

1 May 2018

WM Project Number: 10232-C1  
Our Ref: DA 010518 RTS Mk2  
Email: demos.avramidis@lendlease.com

Demos Avramidis  
Lend Lease  
L14, International Towers  
EXCHANGE PLACE, 300 BARANGAROO AVE, NSW 2000 AUSTRALIA

Dear Demos

**Re: Building C1 - South Barangaroo  
Response to Submissions - Noise and Vibrations**

The following advice is provided in response to submissions on the above project in relation to Noise and Vibration and provide further commentary on plant.

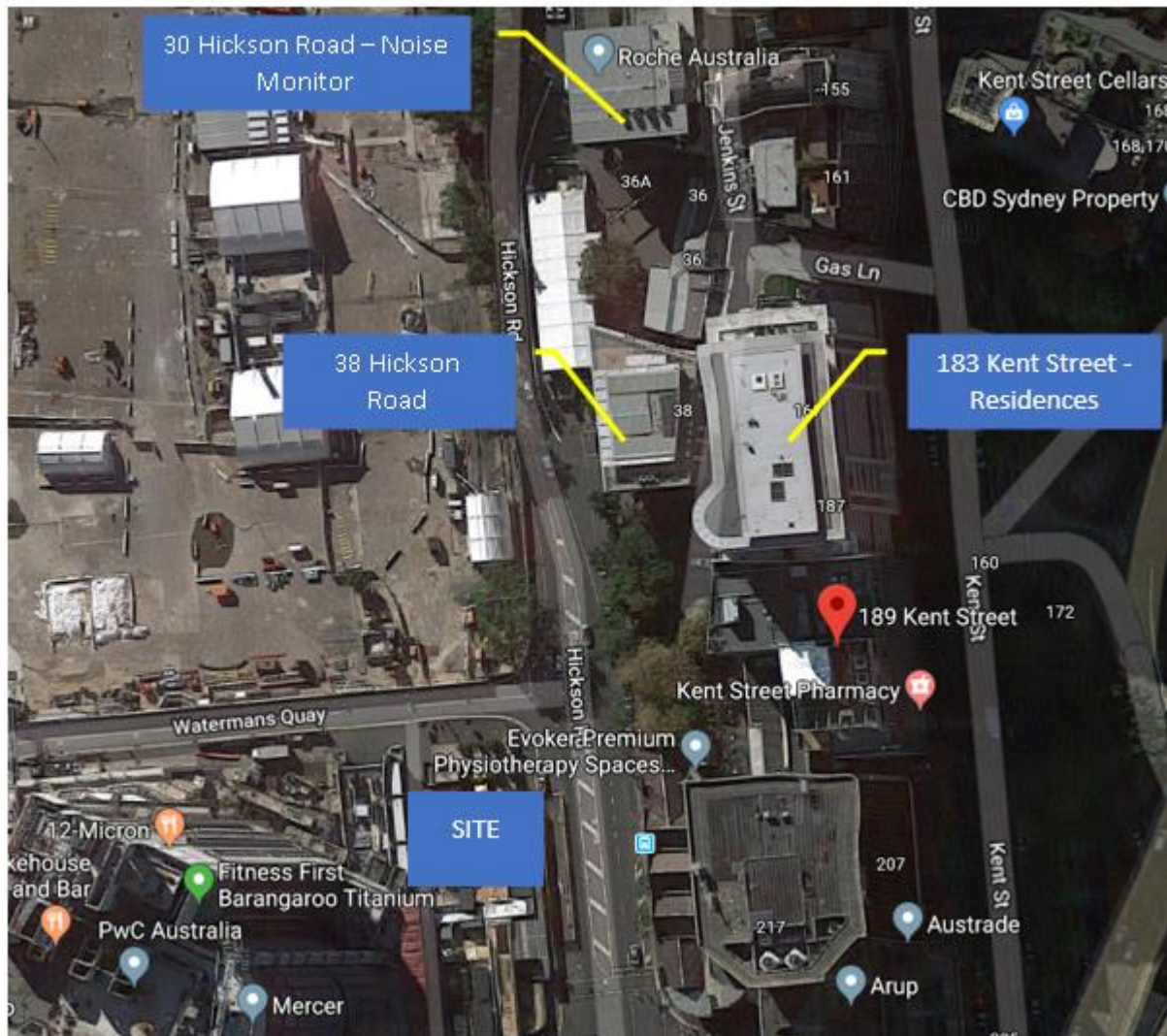
Issues have been raised in relation to residents 'Stamford on Kent' are addressed in detail as follows:

