

**Index of Evidence to the Brief of Evidence of Kathryn Amy Hurren
for and on behalf of Heritage New Zealand, 5 July 2019**

Appendix.	Document	Date	Pg.
Appendix A	Heritage New Zealand 'Form D – Application for an Exploratory Archaeological Authority'	23 September 2016	1
Appendix B	Form for the Assessment of Section 56 Applications	17 October 2016	14
Appendix C	Email from Heritage New Zealand to Waikanae Land Company Ltd re ' <i>Application for Archaeological Authority under Heritage New Zealand Pouhere Taonga Act 2014</i> ' Containing Authority as attachment	18 October 2016	20
Appendix D	Email from Steven Kerr to Andre Baker re ' <i>Commencing small Investigation test pit – Tamati Place</i> '	7 April 2017	29
Appendix E	Report to Heritage New Zealand from Mary O'Keeffe, Heritage Solutions re ' <i>Tamati Place authority 2017/316</i> '	12 June 2017	30
Appendix F	Archaeological Geomagnetic Report: Tamati Place, Waikanae, Kapiti Coast	April 2018	35
Appendix G	Tamati Place –Archaeological issues re ' <i>Report to Waikane Land Company and NZ Historic Places Trust</i> '	March 2012	57

RECEIVED

Waitangi Tribunal

8 July 2019

Ministry of Justice
WELLINGTON



HERITAGE NEW ZEALAND
POUHERE TAONGA

Form D Application for an Exploratory Archaeological Authority

This form is an application to carry out an exploratory investigation of any site or locality. For example, to establish the presence or absence of an archaeological site in an area where there are no existing indications, or to carry out limited investigation of a known site to determine its boundaries or nature.

Stage 1: Pre-Application

It is recommended that you undertake pre-application discussions with Heritage New Zealand Pouhere Taonga during the planning stages of your project, prior to submitting this form (see accompanying Guide D for contact details). This will ensure that the process will run as smoothly as possible. It is also recommended that during consultation with Tangata Whenua or Moriori (Chatham Islands), cultural protocols are established and agreed upon to ensure all parties are aware of what is expected on site while the proposed works are taking place.

Stage 2: Completing the Form

Accompanying this form is Guide D which contains information to assist in its completion. A checklist can also be found at the back of this form to ensure all required information has been provided.

Stage 3: Submitting the Form

This form plus any accompanying pages and reports may be received in electronic or hard copy format. Electronic applications must be legible, and maps and plans provided in colour at a minimum of 400dpi. Emailed electronic applications must be no larger than 10MB. Hard copy applications can be posted to the relevant Heritage New Zealand Pouhere Taonga office (see accompanying Guide D for details).

Stage 4: What Happens Next?

You will be informed in writing within five working days from the receipt at relevant Heritage New Zealand Pouhere Taonga office as to whether your application has been accepted.

Please direct any enquiries to the relevant Heritage New Zealand Pouhere Taonga office, who are here to help (see the accompanying Guide D for contact details).

There is **no fee** associated with Heritage New Zealand Pouhere Taonga processing your authority application.

Please note that once an authority is issued, it is subject to a 15 working day appeal period (plus three working days to allow receipt by all parties if sent by post), during which time the authority cannot be exercised.

If you are the owner of the land to which this authority relates, you are required to advise any successor in title that this authority applies in relation to the land. This will ensure that any new owner is made aware of their responsibility in regard to the Act.

This application is a legal document and is subject to the *Official Information Act 1992*.

Heritage New Zealand
Pouhere Taonga use only

Date received:

Application no:

Archaeologist:

SECTION A: APPLICATION SUMMARY

A.1. Name of Applicant

Name: Waikanae Land Company Limited

A.2. Location Details

Address/location to which the application relates:

Tamati Place
Waikanae
New Zealand

Legal description (e.g. Lot and DP numbers) and CT number if available (provide location plan):

Part lot 1 DP 71625

Local Authority within whose boundaries this application falls (e.g. Dunedin City Council):

Kapiti Coast District Council

A.3. Details of Archaeological Site to be affected

Are there known sites to be affected by the proposed works? ☐ Yes ☒ No If yes, provide details below:

NZAA Archaeological Site Number

Site Name (if known)

Site Type

R26/456 (in proximity)

Koiwi

A.4. Does the land lie within a :

Statutory acknowledgement area? ☐ Yes ☒ No

customary marine title? ☐ Yes ☒ No

A.5. Brief Description of Proposed Activities (tick any that apply)

- ☐ Determine the presence/absence of an archaeological site
- ☐ Determine the extent of an archaeological site
- ☐ Determine the nature of an archaeological site
- ☒ Other (please state below)

To hand-dig a test pit to determine depth of deposited fill on site and to establish depth of natural ground surface, in order to assist in interpretation of data obtained by geomagnetic survey.
The test pit will be approximately 1m (long) x 0.5m (wide) and it is expected to be about 0.5m deep.

A Summary Report has been prepared by the project archaeologist (Mary O'Keefe) which includes background information and a description of the proposed investigations and a location plan.

SECTION B: APPLICATION DETAILS

B.1. Contact Details

Contact Details of Applicant

Name:	Waikanae Land Company Limited, c/- Fitzherbert Rowe Lawyers		
Address:	Private Bag 11016, Palmerston North 4442	Daytime phone:	+64 6 3514 746
		Mobile:	
		Postcode:	
Email:	s.johnston@fitzrowe.co.nz		
Mailing Address: (if different from above)		Mailing Address Postcode:	4442

☒ Tick if you would also like the authority decision to be posted to you

Contact Details of Contact Person (if not the applicant)

Name:			
Address:		Daytime phone:	
		Mobile:	
		Postcode:	
Email:			
Mailing Address: (if different from above)		Mailing Address Postcode:	

B.2. Have any authorities been granted for the proposed areas of works in the past?

☐ Yes ☒ No

If yes, please list relevant authority numbers (contact the relevant Heritage New Zealand Pouhere Taonga office if assistance is required (see the accompanying Guide D for contact details):

--

B.3. Provide a full description (including the nature and purpose) of the investigation. Plans, drawings, and /or photographs must accompany the application. Note that plans must show the proposed activity in relation to the archaeological site, the location of the site, and its extent if known.

The proposed investigation is described fully in A.5. The attached Archaeological Summary Report describes the nature and purpose, and shows the location, of the proposed test pit.

B.4. Indicate if any of the following apply to the land under application:

- ☐ NZ Heritage List entry (previously the NZ Historic Places Trust Register) *(If yes, provide details below)*
- ☐ Covenant or Orders *(If yes, provide details below)*
- ☐ District plan schedule *(If yes, provide details below)*
- ☐ Reserve status *(If yes, provide details below)*
- ☐ Other *(If yes, provide details below)*

B.5. Specify the archaeologist who will be carrying out the archaeological work associated with this application by completing 'Form E: Application for Approval or Change of Archaeologist' (attached to the end of this form).

SECTION C: CONSULTATION

C.1. Has consultation been undertaken with the following parties?

Landowner ☒ Yes ☐ No

Any other person likely to be affected where relevant, including Tangata Whenua or Moriori (Chatham Islands) ☒ Yes ☐ No ☐ N/A

C.2. Consultation with Landowner (if not the applicant)

Contact Details:

Contact name:

Address: Daytime phone:

Mobile:

Postcode:

Email:

Provide details on the consultation undertaken, including the views and the tenor of these views. Also indicate the extent to which the protection of the archaeological site prevents or restricts the reasonable future use of the site.

This information can be below, or attached as separate documents to the application form when submitted.

C.3. Consultation with any other person likely to be affected, where relevant, including Tangata Whenua or Moriori (Chatham Islands).

Contact Details:

Group/Organisation (where appropriate):

Contact name:

Address: Daytime phone:

Mobile:

Postcode:

Email:

Provide details of the consultation undertaken, including the views and the tenor of these views.

This information can be below, or attached as separate documents to the application form when submitted.

The applicant has been engaging on and off with various members of Te Atiawa ki Whakarongotai (TAKW) over the life of development of the land. TAKW were invited by the applicant to be present onsite during the recent geophysical investigations; Les Mullen, representing TAKW attended. He performed the appropriate tikanga protocols prior to the investigations taking place. Mr Mullen was also invited to the initial briefing by the archaeologist and geophys survey specialist on the preliminary results.

During these discussions the need for the test pit was raised and Mr Mullen advised he would take back to the iwi the request for a test pit to confirm the depth of the fill from the lagoon dredgings. Ben Ngaia of TAKW provided approval on 9 August 2016 via email (attached).


SECTION D: LANDOWNER CONSENT

Obtaining consent of all landowners is a legal requirement. It is preferred that consent is obtained as part of this application however it can be provided after the authority is issued. Please note however that consent must still be obtained prior to any works being carried out.

I (please print name) Waikanae Land Company Limited hereby acknowledge:

- 1) That I have read and understood the description of proposed activity included in this application and I acknowledge and accept any implications the activity may have on me and my land.
- 2) That I have been consulted regarding the proposed activity and give my consent to the activity being carried out.
- 3) That I have read and understood the information on legal responsibilities concerning archaeological material provided in the accompanying Guide D.

Signature of landowner:

 S. Johnston (counsel)
for and on behalf of
Waikanae Land Company
Limited

Date:

23/9/2016


SECTION E: APPLICANT'S DECLARATION

I (please print name) Waikanae Land Company Limited hereby acknowledge:

- 1) That all the information provided with this application is true and correct to the best of my knowledge.
- 2) That I have read and understood the description of proposed activity included in this application and I will inform Heritage New Zealand Pouhere Taonga about any changes to the proposed activity while the application is being considered.
- 3) That I accept the responsibilities complicit with being an authority holder, including being liable for the compliance of all authority conditions and any monetary cost this will entail, including cost for analysis of archaeological material recovered and the dissemination of the data in report form.
- 4) I confirm to the best of my ability that the cost of the archaeological programme association with these proposed works will not exceed \$100,000. Please note that the approval of Heritage New Zealand Pouhere Taonga's Board will need to be sought if the programme is to exceed this figure.

If the archaeological programme is likely to exceed \$100,000 please check this box: ☐

Signature of applicant:
(or authorised agent)

 S. Johnston (counsel)
for and on behalf of
Waikanae Land Company
Limited

Date:

23/9/2016

CHECKLIST

Your application can not be considered until each section is completed, the attachments provided, and the application is signed and dated.

Have you:

- ☒ Completed each section?
- ☒ Attached a location plan? **(Section A.2)**
- ☐ Attached details of statutory acknowledgement area or customary marine title, if relevant? **(Section A.4)**
- ☒ Attached plans, drawings, and/or photographs of the proposed activity? **(Section B.3)**
- ☒ Ensured that at least one of these plans show the proposed activity in relation to the archaeological site, the location of the site, and its extent if known? **(Section B.3)**
- ☒ Completed and signed Form E **(Section B.5)**
- ☒ Provided names and contact details of landowner, and details of consultation undertaken? **(Section C.2)**
- ☒ Provided names and contact details of any other person likely to be affected including Tangata Whenua or Moriori (Chatham Islands), and details of consultation undertaken? **(Section C.4)**
- ☒ Ensured that signatures have been provided for **Sections D, E and Form E?**

Form E

Application for Approval or Change of Archaeologist

SECTION A: ARCHAEOLOGIST'S DETAILS

Name:

Address:

Daytime phone:

Mobile:

Postcode:

Email:

Mailing Address:
(if different from above)

Mailing Address Postcode:

☒ Tick if you would also like the decision to be posted to you.

SECTION B: ARCHAEOLOGIST'S DECLARATION

I (please print name) hereby acknowledge:

- 1) That I understand that I am legally responsible for current archaeological practice in respect of the Archaeological Authority for which this approval is granted.
- 2) That I meet the criteria required to be an approved archaeologist under section 45 of the *Heritage New Zealand Pouhere Taonga Act 2014*. This includes providing evidence of my sufficient skill and competency in relation to Maori values, access to appropriate cultural support and access to appropriate institutional and professional support and resources.

Signature of
Archaeologist:

Mary O'Keeffe

Digitally signed by Mary
O'Keeffe
Date: 2016.08.14 14:16:16
+12'00'

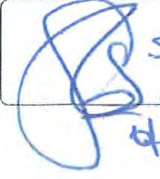
Date:

SECTION C: APPLICANT'S DECLARATION

I (please print name) hereby acknowledge:

- 1) That all the information provided with this application is true and correct to the best of my knowledge.
- 2) That I have ensured all information relevant to the proposed works has been made available to the specified archaeologist.

Signature of Applicant:

 S. Johnston (conceal)
for and on behalf
of Waikanae Land Company
Limited

Date:

TO: Heritage New Zealand
FROM: Mary O'Keeffe, Heritage Solutions
SUBJECT: Tamati Place - Application for exploratory authority
DATE: 16 September 2016

Waikanae Land Company wishes to obtain an exploratory authority in terms of the Heritage New Zealand Pouhere Taonga Act 2014 for a proposed subdivision located at Tamati Place, Waikanae. The location of the site is shown on Figures 1 and 2 below.

The history of Tamati Place is complex, and has been traversed in O'Keeffe (2012). For the sake of expediency a summary is presented here:

- Tamati Place is a partially formed subdivision.
- Koiwi were uncovered on site in 2000 during trenching work for services.
- Subsequent research established that part of the area had previously been used as an urupa, although the extent and intensity of burials has yet to be confirmed. The site was historically designated as a cemetery under the 1968 Horowhenua District Scheme. Following the sale of the site to the Waikanae Land Company Limited in 1969, the designation was uplifted by Kapiti Coast District Council after a public hearing in 1970.
- The area was significantly modified in 1969-71. A swampy area that was the former bed of the Waimeha River was created into a lagoon named the Waimanu lagoon. The location of the lagoon is shown on Figure 2 below. Dredges sucked out the former river bed material, and deposited the material onto the site raising the ground surface, which includes land that is now the area of Tamati Place.
- Archaeological research has established that shell observed on site in 2000 is not in fact archaeological; C14 dates established it was subfossil shell that was former coastal deposits.
- A geophysical survey of the proposed subdivision was undertaken in 2001; this suggested there were further anomalies within an area of the site that might be koiwi.
- The archaeologist is of the opinion that the archaeological values of the land are of far less significance than the cultural values. Apart from the koiwi there are no archaeological sites or features on the current ground surface (there is the possibility of archaeological features on the buried original ground surface but this has not been established). The archaeologist has been advised of the significance of the land and associations to the iwi; however it is not her place to comment on these values or judge the level of significance.
- Iwi do not support further development of the area; although it is noted that iwi support the proposal for this test pit.
- The developer wishes to resolve the impasse. Due to the presence of the koiwi, an archaeological authority would be required if further development was to take place.
- Therefore in an attempt to assist both parties (iwi and the developer) the archaeologist has written a status report¹ setting out known archaeological and historical context (an historian was contracted to search and summarise Maori Land Court Records as part of this process).

¹ O'Keeffe, 2012

- The archaeologist has recommended that a new geophysical survey be undertaken on the site. This is because the technology has improved markedly in the 14 years since the previous survey and the person recommended to undertake this survey is an archaeologist and very experienced in geophysics so capable of interpreting the data from a specialist archaeological perspective.
- This new survey was undertaken on 13-14 July 2016 by Dr Hans Bader.
- In order to complete his interpretation of the geophysics survey data Dr Bader requires an important piece of information, being the depth of the fill on site (the material deposited by the dredge in 1969-71). This information will affect the interpretation of some anomalies observed in the recent geophysics survey and in particular whether they are within the fill or below it in the original ground surface. Figure 3 below shows the location of the proposed test pit.
- In order to test the depth of fill O'Keeffe wishes to hand dig a test pit in an area of the site that the recent geophysics survey indicates is "quiet"; that is, there are no observed anomalies. Dr Bader has provided a set of co-ordinates for such a spot. O'Keeffe would dig a pit deep enough to observe and document the horizon between fill and natural.
- This pit, if dug, would be in an area within proximity of known archaeological features (the koiwi). Thus an exploratory authority is being sought.

Bibliography

O'Keeffe, M. 2012. Tamati Place - archaeological issues. Report to Waikanae Land Company Limited and NZ Historic Places Trust. Unpublished report



Figure 1: Location of Tamati Place (area of proposed subdivision outlined in red)



Figure 2: Aerial view of undeveloped area of Tamati Place, Waimanu lagoon (former Waimeha River and coastline) visible to north-west



Figure 3: Location of koiwi and proposed test pit

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Travel

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FW: Tamati Place (4)

People

56 View Rd, Houghton Bay, Wellington 6023
M 027 440 3769
www.heritagesolutions.net.nz

**** Please note my new email address:
mary@heritagesolutions.net.nz ****

From: Ben Ngaia [mailto:ben@tekau.maori.nz]
Sent: Tuesday, 9 August 2016 2:57 PM
To: Mary O'Keeffe
Subject: Re: Tamati Place

Tena koe Mary,

Thank you for your email. I am happy to support this small hand dug test pit taking place.

Nga mihi,

Ben

Sent from my iPhone

On 9/08/2016, at 9:37 AM, Mary O'Keeffe <mary@heritagesolutions.net.nz> wrote:

Kia ora Ben

Thank you for your new email, passed to me by Uncle Les.

I sent you a message a couple of weeks ago, which you may not have received. I'll reproduce it here – my apologies if I'm doubling up, but I want to ensure you have all the information.

My previous email was written after Hans had undertaken the geophys investigation at Tamati Place, and it included a request for consent to dig a small test trench - I attach the proposal here.

There is a particular reason for wishing to obtain permission to dig this trench – its not a proposal I suggest lightly, having some sense of the cultural significance of the area. Hans' results are a wee bit ambiguous, due in part to the thick layer of fill over the site – this is the fill that was deposited by the dredge in the 1970s when the lagoons were formed. Its important for interpretation of Hans' data that we gain an understanding of how deep this fill

is, and consequently how deep below the current surface the original ground surface is.

Thus a small hand dug test pit in a "quiet" area of the site, that is, an area that Hans's results indicate no subsurface "anomalies", can reveal the horizon between the fill & the original ground surface.

If this work were to take place, it would require an authority from Heritage NZ. The approval of the Trustees would be required for such an authority application.

Ben, I hope it goes without saying that I'm so very happy to meet you to discuss this in person – actually meeting up with you would be my preference so we can talk together about the work and its implications. (Perhaps Uncle Les might like to join us?)

Best wishes

Mary O'Keeffe
Heritage Solutions

56 View Rd, Houghton Bay, Wellington 6023
M 027 440 3769
www.heritagesolutions.net.nz

**** Please note my new email address:
mary@heritagesolutions.net.nz ****



S:\Archaeology\Archaeological Authorities

FORM FOR THE ASSESSMENT OF SECTION 56 APPLICATIONS

A EXPLORATORY AUTHORITY APPLICATION:

File ref: 11013-019

1 Applicant Details

<i>Applicant:</i>	Waikanae Land Company Ltd
<i>Address:</i>	C/- S Johnstone Fitzherbert Rowe Layers Private Bag 11016 PALMERSTON NORTH 4442
<i>Application Number& Acceptance Date:</i>	2017/316 of 6 October 2016
<i>District Council:</i>	Kapiti Coast District Council
<i>Site Location:</i>	Tamati Place, Waikanae
<i>Land Description/status:</i>	Part lot1 DP 716625
<i>Archaeologist nominated under s45:</i>	Mary O'Keeffe

2 Archaeological Site Details:

<i>NZAA Site Numbers:</i>	Possible subsurface, to be determined
<i>Site Type:</i>	n/a
<i>Number on New Zealand Heritage List:</i>	n/a

3 Description of archaeological sites and sources including background, previous modifications and recent site history. Include references: - section 56(2)

Tamati Place is located inland from Waikanae Beach and is the location of an unfinished subdivision that was stopped in 2000 when human remains were exposed during trenching works. The subdivision never progressed from this point.

The property in question was identified and was partitioned for use as a Maori Cemetery in 1919. The land was surveyed in 1920 and the 20 Acre cemetery became Ngarara Block section A 14B No1. The Waikanae Land Company (in its earlier edition) purchased the parcel of land some time in 1969. A letter from the Company to Horowhenua County Council dated 26th August 1969 noted that enquiries made by the Company indicated the land had never been used as a burial ground for Maori, but may have had some Europeans buried there. Use of the land as a traditional Maori burial has been disputed and removal of the cemetery status of the land was objected to by a number of iwi. A decision was made in 1970 to remove the cemetery status of the land as there was no certain evidence that it was used as a historical Maori burial Ground, or that interments had taken place there.

European gravestones were located on the subject which were reported to mark the burial places of William Browne, Margaret Nairn, and Penelope Durie. These headstones have been relocated to the recreation reserve beside the current lagoon but there is no record as to whether the bodies of the people were also recovered.

In 2000 trenches for services were dug along the centrelines of the proposed roads to be known as Tamati Drive and Wi Kingi Place, and human bones were exposed, along with apparently archaeological midden. The bones were exposed in a discrete area within the trench towards the end of Wi Kingi Place, and the midden was exposed in one section in the trench along Tamati Place, opposite the intersection with Wi Kingi Place. The human remains removed on 5 July 2000 consisted of 2 skulls, 1 shoulder bone, 2 collarbones, rib fragments

and two leg bones. Susan Forbes visited the site and noted shell and hangi stones scattered over the subdivision. Further works by site workers on 19 July 2000 encountered further remains including a skull in the trench, several large bones and a skull discovered in the spoil heap, 2 rib bones from the northern side of the trench and 2 further burials removed from the trench. Pieces of wood were identified along with the remains which implies they were once located in coffins and the burials were Christian burials. During the visit by Forbes she noted at least six intact middens along a service trench.

There are five theories of whom the remains belonged and a full summary can be found in Mary O'Keeffe's assessment (page 30).

Mary O'Keeffe does not believe the shell originally seen by Susan Forbes is archaeological. Her explanation is that the graves along Wi Kingi Place are in a part of the subdivision where fill was deposited in 1990. The burials were below the ground surface as it existed before the 1990 earthworks and would have been undisturbed until the service trenches were excavated in 2000. The property has been considerably modified in the last 30 years beginning in the 1960s (69-71) when a swampy area that was the former bed of the Wimeha River was created into a lagoon named the Waimanu Lagoon. The lagoon was excavated with a floating suction dredge that pumped material from the bed of the lagoon and discharged it onto the south eastern lagoon shore.

In 1990 and 1999 the ground surface of the subdivision was re-contoured. In 1990 the ground to the west of Wi Kingi Place was cut to a maximum depth of slightly more than 3m on the dune ridge, and slightly more than 0.5m west of the intersection between Tamati Place and Wi Kingi Place. Fill was deposited on the eastern part of the subdivision to a maximum depth of 4m. In addition, small pockets in the western part were filled to a depth of less than 1m. In 1999 the earthworks resulted in minor cutting to a maximum depth of about 1m on the north-eastern boundary of Wi Kingi Place and along Tamati Place, and the western and northern parts of the subdivision were filled to a maximum depth of 1m. Small pockets of cut and fill were made along the dune ridge southeast of Tamati Place, the maximum cut being about 2m, and the maximum fill about 1m.

Mary O'Keeffe believes that the shells on the present ground surface of the subdivision are nearly all on fill and would have been deposited in their present position either during or since 1990. The material from the lagoon was likely reworked in 1990 and then again in 1999. The material seen by Forbes was either fill and probably deposited in that position in 1990 or could have been deposited in that position in 1970 as dredge spoil. Testing of shell collected in 2001 indicates that they are from natural deposits and are derived from a former beach in the position of the present lagoon.

