

TO: AW Holdings 2021 Ltd

Date: 17 January 2025

Document No: 10034-004-1

FROM: Annabelle Coates, Senior Ecologist

SURF PARK STAGE 2 - FAST TRACK APPLICATION – PRELIMINARY ECOLOGY ASSESSMENT

Introduction

AW Holdings 2021 Limited ("the applicant") are in the process of developing a surf park and associated facilities on a site in Dairy Flat, Auckland. The applicant obtained consent for Stage 1 of the development, including bulk earthworks, removal of vegetation and realignment of a stream through the COVID-19 Recovery (Fast-track Consenting) Act 2020 (FTCA) in 2024. The applicant is now lodging a referral application for proposed Stage 2 of the development under the Fast-track Approvals Act (FTAA) 2024. This memorandum provides a high-level ecological assessment of the proposal, including an evaluation of regional significance of the project's potential contributions to ecology.

Methodology

A conservative, high-level desktop assessment informed an assessment of the Stage 2 site's existing ecological values. Various site visits have been undertaken to the Stage 1 area in 2022, 2023 and 2024 and ecological features mapped for the Stage 1 application. It is considered the Stage 2 areas are broadly the same. Terrestrial features were assessed based on their botanic and habitat values, the latter of which was qualitatively assessed, considering indigenous lizards, birds and bats. Streams were identified based on modelled overland flow path catchment sizes as provided in the Auckland Council's Geomaps. Any overland flow path with a catchment size of 1ha or greater has been considered a *potential* natural stream. Indicative wetland areas for Stage 2 were identified based on wetland delineation protocols (MfE 2021; MfE 2022; Clarkson 2013; Fraser et al. 2018) and classified as per the National Policy Statement for Freshwater Management 2020 (NPS-FM) definition of a 'natural inland wetland'.

The key ecological features identified by the assessment are presented in Attachment A. It is noted that these features are indicative. These features can be ground-truthed and further defined at the substantive application stage.

Existing Environment

The site is located within the Rodney Ecological District of the Auckland region. Historically (pre-human), the area would have likely been comprised of the pūriri forest (WF7-3) and would have supported a diverse range of invertebrates, amphibians, reptiles, birds and bats (Singers et al., 2017). However, historical aerials available for the area (dating back as far as 1940) indicate that the site and much of the surrounding landscape has been progressively cleared over the years to make way for agricultural and horticultural land use (Attachment B).

Currently, the site consists of predominantly of pasture with areas of exotic amenity vegetation and large mature shelterbelts. Within the site boundaries, recognised ecosystem types are limited to open water bodies (OW), which are listed under Auckland Council's Geomaps as farm ponds. The farm pond at 105 Lascelles Drive is no longer present, and appears to have been filled in during 2018. No areas

meeting the Auckland Unitary Plan – Operative in Part (AUP-OP) definition of a significant ecological area (SEA) were present on site.

Terrestrial ecology

The site consists predominantly of pasture grasses. Outside of the pasture grasses there is some limited garden amenity planting around the existing dwellings, and several mature exotic shelter belts. The wider environment surrounding the site is largely devoid of any significant terrestrial vegetation. The botanical value of the vegetation within the site was assessed as low, being predominately pasture with exotic trees. This vegetation provides very low-quality fauna habitat for lizards on account of dominance of short grazed/mown grass which does not provide habitat for native skinks, and the lack of suitable arboreal habitat for native geckos. Due to the poor quality of the vegetation and the lack of connectivity to any remnant native vegetation, it is highly unlikely that any native lizards are present.

The mature exotic trees provide nesting and roosting habitat for birds. Only common native and exotic species are expected to be present on account of the highly modified exotic dominated environment. The only native avifauna identified during the site visits to the Stage 1 area were pūkeko (*Porphyrio melanotus*). These are also expected to be present in the Stage 2 area. The site is considered to provide low value habitat for birds.

Long tailed bats are known to be in the wider area (closest records approximately 8 km to the west). Mature exotic trees within the site have the potential to provide roosting habitat and foraging corridors, however the high level of anthropogenic disturbance (e.g. light, vehicle movements, noise) means the site is not ideal habitat. Bat habitat is considered to be marginal and low value.

