



## **Appendix X**

### **Archaeological Assessment**

**ARCHAEOLOGICAL  
ASSESSMENT**

**PROPOSED  
RESIDENTIAL SUBDIVISION DEVELOPMENT  
BELL ROAD, PAPAMOA**

**Prepared by**

**KEN PHILLIPS (MA HONS)**

**For**

**BELL ROAD LIMITED PARTNERSHIP**

**JULY 2025**

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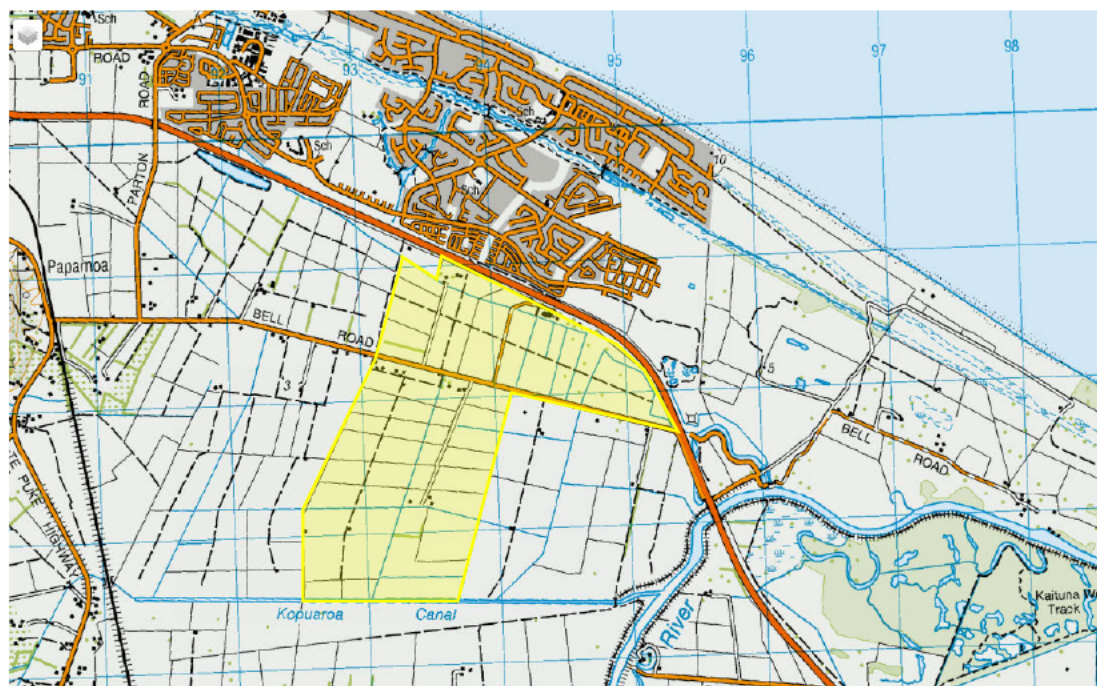
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## INTRODUCTION

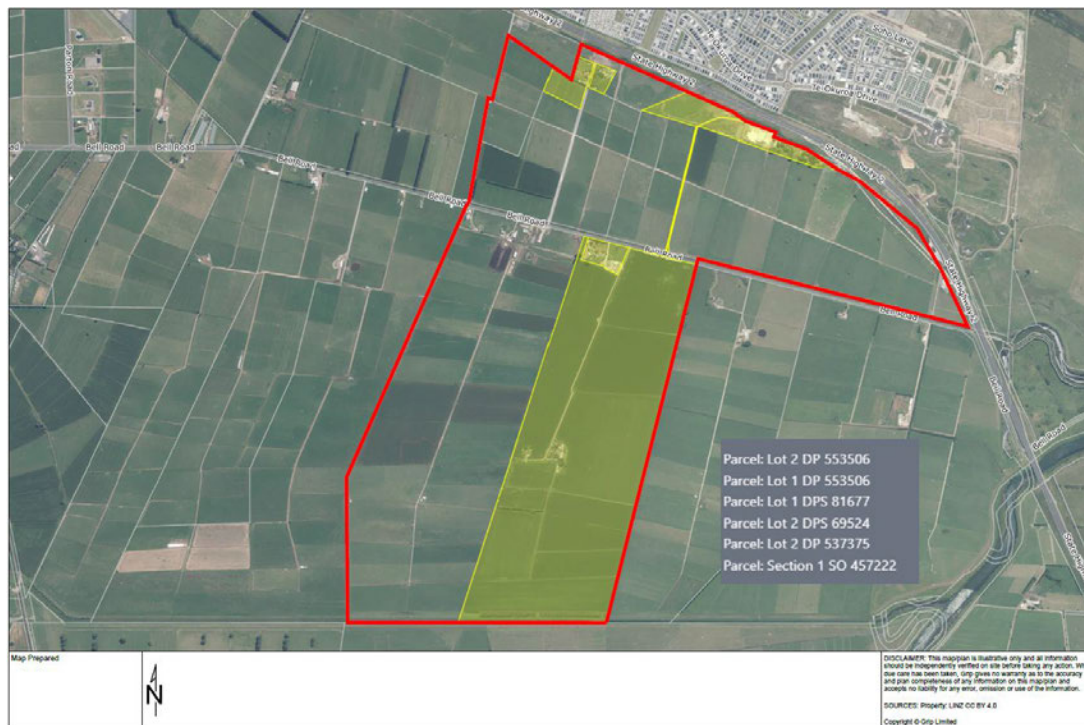
This report was commissioned by Bell Road Limited Partnership to determine if archaeological sites are affected by the proposed residential subdivision development of Multiple properties located on Bell Road, Papamoa (Figure 1 & 2). Ground disturbance associated with the subdivision will be extensive and include topsoil stripping, deposition of preload material, road construction, section development and installation of services.

