

65 AND 73 RATANUI ROAD, PARAPARAUMU, PROPOSED PRIVATE PLAN CHANGE: ARCHAEOLOGICAL ASSESSMENT

Prepared for Welhom Developments Ltd

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By

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Contents

Introduction	1
Project Background	1
Methodology	1
Historical Background	5
Māori Settlement	5
European Settlement	5
Historical Survey	6
Information from Early Maps and Plans	6
Information from Early Aerials	10
Archaeological Background	15
Recorded Archaeological Sites	15
Previous Survey and Investigation	15
Archaeological Landscape	16
Physical Environment	19
Geology and Landscape	19
Field Assessment	21
Field Survey Results	21
Discussion and Conclusions	33
Summary of Results	33
Māori Cultural Values	33
Survey Limitations	33
Archaeological Value and Significance	33
Potential Effects of the Proposal	34
Resource Management Act 1991 Requirements	34
Heritage New Zealand Pouhere Taonga Act 2014 Requirements	35
Conclusions	36
Recommendations	37
Bibliography	38

INTRODUCTION

Project Background

Welhom Developments Ltd requests a private plan change (PPC) for the properties at 65 and 73 Ratanui Road, Paraparaumu (Figure 1 and Figure 2) to rezone these properties from rural Lifestyle Zone to General Residential Zone under the Kāpiti Coast District Plan. The legal descriptions are 65 Ratanui Road - Lot 4 DP 58017 (covering 9.43ha) of which 7.27ha is to be rezoned and 73 Ratanui Road - Lot 3 DP 497389 (covering 5.37ha).

The plan in Figure 3 shows the area to be included in the site subject to the PPC (shaded red and blue) (Site) and the part of the property that will be subdivided off and retained by the 65 Ratanui Road landowner (shaded green).

On the basis of the PPC being approved, Welhom Developments Ltd is proposing future residential development on the Site and possibly a retirement village.

This report has been commissioned by Welhom Developments Ltd to address the potential archaeological constraints which might be encountered during future development of the land for residential purposes and outlines any requirements under the Resource Management Act (RMA) and the Heritage New Zealand Pouhere Taonga Act (HNZPTA).

Methodology

The New Zealand Archaeological Association's (NZAA) site record database (ArchSite), District Plan schedules and the Heritage New Zealand Pouhere Taonga (Heritage NZ) New Zealand Heritage List/Rārangi Kōrero were searched for updated information on archaeological sites or places recorded in the vicinity of the Site. Literature and archaeological reports relevant to the area were consulted (see Bibliography). Early survey plans and aerial photographs were checked for information relating to past use of the Site.

A visual inspection of the property at 65 Ratanui Road was conducted on 2 March 2023 and at 73 Ratanui Road on 20 November 2024. 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 relating to Māori settlement, or indications of 19th century European settlement remains). Exposed and disturbed soils were examined where encountered for evidence of earlier modification, and an understanding of the local stratigraphy. Photographs were taken to record the general area and features of interest.

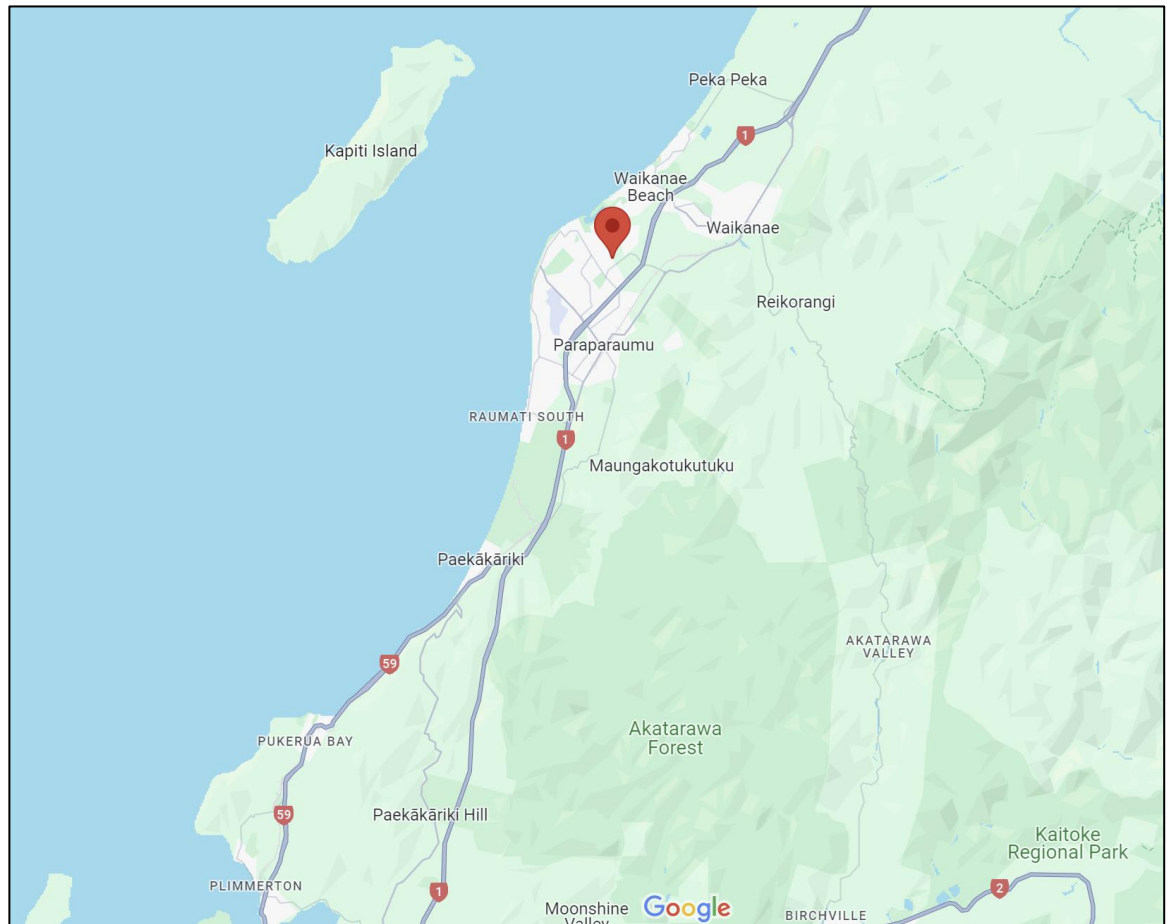


Figure 1. Map showing the regional location of the Site (source: Google Maps)



Figure 2. Upper aerial plan showing the property at 65 Ratanui Road and lower aerial plan showing the property at 73 Ratanui Road (source: Kāpiti Coast District Council Local Maps)

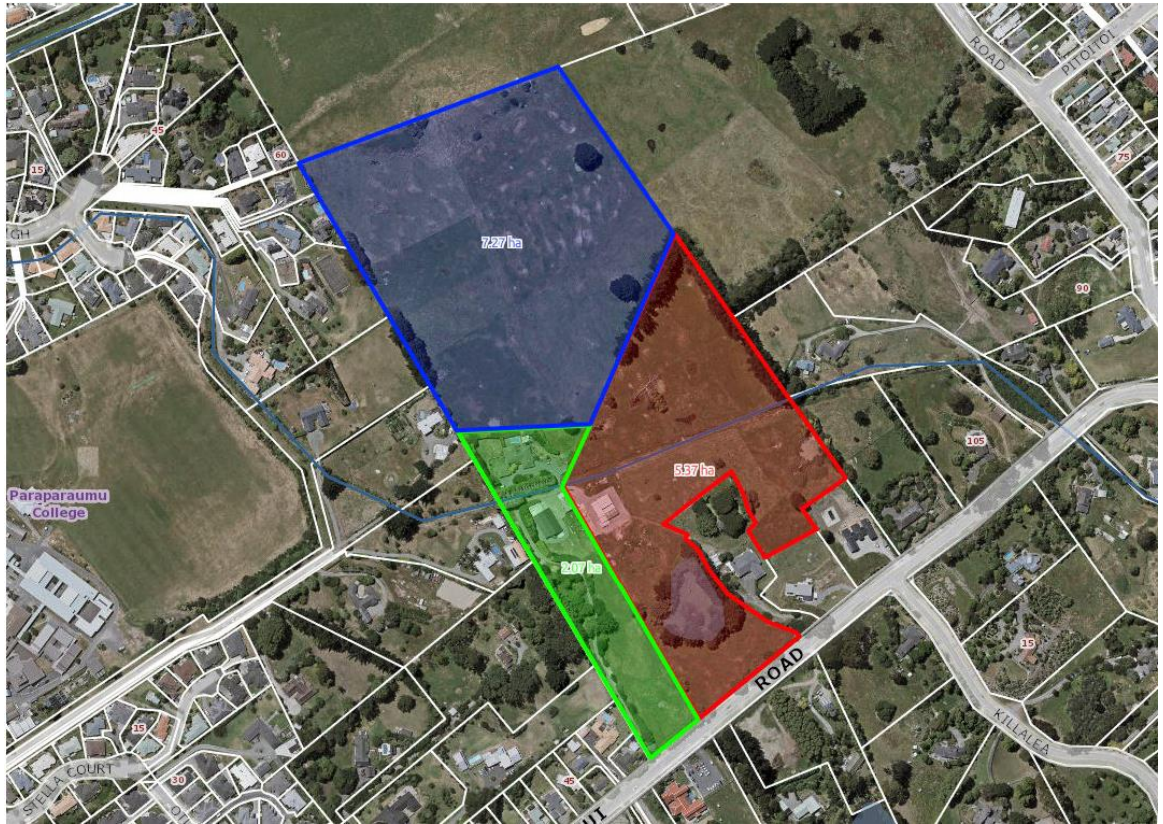


Figure 3. Aerial plan showing the approximate boundary of the proposed residential development site at 65 Ratanui Road shaded blue with 73 Ratanui Road shaded red; and with the area to be subdivided off 65 Ratanui Road shaded green (source: Summerset)

