

WAIKATO DISTRICT PLAN REVIEW SUBMISSION

SUBMITTER KONING FAMILY TRUST

TOPIC: Extent of residential zoning at Raglan

STATEMENT OF EVIDENCE OF Sian Rebecca Keith

Dated: 15.02.2020

Introduction

1. My full name is Sian Rebecca Keith
2. I am a consultant archaeologist and Company Director of Sian Keith Archaeology Ltd, a company I formed in 2016.

Qualifications and Experience

3. I have the qualifications and experience described in the following paragraphs.
4. I hold a Master of Science in Maritime Archaeology from the University of Ulster (2001) and a Bachelor of Science in Archaeology from Glasgow University (1998).
5. I have over twenty years of experience as a field archaeologist in New Zealand, Ireland, the United Kingdom, and Australia. I have been working in New Zealand for the past eleven years.
6. I have a wide range of experience as both a field and consultant archaeologist, including site identification, assessments, interpretation, preservation, excavation, and technical report writing. I have primarily worked within the Waikato and Bay of Plenty regions over the past eleven years and am familiar with the archaeology of these regions. I have prepared archaeological assessments for a wide range of projects within the Waikato Region, including: works for the Wainui Reserve related to a mountain bike track, archaeological investigations of Raglan Old School Arts Centre, the Hamilton Section of the Waikato Expressway, and; a GIS review of the heritage landscape for the Coastal Marine Plan for Waikato Regional Council.

Code of Conduct

7. I have read the Environment Court's Code of Conduct for Expert Witnesses in the Environment Court of New Zealand and I agree to comply with it. My qualifications and experience as an expert are set out above. I have not omitted to consider material facts known to me that might alter or detract from the opinions expressed.

8. The evidence that I give in these proceedings is within my area of expertise, except when I rely on the evidence of another witness or other evidence, in which case I have explained that reliance.

Scope of evidence

9. My evidence has been drawn from my Assessment of Archaeology Effects (AAE) (Keith 2020). This document has been prepared to assess the archaeological values of the land subject to the rezoning proposal and the effects of the proposal on those values. In my evidence I address the following issues:
 - a. Identification of any visible or known pre-1900 AD heritage values within the boundary of the proposal site.
 - b. Assessment of the potential for subsurface heritage values to be present within the proposed site boundary.
 - c. Assessment of the effects of the proposal on those values.
 - d. My evidence does not cover the cultural significance of the project area, and does not represent the views of tangata whenua.

Summary of evidence

10. As part of my AAE (Keith 2020) I researched and analysed the following sources: New Zealand Archaeological Association's (NZAA) database (ArchSite) of recorded archaeological sites, historic survey plans, historic aerial imagery, local published history, historic newspapers, and technical reports prepared by archaeological consultants for the wider environment. I have undertaken a field survey of the proposed rezoning land.
11. Prior to the current study there were no recorded archaeological values within the rezoning land. No evidence was identified in the sources listed above to suggest archaeological activity within the boundary of the proposal.
12. The field survey led to the discovery of three visible archaeological sites within the rezoning area. These sites have been recorded on the NZAA database as R14/457-

459. Two represent (as a minimum) shellfish processing and/or consumption areas (middens) and the third crop storage (pit site). All three sites are determined to represent pre-European Māori activity. This is based on their similarity in nature to the numerous other documented archaeological sites recorded in the wider environment. Such site types are some of the most common types of pre-European archaeological evidence in New Zealand. These three sites may extend further than their current visible extent.

13. No evidence has been gathered to date to suggest that there are sites of exceptional archaeological value located within the zone change proposal site. Additional sites may be present within the rezoning area, however if they are present, they are currently concealed by topsoil and would require invasive techniques to identify. Based on the wider recorded archaeological landscape it is anticipated that the type of sites which could be present subsurface include shell middens, fireplaces, and to a lesser extent, storage pits.
14. Based on the known settlement patterns of the harbour it is likely that most archaeological sites are focused immediately on the harbour edge and hills overlooking the sea and watercourses. The rezoning land is set back some 300m from this environment and on subsoils which are not favourable for cultivation and not known to be the focus of settlement.
15. Future earthworks are likely to see some modification to one or more of these recorded sites. Intrusive archaeological investigations (i.e. test trenching) can be the only way to confidently determine the extent of archaeological activity and the presence/ absence of additional archaeological sites.
16. I have recommended that an archaeological authority be applied for in relation to future earthworks to allow for investigation and recording of the two shell midden sites to mitigate their modification or destruction during any future earthworks. This is because such sites are common, and these two do not appear at present to hold high archaeological value.

17. I have recommended that the archaeological authority and associated investigations should also focus on testing of an additional six areas identified as being of potential archaeological interest.
18. I have recommended that the pit site (R14/459) be preserved within any future plans to subdivide the land. This is based on its apparent good preservation, and because it is a good representative sample of a series of these archaeological features.
19. I have recommended that the Koning Family Trust seek input from iwi on their traditional knowledge of this land and the recommendations I have made.
20. Based on my current understanding of the archaeological values of this land, I do not think the rezoning proposal should be altered based on known, considered, or observable archaeological values.

Dated: 15th February 2021



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Sian Rebecca Keith

Attachment 1

Archaeological Assessment – Koning Family Trust, Raglan, dated October 2020

ARCHAEOLOGICAL ASSESSMENT

KONING FAMILY TRUST, RAGLAN

PREPARED BY SIÂN KEITH

OCTOBER 2020

ARCHAEOLOGICAL ASSESSMENT

KONING FAMILY TRUST

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EXECUTIVE SUMMARY

The Koning Family Trust commissioned Sian Keith Archaeology Ltd (SKA) to provide an archaeological assessment of their land in Raglan. The landowners propose to put in a submission to the Waikato District Plan Review seeking to amend the zoning of their land from rural/coastal to a residential zone. This assessment is required to inform the proposed submission.

The assessment has involved a review of historic documents including aerial photographs, historic maps, and archaeological data including the New Zealand Archaeological Association's (NZAA) national database (ArchSite), and consultant's reports for the wider area. A review of the relevant council plans has been undertaken, and a field visit to the project site has been made.

The research and fieldwork for this assessment has identified that the project is located within a wider landscape that contains evidence of Maori occupation and use prior to 1900, including pa sites which are situated mainly along the coastal fringe. Prior to the current site visit there were no recorded archaeological values associated with the study area. The recent fieldwork identified the presence of two shell middens and one pit site. Further archaeological sites may be present, however there is only limited visual evidence and subsurface testing would be required to confirm the presence or absence of archaeological sites.

Based on the available published information, and the results of the recent fieldwork, it is concluded in this report that the zone change submission should not be altered based on known archaeological values.

It is recommended that:

- The pit site be preserved *in situ* within any subdivision plans.
- That a programme of subsurface investigations, under authority from Heritage NZ, be undertaken prior to bulk earthworks to form any subdivisions within this land. The investigations should focus on the known and suspected archaeological sites, if these areas are to be affected by earthworks. Investigations should seek to identify the location, nature and extent of archaeological evidence within the zone change land.
- Affected tangata whenua should be consulted in relation to their traditional history of this area and cultural values associated with this land.

2.1. HERITAGE NZ POUHERE TAONGA ACT 2014

The purpose of the HNZPTA is to promote the identification, protection, preservation, and conservation of the historical and cultural heritage of New Zealand (HNZPTA section 3). Emphasis is placed on avoiding effects on heritage.

The HNZPTA provides blanket protection to all archaeological sites meeting the definition in the Act, whether they are recorded or not. Protection and management of sites is managed by the archaeological authority process, administered by Heritage New Zealand Pouhere Taonga (HNZPT). It is illegal to destroy, or modify archaeological sites without an authority to do so from HNZPT.

The HNZPTA 2014 (s6) defines an archaeological site as:

(a) Any place in New Zealand including any building or structure (or part of a building or structure) that:

(i) was associated with human activity that occurred before 1900 or is the site of the wreck of any vessel where that wreck occurred before 1900; and

(ii) provides, or may provide through investigation by archaeological methods, evidence relating to the history of New Zealand; and

(b) Includes a site for which a declaration is made under Section 43(1) of the Act¹.

Any person who intends carrying out work that may modify or destroy an archaeological site, or to investigate an archaeological site using invasive archaeological techniques, must first obtain an authority from HNZPT. The process applies to sites on land of all tenure including private, public and designated land. The HNZPTA contains penalties for unauthorised site damage.

