PROPOSED RUAKAKA SERVICE CENTRE, RUAKAKA, NORTHLAND: PRELIMINARY ARCHAEOLOGICAL ASSESSMENT

Prepared for Ruakaka Developments Ltd



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By

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INTRODUCTION

Project Background

Ruakaka Developments Ltd is proposing the development of a new traveller's service centre within an existing rural block on the corner of State Highway 1 and State Highway 15A (Port Marsden Highway) at Ruakaka, Northland (Figure 1-Figure 4). The service centre is proposed to comprise: a full service station and truck stop, food & beverage facilities, retail shop, public amenities including toilets, picnic area and freedom camping area, and car parking. The service centre is proposed to occupy approximately 25% of the 17.853ha property, with the remaining 75% comprising the existing residential home on Lot 2 DP 310034, retired farmland and landscaped area (including proposed riparian planting around the stream, Figure 5) with the remainder of the property being retained in farmland (Tattico 2020).

The development of the service centre will require significant earthworks as shown on Figure 6 and Figure 7. The works include:

- Significant re-contouring over a large portion of the application site to enable the construction of the centre, services and access points as well as to manage stormwater. Earthwork is required to create a raised centre within the site to accommodate the retail area above the 100 year flood levels;
- A significant cut is required to excavate space for the underground fuel storage tanks and stormwater pond;
- Widening of the existing main watercourse that traverses the site to accommodate the additional stormwater generated from the impervious areas of the development;
- Mounding to the state highway frontages proposed to assist in visual separate and management of stormwater within the site.
- Development of wastewater infrastructure with septic tanks and drip lines discharging treated wastewater into a 1ha area of grassland.

An archaeological assessment was commissioned by Ruakaka Developments Ltd to establish whether the proposed work is likely to impact on archaeological values. 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.

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 information on sites recorded in the vicinity. 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 property.

A visual inspection of the main portion of the property, located on the northern side of the intersection of State Highway 1 and State Highway 15A (Figure 3) was conducted on 9



June 2020. 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). Exposed and disturbed soils were examined where encountered for evidence of earlier modification, and an understanding of the local stratigraphy. Subsurface testing with a probe and spade was carried out across the proposed development area to determine whether buried archaeological deposits could be identified or establish the nature of possible archaeological features. Particular attention was paid to areas of proposed earthworks across the property. One identified archaeological site was photographed and GPS readings taken. Photographs were also taken to record the topography and the general area.

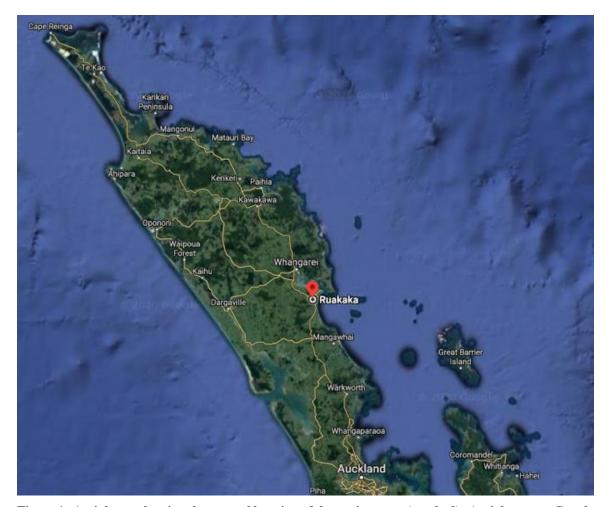


Figure 1. Aerial map showing the general location of the project area (marked). Aerial source: Google Maps 2020





Figure 2. Aerial showing the location and extent of the subject property (shown in yellow) within the wider landscape. Source: Tattico 2020



Figure 3. Aerial showing the extent of the current archaeological survey (outlined in red). Aerial source: Google Maps 2020