HISTORICAL BACKGROUND

Māori Settlement¹

The initial settlement of New Zealand from East Polynesia is believed to have occurred by AD 1250-1300 (c.800 BP/750 cal. BP) (Higham and Jones 2004:232). This is supported by environmental studies which show widespread forest clearance and establishment of fern species around AD 1200-1400 (McGlone and Wilmshurst 1999:12). To date, the earliest radiocarbon dates from archaeological deposits on the Kāpiti Coast fall in the 15th century AD. Davidson (1988) summarises the early settlement pattern prevalent on the Kāpiti Coast as follows:

‘There were some actual settlements along the foreshore, particularly at the river and stream mouths, while others were situated on knolls and spurs in the swamps. These were probably the main focus of settlement ... Shellfish collecting was dramatically illustrated by the countless middens that once lined the foredunes. Many middens were rubbish dumps left by people who went there just to gather shellfish to dry and take back to permanent villages a little further inland. It was only when the middens contained a range of artefacts and bones as well as shellfish that they marked the site of more permanent settlements.’ (Davidson 1988:35).

During the 1820s, the tangata whenua of the Kāpiti Coast were overwhelmed by various northern iwi retreating from the musket wars. The pressure of a rapidly increasing population exacerbated competition for resources in the area, which resulted in a number of battles throughout the 1820s and 1830s, including the war of Haowhenua at Te Horo (Maclean and Maclean 2010). Once peace was restored, Katihiku, located at the mouth of the Ōtaki River, became the home of Ngāti Huia.

European Settlement

Early European settlement along the Kāpiti Coast began in earnest during the 1830s with the arrival of shore whalers, mainly from Australia, that set up stations along the coast and on the offshore islands. In 1839, Te Rauparaha’s son and nephew travelled to the Bay of Islands to request a missionary teacher to settle in the Kāpiti area. In response, Reverend Octavius Hadfield set up a mission station at Kenakena Pā near the mouth of the Waikanae River (Kāpiti Coast District Council (KCDC) 2019). During the 1840s, after the signing of the Treaty of Waitangi, increasing numbers of British settlers arrived at Wellington and Whanganui, although focused settlement did not occur until the 1880s after the construction of the Wellington and Manawatu Railway Company rail line which ran from Wellington to Longburn, and which included a station at Paraparaumu. The railway attracted small lot farmers, flax millers and timber millers (KCDC 2012; Hawke 1990). As well, during the 1880s to the early 1900s, huge swathes of timber were cut from the coastal lowlands and the foothills of the Tararua Ranges in order to provide land for dairy farming, which became the Wellington region’s staple industry (Dreaver 1984; KCDC 2019).

¹ This section has been adapted from Dodd 2018. It should also be noted that while based on reliable documentary sources, this information should not be viewed as complete or without other context, and many other histories are likely to be known to tangata whenua.

HISTORICAL SURVEY

Information from Early Maps and Plans

A review of early maps and plans was undertaken to gather information on early land use in the Site. A plan believed to pre-date 1886² in Figure 4 shows the general area as containing fern ridges and swamps. The 1892 plan in Figure 5 is a survey plan which indicated the presence of swamps in the area containing the Site, specifically, in Ngarara West A no. 9, but also throughout the surrounding lots. A subdivision plan from 1908 (Figure 6) shows that Lot 6 (which contains the Site) overlaps with Ngarara West A no. 9. A slightly later plan from 1919 shows a subdivision that includes Lot 6 into Lot 1 DP 4319 which incorporates the Site (Figure 7). The 1985 plan in Figure 8 shows the subdivision that created the current property at 65 Ratanui Road from Lot 1 DP 4319 and that the property at 73 Ratanui Road was located within Lot 3 of that subdivision.

The earliest plan shows that the Site is situated in an area that was characterised by an undulating landscape of swamps and dune ridges. Later plans indicate that these properties were part of a larger lot from 1919 and only subdivided into residential lots much more recently, from 1985.

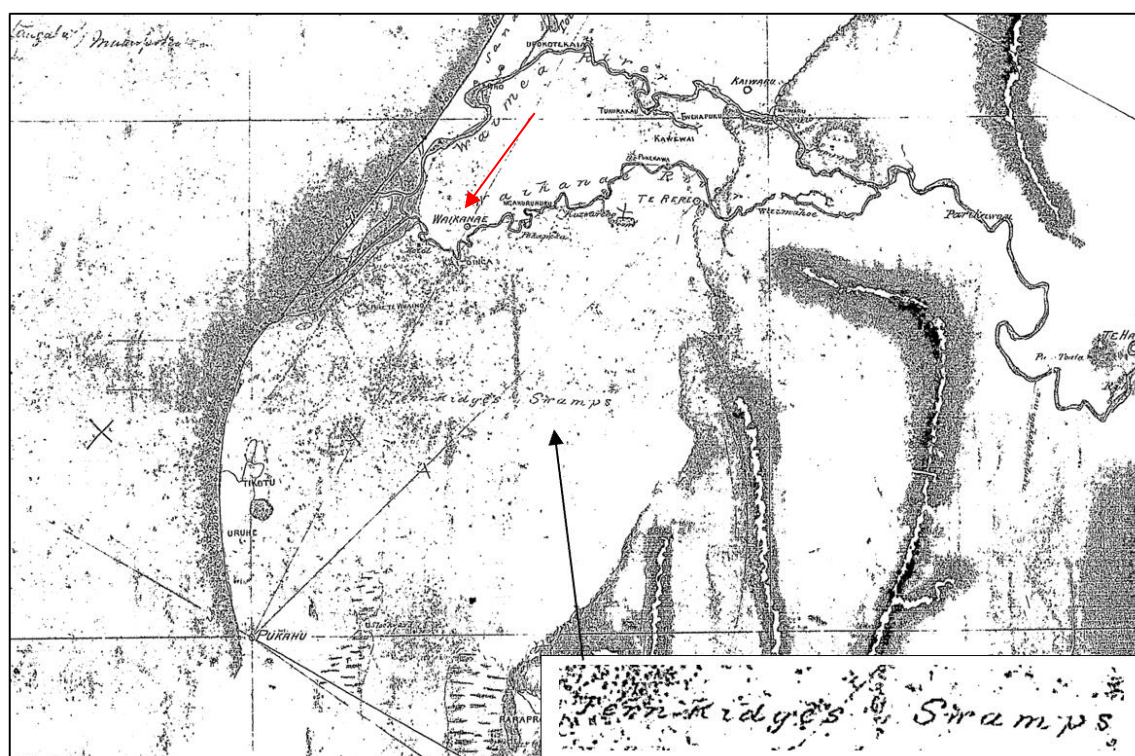


Figure 4. Detail from WN SO 11036 (undated – probably pre-1886 with area around Paraparaumu (indicated by black arrow) to the south of Waikanae (indicated by red arrow) annotated as ‘Fern Ridges Swamps’, with detail of annotation in inset (source: Quickmap)

² Based on the lack of the railway constructed in 1886 shown on the plan (O’Keefe 2011b).

