

email

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Attention:	Peter Golema (ELK)	Date:	2/10/20
From:	Neil Pennington	Ref:	202006-9044
Copies to:		Pages:	3

☐ Urgent ☐ Please Reply ☒ For your files ☐ No action required

Subject: Noise impact assessment – 53 - 55 Donnison St, West Gosford

Good day Peter,

This report provides additional information pertaining to the proposed multi-storey residential development (residential flat building) on No. 53 – 55 Donnison Street, West Gosford to support a develop application to Central Coast Council.

The Environment Protection Agency's (EPA) NSW Road Noise Policy (RNP, 2012), as adopted by the Roads and Maritime Services (RMS) of NSW, recommends various criteria for different road developments and uses. For new residential developments near roads, the RNP advises that land use developers must meet internal noise goals in Clause 102 of the Infrastructure SEPP (Department of Planning NSW, 2007).

The SEPP (2007) is supported by the Department of Planning guideline "Development near Rail Corridors and Busy Roads – Interim Guideline" (2008) which gives the following criteria in Section 3.5:

In any bedroom in the building: 35 dB(A), Leq at any time 10pm – 7am, and
Anywhere else in the building (other than a garage, kitchen, bathroom or hallway): 40dB(A), Leq at any time.

These criteria originated from the Rail Infrastructure Corporation (RIC) publication "Consideration of Rail Noise and Vibration in the Planning Process" (2003) where it is explicit that the criteria apply with windows and doors closed. The criteria are traced to an earlier version of AS/NZS 2107.

This report applies the screening test for road and rail noise as defined in section 3.5 of the Department of Planning Guideline. Figure 1 shows the location of the subject site in relation to the Central Coast Highway and rail line.

The project site is 195m from Central Coast Highway and 235m from the Main North Rail Line as shown in Figure 1.

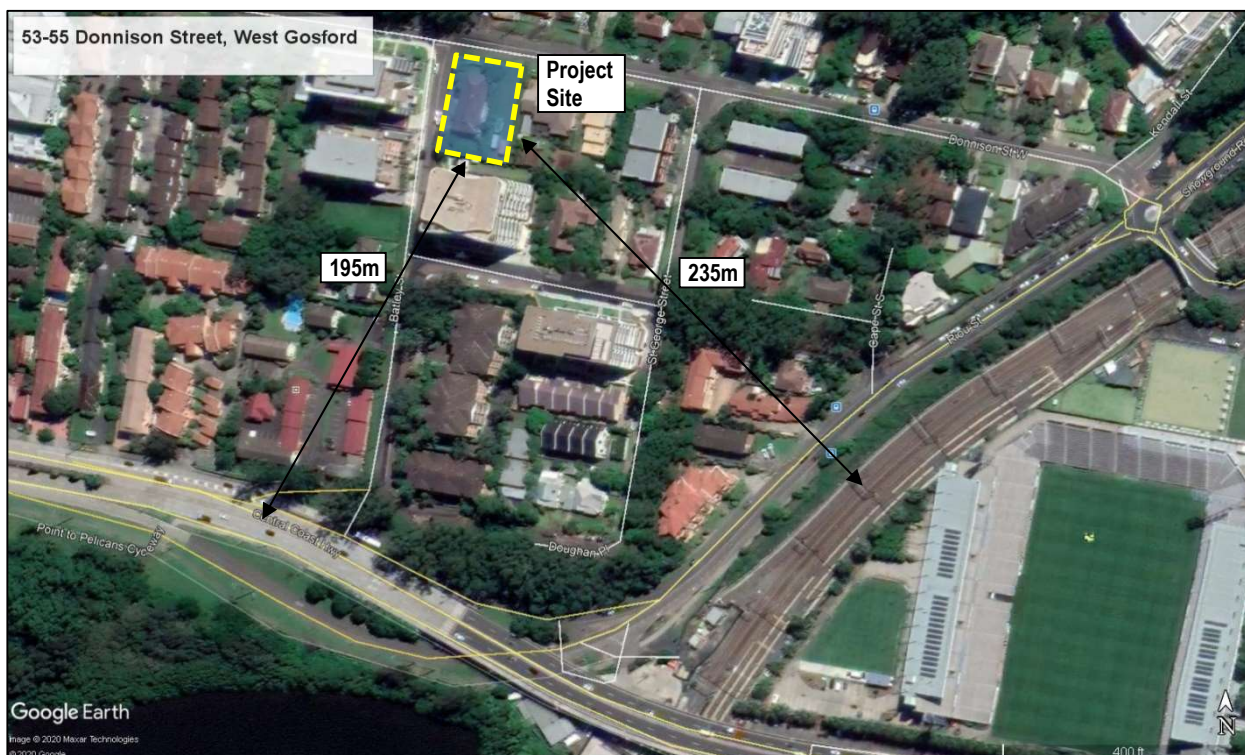


Fig 1. Project site.