The archaeological authority process applies to all archaeological sites that fit the HNZPTA definition regardless of whether the site is recorded in the NZAA Site Recording Scheme or registered with HNZPT; or if the site only becomes known about as a result of ground disturbance; and/or the activity is permitted under a district or regional plan, or a resource or building consent has been granted, or the ground is subject to a designation.

The HNZPTA replaced the *Historic Places Act 1993* (HPA) in May 2014.

HNZPT also maintain the New Zealand Heritage List/Rārangī 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.

2.2. THE RESOURCE MANAGEMENT ACT 1991

The *Resource Management Act 1991* (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 sustaining the potential of natural and physical resources for future generations. The protection of historic heritage from inappropriate subdivision, use, and development is identified as a matter of national importance (section 6f).

¹ Such declarations usually pertain to important post-1900 remains with archaeological values.

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 Maori, including wahi tapu;
- surroundings associated with the natural and physical resources (RMA 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 Maori.

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

2.3. STATUTORY PLANNING INSTRUMENTS

The study area falls within the boundaries of Waikato District Council (WDC) the WDC Plan is relevant to the project.

3. METHODOLOGY

3.1. MAPS AND PLANS

This assessment has used the following sources to provide a historical and archaeological background of the project area:

- The NZAA's online database ArchSite
- The Waikato District Plan
- Historic LINZ maps using the program QuickMaps
- Historic aerial photographs
- Historic plans
- Previous consultant's reports.
- Information published online related to the project footprint/ wider landscape.

3.2. SITE VISIT

A site visit was undertaken by Sian Keith and Laura Davies on 1/10/2018. Survey paths were focused on high ground along ridges to allow for an unimpeded view of the surrounding paddocks. Given the extent of the property, the survey targeted the following areas:

- North facing high ground/hills
- Anomalies observed on aerial photographs
- Areas of interest from historic maps
- Anomalies and shell deposits observed by the owner/farmer

4. PHYSICAL ENVIRONMENT AND SETTING

The area is located approximately 3 km southwest of Raglan's commercial centre. The entire land holdings are approximately 92 hectares in size. The land proposed to be rezoned for deferred residential zoning has an area of approximately 60ha (Figure 1).

The study area is located in low hills that stretch back from the coast, the site generally rises from north to south with an undulating topography and a number of gullies. The study area is open farmland which is currently grazed and used as a dairy farm.

Soil maps classify the soils types in project area as Typic Oxidix Brown Soils which are well drained and have a texture profile of silty-loam over clay and are clayey (Figure 2). Soils with a brown or yellow-brown subsoil below a dark grey-brown topsoil caused by thin coatings of iron oxides weathered from the parent material. Brown Soils occur in places where summer drought is uncommon and which are not waterlogged in winter. They are the most extensive soils covering 43% of New Zealand.²

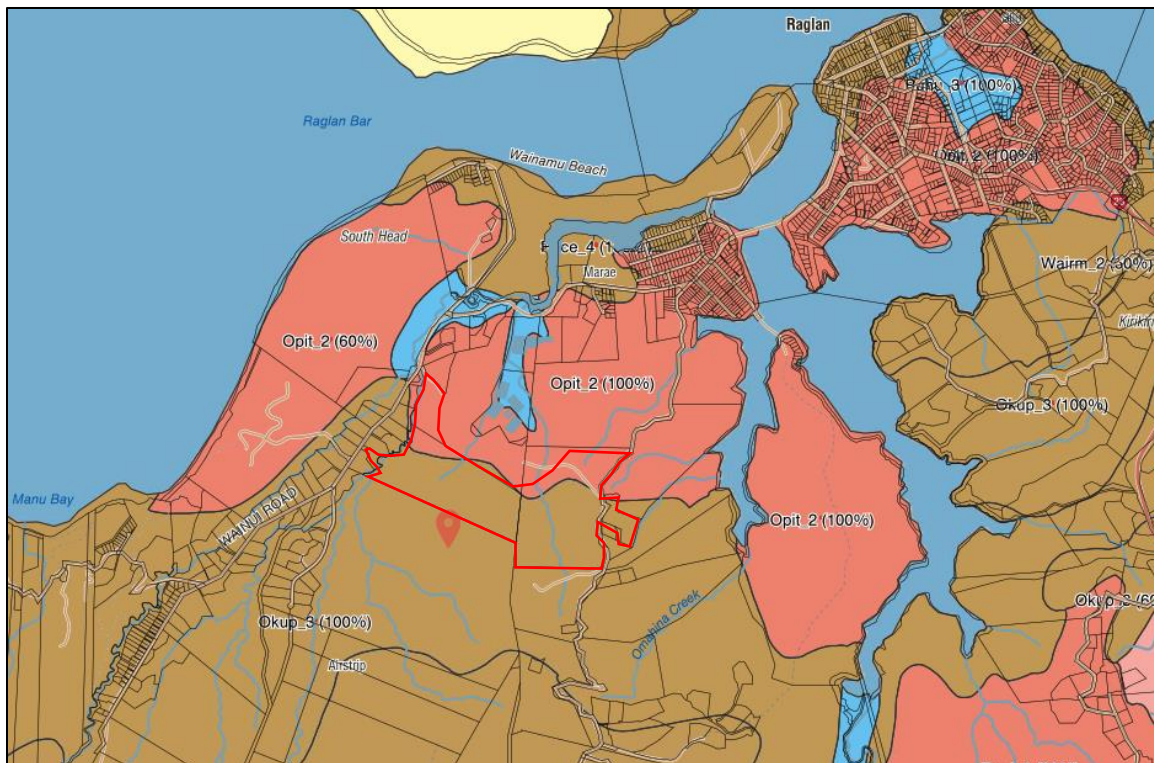


Figure 2: Soil Map: the study area is defined mainly as 'Brown Soil'³

5. HISTORICAL BACKGROUND

It is not the purpose or requirement of this report to provide a detailed history of the occupation of the Raglan area. The following section summarises the key events in the wider study area and provides a more focused study of the known archaeological activity of the immediate study area of the proposal.

² <https://smap.landcareresearch.co.nz/app#>

³ <https://smap.landcareresearch.co.nz/app#>

No attempt is made here to synthesise the rich and detailed record of Maori oral traditions and whakapapa concerning the area, or the various perspectives of the tangata whenua representatives involved as this is best done by tangata whenua.

5.1. MAORI ERA (PRE-EUROPEAN)

The wider region was extensively occupied by Maori, attested to by the rich archaeological landscape and the large number of site records in the NZAA Site recording Scheme (ArchSite) for this area. These sites include pa, kainga, midden, pits, and terrace sites. The recorded archaeological sites cluster along the coast and fresh waterbodies. This is typical of pre-European occupation in New Zealand, where the focus of activity was close to waterways, providing both abundant resources and a method of easy travel. The study area is located within close proximity to the sea on the southern side of the mouth of Whāingaroa⁴/ Raglan Harbour.

5.2. EUROPEAN ERA

The earliest European settlements in Raglan are associated with the Wesleyan Church missions in the early decades on the 19th century. In 1835, Revenant Wallis established a Mission at Te Horea, the main Maori settlement on the northern shore of the Whāingaroa Harbour, then later moved to Nihinihi on the southern side of the Wainui Stream (Keith 2010). By the mid-1850s Europeans farmers and traders arrived in the township. Early industry in the area included flax, farming, milling and traders (Keith and Gumbley 2009). Dairy farming started in the district in the late 1800s, but from the 1930s many dairy units changed to sheep farming, which was more suited to the hilly terrain⁵.

The study area is within both the original Karioi and Rakanui Blocks. In 1855 the Crown acquired⁶ approximately 12,000 acres of land from Maori (Figure 3) known as the Karioi purchase. This area embraced the whole of Karioi Mountain, it extended down the coast from the mouth of the Wainui Stream (just inside South Head) to the Ruapuke Stream. Here the boundary ran NE in a straight line toward Te Mata where it met the Oporu Stream and followed it northward for about 3 miles. From there it ran west and north to the starting point near the mouth of the harbour (Vennell 1976). An area believed to be 600 acres (that would later turn out to be 1,413 acres) was reserved for Maori groups: Te Whaanga, Te Kopua, Papahua and Rakaunui (Fisher, 2014).

