

Prepared for Meridian Energy Ltd

Mt Munro Wind Farm

Archaeological Assessment of Effects

November 2022

Emily Howitt
E: eh.archaeology@gmail.com
P: 021 418 114



EMILY HOWITT
ARCHAEOLOGY

Contents

1	Introduction.....	1
1.1	Project Overview	1
1.2	Project Location.....	1
1.3	Proposed Works	2
1.3.1	Turbines.....	2
1.3.2	Internal Roothing	2
1.3.3	Transmission and Substations	3
1.3.4	Other Buildings / Structures	3
2	Statutory Context	4
2.1	The Heritage New Zealand Pouhere Taonga Act 2014.....	4
2.2	The Resource Management Act 1991	4
3	Environmental Context.....	5
4	Historical Background.....	5
5	Archaeological Assessment	6
5.1	Methodology	6
5.2	Limitations	6
5.3	Results	6
5.3.1	Recorded Archaeological Sites	6
5.3.2	Historic Survey Plans and Aerial Images.....	7
5.3.3	Land Ownership History	10
5.3.4	Site Visit	10
5.4	Research Summary	12
6	Archaeological Values.....	13
7	Assessment of Effects.....	14
7.1	Archaeological Significance	14
7.2	Potential Effects	14
7.3	Mitigation Options	14
8	Conclusions and Recommendations	15
9	References.....	17

Appendix 1: Site Record Form T25/7

List of Figures

Figure 1: Location of the proposed Mt Munro Wind Farm.....	1
--	---

Figure 2: Project overview showcasing the Turbine Envelope Zone (blue shaded area), Turbine Exclusion Zone (white hashed area), and Transmission Corridor (red dashed line). All turbines and infrastructure will be located within these areas. 2

Figure 3: Site entrance and access road detail..... 3

Figure 4: Archaeological site records (stars) in the wider area. The approximate project area is outlined in red. Image from ArchSite. 7

Figure 5: Enlarged portion of survey plan SO12710 (1887) showing the route of Old Coach Road to the west of the proposed project area. The road is marked 'Main Road' on this plan. The project area is shaded in yellow..... 8

Figure 6: Aerial image from 1944, showing buildings on Old Coach Road within the proposed project access road areas (outlined in yellow).The project area is outlined in dotted yellow..... 9

Figure 7: Enlarged portion of 1944 aerial image showing the buildings on either side of Old Coach Road (indicated by the red arrows)..... 9

Figure 8: The site entrance paddock. 11

Figure 9: Looking east toward the building site and road from the paddock, the walnut tree is on the left, and the macrocarpas are on the right. 12

Figure 10: Brick observed in the bank of the stream between the macrocarpa trees and the road..... 12

Figure 11: Recommended buffer area (shaded in red) where excavations should be avoided. 15

1 Introduction

1.1 Project Overview

This Archaeological Assessment of Effects was commissioned by Meridian Energy Ltd (Meridian) to assess the archaeological effects of a proposed wind farm at Mt Munro in the Northern Wairarapa. The project was first investigated over 10 years ago, and a Resource Consent application was lodged in 2011. The application was subsequently withdrawn in 2013 due to a lack of electricity demand. Meridian is now seeking to consent a revised proposal for the Mt Munro Wind Farm.

An Archaeological Assessment was prepared for the former project proposal by Opus International Consultants Ltd in 2011 (Barr 2011). This report presents an updated Archaeological Assessment of the revised proposal footprint. Its purpose is to assess the archaeological significance of the proposal area, and effects of the project impacting on potential archaeological sites. All recommendations in this report are made in accordance with statutory requirements.

1.2 Project Location

The proposed wind farm site is situated on pastoral farmland to the east of State Highway 2 between the Pūkaha National Wildlife Centre, Mt Bruce and Eketāhuna in the Northern Wairarapa (Figure 1). The site is a relatively compact Class 1 site with a capacity for 20 turbines (90 MW).

The proposed wind farm site comprises the following three zones (Figure 2):

1. A Turbine Envelope Zone on which all turbines and any infrastructure will be located.
2. A Turbine Exclusion Zone where infrastructure will be located, but no turbines.
3. A transmission corridor and substation to connect the wind farm to the national

