Ref: 24027
19 November, 2024

Warren Lewis
Godley Peak Station Limited

RE: Access Road and Ecological Assessment

1 Introduction

Godley Peak Station Limited propose to construct a farmhouse and upgrade an access road to the proposed dwelling. e3Scientific (e3s) have been engaged to complete an ecological assessment of the road alignment and farmhouse area. An e3s ecologist visited the site on the 27th of September, 2024 and assessed the ecological values associated with the proposed development areas, the findings of which are provided below.

2 Methodology

2.1 Desktop Research and Site Visit

The desktop and site visits included:

- Review of existing ecological information to determine terrestrial ecological habitats and species likely present on the site.
- Establish the representativeness of the ecological habitats present, and the significance of those habitats, through site visits and a review of the expected pre-disturbance vegetation and Land Environments of New Zealand (LENZ) classification (Leathwick, *et al.,* 2003).
- Establish the presence and significance of plant species through site visits and the Department of Conservation's threat classification for New Zealand indigenous vascular plants (de Lange, *et al.,* 2018).

- Establish the likely presence and significance of native avifauna species through site visits, existing scientific knowledge and the Department of Conservation's threat classification for New Zealand birds (Robertson, *et al.*, 2021).
- Detailed site walkover of all development areas and vegetation communities, performing vegetation cover quadrats within the proposed dwelling location.

The alignment of the survey is shown in the Figure 1 and follows the access road. Figure 1 also shows the location of quadrats completed to describe the vegetation at four locations, two on the alignment and two within the area of the proposed house site.

3 Findings

Figure 1 shows the location of the access road (existing and new) and proposed residential house site. The follow sections describe the ecological values recorded along the alignment of the access road and proposed house site.

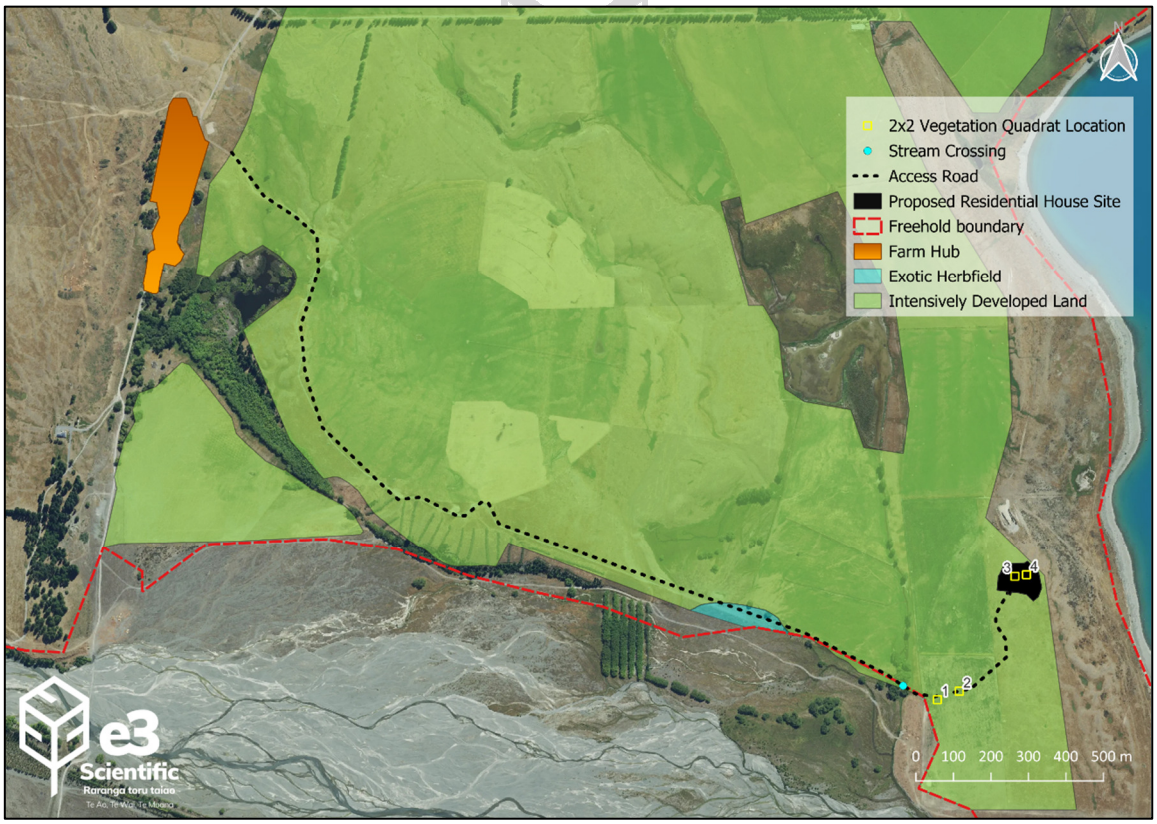


Figure 1: Vegetation and development overview.