ROAD TRAFFIC NOISE IMPACTS

The Department of Planning guideline “Development near Rail Corridors and Busy Roads – Interim Guideline” (2008) provides screening tests to determine whether a full acoustic assessment is required. The tests for road and rail impacts are based on separation distances, traffic speed and traffic volumes.

Historical RTA (now RMS) data shows an estimated traffic volume of 50,000 vehicles per day on Central Coast Highway – West Gosford for the year 2009. This traffic volume and separation distance of the project site from Central Coast Highway is indicated in Figure 2, which is a reproduction of Figure 3.4(a) of the DPE Guideline. Note that the screening test is for “exposed facades” and does not include the significant noise reduction provided by intervening buildings and acoustic barriers.

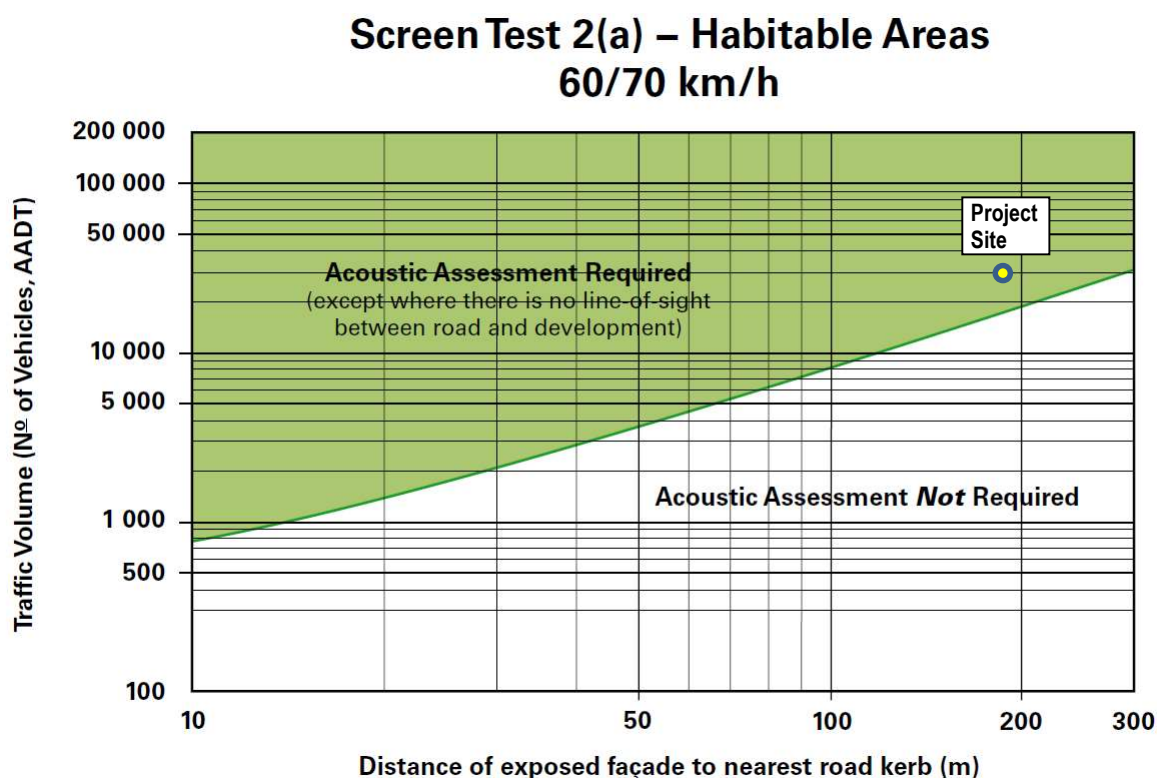


Fig 2. Traffic noise screening test.

Figure 2 shows that an acoustic assessment is required under the condition that there is a line of sight between the road and the development. It has been concluded that for this development, no line of sight exists and all possible view-points between the development and the road are obscured by surrounding structures. Based on this, no further acoustic assessment will be required.

RAIL NOISE AND VIBRATION IMPACTS

Rail noise and vibration screening tests from Section 3.5.1 of the Guideline are shown below in Figures 4 and 5.