It is not clear when European-style farming, or indeed settlement commenced in these blocks, but it appears to have begun in/by 1870. Karioi was a Highway Board area from 1870 to 1889, when it was absorbed (with Whāingaroa Board area and formed into Karioi Riding) into Raglan County Council. In 1876 it had a population of 112 in 27 houses and in 1889 119 ratepayers, 80 of them absentees (Vennell 1976).

The first advertisement for sale of land found at Karioi is dated 1880. In this advert 3 farms and 3 small farms are advertised and Karioi is described as containing 36 allotments.⁷ A newspaper article from 1900 details that ‘one or two parties have taken up Government Sections on the Karioi block,

⁴ The town was named Raglan by the European settlers in 1858 after the British Commander in the Crimean War.

⁵ <https://teara.govt.nz/en/waikato-places/page-6>

⁶ Vennell (1976) indicates that the land was bought by the government, however others have stated that the Karioi was gifted (Greensill (2010) <https://www.parliament.nz/resource/0000139405>), or taken by less scrupulous dealings (Fisher (2014) file:///G:/1.%20Archaeology/1.%20Assessments/Raglan%20BBO/4.%20Research/12654483_Wai%20898,%20A152.pdf)

⁷ Page 4 Advertisements Column 2 WAIKATO TIMES, VOLUME XIV, ISSUE 1182, 24 JANUARY 1880

on the Raglan side of the mountain'.⁸ In 1902 it was reported that 9000 acres of 'native land' adjacent to Raglan on the Karioi block were 'lying idle'.⁹

No similar information was obtained by searching for the Rakaunui Block, and no specific information was found which related directly to the study area.

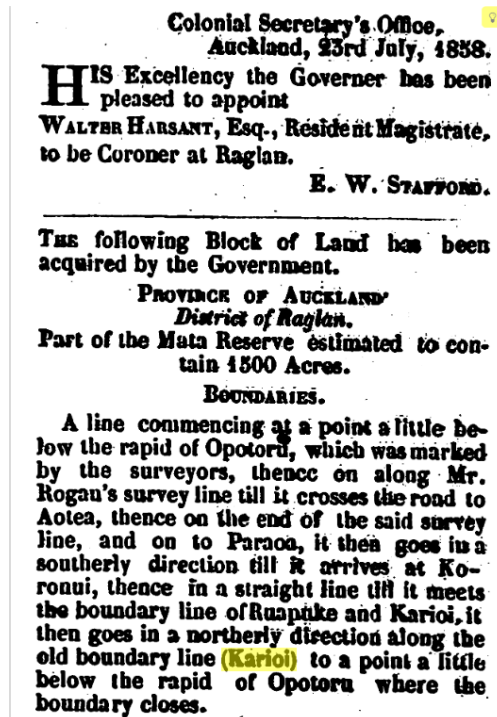


Figure 3: Government purchase of the Mata Reserve¹⁰

6. PREVIOUS ARCHAEOLOGICAL WORK

6.1. SURVEY AND INVESTIGATIONS

Archaeological sites have been recorded around Raglan since the 1960s by both amateur archaeologists, university programmes and consultant archaeologists (Figure 1 and Figure 4). The recorded sites tend to be biased towards those that are easily visible such as pa sites, or because they have been located as a result of private and commercial development. There is no evidence to indicate that the project footprint had been systematically surveyed for archaeological sites prior to the current assessment.

Andrew Hoffmann (2012) carried out an archaeological assessment of the Wainui Reserve, to the west of the current study area (Figure 4), for WDC. Hoffman described 12 sites including pa, kainga and smaller pit and midden sites, and concluded that the pa likely represent a contemporary phase of

⁸ WAIKATO ARGUS, VOLUME VIII, ISSUE 589, 6 MARCH 1900

⁹ WAIKATO ARGUS, VOLUME XIV, ISSUE 1566, 26 MAY 1903

¹⁰ Page 8 Advertisements Column 1 MAORI MESSENGER : TE KARERE MAORI, VOLUME V, ISSUE 13, 16 AUGUST 1858 (papers past).

occupation indicating social competition between Tainui hapu. Hoffman noted that the impetus to pre-European settlement in the area was the natural resources that bound the Wainui Reserve.

Gumbley and Hutchinson (2014) surveyed the Rangitahi Peninsular located to the east of the study area (Figure 4). Before their survey there was one feature identified in the landscape, a single oven/midden. Their survey led to the identification of 24 new archaeological sites including 17 oven/middens, 4 pit/terraces, one pa, one stone structure, and one domestic site.

There have been a number of excavations in the wider Raglan area. The Waikato Museum Archaeological Society excavated Kotare Pa (R14/52) on the north side of the harbour at Horongarara Point in 1972-3 (Wilkes 2000). Stratigraphic evidence indicated at least two separate occupation horizons. Midden analysis concluded that the variety of shellfish species indicated resource gathering focused on the harbour, but also included gathering resources from further afield (Wilkes 2000).

Shell middens at the Raglan Area School were excavated by the Waikato Museum Archaeological Society (Hunt 1962 and Wilkes 2000). The largest midden was noted as being up to 1.5 m deep and covered an area of c. 35 m x 20 m. The midden consisted primarily of shell with some bone and stone artefacts. European artefacts were contained within the upper layer and hence indicated this site was occupied into the 19th century.

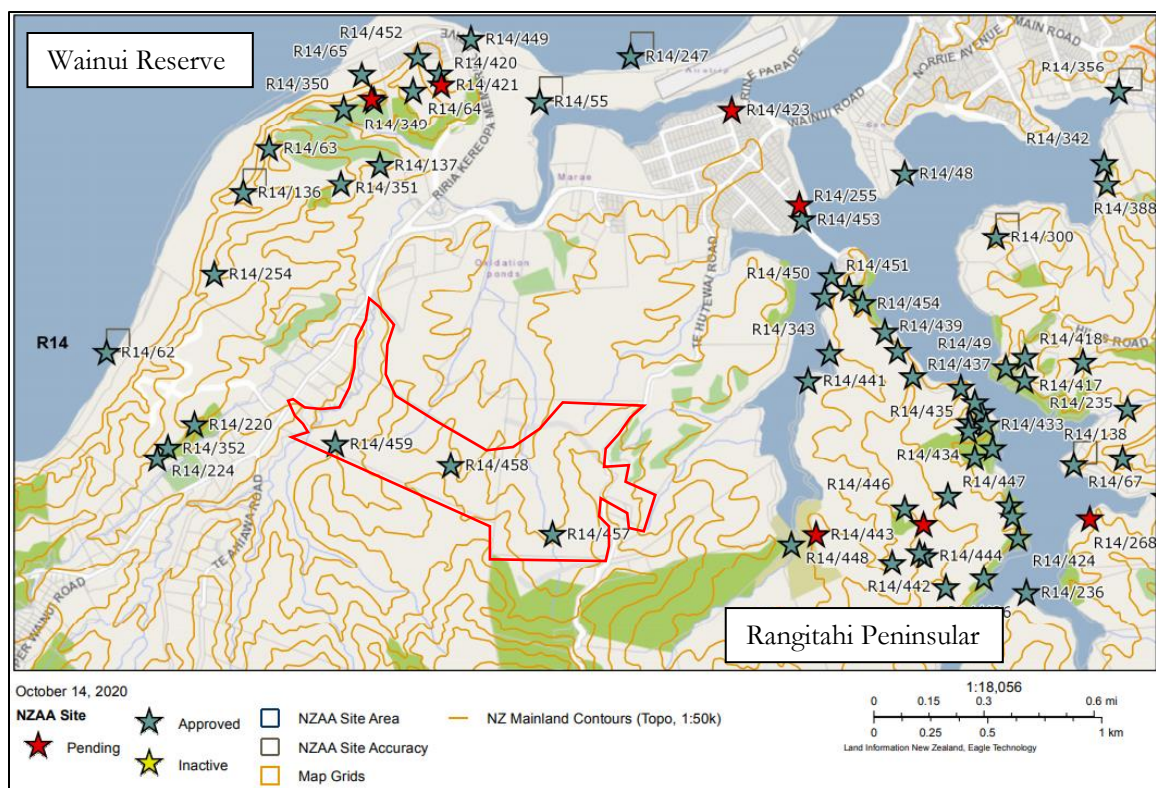


Figure 4: ArchSite map showing recorded archaeological sites within, and immediately surrounding the project area (red outline). Retrieved 14/10/2020 (following the current phase of fieldwork).