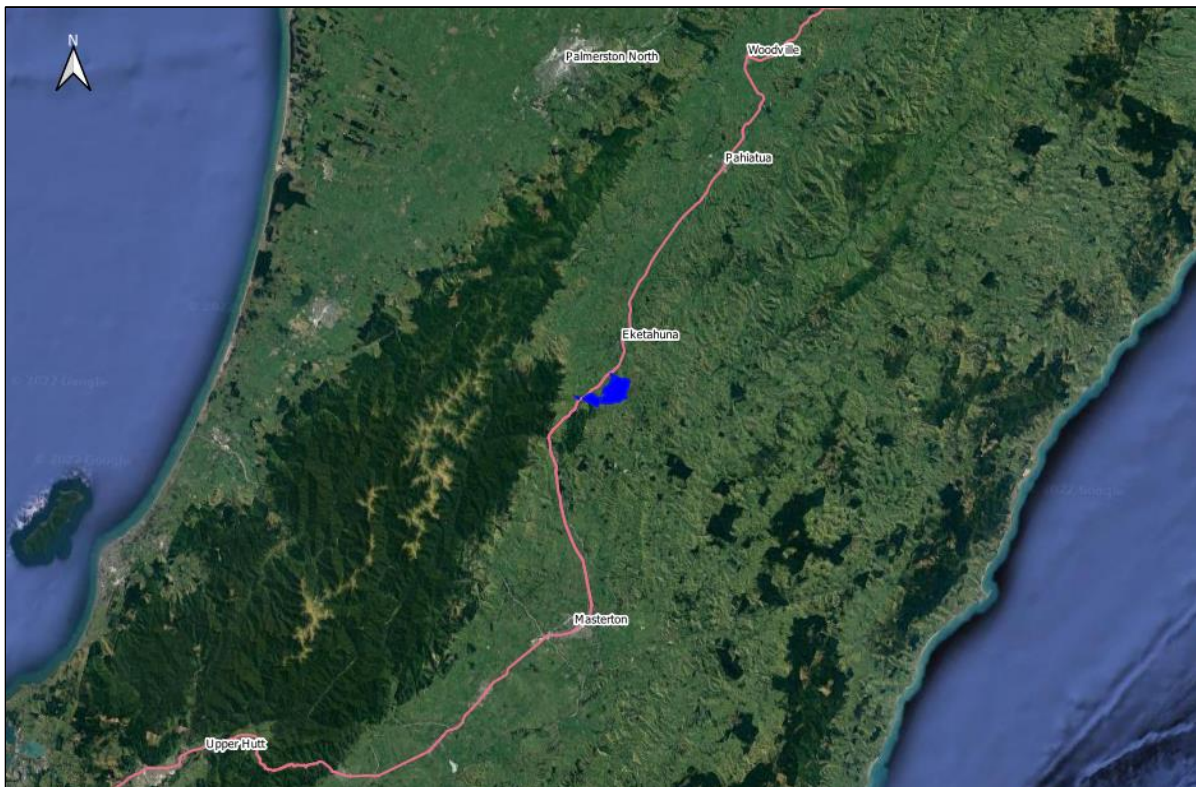


Figure 1: Location of the proposed Mt Munro Wind Farm.



Figure 2: Project overview showcasing the Turbine Envelope Zone (blue shaded area), Turbine Exclusion Zone (white hashed area), and Transmission Corridor (red dashed line). All turbines and infrastructure will be located within these areas.

1.3 Proposed Works

The proposed works will involve excavations for the construction and a range of buildings, roads, transmission networks, and the turbines themselves. Works are limited to the areas within the Turbine Envelope Zone (shaded blue on Figure 2), and the Turbine Exclusion Zone (white hashed areas in Figure 2 and Figure 3), as well works associated with the building the transmission line (red dashed line in Figure 2), and substation.

1.3.1 Turbines

Each turbine will require a foundation, crane pad and blade laydown area onto which the turbine can be erected. The foundations for each turbine measure approximately 23 m in diameter and will require excavation up to 5m deep. Each crane pad and blade laydown area adjacent to the turbine foundation will require an area approximately 125 m at its longest point and 60 m at its widest.

1.3.2 Internal Roothing

The internal road network needs to cater to the transportation requirements of the large turbine components (blades and tower base sections), allow access for the large cranes involved in the turbine erection, and host buried cables forming the underground 33kV network. The width of the roads within the Turbine Envelope Zone will be between 8 and 11 m wide. The combined length of these roads will be approximately 6 km.

The "access roads" that run from the bottom of the hill to the wind farm ridges within the Turbine Exclusion Zone will be between 6 m and 8 m in width (Figure 3). The combined length of these roads

will be approximately 5.5 km. Two main access roads will likely be built for safety and practicality reasons: one for the heavy components and one for light traffic/service vehicles.

The site entrance will be located at the end of Old Coach Road (Figure 3).



Figure 3: Site entrance and access road detail.

1.3.3 Transmission and Substations

A terminal and an internal substation will be constructed. The terminal substation will be located at the bottom of the hill near the existing Transpower line on the western side of the corner of Kaiparoro Road and SH2. The internal 33kV network will run underground from the turbines to a point near the internal substation site near the southwest most turbine. The internal and terminal substations will be connected by a transmission line approximately 3.5km in length. The transmission line will require poles up to 20m high.

1.3.4 Other Buildings / Structures

A wind monitoring tower will be constructed. The location of this will depend on final turbine sites.

The site entrance area (Figure 3) will house a temporary construction village including site offices, amenities, security, parking and laydown area (for turbine component deliveries).

A permanent services building will be located either at the site entrance area or at the substation on the corner of Kaiparoro Rd and SH2.

Other buildings/structures will be sited within the Turbine Envelope Zone or Turbine Exclusion Zone (Figure 2 and Figure 3) including:

- A 30,000L diesel storage tank.
- A concrete batching plant comprising a control room and storage building, offices and amenities, mobile batching plant unit, cement silos and a stockpile area.



2 Statutory Context

There are two main pieces of legislation in New Zealand that control work affecting archaeological sites. These are the *Heritage New Zealand Pouhere Taonga Act 2014* (HNZPTA) and the *Resource Management Act 1991* (RMA).

2.1 The Heritage New Zealand Pouhere Taonga Act 2014

The HNZPTA provides blanket protection to all archaeological sites whether they are recorded or not. Protection and management of sites is managed by the archaeological authority process, which is administered by Heritage New Zealand. It is illegal to destroy, damage or modify archaeological sites without an authority to do so from Heritage New Zealand.

Any person who intends on carrying out work that may damage or destroy an archaeological site, or to investigate an archaeological site using invasive archaeological techniques, must first obtain an authority from Heritage New Zealand. The requirement applies to sites on land of all tenure included private, public and designated land. The HNZPTA contains penalties of up to \$300,000 for unauthorised site damage or up to \$60,000 for breaches of conditions of an authority.

The archaeological authority process applies to all archaeological sites that fit the HNZPTA definition regardless of whether the site is recorded in the New Zealand Archaeological Association (NZAA) Site Recording Scheme or registered with Heritage New Zealand; or if the site only becomes known about as a result of ground disturbance.

