crane permits, road opening permits, hoarding or scaffolding permits, footpath occupation permits and/or any other approvals under Section 68 (Approvals) of the *Local Government Act 1993* or *Section 138 of the Roads Act 1993*.

#### Responsibility for other consents/agreements

AN3 The Applicant is solely responsible for ensuring that all additional consents and agreements are obtained from other authorities, as relevant.

#### **Use of Mobile Cranes**

- AN4 The Applicant must obtain all necessary permits required for the use of mobile cranes on or surrounding the site, prior to the commencement of works. In particular, the following matters must be complied with:
  - a) For special operations including the delivery of materials, hoisting of plant and equipment and erection and dismantling of on-site tower cranes which warrant the on street use of mobile cranes, permits must be obtained from Council:
    - i) At least 48 hours prior to the works for partial road closures which, in the opinion of Council will create minimal traffic disruptions, and
    - ii) At least four weeks prior to the works for full road closures and partial road closures which, in the opinion of Council, will create significant traffic disruptions.
  - b) The use of mobile cranes must comply with the approved hours of construction and must not be delivered to the site prior to 7.30 am without the prior approval of Council.

### **Temporary Structures**

AN<sub>5</sub>

- a) An approval under State Environmental Planning Policy (Temporary Structures) 2007 must be obtained from the Council for the erection of the temporary structures. The application must be supported by a report detailing compliance with the provisions of the Building Code of Australia.
- b) Structural certification from an appropriately qualified practicing structural engineer must be submitted to the Council with the application under State Environmental Planning Policy (Temporary Structures) 2007 to certify the structural adequacy of the design of the temporary structures.

### **Disability Discrimination Act**

AN6 This application has been assessed in accordance with the *Environmental Planning and Assessment Act 1979*. No guarantee is given that the proposal complies with the *Disability Discrimination Act 1992*. The Applicant/owner is responsible to ensure compliance with this and other anti-discrimination legislation. The *Disability Discrimination Act 1992* covers disabilities not catered for in the minimum standards called up in the Building Code of Australia which references *AS 1428.1 - Design for Access and Mobility. AS1428 Parts 2, 3 & 4* provides the most comprehensive technical guidance under the *Disability Discrimination Act 1992* currently available in Australia.

# Commonwealth Environment Protection and Biodiversity Conservation Act 1999 AN7

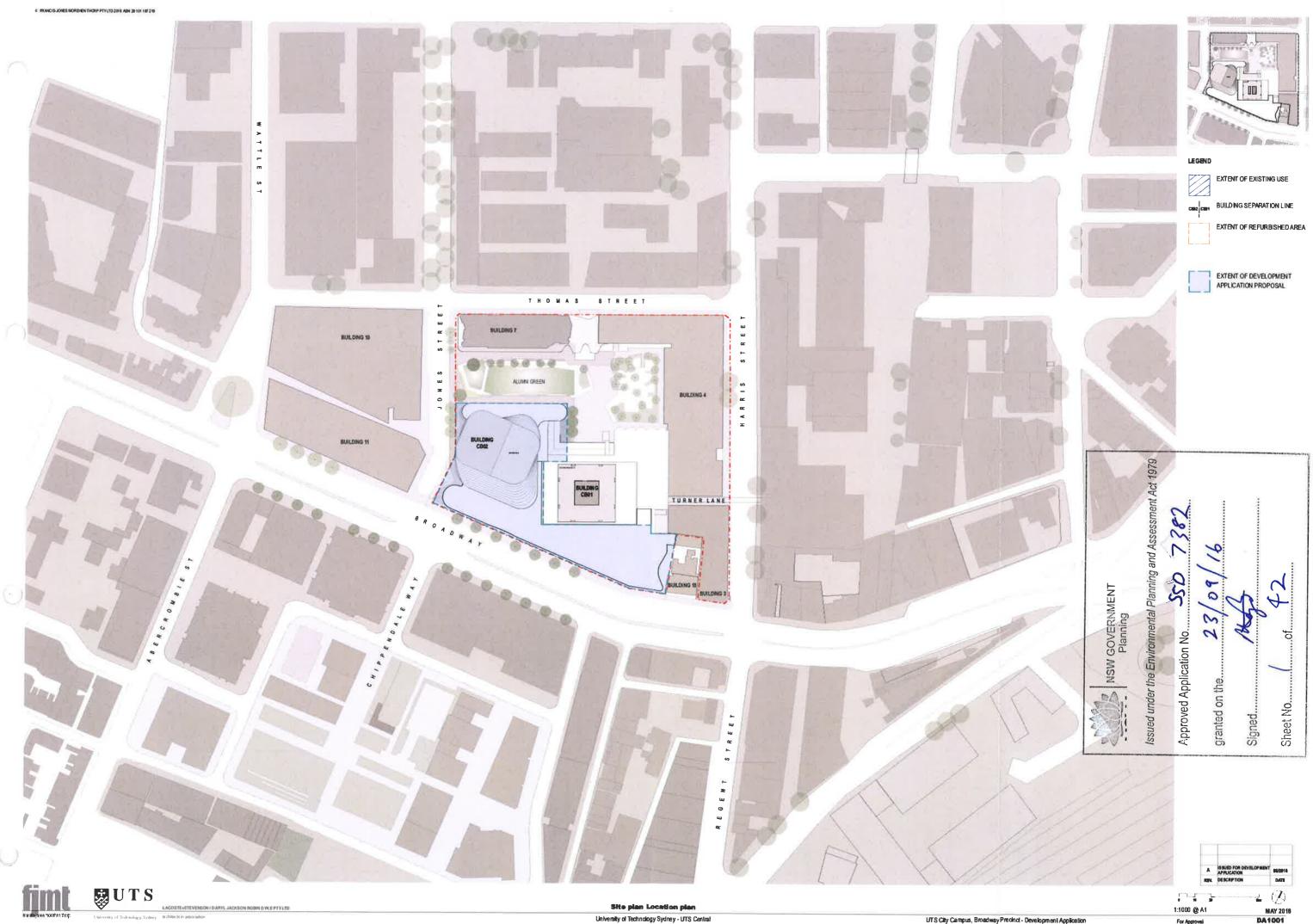
- a) The Commonwealth Environment Protection and Biodiversity Conservation Act 1999 provides that a person must not take an action which has, will have, or is likely to have a significant impact on a matter of national environmental significance (NES) matter; or Commonwealth land, without an approval from the Commonwealth Environment Minister.
- b) This application has been assessed in accordance with the New South Wales *Environmental Planning & Assessment Act, 1979.* The determination of this assessment has not involved any assessment of the application of the Commonwealth legislation. It is the Applicant's responsibility to consult the Department of Sustainability, Environment, Water, Population and Communities to determine the need or otherwise for Commonwealth approval and you should not construe this grant of approval as notification to you that the Commonwealth Act does not have application. The Commonwealth Act may have application and you should obtain advice about this matter. There are severe penalties for noncompliance with the Commonwealth legislation.

#### Asbestos Removal

AN8 All excavation and demolition works involving the removal and disposal of asbestos must only be undertaken by contractors who hold a current WorkCover Asbestos or "Demolition Licence" and a current WorkCover "Class 2 (Restricted) Asbestos Licence and removal must be carried out in accordance with NOHSC: "Code of Practice for the Safe Removal of Asbestos".

#### Site contamination issues during construction

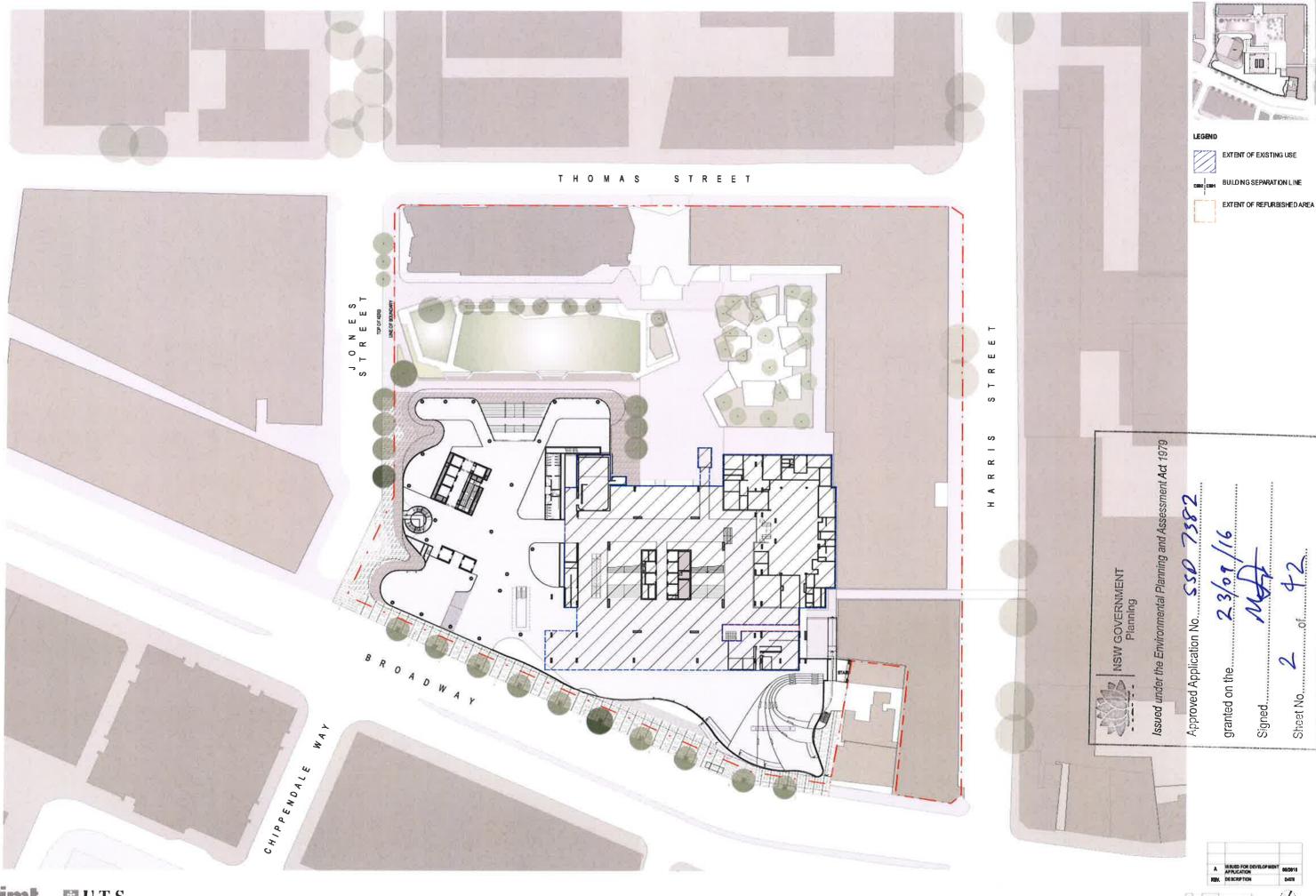
AN9 Should any new information come to light during demolition or construction works which has the potential to alter previous conclusions about site contamination then the Applicant must be immediately notified and works must cease. Works must not recommence on site until the consultation is made with the Department.



LITS City Campus, Broadway Precinct - Development Application

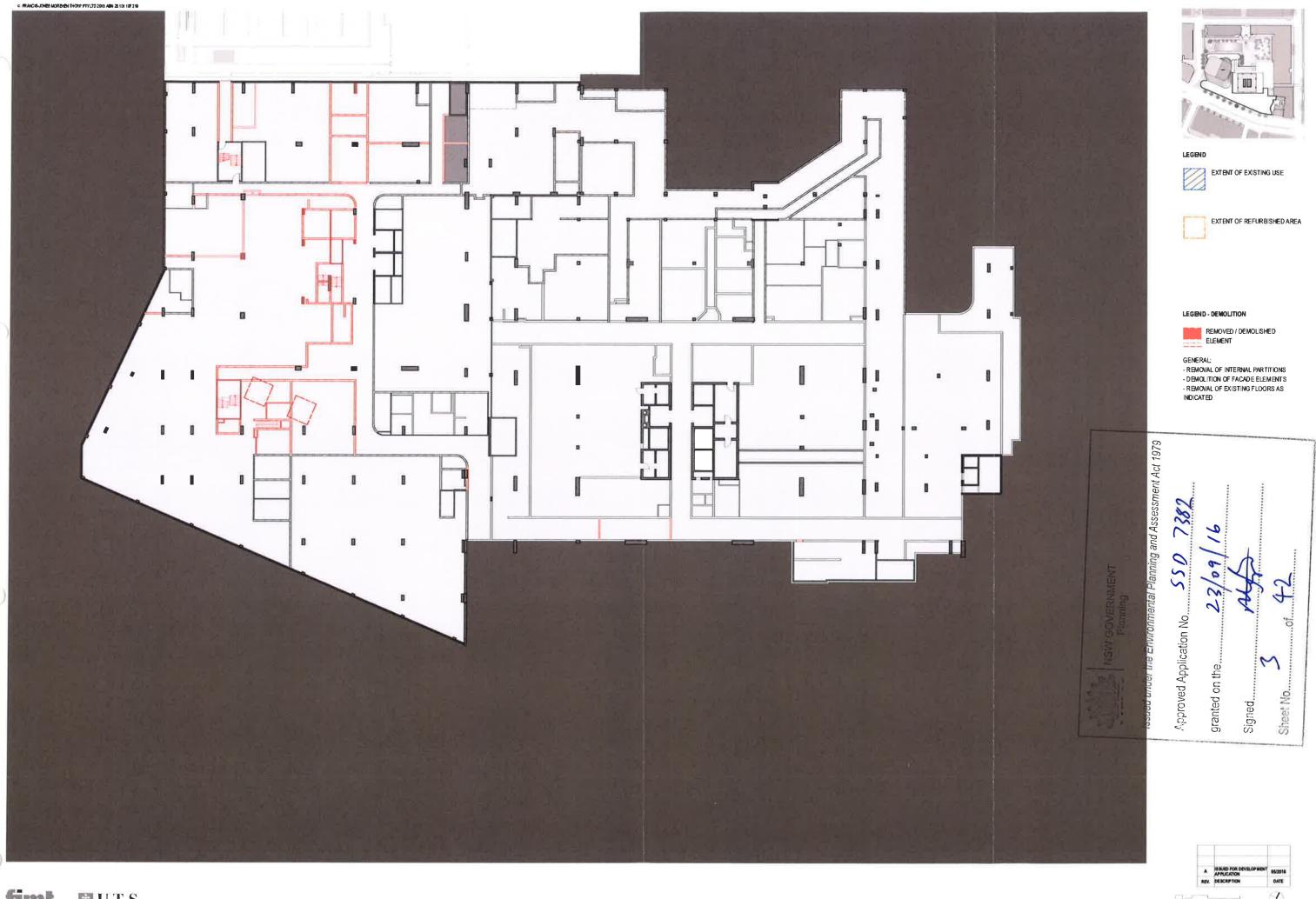
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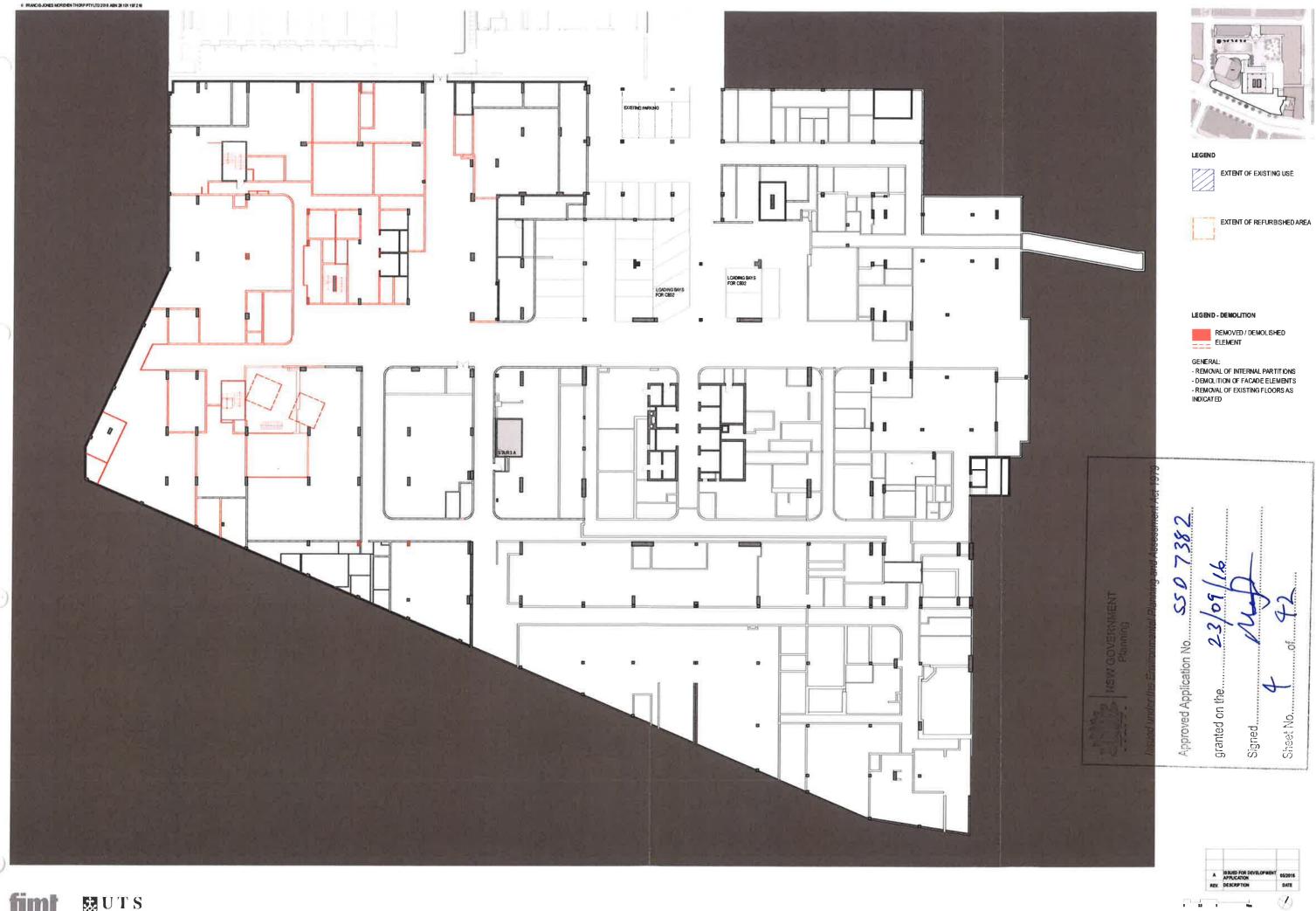
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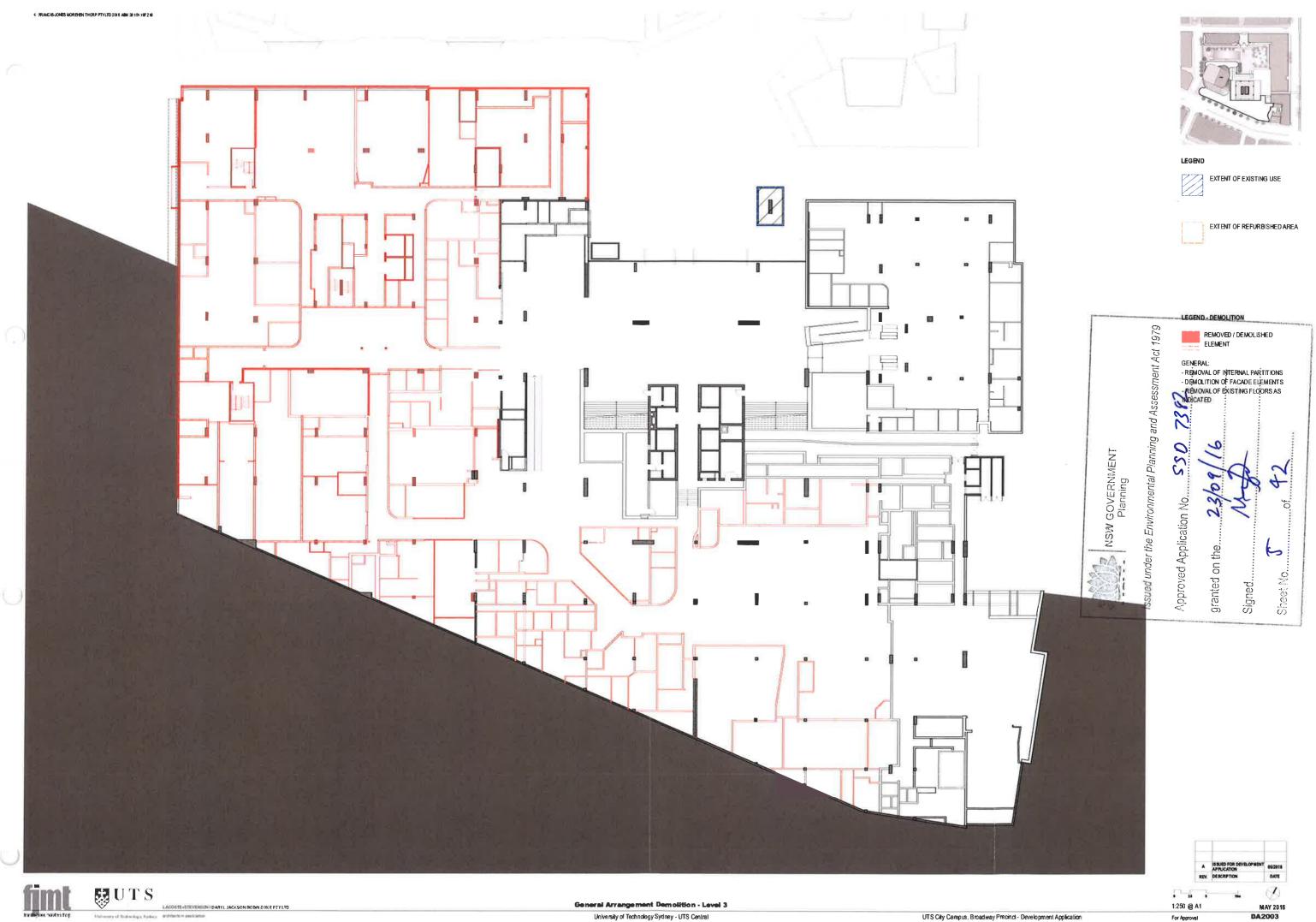








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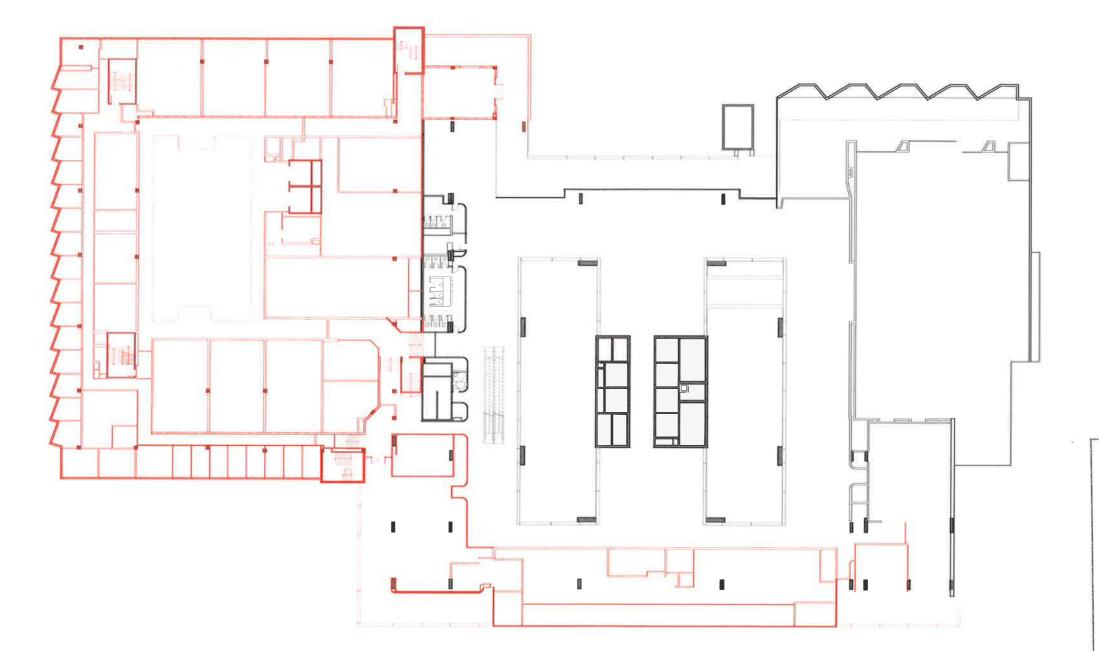
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University of Technology Sydney - UTS Central

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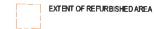
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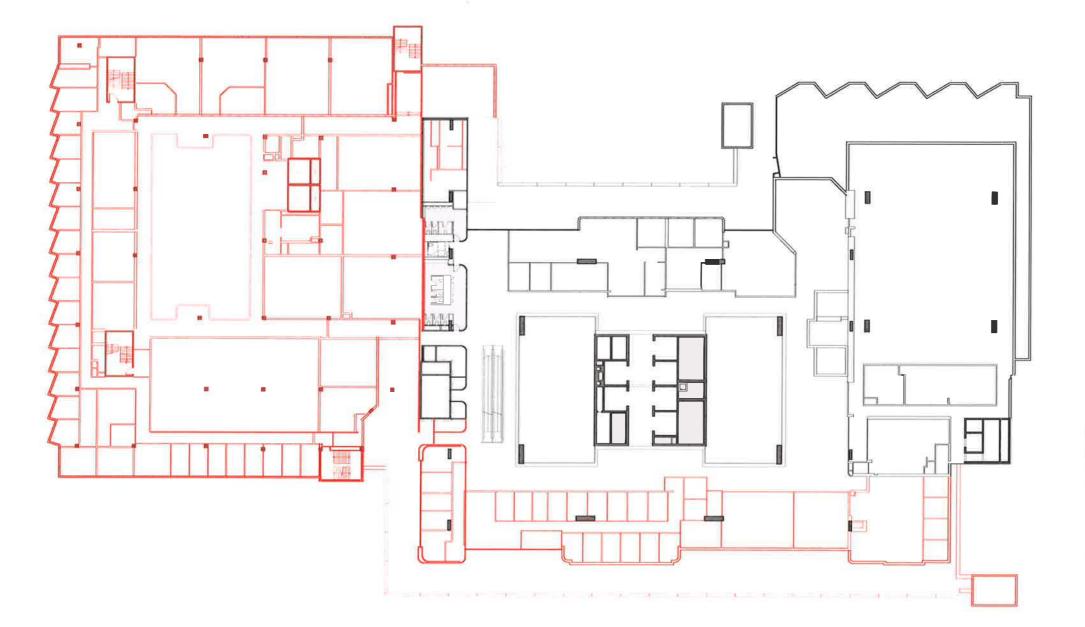
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- REMOVAL OF EXISTING FLOORS AS INDICATED