GPR survey was undertaken in 2002 and noted anomalies within the subdivision. None of these anomalies have ever been ground-truthed and was not undertaken by a trained archaeologist. A new survey has recently been undertaken by Hans Bader. The test pit being applied for under this application is for the purposes of ground truthing in one particular area.

Source

O'Keeffe, M. 2012. Tamati Place – Archaeological Issues: Report to Waikanae Land Company and New Zealand Historic Places Trust. Unpublished archaeological assessment

- 4 Nature and purpose of proposed investigation including description of proposed methodology in line with accepted archaeological practice: - section 56(2)

Mary O'Keeffe plans to hand dig a test pit to determine depth of deposited fill at Tamaiti in a particular location. The purpose of the test pit is to establish depth of natural ground surface to assist in the interpretation of data obtained by geomagnetic survey.

The test pit will be approximately 1m long by 0.5 wide by 0.5 deep. The location of the proposed test pit will be in the area identified below.

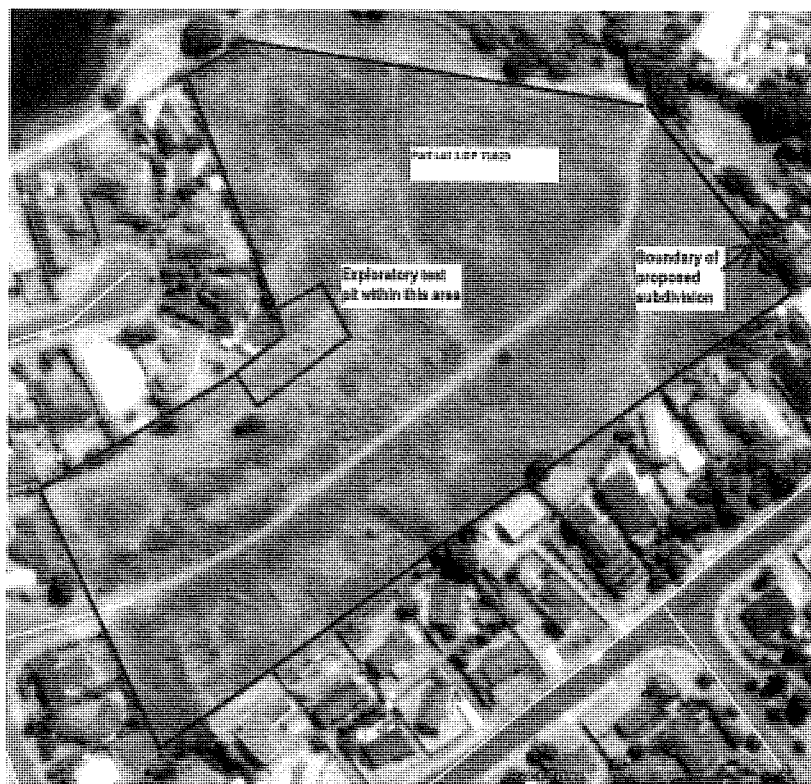


Figure 1: location of test pit

- 5 Consents:
- Landowner Y
 - Occupier n/a- the lot is presently empty – there are no occupiers

B ARCHAEOLOGICAL ASSESSMENT

- 6 Comment on how you have taken the interests of the landowner and applicant into account: - section 59(1)(a)(iii) and 56(2)
Applicant is the landowner.

- 7 Confirm that the applicant can meet the requirements of section 56(6)(b) (i.e. return the site or locality as nearly as possible to its former state)

The test pit is only 1m long by 0.5 wide and likely only 0.5 deep. The test pit will be refilled once the relevant information has been taken out of it.

8 Any other comments:

Tamati Place has a long history of issues with Heritage New Zealand and tangata Whenua. In conversation with Mary O'Keeffe on 6 October 2016 it was confirmed that the test pit is only to ground truth one particular feature of Hans Baders geophysical survey in order that he can complete his report on the subject property. The result of the test pit will in itself not be used over and above verifying Han's work. After the test pit is complete the project archaeologist and project manager wish to sit down with all parties to sort out the subdivision issues and progress the development.

The Regional Archaeologist is familiar with the subject property and last visited the site in 2012.

9 Archaeologist's summary of archaeological aspects:

- (a) application is capable of being granted,
- (b) conditions should be imposed as stated in the determination.

Recommend that authority be granted upon the conditions stated in the determination (No. 13 below).

Kathryn Hurren, Regional Archaeologist

Date: 07 October 2016

C VALUES ASSESSMENT FOR SITES OF INTEREST TO MAORI

10 Tangata Whenua and Applicant Consultation Details: - sections 46(2)(g) and 46(2)(h).

The applicant has met with Les Mullen as a representative of Te Atiawa ki Whakarongotai Charitable Trust on 13-14 July as part of initial geophysical survey of the site and the views were in support as expressed in the email provided by Ben Ngaia on 9 August 2016. Consultation is considered adequate for this application.

11 Comment on whether this application applies to a statutory acknowledgement area and how these requirements have been taken into account:- section 59(1)(a)(v)

N/A

12 Maori Heritage Council: – section 49(1)(a)

This application relates to a site of interest to Maori. This application is considered to be

- (a) Level C: Delegated to Kaihau

The reasons for allocating this application to that level are:

- Consultation has been adequate
- All views expressed have been considered
- An appeal is not expected

Under section 49(1)(a) of the Act, an application over sites of interest to Maori must be referred to the Maori Heritage Council to make recommendations. In this instance it is recommended that the application does not require the approval of the Maori Heritage Council as stated above

Dean Whiting acting Maori Heritage Adviser and Maori Heritage Manager Central and Southern region

Date: 11/10/2016

D RECOMMENDATION**13 Compliance with the provisions of Part 3 Subpart 2:**

All processes are in compliance with Part 3 Subpart 2 of the *Heritage New Zealand Pouhere Taonga Act 2014*.

The recommendation of the Senior Archaeologist is:

GRANT

Heritage New Zealand Pouhere Taonga grants an exploratory authority pursuant to section 56 of the Heritage New Zealand Pouhere Taonga Act 2014, within the area outlined in Appendix 1 within Part Lot 1 DP 71625 to Waikanae Land Company Limited for the proposal to undertake a test pit at Tamati Place, Waikanae, with conditions as set out in the Authority.

Senior Archaeologist



Date 17/10/16

E APPROVED ARCHAEOLOGIST

Form for assessment of approval of archaeologist.

14 Applicant Details

Applicant: Waikanae Land Company Ltd
Address: C/- S Johnstone
 Fitzherbert Rowe Layers
 Private Bag 11016
 PALMERSTON NORTH 4442
Application Number & Acceptance Date: **2017/316 of 6 October 2016**
Archaeologist to be Approved **Mary O'Keeffe**

15 Comment on how the nominated archaeologist meets the requirements of section 45(2) as follows: Has sufficient skill and competency, and has access to appropriate institutional and professional support and resources.

Mary O'Keeffe has the sufficient skills to undertake the proposed test pit. She is familiar with the site and has worked along the Kapiti Coast for a number of years.

16 Comment on how the nominated archaeologist meets the requirements of section 45(2) as follows: In the case of a site of interest to Maori, has the requisite competencies in relation to Maori values, and has access to appropriate cultural support.

Mary O'Keeffe has worked with Te Atiawa ki Whakarongotai on other projects along the Kapiti Coast. She will have the relevant cultural support to undertake the necessary work.

It is recommended that the proposal by the applicant to engage Mary O'Keeffe to carry out the archaeological work required under authority 2017/316 pursuant to section 45(2) of the Act is approved.

Kathryn Hurren, Regional Archaeologist

Date: 7 October 2016

Dean Whiting, Pouarahi

Date: 11 October 2016

The recommendation of the Senior Archaeologist is to approve.

Senior Archaeologist



Date: 18/10/16



S:\Archaeology\Archaeological Authorities

18 October 2016

File ref: 2017/316
11013-019

Waikanae Land Company Ltd
C/- S Johnstone
Fitzherbert Rowe Layers
Private Bag 11016
PALMERSTON NORTH 4442

Tena koe

**APPLICATION FOR ARCHAEOLOGICAL AUTHORITY UNDER HERITAGE NEW ZEALAND
POUHERE TAONGA ACT 2014: Authority no. 2017/316: TAMATI PLACE, WAIKANA**

Thank you for your application for an archaeological authority which has been granted and is attached.

In considering this application, Heritage New Zealand Pouhere Taonga notes that your project archaeologist, Mary O'Keeffe wishes to hand dig a test pit to determine the depth of deposited fill at Tamati Place in a particular location. The purpose of the test pit is to establish depth of natural ground surface to assist in the interpretation of data obtained by geomagnetic survey. The test pit will be approximately 1m long by 0.5 wide by 0.5 deep.

The site is of significance Te Atiawa ki Whakarongotai Charitable Trust and we appreciate the consultation you have undertaken.

Please inform Te Atiawa ki Whakarongotai Charitable Trust, the approved archaeologist and the Heritage New Zealand Pouhere Taonga Regional Office of start and finish dates for the work.

An appeal period from receipt of decision by all parties applies. Therefore this authority may not be exercised during the appeal period of 15 working days or until any appeal that has been lodged is resolved.

If you have any queries please direct your response in the first instance to:

Kathryn Hurren
Regional Archaeologist
Heritage New Zealand Pouhere Taonga, Wellington Office
PO Box 2629, Wellington 6140

Phone (04) 494 8324 Email Archaeologist2CR@heritage.org.nz

Yours sincerely



Pam Bain
Senior Archaeologist

cc: Waikanae Land Company Limited
via email at via email at s.johnstone@fitzrowe.co.nz

cc: Steven Kerr
via email at via email at steven.kerr@xtra.co.nz

cc: Mary O'Keeffe
via email at mary@heritagesolutions.net.nz

cc: Te Atiawa ki Whakarongotai Charitable Trust
via email at via email at admin@teatiawakikapiti.co.nz

cc: Planning Manager
Kapiti Coast District Council
via email at paula.fletcher@kapiticoast.govt.nz, paul.busing@kapiticoast.govt.nz and
Natasha.tod@kapiticoast.govt.nz

Pursuant to Section 51 Heritage New Zealand Pouhere Taonga Act 2014 Heritage New Zealand Pouhere Taonga must notify TLAs of any decision made on an application to modify or destroy an archaeological site. We recommend that this advice is placed on the appropriate property file for future reference.

cc: Ministry for Culture and Heritage
via email at protected-objects@mch.govt.nz

Pursuant to Section 51 Heritage New Zealand Pouhere Taonga Act 2014

cc: NZAA Central Filekeeper
c/o DOC, WELLINGTON
Attn: Nicola Molloy
via email at nmolloy@doc.govt.nz

cc: Heritage New Zealand Pouhere Taonga Regional Archaeologist, Kathryn Hurren

cc: Heritage New Zealand Pouhere Taonga Central Region General Manager, Claire Craig

cc: Heritage New Zealand Pouhere Taonga Maori Heritage Advisor, Dean Whiting



HERITAGE NEW ZEALAND
POUHERE TAONGA

AUTHORITY

Heritage New Zealand Pouhere Taonga Act 2014

AUTHORITY NO: 2017/316

FILE REF: 11013-019

DETERMINATION DATE: 18 October 2016

EXPIRY DATE: 18 October 2021

AUTHORITY HOLDER: Waikanae Land Company Ltd

**POSTAL ADDRESS: C/- S Johnstone
Fitzherbert Rowe Layers
Private Bag 11016
PALMERSTON NORTH 4442**

ARCHAEOLOGICAL SITES: Unrecorded sites

LOCATION: Tamati Place, Waikanae

APPROVED ARCHAEOLOGIST: Mary O'Keeffe

LANDOWNER CONSENT: Landowner is applicant

This authority may not be exercised during the appeal period of 15 working days or until any appeal that has been lodged is resolved.

DETERMINATION

Heritage New Zealand Pouhere Taonga grants an exploratory authority pursuant to section 56 of the Heritage New Zealand Pouhere Taonga Act 2014, within the area outlined in Appendix 1 within Part Lot 1 DP 71625 to Waikanae Land Company Limited for the proposal to undertake a test pit at Tamati Place, Waikanae subject to the following conditions:

CONDITIONS OF AUTHORITY

1. The proposed test pit must be excavated by an archaeologist approved by Heritage New Zealand Pouhere Taonga in the location indicated on the attached plan (Appendix 1).
2. Any archaeological evidence encountered during the exercise of this authority must be investigated, recorded and analysed in accordance with current archaeological practice.

3. As no protocols between the authority holder and Te Atiawa ki Whakarongotai Charitable Trust were provided with the authority application, the following shall apply:
 - a) Access for Te Atiawa ki Whakarongotai Charitable Trust shall be enabled in order to undertake tikanga Maori protocols consistent with any requirements of site safety.
 - b) Te Atiawa ki Whakarongotai Charitable Trust shall be informed 48 hours before the start and finish of the archaeological work.
 - c) If any koiwi tangata (human remains) are encountered, all work should cease within 5 metres of the discovery. The Heritage New Zealand Pouhere Taonga Regional Archaeologist, New Zealand Police and Te Atiawa ki Whakarongotai Charitable Trust must be advised immediately in accordance with Guidelines for Koiwi Tangata/Human Remains (Archaeological Guideline Series No.8) and no further work in the area may take place until future actions have been agreed by all parties. This condition is not a statement of mana whenua status.
 - d) Te Atiawa ki Whakarongotai Charitable Trust shall be informed if any possible taonga or Maori artefacts are identified to enable appropriate tikanga protocols to be undertaken, so long as all statutory requirements under the Heritage New Zealand Pouhere Taonga Act 2014 and the Protected Objects Act 1975 are met.
 - e) Te Atiawa ki Whakarongotai Charitable Trust shall be provided with a copy of any reports completed as a result of the archaeological work associated with this authority and be given an opportunity to discuss it with the archaeologist if required.

4. That within 2 months of the completion of the on-site archaeological work, the authority holder shall ensure that a final report, completed to the satisfaction of Heritage New Zealand Pouhere Taonga, is submitted to the Heritage New Zealand Pouhere Taonga Regional Archaeologist.
 - a) A digital copy of the final report is to be sent to the Heritage New Zealand Pouhere Taonga Regional Archaeologist.
 - b) Digital copies of the final report must also be sent to: NZAA Central Filekeeper and Te Atiawa ki Whakarongotai Charitable Trust
 - c) Site record forms must be updated or submitted to the NZAA Site Recording Scheme.

Signed for and on behalf of Heritage New Zealand.

Te K. Teira

Te Kenehi Teira
 Kaihautu Maori
 Heritage New Zealand Pouhere Taonga
 PO Box 2629
 WELLINGTON 6140

Date *18-10-16.*

Appendix 1: Location of test pit.

ADVICE NOTES**Contact details for Heritage New Zealand Regional Archaeologist**

Kathryn Hurren
Regional Archaeologist
Heritage New Zealand Pouhere Taonga, Wellington Office
PO Box 2629, Wellington 6140

Phone (04) 494 8324 Email Archaeologist2CR@heritage.org.nz

Current Archaeological Practice

Current archaeological practice may include, but is not limited to, the production of maps/ plans/ measured drawings of site location and extent; excavation, section and artefact drawings; sampling, identification and analysis of faunal and floral remains and modified soils; radiocarbon dating of samples; the management of taonga tuturu and archaeological material; the completion of a final report and the updating of existing (or creation of new) site record forms to submit to the NZAA Site Recording Scheme. The final report shall include, but need not be limited to, site plans, section drawings, photographs, inventory of material recovered, including a catalogue of artefacts, location of where the material is currently held, and analysis of recovered material.

Please note that where one is required, an interim report should contain a written summary outlining the archaeological work undertaken, the preliminary results, and the approximate percentage of archaeological material remaining *in-situ* and a plan showing areas subject to earthworks, areas monitored and the location and extent of any archaeological sites affected or avoided.

Rights of Appeal

An appeal to the Environment Court may be made by any directly affected person against any decision or condition. The notice of appeal should state the reasons for the appeal and the relief sought and any matters referred to in section 58 of the Heritage New Zealand Pouhere Taonga Act 2014. The notice of appeal must be lodged with the Environment Court and served on Heritage New Zealand Pouhere Taonga within 15 working days of receiving the determination, and served on the applicant or owner within five working days of lodging the appeal.

Review of Conditions

The holder of an authority may apply to Heritage New Zealand Pouhere Taonga for the change or cancellation of any condition of the authority. Heritage New Zealand Pouhere Taonga may also initiate a review of all or any conditions of an authority.

Non-compliance with conditions

Note that failure to comply with any of the conditions of this authority is a criminal offence and is liable to a penalty of up to \$120,000 (Heritage New Zealand Pouhere Taonga Act 2014, section 88).

Costs

The authority holder shall meet all costs incurred during the exercise of this authority. This includes all on-site work, post fieldwork analysis, radiocarbon dates, specialist analysis and preparation of interim and final reports.

Assessment and Interim Report Templates

Assessment and interim report templates are available on the Heritage New Zealand Pouhere Taonga website: archaeology.nz

Guideline Series

Guidelines referred to in this document are available on the Heritage New Zealand Pouhere Taonga website: archaeology.nz

The Protected Objects Act 1975

The Ministry for Culture and Heritage ("the Ministry") administers the Protected Objects Act 1975 which regulates the sale, trade and ownership of taonga tūturu.

If a taonga tūturu is found during the course of an archaeological authority, the Ministry or the nearest public museum must be notified of the find within 28 days of the completion of the field work.

Breaches of this requirement are an offence and may result in a fine of up to \$10,000 for each taonga tūturu for an individual, and of up to \$20,000 for a body corporate.

For further information please visit the Ministry's website at <http://www.mch.govt.nz/nz-identity-heritage/protected-objects>.



HERITAGE NEW ZEALAND
POUHERE TAONGA

APPROVED ARCHAEOLOGIST

Heritage New Zealand Pouhere Taonga Act 2014

AUTHORITY NO: 2017/316

FILE REF: 11013-019

APPROVAL DATE: 18 October 2016

This approval may not be exercised during the appeal period of 15 working days or until any appeal that has been lodged is resolved.

APPROVAL

Pursuant to section 45 of the Act, **Mary O'Keeffe**, is approved by Heritage New Zealand Pouhere Taonga to carry out any archaeological work required as a condition of authority 2017/316, and to compile and submit a report on the work done. Mary O'Keeffe will hold responsibility for the current archaeological practice in respect of the archaeological authority for which this approval is given.

Signed for and on behalf of Heritage New Zealand.

Te K. Teira

**Te Kenehi Teira
Kaihautu Maori
Heritage New Zealand Pouhere Taonga
PO Box 2629
WELLINGTON 6140**

Date *18-10-16.*

jacki.cole@icloud.com

From: Steven Kerr <steven.kerr@xtra.co.nz>
Sent: Friday, 7 April 2017 5:17 PM
To: 'Andre Baker'
Cc: 'Kristie Parata'; 'Shannon Johnston'; Kathryn Hurren
Subject: Commencing small Investigation test pit - Tamati Place

Kia ora Andre

Further to my email of 5 April, previous communications and subsequent voicemail and text I left on your phone, I am advising that we propose to commence this small investigation test pit at Tamati Place on Monday 10 April 2017.

The archaeologist will be on site at 9am and plans to commence at 10am. The work should be completed by approximately midday that same day.

This advice is in accordance with the conditions of the authorisation granted by Heritage New Zealand.

As per our previous communications we once again invite representatives of the Trust to observe the work and to undertake any tikanga protocols that may be required.

If you have any queries or wish to discuss this further please feel free to call me.

Regards

Steve Kerr
021 759 887

TO Heritage New Zealand
FROM: Mary O’Keeffe, Heritage Solutions
SUBJECT: Tamati Place authority 2017/316
DATE: 12 June 2017

Introduction

An archaeological authority (2017/316) was granted by Heritage New Zealand Pouhere Taonga for a small hand dug test pit on a partially developed subdivision on the Kapiti Coast. This report is presented in fulfilment of condition 4 of the authority.

Tamati Place is a partially developed subdivision on the Kapiti Coast. Its location is shown in Figure 1.

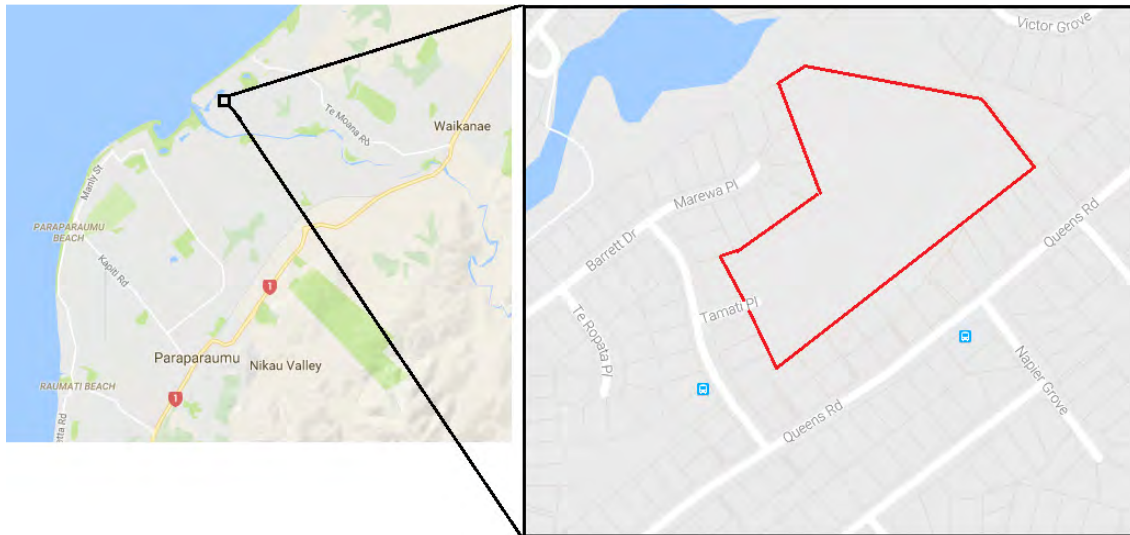


Figure 1: Location of Tamati Place (area of proposed subdivision outlined in red)

Background to the application for exploratory authorisation

Koiwi tangata / human remains were uncovered on site in 2000 during trenching and follow-up testing work for services for development of the proposed subdivision. The location of the koiwi tangata / human remains is shown outlined in red on Figure 2.

Subsequent research has established that a part of the area had previously been used as an urupa, although the extent and intensity of burials has yet to be confirmed. Part of the area had been designated as a cemetery in the Horowhenua County District Scheme. However, following the sale of the site by the Maori owners to the Waikanae Land Company in 1969, the designation was uplifted by the Horowhenua Council in 1970. A geophysical survey was undertaken in 2003 to endeavour to clarify whether there were potentially other burials on the site. That survey

identified the location of the koiwi tangata / human remains and several other ground density anomalies in the vicinity of that area.

The area was significantly modified in 1969-71. A swampy area that was a former beach ridge and the former bed of the Waimeha River was created into a lagoon named the Waimanu lagoon (the former bed of the river forms the northern boundary of much of the proposed subdivision). Dredges sucked out the former river bed and beach material, and deposited the material onto the site raising the ground surface, which includes land that is now the area of Tamati Place.

