APPENDIX I

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NOISE MANAGEMENT STRATEGIES MEMORANDUM

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Queensland Government



13 December 2024

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Attention: John Bryant, Development Manager Stockland Level 4, 99 Melbourne Street, South Brisbane QLD 4101

SLR Project No.: 620.041622.00001

RE: Stockland AURA Town Centre Noise Management Strategies

Dear John,

SLR Consulting Australia Pty Ltd (SLR) has been engaged by Stockland Developments Pty Ltd (Stockland) to provide input into the design of AURA Town Centre Development (the Project). As part of this input, this letter has been prepared to inform Economic Development Queensland's (EDQ) high-level review of the environmental aspects that will be considered during the detailed design stages of Stage 1.

A review of the 16 November 2022 Compliance Plans package drawings and the 6 December 2024 Buchan Studio Work-In-Progress drawings indicates that the AURA Town Centre will broadly comprise the development of a shopping centre and surrounding development including:

- Supermarket with 24x7 mechanical plant use and night time deliveries.
- Outdoor and basement car parking.
- Retail with outdoor food premises, indoor entertainment and professional services.
- Mixed-use surrounding development.

The development will be part of the overall City Centre and will be further surrounded by Medium Density residential uses, as well as educational uses and a Civic Centre. Therefore, the Project is to be delivered in a manner that does not result in an unreasonable impact on the amenity or environmental quality of the surrounding sensitive premises.

A noise impact assessment is to be conducted during the detailed design stage to inform the design process.

1.0 Environmental compliance requirements

The existing Caloundra Plan of Development (PoD) Development Approval does not deal with acoustics issues other than the assessment of noise intrusion from major roads. Similarly, the Development Scheme also does not include specifics for how noise is to be managed other than requiring the protection of sensitive uses (dwellings) from the impacts of noise from the Bruce Highway and the Caloundra Aerodrome.

It is understood that future noise assessments shall be undertaken in accordance with PDA Guideline 14 – Noise.

At this stage, the City Centre and immediate surrounding areas are undeveloped; therefore, environmental noise monitoring is required to be conducted during the detailed design process at already developed residential areas outside but close to the Aura Town Centre to quantify the representative ambient noise levels experienced by external sensitive receptors in order to recommend suitable noise limits based on actual ambient noise levels experienced at developed residential sites.

2.0 Noise mitigation strategies

As described above, the Aura Town Centre will be relatively close to residential and potentially community / educational uses. Whilst this relative placement is not uncommon, we envisage that, pending the outcomes of a detailed assessment, a combination of the following strategies may ultimately need to be incorporated into the detailed design of the City Centre in order to reduce noise emissions:

• Commercial components of mixed-use development facing the Town Centre (i.e. sensitive receptors facing away from the noise source).

Preferably, the lesser of the noise-generating uses should be located closest to the sensitive receptors, and the highest noise-emitting uses should be located towards the centre of the commercial/retail zone.

- Maximise separation distance by installing the rooftop plant towards the opposite ends of the development, relative to the closest sensitive receptors.
- Use of enclosed plant rooms with noise-attenuated ventilation outlets close to residential uses and/or where multi-storey residential use impedes effective block of the line of sight employing noise fences surrounding the rooftop plant.
- Plant room outlets facing away from receptors.
- Acoustic attenuators for car park exhaust fan systems.
- Oversizing of plant systems to operate at lower capacity, therefore, at a reduced noise emission (this is standard practice by supermarket designers used to increase the life of plants).
- Tall noise fences to truck unloading areas and/or enclosed (roofed) truck unloading areas with a gate when these areas are proximate to sensitive receivers.
- Design traffic routes to minimise reversing; therefore, reverse beeper noise (use broadband reverse alarm if required).
- Noise management practises (e.g. stop engines whilst not in use, minimise dropping of objects, signage, and no night time use of staff entertainment systems/music) where in close proximity of residential uses.
- Limiting truck traffic flows to unloading areas during the night time period for areas proximate to sensitive receivers.
- Facade treatments to entertainment areas to reduce noise egress from amplified entertainment and patrons.
- Location of amplified music uses within internal areas of the development as opposed to against the facades (e.g. use of corridors as sound lock).

In summary, based on a qualitative review of the arrangements shown in the abovementioned drawings, it is expected that the Project may be developed to manage its noise impacts on the community whilst meeting reasonable noise goals that are relevant to the future urban environment to which the Town Centre will be situated by introducing acoustic considerations during the design phases, which are to be determined via detailed assessment of the operation of the development.

I trust this letter satisfies your current requirements. Should you have any queries, please feel free to contact me on the details below

Regards,

SLR Consulting Australia

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