EXTENT OF EXISTING USE

EXTENT OF REFURBISHED AREA

#### LEGEND - DEMOLITION

REMOVED / DEMOLISHED ELEMENT

#### **GENERAL**:

- REMOVAL OF INTERNAL PARTITIONS
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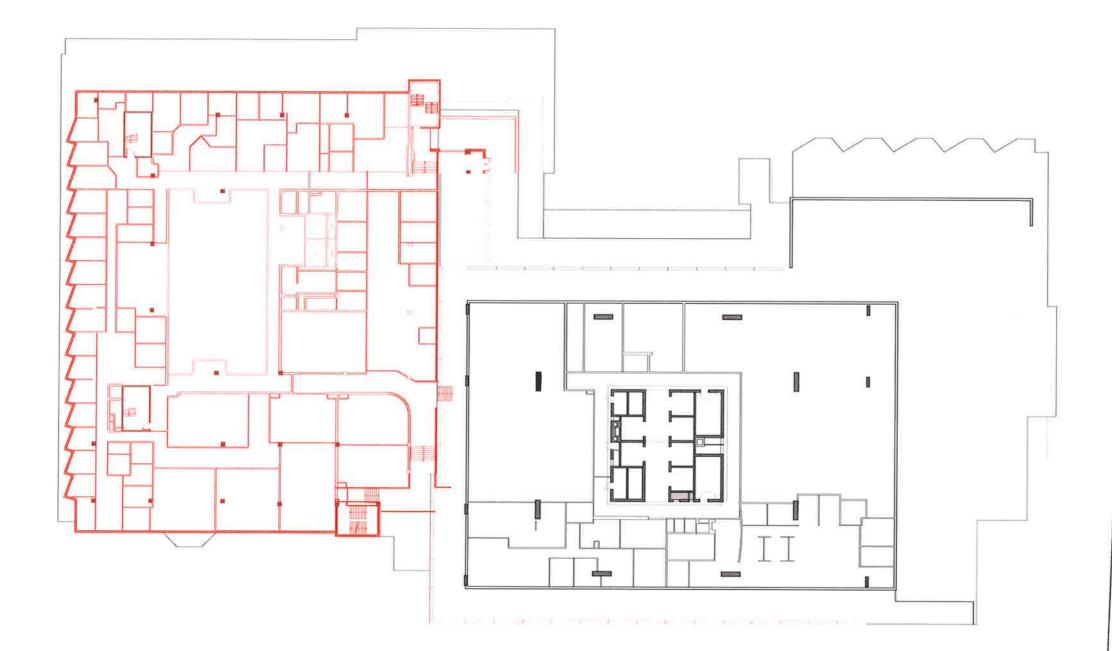


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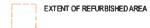
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EXTENT OF EXISTING USE



#### LEGEND - DEMOLITION



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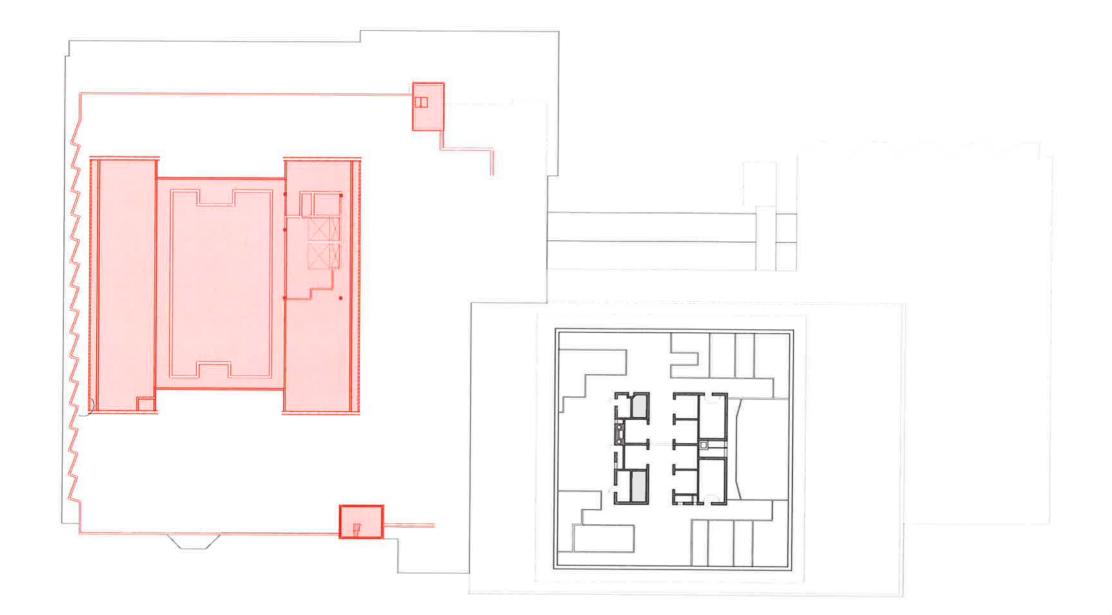
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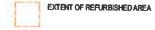
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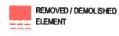






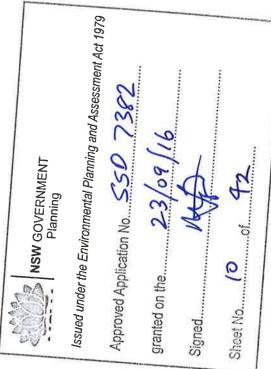


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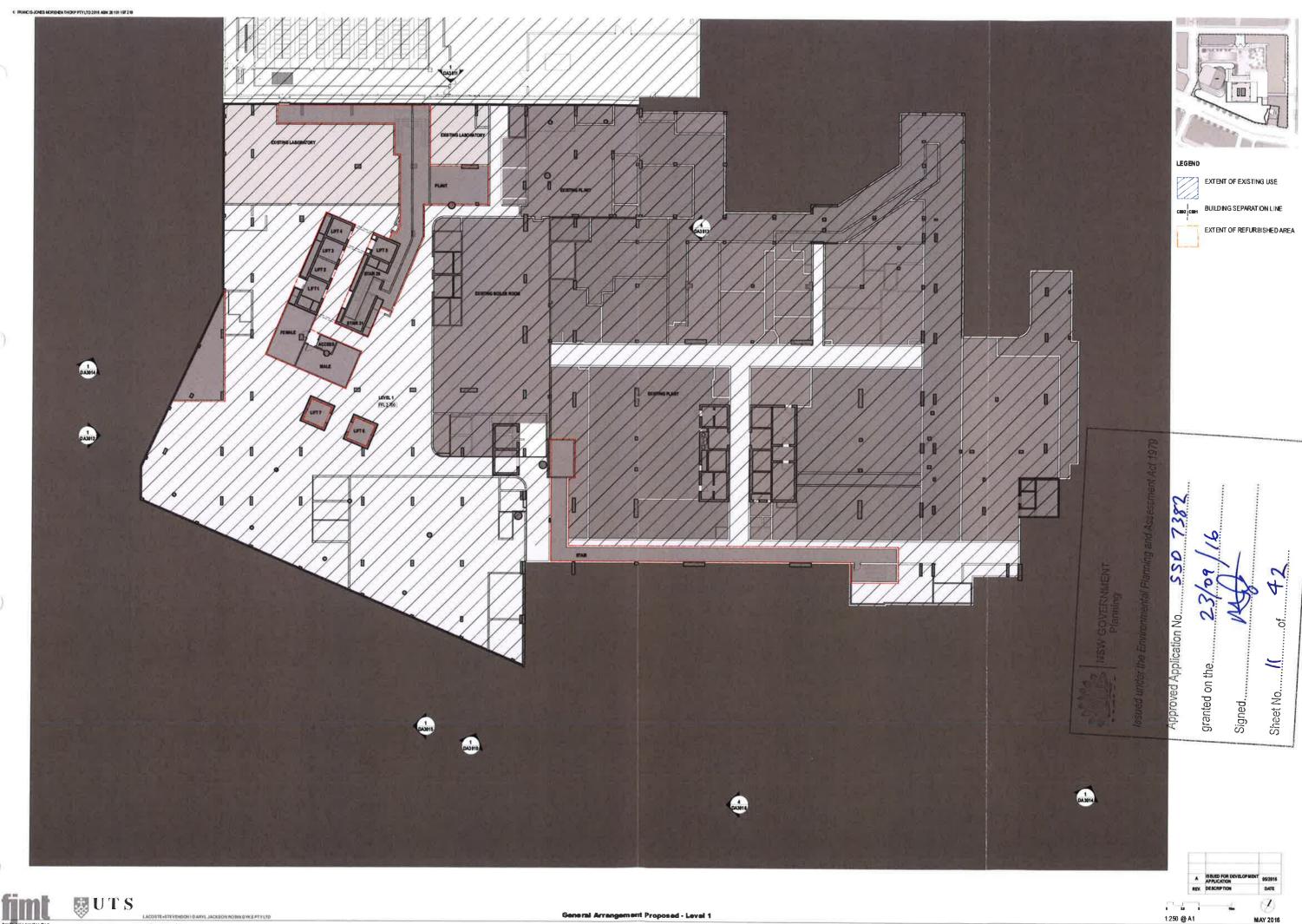
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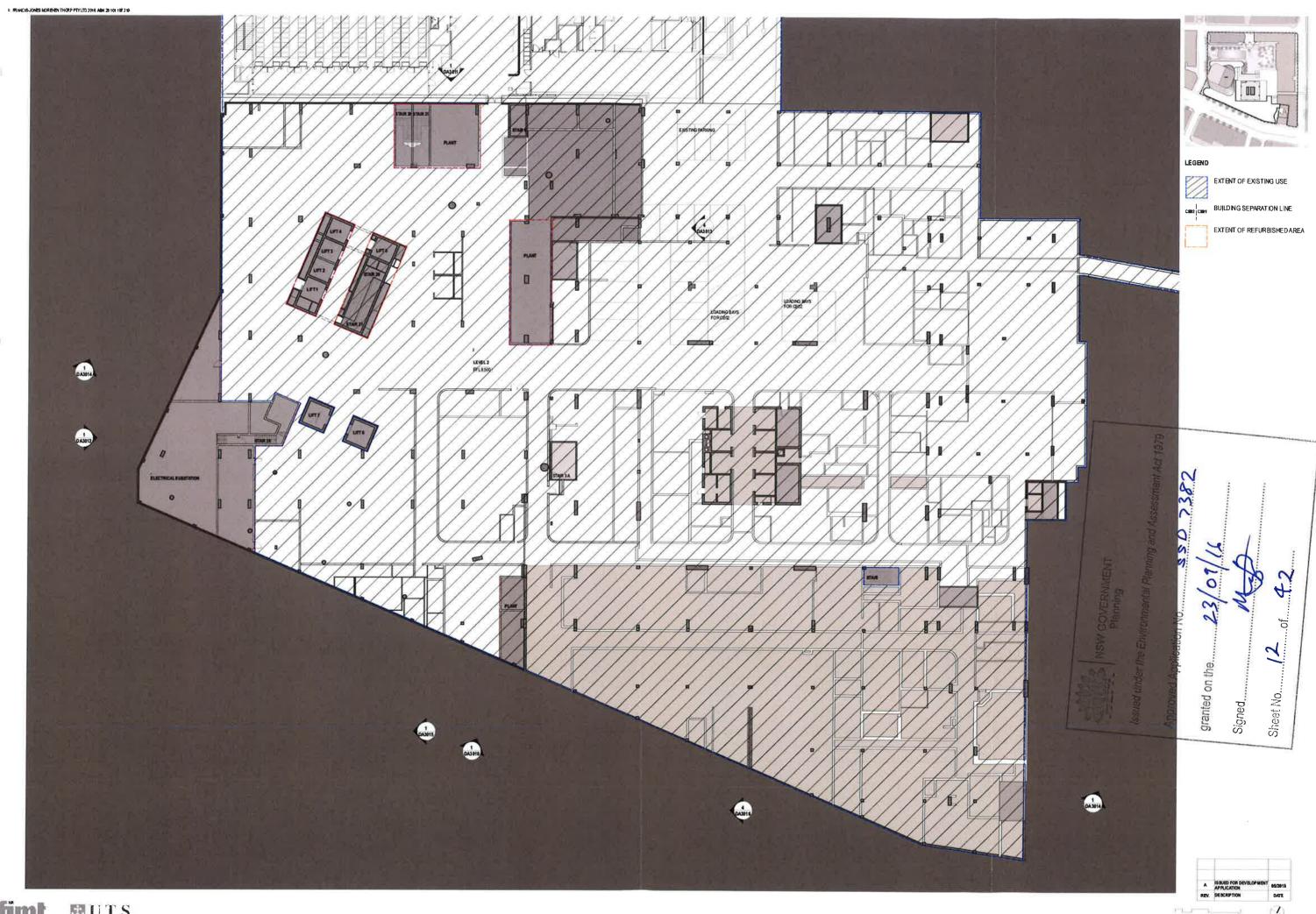


General Arrangement Proposed - Level 1 University of Technology Sydney - UTS Central

UTS City Campus, Broadway Precincl - Development Application

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For Approval



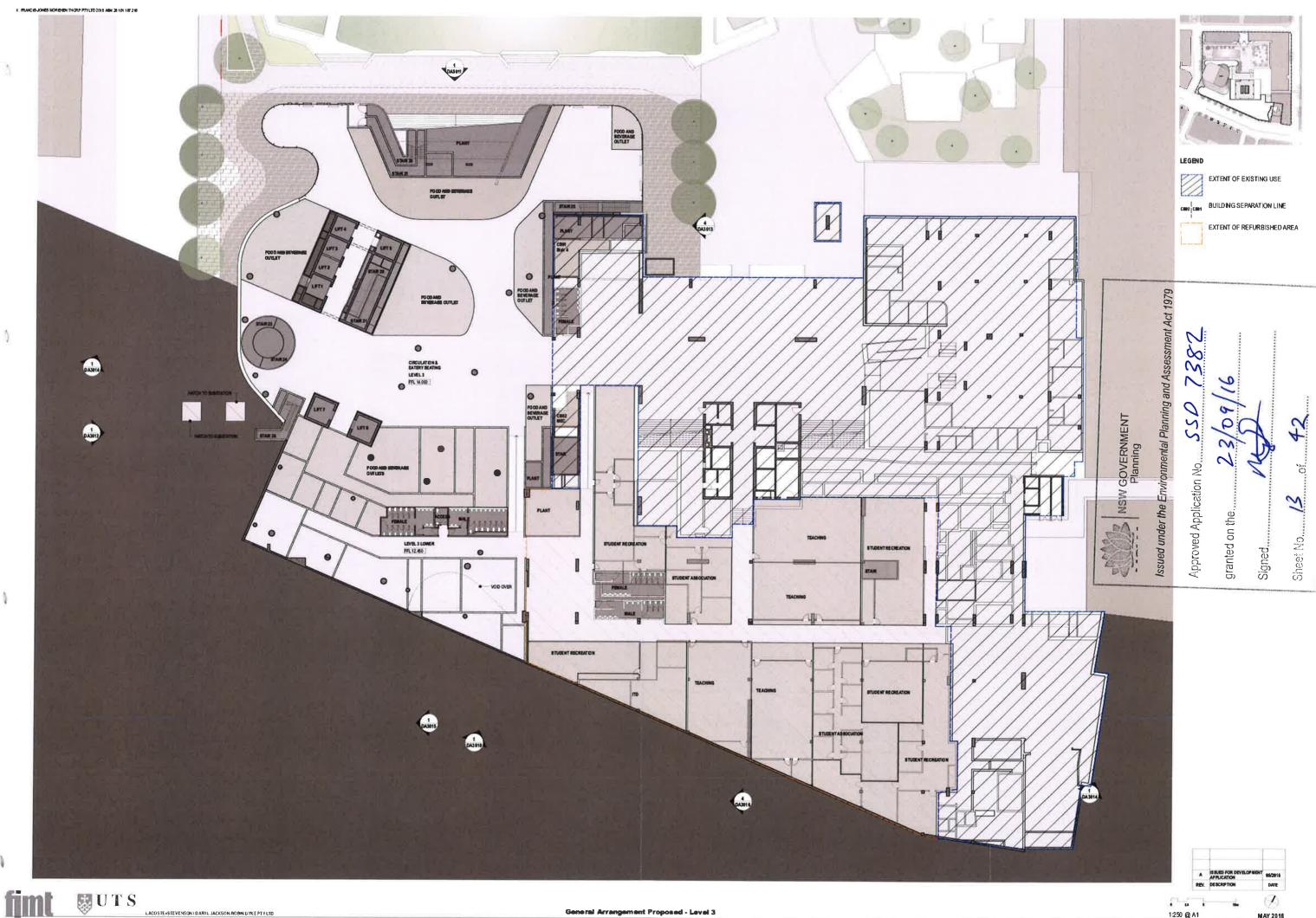


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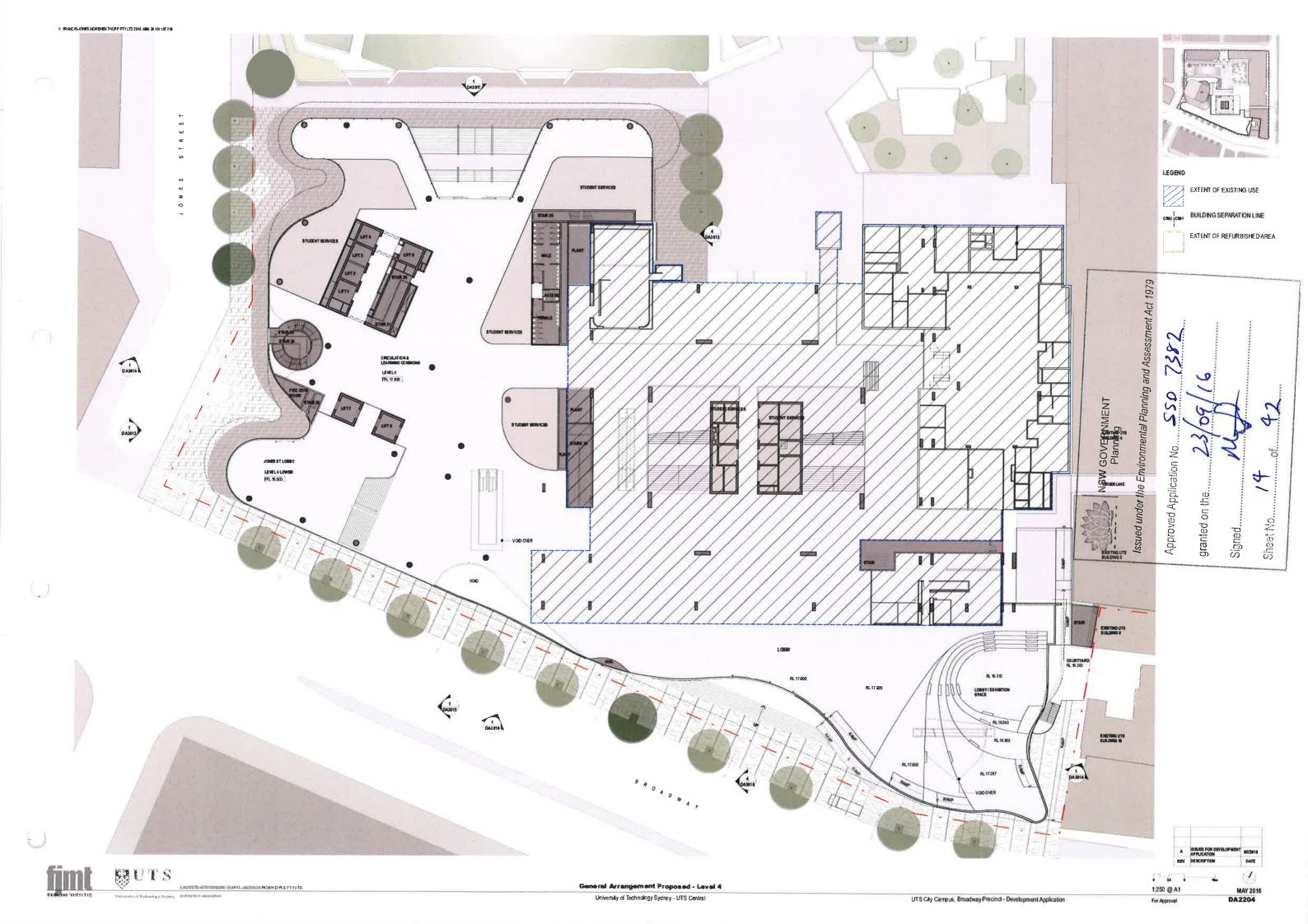
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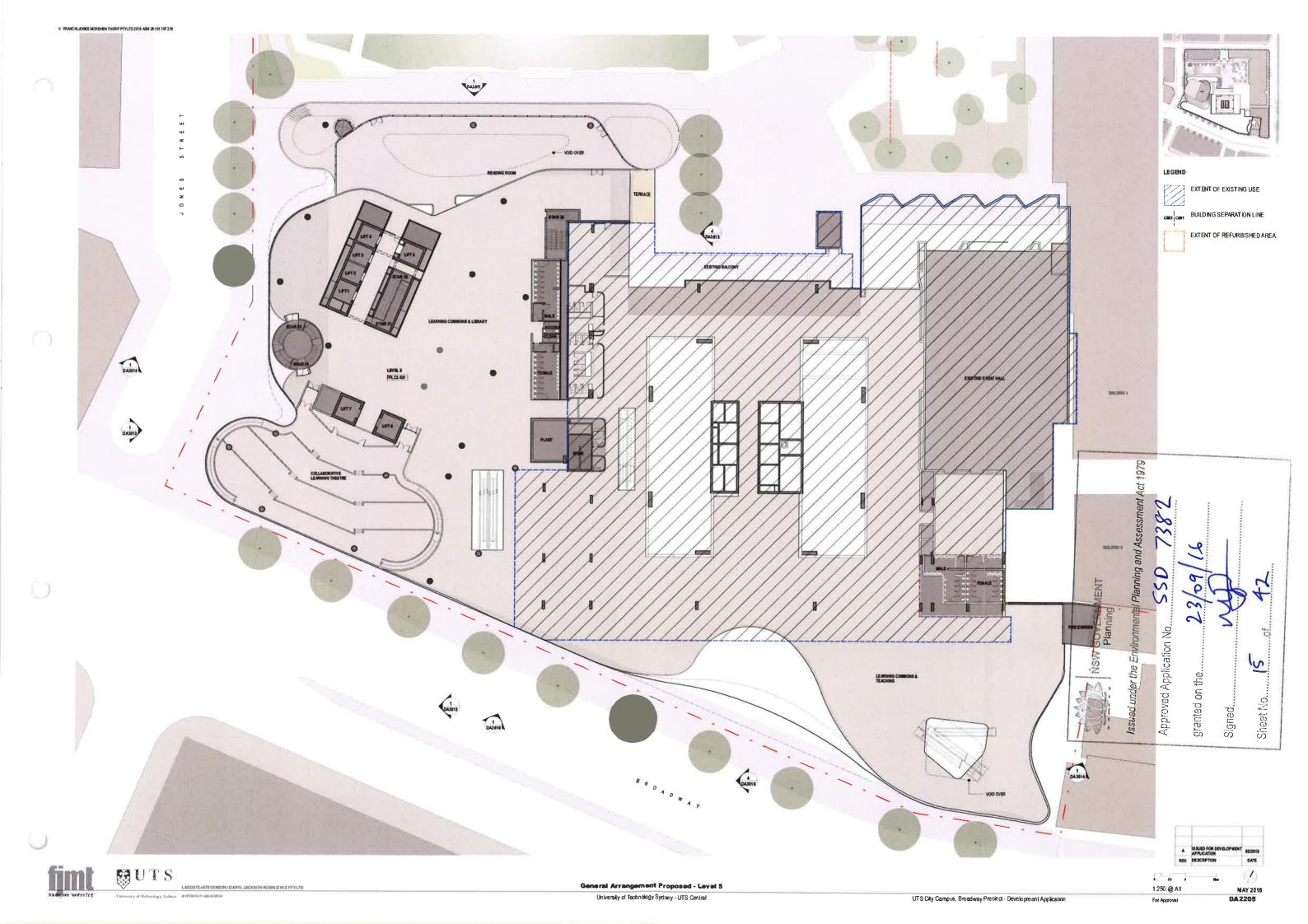
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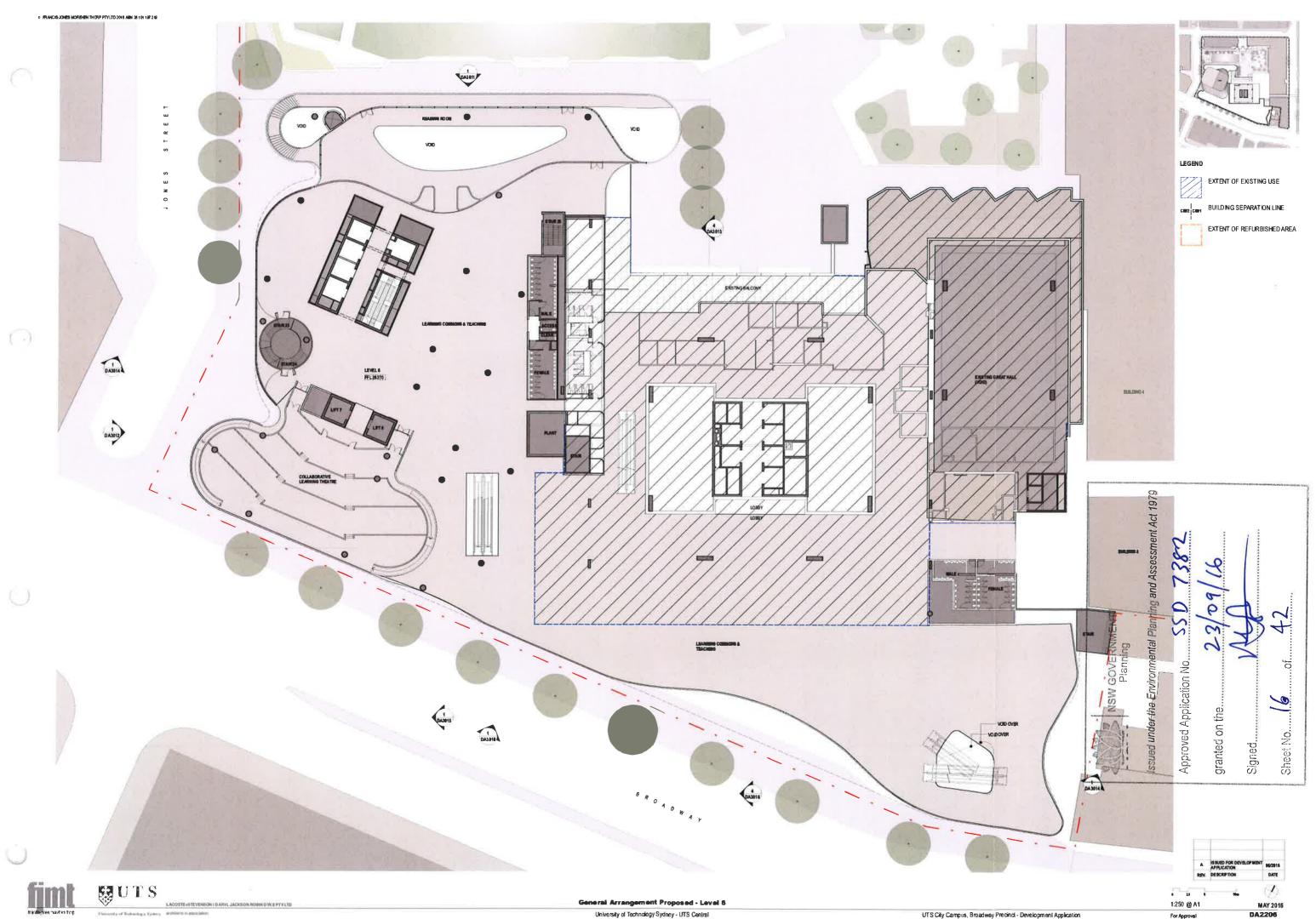


