

18 May 2022

Dunedin City Council
c/o Anderson Lloyd
Level 12, Otago House
477 Moray Place
Dunedin 9016

Attention: Michael Garbett

Dear Michael

TUNNEL BEACH (LUC-2020-631) - RESPONSE TO MINUTE 1 FROM COMMISSIONER

The Commissioner has issued a Minute (1) requesting additional information on the impact of noise from the proposed track realignment. This letter responds to the Commissioner questions and confirms that the conclusions of my noise assessment have not changed.

The proposed alignment brings the track closer to the site boundary but not sensitive areas

The Commissioner has asked that I confirm:

- that the proposed track realignment would bring the track to within approximately 10m of the site boundary of 40 Tunnel Beach Road, and
- that, based on this, my assessment properly considers the impact of the modified walkway and viewpoints 1 and 2 on the property at 40 Tunnel Beach Road.

I can confirm that I agree that the proposed track realignment would bring the track to within approximately 10m of the site boundary of 40 Tunnel Beach Road. However, it is important to distinguish between the distance to the site boundary and the distance to appropriate assessment locations. My assessment is based on predicted noise levels received at the notional boundary of the dwelling and the horse paddocks that were identified as sensitive by the submitter Anya Durling in her submission and evidence.

The 2GP requires compliance at the notional boundary

The Dunedin City Council (DCC) Second Generation District Plan (2GP) requires compliance with the noise rules at the notional boundary of a dwelling in the Rural Residential zone (20m from any side of a residential building, or the site boundary where this is closer to the residential building). This requirement acknowledges that not all areas of a site in a rural/residential environment are sensitive to noise, and they should not be assessed in the same way. The notional boundary is indicated on Figure 1.

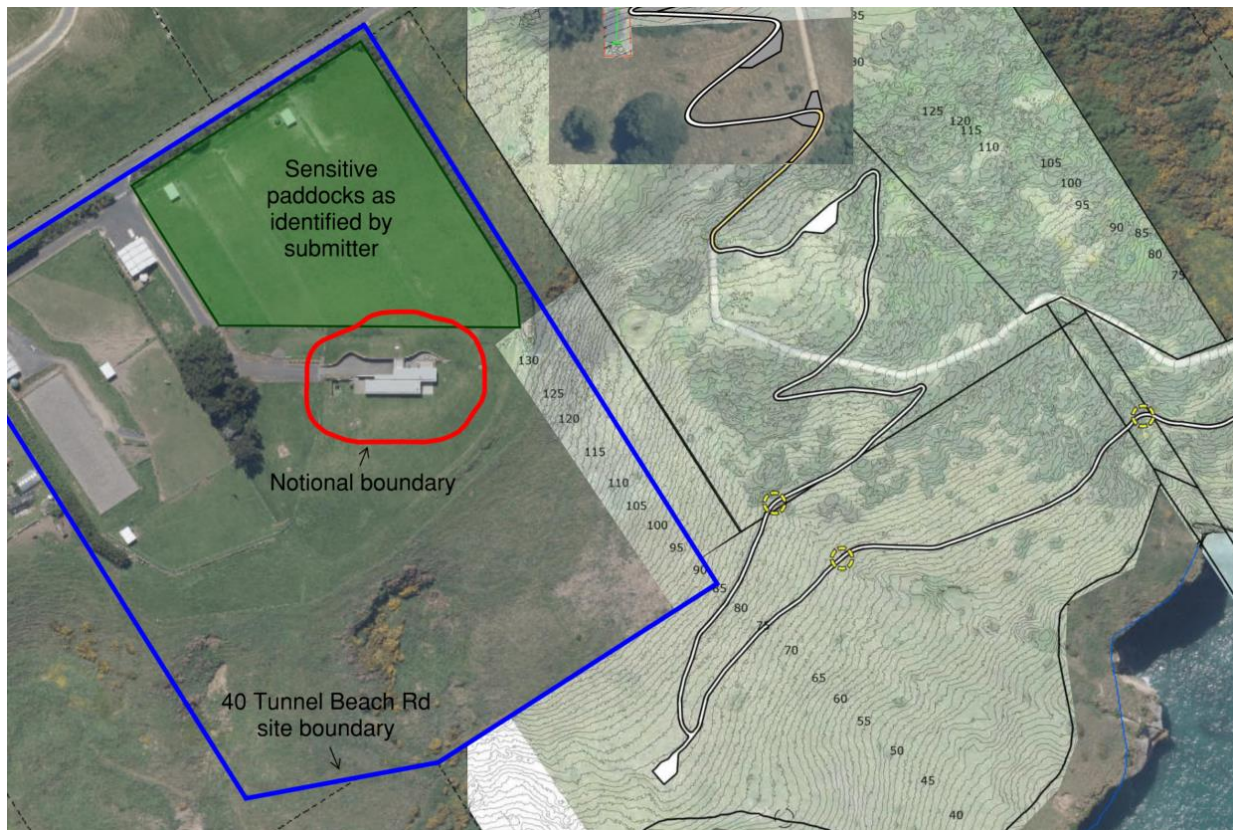
I have assessed noise to other sensitive areas of the site identified by the submitter

