

## Memorandum

То:	Waikato Regional Council
From:	LET Capital Number 3 Partnership
Date:	20 October 2023
Subject:	Project Summary

# WAIUKU WIND FARM – PROJECT SUMMARY

LET Capital Number 3 Limited Partnership (LET) is proposing to develop a wind farm located on the west coast of the North Island (see Figure 1 below), known as the Waiuku Wind Farm (WWF) to provide renewable electricity to the national grid. This project summary outlines the main features of the development and the consenting approach.

## **PROJECT OVERVIEW**

The WWF is designed to provide for both renewable energy generation and also to allow for the continued farming operation on the site. The WWF will produce up to 80 megawatts (MW) with an estimated electricity output of up to 326 gigawatt-hours (GWh) per annum. The proposal involves:

- The construction and operation of up to 14 wind turbines and two wind monitoring masts; and
- Construction of internal access tracks, infrastructure connections and ancillary buildings on the site.

In addition, it is proposed to establish a new transmission line from the site to the Glenbrook sub-station.

#### Wind Turbines

The turbines will each be single pole structures with a ground mounted transformer located adjacent. Each turbine will have a maximum height of 190 metres to blade tip and the blades will be a minimum of 30 metres above ground. See Figure 2 below for proposed location of turbines.

The turbines have modes that limit operation at pre-defined wind speeds and/or wind directions, and with physical modifications such as blade trailing edges that reduce operational noise. Compliance with NZS6806:2010 Acoustics – Wind farm noise (NZS6806) will be achieved.

## **Transmission Connection**

The WWF will connect to the national grid at Glenbrook by way of a new transmission line, which will be a permitted activity. The line will be located within the road corridor and generally be overhead. The parts of this new line that extend through settlement and urban zoned areas will be underground.

## **Internal Tracks and Buildings**

A mix of new and upgraded existing permanent (aggregate) access tracks of up to 10 metres width will be established to each turbine location.

The site's existing farm buildings will remain, as the land will continue to be used for farming purposes. However, there will be new buildings constructed in relation to the operation of the WWF. These buildings will be co-located internal to the site, mostly along internal roading.

The proposed buildings include:

 A collector station building (approximately 60 metres x 50 metres), containing electrical infrastructure (i.e., collecting and converting the power produced by the turbines into a form that can be sent into the national grid).



 An operations and maintenance (O&M) building (approximately 20 metres x 15 metres, with a height of up to 8 metres).

## SITE

The site is located on the west coast approximately 7km north of Port Waikato and 9km south of Waiuku, near the Waikato River mouth. The site comprises multiple properties identified as 612 Forestry Road, 136 Thomson Road, 191 Thomson Road, 260 Thomson Road, 44 Robertson Road, 76 Robertson Road and 66 Huarau Way, Otaua. These properties collectively form a site area of approximately 562.2596ha.

The landscape setting of the site is predominately rural, characterised by extensive rolling pasture. Normal features associated with a working rural environment are evidenced in the fencing, the occasional shelterbelt, farm tracks, rural buildings including a woolshed, together with other buildings including a number of dwellings. Other physical features, such as electricity transmission lines and a telecommunication facility are also present on the site.

There are some site constraints, including:

- Known archaeological sites (NZAA ID: R13/29; R13/1; R13/52; R13/53 and as identified on the Waikato District Plan (District Plan)).
- Significant Natural Areas (as identified in the District Plan);
- Coastal environment overlay (as identified in the Waikato Regional Policy Statement and District Plan);
- Notable trees (as identified in the District Plan);
- Identified natural inland wetlands.

The project works will avoid these constraints, except some turbines and access tracks will be located within the coastal environment overlay.



Figure 1: Location of Waiuku Wind farm (Source Google Earth)





Figure 2: Proposed location of Waiuku wind farm turbines (Source map: Google Earth)