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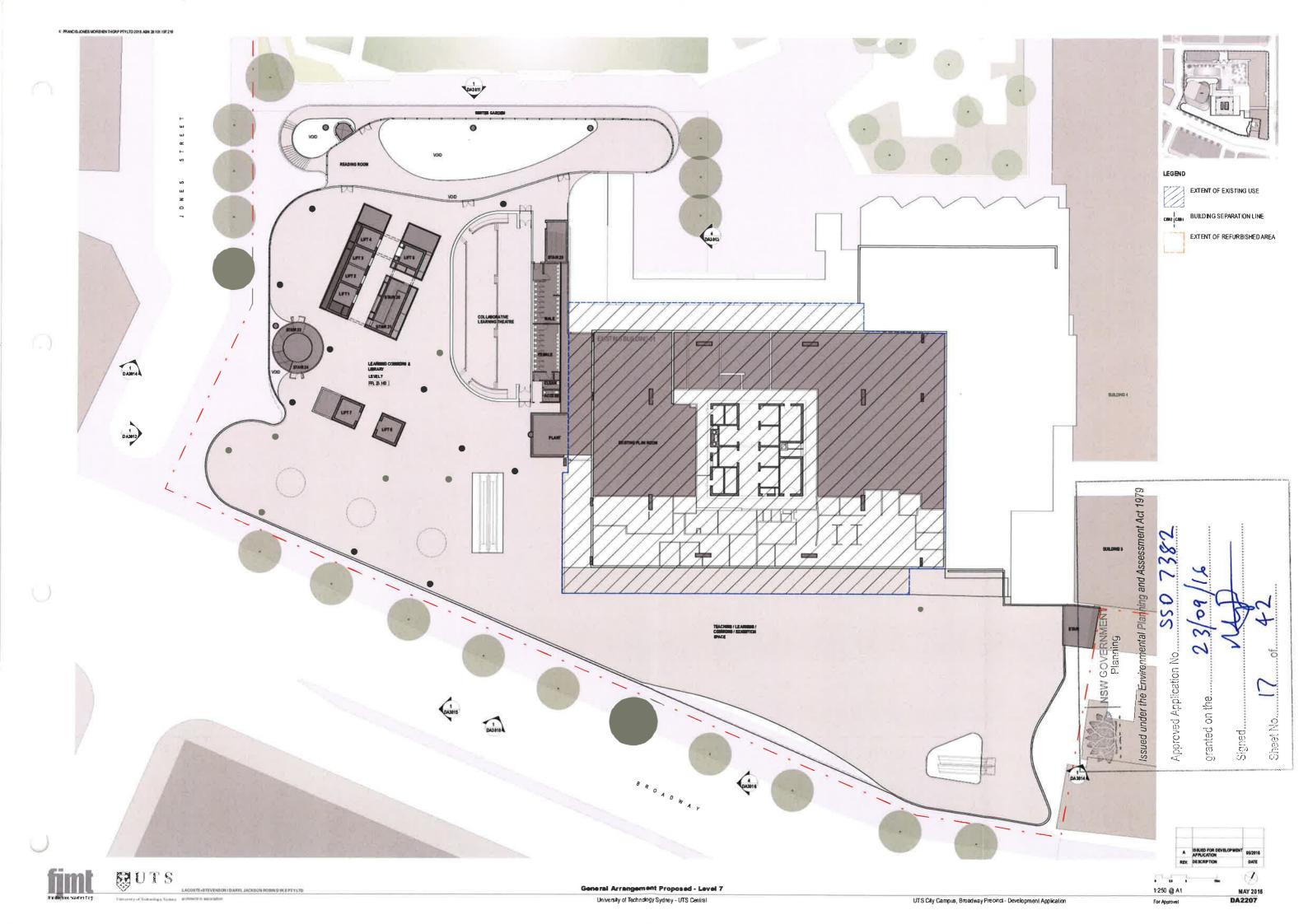
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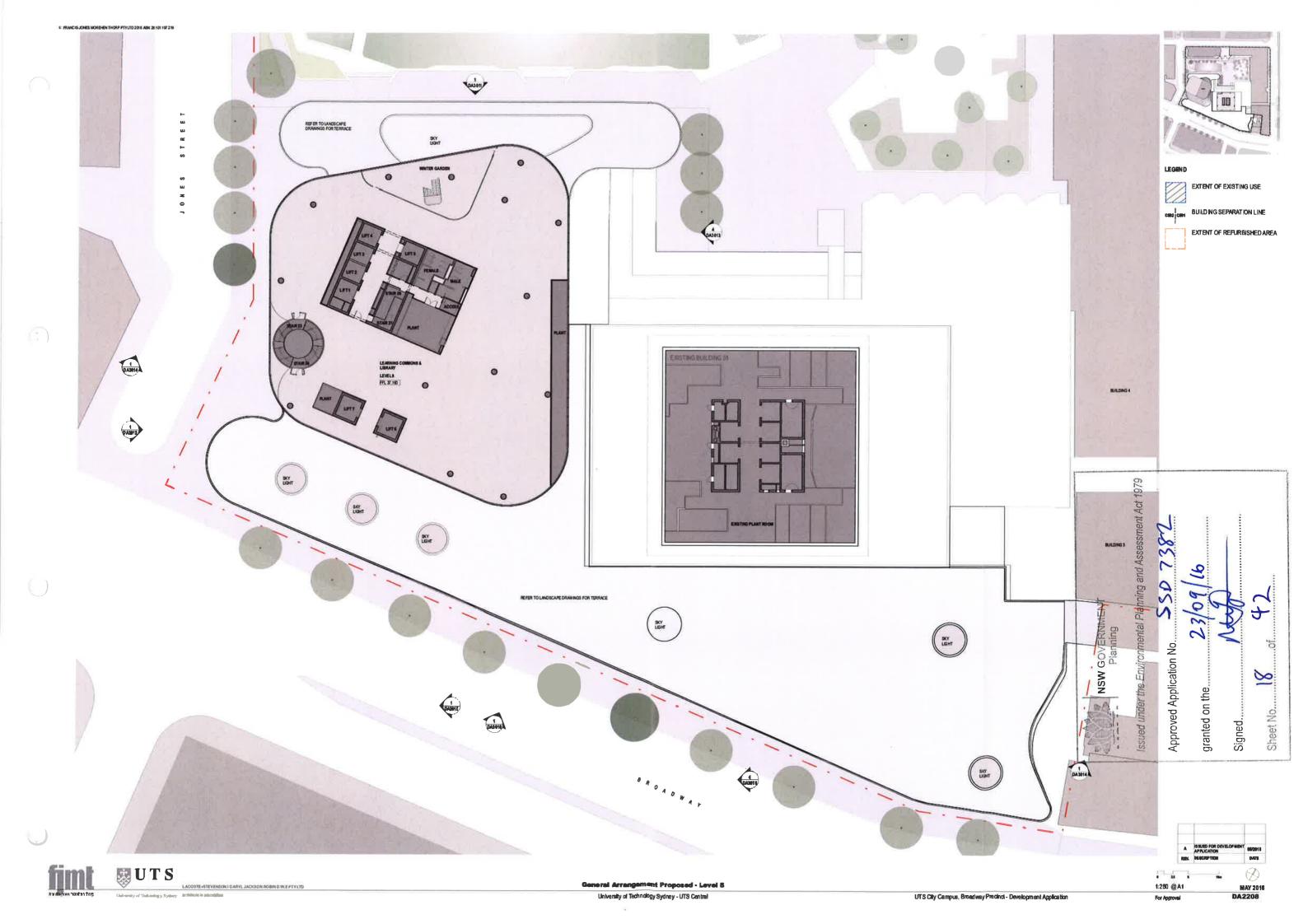


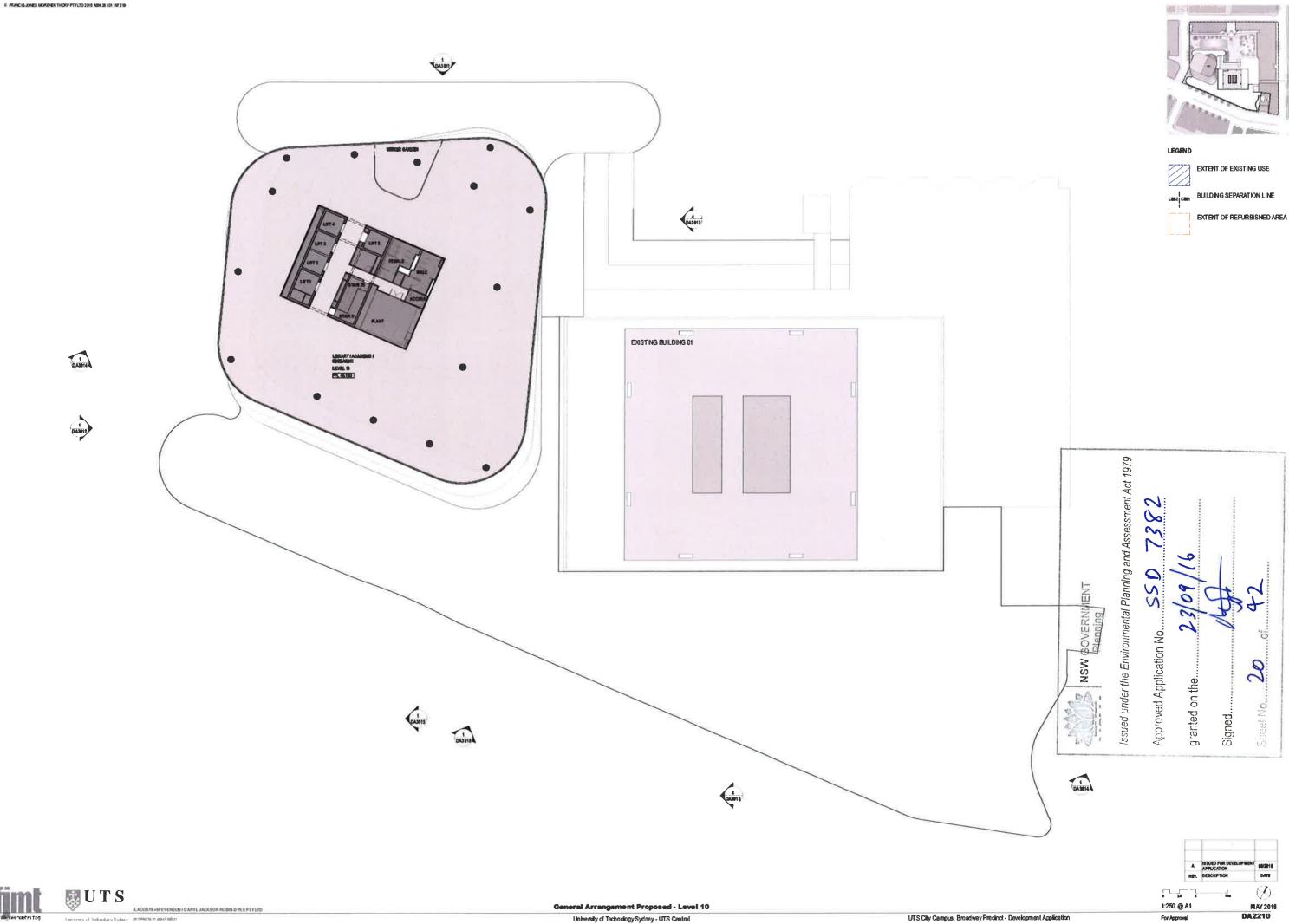




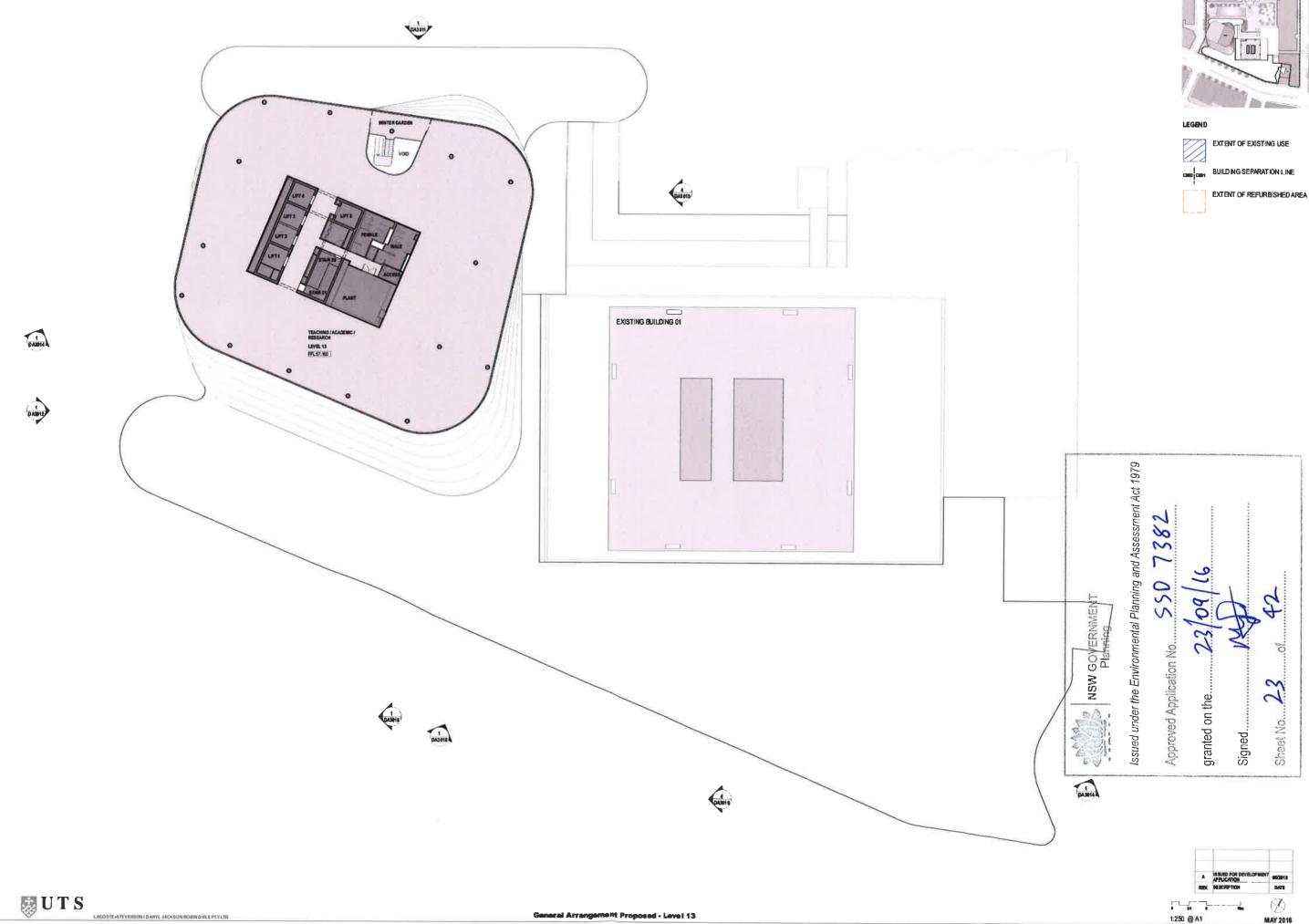
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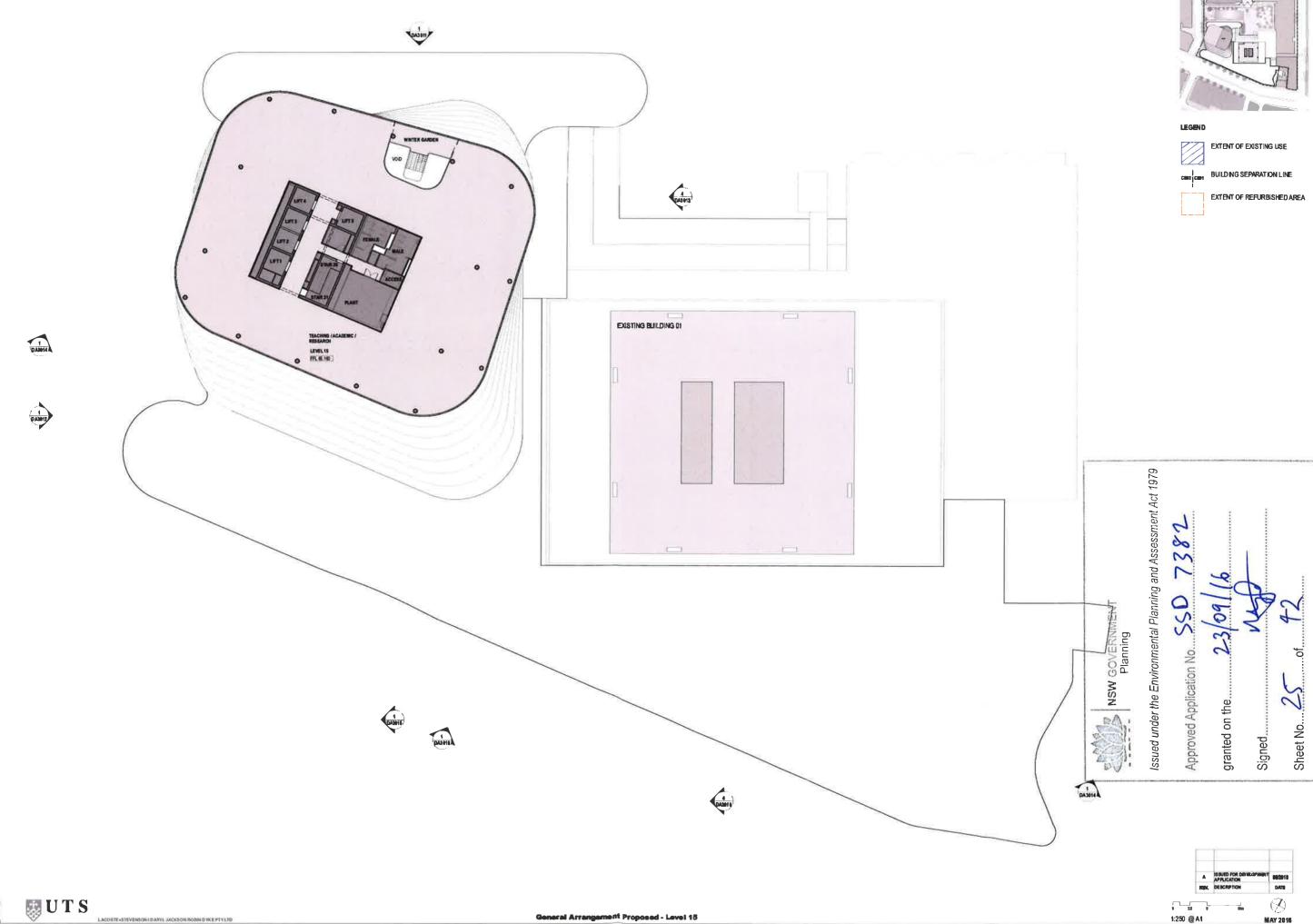
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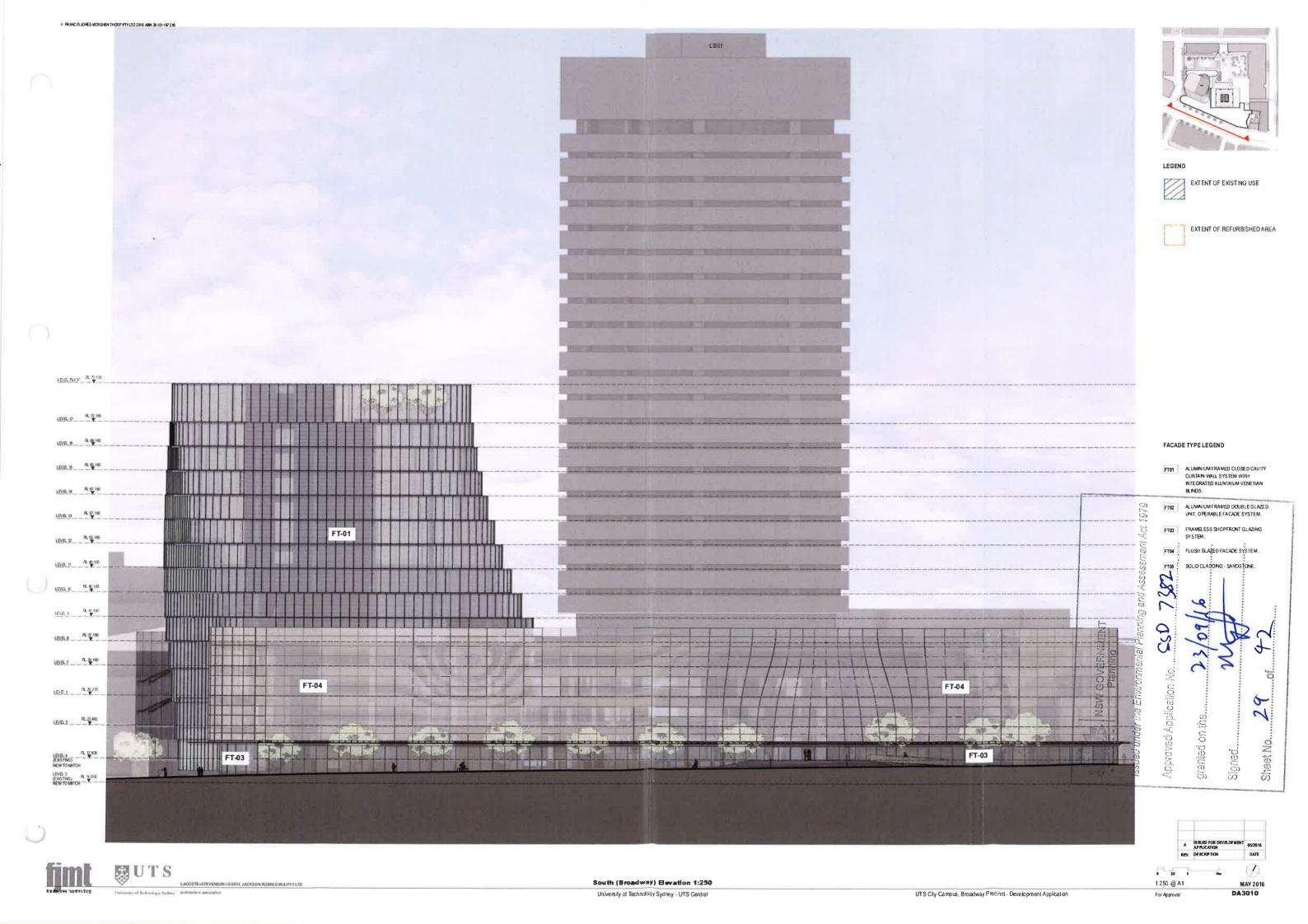


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UTS City Campus, Broadway Precinct - Development Application

