

13 October 2017

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Carolyn McNally
Secretary
Department of Planning and Environment
320 Pitt Street, Sydney NSW 2000

Attention: Megan Fu (Senior Planner, Social and Other Infrastructure Assessments)

SECTION 96(1A) MODIFICATION APPLICATION SSD-7381
UTS CENTRAL PROJECT, BROADWAY PRECINCT

Dear Ms McNally,

This application has been prepared by Ethos Urban on behalf of the University of Technology Sydney (UTS), pursuant to section 96(1A) of the *Environmental Planning and Assessment Act, 1979* (EP&A Act) to modify State Significant Development Consent SSD_7382 relating to the extension of Building 1 and the redevelopment of Building 2 at the Broadway Precinct of UTS (the site).

The modification relates to an extension of allowable hours of construction as follows:

- extending work on Mondays to Fridays inclusive to conclude at 7pm (previously 6pm);
- allowing additional internal fitout works to be carried out between the hours of 7.00pm and 10.30pm on Mondays to Fridays inclusive; and
- extending work on Saturdays to between 7am (previously 7.30am) and 5pm (previously 3.30pm).

This application identifies the consent, describes the proposed modifications and provides an assessment of the relevant matters contained in Section 96(1A) of the EP&A Act. This application is accompanied by:

- Acoustic Statement prepared by Acoustic Studio (**Attachment A**);
- Example Community Project Update prepared by Richard Crookes Constructions (**Attachment B**); and
- UTS Central Complaints Register prepared by Richard Crookes Constructions (**Attachment C**).

1.0 Consent Proposed to be Modified

On 23 September 2016, the NSW Department of Planning and Environment granted development consent for State Significant Development 7382 entirely consistent with the Concept Plan (MP 08_0116) as modified on 17 March 2016. The consent was granted for the 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 improvement works;
- landscaping works;
- staged construction of the two buildings; and
- extension and augmentation of physical infrastructure/utilities.

There has been one modification to the consent, approved on 18 May 2017 for design modifications including façade changes, additional tree removal, additional laboratory, additional skylights, raised Level 8 terrace, additional flues and reconfiguration of internal layouts.

Since consent was issued, UTS appointed Richard Crookes Construction (RCC) as the main works contractor. RCC have identified an opportunity to expand the approved construction hours without causing adverse environmental impacts.

The extension of construction working hours is proposed in order to ensure a timely completion of the project, meet the university's program for relocating users and faculties, and meet student enrolment and growth forecasts. RCC have advised that allowing extended working hours would ensure a timely completion of the project, which is at risk of potential overrun due to factors such as inclement weather, with 46 days lost to date due to rain, extreme heat (in excess of 35 degrees) and high winds preventing the use of tower cranes.

2.0 Proposed Modifications to the Consent

The proposed modification to the development consent comprises an extension of allowable hours of construction as follows:

- extending work on Mondays to Fridays inclusive to conclude at 7pm (previously 6pm);
- extending work on Saturdays to between 7am (previously 7.30am) and 5pm (previously 3.30pm); and
- allowing additional internal fitout works to be carried out between the hours of 7.00pm and 10.30pm on Mondays to Fridays inclusive.

No physical changes are proposed as part of this modification. The proposed modifications are described in more detail below.

2.1 Modifications to Conditions

The proposed modifications described above necessitate amendments to the consent conditions which are identified below. Words proposed to be deleted are shown in ~~bold strike through~~ and words to be inserted are shown in **bold italics**.

C DURING CONSTRUCTION

Hours of Work

C1(a). 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~~ **7 pm**, Monday to Fridays inclusive;
- b) between ~~7.30 am~~ **7 am** and ~~3.30 pm~~ **5pm**, Saturdays; and
- c) no work on Sundays and public holidays.

Works may be undertaken outside these hours where:

- i) 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.

Extended Hours of Work

C1(b). Notwithstanding condition C1(a) above, additional work is permitted to be carried out between 7:00 pm and 10:30 pm, Mondays to Fridays. Works within these hours is to comply with the following:

- a) restricted to the internal fit-out works within the constructed and completed facade of the building;**
- b) no use of and operation of high noise intrusive equipment;**
- c) no works on the facade of the building;**

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- d) deliveries are not permitted;*
- e) no use of tower cranes (except for use of external hoist cranes located on the western elevation of the building); and*
- f) no use of floodlighting or additional lighting beyond internal lighting and lighting required for safety and access.*

Notification of Extended Hours of Work

C1(c) All properties, commercial and residential within the notification area as agreed to by the Secretary, should be notified in writing, seven days prior to the commencement of approved extended construction hours.