There are no known intact archaeological sites within the properties and no previously unrecorded sites were identified during the archaeological survey of the properties. The likelihood of encountering unrecorded subsurface archaeological sites during earthwork associated with the development is considered low due to the unsuitability of the poorly drained landscape for pre 1900 settlement or cultivation. However, it is not possible to provide absolute assurance that sites will not be encountered during ground disturbance associated with the project and given the large scale of the project it is recommended that an authority is obtained from Heritage New Zealand Pouhere Taonga before the commencement of ground disturbance.

This report has been prepared as part of the required assessment of effects accompanying a resource consent application under the Resource Management Act 1991 (RMA) and to identify any requirements under the Heritage New Zealand Pouhere Taonga Act 2014 (HNZPTA). Recommendations are made in accordance with statutory requirements.



**Figure 1. Topographic map showing the approximate location of the property.**



**Figure 2. Plan showing staged subdivision development of affected properties.**

## **Constraints and Limitations**

This is an assessment of archaeological values and does not include an assessment of Māori values. Consultation with tangata whenua is being carried out independently of this report. An assessment of the cultural significance of an area can only be competently made by tangata whenua. It should be noted that an assessment of cultural significance might not necessarily correlate with an assessment of archaeological significance.

## **RELEVANT LEGISLATION**

### **Heritage New Zealand Pouhere Taonga Act (2014)**

An archaeological site, as defined by the Heritage New Zealand Pouhere Taonga Act 2014 6(a), is any place in New Zealand, including any building or structure (or part of a building or structure), that (i) was associated with human activity that occurred before 1900 or is the site of the wreck of any vessel where the wreck occurred before 1900 and (ii) provides or may provide, through investigation by archaeological methods, evidence relating to the history of New Zealand.

Archaeological sites cannot be modified or destroyed unless an authority is granted under section 48, 56(1)(b), or 62 in respect of an archaeological site, no person may modify or destroy, or cause to be modified or destroyed, the whole or any part of that site if that person knows, or ought reasonably to have suspected, that the site is an archaeological site.

### **Resource Management Act (1991)**

The RMA 1991 recognizes as matters of national importance: ‘the relationship of Māori and their culture and traditions with their ancestral lands, water, sites, wahi tapu, and other taonga’ (S6(e); and ‘the protection of historic heritage from inappropriate subdivision, use, and development’ (S6(f)).

Territorial authorities are required under Section 6 of the RMA to recognise and provide for these matters of national importance when ‘managing the use, development and protection of natural and physical resources.

Historic heritage is defined as ‘those natural and physical resources that contribute to an understanding and appreciation of New Zealand’s history and cultures, deriving from any of the following qualities: (i) archaeological; (ii) architectural; (iii) cultural; (iv) historic; (v) scientific; (vi) technological’. Historic heritage includes: ‘(i) historic sites, structures, places, and areas; (ii) archaeological sites; (iii) sites of significance to Māori, including wahi tapu; (iv) surroundings associated with the natural and physical resources.

#### **ASSESSMENT METHODOLOGY**

The New Zealand Archaeological Association’s (NZAA) Central Index of New Zealand Archaeological Sites (CINZAS) was searched to establish the location and background of recorded archaeological sites or other cultural heritage sites in the general vicinity of the property. Relevant background literature pertaining to the recorded traditional Māori and early European settlement of the area were reviewed and early survey plans, photographs and archaeological survey reports relevant to the area were consulted. An inspection of the property was carried out by Archaeology B.O.P. in July 2025.

## PHYSICAL LANDSCAPE

The properties are primarily located on drained wetlands on the southern side of the Papamoa Dune Plain between the Tauranga Eastern Link and the Kopuaroa Canal. The southern edge of the Papamoa dune plain extends into the northern end of the proposed development (Figure 5).

The swamp began forming around 4600 years ago as the Papamoa dune plain prograded impounding an extensive wetland region. Draining of the wetlands began in the early 1900s. A survey plan of the Bell Road area produced in 1877 illustrates the area as undifferentiated wetlands named Te Parapara (Figure 3). The plan also shows the Kopuaroa Creek which would be extended to the Kaituna River by the construction of the Kopuaroa Canal in the 1940s. A later survey plan produced in 1914 describes the subject properties as ‘drained swamp in grass and rape’ on the northern side of Bell Road and ‘Rye & Grass’ and ‘ploughed land’ on the southern side as well as remnant poorly drained areas (Figure 4). A cart track extended along the back of the southern high dunes linking farm houses and outbuilding complexes on neighbouring properties to the north. This track was within or just north of the Tauranga Eastern Link.