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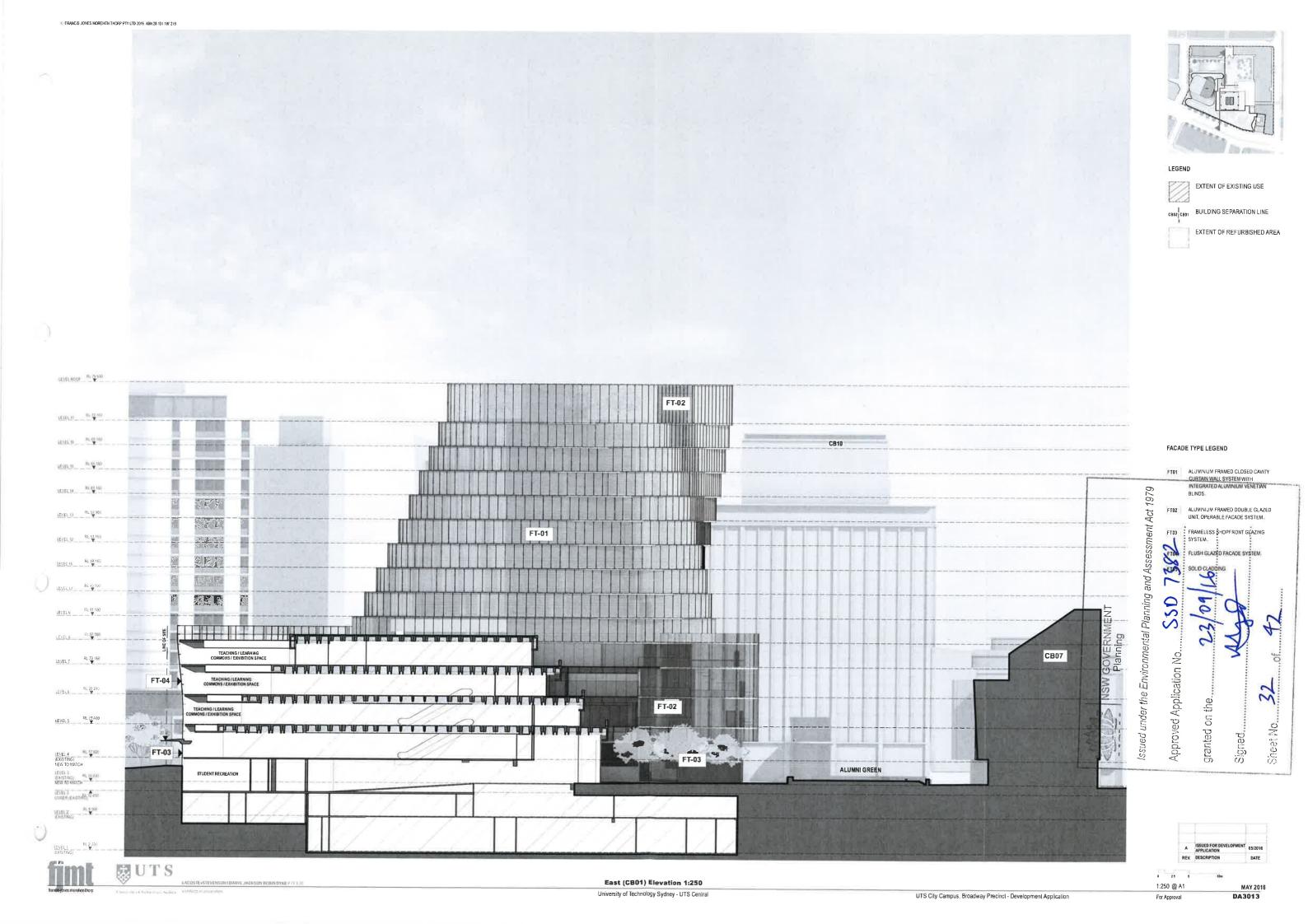
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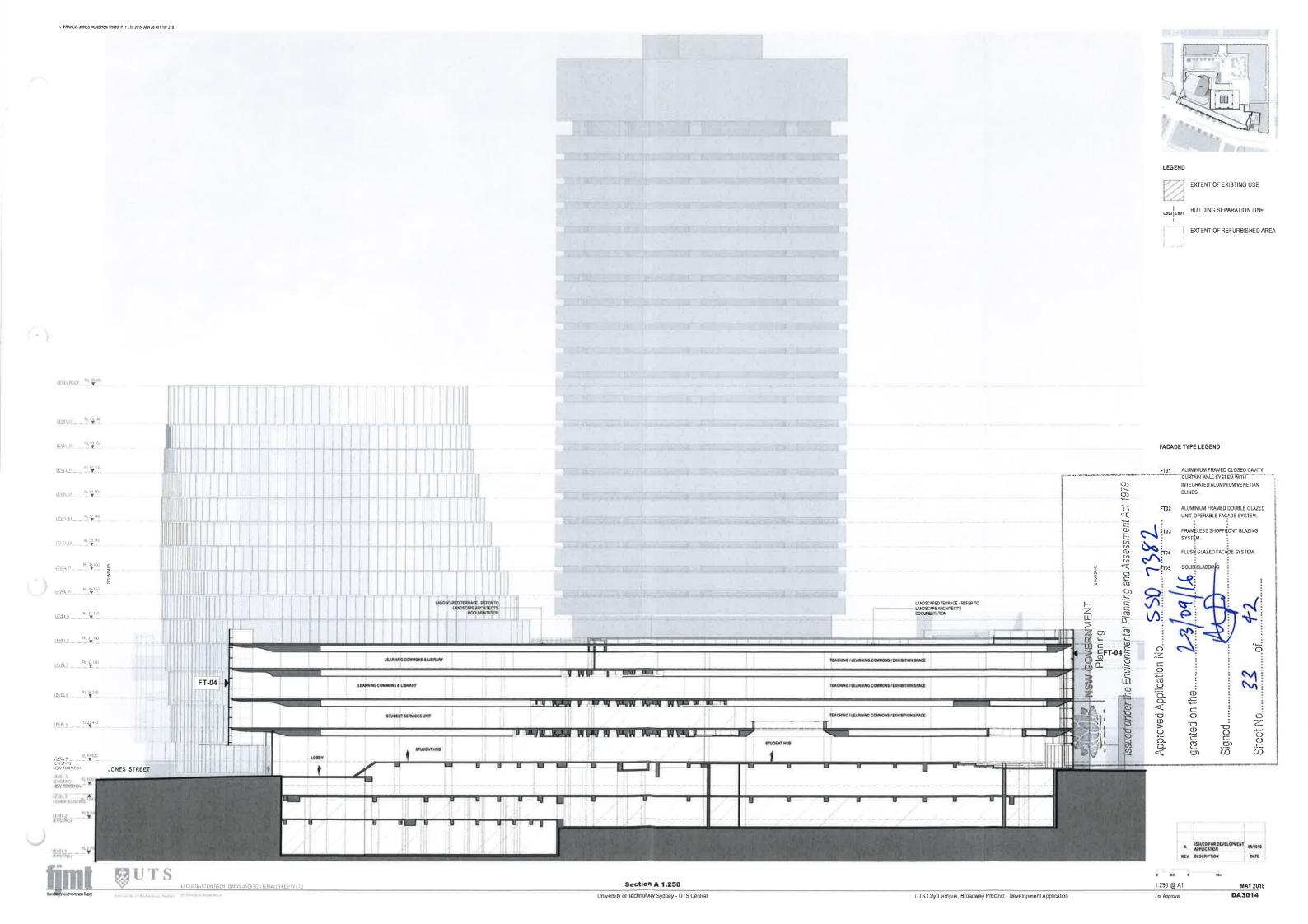


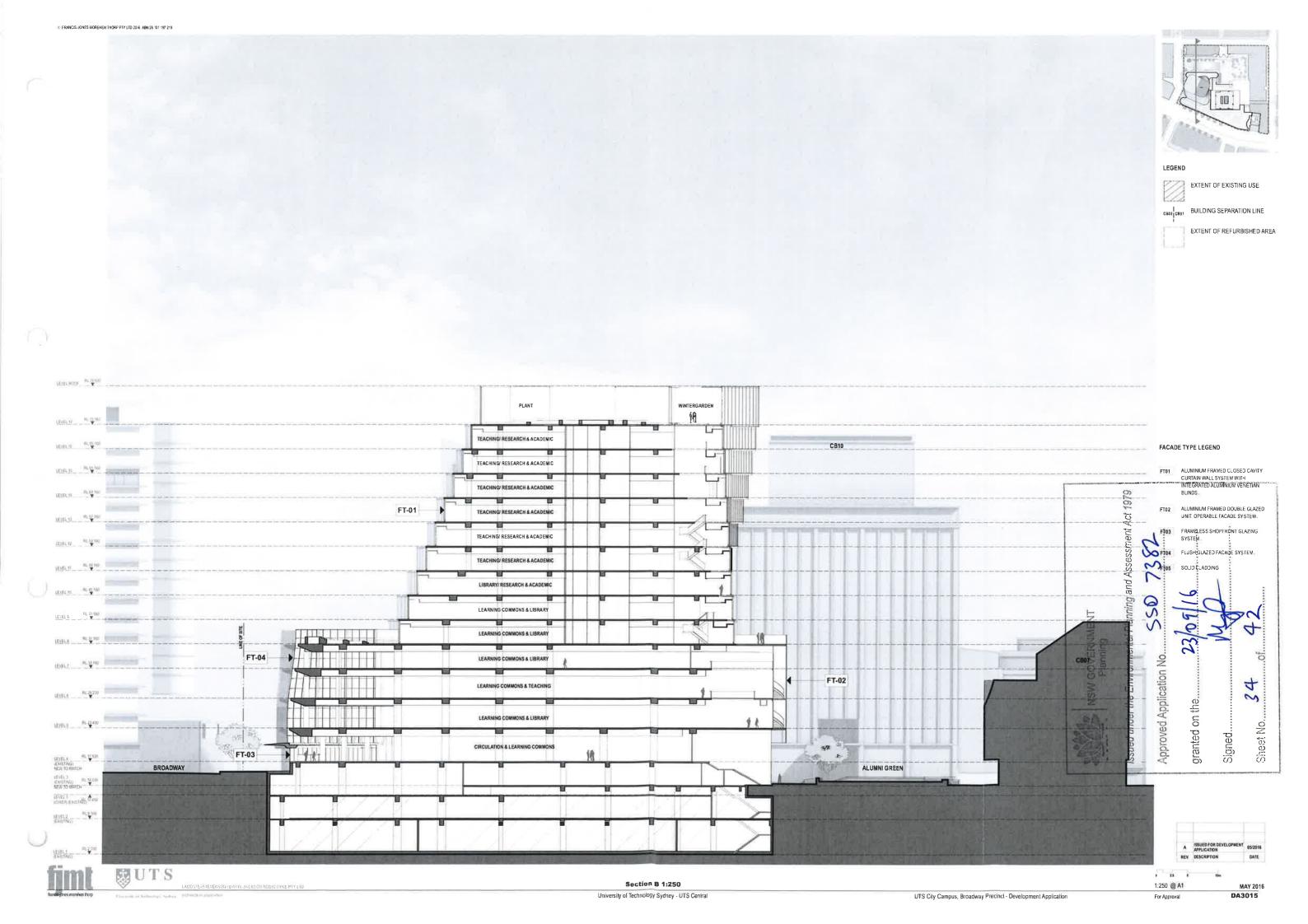


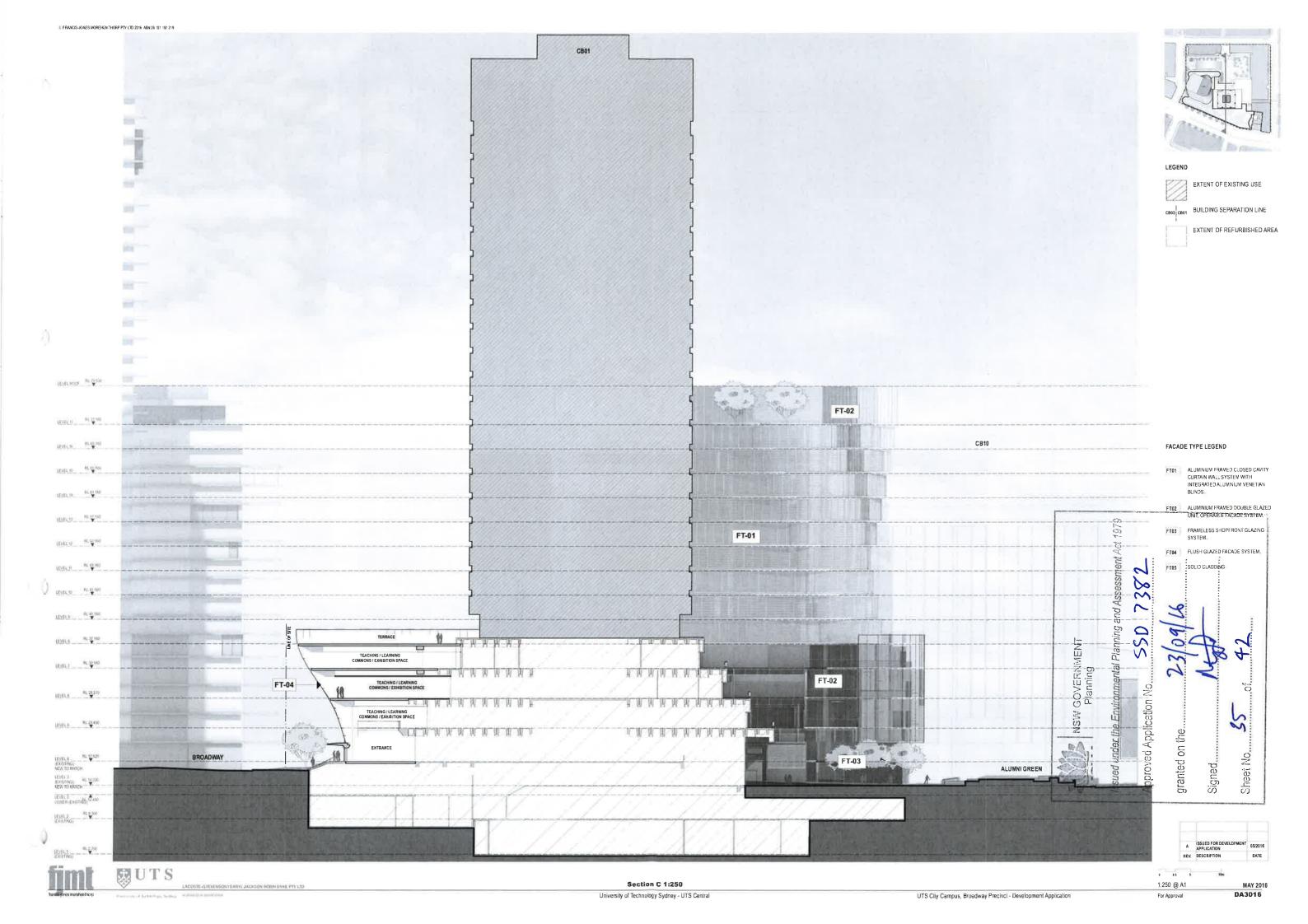












#### FACADE FINISHES





FT05







#### FA CADE FINISHES

- FT01 ALUMINUM FRAMED CLOSED CAVITY CURTAIN WALL SYSTEM WITH INTEGRATED ALUMINUM VENETIAN BLINDS.
- FT02 ALUMINUM FRAMED DGU FACADE SYSTEM
- FT03 FRAMELESS SHOPFRONT GLAZING SYSTEM.
- FTOM FLUSH GLAZED FACADE SYSTEM.
- FT09 SOUD CLADDING

LAND SCAPE FINISHES

BRO ADWAY GRANTE PAVING TO
CITY OF SYDNEY REQUIREMENTS PRECAST CONCRETE PAVING WITH VARIOUS FINISHES

TIMBER DECKING

Approved Application No.

granted on the.

# LANDSCAPE FINISHES













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UTS City Campus, Broadway Precinct - Development Application

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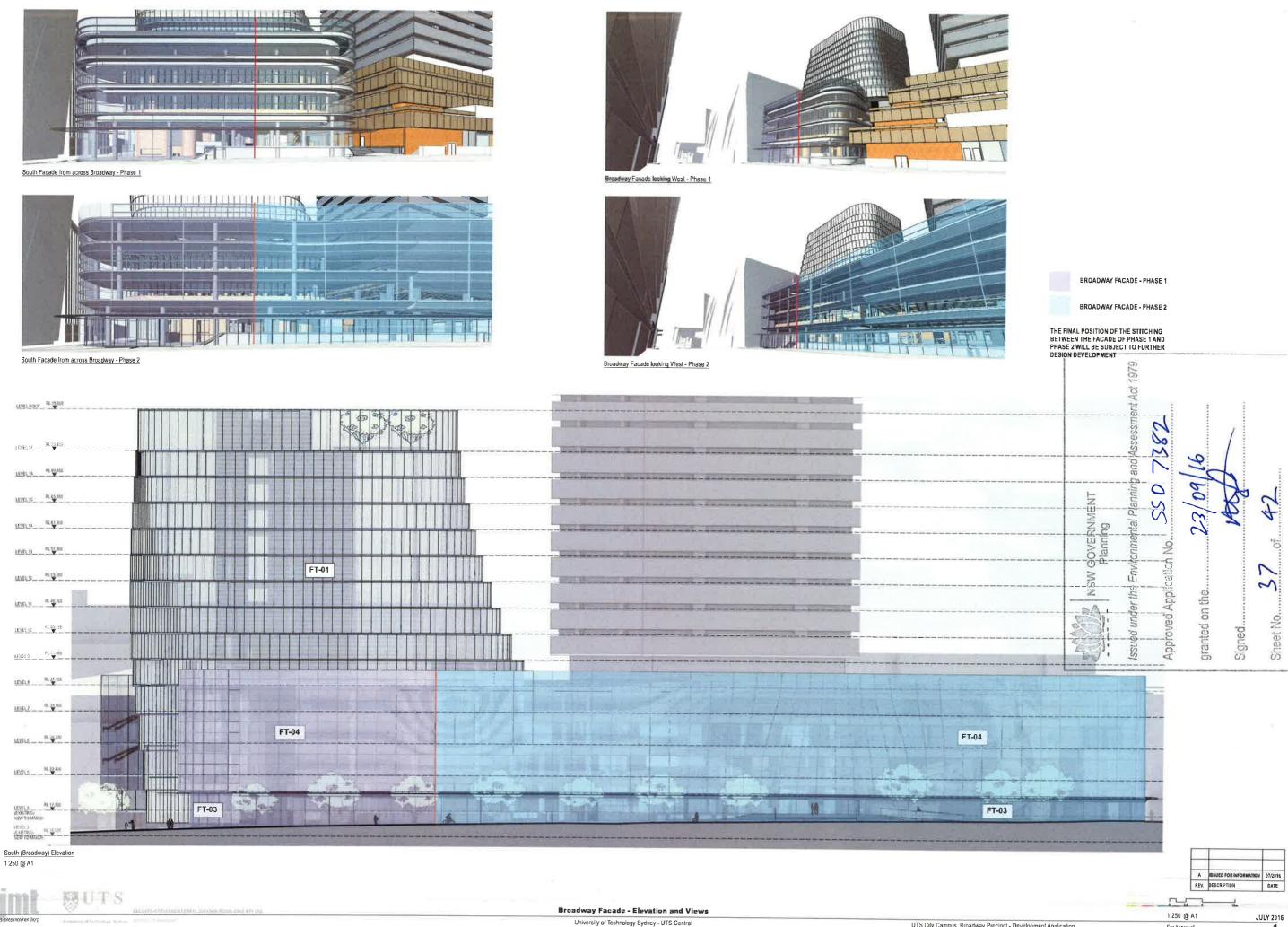
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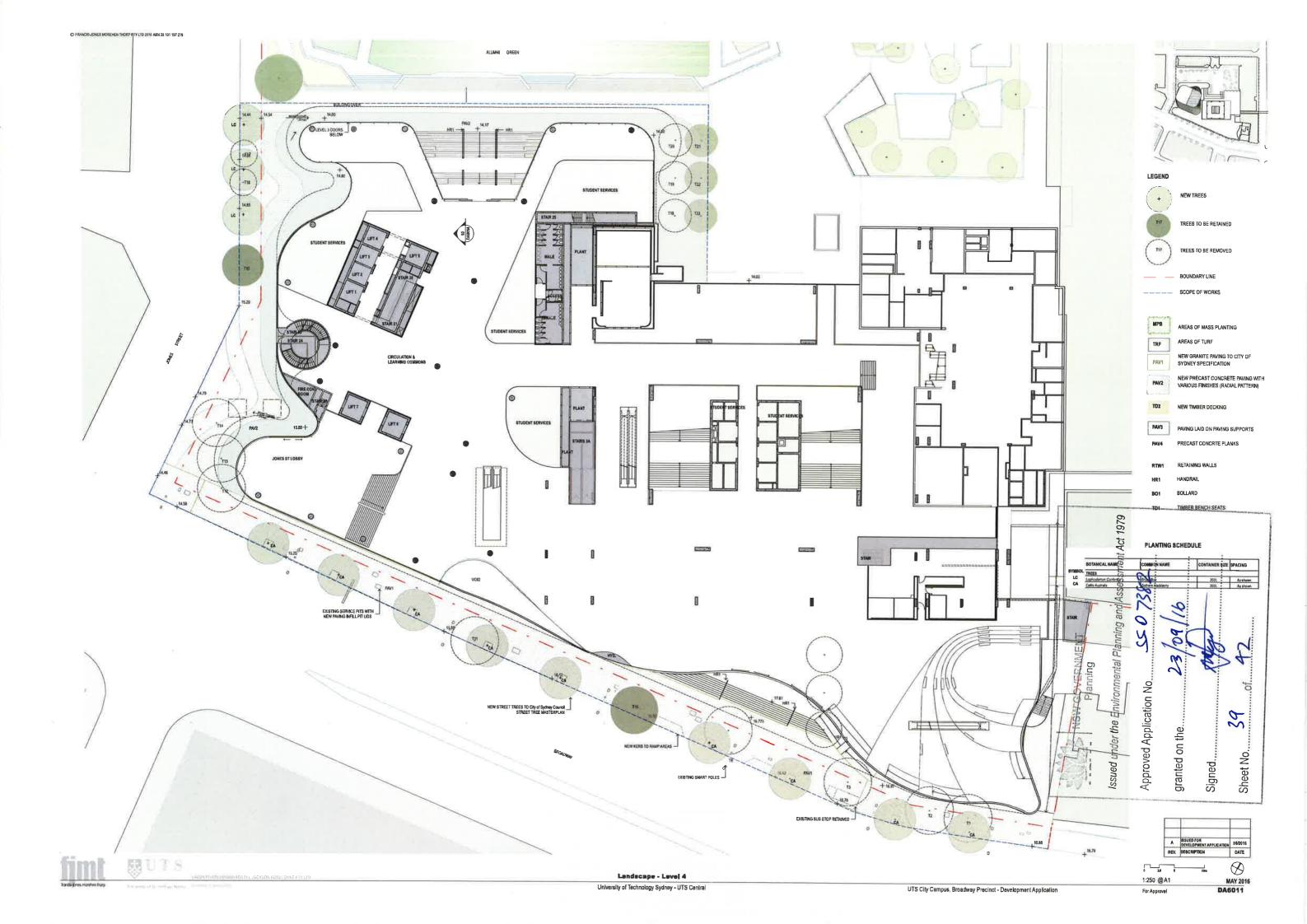
Landscape Site Plan

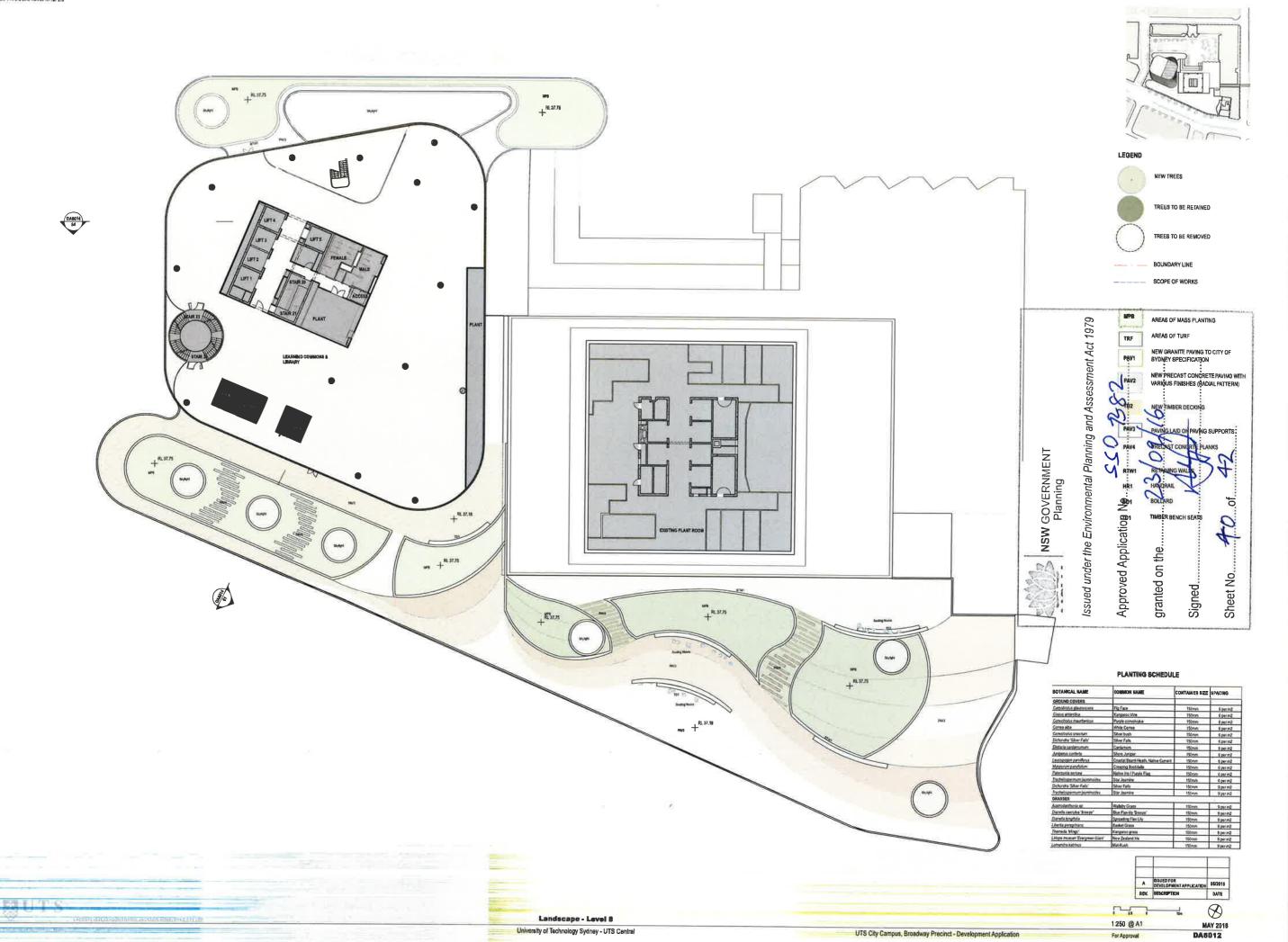
University of Technology Sydney - UTS Central