3.1 Vegetation

3.1.1 Existing Access Road

Vegetation within the proposed dwelling location was of very homogenous cover containing a range of exotic herbs and grasses. Two distinct variations of the exotic vegetation were observed as a result of variable substrates (see Figure 1 for mapping of the two exotic communities).

Plate 1: Vegetation present within existing road alignment.

Intensively developed land (grazed)

The vegetation consisted of browntop (*Agrostis capillaris*), yarrow (*Achillea millefolium*), sheep's sorrel (*Rumex acetosella*), mouse ear chickweed (*Cerastium fontanum*), mallow (*Malva* sp.), cocksfoot (*Dactylis glomerata*), sweet vernal (*Anthoxanthum odoratum*), white clover (*Trifolium repens*) and scotch thistle (*Circium vulgare*). No indigenous species were observed within or directly adjacent the existing access road.

Exotic herbfield (old river gravels)

The vegetation consisted of sheep's sorrel, mouse ear chickweed, mallow, sweet vernal, red-stemmed storks bill (*Erodium cicutarium*), woolly mullien (*Verbascum thapsus*), hare's foot trefoil (*Trifolium arvense*), parsley piert (*Aphanes arvensis*), viper's bugloss (*Echium vulgare*),and shepard's purse (*Capsella bursa-pastoris*).

No indigenous species were observed within or directly adjacent the existing access road.

3.1.2 Proposed new access road

Vegetation within the proposed new access road was of very homogenous cover containing a range of exotic herbs, grasses and sedges. Two 2x2 m vegetation quadrats were completed to characterise the vegetation at points 1 and 2 (See Figure 1) within the last 700 m of where the proposed access trail will adjoin the existing access road and the proposed dwelling location (see **Error! Reference source not found.**). Vegetation present includes scotch thistle, sweet vernal, red-stemmed stork's bill, white clover, cocksfoot, yarrow, mouse-ear chickweed, oval sedge (*Carex leporina*), wall speedwell (*Veronica arvensis*), and red fescue (*Festuca rubra*).

No indigenous species were observed within or directly adjacent the existing access road.

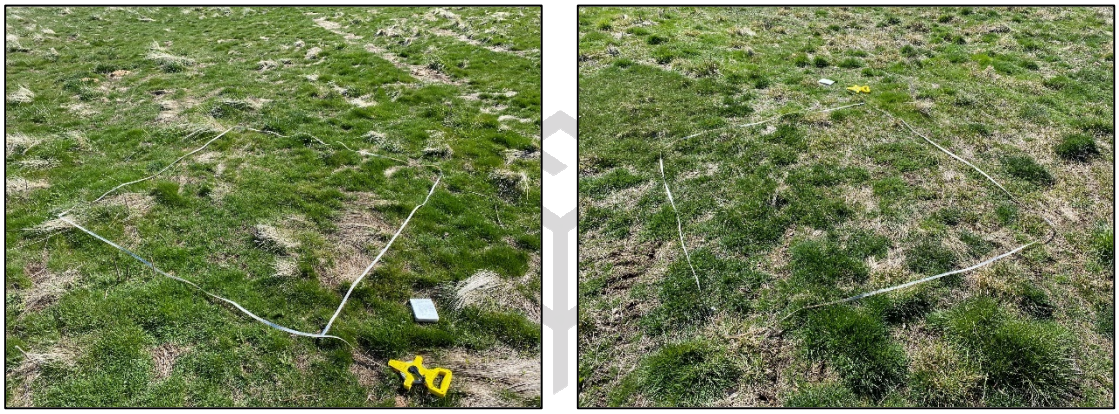


Plate 2: Vegetation present within the proposed road alignment.