Large scale drainage operations associated with the realignment of the Kaituna River were carried out in the 1950s lowering the swamp level by 2 metres in places and opening up further land in the Bell Road area for pastoral use.

The affected properties are currently in pasture divided into multiple paddocks to facilitate stock grazing and cropping. Open drains and internal farm races define many paddock boundaries.

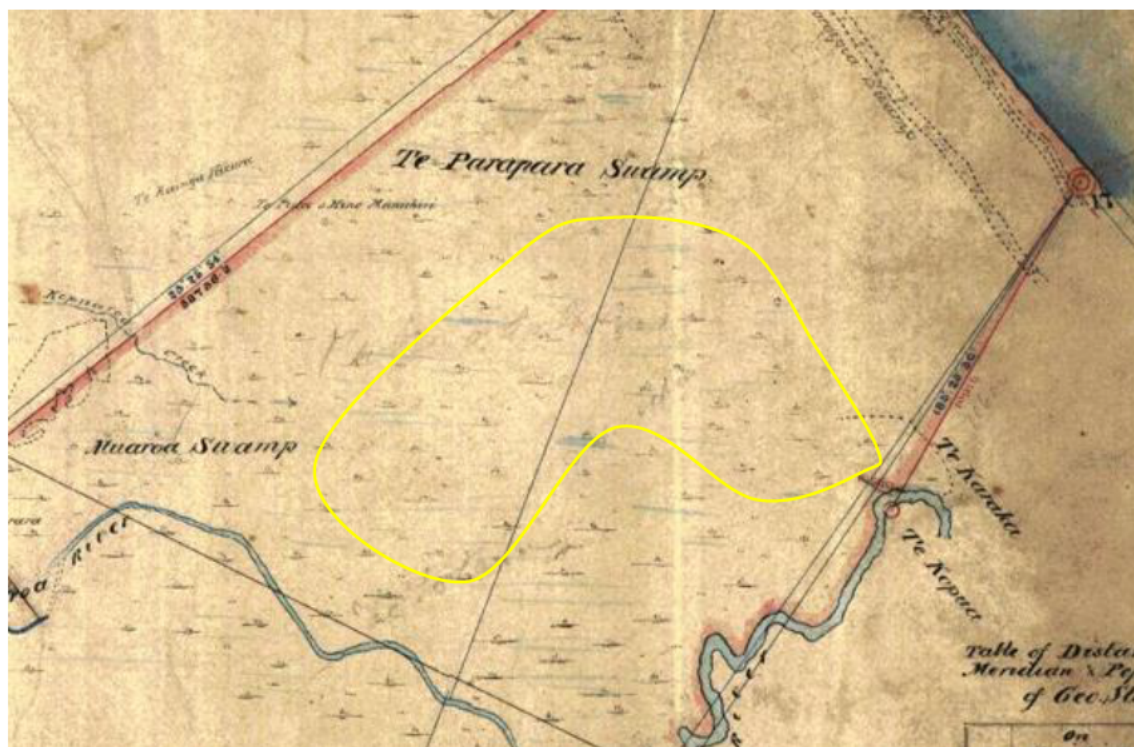


Figure 3. Part survey plan ML 3930 showing approximate location of the properties (outlined yellow) shown as undifferentiated wetlands and named Te Parapara Swamp.