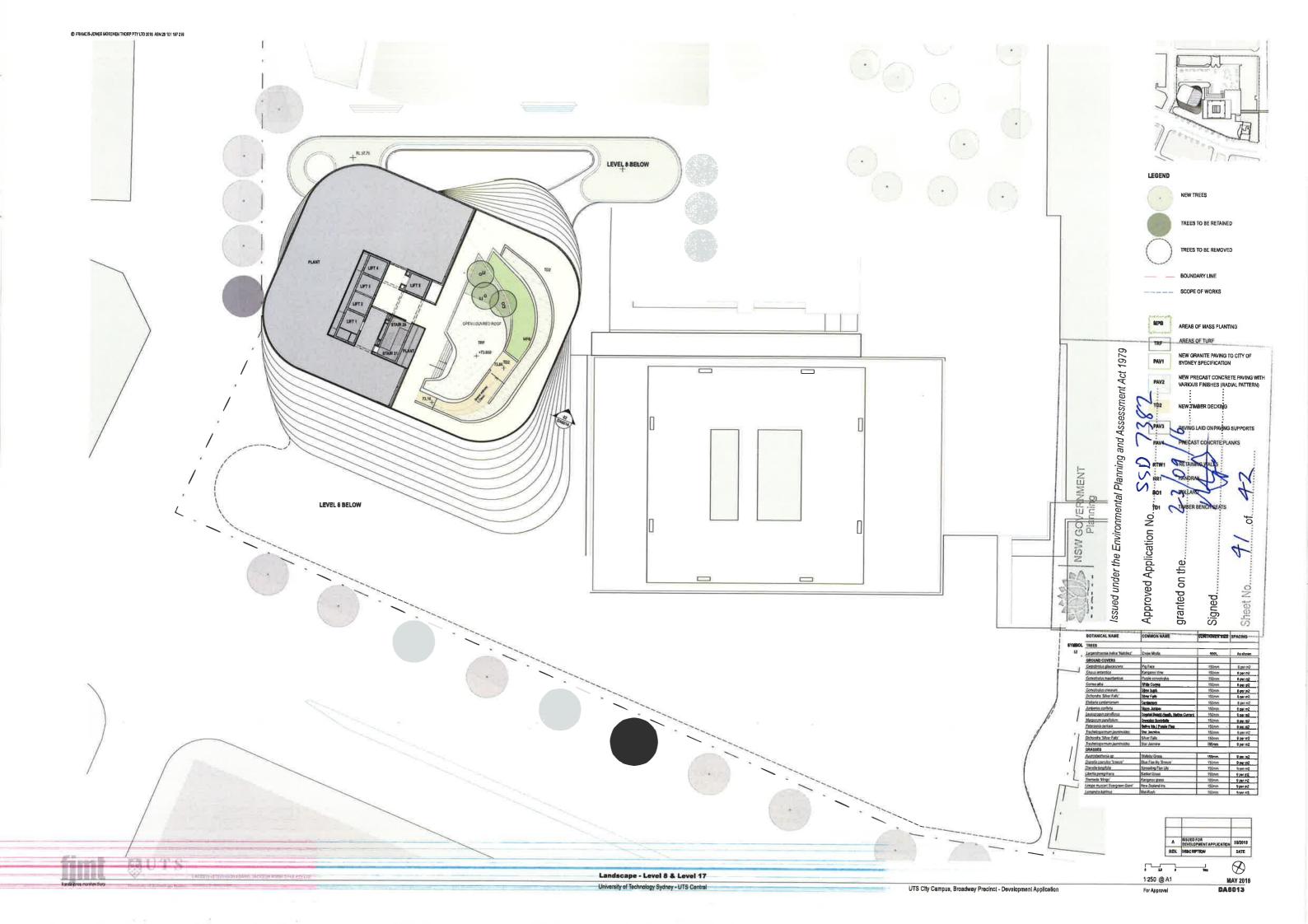
UTS City Campus, Broadway Precincl - Development Application

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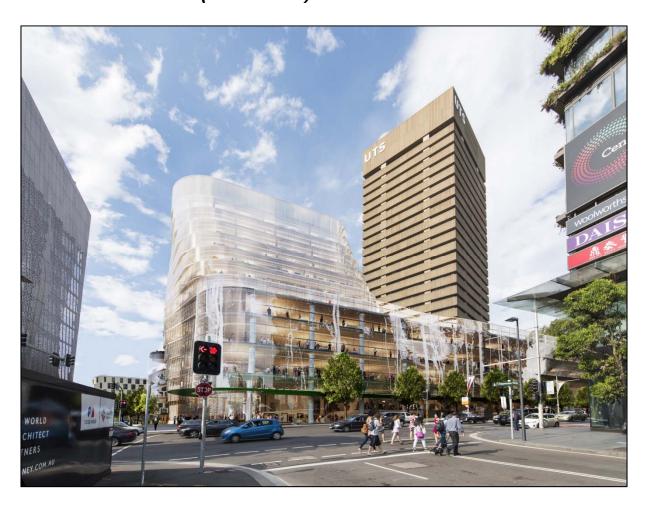
UTS City Campus, Broadway Precinct - Development Application

MAY 2016

DA6014



# STATE SIGNIFICANT DEVELOPMENT ASSESSMENT REPORT: UTS Central, Broadway Precinct, City Campus (SSD 7382)



Environmental Assessment Report Section 89H of the *Environmental Planning and* Assessment Act 1979

September 2016

## **ABBREVIATIONS**

Applicant University of Technology Sydney

CIV Capital Investment Value
Consent Development Consent
Council City of Sydney Council
DA Development Application
DCP Development Control Plan

Department Department of Planning and Environment

EIS Environmental Impact Statement
EPA Environmental Protection Authority

EP&A Act Environmental Planning and Assessment Act 1979

EP&A Regulation Environmental Planning and Assessment Regulation 2000

EPI Environmental Planning Instrument
ESD Ecologically Sustainable Development
LEP Sydney Local Environmental Plan 2012

Minister Minister for Planning

OEH Office of Environment and Heritage RMS Roads and Maritime Services RtS Response to Submissions

SEARs Secretary's Environmental Assessment Requirements
Secretary of the Department of Planning and Environment

SEPP State Environmental Planning Policy

SRD SEPP State Environmental Planning Policy (State and Regional

Development) 2011

SSD State Significant Development

TfNSW Transport for NSW

Cover Photograph: Photomontage from Chippendale Way (Source: FJMT)

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NSW Department of Planning and Environment
www.planning.nsw.gov.au

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## **EXECUTIVE SUMMARY**

This report is an assessment of a State significant development application lodged by the University of Technology Sydney (UTS), seeking approval for the construction and use of an education building within the Broadway Precinct at UTS City Campus, Ultimo.

The project, UTS Central, has a capital investment value (CIV) of approximately \$278 million and would generate 250 operational jobs and 239 construction jobs.

The development is State significant development under clause 15 of Schedule 1 to the State Environmental Planning Policy (State and Regional Development) 2011 (SRD SEPP), as it is development of education facilities and has a CIV of more than \$30 million. The Minister for Planning is the consent authority.

The site is zoned B4 Mixed Use under the Sydney Local Environmental Plan 2012 (SLEP) and the development of an education establishment is permissible with consent.

The proposal was exhibited from 12 May 2016 until 10 June 2016. The Department of Planning and Environment (the Department) received a total of nine submissions during the exhibition of the application - five submissions from public authorities, including City of Sydney Council, and four submissions from the general public, including organisations. The matters raised in the submissions included impacts on pedestrian movement, residential amenity impacts, demolition and construction impacts, public domain works and development contributions.

The applicant provided a Response to Submissions, which included: further justification for design variations to the competition-winning podium design and demonstration that design excellence has been achieved; analysis of pedestrian capacity and movement along Broadway; further details regarding overshadowing impacts; and information regarding timing of Jones Street public domain works and justification for exemption from development contribution requirements.

The Department has assessed the merits of the proposal and has found the key issues associated with the project include: built form and urban design; environmental and residential amenity impacts; and transport impacts. The Department is satisfied that the impacts of the proposal have been addressed in the Environmental Impact Statement (EIS) and Response to Submissions, and can be adequately managed through the recommended conditions. The proposal demonstrates design excellence and design integrity of the competition winning scheme for the podium has generally been maintained. The residential amenity impacts are considered acceptable on balance given the proposal is delivering social infrastructure in a recognised and highly accessible education and health precinct and the CBD context within which the affected residential units are located.

The Department considers the application is consistent with the objects of the Environment Planning and Assessment Act 1979 (EP&A Act), including ecologically sustainable development, State priorities and *A Plan for Growing Sydney*. The Department is satisfied that the subject site is suitable for the proposal and would provide additional employment opportunities. The Department therefore considers the development would be in the public interest and recommends that the State significant development application be approved, subject to conditions.

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## 1. BACKGROUND AND PROPOSED DEVELOPMENT

#### 1.1 Background

The University of Technology Sydney (UTS - the applicant), proposes to construct an education building (known as UTS Central) and increase its capacity to deliver educational services within these facilities at the Broadway Precinct within the UTS City Campus, Ultimo.

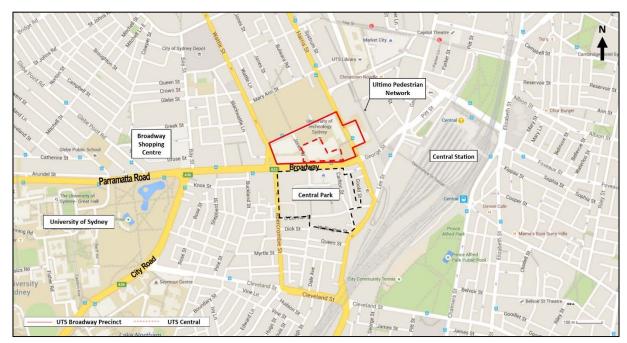


Figure 1: UTS Broadway Precinct location and surrounding context

(source: nearmaps)

UTS Central would comprise a new 10 storey tower (including a plant level) above a new five storey podium to replace Building 2 and a new four storey interconnecting podium linking through the forecourt to the existing Building 1 (refer to **Figure 5**). The new facilities would provide additional floorspace for teaching, research and learning.

UTS Central is the final stage of the approved concept plan (MP 08\_0116) for the Broadway Precinct. The approved concept plan (as modified) comprises the following components:

- the Faculty of Engineering and IT Building (formerly the Broadway Building);
- the Faculty of Science and Graduate School of Health Building (formerly the Thomas Street Building);
- expansion of the podium of Building 1 and a new Building 2;
- expansion of Building 6 for student housing;
- modifications to Buildings 3, 4 and 10;
- modifications to Alumni Green, including a 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.

The concept plan was originally approved on 23 December 2009 by the then Minister for Planning and has been modified five times. Most recently MOD 5 was approved on 17 March 2016, which comprises the demolition of Building 2, a revised maximum gross floor area (GFA) of 38,261 sqm for Building 2, a new building envelope with a maximum height of 64.5 m and revised design controls for Building 2.

Refer to Figures 2 to 4 for the completed new buildings and Alumni Green.



Figure 2: The Faculty of Engineering and IT Building



Figure 3: The Faculty of Science and Graduate School of Health Building

(source:DoPE)



Figure 4: Alumni Green

(source: nearmaps)

## 1.2 Site Description

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 to the east; Broadway to the south; and Wattle Street to the west.

The Broadway Precinct is shown in **Figure 5**. The proposal is located on the southern edge of the Broadway Precinct on Lot 2012 DP 1183894. The proposal is located in the central portion of the precinct bounded by: Alumni Green and Building 1 to the north; Building 18 to the east; Broadway to the south; and Jones Street to the west.

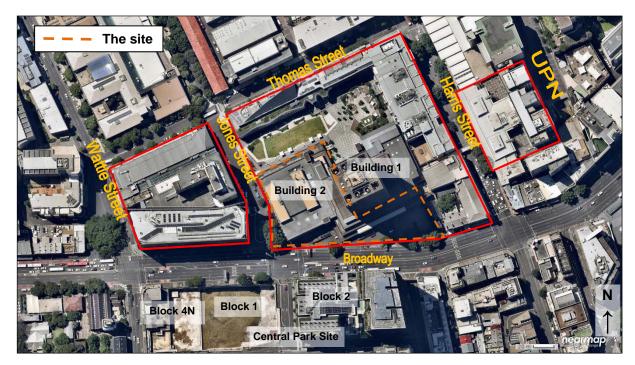


Figure 5: Project location (Broadway Precinct outlined in red)

(source: nearmaps)

## 1.3 Surrounding Development

The former Carlton United Brewery 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. The proposal is located north of Block 2 within Central Park and north-east of approved locations for Block 1 and Block 4N.

Construction of Block 2 within Central Park 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 Central Park to allow for the conversion of the 19 and 20 storey buildings on Block 1 and Block 4N (south west of the proposal) 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 commenced.

Located to the north of the site is the heritage listed former Sydney Technical College Building, on the corner of Jones and Thomas Streets. The heritage listed building is a four storey building.

## 1.4 Project Description

**Table 1** provides a summary of the proposal's key components and features and shown in **Figures 6** to **8** is the proposed site layout.

**Table 1: Key Development Components** 

Development Summary	<ul> <li>site preparation works, including demolition of existing Building 2 to ground level and associated tree removal;</li> <li>construction of a new 15 storey Building 2, including a part five storey podium and one level of plant, above an existing two level basement;</li> <li>construction of a four storey extension of podium of Building 1 along Broadway, integrated with podium of Building 2;</li> <li>public domain improvements works;</li> <li>landscaping works;</li> <li>staging of the construction of the two buildings; and</li> <li>extension and augmentation of physical infrastructure/utilities.</li> </ul>		
Maximum Height	Overall – 65.5 metres (RL 79.5)		
	Podium – 23.16 metres (RL 37.16)		
Gross Floor Area (GFA)	46,150 sqm		
Capital Investment Value	\$278,230,007		
Jobs	250 operational and 239 construction jobs		

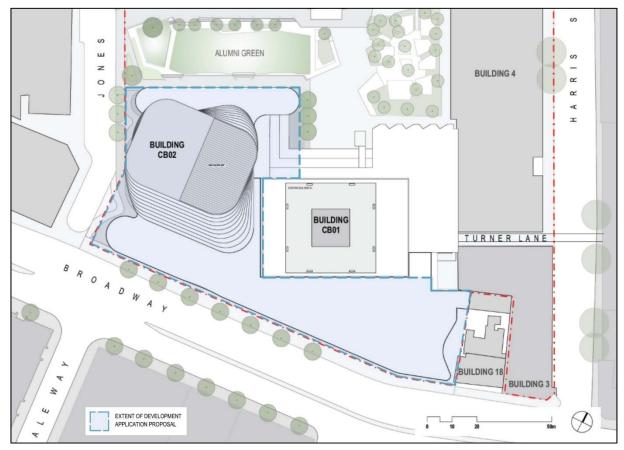


Figure 6: Proposed site layout



Figure 7: Visual perspective of UTS Tower and the proposed podium from Broadway (source the applicant)



Figure 8: Visual perspective of the proposal from Chippendale Way

#### (source: the applicant)

## 1.5 Project Need and Justification

The University projects student load to increase from the 17,100 full time equivalent students enrolled in 2014 to 19,500 in 2020 and additional floor space is required to accommodate this projected growth. The redevelopment of Building 2 and extension of Podium 1 is the final stage of the redevelopment of the Broadway Precinct and would maximise the potential of the site and continue to deliver growth within the tertiary education sector in NSW. The additional facilities would ensure that NSW continues to attract a greater number of lecturers, researchers and students.

The proposal would continue the University's recent delivery of contemporary and unique buildings. It would deliver a revitalised front entrance to the University and also an improved interface with the public domain. The new Building 2 and extension of Building 1 podium would also improve permeability through the campus by providing a more legible main entrance and an integrated ground floor for Buildings 1 and 2, which are situated on the primary frontage of the University. It would accommodate a range of educational functions and provide world leading collaborative teaching and learning spaces to ensure the University remains competitive locally and globally.

The proposal 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.

## 2. STATUTORY AND STRATEGIC CONTEXT

## 2.1. SEPP (State and Regional Development) 2011

The proposal is classified as State significant development because it is development for the purpose of an educational establishment with a capital investment value (CIV) in excess of \$30 million in accordance with Schedule 1 of State Environmental Planning Policy (State and Regional Development) 2011. Therefore the Minister for Planning is the consent authority.

#### 2.2. Delegated Authority

In accordance with the Minister's delegation dated 16 February 2015, the Executive Director, Priority Projects Assessments can determine the subject application as Council has not objected to the proposal, no political disclosure statement has been made and less than 25 public submissions have been received objecting to the proposal.

## 2.3. Permissibility and Zoning

The site is zoned B4 Mixed Use under Sydney Local Environmental Plan 2012 (SLEP) and the proposal is permissible with consent. The proposal is consistent with the objectives of the zone as it seeks to expand an existing use that is compatible with and supported by the surrounding uses. The proposal is well integrated with the surrounding uses as the staff, students and visitors of the educational facility also support the surrounding uses. The proposal is also located optimally to benefit from accessibility to public transport.

## 2.4. Environmental Planning Instruments

The Department of Planning and Environment's (the Department's) consideration of relevant Environmental Planning Instruments (EPIs - including SEPPs) is provided in **Appendix B**. The proposal is consistent with the relevant requirements of the EPIs.

#### 2.5. Objects of the EP&A Act

Decisions made under the Environmental Planning and Assessment Act 1979 (EP&A Act) must have regard to the objects of the EP&A Act, as set out in section 5 of the Act (see glossary at **Appendix D**). The proposal complies with the objects of the EP&A Act as it would deliver additional education facilities to promote the social welfare of the State. The proposal also supports the orderly development of land within an existing university campus for social infrastructure, and thereby protecting the land for public purposes.

#### 2.6. Ecologically Sustainable Development

The EP&A Act adopts the definition of Ecologically Sustainable Development (ESD) found in the *Protection of the Environment Administration Act 1991* (see glossary at **Appendix D**). Section 6(2) of that Act states that ESD requires the effective integration of economic and environmental considerations in decision-making processes and that ESD can be achieved through the implementation of:

- (a) the precautionary principle,
- (b) inter-generational equity,
- (c) conservation of biological diversity and ecological integrity,
- (d) improved valuation, pricing and incentive mechanisms.

The Department has considered the project in relation to the ESD principles. The Precautionary and Inter-generational Equity Principles have been applied in the decision making process via a thorough and rigorous assessment of the environmental impacts of the project. The proposal is considered to be consistent with ESD principles as described in Section 6.5 of the applicant's EIS, which has been prepared in accordance with the requirements of Schedule 2 of the Regulation.

The proposal is located on a previously developed and disturbed site. It would not result in the loss of any threatened or vulnerable species, populations, communities or significant habitats. However, the development would result in the loss of 18 trees (including seven street trees), but this would be offset with the planting of 15 trees (consisting of 12 street trees and three trees on the rooftop terrace). The site is not subject to any known effects of flooding and is not subject to bushfires. The site is unlikely to be impacted by changes in sea level resulting from climate change.

The applicant has also identified that ESD initiatives have been incorporated into the design and construction of Building 2, which is aiming to achieve a 5 star Green Star rating, and that whilst the podium for Building 1 cannot be formally certified, it would also incorporate similar measures that would target the same rating. The ESD initiatives that are incorporated in the proposal include:

- 30 per cent reduction in greenhouse gas emissions through the use of a highperformance façade and high efficiency plant;
- 25 per cent reduction in potable water consumption through the use of water efficient fixtures, collection of rainwater, re-use of rainwater and capture and re-use of fire system test water:
- high quality internal environment through improved ventilation, localised occupant controls, low energy lighting;
- reduction of construction and operational waste and use of environmentally preferable materials; and
- water sensitive urban design solutions in the landscape treatment.

The Department has considered the development in relation to the ESD principles and is satisfied that the proposed sustainability initiatives would encourage ESD, in accordance with the objects of the EP&A Act and EP&A Regulation.

#### 2.7. Environmental Planning and Assessment Regulation 2000

Subject to any other references to compliance with the Regulation cited in this report, the requirements for Notification (Part 6, Division 6) and Fees (Part 15, Division 1AA) have been complied with.

#### 2.8. Strategic Context

The Department considers that the proposal is appropriate for the site given it:

- is consistent with NSW State Priorities to build infrastructure to support an extra one million people over the next 10 years and to ensure NSW residents have the best educational infrastructure;
- is consistent with A Plan for Growing Sydney, as it would be consistent with the priorities to support education infrastructure in the Broadway and Camperdown Education and Health Precinct:
- is consistent with NSW Long Term Transport Master Plan 2012, as it proposes to strengthen usage of existing public transport services by not providing additional car parking and thereby encouraging a modal shift away from private vehicle use and encouraging sustainable transport use;
- is consistent with *Sydney Cycling Future 2013*, as it excludes the provision of additional car parking and is supported by a campus wide cycling strategy to encourage a modal shift away from private vehicle use; and
- would provide direct investment in the region of approximately \$278 million, which would support 239 construction jobs and 250 operational jobs.

#### 2.9. Secretary's Environmental Assessment Requirements

The Environmental Impact Statement (EIS) is compliant with the Secretary's Environmental Assessment Requirements (SEARs) and is sufficient to enable an adequate consideration and assessment of the proposal for determination purposes.

## 3. EXHIBITION CONSULTATION AND SUBMISSIONS

#### 3.1. Exhibition

In accordance with section 89F of the EP&A Act and clause 83 of the EP&A Regulation, the application and accompanying information was made publicly available for at least 30 days following the date of first publication. The Department publicly exhibited it from 12 May 2016 until 10 June 2016 (30 days):

- on the Department's website; and
- at the Department's Information Centre and City of Sydney Council's One Stop Shop.

The Department also advertised the public exhibition in the Sydney Morning Herald, The Daily Telegraph and the Central Courier on the 11 May 2016. The Department notified adjoining landholders and relevant State and local government authorities in writing.

The Department received a total of nine submissions during the exhibition of the application - five submissions from public authorities, including City of Sydney Council, and four submissions from the general public, including organisations.

A summary of the issues raised in the submissions is provided in the following sections.

#### 3.2. Public Authority Consultation and Submissions

No public authority objected to the proposal, however, City of Sydney Council, Roads and Maritime Services (RMS), Transport for NSW (TfNSW), the Environment Protection Authority (EPA) and the Heritage Division of the Office of Environment and Heritage (OEH) provided comments for consideration in the Department's assessment of the application. A summary is provided below.

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

- the request for exemption from development contributions is not accepted;
- the footpath along Broadway is heavily congested and further analysis of pedestrian movement is required to demonstrate that public pedestrian safety can be maintained;
- the bus stop should be relocated further west to provide a larger waiting area if public safety along Broadway cannot be maintained;
- the building entry adjacent to the Jones Street intersection and surrounding area should be level to improve permeability and reduce overcrowding;
- a daylight report and further analysis of overshadowing should be undertaken to ensure adequate solar access can be maintained for the surrounding residential buildings, including consideration of potential impact on heliostat solar collectors;
- wind impacts on Broadway, Jones Street and Alumni Green should be assessed;
- acoustic impacts of any proposed wind turbines should be assessed;
- the building should be designed to provide legible building entries and integrated services areas, including potential substation and rooftop plant;
- bus stop facilities should be upgraded, including way-finding signage;
- additional bicycle spaces and end-of-trip facilities should be provided;
- pedestrian/cyclist linkages should be improved, including pedestrianisation of Jones Street south of Thomas Street, separated cycleway on the southern side Mary Ann Street between Jones Street and the Goods Line; and widening of the shared path along Broadway;
- the pedestrianisation of Jones Street should be incorporated as part of the application given the proposal is the final stage of the concept plan;
- a sustainable travel plan should be prepared and identify projected modal targets, which should be consistent with Sustainable Sydney 2030, and identify how these targets can be achieved;

- a Construction Pedestrian and Traffic Management Plan must be prepared in consultation with Council and the Transport for NSW CBD Co-ordination Office to address the cumulative impacts from the construction projects within the vicinity of the site:
- a revised Loading Management Plan should be provided;
- any paving on Council's land will require further approval from Council;
- flood levels need to be provided to confirm that the site is at, or below flood levels;
- northern roof terrace on Level 8 should include seating areas and additional tree planting to improve useability;
- detailed landscape plans should be provided and should identify tree species consistent with Council's policies for planting along Broadway and Jones Street;
- further consideration of ESD in the design is required, including heat load and heat loss resulting from a predominantly glazed façade, potential use of integrated solar photovoltaics and harvesting rainwater for re-use; and
- public art installation should be provided in accordance with Council's guidelines.

## Roads and Maritime Services (RMS) provided the following comments for consideration:

- the temporary re-opening of Jones Street for construction vehicle access is acceptable subject to a traffic controller being present for the duration of the works and retention of the footpath and pedestrian priority;
- further consultation with RMS and relevant stakeholders is required for Phase 2 construction works for access;
- the swept path of the longest vehicles entering/exiting the site and manoeuvring within
  the site must be in accordance with AUSTROADS and a plan demonstrating compliance
  must be submitted to RMS and the Transport for NSW CBD Co-ordination Office;
- all demolition and construction vehicles must be contained within the site;
- a Road Occupancy Licence is required for any works that may impact on traffic flows on Broadway and Harris Street; and
- the applicant is responsible for all works, including any utility upgrades/ adjustments, and associated costs.

## **Transport for NSW (TfNSW)** provided the following comments for consideration:

- the foundations and building loads may impact on the structural integrity and operation of the CBD Metro corridor;
- the temporary re-opening of Jones Street for construction vehicle access may impact bus services operating along Broadway and further consultation with RMS and the Transport for NSW CBD Co-ordination Office should be undertaken to determine access arrangements and minimise impact on bus services;
- further consideration of the Phase 2 construction impacts need to be provided and traffic analysis is required for construction works where there is an anticipated peak of 110 truck movements per day and mitigation measures identified;
- a swept path analysis for both phases on construction is required;
- further assessment of the additional pedestrian movements and impact on pedestrian infrastructure is required;
- end-of-trip facilities for cyclists should be provided in the new building; and
- conditions of consent for managing potential impacts on the future rail corridor and construction traffic impacts should be included if approved.