6.2. RECORDED ARCHAEOLOGICAL/ HERITAGE SITES

6.2.1. ARCHSITE

Figure 4 identifies recorded archaeological sites immediately surrounding the project area, following the current survey. The sites generally cluster around the north, west, and east of the Koning proposal, and most of the sites are within c.500m of the coast or waterbody, or on high points overlooking these environments.

There were no recorded sites within the project footprint prior to the current phase of fieldwork, the three sites recorded have been added by the author as a result of the recent fieldwork (these will be detailed in Section 8).

Outside of the proposal, the closest archaeological sites recorded are more than 300m from the study area to the west in the Wainui Reserve. Here there is a cluster of 16 recording sites representing 5 pa, 5 pit sites, 5 midden, and one burial site.

6.2.2. THE LIST

No items have been identified on The List, either within or immediately surrounding the project area.

6.2.3. WAIKATO DISTRICT PLAN

No heritage items or sites of significance to Maori are identified on the Waikato District Plan.¹¹

7. HISTORIC MAPS & IMAGES

7.1. MAPS AND PLANS

A search of LINZ survey plans and library sources for online historic maps was undertaken in order to explore the history of the proposed project area and surrounds. The aim was to identify potential archaeological features as well as the use of the land that may have adversely affected archaeological features. A sample of the plans is provided here showing only those which provide the most information.¹²

The earliest plan presented is from 1850 (Figure 5). It is a rough sketch showing only the main areas occupied at that time. No features are identified within the Koning site.

Plan SO 3809, dated 1885, illustrates the northern extent of the study area (Figure 6). It annotates Rangipu Pa, whares, and cultivations, all to the north of the study area. No features of archaeological interest are illustrated directly within the project footprint.

Plan SO11339, dated to 1898, illustrates the full extent of the study area (Figure 7). It annotates an 'old clearing' to the south east of the Koning proposal and partially within it, what appears to be 'PAH' is annotated to the south-east outside of the study area, and 'cultivations' are annotated to the north-

¹¹ <https://www.waikatodistrict.govt.nz/your-council/plans-policies-and-bylaws/plans/district-plan-review>

¹² A full list of the plans viewed is provided in the references.

east, but again outside of the study area. Within the project footprint is annotated 'cleared and grassed' in the northern portion, and in 'teatree fern' in the south eastern portion.

7.2. AERIAL PHOTOGRAPHS

Aerial imagery from the 1940s has been examined to identify if there are any visible surface features in the project area, and to study land use over time.

Figure 8 shows aerial imagery from 1944. It shows the land to the north and west as being grazed farmland. Development is limited to fencing, farm tracks, and a handful of farm buildings. The north east of the project site is mainly in scrub vegetation. The ridgelines have been closely examined in the image for evidence of terraces, other earthworks, and pits sites. Whilst there are a few possible anomalies visible, none of them are striking. It is noted however that in the locations of recorded archaeological earthworks no evidence is visible of archaeological sites either, meaning that the aerial imagery is not conclusive.

Figure 9 is an aerial image from 1974. The only significant difference between this image and the earlier image is that the land to the south-east has been mostly cleared of scrub vegetation, and buildings have been established. Again, there is no evidence in these images which would strongly suggest the presence of pre-1900 earthworks, or other types of archaeological site.

7.3. LIDAR

LiDAR imagery has been examined for anomalies which may indicate archaeological activity (Figure 10). The images were viewed in 2020 during an update to the earlier 2018 assessment and therefore following the fieldwork presented in Section 8. Essentially the LiDAR imagery compliments the fieldwork results. The LiDAR shows two of the pits recorded as site (R15/459), and the depression recorded as Area H (see Section 8). None of the potential terraces which were identified during the field survey are distinct in the LiDAR image. No additional features have been noted on this dataset which would warrant an additional survey of the land.



¹³ <http://digital.liby.waikato.ac.nz/nzc/map/030.html>

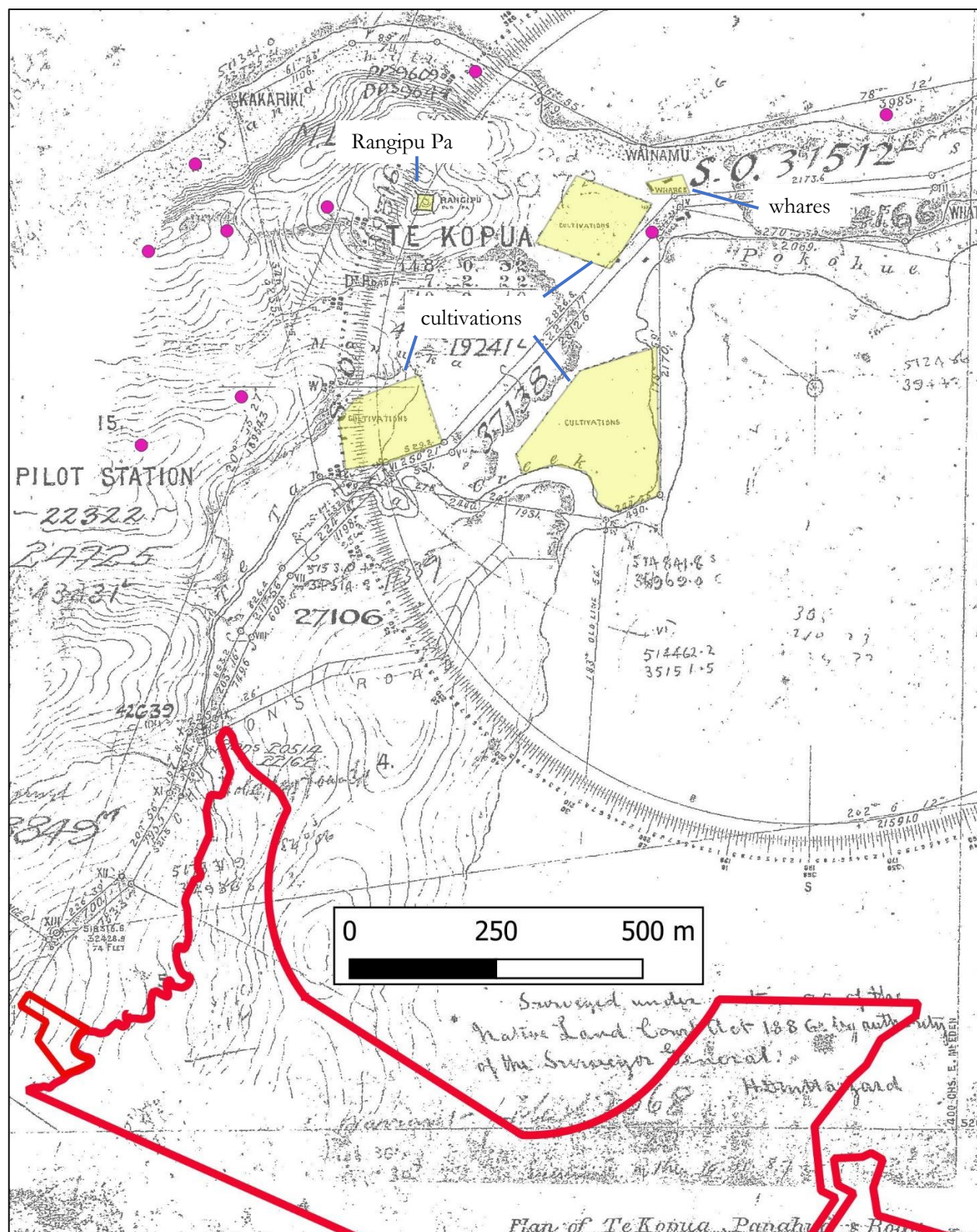


Figure 6: PART SO3809 (1885). Pink dots are recorded NZAA sites (pre-current survey).

