

1 October 2015

WM Project Number: 14288

Our Ref: LT011015 bcDOP

Lee Thomson
Bloompark
Suite 2.02/41 McLaren St

NORTH SYDNEY NSW 2060

Dear Lee

**Re: SCEGGS Redlands School (SDD 6454)
Response to Noise Issues raised by NSW Planning and Environment**

We note that items 7, 8 and 9 in the "Response to Submissions" letter from the Department of Planning and Environment dated 13 August 2015 relate to noise issues. This letter has been prepared to respond to the issues in the following sections:

Item 7: The Department requires that further justification be provided regarding the proposed project specific noise criteria, noting that in absence of the proposed staged redevelopment, the school's operational intensity is not proposed to be increased.

Project Specific Noise Criteria have been established for surrounding receivers based on long term noise monitoring consistent with the requirements of the NSW Industrial Noise Policy (EPA).

The project application construction and operational noise report, number 14288-B dated May 2015 prepared by Wilkinson Murray, detailed the location of noise logging that was conducted between 20 – 27 November 2014. Two (2) locations surrounding the site were selected to cover the range of noise environments in the potentially affected areas being:

Logger	Location	Monitoring Period
1	SCEGGS Redlands Western Boundary	20 – 27 November 2014
2	6 Winnie St, Cremorne	20 – 27 November 2014

These locations are shown in Figure 1.

It is noted that the two locations are on the western and eastern side of the school which are adjacent to residences and away from the influence of traffic generated noise. As such the measured noise levels are lower than can be expected at receivers on Military Road or Gerrard Street.

Accordingly site specific noise criteria based on the measured levels at these locations will be lower and represent a more stringent approach to establishing noise criteria,

Figure 1 Aerial showing Noise Monitoring Locations



Four residential receivers area were identified in the proximity of the area being:

Receivers	Comments
A – Waters Rd	Multi storey residential building.
B – Military Rd	Multi-storey residential buildings on the opposite side of Military Rd.
C – Winnie St	Mix of single and multi-storey residential buildings.
D – Gerard St	Church on the opposite of Gerard Street

Based on site observations it was determined that monitoring location 1 noise levels should be used to established site specific noise criteria for Locations B– Military Rd and Location D – Gerrard Street. This is considered a conservative approach as Locations B and D are subject to higher contributions from traffic noise than Logger location 1.

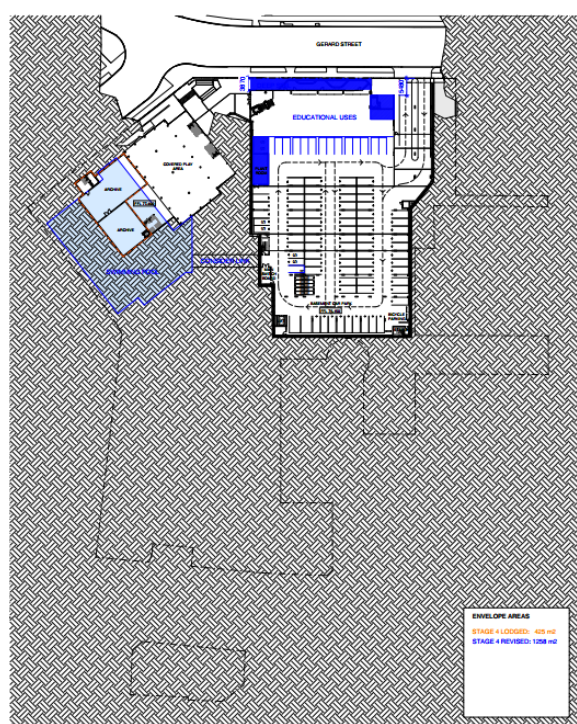
In the case of Winnie Street residences the noise data from location 2 was used to establish site specific noise criteria. This location has lower ambient noise levels as it is surrounded by multi level residential buildings.

Therefore we consider that the project specific noise criteria that has been established is appropriate for the range of noise environments surrounding the school site.

Item 8 The Construction and Operational Noise Report shall be revised to provide consideration and an assessment of amenity impacts on adjoining residential properties from the use of the rooftop swimming pool during the weekday/weekend and use of the proposed new internal link road from Waters Road to Military Road.

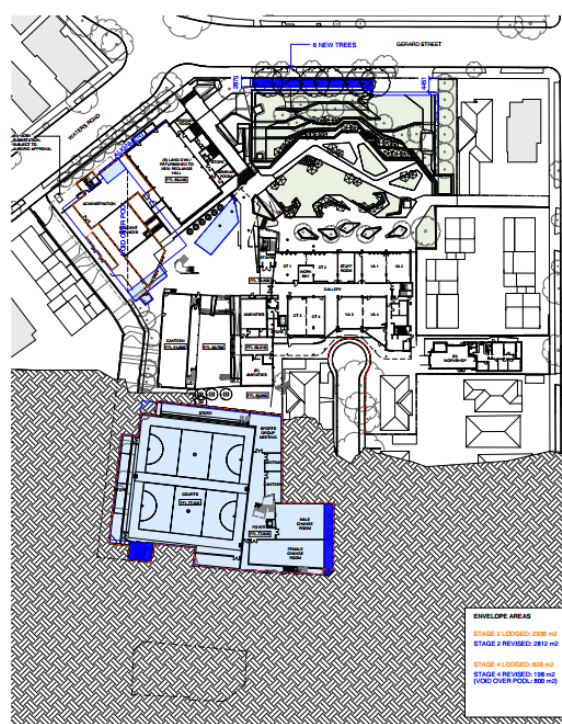
It is noted that the proposed swimming pool location has been revised from an outdoor roof level pool proposed in Stage 4 to an enclosed basement level location. The following figure shows this change.

SUMMARY OF MODIFICATIONS



Basement Level

BASEMENT + LEVEL 1



Level 1

As a result of the relocation of the proposed pool to the basement level any noise generated in this area will be contained within the buildings envelope. Any mechanical plant associated with the pool will be designed to meet the project specific noise criteria that has been established for this project.

Item 8 The Construction and Operation Noise Report details a 'morning shoulder period' from 6 am to 7 am. Under the relevant guidelines this period is defined as being within the night period between 10 pm and 7 am, and therefore, the respective RBLs for that period would apply. In this regard, reference to the 'morning shoulder period' is to be removed and potential noise impacts during this period assessed appropriately.

There are no proposed activities or operations that are proposed in Stage 1 of the project before 7 am. However in future stages there may be activities that occur from 6 am and are yet to be determined.

Therefore representative noise levels in the period between 6 am and 7 am have been processed so that they may be used in establishing noise criteria for future Stage applications.

These noise levels are used in determining the potential for sleep disturbance. The potential for sleep disturbance is assessed on the level that a noise emerges over existing noise levels. Therefore to use an ambient noise level for the whole night period (10 pm to 7 am) that is not representative of ambient noise levels at the time of proposed operation is inconsistent with the above principles.

This approach has been adopted on many projects is consistent with industry practice.

It is noted that, consistent with areas close to commuter roads, noise levels increase significantly after 6 am due to peak hour traffic. As a result shoulder period RBL's are higher than daytime RBL's. In this case the lower intrusive noise criteria would be adopted for assessment purposes.

I trust this information is sufficient. Please contact us if you have any further queries.

WILKINSON MURRAY

A handwritten signature in black ink, appearing to read 'Brian Clarke', written in a cursive style.

Brian Clarke
Senior Associate