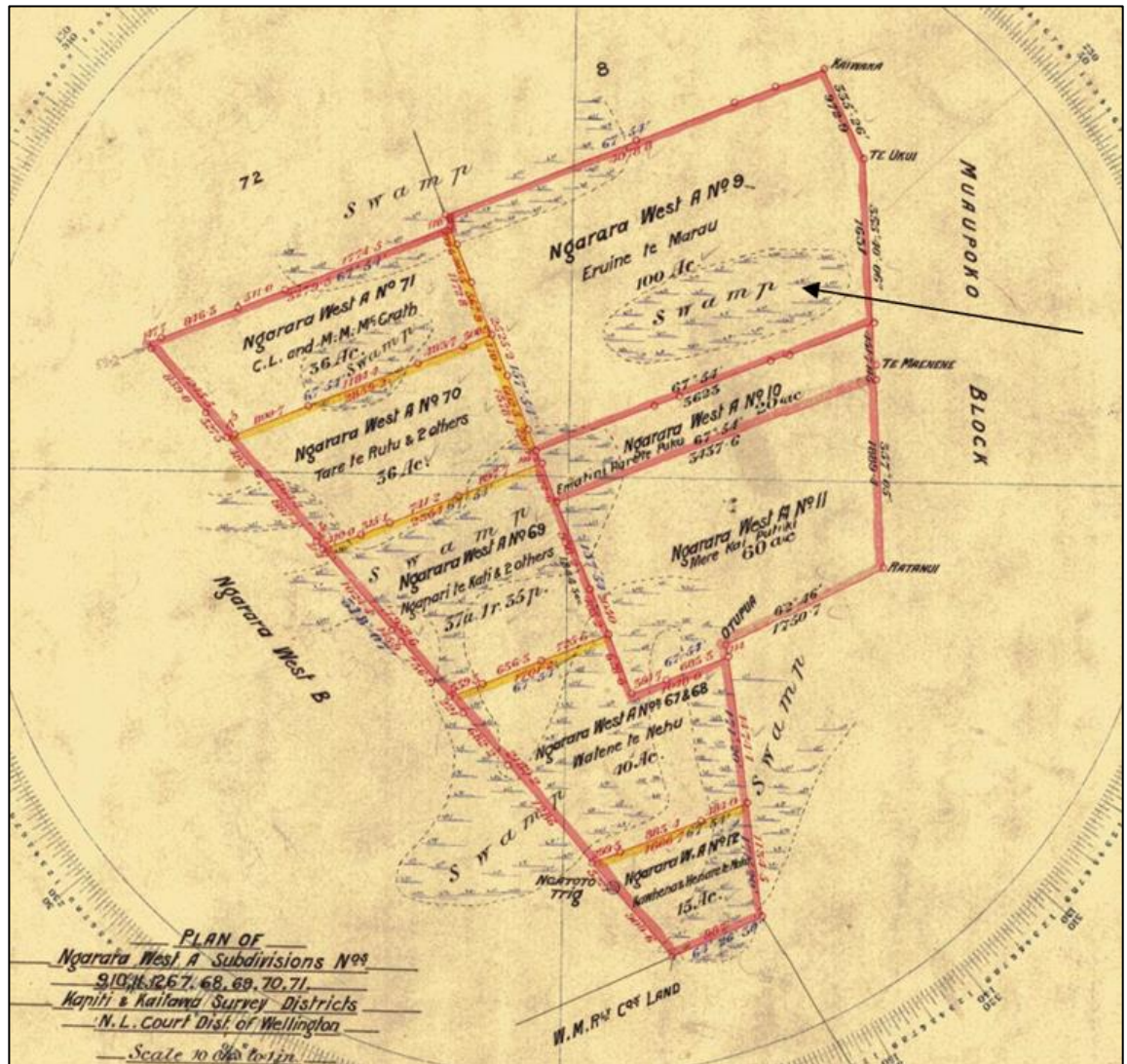


Figure 5. Detail from WN ML 1129 plan dated 1892, showing swamps in the vicinity of the Site (indicated by arrow) (source: Quickmap)

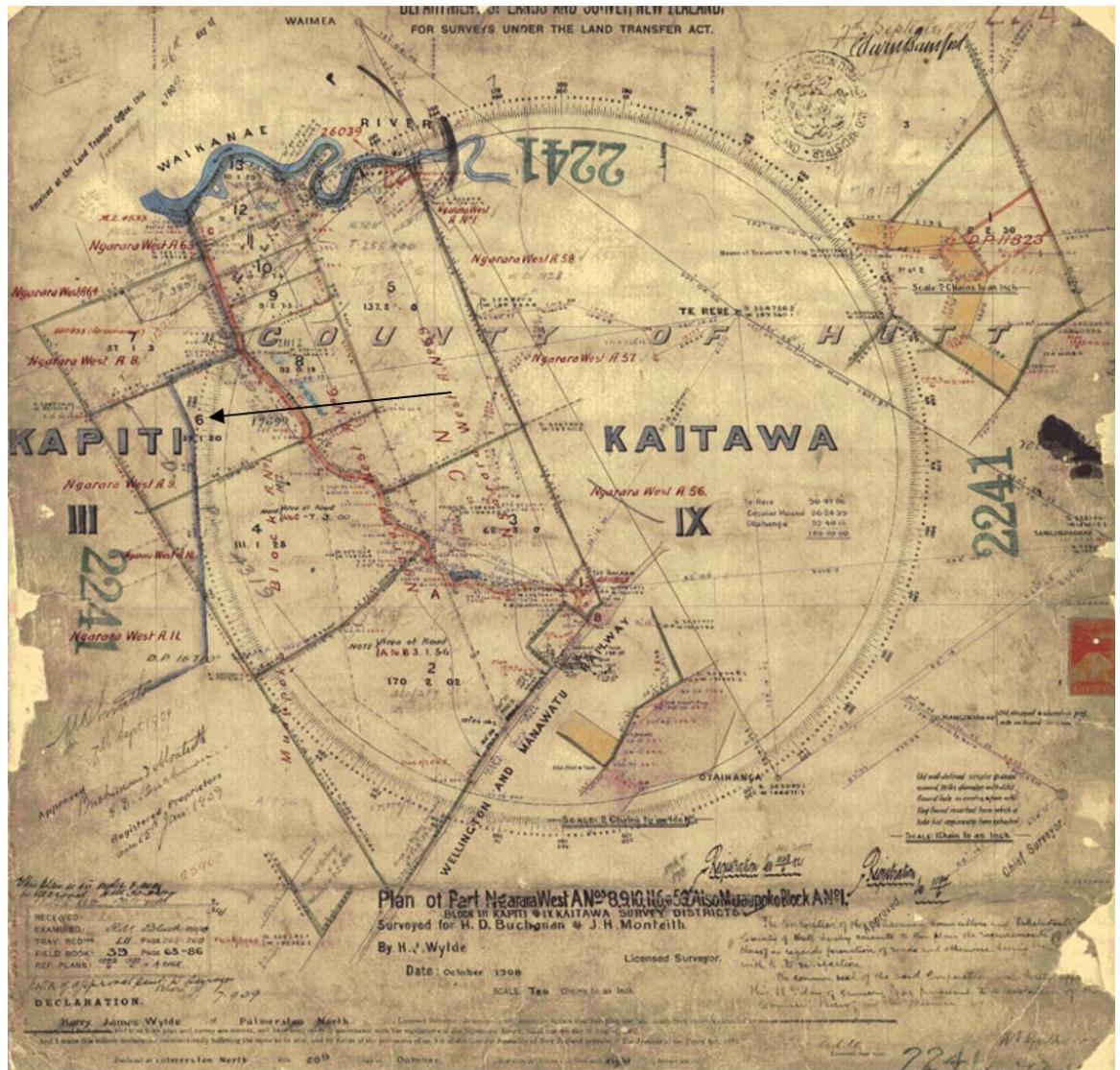


Figure 6. WN DP 2241 plan dated 1908 with Lot 6, which contains the Site, indicated by arrow (source: Quickmap)