Community Complaints during Extended Hours of Work

C1(d) The Secretary shall be notified of any complaints received regarding works undertaken during the extended construction hours in condition C1(b). Should any substantiated complaints concerning offensive noise from any works conducted outside the standard construction hours not be satisfactory resolved, then the approved hours shall revert back to the standard hours of construction in condition C1(a).

Resumption of extended working hours referred to in condition C1(b) shall not be permitted until the proponent can demonstrate to the Department that appropriate ameliorative measures recommended by an acoustic consultant have been fully implemented and that the complaints are satisfactorily resolved.

Reason for Amendment: The extended hours are proposed in order to ensure timely completion of the project, which is of critical importance to UTS. The proposed hours have been developed based on precedent approvals relating to working hours in the immediate vicinity (refer to **Section 4.2**).

3.0 Substantially the same development

Section 96(1A) of the EP&A Act states that a consent authority may modify a development consent if “it is satisfied that the development to which the consent as modified relates is substantially the same development as the development for which the consent was originally granted and before that consent as originally granted was modified (if at all)”.

The development, as proposed to be modified, is substantially the same development as that originally approved in that:

- the proposal retains the approved development, being the construction and use of an education building;
- no physical changes are proposed; and
- there are no more than minimal environmental impacts as a result of the modified development, as detailed in **Section 4.0** of this letter.

4.0 Environmental assessment

Section 96(1A) of the EP&A Act states that a consent authority may modify a development consent if “it is satisfied that the proposed modification is of minimal environmental impact”. Under Section 96(4) the consent Authority must also take into consideration the relevant matters to the application referred to in Section 79C(1) of the EP&A Act.

The following assessment considers the relevant matters under Section 79C(1) and demonstrates that the development, as proposed to be modified, will be of minimal environmental impact.

4.1 Environmental Planning Instruments

The proposed modifications (relating to extending the hours of work) do not affect the consistency of the proposed development with the relevant planning instruments.

4.2 Precedent of Extended Construction Hours

We note that there are precedents in the immediate vicinity (including UTS projects) where construction hours consistent with those being proposed under this modification application have been approved. Examples of these are provided in **Table 1** below.

The below examples demonstrate that the extension of construction hours for development within the immediate vicinity of the subject site is deemed acceptable and has the benefit of reducing the length of a construction program and therefore the impact on residents, commercial tenants and educational receivers within the nearby vicinity of the relevant construction site.

Table 1- Precedent construction hours in the precinct

DA Reference	Address	Approved Hours
MP 09_0213	UTS Thomas Street Building	<ul style="list-style-type: none"> Between 7.00am and 7.00pm, Mondays to Fridays inclusive; Between 7.00am and 5.00pm Saturdays; and No work on Sundays and public holidays.
MP 09_0212	UTS Broadway Building	<ul style="list-style-type: none"> Between 7.00am and 7.00pm, Mondays to Fridays inclusive; Between 7.00am and 5.00pm Saturdays; No work on Sundays and public holidays; and Additional work¹ is permitted to be carried out between the hours of 7pm and 10.00pm on Monday and Friday.
SSD_6554	'Central Park DUO' development, corner of Chippendale Way and Broadway, Chippendale	<ul style="list-style-type: none"> Between 7.00am and 7.00pm, Mondays to Fridays inclusive; Between 8.00am and 5.00pm, Saturdays; and No work on Sundays and public holidays.
MP 09_0078	One Central Park, 26 Broadway, Chippendale	<ul style="list-style-type: none"> Between 7.00am and 7.00pm, Mondays to Fridays inclusive; Between 7.00am and 5.00pm pm Saturdays; and No work on Sundays and public holidays.
MP 10_0218	Block 5C, Central Park, 26 Broadway, Chippendale	<ul style="list-style-type: none"> Between 7.00am and 7.00pm, Mondays to Fridays inclusive; Additional work² is permitted to be carried out between the hours of 7pm and 10.30pm on Monday and Friday; Between 7.00am and 5.00pm, Saturdays; and No work on Sundays or public holidays.