For the purposes of defining what an archaeological site is, the following definition from the HNZPTA is provided. An archaeological site is defined under section 43.1 as any place in New Zealand that

- a) either –
 - i) was associated with human activity that occurred before 1900; or
 - ii) is the site of the wreck of any vessel where that wreck occurred before 1900; and
- b) provides, or may be able to provide, through investigation by archaeological methods, significant evidence relating to the historical and cultural heritage of New Zealand.

Heritage New Zealand also maintains the New Zealand Heritage List/Rārangi Kōrero (The List). The List can include archaeological sites. The purpose of The List is to inform members of the public about such places, and to assist with their protection under the RMA.

It is possible that archaeological sites, as defined in the HNZPTA, will be disturbed by this project. Any sites identified during the ground works at this site will have automatic protection under the HNZPTA.

2.2 The Resource Management Act 1991

The RMA requires City, District and Regional Councils to manage the use, development, and protection of natural and physical resources in a way that provides for the wellbeing of today's communities while safeguarding the options of future generations. The protection of historic heritage from inappropriate subdivision, use, and development is identified as a matter of national importance (Section 6f).



Historic heritage is defined as those natural and physical resources that contribute to an understanding and appreciation of New Zealand's history and cultures, derived from archaeological, architectural, cultural, historic, scientific, or technological qualities.

Historic heritage includes:

- historic sites, structures, places, and areas;
- archaeological sites;
- sites of significance to Māori, including wahi tapu;
- surroundings associated with the natural and physical resources (Section 2).

These categories are not mutually exclusive, and some archaeological sites may include above ground structures or may also be places that are of significance to Māori.

Where resource consent is required for any activity an assessment of effects is required to address cultural and historic heritage matters (RMA 4th Schedule and the district plan assessment criteria).

3 Environmental Context

The project site is located approximately 5 km south of Eketāhuna to the east of State Highway 2 between Old Coach Road on the northern end and Opaki-Kaipaporo Road on the south. Pūkaha National Wildlife Centre is approximately 4 km to the south at Mt Bruce.

The project site is a compact landform, rising steeply from all sides to a longer main ridge and two smaller ridges. It has been pastoral farmland for well over a century.

Mt Munro was originally part of the “Wairarapa Bush” which began further south and continued to near Woodville. Mt Bruce is now one of the last major remnants of mature native forest that remains of that feature. The Tararua Ranges are to the west and northwest of the site.

4 Historical Background

This section has been sourced from the Archaeological Assessment prepared for the proposal in 2011 (Barr 2011).

This area was part of the pathway for Māori between the Wairarapa and Manawatu / Heretaunga. The Makakahi River, passing to the west of the project area provided not only a source of food to Māori during the pre-European period, but also a means of transport. Use of the river to the north however became more difficult, and the locale of Eketāhuna, which means to run aground on gravel or sandbank, marks the extent of the navigable part of the Makakahi River.

Just south of the township of Eketāhuna is a place identified as Te Waiwaka, and it is reported that there was a settlement and gardens in that area.

The beginnings of the township of Eketāhuna are linked with the *Immigration and Public Works Act* initiated by Sir Julius Vogel in 1870, which was designed to initiate a new wave of colonisation. This Act led to the New Zealand government being able to raise a large loan in England to be spent on immigration and settlement. Funds could then be expended on the formation of roads and railways as well as the purchase of large blocks of land to allow for settlement by intending immigrants. Based on the prospect of new settlers arriving, the government purchased nearly 300,000 acres of land, extending from the most northerly portion of the Wellington province, bordering southern



Hawke's Bay, to the plains of the Wairarapa Valley. This area became known as the Seventy Mile Bush Block.

Settlers were to be allocated a section of bush country within the district, with small, cleared areas set aside for the establishment of towns to allow for the building of churches, schools, and tradesmen's allotments. As part of Vogel's scheme, potential immigrants in Scandinavian countries were targeted as prospective settlers and by the middle of 1873 a total of 7,500 immigrants had arrived in New Zealand.

In March 1873 the first of the settlers to eventually settle in the Eketāhuna district arrived in New Zealand, and within a short time made the journey over the Remutaka Range to Kopuaranga north of Masterton where a settler's camp was established. Eventually the settlers made their way to Waiwaka, approximately 3km south of the present-day township and commenced clearing land for the road and railway. Originally the settlement was called Mellemskov, however by the end of the 1870s it had reverted to the Māori name.

A key figure in the district during the 1870s was Mr Alex Munro, a government engineer and surveyor. Munro acted as the government official in the district and assisted many of the new arrivals in settling in. It is after Alex Munro that the high hill to the south of the town is named.

5 Archaeological Assessment

5.1 Methodology

As part of this assessment a desk-based review of information relating to the potential archaeology of the area was conducted. The purpose of this was to identify areas within or immediately near the project area where there were potential archaeological sites. Historical and archaeological information sources consulted include the NZAA Digital Site Recording Scheme (ArchSite), historic survey plans, aerial images, web-based resources and published and unpublished reports / articles.

5.2 Limitations

The NZAA *ArchSite* was the primary resource used for identifying recorded sites in the area. It is important to note that the archaeological site location data in *ArchSite* should be regarded as a guide only and is generally based on reconnaissance rather than on accurate survey information. The coordinates of many of the sites in the database are of variable accuracy. In addition to this, the areal extents for many recorded sites are poorly defined.

This report does not include an assessment of Māori cultural values. Statements are made as to the location and nature of archaeological sites and their archaeological values. There are no statements on the cultural significance of the project area nor are the views of tāngata whenua represented in this report. An assessment of cultural significance will not necessarily correlate with an assessment of the archaeological significance of the area.