3.1.3 House site

Vegetation within the proposed house site was extremely limited and has historically been intensively cultivated and grazed resulting in a highly uniform cover of sown grasses. Two 2x2 m vegetation quadrats were completed to characterise the vegetation at points 3 and 4. The plots were were sparsely vegetated with the dominant species being barley grass (*Hordeum vulgare*) and perennial ryegrass (*Lolium perenne*) both of which were heavily browsed. Very isolated occurrences of red-stemmed stork's bill, nettle (*Urtica urens*), and hawksbeard (Crepis capillaris) were also present.

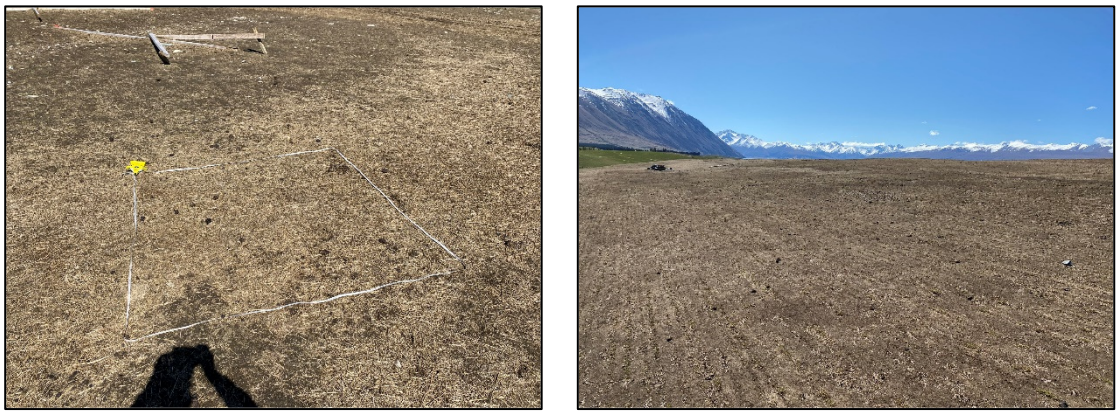


Plate 3: Vegetation present within the proposed house site location.

3.2 Fauna

The habitat present is not suitable for indigenous herpetofauna species as it provides no cover for lizard species and therefore no suitable habitat. Similarly, no suitable habitat is present for indigenous avifauna species given the disturbance regime of farm operations and only occasional foraging habitat is present. Of the species observed or likely to utilise the land for foraging purposes all are classified as Not Threatened with the exception of the At Risk – Declining South Island pied oystercatcher/tōrea (*Haematopus finschi*). Given the presence of only one At Risk or higher fauna species and no observed indigenous vegetation within the proposed disturbance areas they do not meet the criteria for a Significant Natural Area (SNA's) under the National Policy Statement for Indigenous Biodiversity (NPS-IB) under exclusion clause 3 of Appendix 1 and do not require resource consent for disturbance relating to biodiversity values.

3.3 Stream Crossing

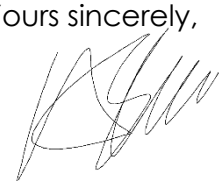
It was noted that the existing access road will require culverting at co-ordinates E:1398800, N:5139083 (see Figure 1). The stream has been historically channelised and straightened with willows planted along its edges. No wetland characteristics were present within or directly adjacent the crossing area with brown top and white clover being the dominant vegetation on the banks with very limited jointed rush (*Juncus articulatus*) also present and isolated water manna grass (*Glyceria fluitans*) within the water column.

4 Summary and Conclusions

No indigenous vegetation was observed within the proposed disturbance areas and of the indigenous fauna species observed only one is classified as At Risk and is therefore exempt from SNA classification.

If you have any questions regarding the information provided in this letter, please contact Liam Salemink-Waldren on 03 409 8664 or via email at liam.salemink@e3scientific.co.nz

Yours sincerely,



Liam Salemink-Waldren
Terrestrial Ecologist

Attachments

Attachment A: Scheme Plan

References

New Zealand Government. (2023). National Policy Statement for Indigenous Biodiversity.

Robertson, H.A.; Baird, K.A.; Elliott, G.P.; Hitchmough, R.A.; McArthur, N.J.; Makan, T.D.; Miskelly, C.M.; O'Donnell, C.F.J.; Sagar, P.M.; Scofield, R.P.; Taylor, G.A.; Michel, P. 2021. *Conservation status of birds in Aotearoa New Zealand, 2021. New Zealand Threat Classification Series 36.* Department of Conservation, Wellington. 43 p.

Attachment A: Scheme Plan