A geomagnetic survey was undertaken by Dr Hans Dieter Bader in July 2016, to determine the possibility of further burials across the area of the proposed subdivision. In order to verify the results of his geomagnetic survey Dr Bader required a test pit to be hand dug on the site, to determine the depth and nature of the substrate. As noted, in the course of constructing the landscape in 1969-71 dredged material was deposited onto the existing ground surface. The test pit was to check and verify the location and depth of this (and any other) deposited material, to assist in the interpretation of the data obtained by the geomagnetic survey.

Due to the cultural sensitivities of the site the archaeologist felt a conservative and cautious approach was appropriate. Therefore an archaeological authority was sought for the hand dug test pit, despite the fact that no known archaeological material was being disturbed, and the test pit was located away from anomalies identified in the course of the geomagnetic survey.

The location of the test pit is shown outlined in blue on Figure 2.



Figure 2: Location of test pit

Test pit: blue outline

Koiwi exposed in 2000: red oval

The hand dug pit was excavated by Dr Hans-Dieter Bader.

Bader advised:

“[The pit] showed a deep topsoil, dark brown in the upper, modern part of it and more darker in the lower part. It overlays clean sand. There is no indication of a layer of dredged sand. The depth of the topsoil indicates centuries of build up of the top soil. It is very unlikely that these natural layers would have developed after the dredging of sand to create the lake nearby. As the land in this area seems to be untouched by the dredging, the geomagnetic data shows features and material accumulated close to the surface that could be relevant to the question of burial pits.”¹



Figure 3: Stratigraphic section in test pit

The soil layers in the test pit, from surface to base are:

¹ Archaeology Solutions, in press: 7

- Yellow/dark brown=modern topsoil
- Upper layer merging into an older and darker topsoil. This lower topsoil has a clear well formed lower boundary, indicating the dune was stable for some time to allow this clear horizon to form
- Lowest level is nearly clean sand of the palaeo dune.

Of particular note is a large spoil heap of material deposited from earthworks on the north-east corner of the site (shows as the yellow outline in Figure 4).



Figure 4: Location of dredged spoil heap (yellow outline)

Implications for site of test pit results:

The test trench has shown two important things that are relevant to understanding of the physical site of Tamati Place:

- Dredged material is only located over part of the subdivision. Therefore anomalies shown by a geophysical survey are not being interpreted through a thick layer of deposited material, and are likely to be reasonably close (less than 2m) below the ground surface

- The topsoil build up is substantial and sufficiently different to the lower sand layer to express a different magnetic signature.

Conclusion

The above soil profile gained from digging of the test pit and observation of physical landform has provided a clearer understanding of the wider stratigraphy of the landscape and is likely to assist with the interpretation of the data from the geomagnetic survey.

Sources:

Archaeology Solutions Ltd. In Press. Archaeological Geomagnetic Report: Tamati Place, Waikanae, Kapiti Coast.



Archaeological Geomagnetic Report: Tamati Place, Waikanae, Kapiti Coast

Prepared for:

Fitzherbert Rowe Lawyers
Private Bag 11016,
Palmerston North 4442

Prepared by:

Archaeology Solutions Ltd
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Blockhouse Bay
AUCKLAND 0644
New Zealand
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Date: April 2018

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Contents:

Contents:.....	2
1.0 Introduction.....	5
2.0 Brief.....	5
3.0 Background.....	5
3.1 Project Background.....	5
3.2 Archaeological Background.....	8
3.2.1 Marked 'graves' (1898).....	8
3.2.2 District Plan change (1969).....	8
3.2.3 Discovery of human remains (2000).....	9
3.2.4. Ground penetrating radar survey (2003).....	9
4.0 Methodology.....	9
4.1 Geomagnetism.....	9
4.2 Background "noise".....	11
4.3 Other Data.....	11
4.4 Differences between geophysical investigations (2003 vs 2016).....	11
5.0 Results.....	12
5.1 Test trench results.....	12
5.2 Geomagnetic Results.....	16
6.0 Discussion.....	23
7.0 Acknowledgments.....	23
8.0 References.....	24
8.1 Primary Sources.....	24
8.2 Secondary Sources.....	24

Figures:

Figure 1: Location of subject area.....	5
Figure 2: Proposed subdivision with service lines as planned, not as built.....	6
Figure 3: Soil layers in test trench. Depth about 60 cm from surface.....	12
Figure 4: Soil layers in test trench: dark brown=modern topsoil, merging into an older and darker topsoil. Lowest level is nearly clean sand of the palaeo dune. The topsoil layers are quite sandy/silty. Natural build up of top soil over a long time is likely.....	13
Figure 5: Location of test trench (with Daniel Parker and Steven Kerr).....	13
Figure 6: Lightly coloured service trenches radiating from a manhole; kerb from road turning circle visible too.....	14
Figure 7: A metal pipe buried deeply, showing a linear alternating di-polar signature.....	15
Figure 8: Strong di-polar (plus and minus values close together) anomalies indicating pieces of metal under the surface.....	15
Figure 9: Possible small pits without metal. Approximately 1.5m x 1m disturbances to the natural soil layers. Some stronger, some weaker.....	16
Figure 10: Possible small pits without metal. Roughly rectangular. 1.5m x 1m. Three weaker anomalies and one stronger one. Strong metal anomalies nearby, especially to the left. Also visible are very small soil disturbances that are too small to be pits. Together with the metal they are probably remnants of the building process (e.g. burning of the building rubbish) to the west of the proposed development.....	16
Figure 11: Geomagnetic survey overlaid onto aerial and cadastral (green areas within the survey extent indicate small area with no data due to dense vegetation cover).....	18
Figure 12: as above. Overlaid with proposed development and services as planned.....	18
Figure 13: Previously recorded anomalies.....	19
Figure 14: Test Trench location.....	19
Figure 15: Interpretation of the geomagnetic survey (test trench in blue).....	20

1.0 Introduction

Human remains were discovered on the subject site in 2000 when utility service trenching and pipeline installation was being finalised for a subdivision. Some of the human remains were described as having Maori characteristics but the rest as of unknown ethnicity (Tyles 2001, summarised in O’Keeffe 2012). The site is currently zoned residential but was previously designated “Maori Cemetery” (in the 1968 Horowhenua County Council District Scheme). Given the discovery of human remains on the site, the landowner would like to confirm whether the site was used for extensive burials other than the remains currently known. The question therefore, that has been posed to the author is whether burial pits can be detected with non-intrusive methods. The purpose of this geomagnetic survey was to address this question. A previously undertaken Ground Penetrating Radar survey indicated a number of individual anomalies, which remained unconfirmed but indicate pits which could have been used as burial pits.

2.0 Brief

Fitzherbert Rowe Lawyers on behalf of the landowner (Waikanae Land Company) instructed Archaeology Solutions Ltd to undertake a geomagnetic archaeological survey over the subject site.

3.0 Background

3.1 Project Background

The residential subdivision of the subject site (undeveloped land at Tamati Place, see Figure 1 & 2) is still proposed. The services were trenched and laid into the ground in 2000 under the terms of the subdivision consent previously given by the Horowhenua County Council. During final testing, and some additional digging for remedial pipeline work, human remains were discovered and initially removed from the land. Those remains were subsequently re-interred by Iwi on site close to the area where they were discovered.

The Waimea Stream was dredged in the 1960s to develop the current lagoon and the dredged material was placed over parts of the site to shape and contour it for further development (O’Keeffe 2012:22-24). The original land surface of the site is palaeo sand dunes. The western corner of the land clearly shows signs of this, but within the other areas of the proposed subdivision this is much less obvious. A test pit was dug in April 2017 to decide this question under an exploratory authority issued by Heritage New Zealand Pouhere Taonga.

The Tamati Place land was designated in the 1968 Horowhenua County Council District Plan as ‘Maori Cemetery’. The designation was uplifted by the Horowhenua County Council

in or about 1969 following the statutory process set out in the Town and Country Planning Act 1953. This process included public notification and a hearing where an opposing submission by a member of the local Iwi was presented. The number of burials on the site is currently unknown and unconfirmed. However, there were two headstones on the land in 1968 when it was purchased from the Maori Trustee (appointed by the Maori owners as their agent for effecting a sale). Those headstones were removed and now form part of a memorial established on adjoining reserve land. Local Iwi representatives advised the representatives of the landowner during meetings between 2014 and 2017, to discuss the recommencement of development of the site that they believed the site to be a burial ground referred to as Karewarewa. This view was supported by a Cultural Impact Assessment commissioned by Fitzherbert Rowe and undertaken by Te Atiawa ki Whakarongotai Charitable Trust (organisation representing the local Iwi). It is this information that the landowner sought to try and verify with this geomagnetic archaeological survey (pers comm Steven Kerr).

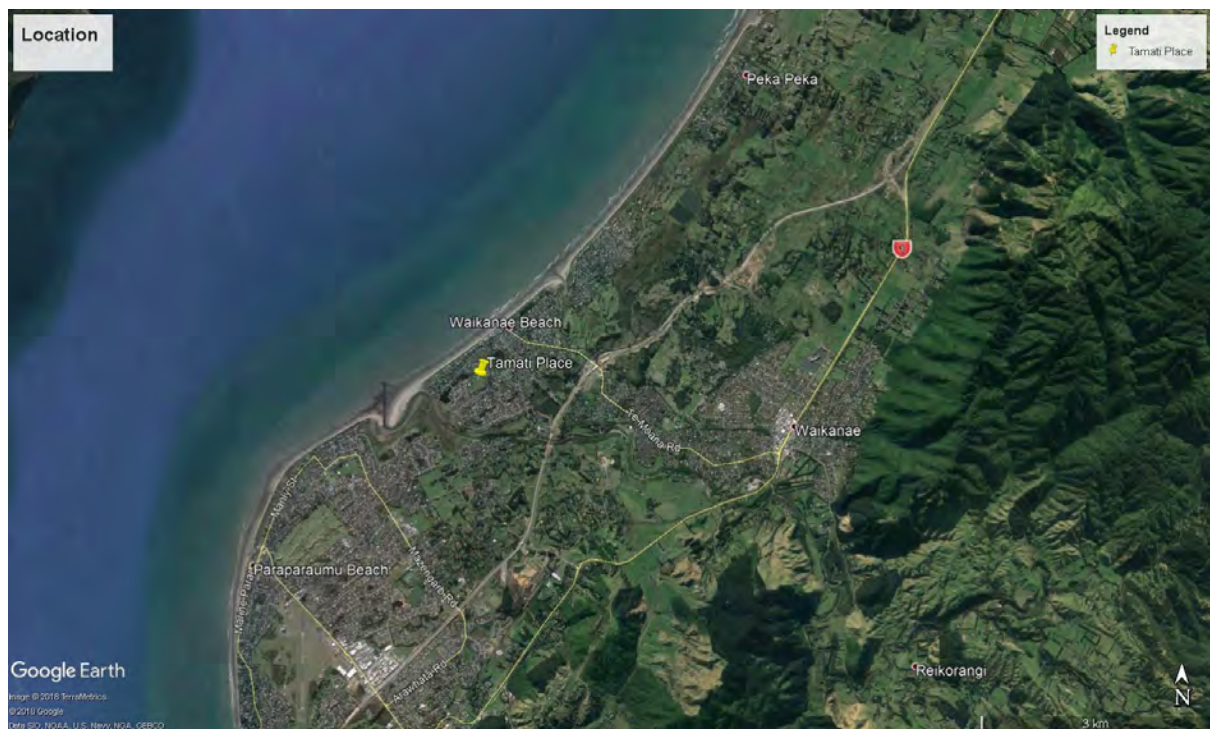


Figure 1: Location of subject area.

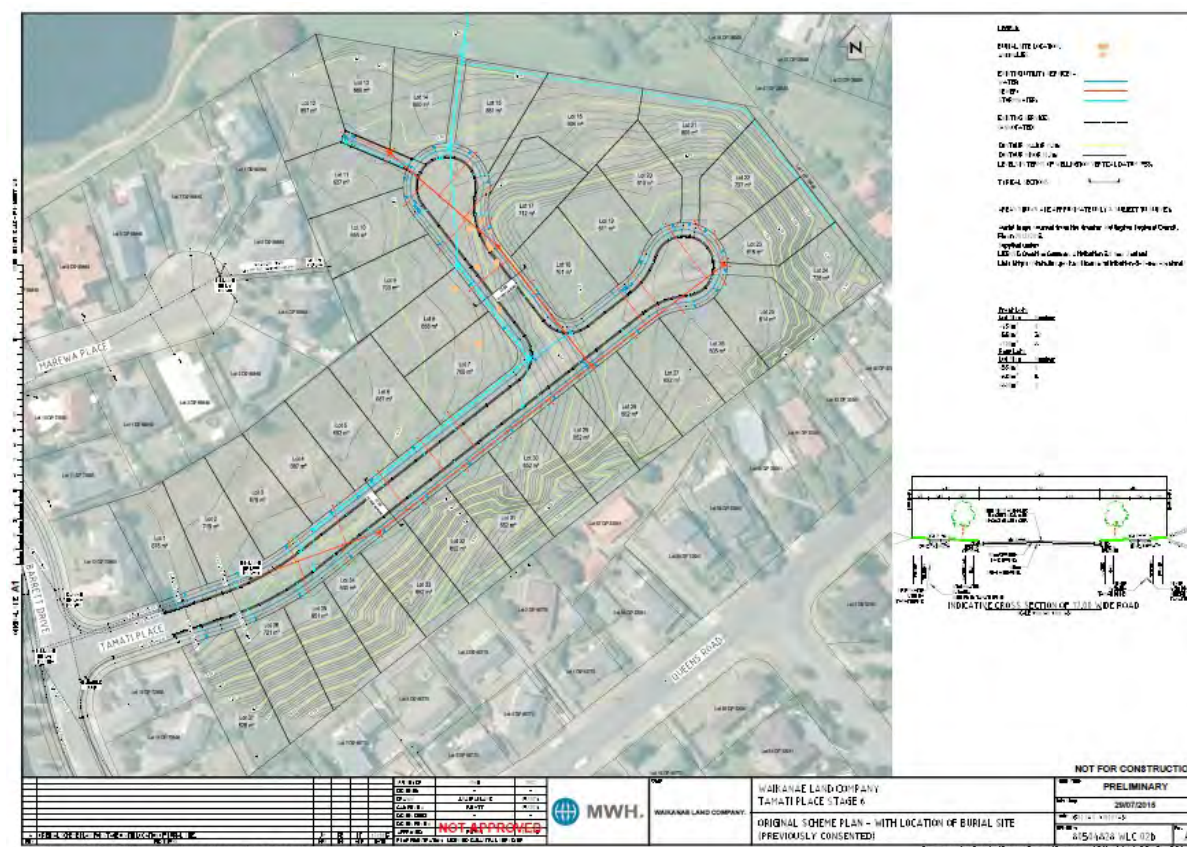


Figure 2: Proposed subdivision with service lines as planned, not as built.

3.2 Archaeological Background

The background to the project and discussion of the previous findings can be found in:

O'Keeffe, M. 2012. *Tamati Place - archaeological issues*, Report to Waikanae Land Company and NZ Historic Places Trust by Heritage Solutions, Wellington.

The information in that Report which is relevant for this investigation is summarised below.

3.2.1 Marked 'graves' (1898)

In the fieldbook 2140 for the plan ML 1491, dated 1898, three indicative 'Graves' are marked up (O'Keeffe 2012:14). They are arguably located within or near the proposed development (ibid.)

3.2.2 District Plan change (1969)

The Horowhenua County Council, after calling for objections and following a full public hearing, uplifted the designation of the land parcel as 'Maori Cemetery'. This decision allowed subdivision consent to be approved. O'Keeffe 2012 has a lengthy discussion on the details of the proceedings and archival materials relating to this.

3.2.3 Discovery of human remains (2000)

In 2000 service lines were installed within the Tamati Place Subdivision in preparation for the approved subdivision. During final digging for remedial work human remains were uncovered and consequently sent to Otago University for further analysis.

The bones found represent a minimum of nine individuals identified as three adults (two male and one female) and six infants and children. Two of the adults and one child had Maori characteristics, while the ethnicity of the remaining six individuals could not be established.

3.2.4. Ground penetrating radar survey (2003)

In 2003 G.P.R. Geophysical Services undertook a preliminary electromagnetic induction survey over the area of the proposed development followed by a ground penetrating radar survey considered then to be preferable in the circumstances. Multiple geophysical methods were used but only the (presumably) 400 MHz antenna used on the ground penetrating radar showed useful results. Nine anomalies in two clusters are interpreted as possible burials by GPR Geophysical Services (G.P.R. 2003, plan repeated as Figure 12 in O'Keeffe 2012).

4.0 Methodology

4.1 Geomagnetism

Five survey grid plots were laid out on the site on 12/07/2017, covering the centre of the proposed development area. They were surveyed using a Fluxgate Gradiometer Foerster Ferex 4.032 DLG STD in a two probe configuration. Transects were walked across these plots at 0.5 metre intervals and data taken in 0.2 metre intervals. Recorded data was normalized to reduce errors resulting from walking transects over uneven ground surfaces and Teslview 1.0 software was used to analyse the data. The data is displayed in the following figures of this report showing grey shades between -20nT and +20nT.

Palaeomagnetism can be recorded by magnetometric methods such as through the use of a fluxgate gradiometer. These are widely employed in archaeological research competing mainly with soil resistivity using electrical resistance and ground penetrating radar using the reflection of radar waves usually in the 200 MHz to 900 MHz range (Goldberg et al 2006, p.313). Magnetometry is the method most commonly used due to its speed and reliability in widely different soil conditions (Goldberg et al 2006, p. 315, Johnson 2006, ch.9 by K. Kvamme).

The fluxgate gradiometer measures small underground magnetic anomalies. Both natural (geomorphological) changes and human-induced soil changes can be detected. A geomagnetic survey is influenced by three components (Zickgraf 1999, p.107-9):

- A. The magnetic field of the earth is constantly changing and influenced by outside changes such as the intensity of the sun. The arrangement of the survey instrument

as a gradiometer using a magnetometer close to the soil surface and a second magnetometer in about 1 metre height compensates for those changes.

- B. Magnetic susceptibility of any material inside a magnetic field changes the magnetic signature of different materials to different degrees. This allows recognition of foreign material in the soil (e.g. shell midden concentrations in the topsoil). Ferromagnetic materials (e.g. iron) can have a magnetic signature on their own (remnant magnetism).
- C. Le Borgne effect: The susceptibility of the topsoil to about 30 cm depth can be up to 100 times stronger than the susceptibility of the soil at 100 cm depth. This is due to chemical reactions of the soil close to the surface. Therefore any trench or pit back filled with mainly topsoil shows a much stronger magnetic signature than the surrounding soil.

Fireplaces, houses and pits are standard features commonly recognised in archaeological geophysical surveys (Zickgraf, 1999, for examples see Duensberg p.130, Glauberg p.140, Mardorf-3 p.144 and Mardorf-23 p.146. The examples are mainly Neolithic and early Celtic earth built structures and settlements in Central Europe for which the archaeological signature is not dissimilar to pre-European Maori structures and archaeological deposits in New Zealand).

Fire events and shell midden have been recognised by geomagnetic surveys at Long Bay (Bader 2007a and b). The results underwent a rigorous ground testing (Phillips and Geometria 2007) that showed the validity of the geomagnetic data interpretation.

The distribution of small metal artefacts can also indicate patterns of historic settlements (Brooks et al 2009). Kvamme (in: Johnson 2006, p.216ff.) provides categories of detectable human activities using magnetometry:

1. Fires including hearth, fireplaces, burn-offs and accidental fires all create thermo-remnant anomalies.
2. Fired construction material like bricks can create the same effect.
3. Human occupation can enhance the Le Borgne effect (see above) and show the extent of settlements compared to unoccupied areas.
4. Accumulation of topsoil such as in the walls of sod houses can create anomalies. Often the natural backfill of a pit increases the amount of topsoil in the pit area and creates the same effect.
5. Removal of topsoil for ditch features or by footpaths or animal traffic can result in anomalies. The quick backfill of pits can result in similar anomalies as the topsoil ends up at the bottom of the pit and the subsoil on the top of the backfill.
6. Imported stone used as buildings or floor material often shows a difference to the surrounding soil matrix.
7. Iron objects will create a dipolar anomaly. Often these anomalies are not part of the archaeological site and can 'hide' weaker anomalies of the archaeological site.

4.2 Background “noise”

The plots surveyed were accessible, slope angle and vegetation cover were such that only in two very small areas no data could be collected (Figure 8 & 9, green areas equals ‘no data’). The sandy background creates a very ‘quiet’ background. This means that the natural variation in readings of the undisturbed soil is small. Against this background, sharp changes in data can be identified as foreign items or features.

A fence on the side of one survey plot has distorted the soil readings close to it (see Figure 8, large variations in the readings along the northwestern edge of the survey area).

4.3 Other Data

The survey results have been overlaid onto an aerial photo from Land Information NZ and a number of historic roll plans (oversized historic survey plans usually used for planning purposes). None of the historic roll plans shows anything of interest, apart from the fact that at least for the last 200 years this area has always been dry land while the streams to the west and east meandered considerably. Please note that all images are for interpretive purposes only. They have been only approximately geo-rectified and are not appropriate for further geo-referencing onto plans or maps intended for other purposes.

4.4 Differences between geophysical investigations (2003 vs 2016)

In 2003 a ground penetrating radar (GPR) survey was conducted and in 2016 a geomagnetic survey (Fluxgate Gradiometer) was undertaken.

The ground penetrating radar detects any sharp interface between soil layers or between soil layers and other materials, e.g. rocks. The reflection of the radar wave is recorded. Any change from the ‘normal’ soil profile of top soil and sub soil is noted as long as the change is substantial. When considering the possibility of burials, the shape of a burial pit is interpreted from two changes when the radar is dragged over two sides of the pit. The difficulty in the interpretation arises when the difference between the ‘normal’ soil profile and the back fill of the pit does not create a distinguishable interface from which the reflection of the radar wave changes considerably enough to be seen in the radar profile. The profiles are said to be in 1 m distance from each other. Three disturbed and three undisturbed profiles are shown as examples for the interpretation (G.P.R. 2003, Appendix B).

In contrast the later geomagnetic survey in 2016 uses the magnetic anomalies created by disturbing the soil (Le Borgne Effect, see above) AND the size and pattern of these anomalies as displayed on a high resolution map 0.5m x 0.2m. Visibility of the service trenching with non-metallic pipes in them clearly indicate that the methodology works in this soil environment. A test trench (see below) also confirms a substantial difference between sub soil and top soil, thus any interruption of the continuous layers or mixing of soils should be visible.

Nonetheless burials are very difficult to detect whichever method is chosen. The Europae Archaeologiae Consilium (EAC) Guidelines for the Use of Geophysics in Archaeology, Questions to Ask and Points to Consider (Europae Archaeologiae Consilium, EAC Guidelines No.2, 2016; derived from the Historic England guidelines on Geophysical Survey in Archaeological Field Evaluation, 2008) recommend any geophysical survey only on areas where burials are suspected, a condition which is fulfilled here.

If GPR is chosen, they recommend a high resolution 0.25m x 0.05m which are lines in 0.25 m distance, not 1 m as documented in G.P.R. 2003. They also recommend it for stone lined coffins or cists which are nearly completely absent in New Zealand.