5.3 Results

5.3.1 Recorded Archaeological Sites

No archaeological sites have been recorded within the proposed project area. The closest site records are located over 14km away. These include two obsidian findspots in the Tararua mountains (S25/59 and S25/84), ovens and an adze findspot just south of Hamua (T25/1), and a pā called Raupeka, near Kiriwhakapapa (S25/171). None of these sites will be affected.



As noted by Barr (2011) while there is a lack of recorded archaeological sites in this district, there has also been limited archaeological surveying carried out. As a general pattern, the higher and more exposed an area, and the further the location is from the coast, the lower the potential for there to be sites associated with Māori occupation. The Makakahi River and flood plain was a key traditional route travelled by Māori between Wairarapa and Heretaunga and Manawatu, and therefore it could be anticipated that there may be sites in the area. Forested areas will have been used during the pre-European period for hunting and the collection of food. Associated with these activities would have been tracks into the bush and small transient camps, however little physical evidence of these activities is likely to remain.

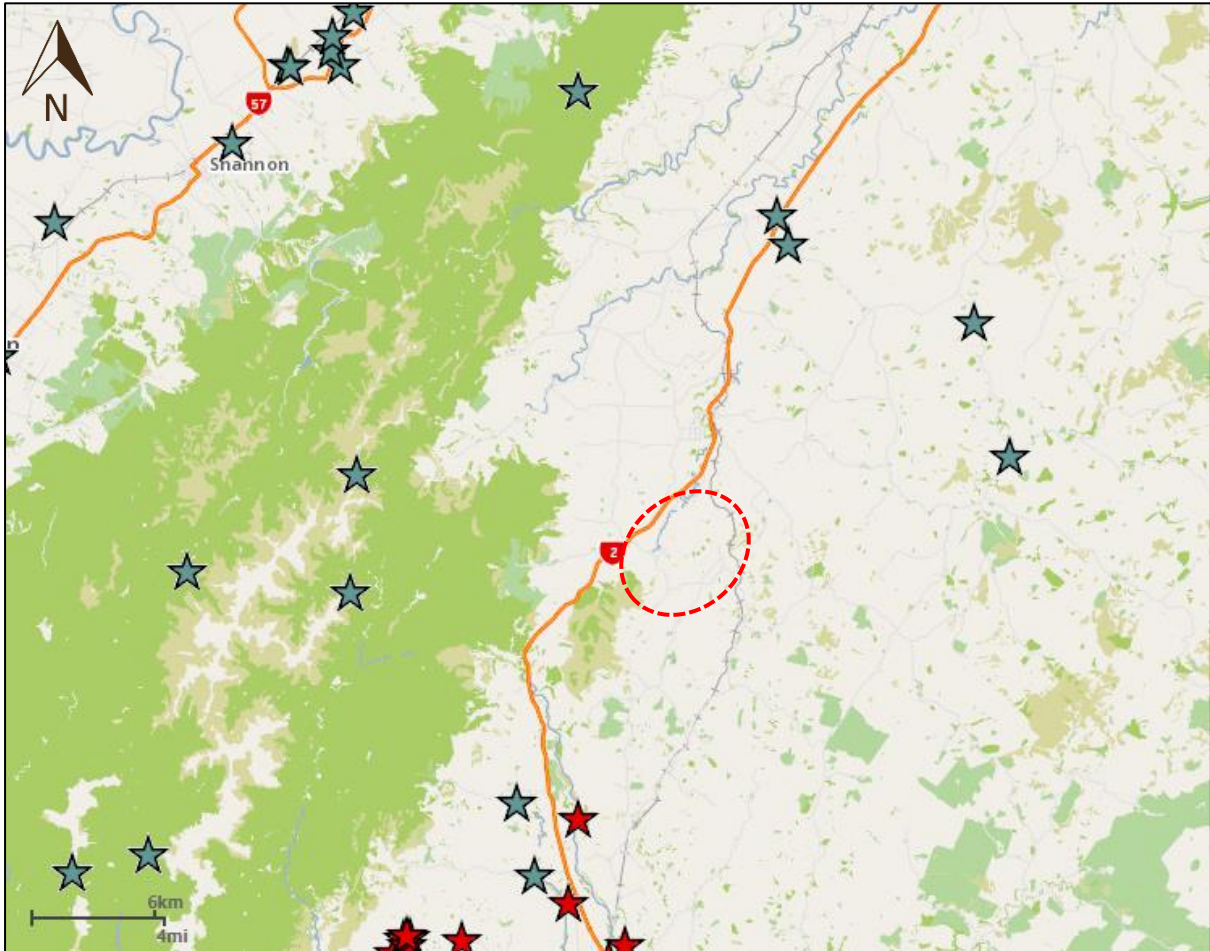


Figure 4: Archaeological site records (stars) in the wider area. The approximate project area is outlined in red. Image from ArchSite.

5.3.2 Historic Survey Plans and Aerial Images

Survey Plans

There are a number of historic survey plans of the Mt Munro / Eketāhuna district dating from the 1870s and 1880s. Historic survey plans often show the location of houses, Māori settlements, old pā sites and urupā or cemeteries. Plans may also provide information on topography as well as historic vegetation cover.

The only feature of interest indicated on historic survey plans of the proposed project area was the legal route of the Old Coach Road (Figure 5). The legal route remains as a paper road through the farmland from the end of Old Coach Road, near the proposed project site entrance area, and runs to the west of the proposed project area joining up to Opaki-Kaiparoro Road. Old Coach Road was

originally the main road linking Eketāhuna to Masterton in the south. It was presumably closed when the new highway (now SH2) was built in the 1920s.