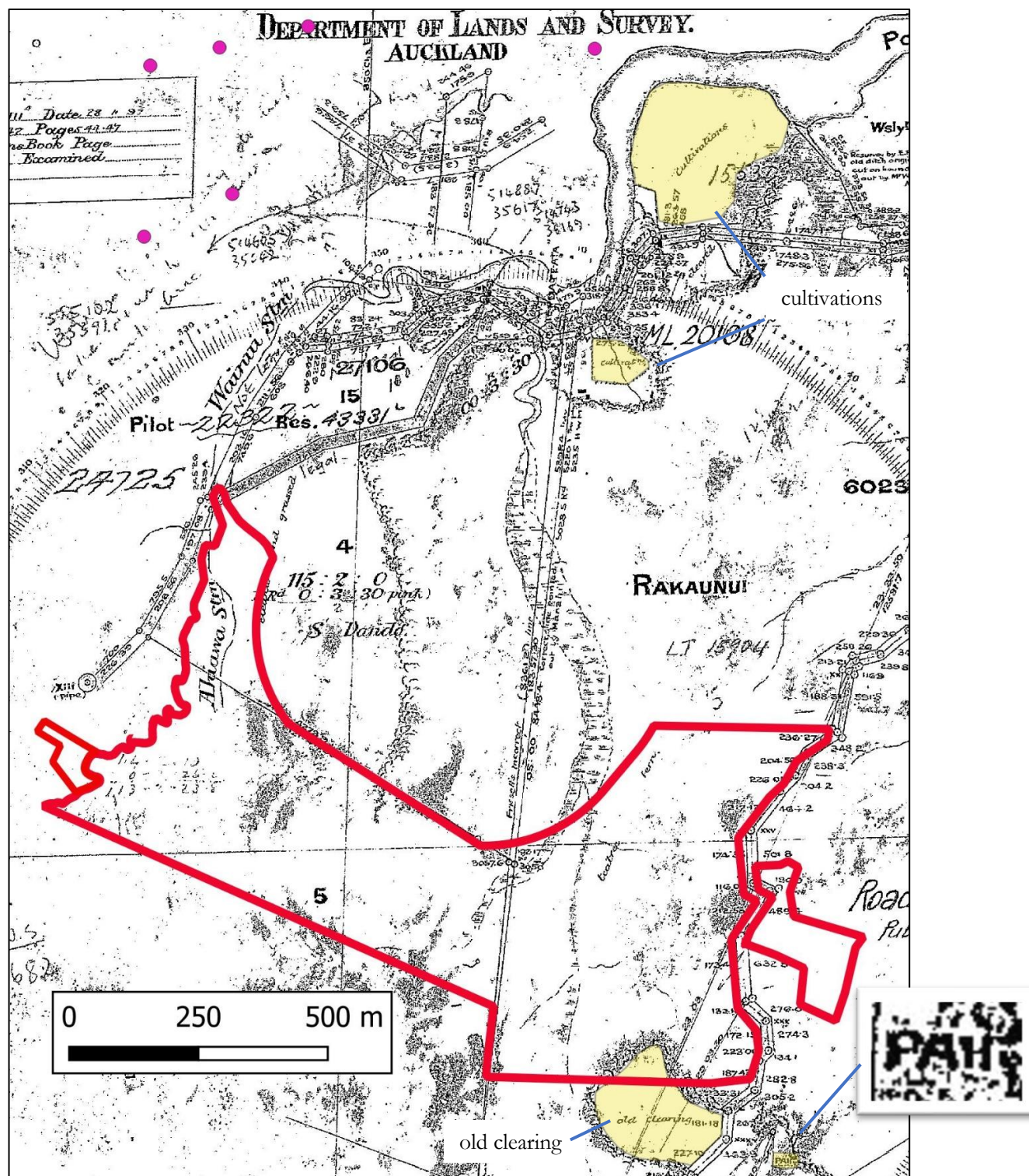


Figure 7: PART SO11339 (1898), inset showing close up of text "PAH".

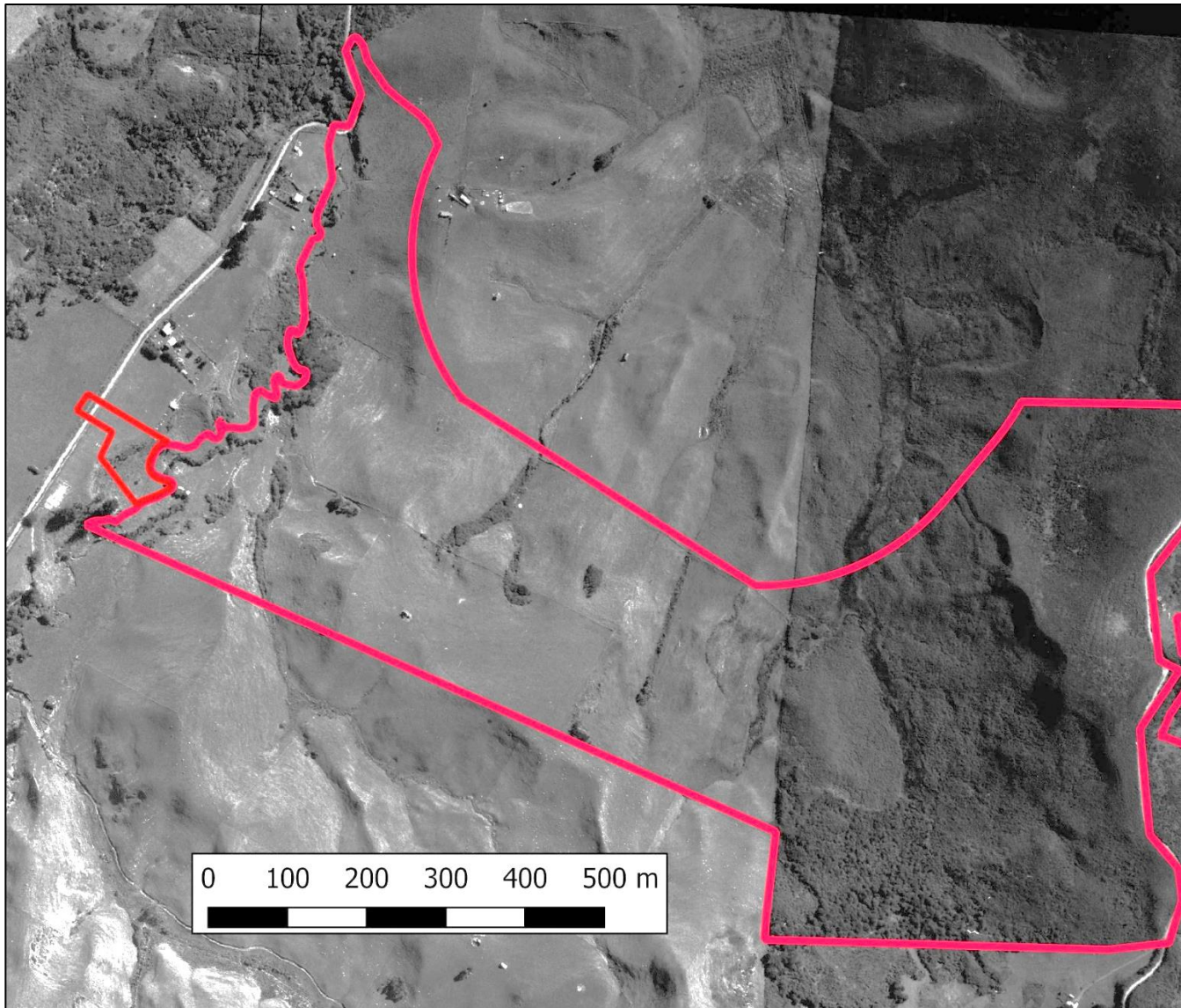


Figure 8: Aerial Image from 1944. Source: Retrolens.