¹ 'Additional work' defined in the consent as:

- (a) restricted to the internal fit-out works within the constructed and completed facade of the building;
- (b) no use of and operation of high noise intrusive equipment;
- (c) no works on the facade of the building;
- (d) deliveries are not permitted;
- (e) no use of cranes; and
- (f) no use of floodlighting or additional lighting beyond internal lighting and lighting required for safety and access.

² 'Additional work' defined in the consent as:

- (g) Internal fit-out works within the constructed and completed façade of the building;
- (h) No works on the façade of the building;
- (i) Use of external hoists located on the western facade of the east and west towers only;
- (j) Notwithstanding (c) above, following the occupation of buildings within Blocks 5A and/or 5B, the use of the external hoist on the northern elevation of the building within Block 5C is only permitted during standard construction hours;
- (k) No vehicle movement to be permitted on/off the site, except for vehicles stationed within the basement level of Block 2 (e.g. forklifts);
- (l) Deliveries are not permitted outside of normal construction hours;
- (m) No use of cranes; and
- (n) No use of floodlights or additional lighting over and above the current lighting levels required for safety and access.

4.3 Acoustic Impact

An Acoustic Report has been prepared by Acoustic Studio and is available at **Attachment A**. The purpose of the report was to quantify the noise impact associated with the extended working hours.

The noise assessment involved predicting the construction noise levels at particular times by measuring the existing conditions (Reduced Background Level, or RBL) and incorporating noise emissions from key construction activities that would occur outside of standard construction hours. Such activities include the following:

- Structure work including formwork and concrete placement;
- Façade work including installation of glazing;
- Fit-out work including services installation, masonry, internal linings, joinery, floor finishes and tiling; and
- External work including in ground services and landscaping.

Acoustic Studio has modelled the predicted equipment noise levels at the nearest sensitive residential and commercial/educational receivers.

Based on the modelling, Acoustic Studio advise that it is likely that the proposed out of hours work will, at times, exceed the stated criteria at the nearest sensitive receivers. It is noted that these predictions are based on a typical worst case with a general consideration of works being carried out at a position on the construction site nearest to the potentially affected receiver and activities generally being carried out continuously.

For each of the construction activities assessed and assuming that, in fact, these activities are found to exceed the noise criteria, then the noise control measures and construction best practices presented below shall be considered and implemented wherever reasonable and feasible. For out of hours works, work scheduling and on site management is considered the most effective and practical measures that can be implemented to minimise the impact on noise sensitive receivers.

No adverse vibration impacts are expected at surrounding receivers around the project site during out of hours works given the nature of the work to occur.

4.3.1 Mitigation Measures

The following noise control measures and construction best practices shall be considered and implemented wherever reasonable and feasible. Further detail is provided in **Section 4 of Appendix A**. The list below has been reviewed by RCC and only contains mitigation measures that are able to be enacted on site.

- **Plant and equipment.** In terms of both cost and results, controlling noise and vibration at the sources is one of the most effective methods of minimising the impacts from any work site activities. Work practices that will reduce noise and vibration at the source include:
 - Employing quieter techniques for all high noise activities such as rock- breaking, concrete sawing, and using power and pneumatic tools.

