3 September 2024
Reference: *1023065 L01B 20 Kelso Crescent Moorebank ENV CNVMP DPIE RFI Respnse.doc*

Eng Tan
Maple Tree
Suite 9.01, Level 9, 580 George Street
Sydney NSW 2000

Dear Eng,

RE: 20 Kelso Crescent, Moorebank Response to DPE comments

Acoustic Works (AW) was engaged by Mapletree SP Australia Management Pty Ltd to prepare an environmental noise assessment for a proposed warehouse and logistics development to be located at 20 Kelso Crescent, Moorebank.

This letter is in response to a request by The Department of Environment for further information regarding the acoustic report prepared for the proposed warehouse and logistics development (ref: *1023065 R01F 20 Kelso Crescent, Moorebank ENV.docx* dated 5/06/2023). To resolve outstanding issues, Acoustic Works provides the following response:

Request
Detailed assessment of the noise impacts of off-site road traffic is required. The assessment should include differentiation of numbers of heavy (more than 2 axles) and medium sized rigid trucks in the calculation of noise impacts. Detail must also be provided in relation to any stopping/acceleration points on truck routes and impacts to adjacent development. Feasible and reasonable mitigation measures should be discussed and justified before stating that any increase below 2 dB is negligible and does not require mitigation (as prescribed by Fact Sheet F of the NPFI).

Response
The Department of Planning and Environment (DP&E) has requested the above, prior to providing our response we wish to provide clarification about the requirements for the developments as follows:

- The Noise Policy for Industry specifically related to activities that occur onsite, this includes *Fact Sheet F of NPFI* , which is clearly stated within the policy in Section 1.4 *"The policy can also be used to assess noise from mechanical plant and equipment; industrial and commercial processes; mobile sources confined to a particular location (for example, drag lines, haul trucks, intermodal facilities and rail shunting yards); and vehicle movements within the premises and/or on private roads."* Therefore, as the NPFI and relevant parts does not apply to the surrounding public roads, it should not be referenced as part of the RFI.
- The relevant document for assessment of Road traffic generated by the site is the *NSW Road Noise Policy*, this document details all relevant criteria required to be addressed including acceptable outcomes and should be referenced in the RFI. The policy only requires the assessment of cars and heavy vehicles, in no part of the policy does it distinguish between the size of the heavy vehicles or require this to be assessed. In addition, the request to assess stopping points, acceleration is not a requirement or form part of the acceptable modelling procedure, the main modelling method use is the Cortn Methodology.

- The *NSW Road Noise Policy* acknowledge that treatment to existing receivers is limited to the receiver and states that *"For existing residences and other sensitive land uses affected by additional traffic on existing roads generated by land use developments, any increase in the total traffic noise level should be limited to 2 dB above that of the corresponding 'no build option' ".*

In the current acoustic report, its noted that the surrounding road network (Newbridge Road and Moorebank Avenue) which is in proximity to sensitive receivers carries the following traffic volumes:

- Newbridge Road - 114,736 vehicles
- Moorebank Avenue – 48,291 vehicles (7% heavy vehicles).
- Heathcote Road – 29,460 vehicles (7% heavy vehicles).

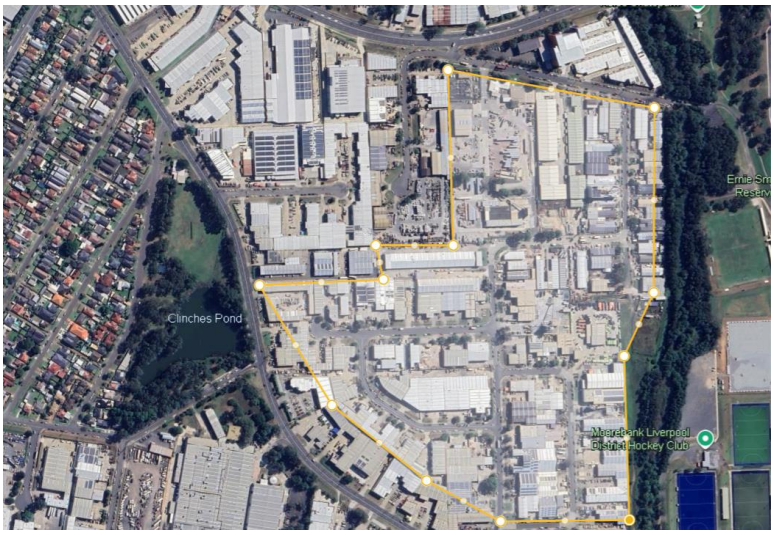
Further analysis was undertaken to determine compliance with the criteria based on transport routes from the site to sensitive receiver based on the following information provided by Genesis Traffic:

- The site is predicted to generate the following traffic volumes as provided by the traffic engineer, with a total number of vehicles produced by the site 1583 vehicles per day with a percentage of heavy vehicles 23%.

Table 1 Total Trip Generation

Period	AM peak (vtph)	PM peak (vtph)	Daily (vpd)
Total	**179**	**193**	**1,583**
Cars (77%)	138	149	1,219
Trucks (23%)	41	44	364

- Detailed traffic volumes on local roads were not provided, based on the square meterage of the surrounding area, preliminary calculation were undertaken to determine the predicted traffic generation rate using the assumption of the Genisis Traffic report (they used 4.6vpd per 100m^2). Based on an area of 284,238m^2 the conservative traffic generation equates to 13,074 vehicles per day, due to the area being industrial, a 23% heavy vehicle rate was used. Refer to area used for the assessment with access to local roads below.



- The following table provides the result of calculation of road traffic noise to the nearest residential receivers in proximity to the road network surrounding the site and haulage routes. The assumption used in the modelling to determine compliance with the criteria for residential was based on a worst case scenario of existing traffic including the traffic generated by the development with the results presented in the table below.

Assessed Road	Receiver location	Current traffic volumes	traffic volumes accounting for development	Predevelopment Noise Impact Leq dB(A)	Post development Noise Impact Leq	Complies Yes/No	Resulting increase in noise levels dB(A)
Iraking Avenue	Jack O'Sullivan Road	13,074	14657	47.1	47.6	Yes with LAeq15h) 55dB(A) Day and 50dB(A) night	0.5dB
Kelso Avenue	Whelan Avenue	13,074	14657	43.2	43.7	Yes with LAeq15h) 55dB(A) Day and 50dB(A) night	0.4
Heathcote Road	Heathcote Road Western Residential	29460	31043	72.4	72.6	No	0.2
Newbridge Road	Newbridge Road Northern Residential	114,736	116319	76.9	77	No	0.1

Based on review of the traffic generation, local road traffic on internal road within the industrial area will comply with the criteria at the nearest residential receivers based on worst case scenario. Existing traffic on Heathcote Road and Newbridge Road is predicted to exceed the criteria at nearby sensitive receivers, review of the traffic generation of the site show the overall increase in road traffic levels will be 0.2dB(A) for Heathcote Road and 0.1dB for Newbridge Road. Based on the existing traffic noise levels exceeding the LAeq 15hour and LAeq 9hr noise limits, the development traffic generation based on existing traffic volumes is predicted to be less than 2dB(A) criteria as stated in Section 3.4 of the NSW Road Noise Policy 2011 and satisfied the assessment requirements.

Request
Discussion/ justification around selection of heavy vehicle routes is also required, particularly with regard to Moorebank Avenue and Heathcote Road. The Department notes that Heathcote Road appears to have significantly less exposure to adjacent residential development.

Response
All haulage routes have been assessed based on the Traffic engineers advice and found to satisfy the assessment requirement for the NSW Road Noise Policy 2011.

Request
The Noise and Vibration Assessment must also assess any altered impacts as a result of the altered traffic generation assumptions discussed above.

Response
The first response has assessed all haulage routes as identified and found the development satisfies the assessment requirement for the NSW Road Noise Policy 2011.

We trust this information meets with your current requirements. Should you have any queries please do not hesitate to contact us.

Regards,

Greg Pearce B.Eng (Mech)
Director
acousticworks)))