Freshwater ecology

Auckland Council Geomaps suggest a number of small overland flow paths to be present within the site. With the exception of the permanent stream, all flowpaths have catchments of less than two hectares and show no evidence of any permanent or intermittent channels. They are therefore considered to be ephemeral. A permanent stream is present long the western boundary of 105 Lascelles Drive. It discharges to the permanent stream within the Stage 1 area at the south western corner of the property at 105 Lascelles Drive and is a tributary of the Rangitopuni Stream. It is considered to be permanent for much of its length however the upper reaches are expected to be intermittent or ephemeral. Full classification will occur during the formal ecological impact assessment stage. The stream has been highly modified over time through deepening and straightening. It is expected flow will be slow, with the substrate dominated by soft sediment. Natural pools, riffles and undercut banks are expected to be largely absent, as was the case for the stream in the Stage 1 area. As a result, instream habitat is expected to be limited, providing minimal aquatic habitat diversity and hydrologic heterogeneity.

Riparian vegetation appears to be limited to pasture species, however the mature exotic trees that are on the western boundary of the property do provide some level of shade and organic matter input.

Review of the New Zealand Freshwater Fish Database for the Rangitopuni Stream show the At Risk – Declining species longfin eel (*Anguilla dieffenbachii*) and īnanga (*Galaxias maculatus*) have been recorded in the wider area. It is possible both species are present within the stream, however the low value habitat means it is more likely only common species such as shortfin eels (*Anguilla australis*) and common bully (*Gobiomorphus cottidianus*) are present and therefore the ecological value of the stream is considered to be low.

A single pond was present in the property at 1320 Dairy Flat Highway. It is located on the eastern boundary of the property. It is entirely disconnected from any other surface waterways. Review of aerial images shows it was constructed after 1970 in an area where no historic surface features such as stream or drains were present. It is therefore considered to be a constructed pond. Riparian vegetation appears to be limited to pasture, however mature exotic vegetation on the properties eastern boundary will provide some level of shade and organic matter input. The lack of connection to surface water, and the lack of surface water in the vicinity of the pond means it is highly unlikely any fish are present in the pond. The value of the pond is considered to be low.

Review of aerial images does not suggest the presence of wetlands or natural streams within the site. There are no areas of standing water or saturated soil present in any current or historical aerial images and no areas of sedges or rushes or other vegetation suggestive of wetlands. On the neighbouring Stage 1 site facultative upland and upland plant species such as perennial ryegrass, kikuyu grass, dallis grass/paspalum and clover were dominant (>90%) and it is considered the Stage 2 site is the same. No natural inland wetlands as per the definition within the NPS-FM are present, however site visits and wetland delineation will occur as necessary during preparation of the formal ecological impact assessment document. It should also be noted that the site is currently, and historically, used and managed as pasture.

Assessment of Effects

Proposal

The applicant intends to develop various typologies of residential houses and associated infrastructure on the Stage 2 area including an area of solar farm on the property at 1340 Dairy Flat Highway. Minor amendments to the Stage 1 design will also be undertaken. It is intended to clear existing vegetation from within the Stage 2 area to facilitate development. No works are proposed within the stream on the boundary of 105 Lascelles Drive. No wetlands are present on the site.

Direct effects of the proposal will be limited to vegetation removal. Botanical values with the site were considered negligible, and the vegetation does not provide any significant value as habitat to indigenous fauna. The loss of vegetation is expected to have a very low-level effect on ecological values.

Indirect effects on fauna, such as birds and bats, can be adequately managed through pre vegetation clearance management such as surveys for nesting birds, clearing vegetation outside of the bird breeding season, and following standard bat roost tree felling protocols. Indirect effects on waterways, such as sedimentation and stormwater contaminants, proposed to be adequately mitigated through appropriate controls and following best practice guidelines, to ensure adverse effects on ecological values are no low. Extensive planting will occur along the stream boundary, as well as along the stream that is within Stage 1.

A more comprehensive ecological assessment will be provided to support the development application at the expert consenting panel stage, which will further assess the potential indirect adverse effects and detail any proposed ecological enhancement actions.