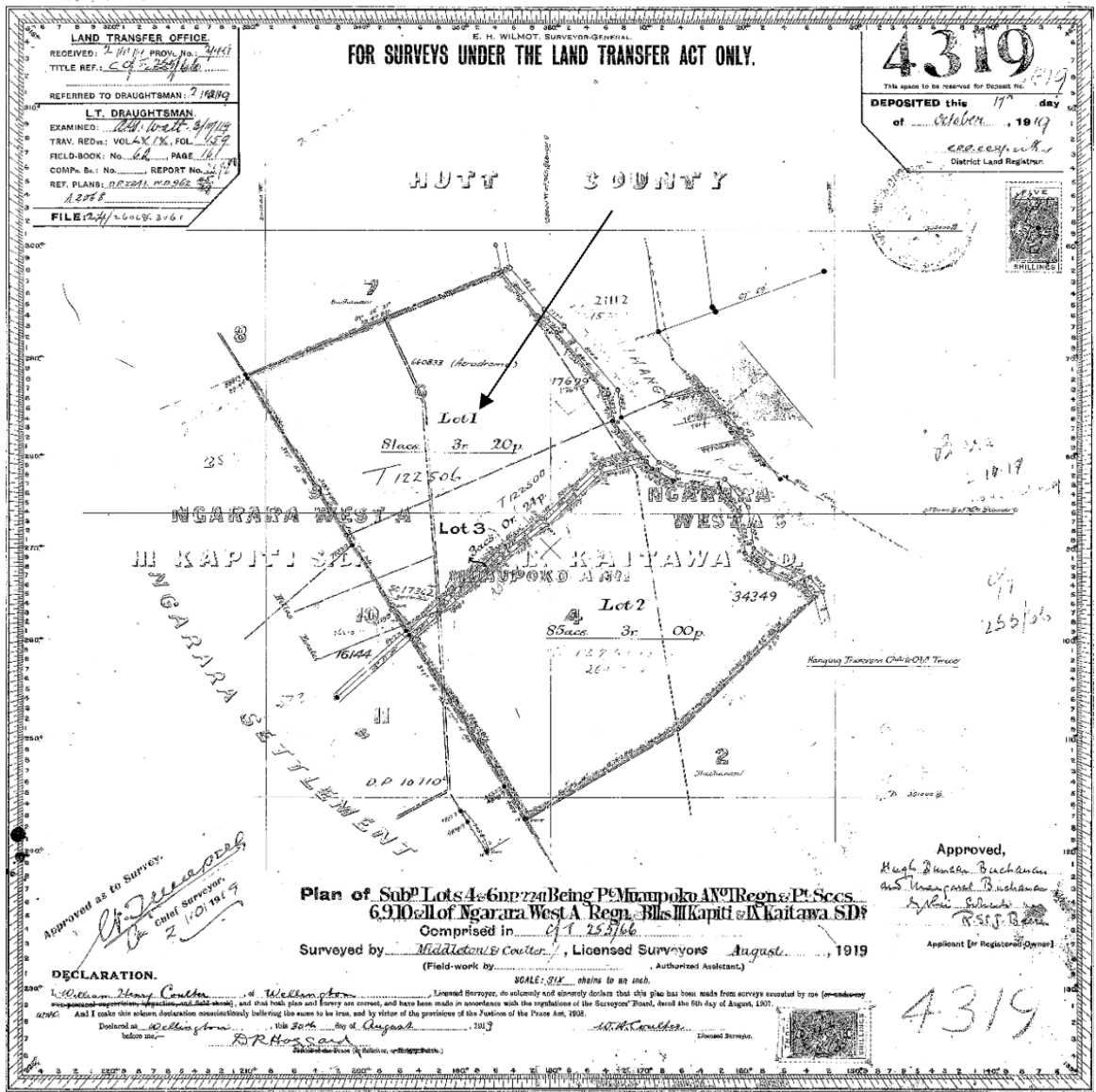


Figure 7. WN DP 4319 plan dated 1919 showing Lot 1 (indicated by arrow) which contains the Site (source: Quickmap)

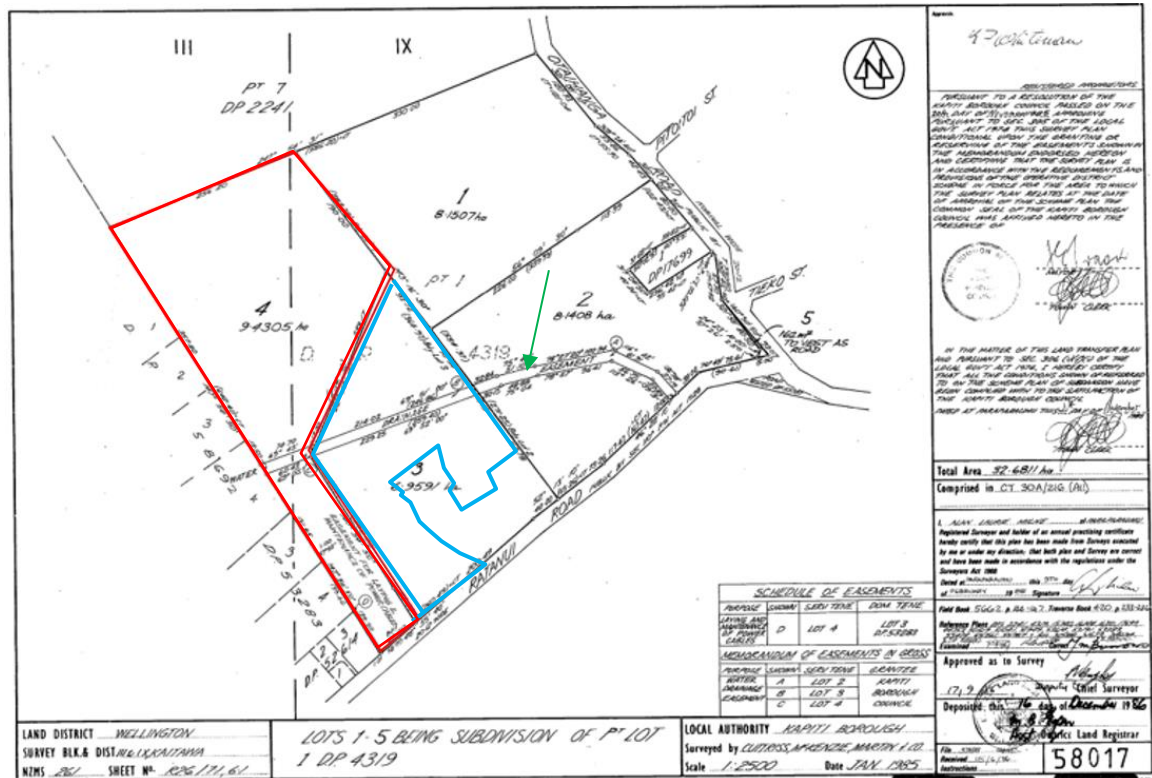


Figure 8. WN DP 58017 plan dated 1985 showing the subdivision that created the current property at 65 Ratanui Road outlined in red (Lot 4 DP 58017) and the outline in blue of the property at 73 Ratanui Road within Lot 3 DP 58017, with drainage easement labelled (green arrow) (source: Quickmap)

Information from Early Aerials

Aerial photographs were also reviewed to gather information on historical land uses in the Paraparaumu area. The aerial photograph dated 1942 (Figure 9) shows the general area containing the Site as open ground with an undulating landscape of dune ridges visible along with a series of ponds especially in the south near Ratanui Road. A later aerial photograph dated 1973 in Figure 10 shows that the ponds are no longer visible. The aerial photograph dated 1987 in Figure 11 shows that buildings have now been constructed on both properties. As well, a large pond of similar shape to one visible in the 1942 aerial photograph is once again visible at 73 Ratanui Road. As well, the presence of a dirt bike track in the northeastern part of 65 Ratanui Road (use confirmed by owner) is visible in a 2015 aerial photograph shown in Figure 12. This aerial photograph also shows that the pond at 73 Ratanui Road seen in the 1942 and 1987 aerial photographs is still present and is now bordered by trees. Finally, a highly modified stream cutting across 73 Ratanui Road and to the south of the current house at 65 Ratanui Road is visible in all of the aerial photographs, indicating the likelihood that water management was ongoing throughout this period.



Figure 9. Aerial photograph dated 1942 (Crown 198 324 G) with the general area containing the Site circled in red, with ponds visible, but no structures present (note - the pond at 73 Ratanui Road also visible in later aerial photographs is indicated by white arrow and highly modified stream/drainage channel by blue arrow (sourced from: <http://retrolens.nz> and licensed by LINZ CC-BY 3.0)



Figure 10. Aerial photograph dated 1973 (Crown 3686 B2) with the general area containing the Site circled in red and highly modified stream/drainage channel indicated by blue arrow (sourced from: <http://retrolens.nz> and licensed by LINZ CC-BY 3.0)



Figure 11. Aerial photograph dated 1987 (Crown 8790 B1) with the property outlines of 65 and 73 Ratanui Road in red and with buildings present and with the pond at 73 Ratanui Road seen in the 1942 and 2015 aerial photographs indicated by white arrow and highly modified stream/ drainage channel by blue arrow (sourced from: <http://retrolens.nz> and licensed by LINZ CC-BY 3.0)



Figure 12. Aerial photograph dated 2015 with area in northeast part of 65 Ratanui Road where a dirt bike track was in use indicated by white arrow; note that the pond at 73 Ratanui Road is also still present and is now surrounded by trees, indicated by yellow arrow, with highly modified stream/drainage channel indicated by blue arrow (source: Kāpiti Coast District Council Local Maps)

ARCHAEOLOGICAL BACKGROUND

Recorded Archaeological Sites

There are no recorded archaeological sites within the boundaries of the properties at 65 and 73 Ratanui Road. Four archaeological sites have been recorded in the general vicinity (within c.500m) of the property boundaries. Two are located approximately 300m to 330m to the west-southwest. These are R26/323, which was originally recorded in 1962 as seven pits, six rectangular and one small circular one. An eeling channel was also recorded nearby. The site record was updated in 2003 to provide a more accurate location, although there is no mention that the site had been revisited since then. The second is R26/355, which is located just to the north of R26/323. This site was recorded in 2006 and described as approximately 20 tuatua shells eroding from a dune face in darkened soil situated above a sterile yellow sand. It was also noted that some of the shells were scattered down the side of the slope. No evidence of bone, oven stones or charcoal was observed. During topsoil stripping for residential subdivision works in the area, three additional areas of interest were identified – two scatters of shell and a small patch of charcoal – with later development earthworks exposing more shell scatters, burnt and cracked rock and charcoal. A third site, located further to the south-southeast of the previous two sites, is R26/322, at a distance of c.375m from the properties at 65 and 73 Ratanui Road. This site was recorded in 1962 as three pits on a low spur projecting into an area of former swamp. A later site visit noted on the site record form (but not dated) states that only two ill-defined depressions were able to still be observed on a spur in this locality. The fourth site is R26/382 (midden) located c.515m to the north-northwest of the properties at 65 and 73 Ratanui Road was recorded in 2003. It was identified during subdivision development and five areas containing archaeological material were recorded. These consisted of clusters of small shells, fish bone and remains of fire (blackened sand with scattered oven stones, charcoal and burnt shell). The material was found to be shallow and unstratified and no structural features were observed, although an adze was recovered. The locations of the sites described above are shown in Figure 13 and a brief description provided in Table 1.