Furthermore in the general advice on a level 2 survey (Delineation: to delimit and map archaeological sites and features) GPR lines in 0.25m or 0.5m distance to each other should be used to create a three-dimensional data cube. Single isolated profiles should only be considered where large linear soil features can be crossed at right angles, e.g. moats or wide ditches. Also salty soils create a high signal loss and depth data has to be calibrated usually using test pits.

In contrast to the GPR, pits can be detected using geomagnetic data as long as the resolution is 0.5m x 0.25m. We have used 0.5m x 0.2m and visualised the data in a map that allows pattern recognition as is recommended in the above mentioned guidelines.

In short, detection of burials is difficult and requires quite specific tight grid lines for the different survey methods and specific displays that allow an archaeological interpretation of the pattern of the data.

The 2016 geomagnetic survey follows those recommendation of the EAC, but the earlier (2003) GPR survey does not follow these recommendations. The distance between survey lines in the GPR survey which is wider than recommended means that there is a possibility that some features were over looked.

5.0 Results

The geomagnetic survey was undertaken before the test trench authorised by Heritage NZ was dug. The test trench was necessary to answer the basic question of the existing soil layers and the results are presented here before the geomagnetic survey results in the logical order.

5.1 Test trench results

In April 2017 a test trench was dug in the area indicated in blue in Figure 14. It showed a deep topsoil, dark brown in the upper, modern part of it and more darker in the lower part. It overlays clean sand. There is no indication of a layer of dredged sand. The depth of the topsoil indicates centuries of build up of the top soil. It is very unlikely that these natural layers would have developed after the dredging of sand to create the lake nearby. As the land in this area seems to be untouched by the dredging, the geomagnetic data shows features and material accumulated close to the surface that could be relevant to the question

of burial pits (see Figure 11 to 14 for results and overlays and Figure 15 for a possible interpretation).

The mixing (mottled appearance) and micro layering that is typical of machine spreading is not visible in the profile and the depth and homogeneity of the top soil layer seems to be most likely the result of natural processes.

Most of the locations of the anomalies that were interpreted in the earlier GPR survey as possible burial pits (G.P.R. 2003, Appendix A) show small, negative anomalies in the geomagnetic survey. These are presented in the figures as small dark gray patches with fuzzy edges ('washed out'). This pattern is indicative of small pits back-filled with a mix of topsoil and subsoil. Anomalies of this nature are highlighted in the results as possible burial pits.

Many of the features shown in the geomagnetic survey have a strong positive and negative value close together (light and dark, often with a sharp edge). These are likely pieces of metal in the ground. The European farming, trenching for the services and building activities close to the edges of the investigation area resulted in intentional and unintentional burial of much metal.

The geomagnetic survey shows many more anomalies consistent with small pits compared to the earlier GPR survey. The possible reason for this is that the topsoil is very sandy/silty and not much different to the underlying sand in terms of density and friability. This results in weak separation of backfill of a pit and the surrounding soil matrix and it is this interface between the two that reflects the ground penetrating radar wave. Therefore the weaker the interface is, the less the radar wave reflects and therefore the harder it is to recognise a small pit. The geomagnetic survey on the other hand visualises the small magnetic difference between the natural soil layers and an area with mixed topsoil / subsoil in a pit. The test trench has shown that the topsoil build up is substantial and sufficiently different to the lower sand layer to express a different magnetic signature.



Figure 3: Soil layers in test trench. Depth about 60 cm from surface.



Figure 4: Soil layers in test trench: dark brown=modern topsoil, merging into an older and darker topsoil. Lowest level is nearly clean sand of the palaeo dune. The topsoil layers are quite sandy/silty. Natural build up of top soil over a long time is likely.



Figure 5: Location of test trench (with Daniel Parker and Steven Kerr).

5.2 Geomagnetic Results

A multitude of anomalies can be seen in the map of the geomagnetic data, most of them the result of modern developments and development work. These or some of them could be remnants of what is believed to have been plant irrigation systems established on the land by the landowner in the 1970s or of a large corrugated iron building then on the site and used during that period for storage of implements (bulldozers, tractors and rollers), a site office for on-site meetings, and a kitchen service area (pers comm Maurice Rowe).

Figure 11 to 14 show the geomagnetic survey results on its own and with various overlays in context. Figure 15 is an interpretation of the results, taking into account the historic and recent information available to the author. This is preceded by a short discussion of the types of geomagnetic anomalies encountered in this survey (Figures 6 to 10).

The existing service trenches (earthworks in 2000), some with metal pipes (strong dipolar signals) and some with plastic pipes (light, positive lines), can clearly be seen in the data (Figure 6 and 7, and Figure 11 and 12).

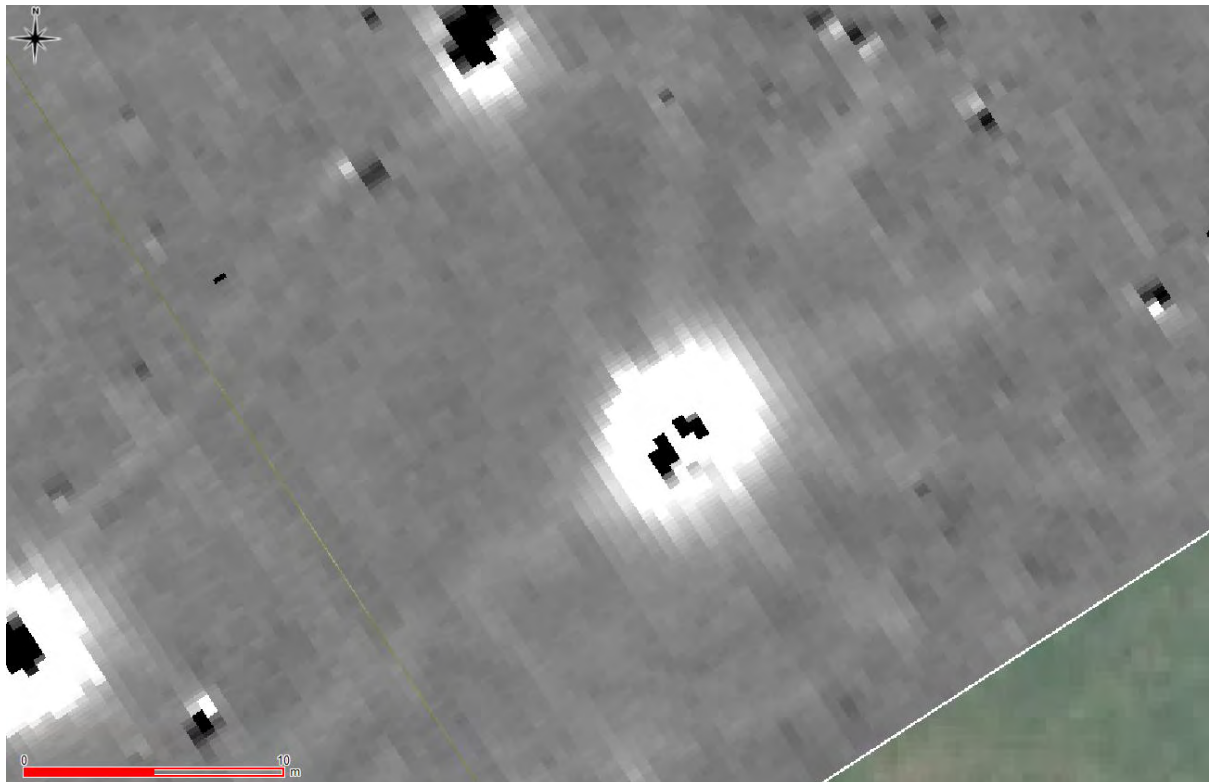


Figure 6: Lightly coloured service trenches radiating from a manhole; kerb from road turning circle visible too.

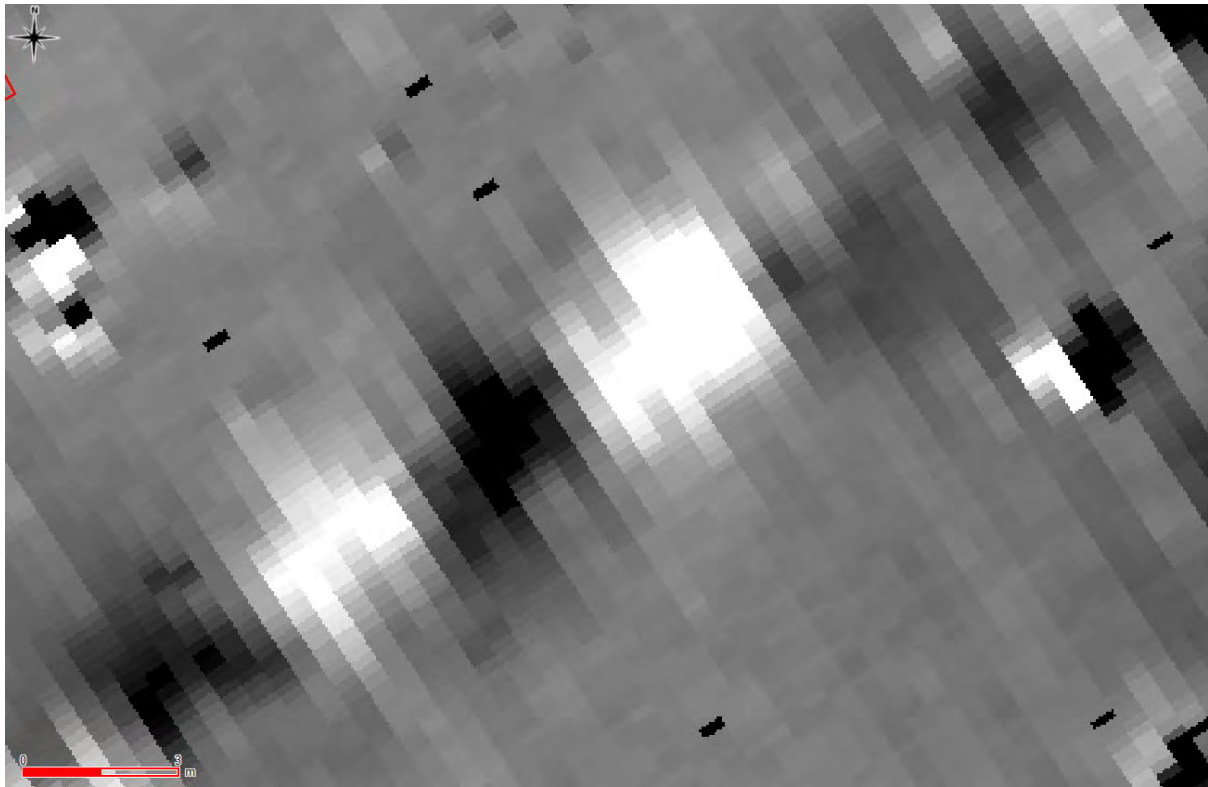


Figure 7: A metal pipe buried deeply, showing a linear alternating di-polar signature.

Figure 8 shows a multitude of mainly metal objects (strong dipolar signals) that are within the area. Most of them are shown very sharp which would suggest that they are close to the surface. Major disturbances and many foreign items in the ground can be seen close to the boundary at the western edge. These are most likely remnants of the building processes next door and any previous activities on the property (see above).

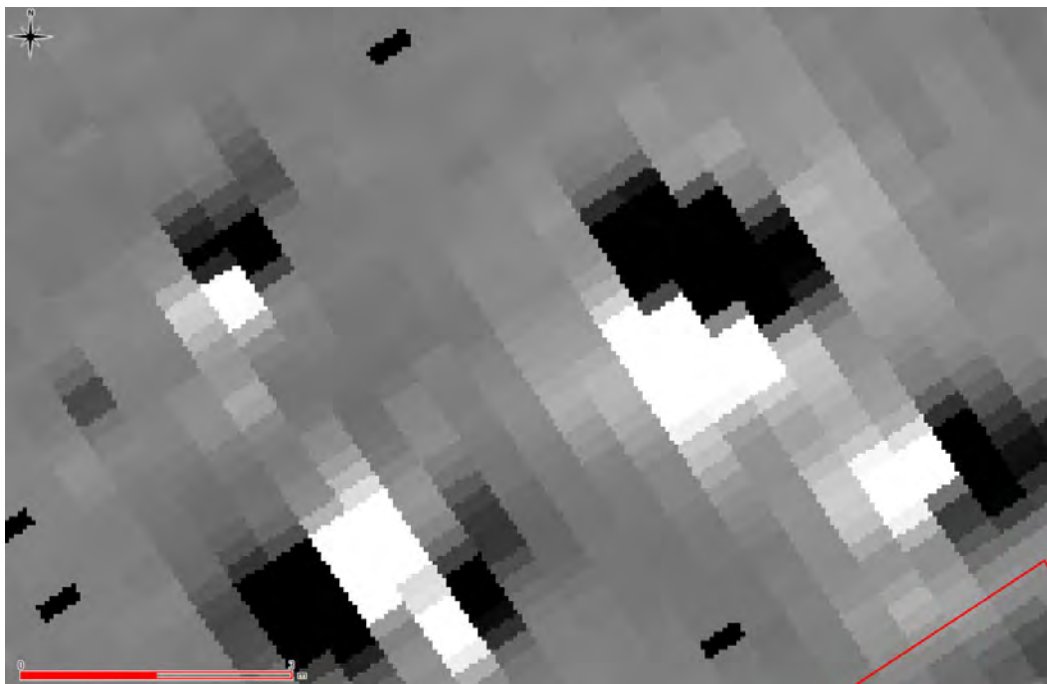


Figure 8: Strong di-polar (plus and minus values close together) anomalies indicating pieces of metal under the surface.

Figures 9 and 10 show some small anomalies which present themselves quite 'washed out' and are largely negative. These are consistent with small pits. Some fall within or very close to the previously recorded 'anomalies' in the GPR survey. But there are a good number more of similar 'anomalies' towards the north and northwest of the area of the previously recorded anomalies, tentatively identified as possible burial pits.

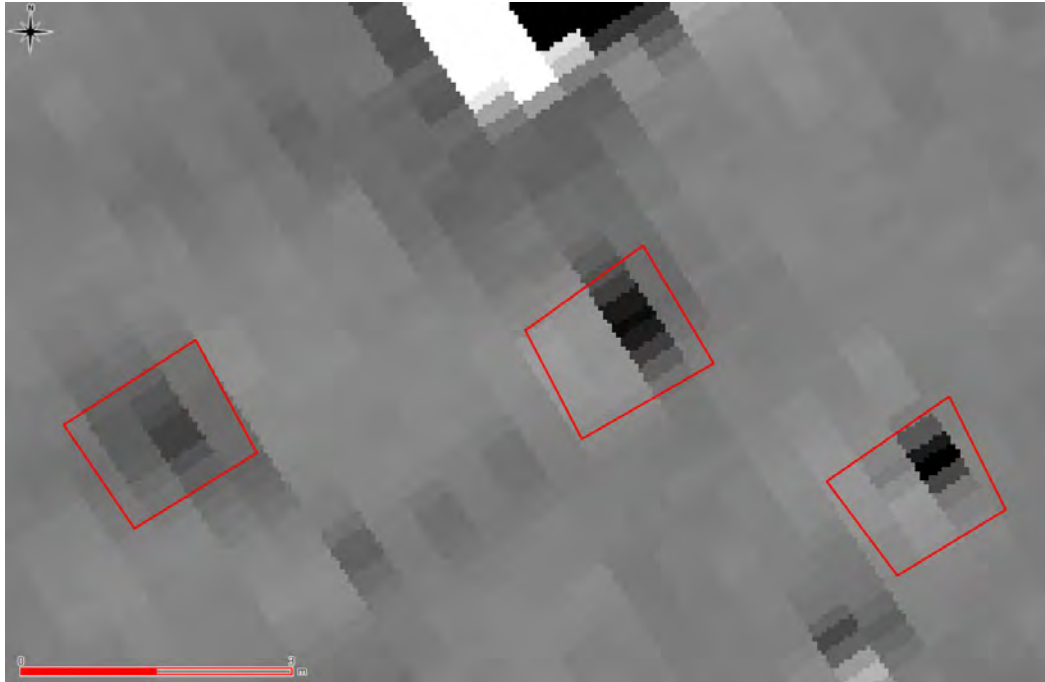


Figure 9: Possible small pits without metal. Approximately 1.5m x 1m disturbances to the natural soil layers. Some stronger, some weaker.

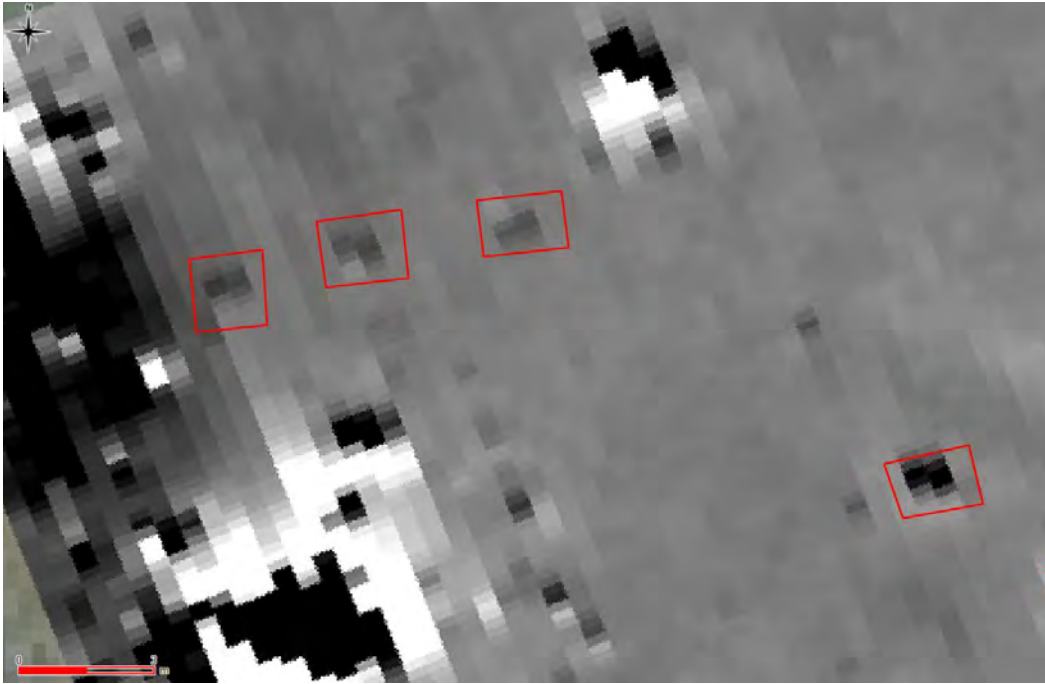


Figure 10: Possible small pits without metal. Roughly rectangular. 1.5m x 1m. Three weaker anomalies and one stronger one. Strong metal anomalies nearby, especially to the left. Also visible are very small soil disturbances that are too small to be pits. Together with the metal they are probably remnants of the building process (e.g. burning of the building rubbish) to the west of the proposed development.

A relevant question for the anomalies identified in this geomagnetic survey, is their depth within the original ground surface before sand was dumped onto the surface. If the original surface is close to the current surface, these anomalies would be consistent with pits to a reasonable depth. If the original surface is deeper than a metre, these items are more likely part of the dumping event. A small hand dug test trench showed that there is no overburden in the north and northwestern area of the investigation and therefore the anomalies can be understood as possible small pits cut into the original topsoil (see chapter 5.1.).

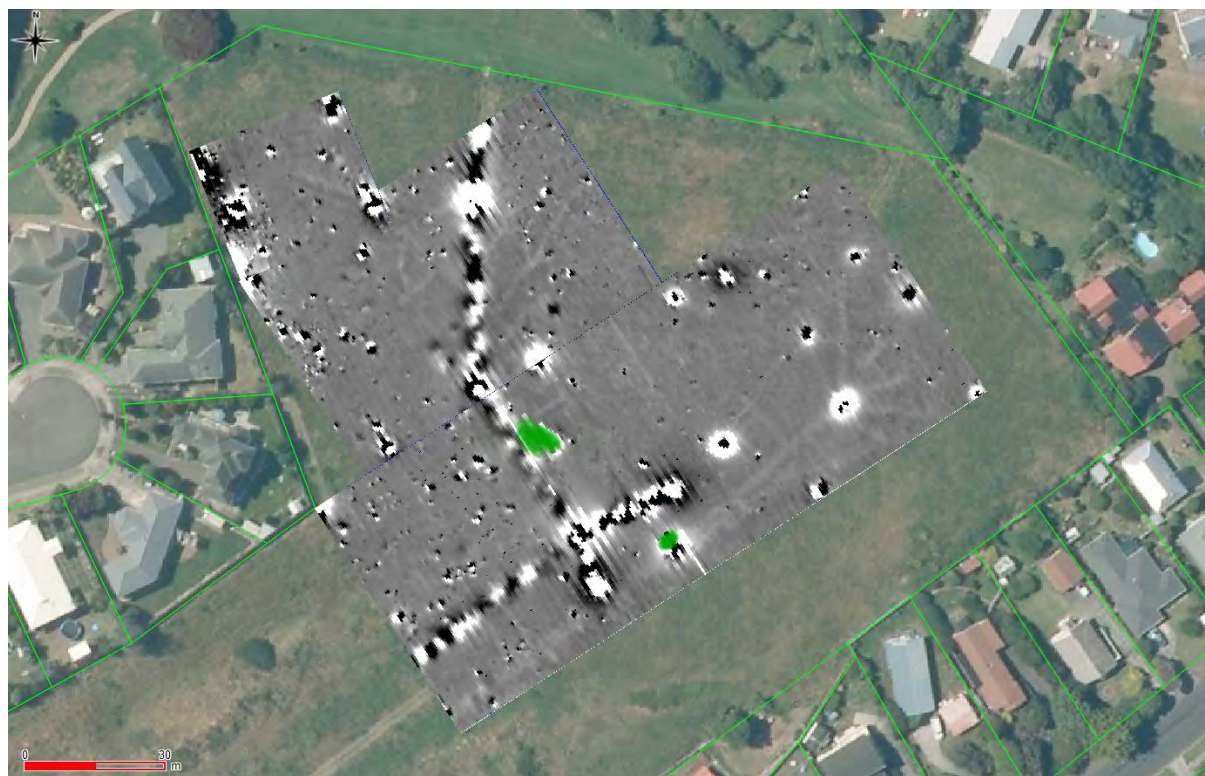


Figure 11: Geomagnetic survey overlaid onto aerial and cadastral (green areas within the survey extent indicate small area with no data due to dense vegetation cover).



Figure 12: as above. Overlaid with proposed development and services as planned.