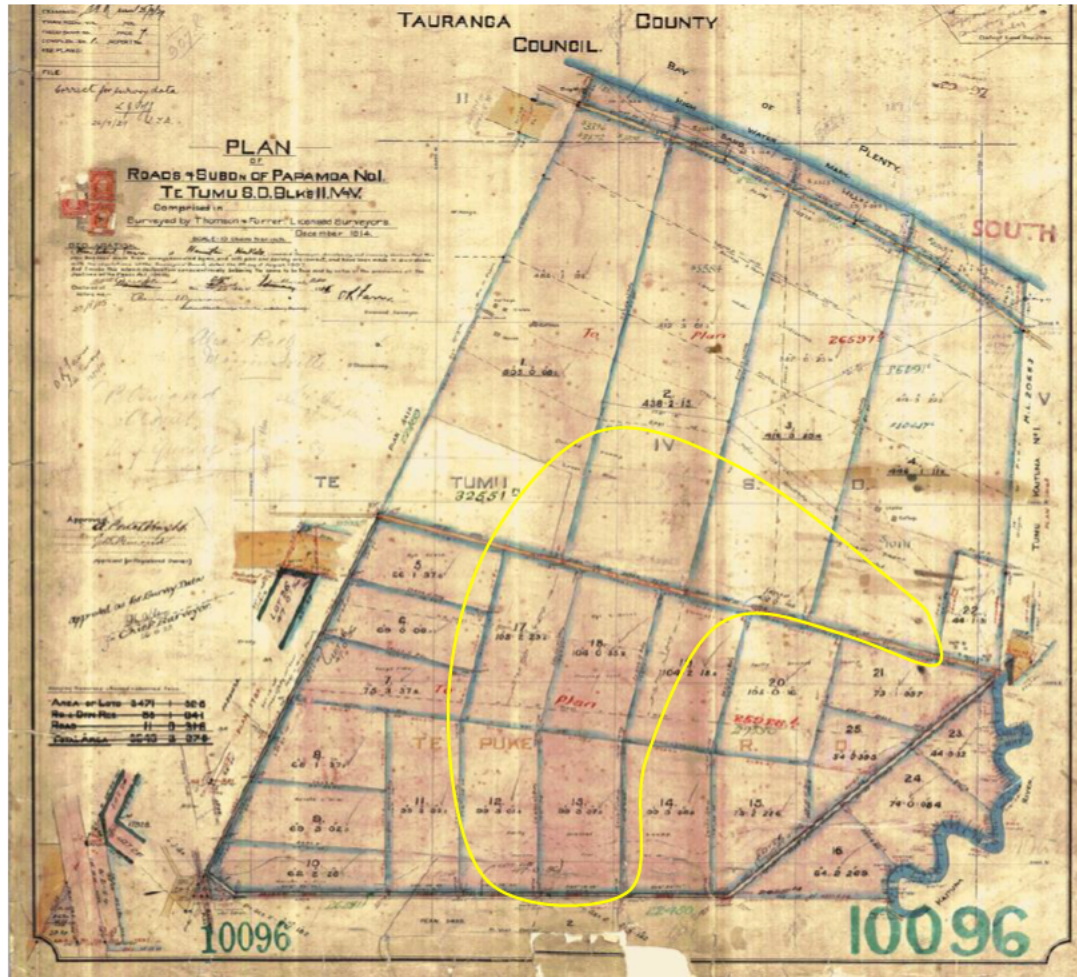


Figure 4. Part survey plan DP 10096 produced in 1914 showing the approximate location of the properties (outlined in yellow) in an area of drained wetlands planted in grass and crops.

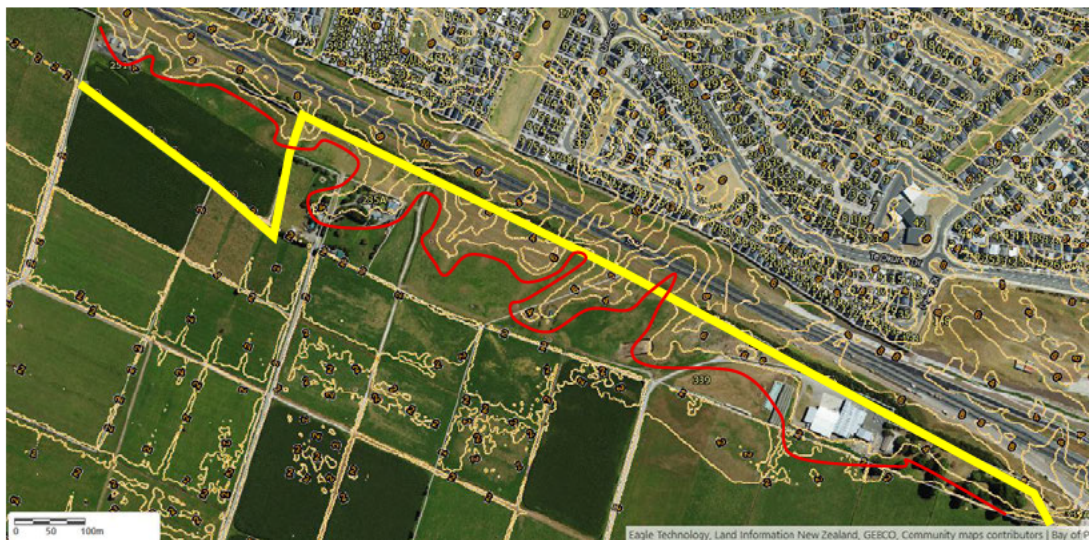


Figure 5. Aerial photo within contour overlay showing the southern edge of the dune plain (red line) extending into the proposed development footprint.

## ARCHAEOLOGICAL LANDSCAPE

The dune plain extending between Mauao and the Kaituna River were used extensively by Māori during the pre-European and early contact period for settlement and cultivation and access to wetland and coastal resources.

Settlement on the dune plain can be divided into a number of occupation zones each with a distinct archaeological footprint reflecting changes in economies defined by the immediate geography and proximity to various bodies of water and may be temporally differentiated (Figure 6). They include the fore dunes (Zone 1) where the archaeology is dominated by large scale shell fish processing sites and short-term encampments. Zone 2 is defined by longer term camp sites and extensive cultivations focused on the high dunes flanking the Horoipia Swamp and Wairakei paleochannel commencing in the 14<sup>th</sup> century. Zone 3 is focused on the Kaituna River and includes five unique pa sites while Zone 4 is perhaps a later activity area utilising more marginal soils around ponding swales and adjacent to Te Parapara Swamp. Recorded archaeological sites in close proximity to the affected properties are primarily within Zone 4.