Previous Survey and Investigation

No previous archaeological investigations or surveys have been undertaken within the properties at 65 and 73 Ratanui Road or in close proximity to the area. In general, archaeological investigations in the surrounding area have been associated with development works that have taken place since the 1980s. The most common site type recorded is midden, although it has been noted that this could be due to the more easily recognisable nature of middens compared to other types of sites (O’Keeffe 2011b:44). It is also noted that the shifting nature of the dunes means that remains can be located on the ground surface, near the top or along the slopes of dunes (O’Keeffe 2011b:46).

A selection of the results of previous investigations is described below to provide an overview of the types of sites identified in the general area. Archaeological testing at the Paraparaumu Airport, which is located c.2200m to the southwest of the properties at 65 and 73 Ratanui Road, was undertaken between 2009 and 2011 for various works, including for a runway extension. Pre-construction testing was carried out in 2009 on dunes and a tuatua midden was identified and recorded as R26/386 (O’Keeffe 2009). Stage 1 of the airport development (the northwest area) was monitored during construction works in 2011 in an area of former swamp. The area was found to have been previously modified with fill

deposited directly on top of a peat layer, with rubble and sandy topsoil also deposited on top. Some of the topsoil was observed to have shell fragments, but it was concluded that the sand was imported and the original location was not able to be determined. An in-situ sand layer below the peat was also identified but no archaeological remains were present (O’Keeffe 2011a: 35-37).

The area in the northwest part of the Paraparaumu Airport was also investigated in 2011. The area tested consisted of a previously truncated dune and areas of former wetland that had been filled in. The test trenches did not identify any archaeological remains and noted that if material had been there in the past, the 20th century modifications appear to have destroyed them (Campbell 2011: 3-5).

An assessment including a survey for the Mackays to Peka Peka Expressway project was undertaken in 2011 (O’Keeffe 2011b). The central part of the project area was located c. 1000m to the south and east of the properties at 65 and 73 Ratanui Road. A number of archaeological sites were recorded during archaeological monitoring of the works (O’Keeffe 2019). As can be seen in Figure 14, there were two areas where clusters of sites were found. To the south of the properties at 65 and 73 Ratanui Road, near Mazengard Road, five sites were identified, consisting of three midden/ oven deposits (R26/555, R26/556 and R26/557); another site containing shell (R26/535) which was found to contain redeposited material but no in situ remains were identified; and the fifth site was a rubbish dump containing bottle glass (clear, green and brown) and a nail. Thirteen archaeological sites were identified to the east of the properties at 65 and 73 Ratanui Road with 11 (R26/370, R26/489, R26/490, R26/539, R26/541, R26/544, R26/545, R26/546, R26/548, R26/549 and R26/550) being midden/ oven deposits, with tuatua being the main species represented and with the deposits ranging from quite dense and thick layers to very thin lenses and scatters. The other two archaeological sites consisted of a European farm post, R26/547 and a possible terrace (R26/455), although the latter could not be confirmed to be archaeological in nature (O’Keeffe 2019: 69-70).

Archaeological Landscape

As stated by Dodd (2018), archaeological remains associated with pre-1900 Māori settlement of the Kāpiti dune belt form part of an extensive but rapidly diminishing archaeological landscape. The most common site type within this area is shell midden/oven sites located along the dunes. These sites have the potential to provide valuable information relating to occupation and the subsistence activities of the people who lived there and help with our understanding of the settlement patterns across the Kāpiti coast dunes. In addition to midden sites, kōiwi tangata (human remains) have frequently been uncovered along the dunes. These may be associated with deliberate dune burials or potentially with battle. Sites such as these are of high cultural and archaeological value based on the Heritage New Zealand and the Greater Wellington Regional Council evaluation criteria.

The archaeological background indicates that the properties at 65 and 73 Ratanui Road are located within a broad archaeological landscape associated with Māori settlement and occupation along the Kāpiti Coast. Based on the landform of dune ridges and former swampy ground, the possibility of archaeological sites being present, particularly shell midden and ovens, which are the most commonly recorded site types in the area, is considered likely.

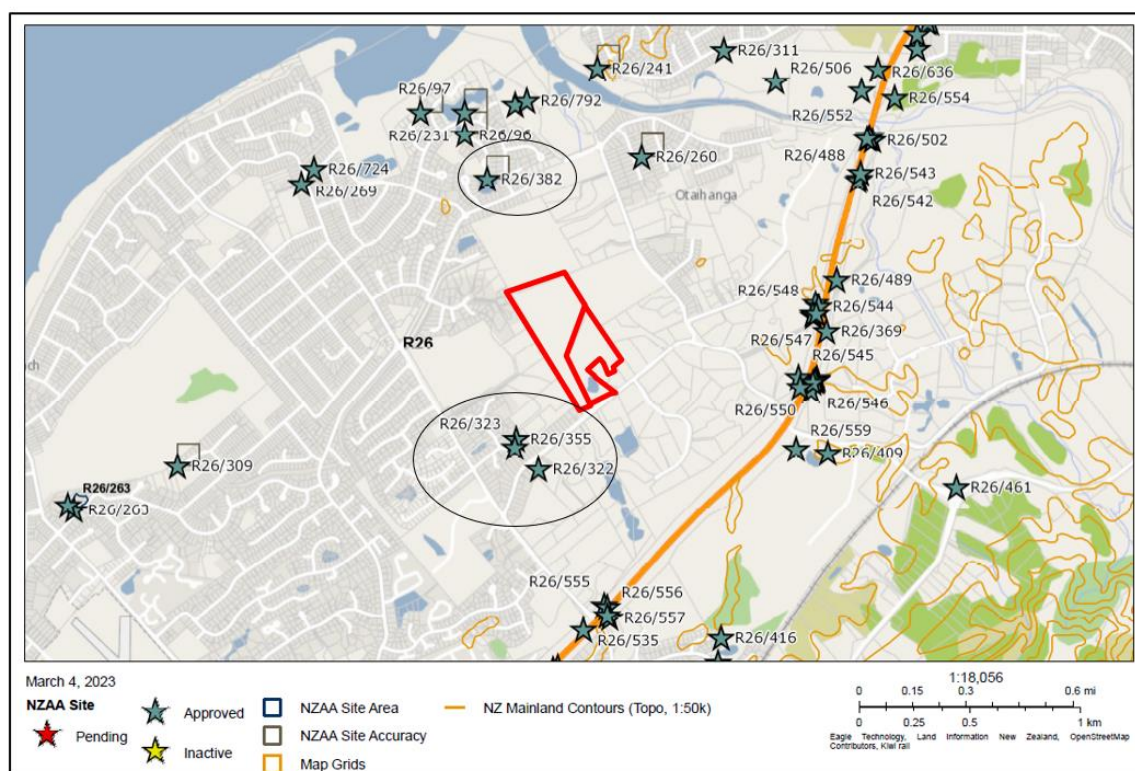


Figure 13. Map showing the properties at 65 and 73 Ratanui Road outlined in red in relation to recorded archaeological sites in the general area, and sites within 500m of the property circled in black (source: NZAA ArchSite)

Table 1. Brief description of recorded archaeological sites within c. 500m of the Site

NZAA Ref	Site Type	Description	NZTM Easting	NZTM Northing
R26/322	Pit/ Terrace	Three pits identified on a low spur projecting out into a former area of swamp.	1769316	5471272
R26/323	Pit/ Terrace	Originally recorded as seven pits and an eel channel in 1962.	1769208	5471372
R26/355	Midden/ Oven	Tuatua midden identified during survey with earthworks uncovering additional shell midden, charcoal and fire cracked rocks.	1769214	547141
R26/382	Midden/ Oven	Shell midden identified during development; an adze was also recovered.	1769082	5472585