- Use quieter plant and equipment based on the optimal power and size to most efficiently perform the required tasks.
- Selecting plant and equipment with low vibration generation characteristics.
- Operate plant in a quietest and most effective manner.
- Where appropriate, limit the operating noise of equipment.
- Regularly inspecting and maintain plant and equipment to minimise noise and vibration level increases, to ensure that all noise and vibration reduction devices are operating effectively.
- Where appropriate, obtain acoustic test certificates for equipment.
- **On site noise management.** Practices that will reduce noise from the site include:
 - Maximising the distance between noise activities and noise sensitive receivers. Strategically locate equipment and plant.
 - Undertaking noisy fabrication work off-site where possible.
 - Avoid the use of reversing beeping alarms or provide for alternative systems, such as broadband reversing alarms, particularly during night or out-of-hours works.
- **Work scheduling.** Scheduling work during periods when people are least affected is an important way of reducing adverse impacts. The following scheduling aspects may reduce impacts:
 - Restricting very noisy activities to daytime, restricting the number of nights that after-hours work is conducted near residences, or by determining any specific requirements, particularly those needed for noise sensitive receivers such as teaching, study or research spaces.
 - Scheduling activities to minimise impacts by undertaking all possible work during hours that will least adversely affect sensitive receivers and by avoiding conflicts with other scheduled events (i.e. University exam periods).
 - Scheduling work to coincide with non-sensitive periods (i.e. work near education facilities during weekends or school holidays).
 - Scheduling noisy activities to coincide with high levels of neighbourhood noise (such as traffic noise from Broadway affecting Central Park) so that noise from the activities is partially masked and not as intrusive.
 - Planning deliveries and access to the site to occur quietly and efficiently and organising parking only within designated areas located away from sensitive receivers.
 - Optimising the number of deliveries to the site by amalgamating loads where possible and scheduling arrivals within designated hours.
 - Designating, designing and maintaining access routes to the site to minimise impacts.
 - Including contract conditions that include penalties for non-compliance with reasonable instructions by the principal to minimise noise or arrange suitable scheduling.
- Consultation, notification and complaints handling.
 - Provide information to neighbours before and during construction.
 - Maintain good communication between the community and Project staff.

- Have a documented complaints process and keep register of any complaints.
- Give complaints a fair hearing and provide for a quick response.
- Implement all feasible and reasonable measures to address the source of complaint.

Further to the above, along with on site management and work scheduling measures, RCC also undertake regular distribution of project updates to the community (see example at **Attachment B**). Through these ongoing communications, RCC are able to create greater awareness with adjoining neighbours and manage the expectations of future on site activities. RCC also have an established complaints management process, with a record of this process available at **Attachment C**.

Implementation of all reasonable and feasible mitigation measures for all works will ensure that any adverse noise impacts to surrounding receivers are minimised when noise goals cannot be met due to safety or space constraints. The management of the UTS Central construction site to date by RCC has demonstrated that it is being managed by a professional and experienced contractor in accordance with best practice. There is therefore confidence that the proposed extended construction hours will also be implemented in a way that is considerate of the surrounding sensitive receivers.

4.4 Transport and Accessibility

The extension of construction hours is not anticipated to increase the demand for parking nor is it expected to produce a corresponding increase in traffic activity and congestion. There is due to the site's CBD context no onsite vehicular parking during the construction phase and workers will be incentivised to use public transport. The site is highly accessible by public transport.

Any consequential increase in truck movements associated with the extended construction hours is not considered to be material.

4.5 Public Interest

The modifications are considered to result in a net reduction in impact and an improved outcome in that the proposed hours will expedite the construction process and limit the duration of noise emissions. The modification will allow the approved development to be delivered within a shorter time frame, allowing the benefits associated with this development to be realised by the community sooner.

During internal fitout works, there will be no use of cranes and no works that are likely to emit significant noise (e.g. use of jackhammers or concrete pours). It is proposed that materials handling will be managed through the future external hoists. The activities expected to be undertaken include services installation (mechanical duct, pipework, cable trays, cable runs, lighting etc.), installation of ceilings, partitions, wall linings, floor finishes (carpet, vinyl, tile, timber etc.), joinery installation and painting. These works will only occur on fully enclosed levels. Therefore, the types of activities proposed are not likely to have a significant impact on the public, including nearby receivers.

5.0 Conclusion

The proposed modifications extension of allowable hours of construction at the UTS Central Project, Broadway Precinct.

In accordance with section 96(1A) of the EP&A Act, Council may modify the consent as:

- the proposed modification is of minimal environmental impact; and
- substantially the same development as development for which the consent was granted.

The extension of construction working hours is proposed in order to ensure a timely completion of the project, meet the university's program for relocating users and faculties, and meet student enrolment and growth forecasts. There are a number of precedents both within UTS and surrounding development sites where it was considered acceptable for similar expanded construction hours to be adopted.

The Acoustic Report prepared by Acoustic Studio has concluded that whilst the worst case scenario is that activities undertaken during out of hours work will, at times, exceed the stated criteria at the nearest sensitive receivers, a range of mitigation measures can be adopted to minimise the amenity impact of surrounding land uses.

We trust that this information is sufficient to enable a prompt assessment of the proposed modification request.

Yours sincerely,



Chris Patfield

Urbanist

9956 6962

cpatfield@ethosurban.com