# **Environment Protection Authority (EPA)** provided the following comments for consideration:

- demolition and construction works are to be undertaken in an environmentally sensitive manner:
- the removal of the underground petroleum storage systems is to be undertaken in accordance with the relevant guidelines and validation provided after the tanks have been removed;

- an unexpected finds protocol should be developed and implemented;
- Safework NSW should be consulted regarding any handling of asbestos waste;
- construction impacts are to be managed in accordance with the relevant construction noise and vibration guidelines and undertaken within the standard construction hours, including truck arrivals;
- respite periods should be provided for the nearby sensitive receivers where construction activities with annoying or intrusive characteristics are being undertaken;
- dust, erosion and sediment controls should be implemented during construction to prevent pollution from leaving the site;
- waste is to be assessed, classified and managed in accordance with guidelines and no concrete waste or rinse water is to be disposed of on the site;
- the noise assessment has not adequately established background noise levels as background noise monitoring was undertaken on the site instead of at the receivers;
- loading dock should be restricted to daytime hours;
- noise monitoring should be undertaken during commissioning of the new building to confirm that noise impacts have been adequately mitigated and do not exceed the predicted levels;
- consultation should be undertaken with the EPA to determine whether the uses in the new building would require any modifications to the University's existing 'radiation management licence'; and
- clarification should be provided on whether any clinical or related waste would be handled, stored, transported or disposed of as a result of the development and relevant guidelines are to be complied with if such waste is present on the site.

Heritage Division of the Office of Environment and Heritage (OEH) provided the following comments for consideration:

- significant building fabric and elements are to be protected during construction works, including vibration monitoring;
- areas previously identified as having historical archaeological potential should be investigated by a suitably qualified and experienced excavation director before works commence; and
- if archaeological excavation is necessary, an excavation methodology and archaeological research design should be prepared in consultation with the Heritage Council of NSW, and the results of any investigation documented in a final excavation report and submitted to the Heritage Council of NSW.

The Department has fully considered the issues raised in submissions in its assessment of the development as detailed in Section 4 of this report.

#### 3.3. Public Submissions

The Department has received three submissions from the executive committees of the residential buildings located to the south of the site within Central Park, which raised issues with the proposal, and one submission from the general public which supported the development. The issues raised in the submissions include:

- demolition noise;
- dust from demolition and construction works and costs associated with additional maintenance as a result of the dust;
- construction traffic management and pollution as a result of heavy vehicle traffic; and
- sun glare from the glazed facades.

The Department has fully considered the issues raised in submissions in its assessment of the development as contained in Section 4 of this report.

## 3.4. Applicant's Response to Submissions

The applicant has provided a response to the issues raised in submissions on 4 August 2016. The response included:

- further justification for design variations to the competition winning podium design and demonstration that design excellence has been achieved;
- analysis of pedestrian movement along Broadway, including conclusion that the setback would result in an overall improved pedestrian environment and acceptable levels of service can be maintained;
- further analysis of the overshadowing impacts; and
- further justification for exemption from development contributions, including advising that
  the University intends on undertaking the Jones Street pedestrianisation upgrade works
  subject to a future design solution to be prepared in consultation with Council.

The applicant's Response to Submissions (RtS) was forwarded to Council and public authorities for comment.

Council was generally satisfied with the applicant's responses, however, considered that bus stop facilities and wayfinding signage should be upgraded and the demand for bicycle parking and amenities generated by the proposal should be delivered with the current application. Council also provided recommended conditions of consent.

TfNSW advised that the level of service of pedestrian movement along Broadway is likely to be lower than that assessed, as the pedestrian capacity assessment assumed an even distribution of pedestrians along the footpath and did not account for the bunching at traffic signals. TfNSW recommended that mitigation measures to address pedestrian movement be prepared in consultation with TfNSW. TfNSW also provided recommended conditions of consent in relation to protection of the future rail corridor and further consultation with TfNSW's CBD Coordination Office in preparation of construction pedestrian and traffic management measures.

The Department has fully considered the applicant's response to issues raised in submissions in its assessment of the development as detailed in Section 4 of this report.

#### 4. ASSESSMENT

#### 4.1. Section 79C Evaluation

**Table 2** identifies the matters for consideration under section 79C (see glossary at **Appendix D**) that apply to State significant development, in accordance with section 89H of the EP&A Act. The table represents a summary for which additional information and consideration is provided for in Section 4 (Key and Other Issues) and relevant appendices or other sections of this report and the EIS, referenced in the table.

The EIS has been prepared by the applicant to consider these matters and those required to be considered in the SEARs and in accordance with the requirements of section 78(8A) of the EP&A Act and Schedule 2 of the EP& A Regulation.

Table 2: Section 79C(1) Matters for Consideration

Section 79C(1) Evaluation	Consideration
(a)(i) any environmental planning instrument	Complies - see Appendix B
(a)(ii) any proposed instrument	Not applicable
(a)(iii) any development control plan	See Appendix B*
(a)(iiia) any planning agreement	Not applicable

Section 79C(1) Evaluation	Consideration		
(a)(iv) the regulations	The development application satisfactorily meets the relevant requirements of the EP&A Regulation, including the procedures relating to development applications (Part 6 of the EP&A Regulation), public participation procedures for SSD's and schedule 2 of the EP&A Regulation relating to environmental impact statements. Refer to discussion at Section 2.7.		
(a)(v) any coastal zone management plan	Not applicable		
(b) the likely impacts of that development	Appropriately mitigated or conditioned - refer to Section 4.2		
(c) the suitability of the site for the development	Suitable - Refer to Sections 2.8 and Section 5		
(d) any submissions	Refer to Sections 3.2 and 4.2		
(e) the public interest	Refer to Section 4.2.4		
Biodiversity values exempt if: (a) On biodiversity certified land (b) Biobanking Statement exists	Not applicable		

<sup>\*</sup> Under clause 11 of the SRD SEPP, development control plans do not apply to State significant development. Notwithstanding, consideration has been given to relevant Development Control Plans at Appendix B.

#### 4.2. Key and Other Issues

The Department has considered the EIS, the issues raised in submissions and the applicant's response to these issues in its assessment of the proposal. The Department considers the key issues to be:

- built form and urban design;
- · environmental and residential amenity impacts; and
- transport impacts.

The concept plan approval (MP 06\_0116) for the site set out a number of requirements and parameters for future applications in developing the Broadway Precinct of the UTS City Campus in relation to the above key issues.

In accordance with the transitional arrangements for the repeal of Part 3A, set out in Schedule 6A of the EP&A Act, a consent authority must not grant consent under Part 4 for a development unless it is satisfied that the development is 'generally consistent' with the terms of the approval of the concept plan.

The Department has therefore assessed the proposal in accordance with the approved concept plan. Key requirements are discussed further in the relevant sections below. The Department's assessment of other parameters of the concept plan are set out in detail at **Appendix C**.

#### 4.2.1. Built Form and Urban Design

#### 4.2.1.1 Buk and scale

The proposal comprises the construction of a 15 storey building, including a plant level, to the west of Building 1, with a five storey podium that would extend through to a new four storey podium for Building 1. The proposal would be situated over two existing basement levels under Buildings 1 and 2 and have frontages to Broadway and Jones Street. The proposal is intended to be a contemporary and flexible building containing collaborative spaces including a library, lecture theatre, teaching spaces, research spaces, student centre, offices and various study areas. **Figures 9** to **11** show the Broadway, Jones Street and Alumni Green elevations of the new building.

The proposed building has an irregular and unique shaped footprint and form. **Figures 7, 8, 12** and **13** show the building in perspective when viewed from the surrounds and illustrate the twisting form of the Building 2 tower component. The building would fill in the foreground area in front of Buildings 1 and 2 and be built up to the site boundary along Broadway and Jones Street at the podium levels with articulation achieved through a curvilinear form along Broadway and recessed elements along Jones Street. The tower for Building 2 will then be setback from the boundaries and Building 1 tower (UTS Tower). The floorplate reduces in size and increases the separation from UTS Tower as the building rises and results in a unique and twisting tower that shifts from aligning with all edges of the site to a final remaining orientation to the Broadway alignment. The curvilinear form of the podium façade along Broadway and the twisting tower provide significant external visual interest, especially in contrast to the existing rectilinear brutalist UTS Tower.

At the ground level, the podium will be setback from Broadway to allow for improved pedestrian movement and circulation around the main entrance and along Broadway. The ground level of the podium has been designed to be open and flexible with lobbies to the multiple entrances whilst also providing exhibition spaces and learning areas.

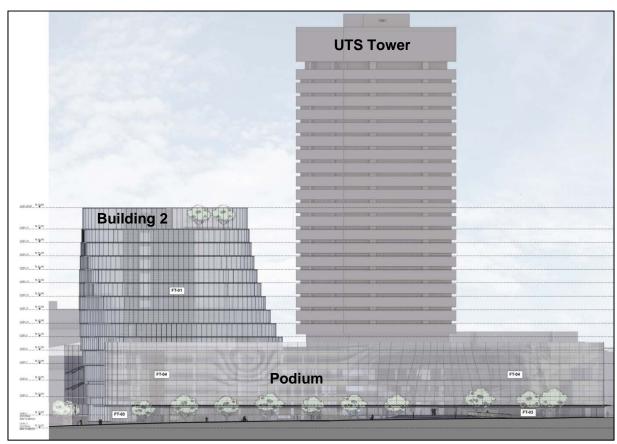


Figure 9: Broadway (south) Elevation

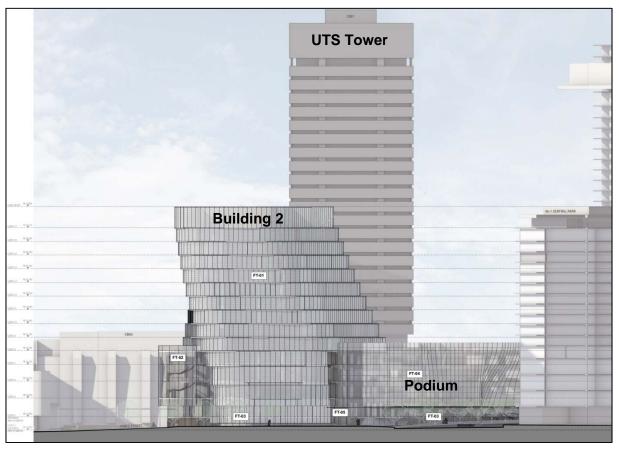


Figure 10: Jones Street (west) Elevation

(source: the applicant)

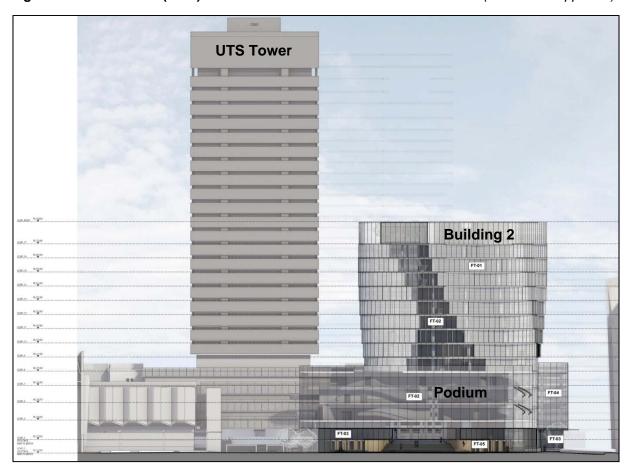


Figure 11: Alumni Green (north) Elevation



Figure 12: Perspective view of Building 2 from Alumni Green (source: the applicant)



Figure 13: Perspective view of Building 2 from Jones Street (source: the applicant)

The podium levels will extend across the forecourt and encompass the area currently covered by the existing Building 2, which would be demolished as part of this proposal. A more slender tower component would extend above where Building 2 is situated alongside the existing UTS Tower. The Building 2 tower will have a wider base that aligns with the edges of the block and progressively narrows to form a more slender tower that will be orientated towards Broadway to allow the UTS Tower to be viewed distinctly from wider contextual viewpoints.

The proposed floorplates of the podium levels are generally consistent and modulated to achieve visual interest and to break up the massing whilst the tower levels have more linear edges but reduce in size as the building rises to minimise the massing. **Figures 14** to **17** illustrate the floor plates of Level 4 (ground level), Level 7 (uppermost podium level), Level 8 (base of tower) and Level 16 (uppermost level of tower), highlighting the modulated podium form and the linear edges of the tower floorplates and the contrast of the building within the two elements. At levels one to seven the podium would be integrated, enabling internal pedestrian connections between the two buildings. Levels 1-2 and part of Level 3 are existing basements levels situated below Buildings 1 and 2 and the forecourt area of these buildings.

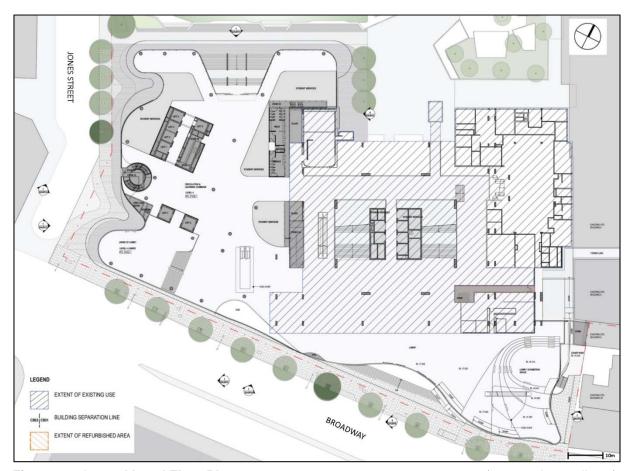


Figure 14: Ground Level Floor Plan

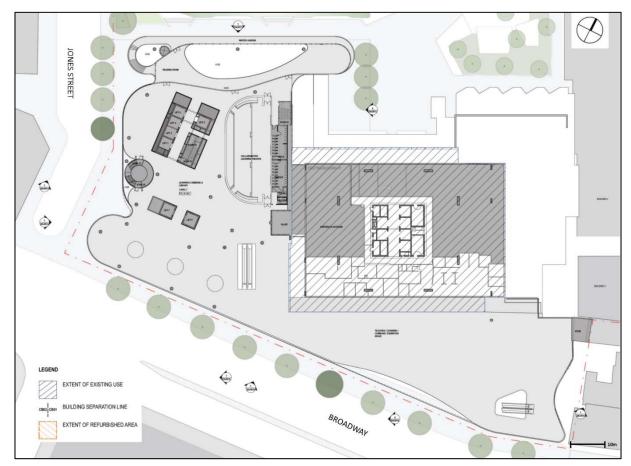


Figure 15: Level 7 Floor Plan (uppermost podium level)

(source: the applicant)

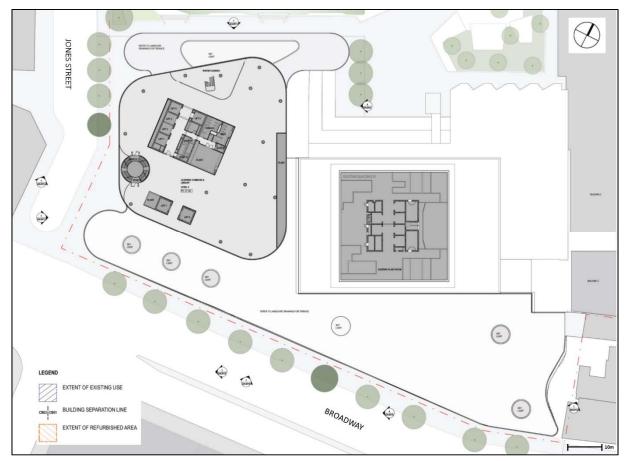


Figure 16: Level 8 Floor Plan (base of tower)

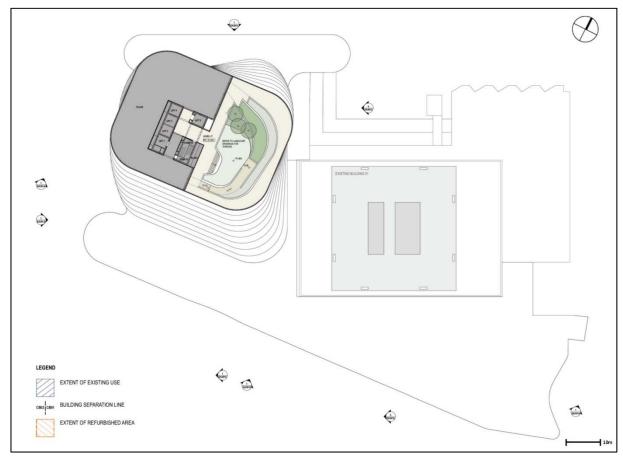


Figure 17: Level 16 Floor Plan (uppermost tower level)

(source: the applicant)

The proposal has an overall maximum height of 65.5 metres (RL 79.5) and maximum podium height of 23.16 metres (RL 37.16). The concept plan prescribes a maximum height of RL 79.5 for Building 2 and RL 45.09 for the joint podium.

The proposed GFA for Building 2 is 39,233 sqm and 6,917 sqm for the Building 1 podium, resulting in a total GFA of 46,150 sqm. The maximum gross floor area (GFA) allowed under the approved concept plan for Building 2 is 60,357 sqm and 4,050 sqm for the Building 1 podium extension, totalling 64,407 sqm.

The proposal therefore generally complies with the bulk and scale controls in the approved concept plan. The proposal is situated wholly within the building envelope identified in the concept plan for Buildings 1 and 2 as shown in **Figures 18** and **19**.



Figure 18: Aerial view of proposed building mass (pink) within approved envelope (red) (source: the applicant)

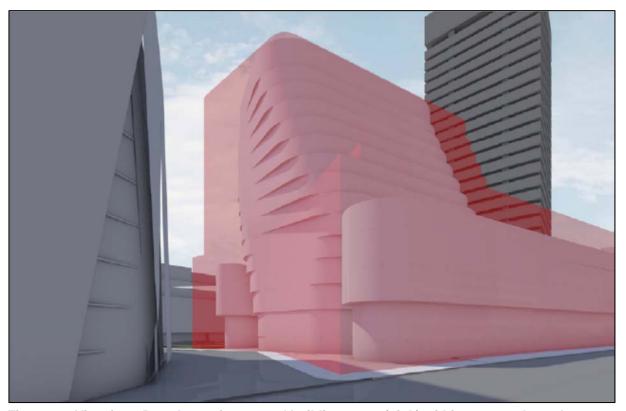


Figure 19: View from Broadway of proposed building mass (pink) within approved envelope (red) (source: the applicant)

The Department is satisfied that the proposed massing meets the controls in the approved concept plan and is suitable for the site.

## 4.2.1.2 Design Excellence

The proposal is located on a prominent frontage and would establish a new identity at the main entrance to the campus. The urban design principles for the concept plan stipulate that development should demonstrate high quality design and:

"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."

The SLEP would also have required that the proposal demonstrates design excellence and that a design competition be held for the proposal given its height and scale. The design excellence provisions of the SLEP do not strictly apply to the proposal as the concept plan prevails in the event of any inconsistency with the SLEP pursuant to the savings and transitional provision in Schedule 6A of the EP&A Act. The concept plan specifically addresses design excellence in the Statement of Commitments and the urban design principles.

The Statement of Commitments in the concept plan also committed to using Lacoste + Stevenson as the architects for the podium design, which was subject to a former design competition process, and FJMT for Building 2. A commitment was also made to adopting the design quality controls that form part of the modified concept plan. The Department was satisfied that there would be adequate measures to ensure design excellence would be demonstrated without the need for a competitive design process. The SEARs also require the applicant to demonstrate how the proposal exhibits design excellence and how the proposed design for Building 2 tower integrates with the Lacoste + Stevenson podium design.

In the Minister's consideration to modify the concept plan to allow for the Building 2 tower, the Minister was satisfied that the architects selected (*FJMT*) were of a high calibre with a record of delivering design excellence. The revised design excellence provisions for the concept plan were sufficient to support exempting Building 2 from undertaking a competitive design process, subject to demonstrating the integration of the 15 storey Building 2 tower with the *Lacoste* + *Stevenson* competition winning podium design. The Department noted that the NSW Government Architect (GA) would be reviewing the design to ensure that the requirements were being met.

## Design Integration and Integrity of Competition Winning Podium Design

The Department referred the application to the GA to seek advice on whether design integrity of the winning design for the podium had been maintained and whether the Building 2 tower design was well integrated with the podium design.

The GA generally supported the design of the proposed Building 2 and noted the curvilinear geometry and offsetting of levels incrementally increases the setback of the new tower from the existing and architecturally significant UTS Tower. The proposed design improves the legibility of Building 1 as a standalone object, improving key contextual views such as that from Sydney University down Broadway, when compared to the envelope. The relationship of the curvilinear geometry to the design principles of the podium competition winning scheme is also supported.

The GA considered the following positive elements would need to be maintained in the detailed design:

 the operable awning windows that form part of the clear flush glazing used for the central north facing 'winter gardens' as it would be integral for natural ventilation and to achieve the indicated indoor / outdoor quality and environmental performance; and • the material quality and detailing of the façade, including the relationship of each 'slipped' slab to the next, and the curvature of the glass, as they are critical to achieving the flowing form, lightness and transparency of the design.

The GA identified that the *Lacoste* + *Stevenson* competition winning podium design included the following notable elements:

- a soft and curvilinear glazed 'veil' with a ceramic frit and a series of service columns described as 'lace columns', intended to be fabricated from sheet steel and to undertake a range of functions including vertical structure, circulation, natural lighting, wind turbines and in some cases sunken gardens;
- internal planning that emphasises the location of open and public functions along the Broadway façade to provide activation and a sense of 'learning on show' facilitated by its southern orientation that enables clear glass, including setting back enclosed areas away from the facade:
- a large 'outdoor room' that addresses Alumni Green;
- an entry that is centred on the existing Building 1 foyer, with secondary entry provided from Jones Street to the west; and
- a glazed skin along Broadway with a white ceramic frit portraying an image of a forest of trees and a denser translucent frit at the main entry to allow for projected images.

The GA considered the proposed design of the Building 2 tower generally integrates well with the competition winning podium scheme, however the design integrity of the podium appears to have been compromised. The proposed podium design retains in principle the curvilinear form and curved glazed skin of the competition scheme, along with the forest ceramic frit. However, the quality of the curved forms have become less subtle, affecting the intended legibility of the scheme as a soft 'veil'. This is particularly evident at corners such as Broadway and Jones Street, where the original tight angular radius has been changed to a broad semi-circle form. This is similarly the case at the Jones Street to Alumni Green corner.

In addition to the loss of the soft 'veil', the GA considered the design quality and integrity with the competition winning design were compromised due to the loss of the 'lace column' elements and the positioning of enclosed areas (large Collaborative Learning Theatre across multiple levels) along the highly visible Broadway façade. It was also noted that the staging could impede the delivery of a cohesive final façade to Broadway and an independent design integrity panel would be appropriate to ensure delivery of the competition scheme and design excellence across the full project – podium and tower.

In the RtS, the applicant provided the following in response to matters raised by the GA:

- the 'lace column' elements were removed due to complexity and inter-connectivity of the
  existing structural systems of Building 1, which greatly limited the opportunity of
  integrating complex new structural systems;
- the Collaborative Learning Theatre is consistent with the principle of an open, activated façade along the Broadway elevation with glazing on the back wall and would prominently exhibit the pioneering innovative collaborative learning that is intended for these spaces;
- the curvilinear form is reinforced by the treatment of the corners of the podium and tower and the clear, activated and connected façade at ground level has been maintained in the proposed design;
- the frit patterning is intended to adhere to the vision in the competition winning scheme and would be further developed with the detailed design of the Broadway façade; and
- a continuous integrated Broadway façade has been carefully considered and a strategy of 'stitching' the façade has been developed (refer to **Figures 20** and **21**).

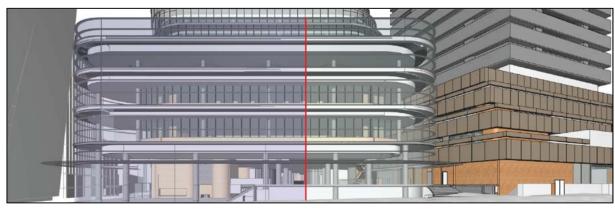


Figure 20: Broadway façade - Stage 1

(source: the applicant)

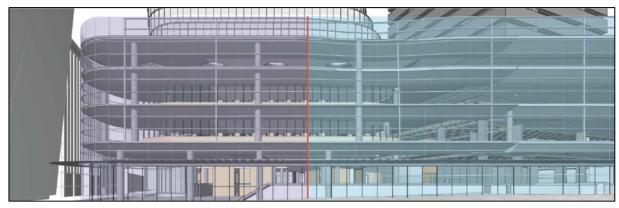


Figure 21: Broadway façade - Stage 2

(source: the applicant)

The applicant also advised that there would be adequate measures, including engagement of architects through the construction stages, review through various groups with UTS personnel and use of contractors which have delivered recent award winning buildings within the campus that have exhibited design excellence. The applicant also advised that the intent is to commence works on Stage 2 of the construction within 12 months of completion of Stage 1.

The GA reviewed the applicant's responses and concluded that the removal of the lace columns is attributed to cost. Whilst the GA concluded that the proposed concrete columns that will replace the lace columns have been adequately setback from the façade to ensure the lightness of the façade is retained, the built elements must be designed by the original competition winning architects, *Lacoste* + *Stephenson*. In relation to the Collaborative Learning Theatres, whilst the winning design sets back large enclosed function areas away from the façade to maintain access and visibility, the location of the theatres are acceptable as these spaces would ensure that teaching and learning is 'on display' and activation would be retained. Furthermore, these spaces require significant further design development.

The GA recommended that the podium façade, stage 1 and 2, be designed by *Lacoste* + *Stephenson* and that the design be reviewed by the GA when the detailed design is finalised. This is required as a number of the finer details relating to the critical elements of the podium design are still being resolved. The Department has recommended conditions to require the review of the design prior to commencing works at each stage of construction to ensure the aesthetics of the competition winning scheme are delivered.

#### Design Guidelines and Quality Controls

The concept plan also identified a number of design guidelines and controls for the future buildings. The Design Quality Controls for the Building 1 Podium and Building 2 are as follows:

- maximum height of 28.67 m for the Building 1 podium extension, 30 m for Building 2 podium at Broadway and 64.5 m for overall height of Building 2 at Broadway;
- refurbish the existing Building 1 forecourt to provide a new entrance to the campus;
- provide a multi-storey atrium with internal garden at the entry;
- provide pedestrian entries off Broadway, Jones Street, Alumni Green and Turner Lane;
- provide pedestrian protection along the length of the Broadway frontage and northern edge of the building with connections to Jones Street and Alumni Green;
- maximise permeability at the Broadway and Alumni Green entries through retail and student and public facilities and ensure permeability of the ground plane along Jones Street;
- provide an element of transparency in the building design to express functions within;
- provide screening to the existing northern terraces to improve functionality and activate the northern edge of the building at all levels;
- incorporate design solutions to address wind conditions;
- provide activation and pedestrian movement between Buildings 1 and 2;
- minimise overshadowing on the public domain and adjacent residential development;
- maximise opportunities for view sharing whilst recognising the site's CBD location;
- provide visual extensions to Alumni Green through the provision of green spaces on upper level terraces and roof spaces;
- setback floors above the podium from the Broadway Street wall;
- establish an appropriate relationship and setback to UTS Tower to support its appreciation and setting from wider viewpoints, including minimum setbacks of approximately 10.5 m - 13 m at Level 9 and approximately 14 m - 19 m at Level 17; and
- respond to the importance of the Balfour Street view corridor through:
  - preserving the openness of the corner of Broadway and Jones Street;
  - materiality: and
  - progressively stepping the building away from Jones Street above the podium.