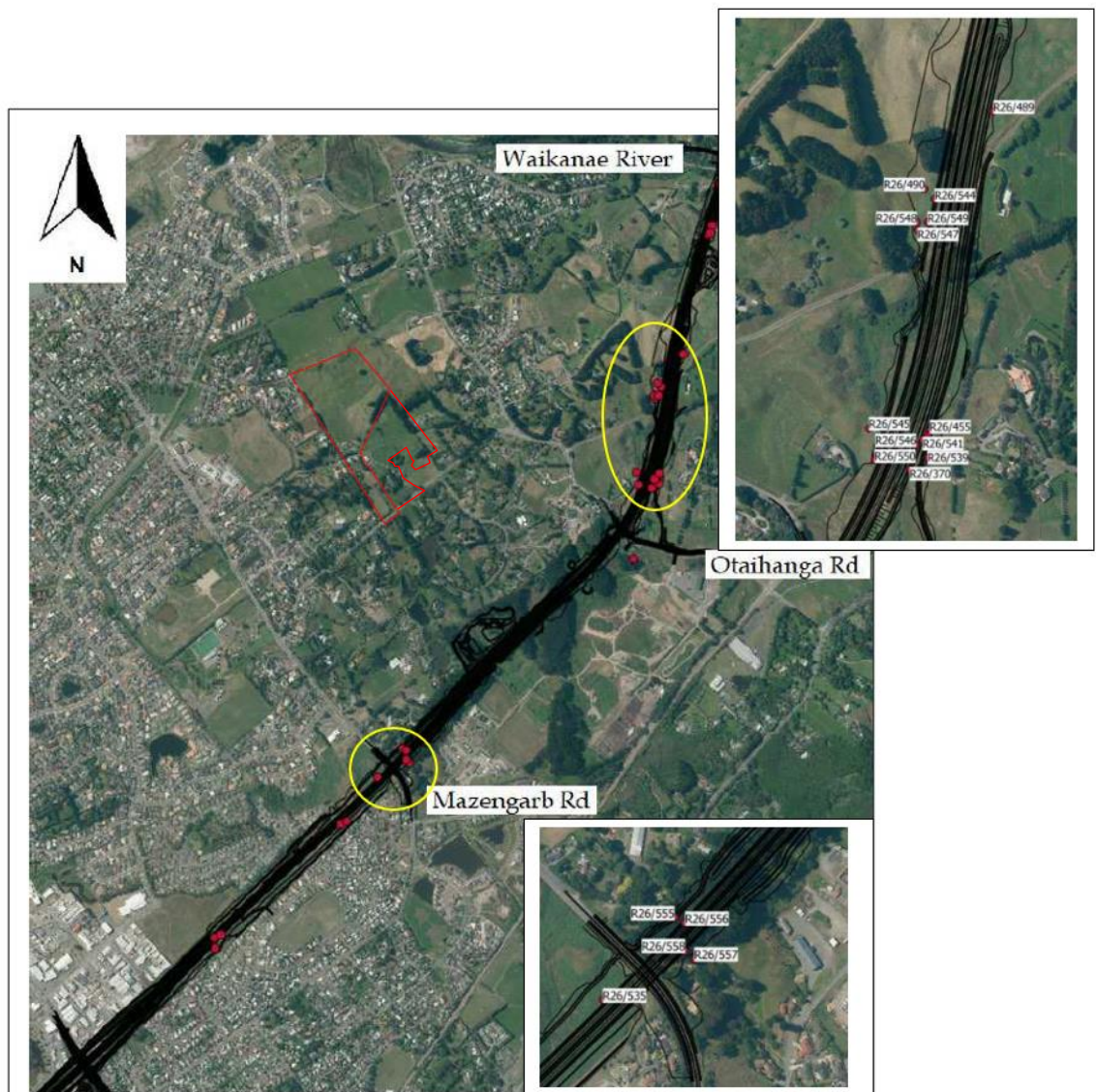


Figure 14. Aerial plan showing detail of some of the archaeological sites (red dots circled in yellow and shown in detail in insets) identified during survey and monitoring along the central part of the Mackays to Peka Peka expressway, with the properties at 65 and 73 Ratanui Road outlined in red (source: O’Keeffe 2019: 70)

PHYSICAL ENVIRONMENT

Geology and Landscape

The topography of the Kāpiti Coast is a relatively narrow and flat coastal shelf characterised by interspersed sand dunes and wetlands. It has been noted that the coastal shelf is mostly made up of recent Aeolian dunes dating from the Holocene comprising alluvial fan, scree and alluvial deposits, as shown in Figure 15. The dune belt extends down the southwest coast of the North Island and is approximately 65km long and up to 10km wide, with steep hills to the east. The dune sands overlie alluvial gravel and sandstone along the inland edge and are ‘broken along their length by substantial deposits of river alluvium’ (McFadgen 1997). The soils of the area comprise a mix of shallow topsoils overlaying grey sands, which are well drained and therefore relatively suitable for crop cultivation, to brown soils in the imperfectly drained lower-lying areas, where swamps and lagoons accumulate, perfect for eel weirs and whitebait fishing (Dodd 2018).

The dune sequence on the Kāpiti/Horowhenua coast was first identified by Cowie (1963), who documented dune phases in the vicinity of the Manawatū River mouth. The dunes have been formed from sediment washed down rivers and streams, then redeposited inland and along the coast by wind and wave action. The oldest dunes are generally those located further inland and the younger dunes, which are deposited over the top of older dune formations, are closer to the coast (Dodd 2018). The dune sequence in the area around Paraparaumu is characterized by Taupo dune and Foxton dune (Figure 16), the latter being the oldest (between 6500yrs and 2000yrs BP), with the Taupo dune being the foredune at the time of the Taupo eruption (1720yrs BP) (O’Keeffe 2011b: 9).

There is one highly modified stream present in the Site situated in a drainage easement running through 73 Ratanui Road and just to the south of the existing house at 65 Ratanui Road. The stream is prone to flooding. There are also a number of natural wetlands present, along with manmade ponds. The properties in general are covered in sandy hummocks in a generally undulating landscape.

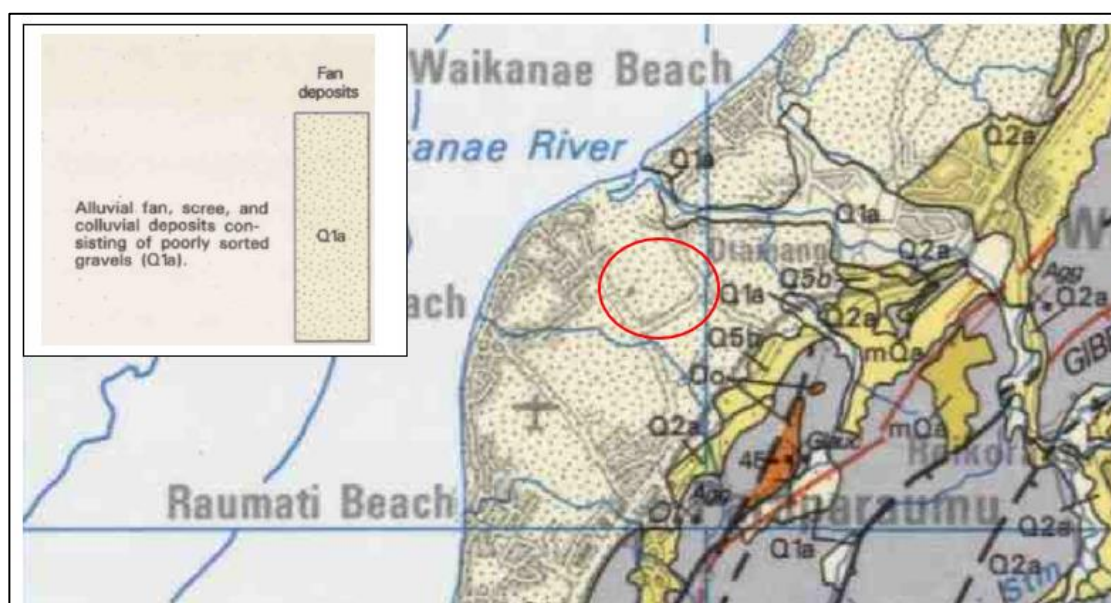


Figure 15. Geological map, with the area containing the Site circled in red (source: Begg and Johnston 2000)