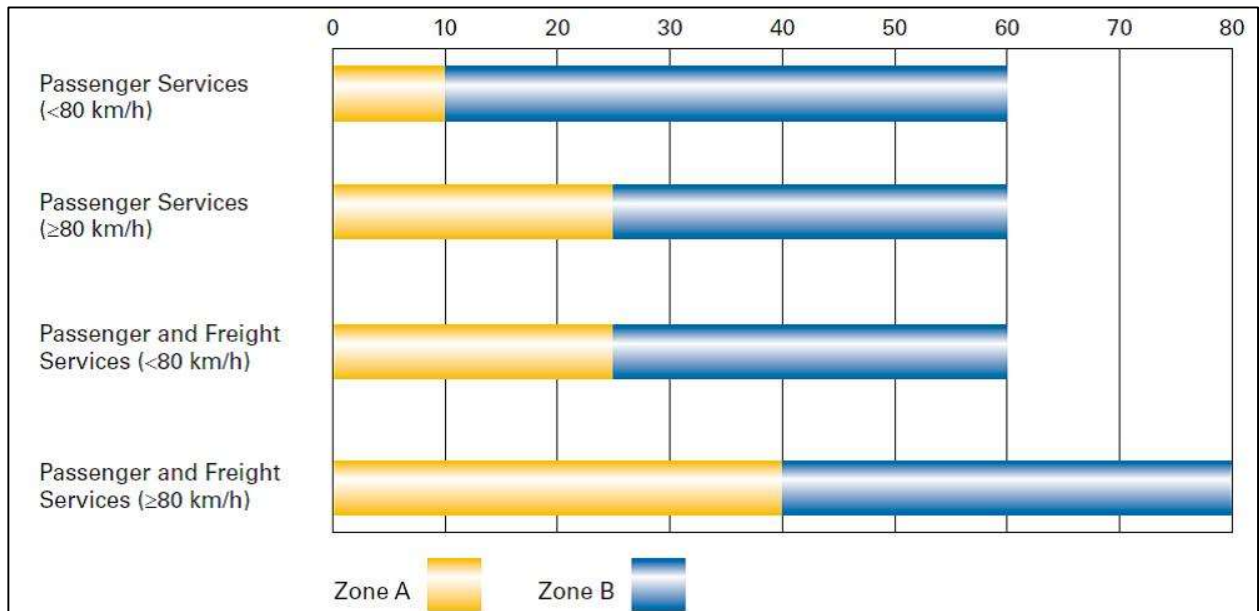


Fig 4. Rail noise screening test.

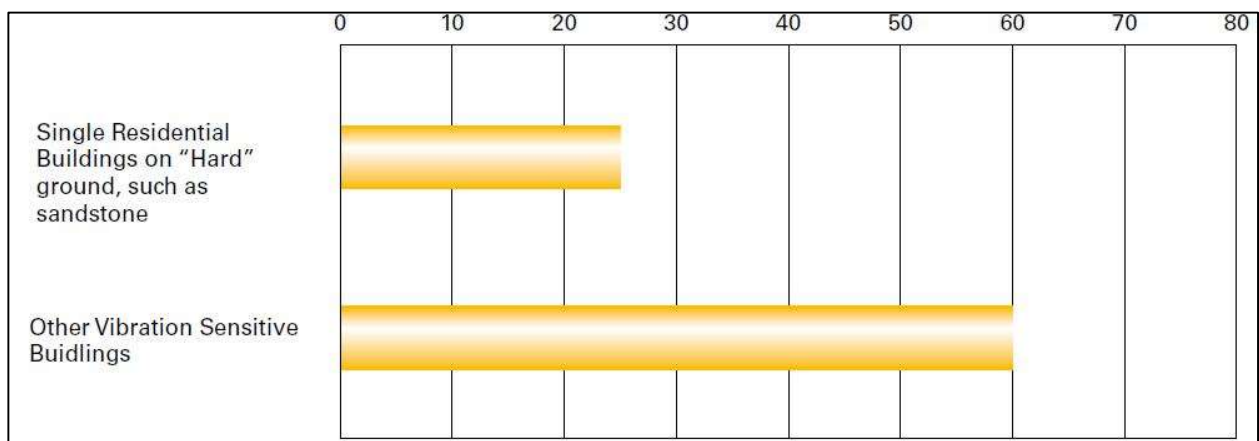


Fig 5. Rail vibration screening test.

The proposed development would be 235m from the rail line. From Figure 4, this is outside Zone B, which ends at 80m from the track. Based on this, no further acoustic assessment is required. Figure 5 shows that the zone requiring assessment of rail vibration impacts ends at 60m from the rail line, implying no rail vibration impacts at the project site.

Regards,

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Principal/Director