The Department considers that the proposal generally meets these controls. The proposal responds to and respects the surrounding buildings and provides appropriate setbacks in accordance with the above controls. Transparency has been achieved through the use of light glazed façades and setting back solid structures, which allows the functions within to be displayed. The vertical winter gardens provided along the northern elevation provide visual interest and connectivity with Alumni Green and additional green space in conjunction with the podium and rooftop terraces. The proposal provides improved pedestrian protection and greater legibility with more prominent entries, in particular a more formal main entrance. The integrated podium will also improve permeability through the site and to Alumni Green.

The Department is satisfied that the building design meets the design controls for the site and is well integrated with the podium winning design.

#### Department's Conclusion

The Department considers that overall the building would present a visually interesting architectural form for the site. The design addresses the design quality controls in the concept plan and would generally meet the design excellence provisions of the SLEP. The design achieves:

- a high standard of architectural design with materials and detailing appropriate to reveal
  the education use and functions on the prominent frontage of the site in contrast to the
  existing solid and enclosed brutalist structures;
- a cohesive and distinctive building which relates positively to surrounding development;
- an improved public domain interface with the delivery of a podium at a scale appropriate for the pedestrian environment that is aligned with the site boundary, whilst still achieving

transparency to minimise its dominance along Broadway, particularly given the current irregular setback and extensive setback of the single main entrance:

- the delivery of a new and revitalised identity for the campus which is a key gateway to the Broadway and Camperdown Education and Health Precinct;
- a visually interesting building that provides an overall improved outlook;
- the delivery of pioneering teaching technologies and techniques on the most prominent frontage of the campus and at a gateway site;
- an improved pedestrian amenity with a clear consistent setback along Broadway and an awning to provide weather protection for pedestrians;
- an appropriate relationship with UTS Tower and Jones Street with the increasing setback
  of upper levels to provide a greater separation to the tower and respond to existing scale
  of development of the heritage significant building located north of the site, respectively;
- an appropriately scaled building as the bulk, massing and modulation for the site meets
  the controls for the site and is consistent with the form of the surrounding development
  and supports a transition along Broadway that responds to the site's peripheral CBD
  location;
- a development that balances the social and environmental impacts of the proposal and mitigates the overshadowing, visual, noise, wind and reflectivity impacts for the site as far as reasonably practicable;
- an ecologically sustainable development that will meet appropriate targets of a an industry best practice accredited rating scheme;
- improved permeability of the site particularly the pedestrian environment by confining vehicular and service access requirements to existing campus arrangements and prioritising pedestrian circulation requirements; and
- an improved landscape treatment along Broadway as well as integrated landscaping with the winters gardens providing connectivity with the main open space area on campus.

The Department is satisfied the development exhibits design excellence and would contribute to the ongoing delivery of design excellence across the campus.

## 4.2.2. Environmental and Residential Amenity Impacts

## 4.2.2.1 Private view impacts

The concept plan approval requires the design of Building 2, including orientation of the tower and separation between towers, to consider view sharing and the impacts on the outlook and views from adjacent residential units.

The Department notes that the residential apartments (existing and approved) and the hotel to the south of the site within Central Park currently enjoy a range of views including expansive city views and distant views of parts of Sydney Harbour and the Anzac Bridge on the horizon (in some instances) above the existing five storey Building 2 on the site. These views are interrupted in some instances by the existing UTS Tower and Faculty of Engineering Building. The proposal would result in a significant increase in the height and scale of Building 2 on the site and would therefore have an impact on views across the site. These impacts were considered in the approval for the enlarged building envelope for Building 2 as part of the concept plan modification.

The applicant provided a Visual Impact Assessment (VIA) as part of the EIS for the subject application. The VIA provides a comprehensive analysis of the view impacts of the proposal, in particular view loss at the affected premises to the south, and highlights the improvements achieved with a smaller building that is situated within the envelope. It takes into account the height and orientation of the existing buildings, their location and available view corridors across the top of other University buildings within the foreground and beyond. Reduced impacts are achieved for higher levels where the tapering of the building allows for the retention of a portion of the partial views to the CBD skyline and in some instances views to Barangaroo between the UTS buildings.

The following three buildings within Central Park would be most affected by the proposal (refer to **Figure 22**):

- Block 2 (East and West Towers);
- Block 1; and
- Block 4N.



Figure 22: Central Park Site - Broadway Elevation

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

The VIA analysis identified 51 existing apartments would have their views highly obstructed by the proposal, and of these, 14 apartments are single aspect with no alternative views of the city and horizon line from their living rooms. The applicant concludes that the overall visual impact of the proposal on views is acceptable given the public interest of supporting the proposal and what is reasonable within the CBD context and overall public interest of the proposal.

In order to determine whether or not the proposed view sharing impacts are 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 making process are:

- 1. assess what views are affected and the qualitative value of those views;
- 2. consider from what part of the property the views are obtained;
- 3. assess the extent of the impact (Tenacity principles establish a spectrum from 'negligible' to 'devastating'); and
- 4. assess the reasonableness of the proposal that is causing the impact.

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

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 5 on Block 2 and Levels 7 on Block 1 and 4N were not considered as these units would have negligible view impacts from the proposal as views would already be blocked by the existing podiums.

Table 3: Private property view impacts - Cental Park site

		Cental Park site		
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 proposal. The proposal would have a 'negligible impact' on these views. Views to the city skyline would be retained.	
Block 2 East Tower – Central and western units above Level 17	Partial Anzac Bridge and horizon	Oblique front views	These units are situated above the height of the proposal. The proposal 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 5 and Level 17	Partial Anzac Bridge and horizon	Oblique front views	The proposal would have a 'minor impact' on these views. Views to the city skyline would be retained.	
Block 2 East Tower – Central units between Level 5 and Level 17	Partial Anzac Bridge and horizon	Oblique front views	The proposal 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 5 and Level 17	Anzac Bridge and horizon	Oblique front views	These units would have views to Anzac Bridge and the horizon. The proposal 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 5	Western edge of CBD, Anzac Bridge and horizon	Front views	The proposal would have a 'devastating impact' on views to Anzac Bridge and horizon. Oblique partial views to city skyline would be retained. Upper levels retain a small portion of their view to Barangaroo.	
Block 2 West Tower  – Central units above Level 5	Western edge of CBD, partial Anzac Bridge and horizon	Front views	The proposal would have a 'devastating impact' on the views. Upper levels retain a small portion of their view to Barangaroo.	
Block 2 West Tower  – Western units above Level 5	Western edge of CBD, partial Anzac Bridge and horizon	Front views	The proposal would have a 'devastating impact' on views to the western edge of the CBD. Oblique partial views to the horizon to the west would be retained. The uppermost level would also retain views to Anzac Bridge.	
Block 1 – Eastern units – Above Level 7 (under construction)	Partial City skyline	Oblique front views	The proposal would have a 'severe impact' on these future views. Partial oblique views to the southern edge of the CBD and horizon to the east would be retained.	
Block 1 – Central and western units above Level 16 (under construction)	Partial City skyline	Oblique front views	The proposal would have a 'moderate impact' on these future views. Views to Darling Harbour and views to the top of the CDB skyline would be retained.  Oblique views to the Anzac Bridge and horizon to the west would be retained.	
Block 1 – Central and western units between Level 7 and 16 (under construction)	Partial City skyline	Oblique front views	Views are generally blocked by the Faculty of Engineering and IT Building and UTS Tower. The proposal would have a 'moderate impact' on these future views.	

Property	View Impacted	View Type	Department's View Impact Assessment
Block 4N – Above Level 16 (under construction)	Partial City skyline	Oblique front views	Views would already be largely blocked by the UTS Tower. Any views to Anzac Bride and horizon to the west would be unaffected by the modified building envelope. The proposal would have a 'moderate impact' on these future views.
Block 4N – Between Level 9 and 16 (under construction)	Partial City skyline	Oblique front views	Views would already be largely blocked by the Faculty of Engineering and IT Building and the UTS Tower. Any views to the west would be unaffected by the modified building envelope. The proposal would have a 'negligible impact' on these future views.

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

The views enjoyed by the existing and future residents are generally partial views given the interruptions by existing development, including the UTS Tower and the University's Faculty of Engineering and IT 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 proposal, these are currently partial views to the city skyline and the western edge of the CBD. The tapering of the building allows for the partial retention of views to Barangaroo on the upper levels. 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. The proposal is situated within the building envelope allowed under the concept plan.

Whilst the Sydney DCP 2012 does not apply to the site, the controls provide a reference with respect to the consideration of view impact in and near the CBD for residential units. The planning controls for development in the Sydney CBD recognise that outlook as opposed to views is the appropriate measure of residential amenity in the CBD context.

The Department considers that given the site's CBD fringe location, the interruption of existing views by University buildings, view loss is inevitable given the demand for social infrastructure and is reasonable in this context. The Department has considered potential alternative design approaches such as a shorter building which would result in some improvement to view loss impacts, but it would not provide an appropriate relationship with the existing UTS Tower, Alumni Green or Jones Street. It would also result in significant negative impacts on the building design quality and aesthetic. The Department also considers that any further reduction in scale of the building would fail to appropriately deliver the required additional educational floorspace. This is considered inequitable in terms of the State significance and strategic importance of this land for social infrastructure given it is the gateway to a centrally located and accessible education facility.

The proposal would provide a visually striking and interesting building and revitalisation of Building 1 and its interface with the public domain and would provide an improved urban outlook for residents. The Department also considers that view sharing can be maintained for a large proportion of the affected units as they 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 proposal is consistent with the form and scale of institutional development within the education precinct and contextually along Broadway by mirroring the transition in height achieved on the Central Park site.

On the basis of this assessment, and in light of the provision of a modern contemporary visually striking and innovative building, to complement the iconic UTS Tower, the Department considers that the proposal's impacts on existing views to be reasonable and acceptable.

### 4.2.2.2 Solar access impacts

The concept plan approval requires that a detailed overshadowing analysis must be provided to address the solar access impacts of Building 2. The design of the Building 2 must ensure that adequate solar access can be maintained at all residential units affected by overshadowing from Building 2.

The applicant has provided shadow diagrams which indicate there would be overshadowing of 52 residential units within Blocks 1 and 2 of Central Park located to the south of the site. Overshadowing would be restricted to the lower levels during mid-winter when overshadowing is most significant.

The overshadowing of Block 2 results in additional overshadowing between 30 mins to 90 mins during mid-winter of 25 units. However, all these units would retain a minimum two hours of solar access between 7.30 am to 4.30 pm in mid-winter, which was established as the accepted timeframe for assessment for solar access for this site when development approval was granted.

The most significant overshadowing impacts would be experienced by the residential units of Block 1. Block 1 already experiences a high level of overshadowing from existing UTS buildings – UTS Tower in the morning and the Faculty of Engineering and IT Building in the afternoon. A total of 32 units would be impacted by the proposal. The following provides a breakdown of how the units would be impacted between 7:30 am to 3 pm in mid-winter:

- 16 units that currently receive two hours of solar access would no longer receive two of solar access, however these units would maintain solar access levels between 30 mins to 90 mins during this period;
- 13 units that currently receive between 30 mins to 90 mins of solar access primarily to private open space areas during this period would no longer receive solar access during this period; and
- three units would retain two hours of solar access during this period.

**Figures 23** to **31** illustrate the extent of overshadowing as a result of the proposal. In these figures, existing shadows are shown in grey; the shadow that is cast by the approved concept plan envelope is shown by the green outline; the shadow cast by the proposal is shown by the orange outline, with new shadowing shaded orange; and non-residential uses shaded purple.

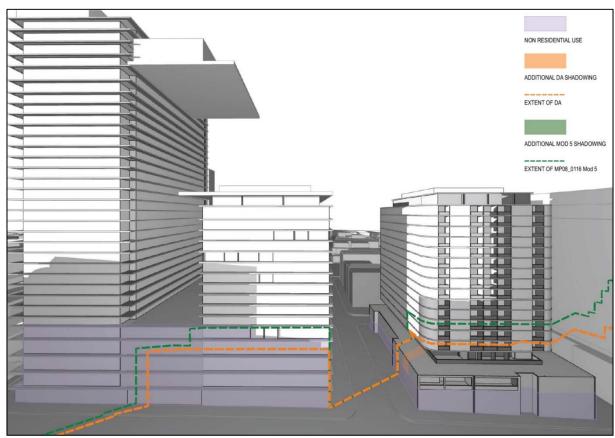


Figure 23: Overshadowing of Central Park units in mid-winter at 7.30 am (source: the applicant)

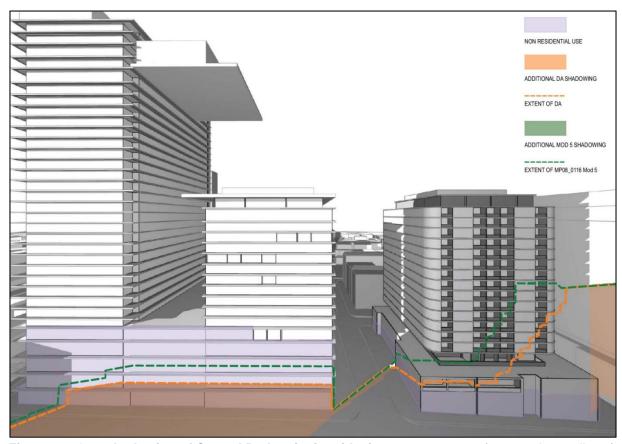


Figure 24: Overshadowing of Central Park units in mid-winter at 8.30 am (source: the applicant)

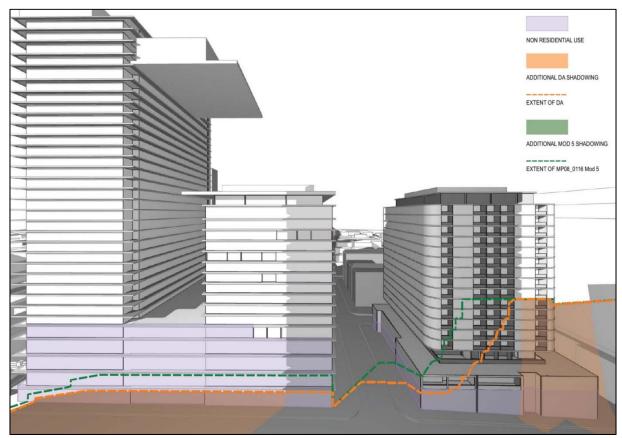


Figure 25: Overshadowing of Central Park units in mid-winter at 9 am (source: the applicant)

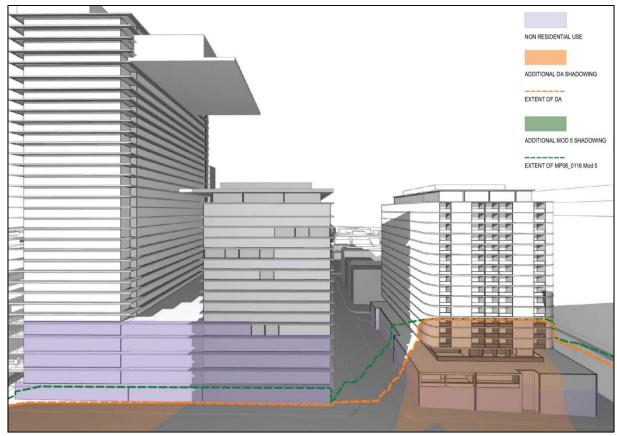


Figure 26: Overshadowing of Central Park units in mid-winter at 10 am (source: the applicant)

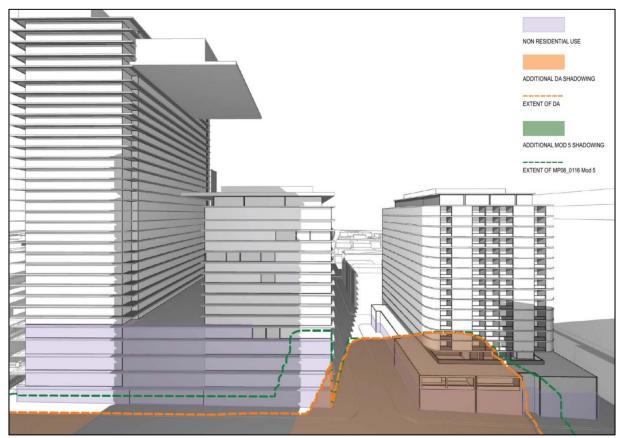


Figure 27: Overshadowing of Central Park units in mid-winter at 11 am (source: the applicant)

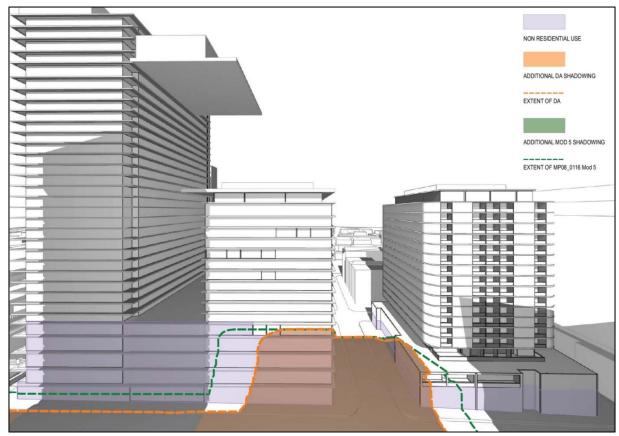


Figure 28: Overshadowing of Central Park units in mid-winter at 12 midday (source: the applicant)

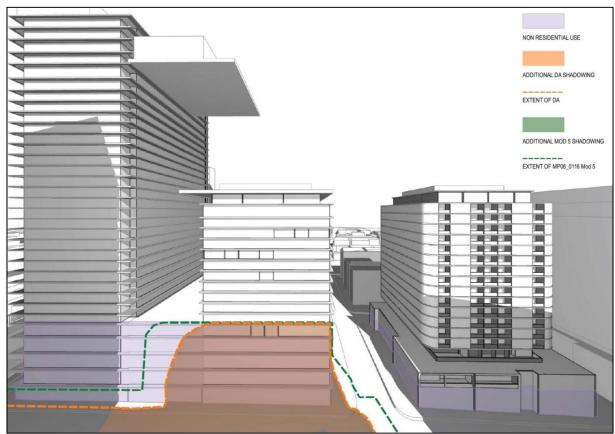


Figure 29: Overshadowing of Central Park units in mid-winter at 1 pm (source: the applicant)

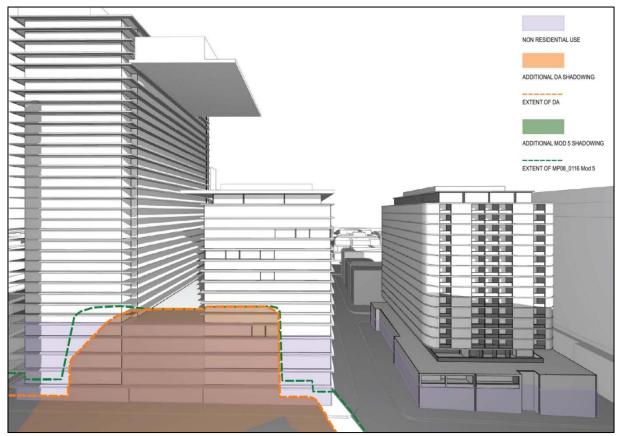


Figure 30: Overshadowing of Central Park units in mid-winter at 2 pm (so

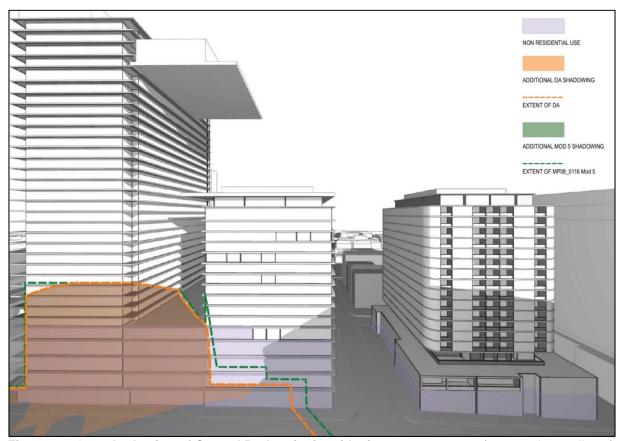


Figure 31: Overshadowing of Central Park units in mid-winter at 3 pm

(source: the applicant)

Council noted that solar access for Central Park has been considered on a site wide approach previously and the Department should consider site-wide compliance in its assessment.

Central Park Block 1 was originally envisaged for commercial development and was only recently approved for residential use. It was acknowledged in the assessment of the development at that time that solar access could not meet the requirements of the Residential Flat Design Code (RFDC), which applied at the time of assessment, or the superseding Apartment Design Guide and solar access would be limited. It was acknowledged that the overall high level of amenity for the residential uses should be considered in light of the need to deliver high density housing closer to jobs, transport and facilities and balanced against the strict adherence to the apartment design guides. It was concluded that the units on the lower levels would not achieve high levels of solar access but these units did benefit from a reasonable level of amenity, despite their limited sunlight access, and units on Level 2 and 3 would have:

- generous open space and loggia areas, larger than provided at upper levels;
- · direct access to pool, gym and amenity space;
- acceptable internal floor area and layouts exceeding the RFDC recommendations; and
- acceptable outlook with all living rooms and open space oriented to the external face of the building.

Apartments on Levels 4 to 9 would also have acceptable internal floor area, internal layouts and outlook. In addition, all the residential units benefit from internal comfort factors such as appropriate apartment sizes, increased floor to ceiling heights and open plan living. The units will also have access to a communal roof terrace at Level 16 which receives two hours of solar access during mid-winter and Block 1 is situated adjacent to Chippendale Green, a 6,000 sqm park developed as part of the Central Park development that is available for the use of residents, employees and the local community.

Approximately 41 per cent of units would receive mid-winter solar access between 7:30 am to 4.30 pm in mid-winter after the design modifications required by the conditions of consent for Block 1 were implemented. This would reduce to 35 per cent of units as a result of this proposal.

The Department considers the overshadowing impacts on these units acceptable it has been demonstrated that the units on the lower levels of Block 1 experience adequate levels of amenity. To reduce the solar access impacts, the height of the proposal would need to be significantly reduced, which would result in a much larger floorplate at the base which would compromise the design quality of the building. A more slender tower or greater setback could also potentially reduce the length of time of overshadowing on some units (as evident when the proposal is compared to the building envelope) but this would result in additional overshadowing impacts to higher units and potentially further reduce the total number of units that receive two hours of solar access in mid-winter.

On balance, given the public benefit from providing additional educational facilities and the reasonable amenity enjoyed by the affected units, the Department considers the overshadowing impacts of the development acceptable in the circumstances.

# 4.2.2.3 Noise and vibration impacts

#### Operational

The applicant has prepared an Acoustic Report which concludes that the use of the building is not expected to generate any adverse noise impacts on adjoining sensitive residences, subject to a detailed assessment of the final plant and implementing noise controls to ensure rooftop plant is limited to 75dBA at one metre from the plant to ensure noise levels meet the project specific noise levels established in accordance with the *Industrial Noise Policy*. These measures include plant selection and placement; barriers; acoustic louvres; and sound absorptive panels. The Acoustic Report also confirms that use of the rooftop terraces would comply with the noise criteria.

The EPA advised that the noise assessment has not adequately established background noise levels as background noise monitoring was undertaken on the site instead of at the receivers. The EPA recommended that noise compliance monitoring and assessment is required during commissioning of the plant and do not exceed the predicted levels identified in the Acoustic Report.

The Department considers that the noise generated from the proposal can be managed to comply with the relevant criteria. The Department has recommended a condition that prior to commencement of works, the applicant identify the required mitigation measures to attenuate the rooftop plant and equipment noise to ensure that it complies with relevant noise criteria, as revised in accordance with EPA's comments. The Department has also recommended that the applicant undertake a noise monitoring program of the mechanical plant within 60 days of the commencement of use to verify that the measured noise levels of the mechanical plant do not exceed the noise criteria.

# Construction Noise and Vibration Impacts

The Acoustic Report predicts that the construction impacts would meet the noise management levels in the *Interim Construction Noise Guideline* (ICNG) when works are being undertaken indoors and would exceed the noise management levels at the surrounding residences and educational receivers during demolition works and façade works in close proximity to the sensitive receiver. The predicted construction noise levels are expected to exceed the highly noise affected level of 75 dBA. Construction vibration is expected to comply with criteria for the surrounding sensitive receivers and preliminary vibration assessment to confirm acceptable level where significant vibration is anticipated to be generated.

The Acoustic Report recommends a number of measures to control noise impacts during construction including standard best practice construction measures, including scheduling of works to manage the impacts on the range of sensitive receivers.

The Department considers that given the anticipated exceedances of the noise management levels at the closest sensitive residential receivers and education receivers, the preparation of a Construction Noise and Vibration Management Plan would be required. The Department has recommended conditions requiring the preparation of this plan and its implementation during construction. The plan should:

- be prepared in consultation with the noise sensitive receivers where the highly affected noise management level is predicted to be exceeded;
- no works to be undertaken outside of standard construction hours identified in the ICNG where they exceed the highly affected noise management level;
- identify appropriate measures to mitigate the noise impacts;
- monitor noise impacts; and
- establish a complaints management system.

# 4.2.3. Transport Impacts

# 4.2.3.1 Bicycle parking and amenities

A future assessment requirement of the approved concept plan requires that any future application for Building 2 must demonstrate that adequate bicycle parking facilities and end-of-trip facilities are provided to support the increased student population that can be accommodated by the redevelopment of Building 2.