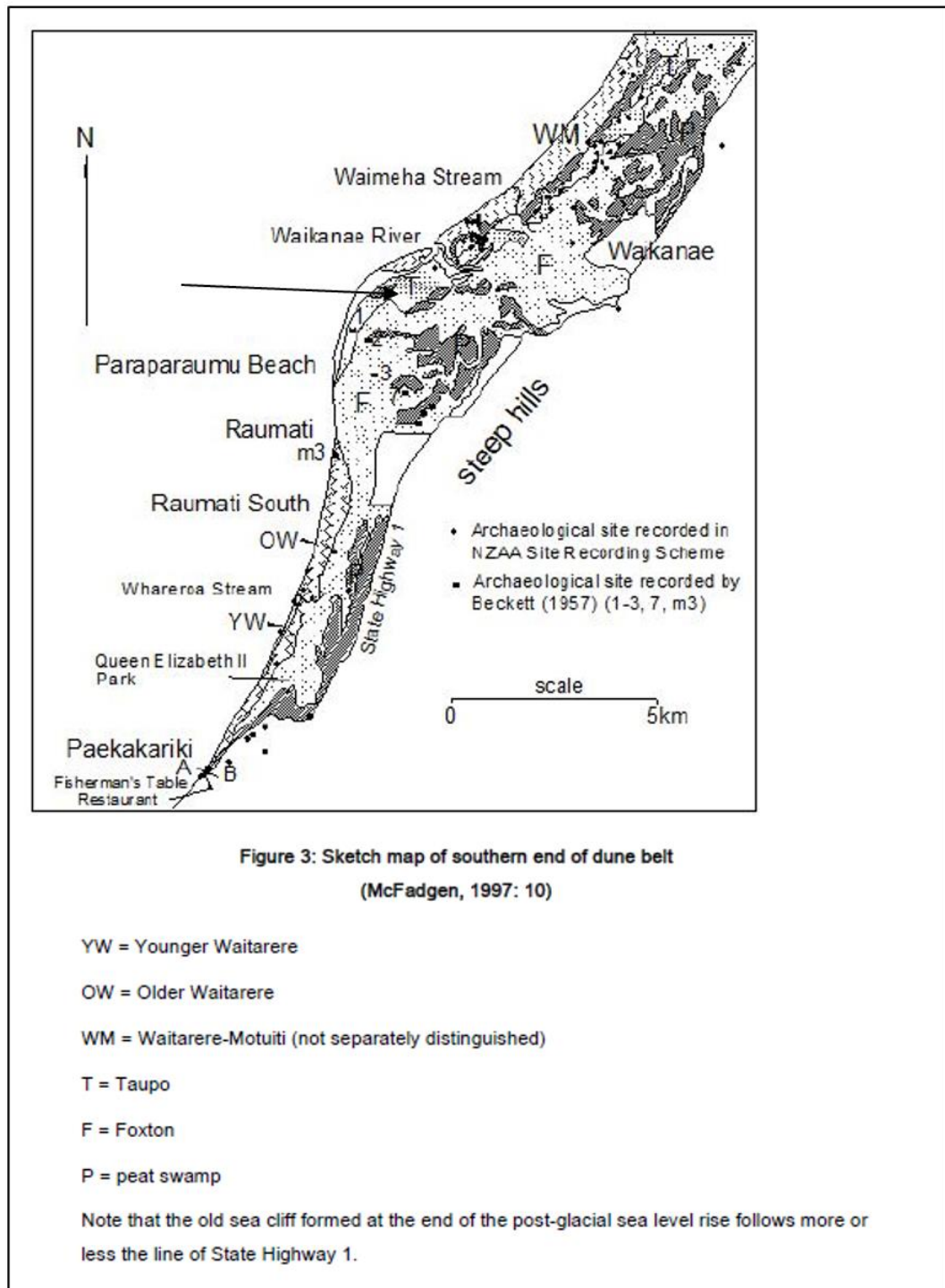


Figure 16. Map of the southern end of the dune belt with the approximate location of the Site indicated by arrow (McFadgen 1997:10, as shown in O’Keeffe 2019: 27)

FIELD ASSESSMENT

Field Survey Results

Two field surveys have been undertaken for this assessment. The first at 65 Ratanui Road on 2 March 2023 and the second at 73 Ratanui Road on 20 November 2024, both by Ellen Cameron. The surveys consisted of a visual inspection, probing and spade tests. The results for each property are presented below.

65 Ratanui Road

All parts of the property were accessible for the survey, although the modified land containing the house and curtilage was not included. The survey consisted of visual inspection to identify any surface archaeological features, as well as subsurface testing with a probe. The area running from Ratanui Road to the house consists of a narrow strip of land with a gravel driveway connecting the road and the house. The area to the east of the driveway consists of grassed paddocks with some filling in of lower areas (according to the current landowner) (photograph in Figure 17).

The main part of the property lies to the north of the house and consists of grassed paddocks with a farm race running north to south through the central part of the property. According to the current landowner, the property was in use in the past as part of a large dairy farm, although at the time of the survey only a small number of cattle were being kept on the property. The land was characterised by dune ridges and low-lying areas, some of which still were waterlogged (photographs in Figure 18 and Figure 19).

It was noted that many of the dune ridges had soil exposed by a large number of rabbit warrens and also from stock movements. The exposed soils were inspected and found to consist of a darker sandy silt topsoil over a yellow sand subsoil (photographs in Figure 20 and Figure 21). No evidence of any archaeological features or deposits was noted in any of the areas of exposed soil. Probing on the dune ridges also did not identify any archaeological evidence.

It was noted that the back of the property along the northern boundary contained two elevated areas which were hillsides leading up to the crest of larger dunes. These areas were visually inspected but heavy vegetation growth did not allow for full access and also hindered full visual inspection (Figure 22). As noted earlier, the northeast part of the property had been used as a dirt bike track in the past. The area was inspected and there was some evidence of tracks and minor soil displacement, but no major impacts to the topography were noted.



Figure 17. Photograph of the paddocks alongside the driveway leading to Ratanui Road, looking southeast



Figure 18. Photograph looking northwest along the central farm race



Figure 19. Photograph of a low-lying marshy area in the northwestern part of 65 Ratanui Road, looking north-northwest



Figure 20. Photograph showing exposed soil in upper part of sand dune ridge exposed by rabbit activity (1m scale)



Figure 21. Photograph showing exposed soil in a sand dune ridge from cattle activity, looking west (1m scale)



Figure 22. Photograph of the hillside along the northern boundary of 65 Ratanui Road, looking northwest

73 Ratanui Road

The survey included all parts of the property apart from one paddock which contained stock and was not entered but instead observed from the fence line. As noted earlier a highly modified stream runs across the northern part of this property from east to west. It was observed to have had cut works with the sides being quite straight and deep (Figure 23). The area to the north of the stream was observed to be triangular in shape and consisted of undulating dune ridges and low-lying areas and two ponds were noted in the southwestern part of this area near the boundary with 65 Ratanui. From the review of aerial photographs, the area along the eastern boundary and also partially along the northern boundary could be seen to contain mature trees. It was observed during the survey that most of these trees had been cut down. Photographs of this area taken during the survey are shown in n Figure 24 - Figure 26.

Two test pits were located in the northern area to observe the stratigraphy of the upper layers of soil, as no exposed sections of soil were observed. The locations of the test pits are shown in Figure 27. The first test pit (TP1) was located on a dune ridge near the area where the trees had been removed at coordinates E1769536 N5471909 +-4m. The test pit showed a dark greyish brown sandy silt becoming more sandy with depth, rootlets were observed throughout the test pit which was excavated to 30cm below surface (bs). Probing indicated similar soil consistency to c. 90 cm below the bottom of the test pit. Photographs of the test pit 1 are shown in Figure 28. The second test pit was located on a lower area at coordinates E1769535 N5471869 +-4m. This test pit showed a mottled pale to greyish brown sandy silt with some yellowish sand from 0-15cm (bs) and a yellow sand from 15-25cm (bs). The upper layers appeared disturbed, likely from stock movements or possibly from modifications of the nearby pond. Photographs of test pit 2 (TP2) are shown in Figure 29.

The eastern and central parts of the property to the south of the highly modified stream were observed to again consist of dune ridges and low-lying areas. A large pond was also noted in the low-lying area along the eastern boundary. An area of exposed soil showed a dark sandy silt topsoil over a yellowish sand. Photographs are shown in Figure 30 - Figure 32.

The western part of the property to the south of the highly modified stream was visited next. This area contained a house and outbuildings just to the south of the stream with undulating dune ridges and grassed paddocks and a large pond situated in the south near Ratanui Road. The pond area showed evidence of recent planting along the eastern slopes leading down to the pond. The area to the south of the pond contained a high dune ridge leading steeply down to Ratanui Road. It was noted that the top of the ridge had exposed soil from stock movements which exposed a dark greyish brown sandy silt topsoil. A track had also been cut into the dune from Ratanui Road which showed a clear soil profile also containing a dark greyish brown sandy silt topsoil ranging from 25 to 40cm in thickness over a yellowish sand. The areas of exposed soil were visually scanned and probed as was the area around them, but no changes in the subsoil layers were noted that would indicate the presence of archaeological deposits such as shell midden. Photographs are shown in Figure 33 - Figure 36.

Survey Results Summary

No archaeological features or deposits were identified during the surveys. In general, no major modifications to the land were visible, although many decades of stock movements and construction of the dirt bike track at 65 Ratanui Road had resulted in some

displacement of soil. As well, the highly modified stream showed evidence of having been cut down and widened, likely as part of flood management. The areas around the ponds also showed evidence of modifications, through tree planting and tree removal.

Although no archaeological remains were identified during the surveys, the presence of sites such as shell midden cannot be completely discounted, especially in the northern hillsides at 65 Ratanui Road, which were considerably elevated over the other parts of the properties. It is also noted that the shifting and mobile nature of sand dunes means that older archaeological deposits, such as shell midden can be covered by later sand movements and these would not be able to be detected through probing. It was also observed that the properties contained low-lying marshy areas and ponds which likely would have been more extensive in the past prior to drainage for farming. The presence of isolated artefact finds is therefore considered possible as artefacts are known to be stored/concealed in wetlands by Māori in the past.



Figure 23. Photograph showing the highly modified stream, looking east



Figure 24. Photograph showing a general view of the northern part of 73 Ratanui Road, looking north



Figure 25. Photograph showing one of the ponds in the northern part of 73 Ratanui Road, looking northwest



Figure 26. Photograph showing the northern boundary of 73 Ratanui Road with row of stumps, looking northeast



Figure 27. Location of the test pits in the northern part of 73 Ratanui Road (source: Kāpiti Coast District Council Local Maps)



Figure 28. Photographs showing detail and location of test pit (T1), looking southwest



Figure 29. Photograph showing the location of test pit (T2), looking southwest



Figure 30. Photograph showing the pond in the southeast part of 73 Ratanui Road, looking east



Figure 31. Photograph showing a general view of the eastern part of 73 Ratanui Road, looking south



Figure 32. Area in the central part of 73 Ratanui Road with sand ridges and dunes with water present in the low-lying areas, looking west



Figure 33. Photograph showing the view of the southwestern part of 73 Ratanui Road, looking south



Figure 34. Photograph showing the large pond in the southwestern part of 73 Ratanui Road, looking north northwest



Figure 35. Photograph showing the cut profile alongside the track leading to Ratanui Road, looking west (1m scale)



Figure 36. Photograph showing the exposed soil along the dune ridge in the southwest part of 73 Ratanui Road, looking southeast

DISCUSSION AND CONCLUSIONS

Summary of Results

There are no previously recorded archaeological sites in the properties at 65 and 73 Ratanui Road and no sites were identified during the survey for this assessment. Both of the properties are part of a broader archaeological landscape that runs along the Kāpiti dune belt. The Paraparaumu area contains a number of archaeological sites associated with Māori settlement and occupation, especially in the form of shell middens and ovens. The relatively unmodified nature of the properties (except the establishment of a house and curtilage and dirt bike track at 65 Ratanui Road and house and curtilage and areas around the ponds and the highly modified stream at 73 Ratanui Road indicates the likelihood that unrecorded archaeological sites, especially in the form of shell midden, may be present, especially along the northern boundary of the property at 65 Ratanui Road which contains slopes of more highly elevated dunes. The property at 73 Ratanui Road is noted from early survey plans and aerial photographs to have contained a number of ponds and would likely have been swamplier in the past, so the presence of isolated artefact finds associated with Māori settlement and occupation, which are sometimes found in swamps/wetlands, is also considered possible.