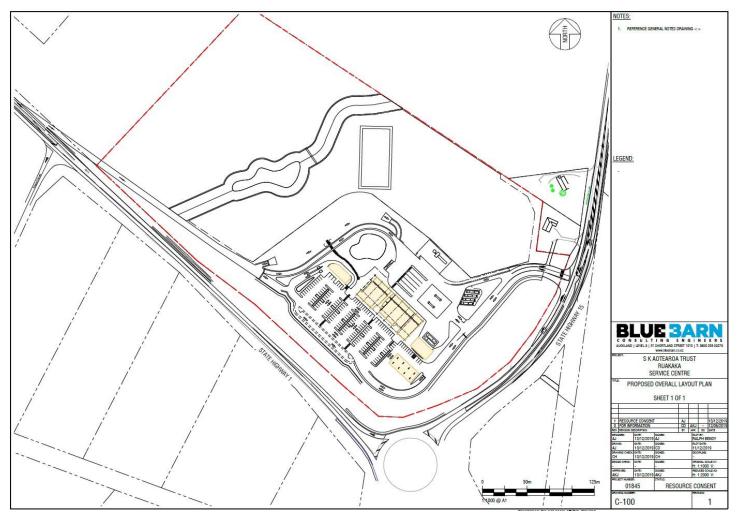


Figure 4. Overall Layout Plan (Bluebarn 2019)





Figure 5. Landscape Masterplan prepared by Boffa Miskell (Tattico 2020)



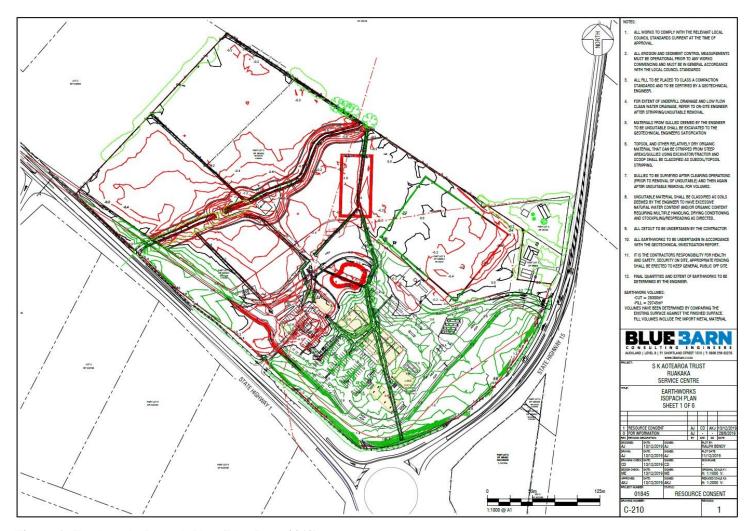


Figure 6. Earthworks Isopach Plan (Blue Barn 2019)





Figure 7. Erosion and Sediment Control Plan (Bluebarn 2019)



HISTORICAL BACKGROUND¹

The Whangarei area was a much-desired location for Māori settlement due to the sheltered harbour, ample marine and freshwater resources available, temperate climate and alluvial river valleys which provided good opportunities for food cultivation. Prior to the arrival of Europeans in the late 18th and early 19th centuries, Māori tribes of the Whangarei coast operated seafaring and trading networks that reached from the Far North down to Tamaki Makaurau (Auckland) and out to Aotea (Great Barrier Island). As part of these overlapping networks, related groups often lived in satellite communities along the coast (Te Ara 2006).

In the year 1820, at the beginning of the musket wars period, Reverend Samuel Marsden made an intrepid journey down the Whangarei Harbour accompanied by a Māori party. Marsden reported that everyday life in the area had already been disrupted, with villages attacked and people living in fear (Pickmere 1986:7). Three years later the missionary Samuel Leigh travelled through the district of Whangarei and found it desolate. He landed near One Tree Point with a mission group and spent the night at Takahiwai (Vallance 1964:30).

During the period of intertribal wars Whangarei was to become the meeting place of northern war parties traveling further south. Pickmere (1986:3) states that these gatherings gave Whangarei its name, which literally means 'swimming place of the whales' but can be translated as 'the meeting place of the chiefs'. The end of the intertribal wars was brought about during the 1830s by two factors – constant war was exhausting the tribes, and the influence of missionaries was increasing (Pickmere 1986:13). Subsequently the coastal areas of Whangarei were repopulated. Figure 8 shows some of the Māori place names recorded around Whangarei Harbour in the 19th century.