The applicant has advised that a campus wide bicycle strategy has been prepared for the University as a condition of approval for the development of Faculty of Science and Graduate School of Health Building. This strategy has been prepared to address the campus wide demand for bicycle parking and amenities and adopts the rates stipulated in Council's DCP of one space per 10 students or staff. The strategy outlines the delivery of up to 1,008 bicycle spaces where required, with the spaces being located primarily in a dedicated area within Building 10. The applicant has delivered 483 of the spaces of the required spaces identified in the strategy and undertakes ongoing monitoring of capacity levels. The monitoring has identified that the level of use of bicycle parking has remained steady at an average of 157 over the last three years even with the delivery of additional facilities, which is equivalent to an average 33 per cent occupancy rate. The applicant therefore maintains that additional facilities are not required at this stage and would be delivered in accordance with the strategy as required.

Council recommended that the additional facilities be delivered as part of this application as it would ensure that the University would be able to support and accommodate the growth of bicycle usage amongst staff, students and visitors.

The Department agrees with Council that additional bicycle parking and end of trip facilities should be provided to encourage bicycle use, however, considers these facilities should be provided to meet the demand generated by the proposal and not the campus in its entirety. The proposal would generate demand for 150 bicycle parking spaces based on a building population of 1,500 at any time and a rate of one space per 10 staff/10 students.

Accordingly, the Department has included recommended conditions requiring the delivery of the additional bicycle spaces and end of trip facilities that would be required for the population that could be accommodated within this building. The Department has also recommended a condition requiring the preparation and implementation of a green travel plan prior to commencement of use of the facilities to ensure that active transport is encouraged.

#### 4.2.3.2 Pedestrian movement

The current buildings on the site provide an irregular setback along Broadway and deeper setback with a large forecourt to Building 1. The proposal would reduce this setback to a consistent 1.5 metres along the length of Broadway, which is consistent with the setback of the ground level delivered with the Faculty of Engineering and IT Building. This would provide a six metre wide footpath.

Council initially raised concerns with impacts on pedestrian movement with the reduced footpath and requested that the applicant demonstrate that adequate pedestrian movement could be maintained.

A footpath capacity assessment was undertaken for Broadway which demonstrates that even with the anticipated growth, the footpath could be maintained at satisfactory levels (LOS B and C) post development and would improve at some points along the pathway given the widened footpath.

Transport for NSW advised that the level of service is likely to be lower than that assessed in the capacity assessment as it assumes an even distribution of pedestrians along the footpath and did not account for the bunching at traffic signals. Transport for NSW recommended that mitigation measures be prepared in consultation with Transport for NSW. This primarily relates to the location of the bus stop, which would potentially be relocated for and after Stage 2 construction works.

The Department considers the provision of a consistent footpath width, with weather protection, would provide an overall improved pedestrian environment. The Department has included a condition requiring the applicant consult with Transport for NSW regarding the design of any works within the footpath and construction zones.

# 4.2.4. Other Matters

# 4.2.4.1 Development contributions

Council initially advised that development contributions were applicable to the development. The applicant maintained that development contributions should not be applied and that the applicant intends on delivering public domain upgrade works with the pedestrianisation of Jones Street. The applicant considers that this would be sufficient to offset any development contributions that Council considered necessary. The applicant provided correspondence demonstrating that the University intends on undertaking these works in 2019 upon completion of Stage 1 of the construction works subject to preparing the design in consultation with Council.

Council has since advised that the proposed in-kind contribution toward public domain works associated with Jones Street would be acceptable and the City of Sydney Development Contributions Plan 2015 would not be applicable to the development.

The Department considers that the public domain improvement works would be sufficient to offset any demand for local service and infrastructure upgrades and has included a condition requiring that the applicant provide details of the design of these prior to commencement of use of the facilities, including consultation with Council and approved design details.

# **4.2.4.2** Heritage

The site does not contain any heritage items but is located within an area that has the potential to impact archaeological resources.

The Heritage Division advised areas previously identified as having historical archaeological potential should be investigated by a suitably qualified and experienced excavation director before works commence. If archaeological excavation is necessary, an excavation methodology and archaeological research design should be prepared in consultation with the

Heritage Council of NSW, and the results of any investigation documented in a final excavation report and submitted to the Heritage Council of NSW.

The Department notes that the works are predominantly being undertaken above ground in an existing disturbed area of the site above existing basement structures. The Department therefore considers the potential for disturbance of archaeological items to be low. However, the Department has included relevant conditions to ensure that adequate mitigation measures, as recommended by the Heritage Division, be implemented during construction if necessary.

#### 4.2.4.3 Public interest

The proposal is considered to be in the public interest as it would provide the following public benefits:

- additional investment in social infrastructure within a highly accessible location;
- growing the Broadway and Camperdown Education and Health Precinct;
- delivering innovative architectural design as well as pioneering teaching and learning techniques;
- ensuring the State remains competitive in attracting students, staff and researchers in the tertiary education sector;
- revitalising the site and providing a visually interesting contemporary building that provides a more prominent entrance to the University and a new identity;
- improved public domain interface along Broadway and Jones Street; and
- delivery of new 239 construction jobs and 250 operational jobs and supporting the growth in student population by 2,400 full time equivalent students.

# 5. CONCLUSION

The Department has reviewed the EIS and considered advice from the public authorities, including Council. Issues raised in the submissions have been considered and all environmental issues associated with the proposal have been thoroughly addressed.

The design of the building meets relevant built form controls and generally demonstrates that design excellence has been achieved. The Department considers that certain elements of the design are critical to ensuring the design excellence is maintained through the construction stages and that the detailed design of certain elements of the proposal are still being refined and critical to ensuring the integrity of the competition winning podium design scheme. The Department therefore considers the detailed design must demonstrate that the critical design elements are reflected in the final detailed design drawings and endorsed by the GA and reviewed by the original podium competition winning design architects,

The design of the building would have amenity impacts on the residential development within Central Park located to the south of the site, including view impacts and overshadowing. The Department considers that whilst there would be impacts on private views, an improved urban outlook would be delivered that is appropriate within a city centre. The overshadowing impacts have also been balanced against the requirements to grow the educational facilities within an existing constrained health and education precinct and the ability to preserve solar access to units that benefit from a high level of amenity within the CBD context.

The Department's assessment concludes that the built form of the new structure is acceptable as it is consistent with the massing of university buildings and Central Park. Any changes to address the amenity impacts would compromise the design quality of the building and appropriate relationship with the surrounding buildings.

The application is consistent with the objects of the EP&A Act (including ecologically sustainable development), State priorities and *A Plan for Growing Sydney*. The Department

is also satisfied the proposal would provide significant public benefits through the provision of additional education facilities within the highly accessible education and health precinct and improved public domain at the gateway to this precinct. The proposal would also provide 250 new operational jobs and 239 construction jobs.

The Department is satisfied that the proposal satisfactorily responds to the issues raised and recommends that the SSD application for the construction and use of UTS Central be approved, subject to conditions. The Department's recommended conditions of consent would ensure that the construction and use of the building would result in an acceptable environmental and residential amenity for the surrounding environment.

# 6. RECOMMENDATION

In accordance with section 89E of the *Environmental Planning and Assessment Act 1979*, it is recommended that the Executive Director, Priority Projects Assessments, as delegate of the Minister for Planning:

- (a) **consider** all relevant matters prescribed under section 79C of the EP&A Act, as contained in the findings and recommendations of this assessment report and appended documentation;
- (b) **grant consent** to the State significant development application for UTS Central (SSD 7382), subject to conditions of consent set out in the attached instrument at **Appendix E**; and
- (c) sign the attached development consent at Appendix E.

grants development consent for the construction and use of UTS Central (SSD 7382).

Prepared by: Megan Fu, Senior Planner

Endorsed by:

Karen Harragon

Diréctor

Social & Other Infrastructure Assessments

22/9/16

Approved by:

David Gainsford

**Executive Director** 

**Priority Projects Assessments** 

# APPENDIX A RELEVANT SUPPORTING INFORMATION

The following supporting documents and supporting information to this assessment report can be found on the Department of Planning's website as follows.

- Environmental Assessment http://majorprojects.planning.nsw.gov.au/index.pl?action=view\_job&job\_id=7382.
- 2. Submissions <a href="http://majorprojects.planning.nsw.gov.au/index.pl?action=list\_submissions&job\_id=7382">http://majorprojects.planning.nsw.gov.au/index.pl?action=list\_submissions&job\_id=7382</a>.
- 3. Applicant's Response to Submissions <a href="http://majorprojects.planning.nsw.gov.au/index.pl?action=view\_job&job\_id=7382">http://majorprojects.planning.nsw.gov.au/index.pl?action=view\_job&job\_id=7382</a>.

# APPENDIX B CONSIDERATION OF ENVIRONMENTAL PLANNING INSTRUMENT(S) AND DCP(S)

# State Environmental Planning Policy (State and Regional Development) 2011

The aims of this SEPP are to identify State significant development and State significant infrastructure and confer the necessary functions to joint regional planning panels to determine development applications.

The proposal is for SSD in accordance with s. 89C of the *Environmental Planning and Assessment Act 1979* (EP&A Act) because it is development for the purpose of an educational establishment with a capital investment value (CIV) in excess of \$30 million, under clause 15 (Educational establishments) of Schedule 1 of State Environmental Planning Policy (State and Regional Development) 2011.

# State Environmental Planning Policy No. 55 – Remediation of Land

SEPP 55 aims to provide a state wide approach to the remediation of contaminated land. In particular, SEPP 55 aims to promote the remediation of contaminated land to reduce the risk of harm to human health and the environment by specifying under what circumstances consent is required, specifying certain considerations for consent to carry out remediation work and requiring that remediation works undertaken meet certain standards.

The contamination assessment undertaken for the site indicates that underground fuel storage tanks are located on the site. The contamination assessment concluded that post removal of the tanks and remediation of any contaminated surrounds that the site and the soil conditions are suitable for continued use of the site for education purposes. The removal of the tanks and validation form part of the mitigation measures of the development.

The Department is satisfied that, in accordance with clause 7 of the SEPP, the investigations undertaken of the subject site demonstrate that the site can be made suitable for the continued use for the intended purpose upon removal of the fuel tanks. The Department has recommended a condition requiring that the validation certificate be submitted to the certifying authority prior to commencement works except demolition works.

# State Environmental Planning Policy (Infrastructure) 2007

The aim of the Infrastructure SEPP is to facilitate the effective state wide delivery of infrastructure by providing greater flexibility in the location of infrastructure and service facilities, allowing the development of surplus government land, identifying relevant environmental assessment categories for development and relevant matters to be considered and providing for consultation with relevant public authorities.

Schedule 3 of the Infrastructure SEPP requires traffic generating development to be referred to the RMS. The proposal was referred to the RMS who raised no objection to the development.

# Sydney Local Environmental Plan 2012 (SLEP)

The development is consistent with the aim of the B4 Mixed Use zone in the SLEP as it seeks to expand an existing use that is compatible with and supported by the surrounding uses. The proposal is well integrated with the surrounding uses as the staff, students and visitors of the educational facility also support the surrounding uses. The proposal is also located optimally to benefit from the accessibility to public transport. Consideration of the relevant clauses of the LEP is provided in **Table 1**. It is noted that the provisions of any

environmental planning instrument or any development control plan do not have effect to the extent to which they are inconsistent with the terms of the approval of the concept plan.

Table 1: Consideration of SLEP 2012

SLEP Criteria	Department Comment/Assessment	
Clause 2.7 Demolition requires development consent	Demolition forms part of the application.	
Clause 4.3 Height of buildings	The maximum height for the site is 45 metres, however, the controls in the approved concept plan prevail. The proposal meets the controls stipulated in the concept plan.	
Clause 4.4 Floor Space Ratio	The floor space ratio for the site is 5:1, however, the controls in the approved concept plan prevail. The proposal meets the controls stipulated in the concept plan.	
Clause 5.9 Preservation of trees or vegetation	The proposal would result in the loss of 18 trees (including seven street trees), but this would be offset with the planting of 15 trees (consisting of 12 street trees and three trees on the rooftop terrace. The Department considers the offset planting is adequate to preserve the amenity of the area.	
Clause 6.21 Design Excellence	A competitive design process is required for development exceeding 25 metres outside of Central Sydney. However, as the concept plan specifically addressed design excellence, it prevails. The concept plan outlines measure to demonstrate design excellence. The Department concluded that the proposal exhibits design excellence and has recommended condition to ensure that design excellence is maintained through the detailed design and construction phases.	
Clause 7.14 Acid Sulfate Soils	The site is classified as class 5, which reflects a relatively low risk, and development consent is only required for works within 500 m of the other land classified with a higher risk level and where the water table is likely to be lowered one metre below AHD on the adjacent land. The proposal will not result in the disturbance of soil or water table of adjacent land with a higher risk as it is located above an existing basement. The Department is satisfied that the proposal is unlikely to disturb, expose or drain acid sulfate soils and cause environmental damage and does not require an acid sulfate soils management plan.	
Clause 7.15 Flood planning	A probable maximum flood level of RL 5.22 has been identified. The proposal is situated above this level. The Department is satisfied that proposal would not result in any increase flood risk to life and property associated with the use of land.	
Clause 7.19 Demolition must not result in long term adverse visual impact	The Department is satisfied that the proposal would not result in any adverse visual impacts that may arise as a result of the demolition with regard to the streetscape and any special character area as a new building is proposed.	
Clause 7.20 Development requiring or authorising preparation of a development control plan	A development control plan (DCP) is required for land if the site area for the development is more than 5,000 square metres or if the development will result in a building with a height greater than 25 metres above ground level. However, a development control plan is not required to be prepared if the consent authority is satisfied that such a plan would be unreasonable or unnecessary in the circumstances. The Department considers a DCP would be unreasonable and unnecessary as the concept plan covers the matters that would have been required by the DCP.	

# **Development Control Plans**

It is noted that clause 11 of the State Environmental Planning Policy (State and Regional Development) 2011 provides that development control plans do not apply to SSD. The site also forms part of a concept plan which provide controls and consideration of the issues covered in the DCP and therefore the terms of the approval of the concept plan prevail over the controls within the DCP.

# APPENDIX C CONSISTENCY WITH APPROVED CONCEPT PLAN

An assessment of the proposal against the terms of approval, modifications and future assessment requirements of the approved concept plan is provided below.

# **Concept Approval Terms of Approval**

#### A1 Development Description

Except as modified by this approval, Concept Plan approval is granted only to the carrying out of development solely within the Concept Plan area as described in the document titled "Environmental Assessment Report UTS City Campus Broadway Precinct Concept Plan" dated May 2009, as amended by the "Preferred Project Report UTS City Campus, Broadway Precinct Concept Plan" dated October 2009, as modified by "by "Section 75W to Concept Plan (MP08\_0116) UTS City Campus, Broadway Precinct GFA and Building Envelope Amendments" dated July 2015, and as amended by the "the Response to Submissions Section 75W to Concept Plan (MP08\_0116)" dated November 2015, prepared by JBA Urban Planning Consultants, including:

- 1. New Broadway Building and Thomas Street Building, with a combined GFA of 44,650 sqm;
- 2. Expansion of Building 1 podium (4,050 sqm) and new Building 2 (60,357 sqm), with a combined GFA of 64,407 sqm;
- 3. Expansion of Building 6 for the provision of student housing, with an additional 25,250 sqm GFA;
- 4. Modifications to Buildings 3, 4 and 10;
- 5. Modifications to Alumni Green, with a new Multi Purpose Sports Hall and book vault beneath; and
- 6. Public domain improvements to Broadway and Thomas, Harris, Wattle and Jones Streets.

#### B1 Building Plant Setbacks

The plant on each building is to be set back at least 6 m from any façade of the building facing a public street, or incorporated into the design of the building to minimise the visual impact of the plant from the street.

# B2 Pedestrian Connectivity

The Concept Plan shall be modified to include a strategy to increase activation of the Ultimo Pedestrian Network (UPN) and improve the legibility of pedestrian access for the public between the Devonshire Street Tunnel, the UPN and Building 6. The strategy should investigate the removal of the existing pedestrian bridge and associated stairs/escalators over the UPN and consider options to replace it with a public entrance at grade from the UPN into Building 6 extending through to Harris Street.

The strategy shall be prepared in consultation with City Sydney, Sydney Harbour Foreshore Authority and any other stakeholder in the UPN. The strategy shall be submitted to the Department of Planning for approval by 31 March 2012. The strategy should outline any proposed works, landscaping, public domain, public art etc within the UPN and should include a timetable for the completion of works.

#### **Department Comment**

The proposal does not exceed the combined GFA of 64,407 sqm for Building 1 and 2. Whilst it does not strictly comply with the individual building control, there is no clear demarcation of Building 1 and 2 within the proposed integrated podium and therefore the Department considers the proposal is generally consistent with the terms of the approval.

The plant is integrated in the design of the building and the rooftop plant is setback from the façade and screened. The Department is satisfied that the plant has been appropriately incorporated into the design and would not have a visual impact from the street.

The proposal is not situated in proximity to the UPN but would provide improved legibility to the campus and permeability through the ground level of the campus. Notwithstanding, the Department is satisfied that whilst not strictly relevant to this proposal, the development would be consistent with the intent to provide improved pedestrian connectivity.

#### **Future Assessment Requirements**

#### C2 View Sharing

The design of Building 2, including orientation of the tower and separation between towers, should address view sharing and detail the impacts on the outlook and views from residential units south of the site.

The applicant has provided an assessment of the view impacts. The Department has considered the private view impacts in **Section 4.2.2.1**.

#### C3 Solar Access

A detailed overshadowing analysis must be provided to address the solar access impacts of Building 2. The design of the Building 2 must ensure that adequate solar access can be maintained at all residential units affected by overshadowing from Building 2.

The applicant has provided a detailed overshadowing analysis. The Department has considered the overshadowing impacts in **Section 4.2.2.2**.

# C4 Bicycle Parking

Any future application for Building 2 must demonstrate that adequate bicycle parking facilities and end-of-trip facilities are provided to support the increased student population that can be accommodated by the redevelopment of Building 2.

The applicant has provided further details of the University's bicycle strategy and adequacy of the existing capacity to accommodate any growth. The Department has considered the bicycle and end-of-trip provisions in **Section 4.2.3.1**.

# Statement of Commitments

# **Design Excellence**

- Adopt the design excellence process at Section 3.9 of the EAR and incorporate the design quality controls at Section 3.10 of the EAR and Section 3.1.3 of the PPR for new development on the site.
- The appointed architects for the Building 1 Podium Extension and Building 2 are Lacoste + Stevenson and fjmt. The design of Building 2 is to incorporate the design quality controls at Section 3.5 of the Response to Submissions for the Section 75W Modification Application (Mod 5).

The design excellence provisions have been adopted for the proposal and design quality controls addressed. The Department considers the proposal has met the design excellence provisions, see **Section 4.2.1.2.** 

# Heritage

- Prepare an interpretation plan that communicates the heritage significance of relevant components of the site.
- Undertake photographic archival recording prior to the commencement of demolition works.
- Undertake archaeological investigations conducted in accordance with an Archaeological Research Design prior to, or in conjunction with, ground disturbance of areas with historical archaeological potential.

The proposal is not located in an area of with heritage significance or historical archaeological potential. Recommended conditions of consent would ensure if any areas of historical archaeological significance were discovered that appropriate measures would need to be prepared and implemented.

#### Traffic, Transport and Access

- Prepare a Transport Access Guide to promote the use of public transport to staff and students.
- Investigate opportunities for the consolidation of bus shelters along Broadway in consultation with the State Transit Authority and the City of Sydney.
- Provide facilities for cyclists.
- Prepare Construction Traffic Management Plans for every development on the site to manage any impacts on traffic and pedestrian movements during construction.

The Department has recommended conditions requiring the:

- delivery of additional bicycle parking facilities and end of trip facilities to promote active transport use;
- preparation and implementation of a Green Travel Plan to promote sustainable transport;
   and
- consultation with Transport for NSW and Council for the detailed design of the public domain works, including consideration of the location of the bus stop on Broadway.

#### **Visual Impacts**

- Use architectural treatment of facades to break down the perceived scale and massing of new buildings.
- Retain street trees or provide additional mature plantings to improve the streetscape.

The proposal incorporates articulation and modulation to provide visual interest and high level of transparency to reduce the massing of the development, see **Section 4.2.1.1**. The proposal would deliver additional tree planting along Broadway to improve streetscape.

#### Wind

- Undertake detailed wind impact assessments for each new building during the detailed design stage.
- Articulate the facades of Buildings 1 and 2 and the Broadway Building to ameliorate the impacts of westerly winds at ground level on Broadway.
- Plant mature trees and shrubs, and provide colonnades or awnings along the boundaries of Alumni Green.
- Locate pedestrian entrances to new buildings along internal pedestrian links to intercept strong wind flows.

A wind assessment was undertaken and concluded that wind conditions at pedestrian level around the site are not expected to be significantly affected by the increase in building massing and would remain suitable for pedestrian standing and walking from a comfort perspective. Wind tunnel testing during detailed design development was recommended and identified as a mitigation measure.

# Landscape Design

- The removal of any significant trees will be subject to an arborist's report.
- Sustainable design principles will be incorporated into the landscape design, including selection of plants with low irrigation requirements and minimising the use of potable water.

An arborist report was submitted and the trees to be removed are not considered to be of significance and would be appropriately offset. Water sensitive urban design solutions has been adopted in the landscape treatment.

#### Contamination

- A Stage 2 Environmental Assessment (EA) that includes soil and groundwater sampling.
- Waste classification for offsite disposal of soil and bedrock.
- A Hazardous Building Material Survey for buildings that are to be refurbished or demolished.

A Preliminary Site Investigation was undertaken for the site and concluded that that post removal of the fuel storage tanks and remediation of any contaminated surrounds that the site and the soil conditions are suitable for continued use of the site for education purposes. The Department has recommended a condition requiring site validation post removal of the tanks.

# **Ecologically Sustainable Development**

- Adopt a 5 star Green Star Education target for the new Broadway Building, extended Building 1 podium and new Building 2
- Reduction in overall water campus consumption by up to 20 percent by 2010
- Meet or exceed the requirements of Section J of the Building Code of Australia for energy efficiency in building fabric and environmental systems
- Investigate integrating a 1.2-1.5 megawatt trigeneration plant into the UTS City Campus utilities system
- Investigate installing of a bio-digester plant in Building 2 to reduce operational waste
- Investigate installing blackwater recycling system with sewer mining capacity (to enable black water to be used for chiller and toilet flushing purposes).

The proposal will meet the targets identified.

11141	<b>Pedestrian</b>	Maturant
Ultimo	Pedestrian	Network

Ultimo Pedestrian Network

Develop a strategy with relevant stakeholders and upgrade the Ultimo Pedestrian Network to activate and improve the aesthetic appeal of the area

Works have been completed.

# APPENDIX D GLOSSARY

# **Ecologically Sustainable Development** can be achieved through the implementation of:

- (a) the precautionary principle namely, that if there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation. In the application of the precautionary principle, public and private decisions should be guided by:
  - (i) careful evaluation to avoid, wherever practicable, serious or irreversible damage to the environment, and
  - (ii) an assessment of the risk-weighted consequences of various options,
- (b) inter-generational equity—namely, that the present generation should ensure that the health, diversity and productivity of the environment are maintained or enhanced for the benefit of future generations,
- (c) conservation of biological diversity and ecological integrity—namely, that conservation of biological diversity and ecological integrity should be a fundamental consideration,
- (d) improved valuation, pricing and incentive mechanisms—namely, that environmental factors should be included in the valuation of assets and services, such as:
  - (i) polluter pays—that is, those who generate pollution and waste should bear the cost of containment, avoidance or abatement,
  - (ii) the users of goods and services should pay prices based on the full life cycle of costs of providing goods and services, including the use of natural resources and assets and the ultimate disposal of any waste,
  - (iii) environmental goals, having been established, should be pursued in the most cost effective way, by establishing incentive structures, including market mechanisms, that enable those best placed to maximise benefits or minimise costs to develop their own solutions and responses to environmental problems.(Cl.7(4) Schedule 2 of the Regulation).

#### **Objects of the Act**

- (a) to encourage:
  - (i) the proper management, development and conservation of natural and artificial resources, including agricultural land, natural areas, forests, minerals, water, cities, towns and villages for the purpose of promoting the social and economic welfare of the community and a better environment,
  - (ii) the promotion and co-ordination of the orderly and economic use and development of land,
  - (iii) the protection, provision and co-ordination of communication and utility services,
  - (iv) the provision of land for public purposes,
  - (v) the provision and co-ordination of community services and facilities, and
  - (vi) the protection of the environment, including the protection and conservation of native animals and plants, including threatened species, populations and ecological communities, and their habitats, and
  - (vii) ecologically sustainable development, and
  - (viii) the provision and maintenance of affordable housing, and
- (b) to promote the sharing of the responsibility for environmental planning between the different levels of government in the State, and
- (c) to provide increased opportunity for public involvement and participation in environmental planning and assessment.

# **Section 79C Evaluation**

# (1) Matters for consideration—general

In determining a development application, a consent authority is to take into consideration such of the following matters as are of relevance to the development the subject of the development application:

(a) the provisions of:

- (i) any environmental planning instrument, and
- (ii) any proposed instrument that is or has been the subject of public consultation under this Act and that has been notified to the consent authority (unless the Director-General has notified the consent authority that the making of the proposed instrument has been deferred indefinitely or has not been approved), and
- (iii) any development control plan, and
- (iiia) any planning agreement that has been entered into under section 93F, or any draft planning agreement that a developer has offered to enter into under section 93F, and
- (iv) the regulations (to the extent that they prescribe matters for the purposes of this paragraph), and
- (v) any coastal zone management plan (within the meaning of the Coastal Protection Act 1979),

that apply to the land to which the development application relates,

- (b) the likely impacts of that development, including environmental impacts on both the natural and built environments, and social and economic impacts in the locality,
- (c) the suitability of the site for the development,
- (d) any submissions made in accordance with this Act or the regulations,
- (e) the public interest.
- **Note.** See section 75P(2)(a) for circumstances in which determination of development application to be generally consistent with approved concept plan for a project under Part 3A.
- **Note.** The consent authority is not required to take into consideration the likely impact of the development on biodiversity values if:
  - (a) the development is to be carried out on biodiversity certified land (within the meaning of Part 7AA of the Threatened Species Conservation Act 1995), or
  - (b) a biobanking statement has been issued in respect of the development under Part 7A of the Threatened Species Conservation Act 1995.

# APPENDIX E RECOMMENDED CONDITIONS OF CONSENT