Anya Durling has raised concerns about the effect of noise on their horses and identified paddocks used for breeding and training racehorses. While compliance with the 2GP noise limits is not required at these locations, I have included these horse paddocks in my assessment to address the potential effects on horses.

In my evidence I referred to the walking track not coming closer to “the paddock or the notional boundary of 40 Tunnel Beach Road”. I acknowledge that the distinction between the horse paddocks and other parts of the site that are not sensitive to noise was not clear.

For clarity, Figure 1 shows the site boundary and the sensitive areas used in my assessment. This shows that the track does come closer the site boundary, but not the areas of the site that have been considered sensitive in my assessment.

Figure 1: Indicative assessment areas and site boundary



Noise at the closest part of the site would still comply with daytime noise limits

To provide some assurance that noise levels will still be reasonable, I have predicted the noise level at the closest point of the site boundary (even though this is not a sensitive area and compliance with 2GP limits is not required here).

I predict that noise from people on the track would still be below the daytime noise limit (55 dB L_{Aeq}) at the closest part of the site (approximately 10m from the track). Viewpoint (VP2) is located around 50m from the site boundary. I predict that noise from people at VP2 would be 35-40 dB L_{Aeq} .

Based on the lack of sensitivity in these areas, I consider that this level of noise is reasonable and that there would be no adverse noise effects to this part of the site.

I do not consider that requiring a 1.8m barrier is a suitable consent condition

The submitter has suggested a consent condition that requires a 1.8m high timber fence around the viewing platforms to mitigate adverse noise effects. The Commissioner has asked that I provide advice on the suitability of this condition.

I do not believe that a noise barrier is suitable or necessary for two reasons:

- 1) To provide a significant reduction in noise, the barrier would need to block line of sight between the people on the platform and the receiver. Based on the topography, I do not believe that a 1.8m high barrier would block line of sight to the full area of the platform. Further analysis of the cross sections would be required to determine how high the barrier would need to be to block line of sight.
- 2) As stated in my evidence and in the hearing, I have used a group of people in an outdoor dining area as a conservative (high) estimate of the potential noise from groups walking on the track. Even with this assumption, the predicted noise level from people on the track received at the notional boundary and horse paddocks (as shown on in Figure 1) is less than 30 dB L_{Aeq} . This is more than 25

decibels below the daytime noise limit. I consider that any noise effects from people on the track would be negligible, regardless of the existing noise level. Therefore, it is not appropriate to require a timber fence because of noise mitigation.

Based on this, I do not consider that a 1.8m high barrier represents the best practicable option to reduce noise effects.

Yours faithfully

MARSHALL DAY ACOUSTICS LTD



Brendon Shanks
Associate