Another missionary, Colenso, travelled the district between 1836 and 1842, accompanied by James Busby in 1839, who bought the Ruakaka area from the Parawhau and Patuharakeke chiefs. The sale was supervised by the chiefs Te Tirarau III and Karekare (Nevin 1984:14). Busby also bought land in 1839 'on the south side of the harbour' from the Patuharakeke (Pickmere 1986:27). In 1841 Colenso travelled from the Kaipara, and the first habitation the party came across was 'near the present settlement of Takahiwai', where they were welcomed by the Patuharakeke rangatira Pou and the hapu (Vallance 1964:34). A sketch dated to 1842 shows the entrance to Whangarei Harbour with silhouettes of the Heads and a manned waka (Figure 9). In February 1854, Māori again sold Ruakaka, this time to the Crown. It was a smaller block than previously, not including Marsden Point or One Tree Point. The excluded area was known as Poupouwhenua and was sold to the Crown in July 1854 (Richards 1984:9-12).

While Russell in the Bay of Islands had become a bustling whale port by 1838 with numerous hotels, grog shops, and billiard saloons, Whangarei's first permanent European settler, William Carruth, did not arrive until 1839 (Pickmere 1986:19). By 1842 there were still only seven families of settlers living in Whangarei (Pickmere 1986:37). Resentment and disillusionment toward the Government had been growing among Māori since the signing of the Treaty of Waitangi, and when word of an attack on settlers in

¹ Macready & Judge 2020



Russell reached settlers in Whangarei the families left their homes and sailed for Auckland. For several years there were no Europeans living in the area.

Sustained European settlement of the area did not begin until the 1850s, and with settlement, came industrial development. A flax mill was built during the 1850s, and a flour mill had been built by the 1860s. Cattle had been introduced to the Whangarei area during the 1840s – being the origins of dairy farming in the region. The earliest coal mining occurred at Whau Valley from 1865 to 1889. The potential of a kauri gum industry was first recognised in 1840 but it took years for such an industry to develop. America had become the main destination for exports by the 1860s. Prices per ton of gum soared and gum digging became a reasonably profitable industry to work in, attracting a wide variety of men (Keene 1966).

Early industries in the wider Whangarei district include the timber mill at Ngunguru which operated from the 1830s, and the mining of silver and gold at Puhipuhi from the 1880s. During the years prior to 1900 until around the beginning of the Great War, Whangarei was regarded as one of the most important regions in New Zealand in terms of fruit growing (Keene 1966).

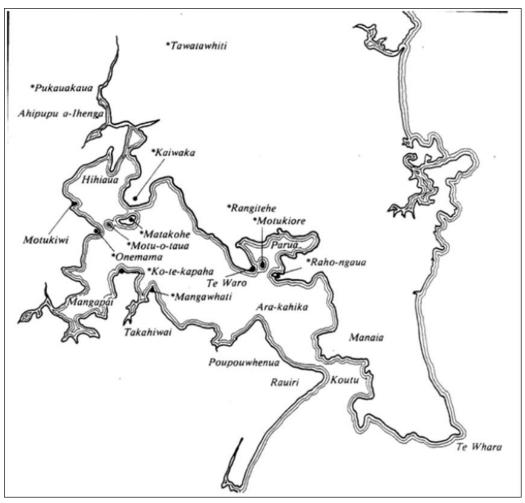


Figure 8. Traditional place names around Whangarei Harbour used in the early 19th century (Pickmere 1986:5)



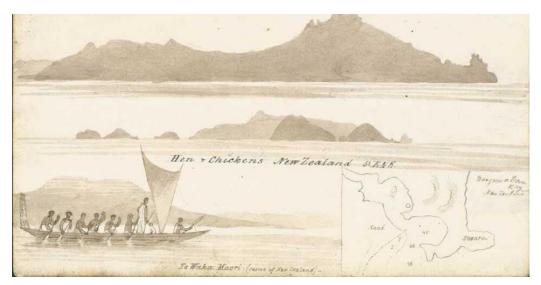


Figure 9. View of the Entrance to Whangarei Harbour (1842). Entrance to Whangari River, bearing NW by W; Hen and Chickens, New Zealand..., Te Waka Māori (canoe of New Zealand); Wangari or Bream Bay, New Zealand.1842. Reference number: MS-0104-071 (https://tiaki.natlib.govt.nz/#details=ecatalogue.239815)