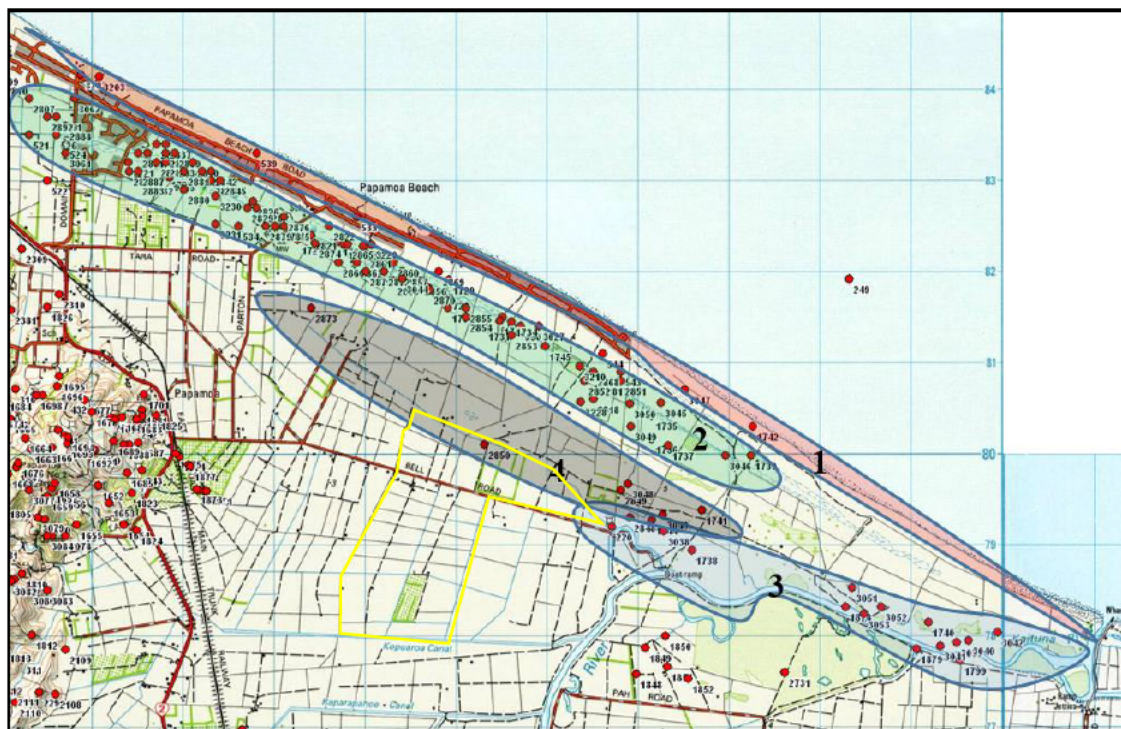


Figure 6. Plan showing the four principal archaeological zones on the Papamoa Dune Plain. (Phillips 2015).

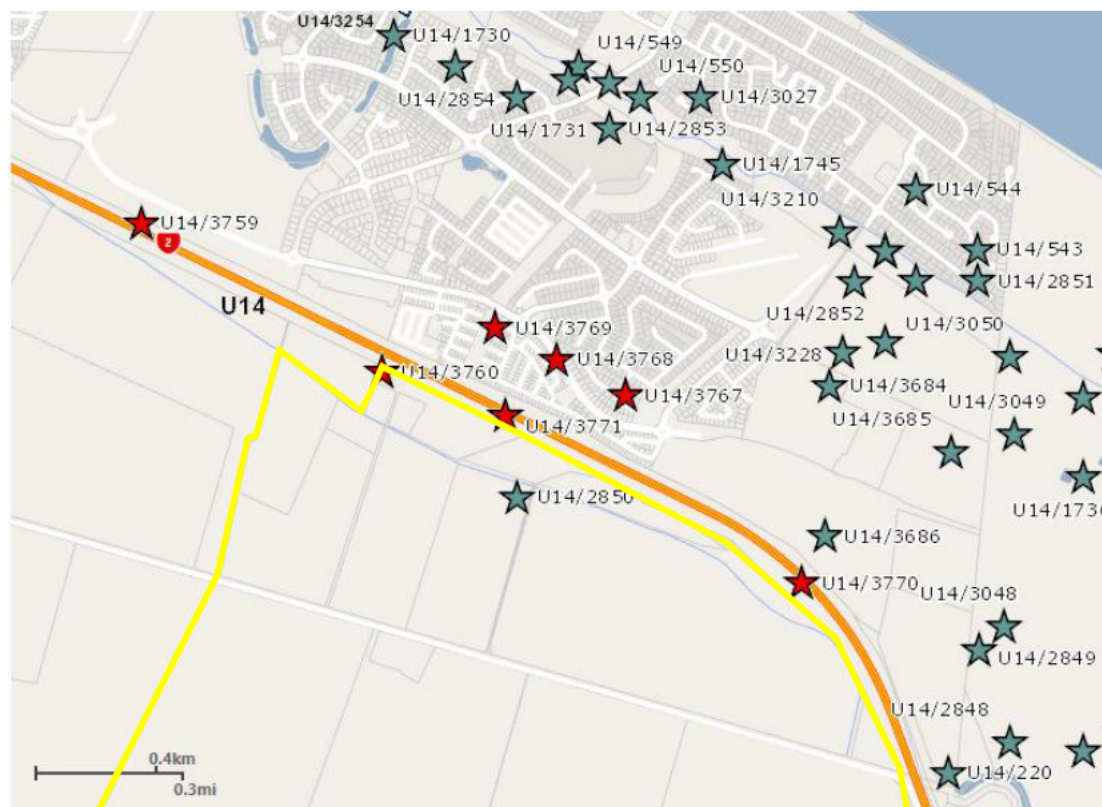
## Recorded Archaeological Sites

There are four recorded archaeological sites within or in close proximity to properties included in the proposed subdivision development (Figure 7 & Table 1)). Of these four sites two sites located to the north of the proposed subdivision have been investigated, recorded and destroyed under the provisions of NZHPT authorities. There was no evidence to indicate that these sites extended south into the proposed development consequently they are not considered affected by the development. The remaining two sites that are potentially within the affected properties are discussed below. There are

no recorded archaeological sites within the wetlands south of the dune plain within which the greater part of the proposed development is located.