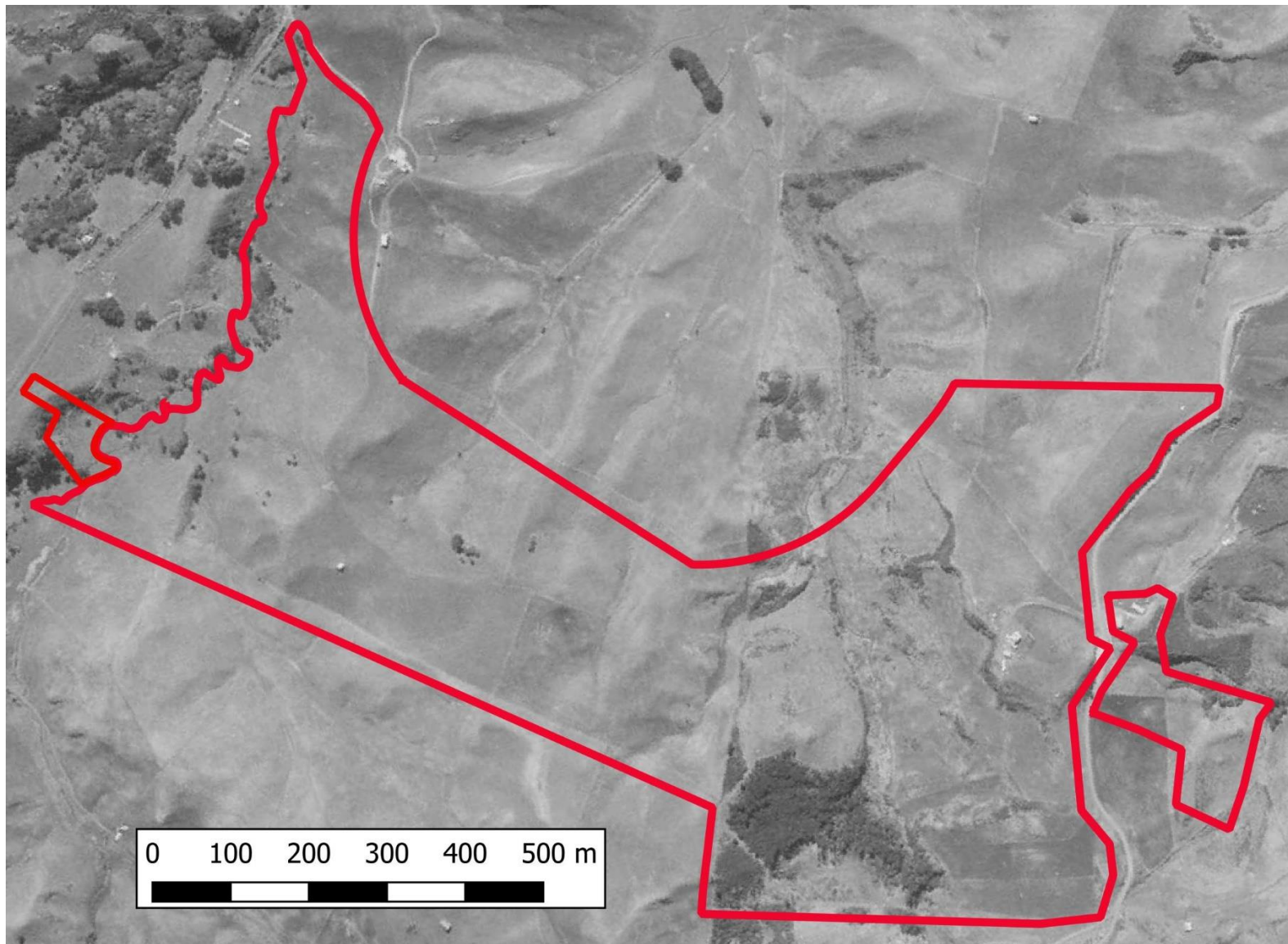


Figure 9: Aerial Image from 1974 (source: Retrolens)

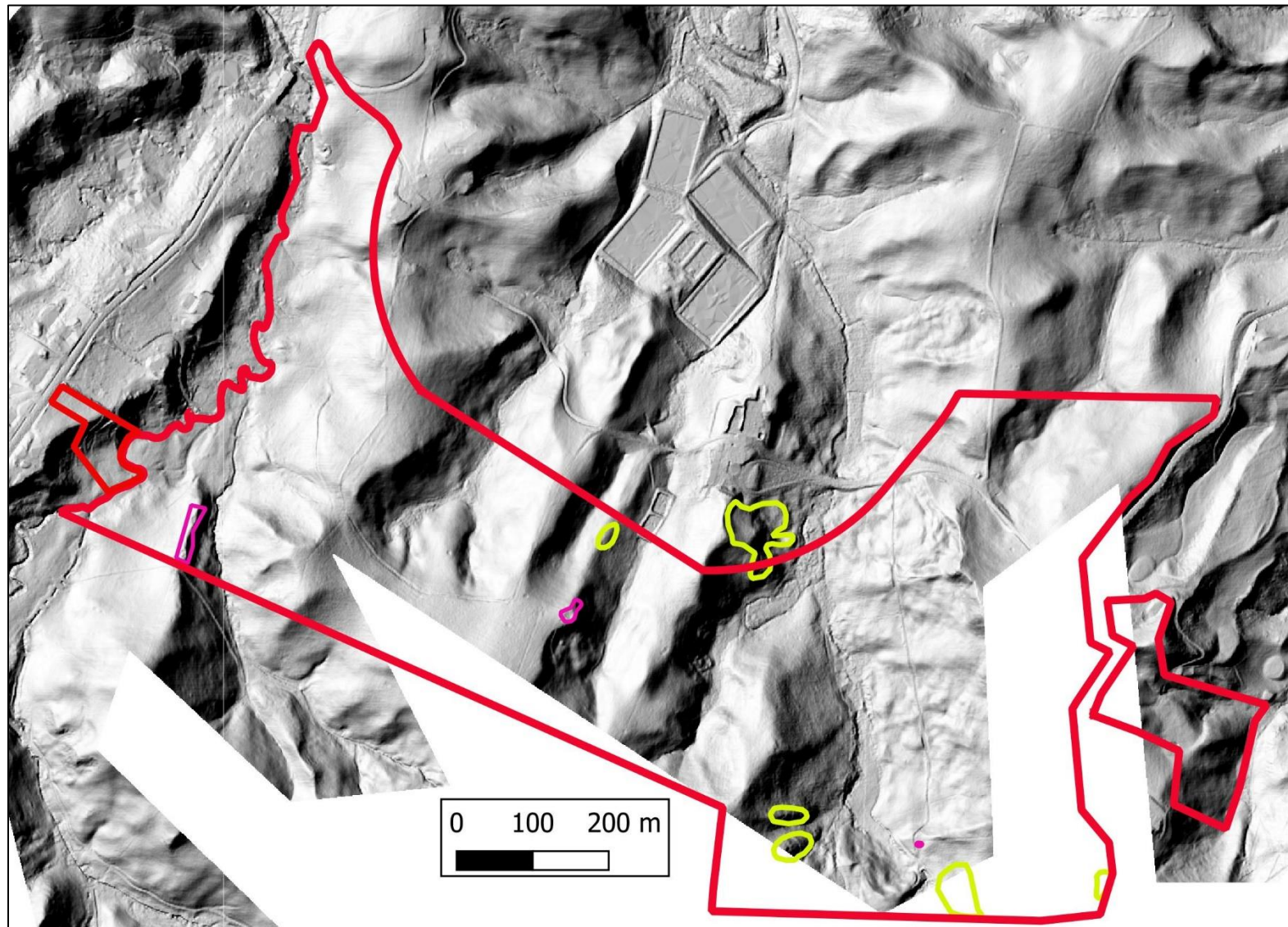


Figure 10: LiDAR image. Yellow demarks areas of potential archaeology, and pink sites recorded on the NZAA database (see Section 8).

7.4. SUMMARY OF DOCUMENTARY EVIDENCE

The archaeological database, historic plans, and aerial images identify the land to the north and west of the study area as having clear archaeological values. With the exception of an 'old clearing' identified on historic map from 1898 (Figure 7) which appears to cross into the study area, there is no clear evidence for potential archaeological activity within the Koning proposal.

8. FIELDWORK

A pedestrian field survey was undertaken by Sian Keith and Laura Davies on 1/10/2018. Access was granted to the entire property, however two fields were not inspected on foot due the presence of bulls (Figure 11 – annotated NA (not accessed)). The track taken during survey is illustrated in Figure 11. The landowner Martin Koning identified two areas where the thought archaeological sites might be located, and he also described his history of farming on the land.

The paddocks within c.300m of the water treatment ponds were not surveyed as no development is currently permitted within this area. The survey focused on ridge lines, mainly those with a northern aspect, and anomalies identified by the examination of modern historic aerial imagery. Spade test pitting was attempted but the soils were dense compact clay and could not be cut by spade; exposed soil profiles in eroded banks and driveways were examined instead to determine soil profiles and record any potentially exposed archaeology.

Eight areas of archaeological interest were recorded within the current extent of land. Each area was designated a letter from A to I (Figure 12) These were categorised into two groups. The first group are areas where there are irregularities in the ground, including depressions, or possible indistinct terracing along hillsides. These are suspected archaeological sites but require further testing to determine if they are natural anomalies, the result of modern farming practices or the result of pre-1900 occupation. The second group are positively identified archaeological sites. Three archaeological sites were identified during the current field survey, these have been recorded as sites in NZAA's site recording scheme ArchSite: Area D (R14/457); Area E (R14/458), and; Area F (R14/459).