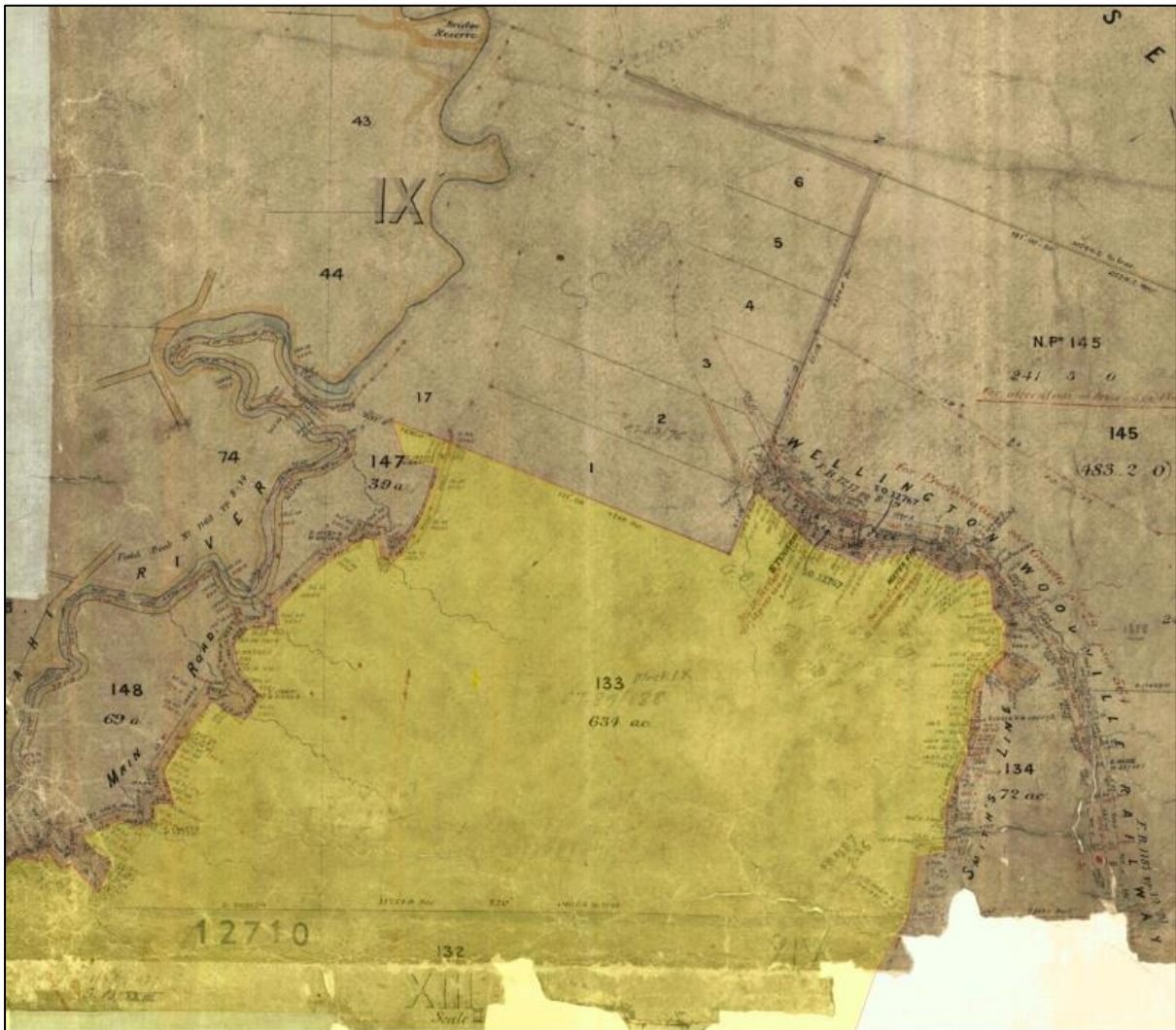


Figure 5: Enlarged portion of survey plan SO12710 (1887) showing the route of Old Coach Road to the west of the proposed project area. The road is marked 'Main Road' on this plan. The project area is shaded in yellow.

Aerial Images

The earliest aerial images of the area were taken in the 1940s. These images largely show the proposed project area as cleared farmland (Figure 6). The Old Coach Road route can clearly be seen and may still have been in use as a farm road. There are no buildings or other features visible within the Turbine Envelope Zone or Turbine Exclusion Zones.

Two features of note can be observed. These include a house, surrounded by shelter trees, on the left side of Old Coach Road where the proposed site entrance will be located, and a building of unknown function on the opposite side of the road (Figure 6 and Figure 7). The house site is situated on a 39-acre block called Section 147, Block IX. The building on the opposite side of Old Coach Road were located on Section 133, Block IX. Currently farm buildings are situated on this same site, but the dwelling and trees on the opposite side of the road have been removed.