**Table 1. Recorded archaeological sites within or on close proximity to the proposed subdivision development.**

SITE NUMBER	SITE TYPE	CONDITION
U14/2850	MIDDEN	DESTROYED?
U14/3760	MIDDEN GARDEN SOIL	PARTLY OR WHOLLY DESTROYED
U14/3770	MIDDEN	DESTROYED
U14/3771	MIDDEN	DESTROYED



**Figure 7. NZAA Archsite Plan showing the location of the recorded archaeological sites identified on the southern margins of the Papamoa Dune within or in close proximity to the proposed subdivision development (outlined in yellow).**

### *U14/2850*

This site was recorded in 1996 and is described as a small subsurface shell deposit identified by probing. The shell was not viewed, and size and composition are not stated. Kahotea carried out an archaeological survey of this area in 1999 but could not relocate U14/2850 (Kahotea 1999). In 2004 the author inspected the area and carried out spade test pitting in the specified location, but no evidence of the site could be found (Phillips 2004). Phillips inspected the site again in 2005 and determined that the location had been modified by a silage pit and farm activity (Phillips 2005).

It was described as located immediately north of a large building which would likely place the site within the construction corridor of the Tauranga Eastern Link. No evidence of this site was identified during archaeological monitoring for this project (Phillips et al 2021). In summary, it seems likely that this site was located within the TEL construction corridor and has been destroyed either by farm activity and or the TEL construction and will not be affected by the proposed residential subdivision development.

#### ***U14/3760 Garden Soil / Midden***

This site was identified during earthwork associated with the construction of the TEL. It is located on the inland slope of the southernmost dune and between two parabolic dune blow outs extending into the Kaituna swamp. The area had been extensively modified by farm activity leaving only a remnant of the site beside a farm race. It comprised a buried culturally modified soil layer (CMS) indicative of Pre European Māori cultivation. The 30cm deep CMS was evident 20cm below the surface and comprised a low concentration of shell fragments Ostrich foot being the only diagnostic species. The underlying Kaharoa ash layer had been mixed into the CMS with some evince of remnant undisturbed KA at the base of the mixed soil. It is not known if any intact components of this site extent south into land affected by the proposed subdivision development.

### **SURVEY RESULTS**

An inspection of the properties was carried out by Archaeology B.O.P. in July 2025. The ground surface was examined for evidence of former occupation (in the form of shell midden, depressions, terracing or other unusual formations within the landscape, or indications of 19th century European settlement remains). Subsurface testing based on spade test pitting was carried out within the property to determine whether buried archaeological deposits could be identified. Disturbed soils and soil profiles were examined where encountered for archaeological evidence of earlier settlement, and an understanding of the local soil stratigraphy.

The two recorded archaeological sites with coordinates located within the affected properties were not relocated and are considered destroyed by farm activity and or road construction. No previously unrecorded archaeological sites were identified within the property and no evidence for the presence of subsurface archaeological features was detected in spade test pits and exposed soil profiles. The limitations of spade test pitting and surface inspection should be recognised and it is not possible to provide absolute assurance that unrecorded subsurface archaeological sites are not present in this area.

### **SUMMARY**

Coordinates for one recorded archaeological site (U14/3760) are located within Section 26 SO 427562 however no surface or subsurface evidence of this site could be found during the 2025 archaeological survey of the property, and it is possible the site has been destroyed by farm activity. Recorded site U14/2850 was recorded as a small subsurface shell midden in 1996 but subsequent archaeological inspections of its

specified location have failed to relocate the site. It seems likely that the site was located within the Tauranga Eastern Link construction corridor and has been destroyed.

The drained wetlands on which the greater part of the properties are situated was generally unsuitable for cultivation and settlement consequently it is not surprising that archaeological sites have not been identified within the wetlands. They would have provided vast natural resources common to Bay of Plenty wetlands including harakeke and raupo and fauna of the wetland environment. The environment could have also supported taro cultivations in close proximity to settlements on the dune plain.

Occasionally evidence of resource collection in wetland environments primarily in the form of artifacts is found during archaeological monitoring of such environments. The anaerobic conditions of the wetlands can preserve such artefacts for hundreds of years. The preservation qualities of the anaerobic wetland environment were known to local Māori who would purposely secrete important artifacts made of organic material such as whakairo (carvings) in the wetlands typically in close proximity to settlements on terra firma. Several toki were uncovered during recent earthwork associated with the Kaituna Restoration project to the north east and wooden artifacts are periodically discovered in wetland environments in the wider Bay of Plenty region most recently during the construction of the Thornton Cut in the eastern Bay of Plenty where a large assemblage of artefacts made of wood and flax were recovered during an archaeological excavation of a wetland immediately adjacent to an early Māori settlement on a dune ridge.

