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Horsham Downs Estate Ltd
Attn: Sam Pemberton

**Horsham Downs Estate Fast Track Referral Application – Ecology**

## Introduction and Project Description

Horsham Downs Estate Ltd (the applicant) is proposing to develop 319 Gordonton Road (hereafter the 'Site') in Rototuna, Waikato (Figure 1), through the Fast Track Approvals Act 2024 (FTAA). The Site is zoned 'rural' in the Waikato District Plan (2024).

At a high level, the Project seeks to enable the following activities:

- Residential development and subdivision to provide for approximately 850-950 lots, delivering a mix of housing typologies to support a range of household types, life stages, and affordability outcomes. It is intended that most dwellings/lots will contain stand alone, duplex or terrace dwellings, but at this stage the scope of the proposal is intended to cover all forms of residential activity irrespective of how it might be defined in the district plan.
- A neighbourhood centre located and designed to provide everyday services and employment opportunities, likely including retail activities, commercial, food and beverage premises, community facilities, and other complementary uses that reduce travel demand and support local living.
- An open space and green-blue network, incorporating low-lying areas, a neighbourhood park, landscape buffers that enhance amenity and ecological outcomes.

The masterplan for the Project is provided separately in associated submission documentation.

## Approach to Effects Management

Ecological Solutions Limited (ESL) was engaged to undertake an initial high-level terrestrial and aquatic ecological assessment of the Site including the identification of any potential ecological effects. If the Project is referred, suitably qualified and experienced ecologists will prepare an ecological impact assessment (EcIA) report for the substantive application that:

- Describes the Site's current ecological values.
- Assesses the actual or potential effects of the project and sets out methods to avoid, remedy, mitigate, offset or compensate those effects on the values identified.
- Has regard to the relevant policy frameworks in light of the ecological effects anticipated, with particular attention to the National Policy Statement for Indigenous Biodiversity (NPSIB) and the National Policy Statement for Freshwater Management 2020 along with regional and district planning documents.
- Takes into account any relevant conditions of consent.

Specific detailed ecological management plans required to address any adverse effects on ecological values will also be prepared, including applications for any required statutory authorisations (e.g., Wildlife Act Authorisation). Once the necessary resource consents are obtained, appropriately qualified and experienced ecologists will assist with implementing any ecological management plans as required.

## Background Analysis and Receiving Environment

### Surveys and Analysis

A high-level assessment of the ecological features within the Site was undertaken during a field survey on 13 January 2026 after reviewing ecological databases including New Zealand Freshwater Fish database (NZFFD), Department of Conservation (DOC) Bioweb, National Bat Database and eBird, Waikato Regional Council (WRC) spatial database and historical aerial images. Significant natural areas (SNAs) were identified from the Waikato District Plan (2024).

Terrestrial ecological features, including vegetation and habitat for indigenous fauna and wetlands were indicatively mapped. Fauna observed on-site during the survey was also noted.

Watercourses were classified in accordance with the definitions in the Waikato Regional Plan based on desktop analysis (LiDAR, contours, Digital Elevation Models (DEM) data) and physical survey of all watercourses within the Site. Environmental DNA (eDNA) samples were collected from two locations within watercourses on the boundary of the Site to investigate aquatic biodiversity, particularly the potential presence of black mudfish (*Neochanna diversus*).

Comprehensive field studies, especially with regard to detailed watercourse and water quality surveys, vegetation assessments, wetland delineation and mapping, and specific fauna surveys will be undertaken to inform the substantive application should the application be accepted as a referred project.