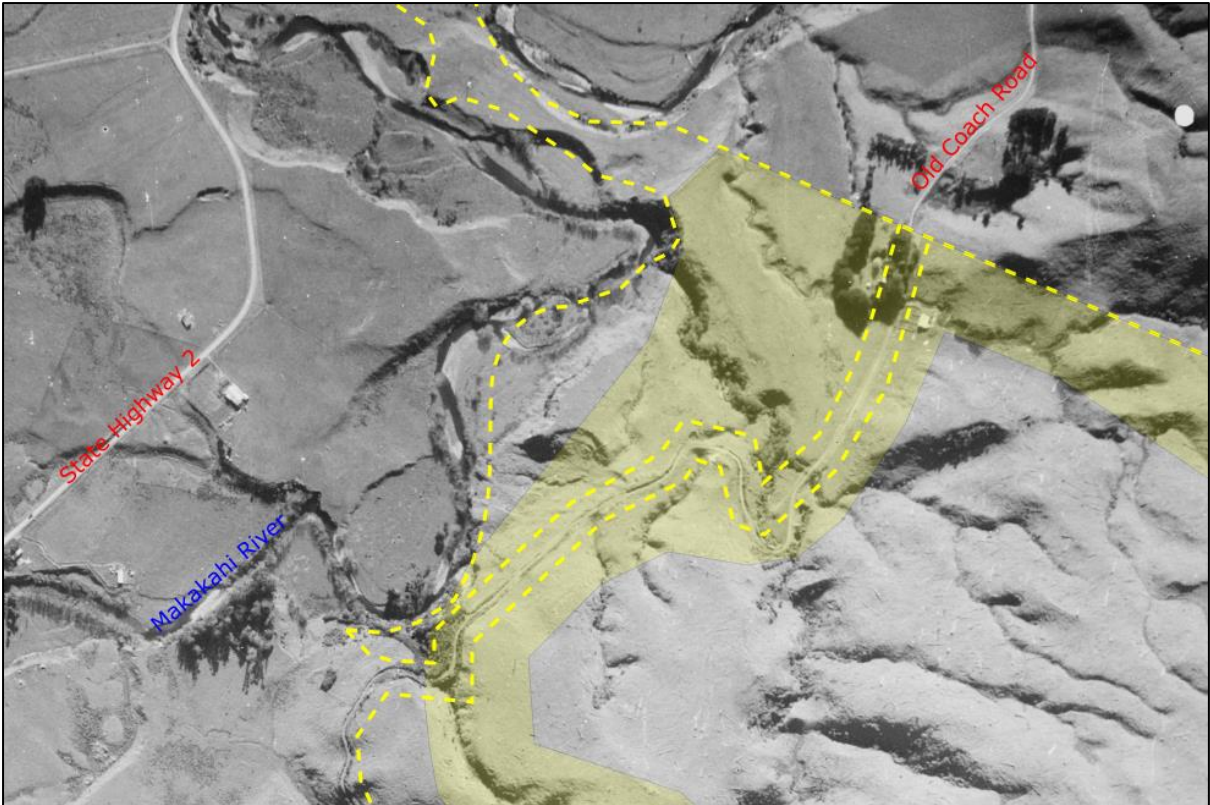


Figure 6: Aerial image from 1944, showing buildings on Old Coach Road within the proposed project access road areas (outlined in yellow). The project area is outlined in dotted yellow.



Figure 7: Enlarged portion of 1944 aerial image showing the buildings on either side of Old Coach Road (indicated by the red arrows).

5.3.3 Land Ownership History

Ownership records for Section 147 (Certificate of Title WN47/208) shows that the section was first purchased by Henry Stewart (farmer) in November 1887 and sold again in 1911. This timeline lines up with an obituary for a Mr Henry Stewart residing in Ōtaki, who died in 1943 (Ōtaki Mail 1943). The obituary states that Henry Stewart, from Kidderminster, England, arrived in Wellington on the steamship “Doric” in August 1887. A month later he left for Eketāhuna where he acquired a block of bush land, and after a residence of 24 years in that district, retired to take up residence in Ōtaki.

Section 133, on the opposite side of Old Coach Road, was first purchased by Anders Anderson (settler) in 1896 (Certificate of Title WN89/188). The block was transferred to the executors of Anders Anderson’s will in 1924. One of these was John Oliver Wilkie Anderson, a son of Anders who was farming the land. The Anderson family were early Swedish settlers to the Eketāhuna area. They had a homestead on Alfredton Road.

Section 147 was purchased by John Oliver Wilkie Anderson in 1919. The dwelling visible on Section 147 the 1944 aerial image may have been constructed by Henry Stewart after he purchased the land in 1887, or it may have been built on by the Anderson’s after 1919.

5.3.4 Site Visit

An archaeological survey was conducted by Cathy Barr in 2010 and 2011 during the initial project proposal process (Barr 2011). An additional site visit was undertaken by archaeologist Emily Howitt, accompanied by Nick Bowmar (Meridian), on 21 October 2022 specifically to inspect the possible historic building site on Old Coach Road.

2010/2011 Site Visit:

The following statement about the site is reproduced from Barr (2011):

No evidence of archaeological features or deposits were identified within the area of the wind farm in which it is proposed to erect turbines. The only feature of historic interest is the remaining benched section of the Old Coach Road. Part of this road, at the northern end, is still in use as a formed access road. This provides access to several properties in the area for approximately 1.7km south from the junction with State Highway 2. The remaining legal section of the road is partly used as farm track, but mainly represented as a benched grass track across farm paddocks between the end of the maintained Coach Road North and the access to the Anderson property from Opaki-Kaiparoro Road. In sections the benching of the old road is clearly visible. It is noted however that the entire route of the old road was not inspected as the remaining visible section is located on farmland, and outside the footprint of the project area. Part of Old Coach Road will be upgraded as part of the project however this is along the length of road that is currently used as access for properties in this area. The entire length of the Old Coach Road remains a legal road but only the northern section has been maintained. As such, within this maintained section there is unlikely to be any features or deposits that meet the legal definition of an archaeological site.

While not all turbine sites were surveyed in 2011, it was considered, given the topography, distance from the coast and exposed condition of the hills, that sufficient area had been examined to gain an understanding of the environment, and linked with background research, further fieldwork was not warranted.

In November 2011 the route of the transmission line was inspected by Barr (2011), with particular attention paid to the location of proposed pylon sites on the lower hills and river flats. No visible evidence of any features of an archaeological nature were identified.



2022 Site Visit:

The paddock where the possible pre-1900 house site was located (proposed to be the wind farm site entrance area) was inspected on foot. The ground surface in the paddock and the exposed stream banks were checked for any surface evidence of buildings or associated artefacts that could indicate the age of the buildings and their specific footprints.