**Stamford on Kent**

A noise monitor was located at 30 Hickson Road Millers Point. Assessment of construction and operational noise from the development has been conducted at the 38 Hickson Road residential development. The residences at 38 Hickson Road and 'Stamford on Kent' (183 Kent Street) building are a similar horizontal distance from the C1 site. However, given the elevation of the Stanford on Kent building the overall distance is greater to the C1 site, than the 38 Hickson Road residences. As such any noise from either construction or operation will be higher at 38 Hickson Road (albeit also within acceptable amenity standards) than the Stamford on Kent building.

It therefore follows that the acceptable impacts at 38 Hickson Road will mean that noise will be acceptable at the Stamford on Kent building, that is, any noise from either construction or operation of C1 would be higher at Hickson Road residences than Stamford on Kent building.

Figure 1 shows the location of noise monitoring, 38 Hickson Road, and the Stamford on Kent Building (183 Kent Street).

**Figure 1 – Site Aerial and Surrounding Receivers**

### Mechanical Plant Noise

Mechanical plant associated with the development consists of Air Handling Units located in the Level 1 plantroom and roof top exhaust Fans. The detailed design had been conducted based on achieving acceptable levels of noise at the nearby receivers being pedestrian and commercial receivers near the site. As such resultant noise levels at residences such as Stanford on Kent will be well below ambient noise levels thereby protecting the acoustic amenity of these residents.

All major plant, heat exchanges and chillers are contained within the basement of Barangaroo. As a result, there are only fans located on the roof of C1. Resultant noise levels at residences such as Napoleon Apartments and Stanford on Kent will be below 40 dBA. This level is well below site specific noise criteria detailed in the project application.

## **Ventilation Stacks**

There are two risers on the C1 site that currently exist associated with the High Voltage Room risers (HV). These are not fan assisted and as such are not acoustically significant. No change to these risers is proposed.

## **Future Generator Plant**

The mezzanine floor linked to the ground level includes a plant area. The plant area may include a generator for power. The details of the generator are subject to further investigations and approvals. The plant area will include an acoustic enclosure and vibration isolation. These measures along with any necessary standard engineering noise and vibration controls will form part of the design requirements for this area to ensure that both acoustic amenity and human comfort vibration criteria are achieved.

It is noted that these generators are typically supplied in their own acoustic housing which includes vibration isolation and will be designed to meet the night time site specific noise criteria of 50 dBA at the nearest residences, being 38 Hickson Road. Noise levels at Stamford on Kent residence from this equipment will be lower than at Hickson Road.

## **Out of Hours Construction**

Out of hours construction is not proposed except where provided with any conditions of development consent. The proposed hours of operation are standard approved hours.

## **Construction Noise and Vibration Impacts**

No excessive noise and vibration associated with construction is predicted for this project. There is an environmental, construction and site management plan which includes management of noise and vibration for the entire South Barangaroo site that will be applied by Lend Lease to the C1 site.

No specific actions beyond those in the Noise and Vibration section of the environmental, construction and site management plan are proposed.

## **Noise Policy for Industry**

The EPA notes that the new Noise Policy for Industry (NPI) has superseded the Industrial Noise Policy (INP) in October 2017. The noise criteria for the project has been based on the INP.

However, as acknowledged by the EPA, the SEARs for SSD 8529 were issued on 23 June 2017 which is prior to the issue of the NPI. Therefore, assessment with respect to the NPI is not applicable for this project.

Yours faithfully

**WILKINSON MURRAY PTY LIMITED**



**Brian Clarke**  
Senior Associate