#### **ASSESSMENT OF EFFECTS**

No known archaeological sites will be affected by the proposed residential subdivision development of the specified properties and the likelihood of encountering unrecorded subsurface archaeological sites is considered low. However, it is not possible to provide absolute assurance that archaeology will not be affected by the development as there remains a possibility that sites may be uncovered on the back dunes extending into the northern area of the proposed development and artifacts may be encountered in the former wetlands particularly adjacent to the back dunes and in the vicinity of former stream channels. It is therefore recommended that an authority from Heritage New Zealand Pouhere Taonga is obtained before the commencement of any ground disturbance associated with the project.

## RECOMMENDATIONS


The following recommendations for avoidance or mitigation are provided below.

1. That a Heritage New Zealand (HNZ) authority to modify damage or destroy possible components of recorded sites U14/2850 and U14/3760 as well as possible unrecorded archaeological sites encountered during earthwork associated with the proposed residential development is obtained before the commencement of ground disturbance associated with the project.
2. That in the event that intact archaeological sites are encountered during ground disturbance associated with the development all work must stop in the immediate area until the project archaeologist has carried out appropriate investigation, sampling and recording in accordance with conditions of an HNZ authority.
3. That if koiwi tangata (human remains) are encountered, no further modification of the site concerned shall occur until tangata whenua and the HNZ have been advised and their responses received.
4. Archaeological survey cannot always detect sites of traditional value to Māori, such as wahi tapu. Tangata whenua should be consulted regarding the possible existence of such sites and informed of the recommendations of this report.

**REFERENCES**

- Kahotea, D. 1999 Archaeological Survey Tauranga Eastern Arterial Parton Road to Paengaroa. Unpublished report prepared for Beca.
- Phillips, K.J.S. 2004 Archaeological Survey and Assessment of Effects – Proposed subdivision development Pt Lot 1 DPS 88387 & Pt Lot 2 DP 88387 Papamoa. Unpublished report prepared for Bluehaven.
- Phillips, K.J.S. 2005. Archaeological Survey and Assessment of Effects – Proposed Wairakei Arterial Road. Unpublished report prepared for Tauranga City Council.
- Phillips, K.J.S. 2005. Archaeological survey and assessment of effects, Proposed Bell Road Interchange Eastern Arterial, Tauranga. Unpublished report prepared for Tauranga City Council.
- Phillips, K.J.S. 2008. Archaeological survey and assessment of effects, Proposed Bell Road Storm Water Project, Papamoa. Unpublished report prepared for Tauranga City Council.
- Phillips, K.J.S. 2008. Archaeological survey and assessment of effects, Proposed Tauranga Eastern Motorway Construction Corridor. Unpublished report prepared for Tauranga City Council.
- Phillips, K.J.S. 2009. Archaeological Survey and Assessment of Effects – proposed Tauranga Eastern Motorway Construction Corridor. Unpublished report prepared for Beca.
- Phillips, K.J.S., C. McCaffrey & M. Turner 2021 Tauranga Eastern Link Final Archaeological Monitoring and Investigation Report. HNZ Authority 2009/236 & 2012/513. Unpublished report prepared for NZTA and HNZPT.

## APPENDIX A: NZAA SITE RECORD FORMS U14/2850 &amp; U14/ 3760

NEW ZEALAND ARCHEOLOGICAL ASSOCIATION INCORPORATED			
	<h2>Site Record Form</h2>		
	<b>NZAA Site Number:</b>	U14/2850	<b>Site Coordinates (NZTM)</b>
	<b>Imperial Site Number:</b>		<b>Easting:</b> 1894098
	<b>Site Type:</b>	Midden/Oven	<b>Northing:</b> 5818621
	<b>Site Name(s):</b>		<b>Source:</b> CINZAS
			
<small>Scale: 1:2,500</small>		<small>Disclaimer: Polygon may not reflect the full extent of the site</small>	
<b>Finding Aids to the Location of the Site:</b>			
<b>Brief Description:</b> MIDDEN			
<b>Condition of Site when last visited:</b> No Recent Info			