The following results are ordered into the two aforementioned groups and then by area in alphabetical order.



Figure 11: Area Surveyed, paddocks with bulls marked with 'NA' (not accessed).



Figure 12: Location of areas of interest and NZAA sites (note: site areas are an approximation as the subsurface extents are not known).

8.1. GROUP 1 – POTENTIAL ARCHAEOLOGICAL SITES

8.1.1. AREA A - TERRACE

Minor indistinct terracing on the south-facing profile of the hill (Figure 13). Appears on the opposing side of the hill than typically expected but the surrounding landscape would not significantly impede sunlight. No clear visible evidence for archaeology identified, however future subsurface testing is recommended in this location



Figure 13: Area A circled in red. Facing SE

8.1.2. AREA B – CLEARING

Area recorded as an ‘old clearing’ on historic maps (see Figure 7). Soil conditions hampered spade-dug test pit efforts. Location is in a slight depression and is relatively flat compared to the surrounding landscape (Figure 14). No clear visible evidence for archaeology identified, however future subsurface testing is recommended in this location



Figure 14. Area B clearing in the foreground. Facing E.

8.1.3. AREA C – TERRACE

Indistinct but possible terracing along the ridge of the hill (Figure 15 and Figure 16). The bulldozed tracks mean the definition of possible terracing may be obscured. No clear visible evidence for archaeology identified, however future subsurface testing is recommended in this location



Figure 15: Area C possible terracing, looking W.



Figure 16: Area C possible terracing, looking down the hill. Facing NE.

8.1.4. AREA H – DEPRESSION

Small depression adjacent to a paddock fence (Figure 17). May be the result of farming, however given its proximity to a shell midden (See Area E), it should warrant future subsurface testing.



Figure 17: Area H Depression circled in red. Image facing north

8.1.5. AREA I – TERRACE

Noted along a minor ridge was a series of possible terraces (Figure 18 and Figure 19). Six possible terraces were identified, but as they were not completely clear or distinct they were not recorded as an archaeological site. Future subsurface testing is recommended in this location



Figure 18: Area I, looking E down the hill onto the terracing.



Figure 19: Area I, looking down the hill at the possible terraces. Facing SE.

8.2. GROUP 2 – RECORDED ARCHAEOLOGICAL SITES

8.2.1. AREA D – MIDDEN (R14/457)

Shell midden eroding down an east / west ridge (Figure 20). Midden was seen on western side and visible in the cut of the road. The shell is very fragmented. Recorded as site R14/457. Whilst only midden was identified, it could indicate a more extensive site is present, and this should be subject to future subsurface testing.



Figure 20: Area E Midden, Site R14/457

8.2.2. AREA E – MIDDEN (R14/458)

Midden eroding down the north face of hill (Figure 21). There was a dip at the top of the hill but after consulting with the landowner this was determined to be an old water trough. The shell visible is very fragmented. Recorded as site R14/458. Whilst only midden was identified, it could indicate a more extensive site is present, and this should be subject to future subsurface testing.

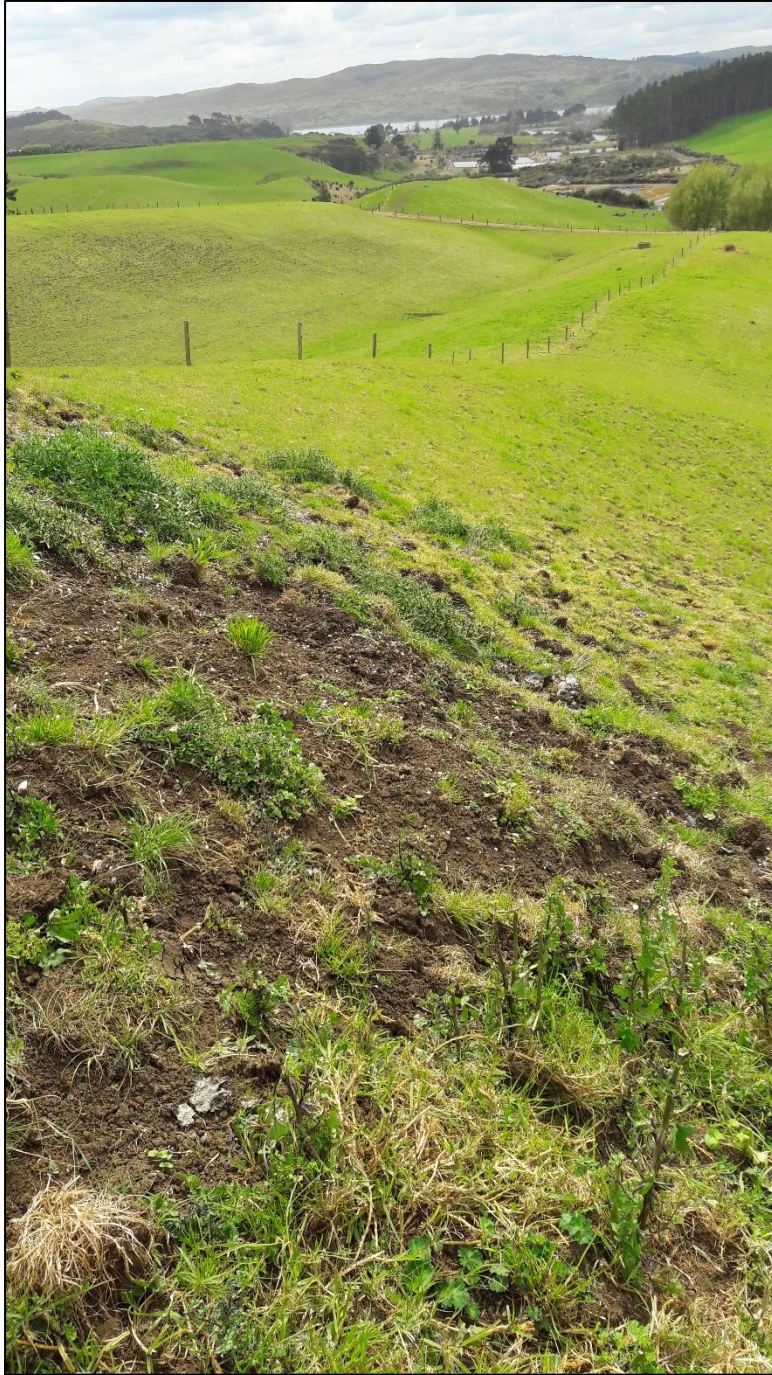


Figure 21: Midden site R14/458 seen eroding out of hill face. Facing NW.

8.2.3. AREA F – PITS AND TERRACE (R14/459)

This area has a series of five pits visible as highly distinct rectangular depressions (Figure 22 and Figure 23). The pits are situated on a narrow ridge that appears to have been terraced. The largest pit is c. 5m by 3m with the smallest c. 3m by 2m. The pits appear in two groups with a set of three on the highest point and another two on a lower terrace. This hill ridge overlooks a flat lowland that is situated at the convergence of two streams and would be a possible location for horticultural activity (Figure 24).



Figure 22: Two pits, on possible lower terrace. Photographer facing south



Figure 23: Three pits, on possible upper terrace. Photographer facing south



Figure 24: Looking down from terrace onto flat area at the base of Area F. Photographer facing north-west

8.3. DISCUSSION

8.3.1. LAND SUITABILITY FOR PRE-EUROPEAN OCCUPATION

There are large number of recorded sites along the coast and main fresh waterways, a relatively high number of these are pa suggesting a high intensity of occupation by Maori in the wider landscape. The project is c.300m further inland from the coast and waterways than the main concentration of archaeological sites. It is within a landscape that is currently seen as a less favourable location for settlement.

There are water courses running through the project footprint and it is possible, but not yet known, if the adjacent land in the low-lying stream and river areas were cultivated. Similar riverside environments to the north are annotated as cultivation areas in the historic plans (see Figure 7). The soils on the ridgelines are dense and clayey and would be difficult soils to cultivate using traditional methods, however the lower lying areas may provide more suitable environments for kūmara and taro growing. This observation would need to be field tested.