Effects on terrestrial values

Terrestrial ecological values on site are limited to areas of exotic shelterbelts and amenity limited low-quality fauna habitat. The removal of this vegetation for development is considered appropriate for the project and is not considered to result in a significant loss of ecological function or terrestrial habitat.

Rather, the proposal offers the opportunity to for extensive native planting within the margins of freshwater environments, which will allow for an increase in habitat quality, native vegetation diversity, ecological connectivity and buffering function of terrestrial vegetation on site. Any riparian buffer planting will greatly increase terrestrial ecological connectivity, diversity and habitat values. In light of Auckland's history of biodiversity loss and ecosystem fragmentation, this proposal presents a significant opportunity for biodiversity gain within the area. The area around the solar farm will be vegetated with appropriate species and is expected to be largely similar to what is currently present.

Any potential direct effects on indigenous fauna can be appropriately managed through fauna management plans.

Effects on freshwater values

The site's existing freshwater values are limited to a small stream on the western boundary of 105 Lascelles Drive. It flows into the stream within the Stage 1 area, which also forms the southern boundary of 105 Lascelles Drive. No direct works are proposed within any waterways. Indirect effects associated with earthworks in the catchment, such as an increased risk of sedimentation and discharge of other stormwater contaminants, can be adequately managed through appropriate design and erosion and sediment control. Where adverse effects cannot be avoided, these will be managed appropriately through the mitigation hierarchy.

Through proposed riparian margin planting, the proposal is expected to promote an improvement in water quality (i.e., via increased filtration function of riparian vegetation), shading, bank stability and in-stream fauna habitat, while providing buffer and connectivity function.

Relevant legislation

The proposal is considered to align with the policies and objective of key pieces of environmental legislation, such as the NPS-FM and the National Policy Statement for Indigenous Biodiversity (NPS-IB).

The main objective of the NPS-FM is to ensure the health and well-being of water bodies and freshwater ecosystems are prioritised. Potential significant adverse effects of development will be able to be appropriately avoided, minimised, remedied, offset or compensated under the effects management hierarchy. Furthermore, the proposal will result in the establishment of planted riparian margins, which will improve the overall quality of freshwater environments on site and within the downstream receiving environment.

The main objective of the NPS-IB is to ensure, at a minimum, that no overall loss in New Zealand's biodiversity occurs by protecting and restoring indigenous biodiversity values. The proposal is considered to be consistent with the objectives of the NPS-IB, as no overall loss in indigenous terrestrial biodiversity is anticipated as a result of the development of the site. Rather, the proposal provides the opportunity to improve the site's terrestrial biodiversity through planting and enhancement activities, which will improve the overall diversity, native species habitat and quality of the site's terrestrial features.

Conclusion

The potential impacts of the proposed Stage 2 of the Surf Park development in Dairy Flat have been assessed from a high-level in relation to the ecological values currently associated with the site. These include areas of low-value exotic vegetation, and a low-value stream. The proposed avoidance of works within the stream, along with mitigation measures for indirect effects (e.g., suitable stormwater and

wastewater management), will prevent a loss in the site's biodiversity value. It is recognised that the ecological features are indicative at this stage and that the extent and quality of these features will be further defined at future application stages. Notwithstanding the above, it has been acknowledged that the proposal presents ample opportunity for significant enhancement and protection of the existing key ecological features. Given the proposed ecological enhancement activities, it is considered that the development's contribution to environmental value would be positive.