Māori Cultural Values

This is an assessment of archaeological values and does not include an assessment of effects on Māori cultural values. Such assessments should only be made by the tangata whenua. Māori cultural concerns may encompass a wider range of values than those associated with archaeological sites.

The historical association of the general area with the tangata whenua is evident from the recorded sites, traditional histories and known Māori place names.

Survey Limitations

It should be noted that archaeological survey techniques (based on visual inspection and minor sub-surface testing) cannot necessarily identify all sub-surface archaeological features, or detect waahi tapu and other sites of traditional significance to Māori, especially where these have no physical remains.

It is noted, however, that the mobile nature of the sand dune landscape makes the identification of older archaeological sites during field survey difficult, as they are likely to have been covered to depths that cannot be reached by probing.

Archaeological Value and Significance

The archaeological value of sites relates mainly to their information potential, that is, the extent to which they can provide evidence relating to local, regional and national history using archaeological investigation techniques, and the research questions to which the site could contribute. The surviving extent, complexity and condition of sites are the main factors in their ability to provide information through archaeological investigation. For example, generally pā are more complex sites and have higher information potential than small midden (unless of early date). Archaeological value also includes contextual

(heritage landscape) value. Archaeological sites may also have other historic heritage values including historical, architectural, technological, cultural, aesthetic, scientific, social, spiritual and traditional values.

The Site currently has no known archaeological value as no archaeological sites have been previously recorded within its boundaries and none were identified during the surveys for this assessment. If any unrecorded archaeological sites are present they would have value as part of the broader archaeological landscape of Māori settlement and occupation on the Kāpiti Coast.

Potential Effects of the Proposal

Based on the preliminary findings of this assessment any future residential development enabled by the PPC has the potential to affect unrecorded subsurface archaeological sites, most likely in the form of shell midden/oven and isolated finds, although other features associated with Māori occupation and settlement may also be present.

In any area where archaeological sites have been recorded in the general vicinity it is possible that unrecorded subsurface remains may be exposed during development. In this case it is considered likely that unrecorded subsurface archaeological sites relating to Māori occupation and settlement will be exposed during development especially along the northern boundary of the property at 65 Ratanui Road which contains slopes of more highly elevated dunes.

Once detailed design has been undertaken and the final layout and earthworks plans for the proposed residential development have been prepared it will be necessary to update this assessment to determine the level of potential effects, and to recommend appropriate archaeological management and mitigation measures for the development.

Archaeological features and remains can take the form of burnt and fire cracked stones, charcoal, rubbish heaps including shell, bone and/or 19th century glass and crockery, ditches, banks, pits, old building foundations, artefacts of Māori and early European origin or human burials.

Resource Management Act 1991 Requirements

Section 6 of the RMA recognises as matters of national importance: ‘the relationship of Māori and their culture and traditions with their ancestral lands, water, sites, waahi tapu, and other taonga’ (S6(e)); and ‘the protection of historic heritage from inappropriate subdivision, use, and development’ (S6(f)).

All persons exercising functions and powers under the RMA are required under Section 6 to recognise and provide for these matters of national importance when ‘managing the use, development and protection of natural and physical resources’. There is a duty to avoid, remedy, or mitigate any adverse effects on the environment arising from an activity (S17), including historic heritage.

Historic heritage is defined (S2) 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 waahi tapu; (iv) surroundings associated with the natural and physical resources’.

Regional and district plans contain sections that help to identify, protect and manage archaeological and other heritage sites. The plans are prepared under the provisions of the RMA.

The Kāpiti Coast District Plan is relevant to any future residential development enabled by the proposed PPC on the Site. There are no scheduled historic heritage sites located in the Site. However, future residential development enabled by the PPC does have the potential to affect unrecorded subsurface archaeological remains that may be present within the Site. Further detailed archaeological assessment and mitigation recommendations will be required as part of future resource consent applications for residential development enabled by the PPC.

Heritage New Zealand Pouhere Taonga Act 2014 Requirements

In addition to any requirements under the RMA, the HNZPTA protects all archaeological sites whether recorded or not, and they may not be damaged or destroyed unless an Authority to modify an archaeological site has been issued by Heritage NZ (S42).

An archaeological site is defined by the HNZPTA Section 6 as follows:

‘archaeological site means, subject to section 42(3), –

(a) any place in New Zealand, including any building or structure (or part of a building or structure) that –

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

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

(b) includes a site for which a declaration is made under section 43(1).³

Authorities to modify archaeological sites can be applied for either in respect to archaeological sites within a specified area of land (S44(a)), or to modify a specific archaeological site where the effects will be no more than minor (S44(b)), or for the purpose of conducting a scientific investigation (S44(c)). Applications that relate to sites of Māori interest require consultation with (and in the case of scientific investigations the consent of) the appropriate iwi or hapu and are subject to the recommendations of the Māori Heritage Council of Heritage NZ. In addition, an application may be made to carry out an exploratory investigation of any site or locality under Section 56, to confirm the presence, extent and nature of a site or suspected site.

At present, no archaeological sites have been recorded in the properties at 65 and 73 Ratanui Road, although the potential for currently unrecorded subsurface archaeological sites associated with Māori occupation has been identified. If modification of an archaeological site/s is necessary for future residential development enabled by the PPC,

³ Under Section 42(3) an Authority is not required to permit work on a pre-1900 building unless the building is to be demolished. Under Section 43(1) a place post-dating 1900 (including the site of a wreck that occurred after 1900) that could provide ‘significant evidence relating to the historical and cultural heritage of New Zealand’ can be declared by Heritage NZ to be an archaeological site.

an Authority issued under the HNZPTA would be required prior to the commencement of any works that would affect the site/s and would be subject to appropriate mitigation through archaeological information recovery.

Conclusions

Currently, no archaeological sites have been identified in the Site. However, based on the findings of this assessment there is potential for unrecorded subsurface remains associated with Māori occupation to be present in the Site. No significant adverse effects on archaeology are expected, although the presence of unrecorded subsurface remains, such as shell midden and ovens is considered likely, especially on the hillsides at the northern part of 65 Ratanui Road and possibly in the dune ridges in other parts of the property as well. It is also considered possible that isolated artefact finds could be present in the low-lying wetland and former wetland areas of the property at 73 Ratanui Road. Based on the expected nature of sites likely to be present the adverse effects can be mitigated under the provisions of the HNZPTA.

As this report is solely for the proposed change in land use from rural lifestyle to residential, it is recommended that future residential development enabled by the PPC undertakes detailed assessment, and appropriate mitigation measures are adopted where appropriate. Mitigation measures are likely to consist of archaeological monitoring during earthworks with recording and sampling of any archaeological remains if encountered.

RECOMMENDATIONS

- There should be no major constraints on any future residential development enabled by the PPC on archaeological grounds, as no known archaeological sites will be affected, and the possibility that archaeological remains may be present can be appropriately mitigated through the provisions of the HNZPTA.
- Detailed assessment will be required for any future residential development enabled by the PPC to provide a full assessment of effects on archaeological values once future development plans have been prepared at the resource consent stage.
- If impacts on identified or unidentified archaeological sites from future residential development are considered to be likely based on the detailed assessment, an Authority should be applied for under Section 44(a) of the HNZPTA as a precaution prior to the start of earthworks. This would establish appropriate procedures for the management of any archaeological remains discovered, reducing the potential for delays during the development process.
- If no Authority has been obtained and subsurface archaeological evidence should be unearthed during construction (e.g. intact shell midden, hangi, storage pits relating to Māori occupation, or cobbled floors, brick or stone foundation, and rubbish pits relating to 19th century European occupation), work should cease in the immediate vicinity of the remains and Heritage NZ and the Kāpiti Coast District Council should be notified.
- If modification of an archaeological site does become necessary, an Authority must be applied for under Section 44(a) of the HNZPTA and granted prior to any further work being carried out that will affect the site. (*Note that this is a legal requirement*).
- Since archaeological survey cannot always detect sites of traditional significance to Māori, such as wāhi tapu, the tangata whenua should be consulted regarding the possible existence of such sites on the property.

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