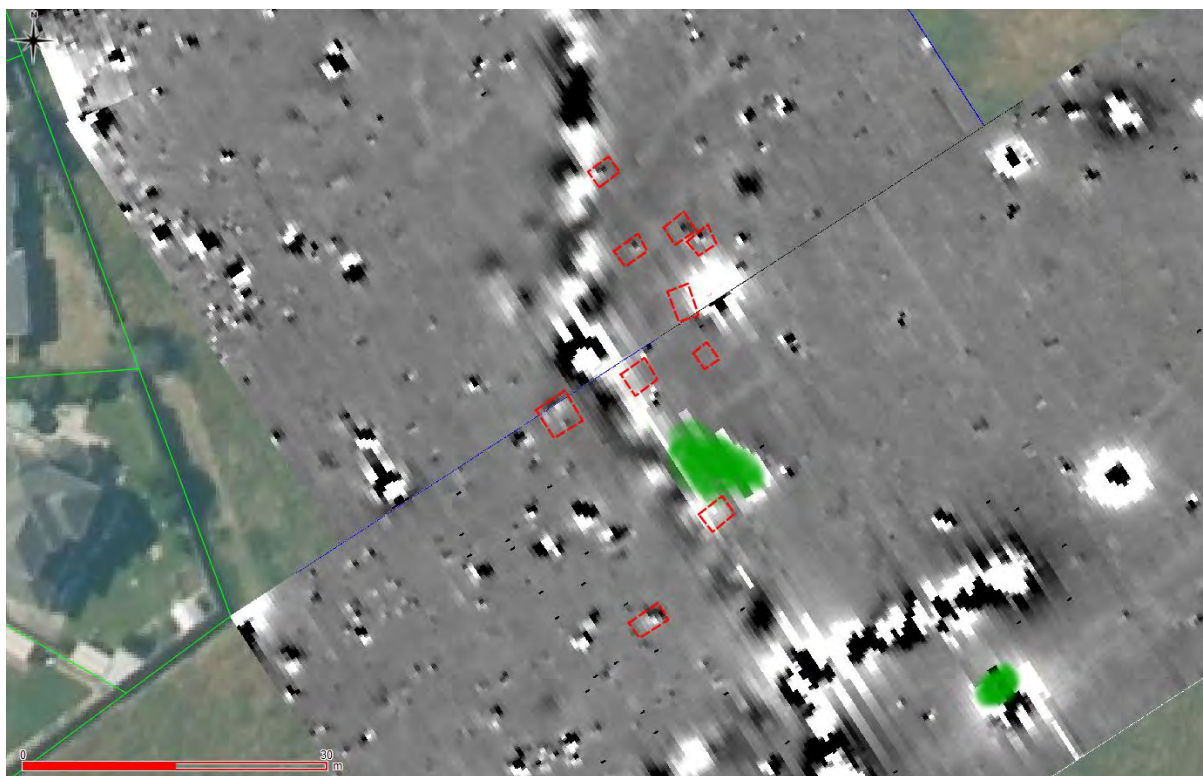


Figure 13: Previously recorded anomalies.

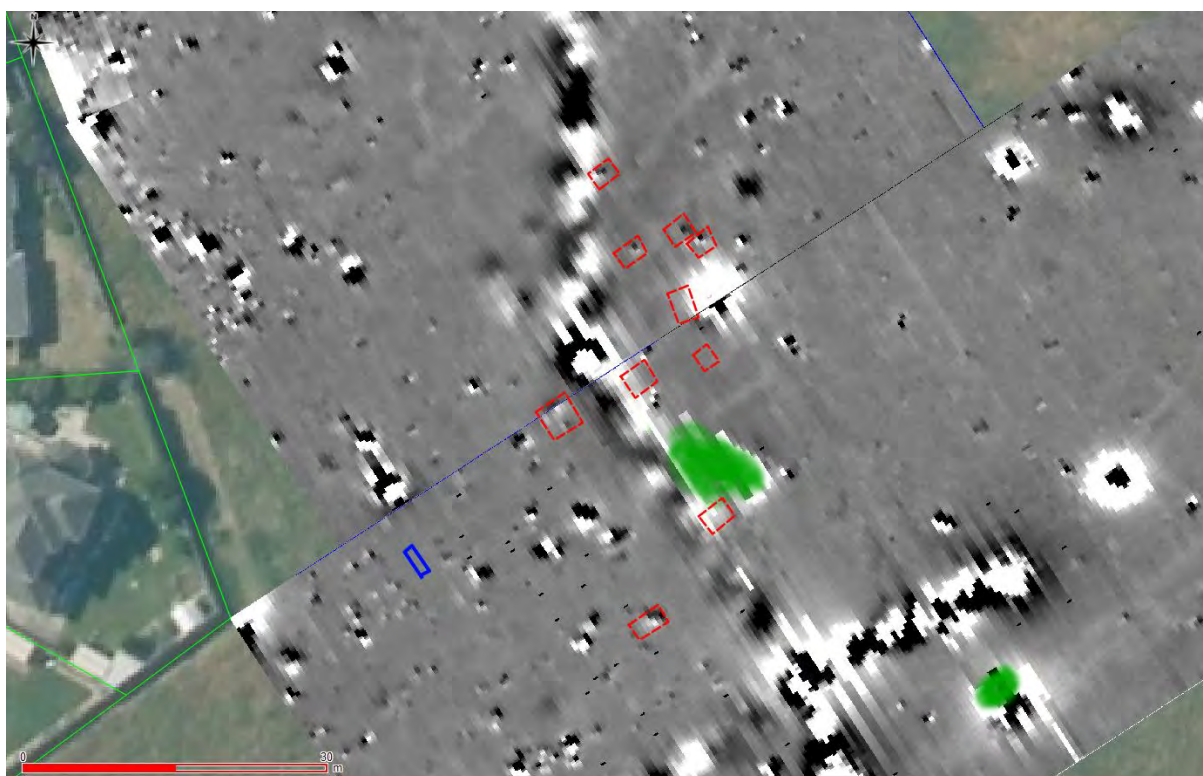


Figure 14: Test Trench location.

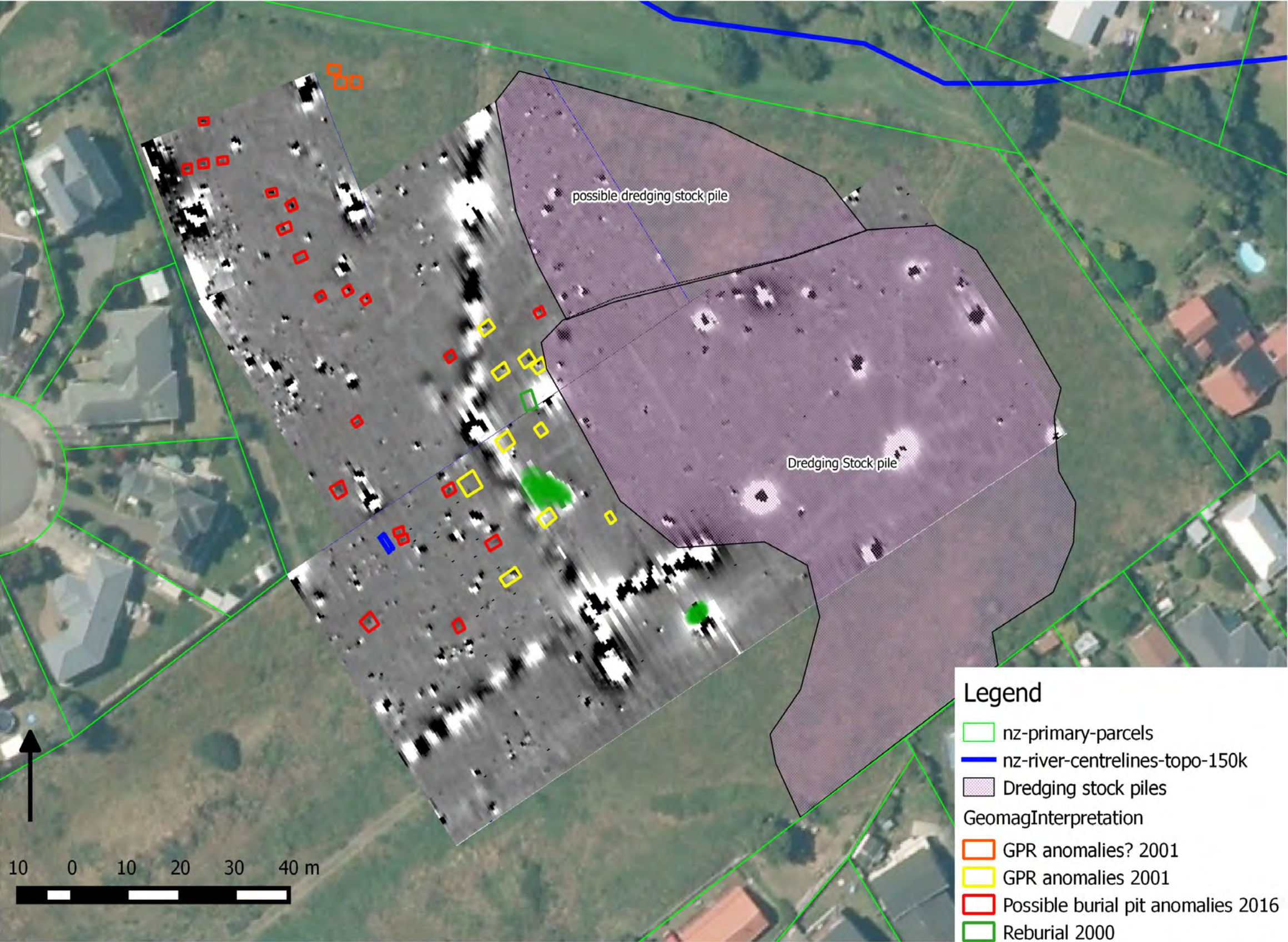


Figure 15: Interpretation of the geomagnetic survey (test trench in blue)

6.0 Discussion

This survey presents a difficult problem. Small pits, like burial pits, without any further context (e.g. a kainga or paa) are difficult to detect using any geophysical method. It is only recommended in the international literature if there is an independent indication of a burial ground in the area, which in this case is supplied by the accidental discovery of several burials. Multiple events of earthworks and since removed buildings add complexity and ambiguity to the data.

Any geophysical method used in an archaeological context relies on accurate pattern recognition. Pattern recognition can be ambiguous and more than one explanation model can fit a pattern. Therefore it is always recommended to ground test any explanation model. It is obvious that ground testing possible burial pits poses the problem of being culturally sensitive. Especially as we already know that at least some burials were undertaken in the area.

The issue with the model presented here is that the burials could have possibly been much wider spread over the property than the previous work and the accidental discovery locations suggest. If ground testing of the results would be undertaken this could be done from the fringes to the center until the extent of burial locations becomes clear. In a technical sense this approach is the least intrusive. But as it is intrusive an authority by Heritage New Zealand will be required, as we have reasonable suspicion of the presence of archaeological features on each of the possible ground testing locations. Such intrusive work is best undertaken with the support of mana whenua.

7.0 Acknowledgments

The author would like to thank Mary O'Keeffe and Daniel Parker for their help on site and off site. A special thanks to the iwi representative Les Mullen who patiently helped on site.

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cadastral
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Tamati Place - archaeological issues

Report to Waikanae Land Company and NZ
Historic Places Trust

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March 2012

Contents

1. INTRODUCTION	1
2. BACKGROUND	2
2.1 HISTORY OF DEVELOPMENT IN THE AREA	2
2.2 ARCHAEOLOGICAL WORK IN 2000	3
3. ANALYSIS AND RESEARCH	6
A. HISTORICAL BACKGROUND	6
3.1 Historical burial grounds near Waikanae	6
3.2 Historic burials	6
3.3 Traditional graveyard	8
3.4 1898 graves	12
3.5 Historical documents	15
B. THE LAND	17
3.6 Land ownership	17
3.7 Cemetery designation	17
3.8 Construction of the lagoons and subdivision	22
3.9 Geomorphological context	24
3.10 GPR survey	25
C. ARCHAEOLOGICAL ANALYSIS	27
3.11 Origin and interpretation of the shell	27
3.12 Analysis of the human bones	29
3.13 Interpretation of the burials	29
3.14 Summary of section 3	31
4. CONCLUSIONS	32
SOURCES	34
APPENDICES	36
APPENDIX 1: RESEARCH NOTES ON NGARARA WEST A14 – URUPA/CEMETERY	36

Figures

Figure 1: Location of Tamati Place	1
Figure 2: Original land areas of the Waikanae Land Company Limited land (excluding the estuary area to the south which was also included in the Company's title)	3
Figure 3: Location of places mentioned in this report	4
Figure 4: Headstones of Browne, Nairn and Durie, relocated to edge of Waimanu Lagoon	7
Figure 5: ML 2823, 1915	10
Figure 6: ML 3495, 1920	11
Figure 7: ML 1491, 1898	13
Figure 8: Fieldbook 2140, surveyed for plan ML 1491, 1898	14
Figure 9: Location of graves from surveyor's notebook on contemporary aerial	15
Figure 10: Planning map from Horowhenua County Council district plan 1968, showing cemetery designation	18
Figure 11: Cemetery designation in relation to current street layout	19
Figure 12: GPR survey	26

1. Introduction

The Waikanae Land Company Ltd (the Company) owns land centred around Tamati Place, at Waikanae Beach (see figure 1).

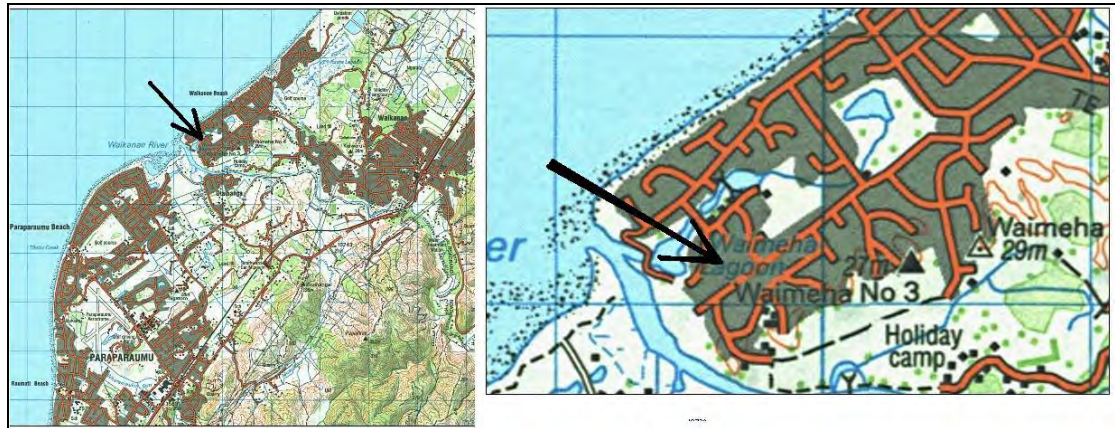


Figure 1: Location of Tamati Place

The Company wishes to complete development of subdivisions in two locations on the land. Tamati Place was the subject of archaeological investigations in 2000-1, where human burials were exposed during trenching work in preparation for further subdivision. All work has since ceased on each planned area of development.

The history and archaeology of the land in question is complex. Mary O'Keeffe of Heritage Solutions (the consultant) was engaged by the Company, to undertake research as to the history and archaeology of the land.

This report provides that archaeological and historical background, to inform future decision making in relation to the land.

The land in question is Ngarara West A 14B1.

2. Background

2.1 History of development in the area

Subdivision commenced in the southern Tutere Street area at Waikanae Beach in the late 1960s. The Company completed some five Stages of subdivision, now comprising lower Tutere Street, Ara Kuaka Street, Oratia Street, Waiheke Street and Piopio Grove. These Stages of subdivision comprised some 121 residential allotments. In the course of the subdivision an extensive lagoon area (now known as the Waimanu Lagoon) was formed and consequently vested in the local authority as reserve. At a later date the extensive southern portion of the Company's property comprising an area of 15.2200ha (including the Waikanae riverbed and an extensive estuary area on the southern side of the Waikanae River) were transferred to the Crown as wilderness reserve¹.

The Company was placed in statutory receivership in 1979. In the early 1990s further Stages of subdivision of the Company's land were undertaken in the name of the Company on behalf of unpaid security holders.²

The landholding of the Company comprised some 38.8068 hectares in Certificate of Title No 7A/1139 which included the seafront property north of the Waikanae River, the adjoining riverbed and the estuary area to the south of the River, together with a separate block comprising 8.0937 hectares in Certificate of Title No 8B/524 ("the 20 acre block"). At the date of its acquisition by the Company from Maori owners in 1969 the 20 acre block was designated "Maori Cemetery" under the 1968 Horowhenua County Council District Scheme (see below at section 3.7), but this designation was removed by the Horowhenua County Council in 1969 following a public hearing (at which local Maori appeared and gave evidence) in respect of the Company's application for such removal.³

Figure 2 shows the Company's original three title areas (outlined in red but excluding the extensive estuary area south of the Waikanae River which also formed part of the Company's main title). The largest of these outlined areas shows the Company's six Stages of subdivision which occurred on the coastal side of the lagoon areas prior to statutory receivership. Also shown in the inland side of the lagoon areas are the areas comprising the further Stages of subdivision completed since statutory receivership on behalf of security holders⁴. These further stages comprised the remaining residential portion of the main title area and slightly over half of the residential area of the 20 acre block. The smallest of these outlined areas shown on Figure 2 (which comprised an area of 6 acres 1 rood which now includes part of Queens Road) was purchased by the Company in May 1970 and was sold in an undeveloped state at a mortgagee sale during the statutory receivership of the Company and later subdivided (but not by the Company).

¹ Letter from Maurice Rowe to author, 19 September 2009

² Ibid.

³ Ibid.

⁴ Ibid.



Figure 2: Original land areas of the Waikanae Land Company Limited land (excluding the estuary area to the south which was also included in the Company's title)

In 1999 a further Stage of subdivision (designated Stage 6) for the 20 acre block was approved by the local authority for the whole of the area to be known as Tamati Place and Wi Kingi Place. All services required for this subdivision were installed along with base course roading but in the course of final trenching human remains were located in the Wi Kingi Place area.

2.2 Archaeological work in 2000

In 2000 the Company was developing a proposed subdivision at Tamati Place and Wi Kingi Place designated Stage 6 and a residual proposed subdivision off Barrett Drive designated Stage 4b (see Figure 3).

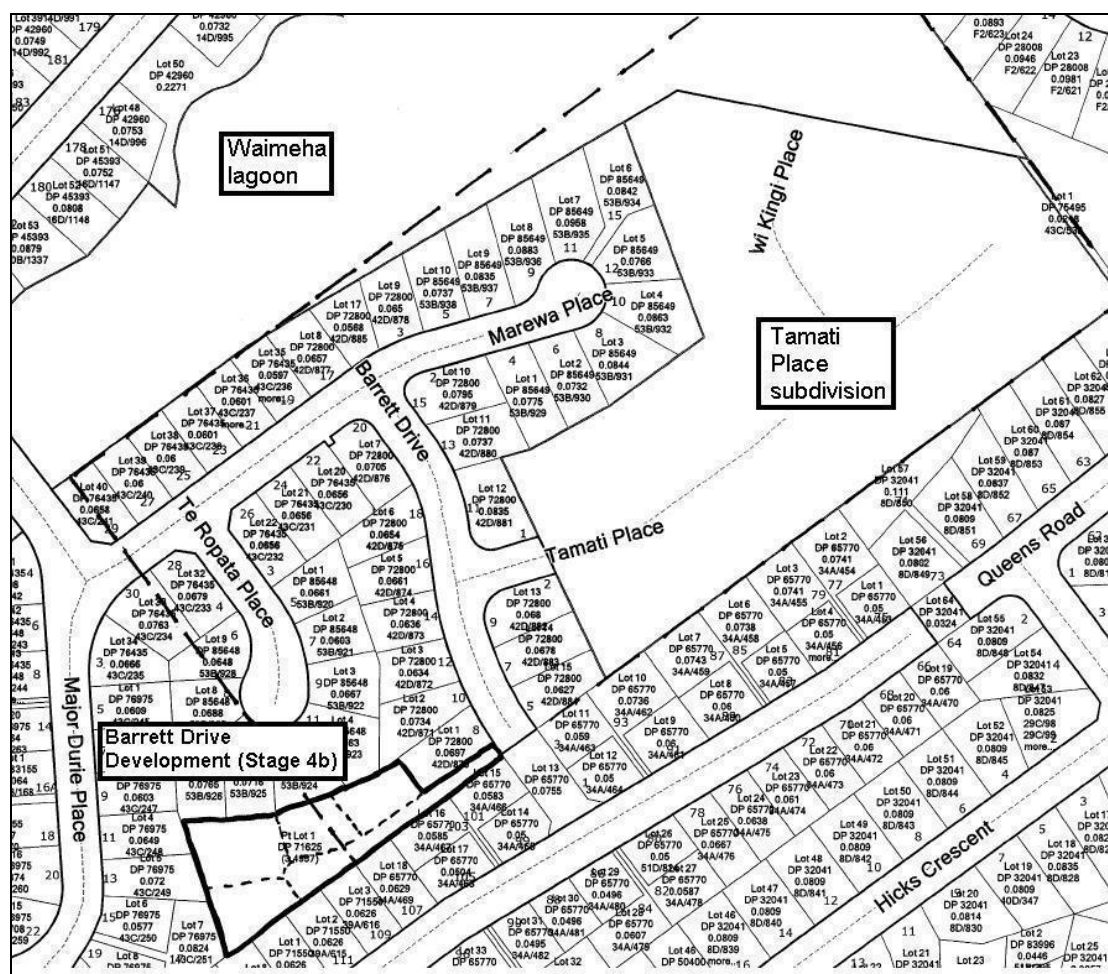


Figure 3: Location of places mentioned in this report

Trenches for services were dug along the centrelines of the proposed roads to be known as Tamati Drive and Wi Kingi Place, and human bones were exposed, along with apparently archaeological midden (shells). The bones were exposed in a discrete area within the trench towards the end of Wi Kingi Place, and the midden was exposed in one section in the trench along Tamati Place, opposite the intersection with Wi Kingi Place. The Historic Places Trust and local iwi were informed⁵. However further work took place on the site and within the excavated trench that resulted in a prosecution of the contractors under the Historic Places Act 1993, which was later overturned⁶. Further development of the subdivision fell into abeyance.

Susan Forbes' evidence to the District Court states that 2 skulls, 1 shoulder bone, 2 collarbones, rib fragments and two leg bones were removed from the trench on 5 July 2000. During the same site visit Ms Forbes observed "extensive areas of intact and modified midden/oven material"⁷. Ms Forbes observed shell and hangi stone scattered over the subdivision, and observed at least three apparent intact deposits of shell midden visible in service trenches⁸.

⁵ It is noted that the consultant was not on site when the bones and other archaeological features were revealed, and was not the archaeologist who dealt with the preliminary archaeological findings on site.

⁶ It is neither the purpose nor place of this report to set out or comment on the actual events that took place and resulted in the prosecution. Suffice to say there was ambiguity in communication between parties.

⁷ Forbes, n.d.: 4

⁸ *ibid*

Subsequent work in the same trench at Wi Kingi Place disturbed further burials on 19 July 2000. Ms Forbes' evidence states that the following human remains were removed by her and iwi:

- A skull in the trench uncovered by the site workers
- Several large bones and a skull discovered in the spoil heap
- 2 rib bones from the northern side of the trench
- 2 further burials removed from the trench

During this second site visit Ms Forbes also observed shell which she reported to be at least six intact middens along a service trench. Unfortunately it is not known exactly which trench or where along it Ms Forbes observed these and the previous midden. However James Hutchison (formerly of Montgomery Watson) noted the locality of the shell, as he recalled it, as being approximately opposite the intersection with Wi Kingi Place.

The human remains were analysed by Dr Nancy Tayles of Otago University (refer also section 3.12 of this report). In addition the consultant was subsequently engaged to undertake an archaeological assessment of the proposed Tamati Place subdivision to meet the statutory requirements of the Historic Places Act 1993, as no assessment had been completed at that time. In the course of this assessment research on the wider vicinity was undertaken to place the archaeological features into context; this research is replicated in this report.

