

Subject: Objection to Project Mars Data Centre (12 Mars Road) regarding Unacceptable Acoustic Impacts and Loss of Residential Amenity.

1. Topographical Vulnerability: The "Edge" Effect and Natural Amplification

I am writing to formally object to the proposed development at 12 Mars Road. As a resident of Wood Street living on the edge of Blackman Park, I am acutely aware of how sound behaves in this specific pocket of Lane Cove West.

The proposed site sits on the edge of a natural amphitheatre formed by the local topography. This position is acoustically impactful on residential areas extending beyond Wood Street, because it provides a direct, unobstructed "line of sight" for sound waves to travel across the valley.

Natural Megaphone: The landform acts as a natural amplifier. This is proven by the fact that relatively quiet industrial sounds, such as *leaf blowers operating within the industrial park early in the morning*, are clearly audible as far away as Penrose Street.

Acoustic Projection: Because 12 Mars Road sits on the rim of this bowl, the massive mechanical cooling plants will effectively "broadcast" noise across the area. **The sound will not be contained by the site;** it will be projected directly toward residential interfaces that sit at similar or lower elevations.

2. The Apollo Place Precedent: A Case of Under-Predicted Noise

The theoretical acoustic modelling in this precinct has already failed the community.

Failure of Distance Decay: The existing data centre at Apollo Place is approximately 1.3km from my location in Wood Street. Despite this significant distance, the facility is clearly audible, especially during the quiet "night-time" period (10pm–7am).

Empirical Evidence vs. Models: If a facility 1.3km away is generating noise levels that exceed the community's reasonable expectations of amenity, it suggests that the current modelling standards for hyperscale data centres are insufficient for the Lane Cove West topography.

3. Escalation of Impact: 1.3km vs. 500 Metres

The proposed Mars Road facility is significantly closer—approximately 500 metres from my residential boundary.

Geometric Spreading: In acoustics, reducing the distance between a noise source and a receiver by more than half does not result in a linear increase in noise; it results in a massive escalation of perceived sound pressure.

Unmanageable Proximity: If the "Apollo Place" facility is already a nuisance at 1.3km, placing a larger, higher-capacity facility just 500m away (closer for many Lane Cove West residents) will fundamentally destroy the residential amenity of Wood Street and surrounding areas.

4. Characteristics of Data Centre Noise

Unlike other industrial tenants in Lane Cove West, data centres present a unique acoustic threat:

Constant Tonality: The noise is 24/7. There is no respite.

Low-Frequency Penetration: The "hum" of cooling fans is a low-frequency sound that penetrates standard residential glazing and masonry more effectively than traffic or general industrial noise.

Cumulative "Noise Floor": Each new data centre raises the "background noise floor" of the suburb. We will reach a saturation point where the natural quiet of the evening is being permanently replaced by mechanical drone.

Conclusion

The "edge" location of 12 Mars Road makes it an inappropriate site for a hyperscale data centre. The community should not be forced to endure a permanent loss of sleep and amenity because a developer's model failed to account for the reality of our local geography.