The land forms include a number of north/south oriented ridge lines. North-facing hills and ridges tend to be the focus of pre-European activity and some of the ridgelines do provide good expansive views and good aspects north. It is on one of these ridgelines that the recorded pit site is located, and another ridge where one of the midden sites. Some of these ridgelines are identified as 'areas of interest', a determination made partly on topography, and in some instances because there are undulations which may represent back filled pits and/or terraces. This will require subsurface testing to validate.

8.3.1. RECORDED ARCHAEOLOGICAL SITES AND ARCHAEOLOGICAL POTENTIAL

Three archaeological sites (R14/457-9) were positively identified within the project footprint, all were identified as a result of the current field survey undertaken as part of this assessment. Two of the sites have been identified based on the presence of visible eroding shell midden, and the third is a pit site identified based on physical evidence of 5 rectangular depressions located on a narrow north-facing ridge.

Archaeology tends to be subsurface by nature it is likely that there are more sites within the Koning site area than the three identified. An additional six 'areas of interest' (A-C and H-I) were noted that may provide archaeological evidence.

Evidence for temporary camps and further midden deposits may be present and crop storage practices (i.e. pit sites) may be more extensive than the single site identified. There is however no current definitive archaeological evidence and, based on current understanding of the wider environment, pre-1900 landuse in the Koning site was probably relatively sparse compared to that recorded in the immediate coastal environs. Nevertheless archaeological sites tend to be subsurface and can only be identified following the removal of topsoil.

The presence of shell midden and a probable crop storage site is an indication that pre-European Maori were venturing into this land and using it, but the full nature and extent of their activities remains inconclusive. No sites which would generally be considered to hold high archaeological values such as pa or urupa have been identified. The archaeological features seen including middens, pits and possible terraces are considered typical of archaeology encountered in the wider Raglan area.

Confirming the extent of the three recorded archaeological sites and the authenticity of the possible sites (areas of interest) would require machine test trenching.

9. CONSTRAINTS AND LIMITATIONS

This report is an assessment of the impacts of the proposed zoning change on archaeological values. There are no statements on the cultural significance of the project area nor are the views of tangata whenua represented in this report.

Statements are made as to the location and nature of recorded archaeological sites and their archaeological values. The archaeological information is derived from both published material including the HNZPT Digital Archaeological Report Library and New Zealand Archaeological Association (NZAA) ArchSite Database as well as information from archaeologists who have undertaken research and HNZPT authority work in this part of the Waikato.

10. ARCHAEOLOGICAL AND OTHER VALUES

10.1. ARCHAEOLOGICAL VALUES

10.1.1. HNZPT

The following is an assessment of archaeological values based on the criteria required by HNZPT. Should there be archaeological material present the following statements on their values may be considered:

- *Condition:* Some modification is likely to have occurred from modern farming practices. Of note the current owner has planted crops in the past and has disced the land on several occasions in the past. Therefore most of the upper 30-40cm of the land has probably been modified by that activity. Archaeological evidence may be in relatively good condition within the project footprint below the upper 30-40cm. This would include deeper cut features such as crop storage pits.
- *Rarity:* Archaeological evidence within the project area does have a degree of rarity value in that little is known in particular about Maori occupation and use of this part of the wider harbour landscape pre-1900. It is not known how the inner hills south of the harbour were used, how much activity took place here, and if the lands were in use concurrently to lands in the immediate coastal environment.
- *Contextual Value:* The archaeological material identified to date is likely be associated with Maori horticultural activity, food consumption, and possibly undefended occupation.
- *Information Potential:* The known sites, and any future sites located may provide a better and more comprehensive understanding of these inner coastal landscapes and therefore settlement patterns in the region.
- *Amenity Value:* Preservation of the pit site within the study area on the basis of amenity or education value, could be appropriate in this instance.
- *Cultural Associations:* The area has cultural associations with Waikato Tainui. The association to hapu level is left for affected tangata whenua to determine.

10.1.2. WAIKATO DISTRICT PLAN (PROPOSED)

The objectives set out in the WDP are ‘a district that acknowledges its past by recognising, identifying, protecting and promoting heritage’. The values include the following, which are used to assess the current project footprint.

Value	Assessment
Architectural	N/A
Archaeological	Detailed above
Cultural	This is a matter for Tangata Whenua
Technological	Maori horticulture sites, such as that represented by the recorded pit site, represent the adaptation of a horticulture system developed in the tropics to the temperate climate of New Zealand.
Scientific	These values are effectively the same as the archaeology values.
Intrinsic or amenity values	Detailed above
Any other significant features	N/A

10.1.3. WRPS

The following criteria are based on the Waikato Regional Policy Statement.

Qualities	Value	Assessment
Archaeology	<i>Information</i>	This is detailed in the <i>Information Potential</i> value above
	<i>Research</i>	There is potential to address archaeological research questions around the adaptation of tropical Polynesian horticulture, including around forest clearance and garden preparation, and to provide radiocarbon dates, and paleoenvironmental information. This landscape may also provide a cross comparison with activities taking place immediately adjacent to the coast, and further inland from the coast.
	<i>Recognition or protection</i>	The three sites recorded constitute archaeological evidence and are therefore protected under s.42 of the <i>Heritage New Zealand Pouhere Taonga Act 2014</i> .
Architecture		N/A
Cultural	<i>Sentiment</i>	This is a matter for Tangata Whenua
	<i>Identify</i>	This is a matter for Tangata Whenua
	<i>Amenity or education</i>	Detailed above
Historic	Associative value	Associated with the Maori settlement of Whāingaroa/ Raglan Harbour and surrounding lands.
	Historical pattern	N/A
Scientific		These values are effectively the same as the archaeology values.
Technological	Technological achievement	Detailed above

11. ASSESSMENT OF EFFECTS

11.1. SUMMARY OF PROPOSAL

The Koning Family Trust are seeking to rezone their land to a residential zone. This signals land is suitable for future residential development. The residential zone will allow for the construction of dwellings, roading infrastructure, and services.

The plans provided above show the extent of the subject site (Figure 1, Figure 9, and Figure 12). No detailed plans are available at this stage and so the assessment of effects assumes any portion of the subject site may be developed in the future.

11.2. ASSESSMENT OF EFFECTS

The study area landscape is set back c.300m from the more favourable coastal locations. Based on current information, it is thought that these locations are less likely to have been the focus of permanent pre-European settlement. There are no known pa sites, kainga, or urupa within the project footprint which could be affected by the proposed zone change.

Three sites have been recorded, two represent (as a minimum) shell fish processing and/or consumption areas (middens) and the third crop storage (pit site). Such site types are some of the most common types of pre-European archaeological evidence. Additional sites may be present but not currently visible. The proposal is likely to see some modification to one or more of these recorded sites. Intrusive archaeological investigations (i.e. test trenching) can be the only way to confidently determine the presence/ absence of archaeological sites, and the extent of archaeological activity.

No evidence has been gathered to date to suggest that there are sites of exceptional archaeological value located within the zone change proposal. Of the sites identified, the pit storage site is currently thought to be in good condition and would be worth preservation within any future subdivision plans. The remaining sites, and areas of interest, should be investigated in advance of any future development.

11.3. RECOMMENDATIONS

It is recommended that:

- No alterations to the current rezone footprint are made based on known archaeological values.
- The pit site recorded as R14/459 should be considered for preservation within any scheme plan.
- Archaeological investigations be undertaken of the two the recorded midden sites R14/457 and R14/458 to determine the true nature and extent of these sites in advance of any earthworks to form a subdivision.
 - Note: the investigations will require an authority from Heritage NZ.

- Archaeological investigations of the ‘areas of interest’ are recommended to determine if there is evidence for archaeological activity. The investigations should be focused on determining the location, nature and extent of archaeological evidence. Investigations should include the following, assuming earthworks will be required in these locations:
 - Low lying areas below R14/459 in proximity to the western watercourse (Te Tarata Creek)
 - High profile north-facing ridgelines, in particular those with undulations which are thought may represent archaeological sites and area marked out as ‘old clearing’ on Figure 7 (Areas A-C and H-I).
- Note: the investigations will require an authority from Heritage NZ.
- The Koning Family Trust/ their representatives seek input from local iwi to discuss this assessment and the recommended approach.

12. REFERENCES

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- New Zealand Heritage List/Rārangi Kōrero.
- LINZ Historic Maps: 69, 6023, 903, 943, 1301A, 3809, 5977, 7178, 7656, 3809, 11339, 11340, 11604, 12258, 13913, 14349, 18264, 18598, 20108, 20514, 22162, 22322, 24725, 27106, and 30217.
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