NEW ZEALAND ARCHAEOLOGICAL ASSOCIATION <b>SITE RECORD FORM (NZMS 260)</b>		NZAA METRIC SITE NUMBER U14/2850 DATE VISITED 18/3/96 SITE TYPE Midden SITE NAME: MAORI OTHER													
NZMS 260 map number U14 NZMS 260 map name Tauranga NZMS 260 map edition 1980															
Grid References Easting <u>2 8 0 4 3 5 4</u>		Northing <u>6 3 8 0 2 0 9</u>													
1. Aids to relocation of site ( <i>attach a sketch map</i> ) Immediately north of large building. Present subsurface - detected by probing. NOTE: Site located by GPS and grid coordinates are accurate.															
2. State of site and possible future damage Midden under no immediate threat of disturbance.															
3. Description of site ( <i>Supply full details, history, local environment, references, sketches, etc. If extra sheets are attached, include a summary here</i> ) Site consists of small subsurface shell deposit. Composition unknown.  REFER TO: C. Fredericksen, D. Kahotea and M. Felgate 1996 <i>An Archaeological Survey of the Papamoa Coastal Zone, Tauranga District</i> . Report prepared for Tauranga District Council and New Zealand Historic Places Trust.															
4. Owner Address		Tenant/Manager Address N/A													
5. Nature of information ( <i>hearsay, brief or extended visit, etc.</i> ) Brief visit Photographs ( <i>reference numbers, and where they are held</i> ) Aerial photographs ( <i>reference numbers, and clarity of site</i> )															
6. Reported by Address		Filekeeper Date													
C. Fredericksen, D. Kahotea, M. Felgate PO Box 91206, AMSC, Auckland		<i>RA Repman</i> 29.5.96													
7. Key words MIDDEN, SUBSURFACE															
8. New Zealand Register of Archaeological Sites ( <i>for office use</i> ) NZHPT Site Field Code															
Latitude S		Longitude E													
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A	A														
.	.														
.	.														
A	A														
N	N														
.	Local environment today		Security code												
.	Land classification	N	Local body												



NEW ZEALAND ARCHEOLOGICAL ASSOCIATION INCORPORATED



## Site Record Form

NZAA Site Number: U14/3760

Imperial Site Number:

Site Type: Midden/Oven

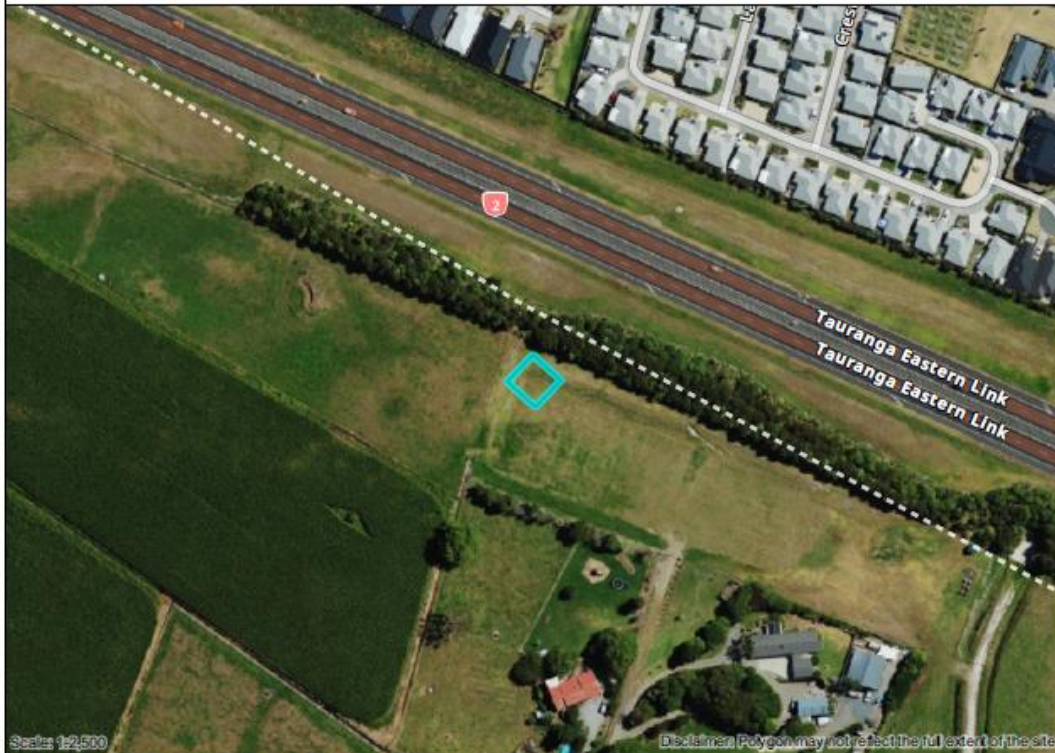
Site Name(s):

Site Coordinates (NZTM)

Easting: 1893656

Northing: 5819027

Source: Handheld GPS



**Finding Aids to the Location of the Site:**

On southern edge of TEL road reserve south of Lance Way

**Brief Description:**

Shell midden in deep garden soil

**Condition of Site when last visited:**

Fair

**NEW ZEALAND ARCHEOLOGICAL ASSOCIATION INCORPORATED****Site Periods:**

Indigenous pre-1769

**Ethnicity:**

Maori

**Site Features:**

Midden, Soil - garden

**Associated Sites:****Description:**

Updated 24/08/2021 (Field visit), submitted by kenphillips , visited 29/02/2012 by Phillips Ken  
Grid reference (E1893656 / N5819027)

Pocket of shell midden in deep garden soil matrix exposed in section on southern cutting of TEL road reserve.

**Ref:**

Phillips, K. & C. McCaffrey 2021 Tauranga Eastern Link Final Archaeological Monitoring and Investigations Report.  
Unpublished report prepared for Waka Kotahi NZ Transport Agency, Heritage New Zealand Pouhere Taonga & Beca.

**Condition Notes:**

Updated 24/08/2021 (Field visit), submitted by kenphillips , visited 29/02/2012 by Phillips Ken

Section destroyed during construction of TEL but intact components may survive in adjacent property to south.