3. Analysis and research

A great deal of information on the history, archaeology and geomorphology of the area is available. All of this data contributes to an understanding of the history and archaeology of Tamati Place.

A. Historical background

3.1 *Historical burial grounds near Waikanae*

Several historical burial grounds are recorded or reported in the vicinity of Waikanae:

- Takamore: an urupa north of the Waikanae River, off Puriri Rd^{9 10}. Several marked graves on the top and slopes of a sand dune; the urupa is within a wahi tapu
- Waimeha: pa near mouth of Waimeha Stream where the stream meets the Waikanae River. Carkeek¹¹ notes it was also referred to as a burial ground by Eruini te Marau, whose mother was buried there, and it was referred to as a burial ground by Hira Maika, who said that Waipunahau is reported to have been buried there on her death in 1853; she was the mother of Wi Parata Te Kakakura Waipunahau, Chief and leader of Te Ati Awa¹².
- Arapawaiti: a burial ground on the south side of the Waikanae River, near the old Ferry Inn at Otaihanga. Reported to have Maori and European families buried there, and also dead from the Kuititanga battle¹³.
- Karewarewa: exact location not known but it was reported to an 1890 Land Court Hearing by Mere Pomare, mother of Sir Maui Pomare, as being on the northern side of the Waikanae River¹⁴. Mere Pomare noted that her mother, the famous chieftainess Te Rauoterangi, who signed the Treaty of Waitangi, was buried there¹⁵.

3.2 *Historic burials*

A 1992 report by Wellington Regional Council states that during the work in 1970-71 to create the Waimeha lagoons

“Nearby several gravestones made of Sydney sandstone were discovered. They mark the burial place of, among others, a whaler named William Browne and a little daughter of Major Durie¹⁶.....Until recently large flax bushes had grown over the headstones, all but obscuring the remnant of a large burial ground

⁹ Carkeek, 1966 147

¹⁰ WRC, 1993: 4

¹¹ Carkeek, 1966: 152

¹² WRC, 1993: 4

¹³ WRC, 1993: 4

¹⁴ Carkeek, 1966: 116

¹⁵ ibid

¹⁶ Police and Customs Officer at Waikanae, 1847-1851

which once covered nearly 20 acres. However, they have been restored and are now visible by the Waimanu Lagoon”¹⁷.

Unfortunately most of the information contained in this quote is not sourced. There is one reference to MacLean¹⁸, and the text of the quote is extremely similar to that used in Chris and Joan MacLean’s 1988 book on Waikanae¹⁹, which suggests this could be the source. The text in MacLean only lists William Browne and “...a daughter of Major Durie...”²⁰.

The consultant found the two relocated headstones beside the lagoon (Figure 4). The headstones are also shown as photographs in the WRC’s 1992 report; the report records one headstone as being that of William Browne²¹, and the other being that of “Margaret Nairn and Penelope Durie”²², with both names inscribed on the stone. The writing on the headstones appears clearer when photographed in or around 1992 for the WRC report, than when photographed in 2007 by the consultant.



Figure 4: Headstones of Browne, Nairn and Durie, relocated to edge of Waimanu Lagoon

O’Keeffe, 2007

The Biographies Index of the National Library lists a William Franklin Browne, born in Barbados and died 11 August 1911. He married Erena, daughter of William Jenkins, a

¹⁷ WRC, 1992:106

¹⁸ *ibid*

¹⁹ MacLean, 1988

²⁰ MacLean, 1988:196. See also paragraph 3.7 below

²¹ WRC, 1992: photo 30

²² WRC, 1992: photo 29

well-known whaler of the district, who married Paeroke Rawiri; William Jenkins built the Jenkins Accommodation House at Waikanae (now known as Jenkins cottage, and still lived in by a family descendant)²³. Marriage to a Waikanae woman would have explained why William Browne was buried at Waikanae; however, the obituary for William Franklin Browne notes he was buried at Karori cemetery, so this is unlikely to be the William Browne buried at Waikanae²⁴.

The biographies index does not have an entry for Penelope Durie. She was probably named after her mother. Major David Stark Durie (1804-1874) arrived in New Zealand in May 1840, and was the Police and Customs Officer at Waikanae between 1847 and 1851. His entry in the NZ Biographies index notes he had 6 children, including 4 daughters. Only three of the daughters are named, and their “society weddings” are described; it is speculated that the fourth daughter was not named or her life noted because she died as a child.

The register of deaths index at the National Library has deaths noted for a William Browne in 1890, 1892 and 1893, for a Margaret Nairn in 1893 and for a Penelope Durie in 1896.

The New Zealand Cemeteries Records index at National Library was checked, as were the New Zealand Gazettes between 1857 and 1920. There is no record of a formal or gazetted cemetery at Waikanae.

3.3 *Traditional graveyard*

An historic graveyard may have been located within the area of Ngarara West A14B. An area of land within this parcel was later designated as a cemetery in the Horowhenua County Council plan, but the designation was lifted (see section 3.7 below).

There was some ambiguity over the location of the historic graveyard, due to various petitions and orders made in the Maori Land Court in the later part of the 19th century and early 20th century.

A letter dated 19 February 1970, from the Maori Land Court to Rowe & O’Sullivan, (lawyers to the Waikanae Land Company), states:

“Mr W Lawrence has made enquiries at this office about a cemetery on land north of the Waikanae River, and he has asked me to pass the following information on to you.

On 10 November 1896 the Maori Land Court made a partition order for an area of land containing approximately 10 acres, called Ngarara West A14A. The minutes recorded in Otaki M.B 31/147-148 state “the object in dividing this section (A14) is to set apart a portion of it for a cemetery to include the part to the west of section 15 between that boundary and the River Waimea²⁵...”. All of the owners of A14 were to be included in the Cemetery area, which was to be absolutely inalienable. This order was not completed by survey, and the order has not been signed.

²³ NZ Biographies Index, Turnbull Library

²⁴ NZ Times, 14 August 1911

²⁵ Note the names “Waimea” and “Waimeha” are both used

On 10 August 1915 a further partition order was made for an area of 9a.1r.20p. called Ngarara West A Sec 14A in the name of Charles Bruce Morison. The minutes on this partition are contained in Wn.M.B 20/149. There is no reference in these minutes to the land having been used as a cemetery, nor to a transfer from the Maori owner to C.B. Morison. The court would no doubt have been satisfied that Morison was entitled to be shown as the owner. This partition order has been registered in the Land Transfer Office, and we have treated the land as being European land.

Section A14A is located immediately to the north of the subdivisions of Ngarara West A14B.²⁶

The letter is signed by the deputy registrar.

Figure 5 shows plan ML 2823, which contains land parcels Ngarara West A14A (containing 9 acres 1 rood and 20 perches) and Ngarara West A14B (containing 178 acres 0 roods and 20 perches, of which 30 acres was referred to as “underwater”).

²⁶ Letter dated 19 February 1970, contained in file on purchase of 20 acre block held by Fitzherbert Rowe Lawyers

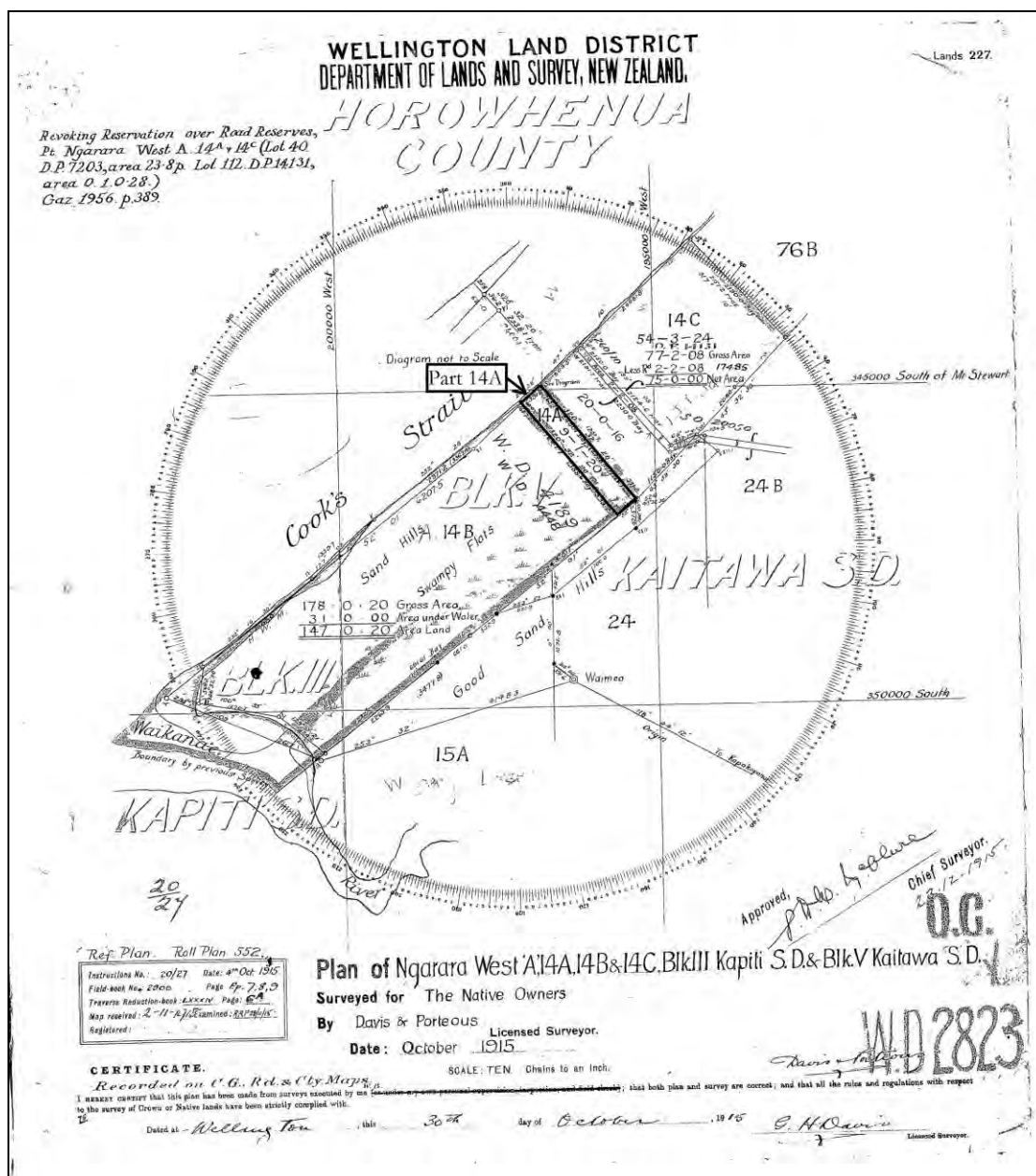


Figure 5: ML 2823, 1915

Quickmap

Figure 6 shows ML plan 3495 showing land parcel Ngarara A 14 B1 (which is the 20 acre block partitioned in 1918 and designated as a cemetery in the 1968 Horowhenua County Council Plan).

Additional research was commissioned from Evald Subasic, an expert in Maori Land Court minutes, to clarify this situation. His full report is annexed to this report as Appendix 1.

- November 1896: Maori owners of Ngarara West A14 block apply to have section set apart as cemetery reserve
- Provisional order granted on 10 November 1896, block to be known as Ngarara West A14A, not competed by survey (cemetery didn't come into existence)
- February 1905: Maori owners made another application, this was dismissed as judge noted only required survey to complete, this didn't happen

- May 1906: different section cut out as Ngarara West A14C (this area being shown on Figure 5 as being situated immediately to the north east of Ngarara West A14A).
- August 1915: Owners (E D & H Barber) have their block cut out – this becomes known as Ngarara West A14A, but bears no relation to the 1896 application for parcel A14A (Barber's parcel is 9 acres 1 rood & 20 perches, seen above in Figure 5)
- June 1918: Maori owners again made application for cemetery block. Parcel surveyed off (see Figure 6) and called Ngarara West A14B1.

Subasic concludes “The evidence examined suggests that the block of approximately 10 acres which the Maori owners of Ngarara West A14 sought in 1896 to set apart as a cemetery reserve was in the location of Ngarara West A14B1 which was partitioned in 1918. Ngarara West A14B1 was gazetted as a cemetery under the Horowhenua County administration (although the lifting of that status in 1969 has not been examined by me)”.

However it is not clear whether the 20 acre cemetery block was already in use in 1918 and the Maori Land Court was formalising an existing land use, or whether the area was set aside for planned future use and it is noted that the Partition Order of 1918 in respect of it did not stipulate that the area would be inalienable (as was proposed for the 1896 partition).

If the block were being defined for both existing and future use, some parts of the block would presumably include existing burials and some empty parts would be flagged for future use. It is possible that the 20 acre block would include existing burials: it is assumed that Hira Parata, who was asked by the judge in 1918 to assist the surveyors, would have advised the surveyors where any burials were located, and they would have placed the block boundaries to include these areas. Clearly the square edges of the 20 acre block do not mark the precise boundaries of a possible already existing graveyard, and are straight lines for surveying convenience.

It is noted that during the trenching on site in 1999-2000 burials were revealed in just one locality, as opposed to multiple localities as might be expected if the cemetery was in wide-spread use.

3.4 1898 graves

Historic survey plans and surveyors' fieldbooks for the area of Tamati Place were searched.

The area of the Ngarara block, within which the area of Tamati Place is located, is shown on survey plan ML 1491, 1898 (Figure 7).

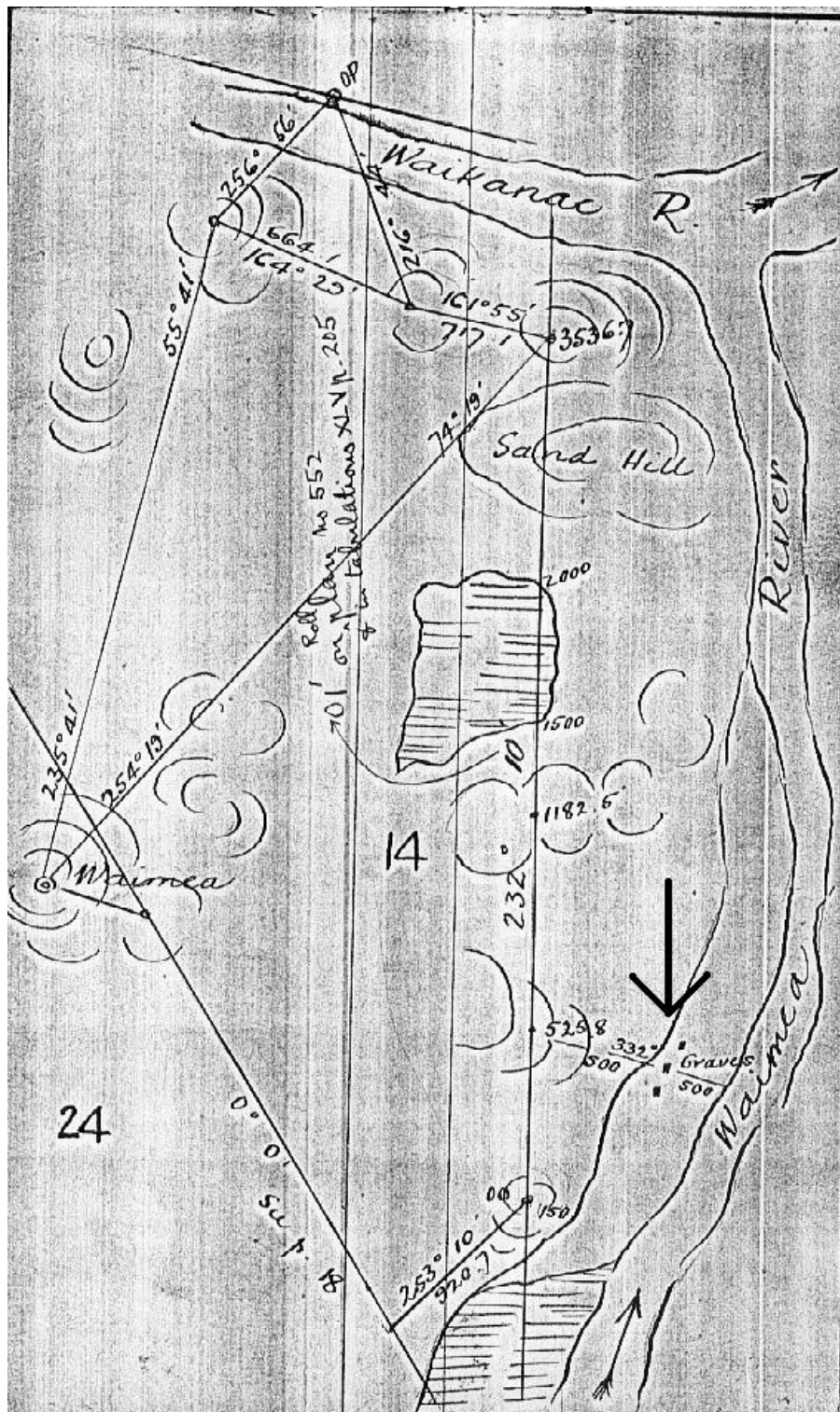


Figure 8: Fieldbook 2140, surveyed for plan ML 1491, 1898.

Graves arrowed
Land Information New Zealand

It is considered significant that the surveyor used the word “graves” in his fieldbook, and three small rectangles are shown to mark the graves. From the specific use of this term it may be inferred that the graves were of European style, marked either with headstones, crosses or a boundary fence. Generally when surveyors were recording unmarked Maori burial grounds they used terms such as “native burial ground”, “burial ground” or

similar. European style burial does not of course imply European people are buried there; they may be burials of Maori people dating from the post contact period.

Using survey information available in the notebooks, a surveyor colleague of the archaeologist²⁷ extrapolated the location of the historical graves onto a contemporary map – they are located on Wi Kingi Place exactly where the burials were revealed in 2000.



Figure 9: Location of graves from surveyor's notebook on contemporary aerial
McFadgen, 2010

It is possible that the graves of Browne, Nairn and Durie are the same three graves shown in the surveyor's notebook of 1898. However this has not been proven and can only be speculation.

It is noted that the WRC report states that Nairn and Durie shared one grave, and only two headstones were relocated during the lagoon construction work; therefore, if these people are the three in the 1898 plan there was at least one further unknown person in the third grave.

3.5 Historical documents

Further documents were searched in an attempt to obtain information on the land and its use. The current certificate of title for the 20 acre block (53B/939 issued in the name of the Company on 21 July 1998) was examined. The previous Certificate of Title for the 20 acre block (8B/524 issued 3 August 1970 in the name of the Company) was also examined, as was the Certificate of Title for the Company's main block originally comprising 38.8068 hectares including the estuary area (7A/1139 issued in the name of

²⁷ Bruce McFadgen

the Company on 12 June 1969). Certificates of Title 7A/1139 and 8B/524 respectively also referred to Maori Register documents that were obtained (MR 10/62 and 10/139).

The Ngarara West A file held by National Archives was examined²⁸. The only reference in that file to a cemetery was a letter dated 28 January 1926 from a Pono Timihana of Taranaki, requesting a copy of a sketch map of the Waimea Block to show the two cemeteries, Waimea cemetery and Takamore cemetery. The reply from the Chief Surveyor of 28 January 1928 notes there were no plans in the office showing these cemeteries. There is no further correspondence on this matter on the file.

²⁸ National Archives AAMA 20/27 Vol 1, accession W3150

B. The land

3.6 *Land ownership*

The Company purchased Ngarara West A14B1, the 20 acre block, in August 1969 from the Maori Trustee as agent for the Maori Owners²⁹. Prior to purchase the Company had attempted to contact each of the Maori Owners individually, for a meeting to consider the sale³⁰. This meeting was advertised for 18 December 1968^{31 32} and was duly convened at Waikanae on that date. The meeting by resolution approved the Maori Trustee as agent of the Owners to sell the land by public tender. The Company subsequently purchased the land through that tender process.

3.7 *Cemetery designation*

The 20 acre area of land was identified and was partitioned for use as a cemetery in 1919. The land was surveyed in 1920, and the 20 acre cemetery area became Ngarara block section A 14B No 1.

It is not known when this cemetery designation was placed³³ but it must have been on or before 1968, as the land was designated as a cemetery in the Horowhenua County Council plan, and is shown as such on a Horowhenua County Council planning map, dating to 1968 (Figure 10).

²⁹ Letter from Dep't of Maori Affairs to the Waikanae Land Company dated 8 August 1969, contained in file on purchase of 20 acre block held by Fitzherbert Rowe Lawyers

³⁰ Letters on file, contained in file on purchase of 20 acre block held by Fitzherbert Rowe Lawyers

³¹ Note on file, contained in file on purchase of 20 acre block held by Fitzherbert Rowe Lawyers

³² Of interest was a letter on file dated 18 August 1969 from the Wellington Archaeological Society, noting the advertised block for sale, noting there was "signs of prehistoric occupation, mainly in the form of now rather disturbed midden deposits" and requesting permission to go on the land to examine and record the sites, contained in file on purchase of 20 acre block held by Fitzherbert Rowe Lawyers

³³ Horowhenua Council records have been moved in part to the Kapiti Coast District Council. Many records are missing or incomplete. The district plan which shows the map became operative on 1 June 1968.

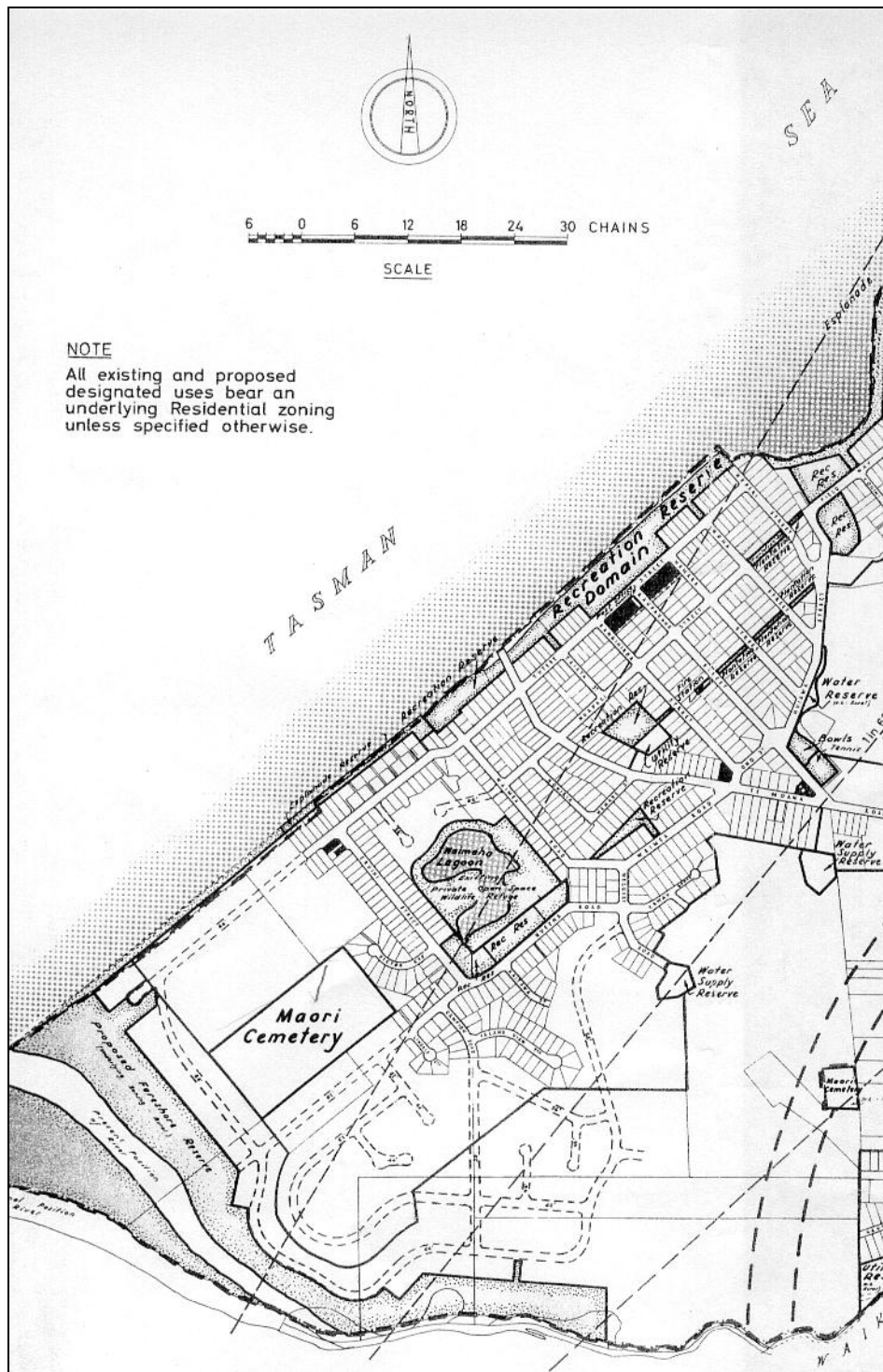


Figure 10: Planning map from Horowhenua County Council district plan 1968, showing cemetery designation

Figure 11 shows the boundary of the designated cemetery in relation to present day street layout.