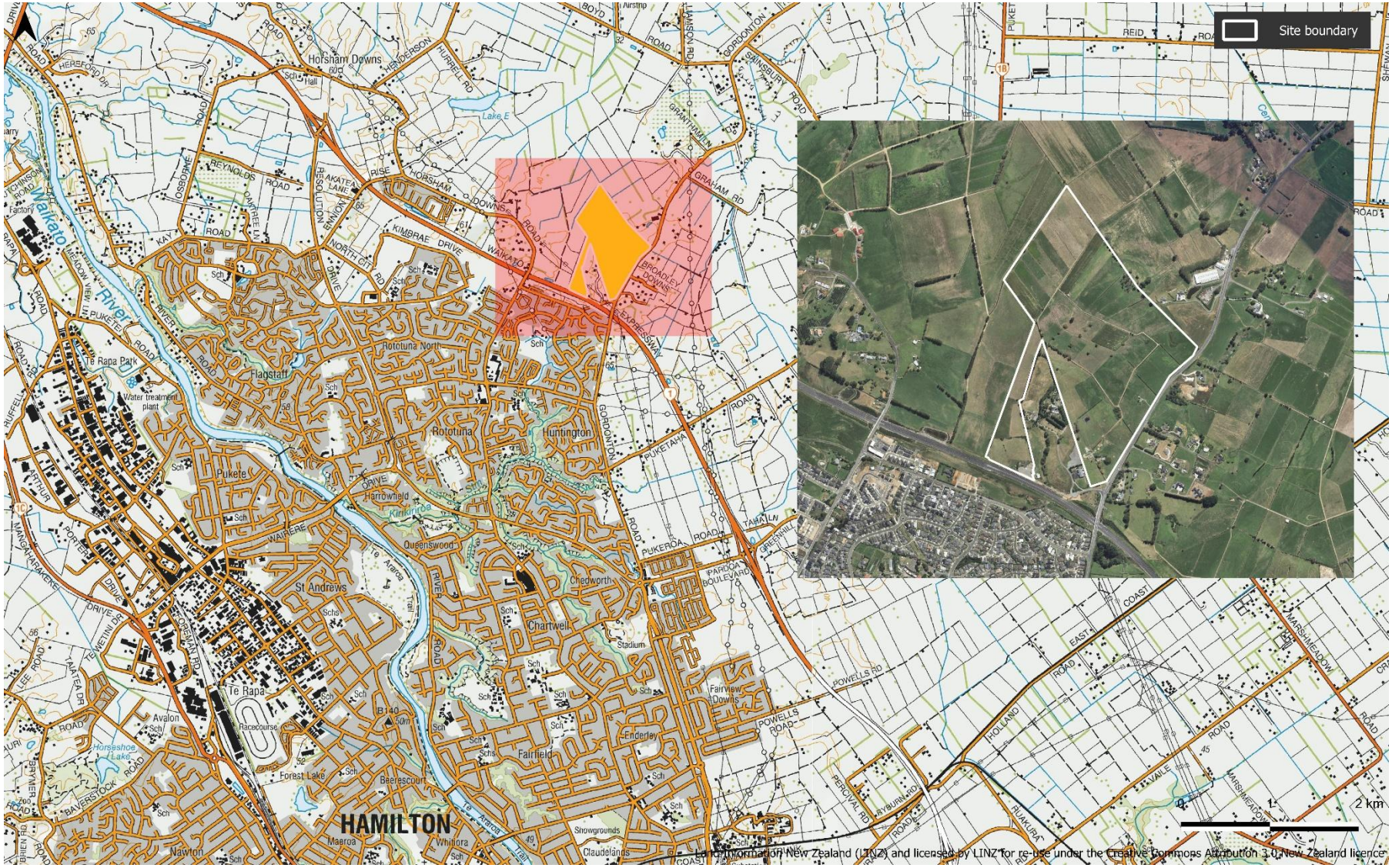



**Figure 1: Location of the Site.**

## Terrestrial Ecological Features

The Site was farmed at the time of the survey and was mostly exotic pasture, shelterbelts/hedgerows and paddock trees typical of the rural Waikato landscape (Figure 2). A small area of vegetation around a pond/putative wetland area predominantly comprised exotic species. No plant species of botanical or conservation interest were observed during the survey. There are no Significant Natural Areas (SNAs), Significant Amenity Landscapes or Notable Trees identified by the district or regional plan within or immediately surrounding the Site.

Birds observed at the time of the survey were predominantly common, exotic species. The native bird assemblage included common species such as pūkeko (*Porphyrio melanotus*), swamp harrier (*Circus approximans*), spur-winged plover (*Vanellus miles*), paradise shelduck (*Tadorna variegata*) and welcome swallow (*Hirundo neoxena*). None of the species observed during the survey is classified as of conservation concern.

Other native birds recorded in the eBird database in the local area which could potentially utilise habitat within the Site for breeding, and are of conservation concern, include pipit (*Anthus* novaeseelandiae, 'At Risk – Naturally Uncommon') and South Island oystercatcher (*Haematopus finschi*, 'At Risk – Declining') (Robertson et al. 2021). Kākā (*Nestor meridionalis*, 'At Risk - Recovering') have been observed in shelterbelts within 1 km of the Site. However, a lack of mature indigenous vegetation within the Site means it is unlikely that kākā would use the Site for anything more than a transient visitation while moving between areas of higher quality habitat.

Habitat for lizards within the Site was scarce or poor quality. Native lizards recorded within c. 12 km of the Site (DOC Bioweb) include goldstripe gecko (*Woodworthia chrysosiretica*, 'At Risk – Declining'), pacific gecko (*Dactylocnemis pacificus*, 'Not Threatened'), and copper skink (*Oligosoma aeneum*, 'At Risk – Declining'), (Hitchmough et al., 2021). If present, copper skinks are likely to occur at low density and be restricted to small areas of suitable habitat associated with shelterbelts/hedgerows and overgrown grass along fence lines and watercourses. Grazed or mown pasture would not be considered suitable habitat for copper skinks. Vegetation within the Site was not considered suitable habitat for geckos.