The site entrance paddock slopes gently towards the west, away from the road. The area is presently covered with cropped grass. There are two large macrocarpa trees on the edge of the stream to the south, and a walnut tree located in the middle of the site access paddock (Figure 8 and Figure 9).

No evidence of any building remains was observed in the site entrance paddock where the building footprints are thought to have been. The area is completely clear, with the exception of the remaining walnut tree. On the south side of the fence, between the macrocarpa tree and the road, some bricks were seen in the stream bank, however this is outside the area of proposed works (Figure 10). No artefacts were observed that could indicate when the buildings were built.

The buildings have clearly been purposefully removed at some point after the 1940s, and many of the trees that were visible on the 1940s photo have also been cut down and removed. The presence of building material in the stream bank indicates that removal of the structures may have involved bulldozing building remains south into the stream channel. If any archaeological features associated with the buildings remain intact, they will be below the ground surface, but it is likely that the removal of the buildings has significantly modified the landscape. Any subsurface remains are probably in poor condition.



Figure 8: The site entrance paddock.



Figure 9: Looking east toward the building site and road from the paddock, the walnut tree is on the left, and the macrocarpas are on the right.



Figure 10: Brick observed in the bank of the stream between the macrocarpa trees and the road.

5.4 Research Summary

It cannot be determined that the farmhouse visible on the 1944 aerial image in the site entrance paddock was definitively constructed prior to 1900, but on the balance of probability it seems likely.

In 1944 the house was surrounded by well-established macrocarpa trees, indicating they had been growing for some time. The land ownership records, and historic newspaper articles indicate that the land was first cleared and occupied by Henry Stewart in 1887. It is possible that Henry Stewart owned the land but did not reside on it, and the property may not have been built on until after 1919 when the land was purchased by the Anderson family, but this cannot be confirmed.

A Site Record Form has been created in ArchSite for this site (T25/7). See Appendix 1 for Site Record Form.

6 Archaeological Values

The extent to which the building platform was bulldozed/cleared when the buildings were demolished is unknown, but it is possible that subsurface features, such as post holes, long drop pits, and rubbish pits may remain intact below the ground surface in the site entrance field.

The assessment of archaeological values was based on a consideration of the impacts of the proposed works on both potential and known archaeological sites in the area. These sites were characterised using the archaeological values of condition, rarity, contextual value, information potential, amenity value and cultural associations, as per Heritage New Zealand Guidelines.¹

Table 1: Archaeological values: historic farmhouse site (T25/7).

Value	Assessment
Condition	While the buildings are no longer present on the site, there is potential for subsurface archaeological deposits to remain intact below the ground. These may include the house foundations, foundations of outbuildings, and rubbish pits, all of which are common features on the sites of pre-1900 buildings. These may be in good condition, but they are likely to have been impacted by bulldozing to clear the building platform. Condition Value: Unknown, but probably modified.
Rarity/ Uniqueness	Pre-1900 European farm residences are neither unique nor rare. Rarity/Uniqueness Value: Low.
Contextual Value	If the house was built prior to 1900 it has contextual value as part of the 19 th century township of Eketāhuna. Contextual Value: Low-Moderate.
Information Potential	If intact archaeological features remain <i>in situ</i> on the site, then there is potential for archaeological information to be gathered about the building's age and footprint, but the only evidence will be below ground and likely to have been modified. Information Potential: Low.
Amenity Value	The site has no amenity value. The property is remote and privately owned. Any surviving archaeological features will be below the ground surface. Amenity value: None.

¹ Heritage New Zealand Pouhere Taonga *Archaeological Guideline Series No. 2: Guidelines for Writing Archaeological Assessments*



Value	Assessment
Cultural Associations	The site is associated with early European settlers.

7 Assessment of Effects

7.1 Archaeological Significance

The vast majority of the Mt Munro Wind Farm area is farmland that was cleared of bush in the late nineteenth century. Two potential archaeological sites have been identified, these include the unmodified section of the Old Coach Road in farmland to the west of the proposed project area, and a potential 19th century farmhouse footprint in the site entrance area to the west of Old Coach Road. The unmodified section of Old Coach Road is outside the proposed project area and will not be affected by the proposed wind farm works. The possible 19th century house site is within the site entrance area of the wind farm. A Site Record Form has been created in ArchSite for this site (T25/7).

No archaeological sites or heritage items have been identified within the Turbine Envelope Zone. The areas where the turbines will be sited are on an exposed ridge generally considered to be incompatible with human occupation.

Although no archaeological sites or heritage items have been identified within the proposed Turbine Envelope Zone, Turbine Exclusion Zone, Transmission Corridor or Substation sites, this does not exclude the possibility that area was visited and used by Māori in the past. The area would have been rich in forest resources (plants and animals) prior to the clearance of the trees, and it is likely that these would have been utilised by those living on the lower flat land around the Makakahi River. Consultation with local iwi will confirm whether there are any wāhi tapu sites within the project area.

7.2 Potential Effects

There is one potential archaeological site that may be affected by the proposed wind farm development. This is the potential 19th century house footprint, which is within the designated site entrance area that will house a temporary construction village including site offices, amenities, security, parking, and laydown area. No surface evidence of the house remains visible, and it cannot be determined with certainty when the house was built, but there is potential for subsurface 19th century archaeological features associated with the house in this area.

7.3 Mitigation Options

If it is possible to avoid excavations within the area of the original farmhouse, then this should be the adopted approach for managing the potential for impacting an archaeological site. The recommended exclusion area is shown in Figure 11 and comprises the southeast corner of the block out to the walnut tree.

If excavations cannot be avoided in this area there is a legal requirement under the *Heritage New Zealand Pouhere Taonga Act 2014* to seek an archaeological authority from HNZPT for any works that will modify, damage or destroy an archaeological site. As mitigation for information loss if an archaeological site is identified during the proposed works, it is recommended that archaeological



monitoring of groundworks within the area of the historic house is undertaken to identify and record any archaeological features if they are exposed.