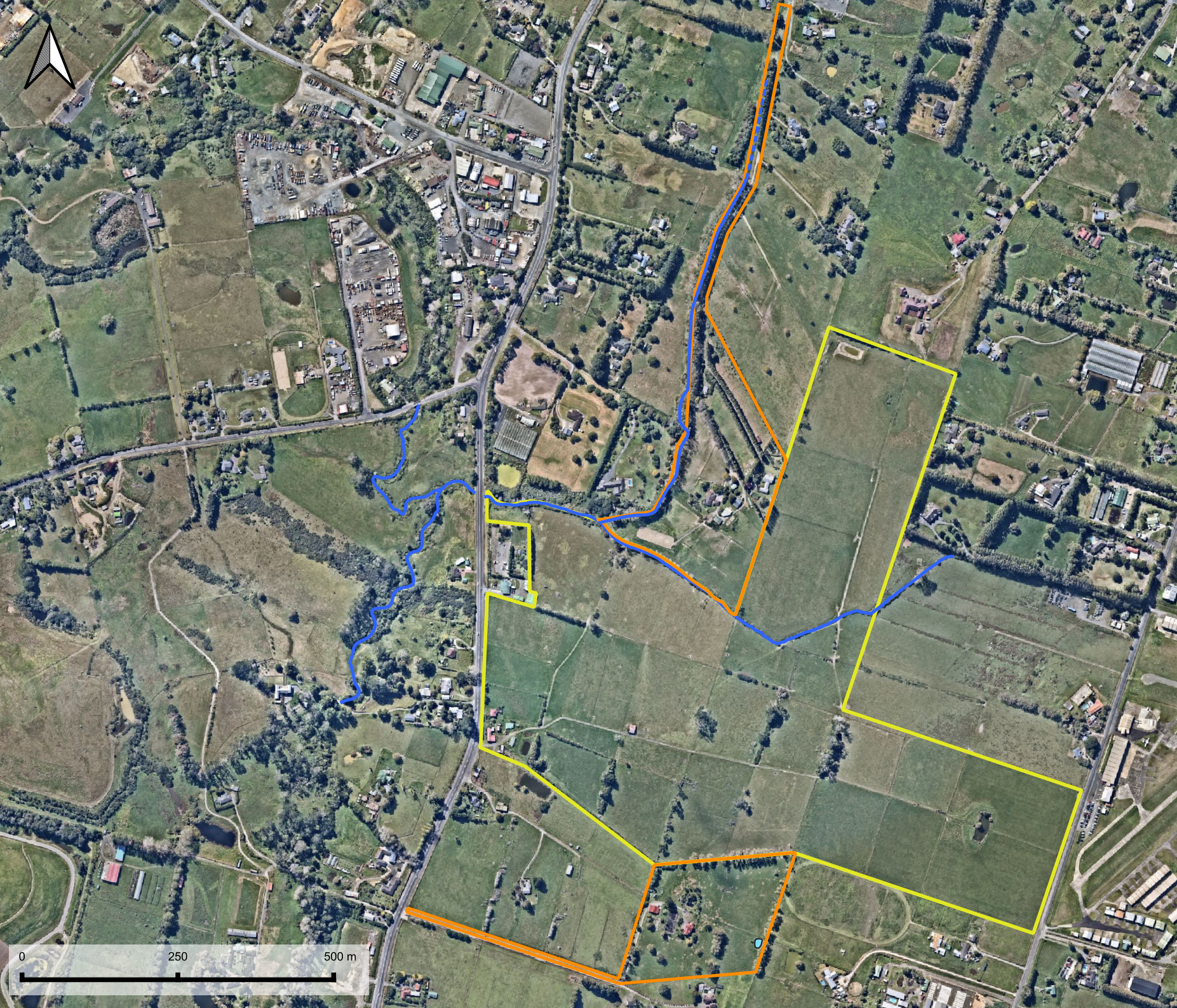
Attachments

Attachment A – Map of key ecological features

Attachment B – Historic aerials

© Viridis Limited 2025

This document has been prepared by Viridis Limited for AW Holdings Ltd. The document may only be used for the purpose for which it was commissioned and in accordance with the Terms of Engagement for the commission. Unauthorised use of this document in any form whatsoever is prohibited.



Stage 2 ecological
features

- Stage 2 boundaries
- Stage 1 boundaries
- Permanent stream
- Intermittent/
Ephemeral stream
- Constructed pond

SOURCES
Nearmap.com 2024

DISCLAIMER: This map/
plan is not an engineering
draft. This map/plan is
illustrative only and all
information should be

SCALE **1:7,700** @ A4

PROJECT NO. 10034
DRAWN BY: AJC
DATE: 16/12/2024