Native long-tailed bats/pekapeka (*Chalinolobus tuberculatus*) are considered 'Threatened – Nationally Critical' (O'Donnell et al. 2023). There are numerous records of long-tailed bats within 25 km of the Site and the nearest record is less than 250 m to the south of the Site (DOC National Bat Database). Mature trees, shelterbelts, hedgerows, open paddocks and watercourses within the Site could provide foraging, commuting and roosting habitat for bats. Detailed surveys will need to be undertaken to confirm the presence of bats.




**Figure 2: Terrestrial and freshwater ecology features of the Site.**

### Wetland Ecological Features

The Site contains four small, isolated areas of putative wetland within paddocks that could meet the Resource Management Act 1991 (RMA) and NPS-FM (2020) definitions of wetland and natural inland wetland, respectively (Figure 2). These areas covered c. 0.4 ha in total. All putative wetland areas were highly modified and degraded through historic vegetation removal, drainage and mostly (Areas 1, 2 and 3) unrestricted livestock access, indicating low ecological values with a material limit on their future potential ecological value given their size and lack of interconnectivity.

### Freshwater Ecological Features

All watercourses within the Site were classified as 'artificial watercourses' in accordance with definitions in the Waikato Regional Plan (Figure 2). A review of historical aerial imagery (Retrolens), DEM and LiDAR data show they have no natural portions from their confluence with a river or stream to their headwaters.

Watercourses within the Site drain to the north-east and ultimately flow into a tributary of the Komakorau Stream which discharges to the Waikato River. There were no fish records in the NZFFD for the drainage system that flows through the Site. However, there were numerous records for the wider Komakorau Stream catchment including for species that are considered 'At Risk – Declining' (i.e., longfin eel (*Anguilla dieffenbachii*), black mudfish, common smelt (*Retropinna retropinna*), giant kōkopu (*Galaxias argenteus*), 'At Risk – Naturally Uncommon' (i.e., torrentfish (*Cheimarrichthys fosteri),* banded kōkopu (*Galaxias fasciatus*), Cran's bully (*Gobiomorphus basalis*)) or 'Threatened – Nationally Vulnerable' (i.e., īnanga (*Galaxias maculatus*)) by Dunn et al. (2025). The nearest records are of shortfin eel (*Anguilla australis* 'Not Threatened') and giant kokopu from watercourses within 5 km of the Site. Environmental DNA sampling indicated the presence of shortfin eel in the watercourse on the north-western boundary of the Site, but no 'At-Risk' fish species. More detailed surveys will be undertaken at the substantive application stage.

## Actual and Anticipated Ecological Effects

The Project will involve works that have the potential for adverse effects on ecological values within the Site. Based on the proposed masterplan, the potential adverse effects if not managed appropriately include**:**

- Removal of poor quality, predominantly exotic vegetation (e.g., pasture, shelterbelts, mature exotic trees) and habitat has potential to result in a loss of habitat for terrestrial fauna (e.g., copper skink, long-tailed bats, native birds).
- Unavoidable loss and/or effects on isolated, low-quality wetland areas.
- Changes in groundwater and overland flow paths that could affect wetland and watercourse hydrology.
- Removal and/or modification of artificial watercourses (including for stormwater conveyance) that may provide habitat for native fish.
- Potential short-term adverse effects on water quality due to sediment mobilisation and/or contaminant discharges and/or dust during earthworks.
- Potential stormwater discharges that affect downstream hydrology and water quality.
- Potential wastewater discharges that affect downstream water quality.

## Approach to Addressing Effects

The general approach to addressing effects is outlined below:

- Follow the effects management hierarchy in addressing any adverse effects attributable to the proposed works (i.e., first avoid, then remedy, then mitigate, then offset).
- The removal of exotic vegetation and/or habitat, which may result in adverse effects on native terrestrial fauna (e.g., birds, bats, lizards), can be managed to avoid or minimise effects by using a conventional management plan approach.
    - Management of fauna (specifically lizards) is subject to the provisions of the Wildlife Act 1953, and would require a Wildlife Act Authority (WAA) (if identified within the Project Area) in order to handle, capture and relocate salvaged lizards, and any incidental killing of lizards that are not collected. Effects on lizards will be addressed via a dedicated Lizard Management Plan.
    - The approach to managing effects on bats would involve following the Department of Conservation protocols for tree felling. Effective implementation of these protocols by specialist bat ecologists with level 3.1 – 3.3 competency. One should not be in a position where bats require handling, thus a WAA would not be required.
    - If bat presence and/or bat roosts are identified during detailed surveys, appropriate avoidance and/or mitigation and/or offsetting will be set out in a Bat Management Plan.
    - The direct effects of vegetation removal on birds would be managed by avoidance (e.g., avoidance of felling during nesting season or if outside this period, avoiding felling any tree with a nest until chicks have fledged). On that basis, a WAA for managing birds would not be required.
- Any loss of isolated, low quality natural inland wetland habitat will be addressed by avoidance where possible. However, where loss cannot be avoided, the effects hierarchy would be implemented. Any creation/restoration of wetlands would follow best practice (e.g., planting ecologically appropriate indigenous plant species, pest plant and animal control, formal legal protection), with opportunities to provide alternative habitat for displaced wetland fauna on-site to be carefully investigated.
- Fish capture and transfer will be used to manage the direct impacts on fish in artificial watercourses (if removed) or during the construction of culverts on retained watercourses causing potential mortality on native fish. These effects will be addressed via a dedicated Fish Management Plan. A comprehensive Freshwater Fisheries Assessment (Fisheries Act 1983) is not required for this site because watercourses are artificial.
- Any culverts required will be designed and constructed in accordance with the New Zealand Fish Passage Guidelines (Franklin et al. 2024) to provide fish passage and ensure the Fisheries Act (1983) fish passage requirements are met. Any reduction in habitat and ecological values due to the construction of culverts will be addressed via restoration of remaining watercourses.
- The magnitude of adverse effects on water quality and aquatic habitat during earthworks will be reduced via best practice approaches to the timing of works, careful construction methodologies and erosion and sediment control measures that will be implemented in accordance with existing WRC guidelines.
- Potential stormwater discharge effects will be managed by designing stormwater treatment wetlands in accordance with WRC guidelines. Stormwater treatment

wetlands would be designed with indigenous vegetated riparian margins to maximise their ecological value as habitat for native species.

- Wastewater will be treated on-site using a Membrane Bioreactor (MBR) system. The effects of any wastewater discharge will be managed to ensure discharge water quality meets standards and guidelines to avoid adverse effects on downstream water quality and aquatic ecology. Prior to a substantiative application being lodged, the water quality of the receiving environment will be sampled at sufficient intervals to establish baseline information. This information will be utilised to inform the design of the wastewater treatment plan and its outputs (i.e., the discharge criteria).

## Conclusion

The anticipated adverse effects of developing the Site will be managed via design, the development of suitable consent conditions, implementation of site-specific management plans for affected habitat and fauna and, if required, offset/compensation. If required, a WAA will be sought for the salvage and relocation of copper skink during vegetation clearance and habitat, as well as incidental injury or death.

Any unavoidable loss of wetland areas would require the application of the effects management hierarchy. There are locations within the Site where the effects management hierarchy could be applied to address this loss (e.g., in areas adjacent to stormwater treatment wetlands). A detailed ecological assessment and ecological management plan as well as an offset/compensation plan (if required) will be included in the substantive application should the application be accepted as a referred project.

## Qualifications and Experience

Ecological Solutions Ltd (formerly Freshwater Solutions Ltd and The Ecology Company Ltd) are expert freshwater and terrestrial environmental consultants with offices based in Northland, Auckland, Tauranga and Nelson from where we service our national client base. The company is managed by Richard Montgomerie who founded Freshwater Solutions Ltd in 2009. Dr Gary Bramley is the terrestrial team lead and Nick Carter is the freshwater team lead, each with more than 20 years' experience managing a diverse range of environmental projects, including significant infrastructure and housing projects, throughout the country.

Rebecca Bodley is currently the project manager for the Rotokauri Greenway Project (an EPA approved COVID-19 Recovery (Fast-track Consenting Act 2020 project). Nick prepared the freshwater ecology effects assessment and ecological management plan components for the Rotokauri Greenway Project and prepared effects assessments for developments at Pōkeno. Rebecca is also project managing the Brymer project (a Fast Track Approvals Act 2024 project). Richard Montgomerie, our managing director and Chad Croft, another of our senior ecologists, have extensive experience in the land development sector in the Waikato Region including the Peacocks Structure plan area and are currently managing Ecological Solutions involvement in the greater Southern Links 1 project area.

Ecological Solutions are experienced in developing appropriate mitigation and biodiversity offset/compensation projects required to manage terrestrial, wetland and stream habitat loss for a range of flora and fauna, including wetlands, black mudfish and bats for various Waikato developments

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