Figure 11: Recommended buffer area (shaded in red) where excavations should be avoided.

8 Conclusions and Recommendations

This archaeological assessment report has been prepared for Meridian Energy Ltd for the proposed construction of the Mt Munro Wind Farm near Eketāhuna. The only proposed works that are likely to impact a possible archaeological site are within the site entrance area to the west of the Old Coach Road. This paddock was the site of a farmhouse and outbuildings visible on a 1944 aerial image, and originally on the block of land purchased by Henry Stewart in 1887. It is possible that the house was built by Stewart and as such it has been recorded as archaeological site record T25/7. No archaeological features are presently visible in the paddock, and it is likely that when the building was removed some components were bulldozed into the stream channel to the south of the site as indicated by the presence of brick seen there. However, intact archaeological features may be present below the ground surface in the site entrance paddock.

The following recommendations are made in this report:

1. That a buffer zone where no ground disturbance activities can occur within the site entrance paddock is implemented to ensure that subsurface archaeological features associated with Site T25/7 are not impacted (Figure 11).
2. If there is no way to avoid excavations in the proposed exclusion zone (Figure 11), then a general Archaeological Authority should be applied for from Heritage New Zealand Pouhere Taonga to cover the site entrance paddock, and all groundworks that may affect subsurface archaeological features must be monitored by an archaeologist.

3. For all other works, including formation of the site access roads, construction of the turbines and the associated buildings, it is recommended that an Accidental Discovery Protocol is followed. These protocols should outline steps to be taken should suspected archaeological deposits or features be exposed during construction. If, however, a suspected site is confirmed as an archaeological site, it will be necessary to cease all work in that area and apply for an Archaeological Authority from Heritage New Zealand Pouhere Taonga to modify the site.



9 References

Barr, C. 2011. Archaeological Assessment: Proposed Wind Farm, Mt Munro. Unpublished report for Meridian Energy Ltd.

“Obituary: Mr Henry Stewart”. Otaki Mail, 15 December 1943. Page 2. Accessed via Papers Past.

The New Zealand Archaeology Association Site Record Database ‘ArchSite’.

Survey Plan SO12710 (accessed via Grip Map).



Aerial Images: RetroLens (<https://retrolens.co.nz/>).

Certificates of Title WN47/208, WN89/188 (accessed via LINZ).



Appendix 1: Site Record Form T25/7

NEW ZEALAND ARCHAEOLOGICAL ASSOCIATION

 <p>Site Record Form</p>	<p>NZAA SITE NUMBER: T25/7</p> <p>SITE TYPE: Historic - domestic</p> <p>SITE NAME(s):</p> <p>DATE RECORDED:</p>
<p>SITE COORDINATES (NZTM) Easting: 1827841 Northing: 5492769 Source: On Screen</p>	
<p>IMPERIAL SITE NUMBER: METRIC SITE NUMBER: T25/7</p>	
 <p>Scale 1:2,500</p> <p>Eagle Technology, Land Information New Zealand, OpenStreetMap Contributors, Kiwi rail</p>	
<p>Finding aids to the location of the site 168 Old Coach Road, paddock north of the stream</p>	
<p>Brief description Site of 19th C farm house</p>	
<p>Recorded features Building - homestead</p>	
<p>Other sites associated with this site</p>	

SITE RECORD HISTORY	NZAA SITE NUMBER: T25/7
<p>Site description</p> <p>Updated 21/11/2022 (Field visit), submitted by emilyhowitt , visited 21/10/2022 by Howitt, Emily Grid reference (E1827841 / N5492769)</p> <p>Probable site of a nineteenth century farm house built by Henry Stewart after 1887.</p> <p>Section 147 (Certificate of Title WN47/208) was first purchased by Henry Stewart (farmer) in November 1887 and sold again in 1911. This corresponds with an obituary for a Mr Henry Stewart residing in Otaki, who died in 1943 (Otaki Mail 1943). The obituary states that Henry Stewart, from Kidderminster, England, arrived in Wellington on the steamship "Doric" in August 1887. A month later he left for Eketahuna where he acquired a block of bush land, and after a residence of 24 years in that district, retired to take up residence in Otaki. Section 147 was purchased by John Oliver Wilkie Anderson, the owner of the farm on the opposite side of Old Coach Road, in 1919.</p> <p>There is a dwelling visible on Section 147 on a 1944 aerial image. There appears to be a dwelling and at least one outbuilding. the buildings are surrounded by a well established shelterbelt of macrocarpa (some of the trees are still extant). The house is likely to have been constructed by Henry Stewart after he purchased the land in 1887, but it is possible it was built by the Andersons after 1919.</p> <p>Condition of the site</p> <p>Updated 21/11/2022 (Field visit), submitted by emilyhowitt , visited 21/10/2022 by Howitt, Emily</p> <p>The buildings are no longer present, and no obvious building footprints could be seen during a site visit. The only evidence of a building having been on the site was some scattered brick observed in the stream bank. It is possible subsurface features remain intact.</p> <p>Statement of condition</p> <p>Updated: 28/11/2022 - Below surface - Surface evidence has been obliterated, however, there is likely to be subsurface material present. Note that this is different from a destroyed site.</p> <p>Current land use:</p> <p>Updated: 28/11/2022 - Grazing</p> <p>Threats:</p> <p>Updated: 28/11/2022 - Stock trampling, Farming practices, Property development, Services/ utilities</p>	

SITE RECORD INVENTORY	NZAA SITE NUMBER: T25/7
------------------------------	--------------------------------

Supporting documentation held in ArchSite