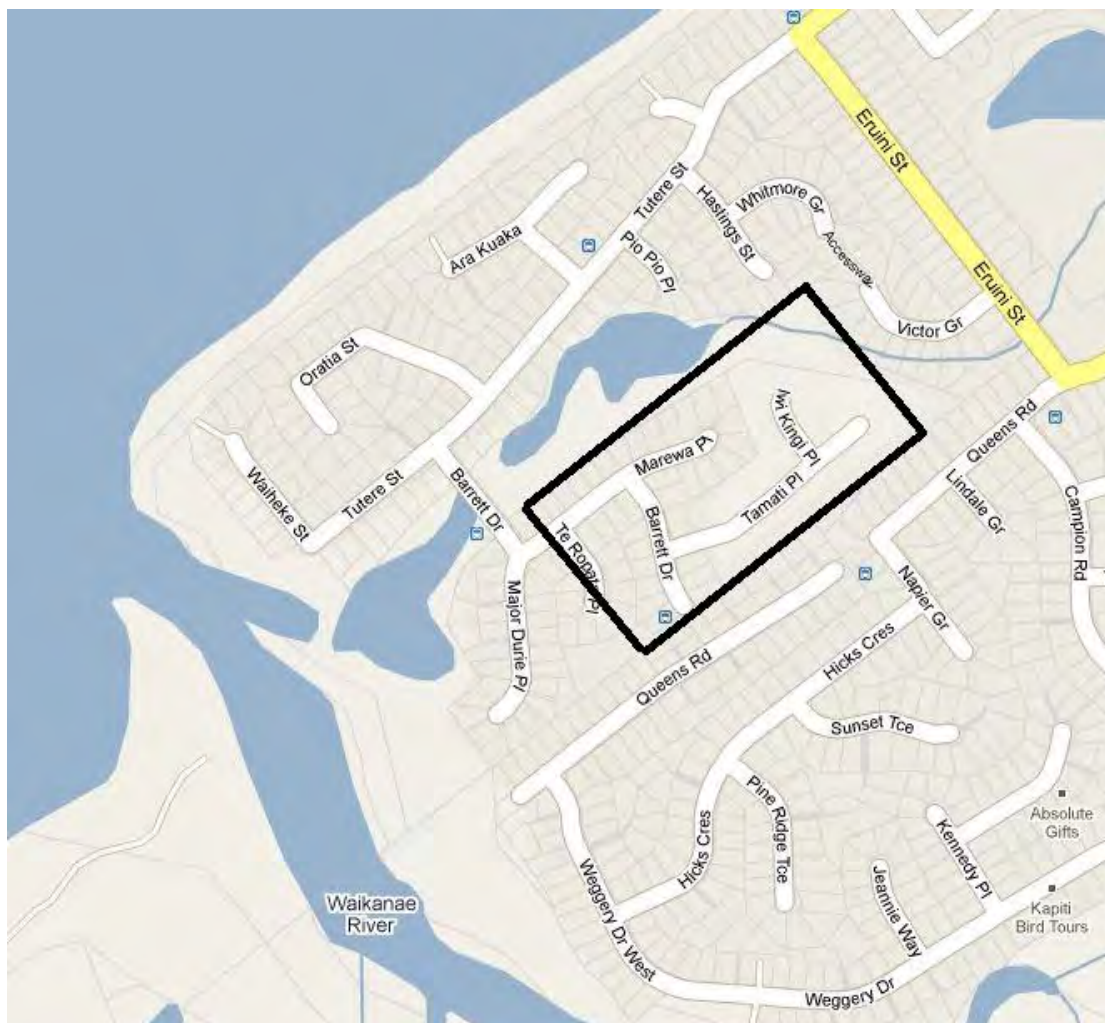


Figure 11: Cemetery designation in relation to current street layout

The Company purchased the parcel of land known as Ngarara A14B1 some time in 1969³⁴. A letter from the Company to Horowhenua County Council dated 26th August 1969 notes the Company had “recently entered into a contract to purchase the...block from the Maori Trustee...”³⁵. The same letter noted that enquiries made by the Company indicated the land had never been used as a burial ground for Maori, but may have had some Europeans buried there³⁶. The nature of these enquiries or the source of this information is not stated.

The file on the purchase of the 20 acre block by the Company, held by Fitzherbert Rowe Lawyers, contains a copy of the Wellington Minute Book 21 referred to in this report. The copy of the minutes on file has a cover letter from the Maori Land Court to the Company lawyers, dated 11 September 1969. This letter states “At the meeting of owners of this block held at Waikanae on 18 December 1968, Mr Simpson, Solicitor, said

³⁴ Letter dated 26th August 1969, contained in file on purchase of 20 acre block held by Fitzherbert Rowe Lawyers

³⁵ Ibid.

36 *ibid*

that at first it was thought that the cemetery was in this block but he had since learnt that it was not³⁷. The source of this information is not stated.

A further letter from the Maori Land Court to the Company lawyers dated 23 September 1969 noted that the block of land partitioned out by the Maori Land Court in 1919 for use as a graveyard, but that there had been no subsequent action to have the land set apart as a Maori reservation for the purposes of a cemetery, and it thus remained Maori freehold land at that time³⁸. A subsequent letter from the Company lawyers to the Horowhenua County Council dated 25th September 1969 noted that the intention of establishing a cemetery had not been carried out, and that there was no suggestion at the 1919 hearing that the land had ever previously been used as a cemetery, and that this was a use envisaged for the future³⁹. The Council indicated in October it would consider lifting the Maori Cemetery designation, provided the Maori Land Court would confirm that the land was not in use as a Maori burial ground⁴⁰.

A newspaper report from the Evening Post of 28 October 1969 on Fitzherbert Rowe's file on the purchase of the 20 acre block records the plan of the Company to buy the block, and of the plan to change the designation⁴¹. The article states there were three recognised Maori burial grounds in the Waikanae area (but names only Tukimore (sic)), and names the burial ground within the 20 acre block as Karewarewa. The article notes that the burial ground then in current use at Waikanae was the Tukimore [sic] ground, the other two were filled. This statement implies Karewarewa burial ground had been in use prior to 1969, and was filled. The source for naming Karewarewa as the 20 acre block of land is not stated in the newspaper article. The article further states that Mere Pomare noted that her mother, Te Rauoterangi, was buried at Karewarewa, as were others including Ihaia Paihia; dead from the battle of Kuititanga; and Waipunahau, the mother of Wi Parata. The source of this information is not stated in the article. Section 3.7 of this report, sourced from Carkeek, noted that not only was the precise location of Karewarewa not known, but that Waipunahau was buried at Waimeha, not Karewarewa, and that dead from the Kuititanga battle were buried at Arapawaiti, not Karewarewa.

Mrs T Kauri and Mrs S Tamati both signed a letter dated 14 October 1969, objecting to the lifting of the designation. They noted their tupuna who were buried at Karewarewa. However, of interest is the fact that they refer to land block Ngarara West A14B1, but then ask "If this is (sic) piece of ground known as Karewarewa...", which suggests there may have been some doubt over the location of Karewarewa⁴².

³⁷ Letter dated 11 September 1969, contained in file on purchase of 20 acre block held by Fitzherbert Rowe Lawyers

³⁸ Letter dated 23 September 1969, contained in file on purchase of 20 acre block held by Fitzherbert Rowe Lawyers

³⁹ Letter dated 25 September 1969, contained in file on purchase of 20 acre block held by Fitzherbert Rowe Lawyers

⁴⁰ Letter dated 3 October 1969, contained in file on purchase of 20 acre block held by Fitzherbert Rowe Lawyers

⁴¹ File on purchase of 20 acre block held by Fitzherbert Rowe Lawyers

⁴² Letter dated 14 October 1969, contained in file on purchase of 20 acre block held by Fitzherbert Rowe Lawyers

The county engineer wrote to the Company's solicitors in February 1970 noting that apparent initial clearing work on site being undertaken by the Company was "premature"⁴³.

The Maori Land Court in Palmerston North wrote to the Company on 19 February 1970, advising that at that point the survey for the 20 acre block had not been undertaken and the partition order had not been signed. The letter also notes a further partition order made for a 9 acre area called Ngarara West A sec 14A, for a Charles Morison, and that the minutes for this partition contained no reference to the land having been used as a cemetery⁴⁴.

The proposal to lift the designation was publicly notified in February 1970⁴⁵. An objection was lodged by Te Aputa Kauri (referred to above as Mrs T. Kauri), on the basis that ancestors were buried in the block of land, it was a tapu place, and it was the resting place of many persons connected with the early history of Waikanae⁴⁶. A letter from the County Clerk to the Company's solicitors noted Mrs Kauri's objection, and also noted there were three other objectors who lodged too late, but who would probably support Mrs Kauri's objection⁴⁷.

The Company lodged an opposition to Mrs Kauri's objection on 1 May 1970, on the grounds that "the land...cannot be shown to be the burial place of any of the ancestors of the objector or of Maoris (sic) connected with the early history of Waikanae; and...that the...land cannot be said to be a traditional Maori burial ground..."⁴⁸.

The hearing to lift the designation was held some time between February and August 1970 (there are no minutes or record of the hearing on file, but a letter from the County Clerk dated 10 August 1970 states that the hearing of objections was complete)⁴⁹.

The file held by Fitzherbert Rowe Lawyers contains an undated copy of a presentation presumably made by Mrs Kauri at the hearing. In it she expressed her feelings towards the land and her tupuna. She confirmed her objection to the lifting of the designation, but she also asked that "...any human remains that are uncovered in the course of excavation or development of [the land] be interred in a common grave on an adjacent piece of land and for a plaque to be erected...."⁵⁰.

William Lawrence, Director of the Company, also made a presentation to the hearing. In his presentation he noted that the only visible evidence of burials on the land were two

⁴³ Letter dated 18 February 1970, contained in file on purchase of 20 acre block held by Fitzherbert Rowe Lawyers

⁴⁴ Letter dated 19 February, contained in file on purchase of 20 acre block held by Fitzherbert Rowe Lawyers

⁴⁵ Copy of public notification for insertion into Chronicle and Evening Post newspapers, 14 and 21 February, 1970, contained in file on purchase of 20 acre block held by Fitzherbert Rowe Lawyers

⁴⁶ Objection form no 3/1, dated 2 April 1970, contained in file on purchase of 20 acre block held by Fitzherbert Rowe Lawyers

⁴⁷ Letter dated 27 April 1970, contained in file on purchase of 20 acre block held by Fitzherbert Rowe Lawyers

⁴⁸ Opposition to objection form dated 1 May 1970, contained in file on purchase of 20 acre block held by Fitzherbert Rowe Lawyers

⁴⁹ Letter dated 10 August 1970, contained in file on purchase of 20 acre block held by Fitzherbert Rowe Lawyers

⁵⁰ Undated presentation, signed by Te Aputa Wairau Kauri, contained in file on purchase of 20 acre block held by Fitzherbert Rowe Lawyers

headstones, one of which indicated it related to a person who was European. He noted his enquiries to the Maori Land Court which indicated there was no Court record or Court knowledge indicating the block was part of a traditional burial ground. He noted that the land had not been set apart as a Maori reservation for the purposes of a cemetery and nor had trustees been appointed. He noted that Carkeek did not know the precise location of Karewarewa⁵¹.

The County Clerk wrote to the Company on 10 August 1970, stating that Mrs Kauri's objection to the lifting of the designation had been disallowed. However the Clerk also stated "but nevertheless as there is a possibility that human remains may be uncovered as development of the land processed, the Waikanae County Town Committee's attention be drawn to this possibility, so...the Committee may recommend...that the Company shall arrange for the reinternment of any such remains..."⁵²

In this letter dated 10 August 1970 the County Clerk notes the objection had been disallowed because "...there [was] no certain evidence that it is an historical Maori Burial Ground, or that interments have taken place since it was set apart for a future Maori Cemetery in 1919"⁵³. This is the only reference to the cemetery being set aside for "future" use, implying the land had not been used for burials to that point apart from those evidenced by the two headstones on the land.

From August 1970 onward the file contains correspondence outlining and progressing the Company's development plans on the land.

3.8 Construction of the lagoons and subdivision

In the last 30 years the ground surface of the area around Tamati Place has been considerably modified.

The Company was formed around 1969 to develop areas of land on the Kapiti Coast for subdivision. The total area purchased for development by the Company was slightly in excess of 122 acres (comprised in three separate certificates of title) and including the area of what is now the proposed Tamati Place subdivision. This block was subject to a designation for a Maori cemetery, as discussed in section 3.7 of this report; this block has already been rezoned for residential use.

Between 1969 and 1971 a swampy area that was the former bed of the Waimeha River was created into a lagoon named the Waimanu lagoon⁵⁴. The lagoon was excavated with a floating suction dredge that pumped material from the bed of the lagoon and discharged it onto the south-eastern lagoon shore⁵⁵. How far from the lagoon shore the material was re-deposited is not known, but it is reasonable to expect that it would have been used to level the surface of the terrace between the stream and the low dune ridge.

⁵¹ Undated, unsigned presentation, contained in file on purchase of 20 acre block held by Fitzherbert Rowe Lawyers

⁵² Letter dated 10 August 1970, contained in file on purchase of 20 acre block held by Fitzherbert Rowe Lawyers

⁵³ Letter dated 10 August 1970, contained in file on purchase of 20 acre block held by Fitzherbert Rowe Lawyers

⁵⁴ Maurice Rowe, *pers. comm*

⁵⁵ James Hutchison *pers. com*

The nature of the dredge meant it was automatically compacting material as it was deposited⁵⁶. A recreation reserve was created around the edges of the lagoon.

A report and photograph in the Kapiti Observer of 9 July 1970 shows the suction dredge at work. The story reports plans for a marina and housing development. The Kapiti Observer has further stories and photos in its editions of 29 October 1970 and 17 December 1970.

A report made by WRC in 1992 stated “as the work proceeded on the lagoons “an extensive Maori burial ground was uncovered””⁵⁷. This report speculated that these burials may have “included warriors killed during the battle of Kuititanga”⁵⁸. A similar statement is also included in Chris MacLean’s book *Waikanae: Past and Present* (it is likely that MacLean was a source for the WRC report – text in both is very similar)⁵⁹.

However, given that the work was carried out between 1969 and 1971, it is possible sources have become confused over the years. Maurice Rowe, who was a director of the Company at the time, is emphatic that no burials were located or disturbed during the lagoon development work; he remembers the locating of the headstones, but no bodies in association with these or anywhere else⁶⁰.

This report from the MacLean book and the WRC report was discussed with Kapakapanui at a meeting of 13 February 2001; in a follow-up e-mail from Susan Forbes on this issue Susan states “some of that info has become somewhat generalised over the years. Burials were uncovered at the airport and at Queens Road and none of us could think of any at Waimeha – Chris’s sources were probably talking about Queens Road - not far away but far enough to be unrelated to this project”⁶¹.

Following acquisition of the 20 acre block by the Company in 1969-70, “several gravestones” (as described in the WRC Report) were located, which were reported to mark the burial places of William Browne, Margaret Nairn, and Penelope Durie⁶². These headstones have been relocated to the recreation reserve beside the current lagoon; the WRC report does not state whether the bodies of the people were also recovered, and if so, what became of them.

In 1990 and 1999 the ground surface of the subdivision was re-contoured⁶³. In 1990 the ground to the west of Wi Kingi Place was cut to a maximum depth of slightly more than 3m on the dune ridge, and slightly more than 0.5m west of the intersection between Tamati Place and Wi Kingi Place. Fill was deposited on the eastern part of the subdivision to a maximum depth of 4m. In addition, small pockets in the western part were filled to a depth of less than 1m.

⁵⁶ Maurice Rowe, *pers. comm*

⁵⁷ WRC, 1992:105

⁵⁸ *ibid.* 105

⁵⁹ This particular section was unreferenced in the MacLean book: the consultant contacted Chris MacLean and asked if he could remember the source. Chris was kind enough to check his records for his book; he had no written records for this report, so suspected it came from an oral interview undertaken for his book. He postulated the lack of referencing would have been deliberate to ensure the anonymity of the source.

⁶⁰ Maurice Rowe to Mary O’Keeffe, 2 September 2010

⁶¹ e-mail exchange: Susan Forbes to Mary O’Keeffe, 15 February 2001

⁶² WRC, 1992:105

⁶³ engineering plans: 1605836 sheet 1, 1990; 1272233 sheet 1, 1999

In 1999 the earthworks resulted in minor cutting to a maximum depth of about 1m on the north-eastern boundary of Wi Kingi Place and along Tamati Place, and the western and northern parts of the subdivision were filled to a maximum depth of 1m. Small pockets of cut and fill were made along the dune ridge southeast of Tamati Place, the maximum cut being about 2m, and the maximum fill about 1m.

It would have been normal practice to use the nearest source of material as fill and this would have included spoil cut from the higher parts of the subdivision. In 1990, however, some spoil was also brought in from the Major Durie Drive subdivision between Tamati Place and the Waikanae River and deposited along the south-eastern dune ridge⁶⁴.

It is noted that no human remains were found during the course of these works.

3.9 *Geomorphological context*

The geomorphology of the area provided critical information in interpreting what was thought to be archaeological material. Survey plans and aerial photos housed at Land Information New Zealand were studied to gain information on the changing environmental context of the area.

Tamati Place subdivision is near the seaward edge of the sand dune belt that extends from Paekakariki in the south to beyond the Manawatu River in the north. It is on the south bank of the former Waimeha Stream, which was once a large tributary of the Waikanae River⁶⁵ that flowed west to southwest behind the coastal dunes towards the present Waikanae estuary. It is bounded to the southeast by a low dune ridge roughly parallel to the coast.

The sand dune belt has formed during the last 6500 years⁶⁶. Before then the shoreline was near the foot of the hills⁶⁷, and since then, as a result of sand accretion, the shoreline has moved seawards some 3.5 km to its present position.

About a kilometre inland of the subdivision a prominent sand dune ridge roughly parallel to the coast marks an intermediate position of the shoreline. The dune ridge, called the Taupo Dune, is a relict foredune that was the shoreline at the time of the Taupo Pumice eruption⁶⁸ *ca.* 230 AD.

The sand seawards of the Taupo Dune has accumulated since about 230 AD and is identified as belonging to the Waitarere and Motuiti dune-building phases⁶⁹. At some time since 230 AD the beach was where the subdivision is today, and has been buried as the shoreline advanced further seawards. The Waimeha Stream, which at one time would have flowed to sea north of the subdivision, was probably forced to flow south-westwards by the accumulation of sand between it and the sea.

⁶⁴ James Hutchison, *pers. com.* 2000

⁶⁵ Adkin, 1941

⁶⁶ Gibb, 1978

⁶⁷ Fleming, 1972

⁶⁸ Stevens, 1988, Sparks *et al*, 1995

⁶⁹ Stevens, 1988

3.10 GPR survey

A ground penetrating radar (GPR) survey was carried out in March 2002 to check for the possibility of further unrecorded and unknown burials in the Tamati Place area. The entirety of the Tamati Place proposed subdivision was scanned; nine anomalies that the technician considered could conceivably (but not presumably) have been further possible burials were recorded in the vicinity of Wi Kingi Place, immediately around where the first burial were revealed by the trenching in 2000 (see Figure 12). Three anomalies were also recorded at the very north boundary of the site; no further anomalies were recorded anywhere else on site.

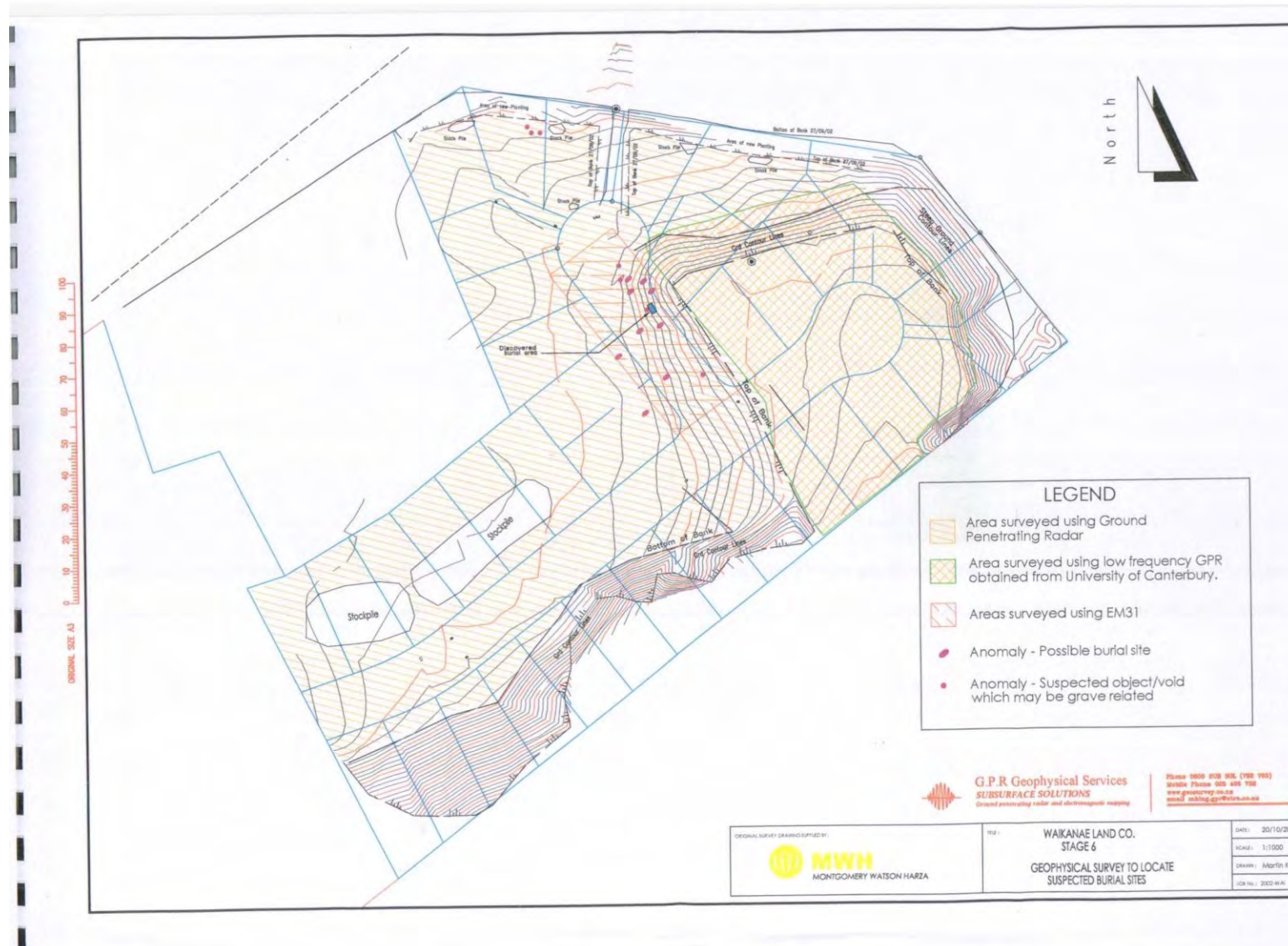


Figure 12: GPR survey
GPR Geophysical Services, 2003

C. Archaeological analysis

3.11 *Origin and interpretation of the shell*

The archaeologist on site during the initial discovery of the burials also reported seeing lenses of shell⁷⁰ in section. When the consultant made a visit to the site in December 2000, and January 2001 shell was observed scattered loosely over the surface of the partially vegetated sand surface of the proposed subdivision.

