



acoustic studio

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31 January 2017

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Dear Greg

UTS Central Project

State Significant Development Application Number: SSD7382

Section 96 Application – Acoustic Assessment

The University of Technology Sydney (UTS) is currently proposing to redevelop Buildings CB02 and extend the podium of CB01 within its Broadway Precinct of the UTS City Campus as part of the approved State Significant Development SSD7382.

A supplementary acoustic assessment has been carried out to support a Section 96 application to modify the approved DA with specific focus on the following:

- Provision of laboratory exhaust flues on the roof of the Level 17 Plantroom

This letter details the assessment that has been undertaken to review the potential operational impacts of the proposed modification to the SSD.

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1. Introduction

On 23 September 2016, the NSW Department of Planning and Environment granted development consent for State Significant Development 7382 for the University of Technology Sydney (UTS) Central Precinct. 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.

UTS are now seeking to submit a Section 96 (1A) application to modify the above consent (SSD_7382). The application seeks approval for the following:

- adjustment of the Broadway and Jones Street façade;
- adjustment of the Jones Street entry near Broadway;
- provision of a pedestrian awning and activated space on the Broadway frontage;
- relocation of the collaborative learning theatres;
- adjustment and increase in the number of skylights;
- provision of laboratory exhaust flues on the roof of the Level 17 Plantroom;
- addition of Superlab on Level 1;
- adjustment to open roof terrace extent;
- reconfiguration of vertical circulation; and
- landscape adjustments including removal of a tree on public land (Jones Street).

The Broadway Precinct of the UTS City Campus is located entirely within the Sydney Local Government Area on the southern edge of the Sydney Central Business District.

The Broadway Precinct of the UTS City Campus has frontages to Broadway, Thomas, Wattle and Harris Streets, and the Ultimo Pedestrian Network. Jones Street and Harris Street intersect the precinct. It is less than 700 metres from Central Railway Station.

The UTS City Campus occupies approximately 42,000m² of land within the Ultimo Cultural and Education Precinct (UCEP) which includes, among others, the Sydney Institute of TAFE, the Powerhouse Museum and the ABC.

As shown in Figure 1, the subject site is referred to as UTS Central and consists of:
UTS Building 1 (CB01) – Podium Extension.

UTS Building 2 (CB02) – Building site of former Faculty of Engineering and Information Technology.

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Figure 1 – Subject site (shown in red) - Source: FJMT Architects

2. Criteria

The relevant noise criteria to the proposed Section 96 modifications include:

Development Consent Conditions

SSD 7382 Development Consent Condition E4 “Noise Control Plant and Machinery” states the following:

“... 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...”

Acoustic SSD Report

In addition to the specific Development Consent Conditions, the existing noise environment and relevant noise criteria has been established for the project (plus SSD assessment) and is documented in the Acoustic SSD report (*University of Technology Sydney, UTS Central Report, Acoustic Report for State Significant Development Application - report reference: 20160427 UTS.0001.Rep.RevC*).

Compliance with the SSD report criteria will also ensure compliance with the Development Consent Condition E4 above.

3. Proposed Modification to Approved SSD

With regard to the proposed modifications outlined in Section 1, the additional laboratory exhaust flues are noted to have the potential for noise impact and therefore an additional acoustic assessment has been carried out.

Acoustic Studio has reviewed the proposed laboratory exhaust flue selections to be included as part of the Section 96 modifications which include:

- Laboratory Exhaust Flue Fans
 - 4 x Seat Ventilation - SEAT 30 Fans
 - 6 x Seat Ventilation - SEAT 35 Fans

We understand that the proposed operating times for the above plant will be within the hours of 7am and 10pm.

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4. Outcomes of the Assessment

Acoustic Studio confirm that, in accordance with the requirements of Condition E4, the current selections for additional laboratory exhaust flues (to be included as part of the Section 96) do not require any additional treatment in order to comply with the following conditions of the SSD 7382.

- Condition E4 : Noise Control - Plant and Machinery

This statement of compliance is made on the basis of the following works undertaken by Acoustic Studio:

- Review of the proposed modifications to the mechanical services scheme and equipment selections (including manufacturer noise data) provided by the mechanical consultant.
- Predictions of the external noise emissions associated with the proposed laboratory exhaust flues and resulting noise levels at affected receivers in accordance with Condition E4 Noise Control - Plant and Machinery.

Where the final selections vary, Acoustic Studio will review the design to ensure equivalent selections are provided and / or noise controls are incorporated as required for the final design to ensure that the cumulative noise output from plant at the nearest affected receivers is within the allowable limits. General design consideration and controls implemented will typically include; strategic selection and location of plant and/or acoustic noise control measures such as enclosures, barriers, acoustic louvres, sound absorptive panels, etc.

We trust that this information meets your needs at this time. Please feel free to contact me if you need anything further.

Yours sincerely



Anthony Cano,
Acoustic Engineer, Acoustic Studio Pty Ltd

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