Shells on the present ground surface of the subdivision are nearly all on fill and would have been deposited in their present position either during or since 1990 AD.

The original material excavated from the lagoon was almost certainly reworked in 1990 and again in 1999. In 1990, the material west of Wi Kingi Place was cut and probably re-deposited on the eastern part of the subdivision. In 1999, material along Tamati Place and Wi Kingi Place was excavated and probably re-deposited on the western part of the subdivision.

If the shell lens reported by Forbes to have been found 600 mm below the ground surface in Tamati Place was found east of the intersection with Wi Kingi Place, then even allowing for up to 1m of cut in 1999, it would be in fill and probably deposited in that position in 1990 AD. If it was found at or west of the intersection it could have been deposited in that position in 1970 as dredge spoil.

It is therefore inferred from the history of earthworks on the subdivision that the shells on the ground surface and in the trenches are not *in situ* deposits. Excavation of a trench where the shell lens was found would test the inference that the shell lens is in re-deposited material.

To test this hypothesis a surface collection of shells was made in January 2001 for analysis and testing.

The shells (table 1) are estuarine and open coast species found on the beach today. As similar species are also found in shell middens in the Waikanae area, the species themselves are not a reliable indication of either a natural or a cultural origin.

Table 1: Shell species collected from ground surface of the subdivision.

Shell species	
Scientific name	Common name
<i>Austrofuscus glans</i>	ostrich foot
<i>Dosinia anus</i>	ringed dosinia
<i>Mactra discors</i>	
<i>Paphies australis</i>	pipi
<i>Paphies (Mesodesma) subtriangulata</i>	tuatua

⁷⁰ Shell lenses would indicate shell deliberately discarded by people; and thus is an archaeological deposit

<i>Paphies (Mesodesma) ventricosa</i>	toheroa
<i>Spisula aequilateralis</i>	triangle shell

There is a general absence of cultural material such as artefacts, animal bones from food species, burnt and fractured oven stones, or charcoal that might indicate the shells are from old middens.

Blackened twigs and sticks similar in appearance to charcoal were seen in several places, as were stone fragments with blackened surfaces, or with the reddish colour of iron oxide, but natural processes can explain these materials.

On the lower slopes of the sand ridge southeast of Tamati Place between the entrance to the subdivision and Wi Kingi Place irregular mounds of black peat about 2m across and 20 to 40 cm high were observed during a site visit in January 2001. The peat is mixed with swamp-blackened twigs and sticks, rounded lumps of Taupo Pumice discoloured by swamp black and iron oxide, shells stained with iron oxide, and occasional stones some with blackened surfaces others stained with iron oxide.

The peat is probably from either re-deposited material originally dredged from the lagoon in the 1970s, or is from a former *in situ* wetland. In either case it has probably been dug out of a service trench along Tamati Place. Excavation of a new trench might clarify its origin. The wood fragments, stone, and shells can be matched on the present beach and are possibly from an old foreshore that later became incorporated in a wetland after the Waimeha Stream began to flow south-westwards.

A sample of shells was taken from the ground surface for radiocarbon dating. The ground surface over the subdivision had been sprayed with a mixture of PVA and grass seed, and PVA adhering to shells was removed by scrubbing the shells in tap water. The age of the shells, determined by radiocarbon dating, is between 935 and 1080 AD (Table 2). This age is substantially older than the date for the human settlement of New Zealand of *ca.*1250 AD⁷¹ and indicates that the shells are not from an archaeological midden.

Table 2: Radiocarbon and calibrated ages (95% confidence interval) for tuatua shells (*Paphies (Mesodesma) subtriangulata*) collected from the ground surface of the Tamati Place subdivision. The shells were physically pretreated by scrubbing in cold water to remove traces of PVA and then air-dried. The shells were chemically pretreated by washing in 5 M dilute hydrochloric acid for 500 seconds, rinsing and drying. $\delta R = -30 \pm 13$ (McFadgen and Manning, 1990).

Laboratory number	Conventional Radiocarbon Age (years BP)	$\delta^{13}C$ ‰	Calibrated Age (years AD)
Wk9144	1360 \pm 40	1.4 \pm 0.2	935–1080

The age of the shells indicates that they are from a natural deposit. Considering the earthworks that have been carried out on the subdivision, especially the excavation of the lagoon in the 1970s, it is inferred that the shells on the subdivision are derived from a former beach in the position of the present lagoon. The lagoon water level is less than a

⁷¹ Anderson, 1991; McFadgen *et al.*, 1994; Higham and Hogg, 1997

metre above mean high water mark, and the suction dredge would almost certainly have intercepted an old beach when the lagoon was excavated.

Excavating a trench near the present lagoon edge can test the inference. Shells should be found at or above the height of the lagoon bottom and have an age similar to that obtained for the shells on the present ground surface.

Not all of the shells on the subdivision are necessarily from a natural deposit, however. Some could possibly be from shell middens that were originally on the subdivision, or brought from Major Durie Drive, but their status as former midden shells would need to be demonstrated.

It is noted that if the shells in the subdivision are a result of the construction of the lagoon, it is possible that some of the human bones might have been similarly deposited if they had been originally buried on a former bank of the Waimeha Stream.

3.12 Analysis of the human bones

Dr Nancy Tayles, an anatomist from Otago University, was engaged to examine the bones recovered in 2000.

Tayles⁷² reported:

- ♦ The minimum number of individuals represented is nine: three adults, and six infants and children. It is not possible to be more precise about the number because of the disturbance and poor condition of some of the material
- ♦ Two of the adults are Maori. One child has two of the Maori characteristics, in the skull and femur. The ethnicity of the remaining individuals could not be established.
- ♦ Two adults were male, one was female
- ♦ There was no obvious cause of death for any of the people

3.13 Interpretation of the burials

The graves along Wi Kingi Place are in a part of the subdivision where fill was deposited in 1990. They were below the ground surface as it existed before the 1990 earthworks and would have been undisturbed until the service trenches were excavated in 2000 AD.

The first groups of burial were removed from the site and have been reinterred. The second group were also removed from site and were put into safekeeping at the Waikanae Funeral Home. These burials have been analysed by Dr Nancy Tayles of Otago University, as reported in section 3.12 of this report.

In her evidence Ms Forbes noted that the “bones recovered had been laid either on wooden slats or in coffins”⁷³. She did not say what the evidence for this is: whether she observed pieces of wood *in situ*, or staining in the soil/sand that is interpreted to be wood.

⁷² Tayles, 2001: 2

⁷³ Forbes, n.d.:7

However the burials analysed at the Waikanae Funeral Home also contained fragments of wood that displayed regular holes consistent with a hole left by a rusted nail. It is inferred that these wooden fragments are the remains of coffins, which in turn implies burial in a “Christian” style. However it cannot be inferred that all the burials disturbed on site were in coffins or on slabs. In her evidence Ms Forbes notes that several of the disturbed burial and bones were recovered from the spoil heap (Forbes, n.d.). Equally these wooden fragments could originate from wooden crosses and/or wooden fences used to mark graves, which also are associated with Christian style of burial.

Two pieces of information have been established about the burials: some at least are of post-contact⁷⁴ age (on the basis of the wooden fragments and nails), and some are Maori in origin.

There are several possibilities for the origins of the burials.

- The first is that they are Muaopoko, dating from before the settlement of Te Ati Awa in the region (c.1820s). This is not considered likely from the post-contact context inferred from the wood attributed to coffins or wooden crosses.
- The second is that they are Ngati Raukawa dead after the Kuititanga battle in 1839. Carkeek notes that all the 55 Raukawa dead were buried in one grave, and in “European fashion”⁷⁵. Carkeek’s statement makes it less likely that the Tamati Place burials are from this battle: if all the battle dead were buried in coffins a great number of coffins would have had to have been obtained within a very short timeframe. It is considered far more likely that after the battle bodies were wrapped in shrouds or cloths of some sort, and were buried in a mass grave, as recorded by Carkeek. Further, Carkeek records the dead were buried at the “main Waikanae settlement”, which was the pa at Kenakena, which is across the Waikanae River.
- The third is that they are Te Ati Awa from mid to late 19th Century. There are no grounds to discount this as a possibility. Such burials could be in coffins, and could have wooden crosses or boundary fences, which could explain the wooden fragments with the burials.
- The fourth is that they are Te Ati Awa from the early 20th Century, and that the precise location of the burial ground has fallen out of traditional memory. These graves also could have coffins or wooden crosses or boundary fences, which could explain the wooden fragments with the burials.
- The fifth is that they are a combination of Maori and European dead, as the ethnicity of some of the burials recovered has not been established. They could include the bodies of William Browne, Margaret Nairn, and Penelope Durie (as noted in section 3.2 of this report). These Europeans could have been buried at the local Maori burial ground, as there may have been no European church cemetery in Waikanae at this time.

This last option is considered most likely, on the basis of historical and documented use of the site. It is reasonable to assume that some at least of the burials predate 1900, so are archaeological in terms of the definition in the Historic Places Act. There is nothing to firmly date any of the burials, except for a likely post-contact context.

It is possible that bones disturbed on site are from a variety of historical origins, and have been mixed and disturbed prior to 2000AD. Some of the human bones might have been

⁷⁴ “Contact period” refers to the period in New Zealand history when Maori and European were first making contact, in the middle part of the 19th century

⁷⁵ Carkeek, 1966:60

disturbed by preparation of the ground surface (e.g. by removal of topsoil or vegetation) before the lagoon dredgings were deposited in 1970, or by smoothing the ground surface after the dredging was finished. Also, it is possible that later burials intercut earlier burials, and that further disturbance by the digger in 2000AD has mixed bones of various origins.

The link between the headstones found on site and relocated in 1970, and the three graves marked on the 1898 survey plan has not been established, nor has the relationship between the occurrence of the burials of Browne, Nairn and Durie in a traditional Maori burial ground. It is possible that the headstones of Browne, Nairn and Durie are the same as the three graves marked on the 1898 plan, but this has not been established nor proven.

3.14 Summary of section 3

Much detailed data has been presented in section 3 of this report. In order to help the reader assimilate this data, a summary of key facts and data is presented:

- ♦ the area of completed and proposed development is partially within the 20 acre block formerly designated “Maori cemetery”
- ♦ it is not known how much of the 20 acre block had been utilised for burials
- ♦ some of the burials disturbed at Tamati Place were of Maori origin, and were both adults and children
- ♦ there were also burials on site noted by a surveyor in 1898, probably of European origin
- ♦ two burial headstones were relocated during development work in the 1970s
- ♦ the landscape around the present Waimanu lagoons was created by dredging in the 1960s
- ♦ shell on the surface of the Tamati Place subdivision was not of archaeological origin, and instead was remnants of a former shoreline
- ♦ A GPR survey shows some anomalies on site; the majority of recorded anomalies in the GPR survey are closely clustered around the area of the revealed burials, with the exception of three anomalies at the north of the area of GPR survey.

4. Conclusions

The Company has completed various stages of development within an area of rolling dunes beside the former alignment of the Waimeha River. Part of the area of the proposed remaining work (Stage 6) is also within a former designated cemetery and a small part (Stage 4b) is outside this area (see Figure 3). Part of the former designated cemetery is known to have been used for burials; however the extent of the burials is not known.

While it is known that there were three graves located on the former designated graveyard block, as well as historical accounts of people possibly buried there in the 1850s, and some burials have been located on that block, the number and extent of burials is not known. A significant portion of that block has already been developed for housing and the GPR survey of the undeveloped land did not provide evidence of burials beyond the isolated site where burials were exposed in 2000.

Shell scattered on the surface adjacent to where the burials were located in 2000 was found to be of natural origin, and not archaeological. However it is noted that midden is by far the most common type of archaeological site found on the Kapiti Coast, and there is a high likelihood of middens within the rolling coastal dunes here as elsewhere on the Kapiti Coast.

Records show a 20 acre graveyard was cut out in 1918; there is no indisputable evidence that it was already in use. Records show the designation for a Maori Cemetery in the 1968 district plan, of an area of very similar location, size and alignment to the 1918 graveyard.

Due to the disturbance of the burials in 2000, this is an area of archaeological sensitivity. A ground penetrating radar survey undertaken in 2002 on Stage 6 of the subdivision located some anomalies on site that may be further unknown burials: these were clustered around the burials disturbed in 2000. It is noted that no further certain “burial” anomalies were recorded in the area of Stage 6, which suggests the burials may be a localised cluster.

From this it is inferred that there is a low likelihood of finding burials within Stage 4b of the subdivision. It is however noted that the GPR survey did not extend to the area of Stage 4b, and this area has not been tested in any way.

Specifically in relation to Stage 4b, it is suggested that an archaeological authority be granted, noting the following specific issues:

- There is to be substantial areas of fill placed on site, with little cutting, so the potential impact on the archaeological resource is reduced;
- The area of proposed work is at the western extent of the 20 acre block, whereas the found burials were at the eastern end;
- Part of the area of proposed work is a high dune. Based on existing archaeological knowledge of the Kapiti Coast, burials are more likely on the tops of the dune. The top part of the dune is located within properties adjacent to Stage 4b that have already

been developed, the majority of the dune that is within Stage 4b is the dune slope, where burials are less likely to be located;

- The consultant considers there is a likelihood of finding intact middens within the area of proposed Stage 4b; however middens are not unusual on the Kapiti Coast, and is a common outcome where other authorities have been granted;
- The actual area of work is very small, being only 4 lots. The properties bordering this proposed area of work have already been developed, and contain already constructed houses.

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Appendices

Appendix 1: Research Notes on Ngarara West A14 – Urupa/Cemetery

The purpose of this report is to discuss and clarify – insofar as it is possible – the uncertainty over the location of the surveyed Maori urupa/cemetery (or cemeteries) on Ngarara West A14 block at Waikanae. Two critical issues to be addressed were identified – firstly, whether there were one or two surveyed urupa/cemeteries on the A14 block, and secondly, whether there was a surveyed urupa/cemetery on the Ngarara West A14B1 section. The conclusions, based on the sources consulted (Maori Land Court Minute Books, and Maori Affairs and Lands and Survey files at Archives New Zealand) are presented below, along with some of the related surveying and partitioning issues which help clarify the overall picture.

The first reference to a cemetery on the Ngarara West A14 block appears in Otaki Maori Land Court Minute Book 31, when the Maori owners of the land applied in November 1896 before the Maori Land Court to have a section of the block set apart as a cemetery reserve, to be vested in all the owners. The cemetery was to:

include the part to the westward of Section 15 between that boundary and the river Waimea to comprise an area of 10 acres if an area to that extent is comprised within the boundaries indicated, if not then such a quantity as may be found there whether more or less.⁷⁶

Judge Mackay, who presided over the 1896 case, issued a provisional partition order to this effect, stipulating that the cemetery reserve was to be designated as Ngarara West A14A. The order, however, was not completed by survey. This in effect meant that the partition was not completed, and Ngarara West A14A as defined in the partition order did not come into existence as a cemetery reserve with a surveyed title.

The reference in the 1896 minutes to “the boundaries indicated” indicates that the boundaries of the cemetery reserve had been marked on the court’s copy of the survey plan of the block. Unfortunately, the court’s copies of such plans are not generally retained as official records and the plan before the court in 1896 has not been located.

Nine years later, in February 1905, the Maori owners of Ngarara West A14 made another application to the Maori Land Court for a cemetery to be partitioned out of the block. This time the application was dismissed, with the Judge noting that the provisional orders for this purpose had already been made in 1896, and all that was required at that point was for a survey of the section to complete the order.⁷⁷

Again, no survey of Ngarara West A14A was completed. The probable reason for the lack of survey was the fact that at the time there was an outstanding survey lien on the Ngarara West A14 block dating back from the original partition of the block out of

⁷⁶ Otaki MB 31, p. 147.

⁷⁷ Wellington MB 13, pp.285-286.

Ngarara West. Either the owners themselves were unwilling to incur a further survey lien by surveying the cemetery section, or the surveyors were unwilling to survey the section until the outstanding debt to them was paid. The evidence consulted is silent on this matter, but the outstanding survey lien from the Ngarara West A14 block came to prominence in 1906. The surveyor took advantage of a change in legislation which allowed survey liens to be satisfied with land rather than cash, and applied to the Maori Land Court in May 1906 to have a section cut out of Ngarara West A14 to satisfy the survey lien. This was approved, and 75 acres were cut out of the block (leaving the balance of the block at 185 acres) to satisfy the lien; the section being designated as Ngarara West A14C.⁷⁸

The designation of the 1906 partition as Ngarara West A14C is somewhat unusual, considering that sections A and B did not actually exist at this time, not then having been surveyed. It is possible that the Judge, still mindful of the provisional partition order from 1896 designating the cemetery reserve as Ngarara West A14A, anticipated that with the completion of a survey that section would come into existence and thus any potential confusion would be avoided (presumably Ngarara West A14B was used to designate the balance of the block).

Yet again, no survey of Ngarara West A14A or B followed in the coming years, and confusion over the designations crept in. The catalyst for this was the application of E. D. and H. Barber to the Maori Land Court to have their interests in the Ngarara West A14 block cut out in August 1915. The Barbers acquired interests in the block that had initially been obtained by C. B. Morrison from the Maori owners in the late 1890s and early 1900s.⁷⁹ Initially it was believed that the Barbers' interest in the block was 13½ acres, but it was soon realised that after Ngarara West A14C had been cut out to satisfy the survey lien, Morrison's interest amounted to only 9 acres 1 rood and 20 perches. This area was then cut out of the block, and designated as Ngarara West A14A – its boundary was drawn parallel to the southern boundary of Ngarara West A14C (the 75 acre section cut out in 1906 to satisfy the survey lien).

It is evident that the Ngarara West A14A defined in 1915 bore no relation to the Ngarara West A14A referred to in the provisional partition order of 1896. There are several factors strongly hinting at this. Firstly, there is no reference in the Court minutes (or in other official sources) to the land having been used, or it being intended to be used, as a Maori cemetery. Secondly, it seems fairly clear from the Maori Land Court minutes that the Ngarara West A14A being talked about in 1915 was a new title, rather than any sort of completion of an existing provisional order. Thirdly, even though the provisional Ngarara West A14A order of 1896 had still not been surveyed, it seems quite clear that it is not the same piece of land as the Ngarara West A14A which came into existence in 1915. The 1915 section is a 'slice' across the block and extends all the way to the coast (something which was not mentioned in the description of boundaries given at the hearing in 1896), and its location was determined largely in relation to the Ngarara West A14C block, rather than any previously given boundaries.

It is not clear why the Barbers' section was designated as Ngarara West A14A, when the section cut out to satisfy the survey lien some nine years earlier had been

⁷⁸ Wellington MB 15, pp. 127-128.

⁷⁹ Wellington MB 20, p. 149. For more on Morrison's acquisitions, see Otaki MB 42, pp. 263-264.

designated as Ngarara West A14C. Perhaps the Court believed that as no survey had been made for close to twenty years since the provisional order was issued in 1896, the order was unlikely to be completed and therefore a return to the usual designation of sections was deemed appropriate. Perhaps the presiding Judge was simply unaware of the provisional order in the first place. Whatever the reason, the subdivision of Ngarara West A14 by late 1915 included Ngarara West A14A (Barbers' section, no relation to the Ngarara West A14A of 1896), Ngarara West A14B (the balance of the block remaining with Maori owners), and Ngarara West A14C (cut out in 1906 to satisfy the survey lien).

In June 1918, the Maori owners of Ngarara West A14B made an application to the Maori Land Court for a cemetery to be cut out from that section. The applicants noted a section had been set apart by Judge Mackay (who presided over the original partition hearing in 1896) but that it had not been surveyed. The cemetery section sought in 1918 was to measure around 20 acres, and the boundaries were to be pointed out by Hira Parata or some other person approved by the Judge. The order for this partition was given by the Judge, and the section was designated as Ngarara West A14B1 (Ngarara West A14B2 was the balance of the block which remained with the Maori owners).⁸⁰ The section was surveyed by 1920 (the delay between the issue of order and survey was explained because of the difficulty of arranging the survey with Hira Parata) and shown in the plan WD 3495 (interestingly enough, there was a survey lien registered against this section until at least March 1930).

It is not clear whether Ngarara West A14B1 is the same land as the land specified in the application for a cemetery reserve in 1896. The fact that the latter was never surveyed, and the description of its boundaries in the original application is fairly vague, makes this a difficult issue to clarify. There is also no description of the boundaries at the 1918 hearing that created Ngarara West A14B1 which could conceivably have been used in comparison with the 1896 provisional order. The discrepancy in the size of the two sections (approximately 10 acres and 20 acres) is not necessarily telling – it may have been a case of inaccurate approximation in the first instance, or the owners' need to enlarge the section after over twenty years had lapsed between the two applications. Another option is that there may simply have been two different pieces of land but, for the reasons set out earlier, this seems unlikely.

The evidence examined suggests that the block of approximately 10 acres which the Maori owners of Ngarara West A14 sought in 1896 to set apart as a cemetery reserve was in the location of Ngarara West A14B1 which was partitioned in 1918. Ngarara West A14B1 was gazetted as a cemetery under the Horowhenua County administration (although the lifting of that status in 1969 has not been examined by me). Other sources (notably tangata whenua oral evidence and County Council records) may be able to provide evidence regarding the actual usage of this site, but these have not been examined in the course of research for this report.

Evald Subasic
14 June 2011

⁸⁰ Wellington MB 21, p. 386.