HISTORICAL SURVEY

Information from Early Maps and Plans

A survey plan reportedly dating to 1862 shows the wider Ruakaka area and the boundaries of the Waiwarawara Block shown as '*Native Reserve*' (Figure 10). The land is shown as areas of swamp with groves of kahikatea and an area of raupo is also shown to the northwest. Other annotations which appear to refer to tree or plant species are also shown but were unable to be deciphered. The subject property is shown as covered at least partially in kahikatea – these trees generally prefer poorly drained soils and alluvial plans (Figure 11). For Maori, kahikatea had many uses ranging from the berries being eaten to the bark and leaves being used for medicinal purposes, the resin and burnt timber could also be used for dye and bark and timber used for fires, lashing, torches, weapons, tools and other implements. Raupo was also a highly prized plant, used for whare construction, sails and kits and rafts (Landcare Research Manaaki Whenua 2020).

A further undated plan from a similar period shows the Ruakaka area with the subject property being located within '*Henry's Selection*', immediately east of the Waiwarawara Block boundary (Figure 12).

A survey plan dated to 1873 entitled 'Plan of Waiwarawara Block' (ML 2635) shows part of the Ruakaka River, areas of bush and part of a horse track running from Whangarei to Waipu (Figure 13). The block within which the current project area is located is shown as owned by 'Thomas Henry'. Again, the large grove of kahikatea is shown located on the southern edge of the project area (Figure 14). A tributary to the Ruakaka River is shown to the north-west of the project area. An annotation to the north-west shows the land as 'Level Land; Tea tree, Flax, &c.'.

A later plan dated to 1889 was undertaken to show the 'Bellevue' blocks (Figure 15). Bellevue was an estate developed by Irishman Thomas Henry from an extensive block of land purchased from the Crown, including the adjacent Waiwarawara Block which was originally designated as 'Native Land' but was inadequately protected by the Native Land Court (Gudex 2013, Chetham 2019). The plan does not add greatly to our understanding of the project area, however it does show the alignment of a small tributary to the Ruakaka River, running north-south through the property (Figure 16).

Detail from the Lands & Survey Department Geological Plan of the Ruakaka District dating to 1928, shows the land as vacant of any structures and bordered by swampland (Figure 17).



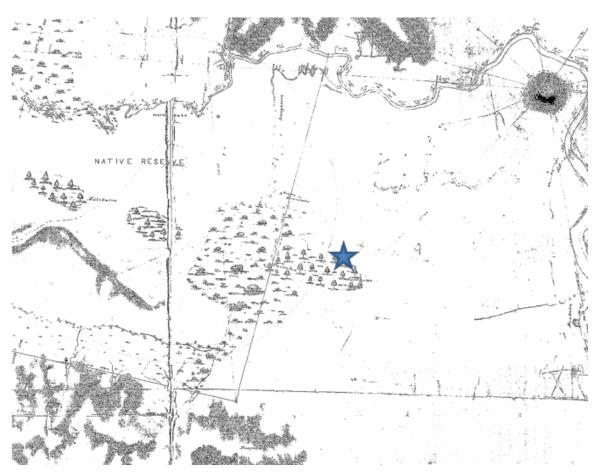


Figure 10. SO40A-2 (1862), showing the Waiwharawhara Block as 'Native Reserve'. The approximate location of the subject property is marked with a star. Map source: Quickmap 2020



Figure 11. Detail of SO40A overlaid onto a modern aerial map showing the project area (approximate boundary outlined). Aerial source: Google Earth 2020





Figure 12. Detail of Roll 7(4) showing the approximate current project area (marked with star). Plan source: Quickmap 2020

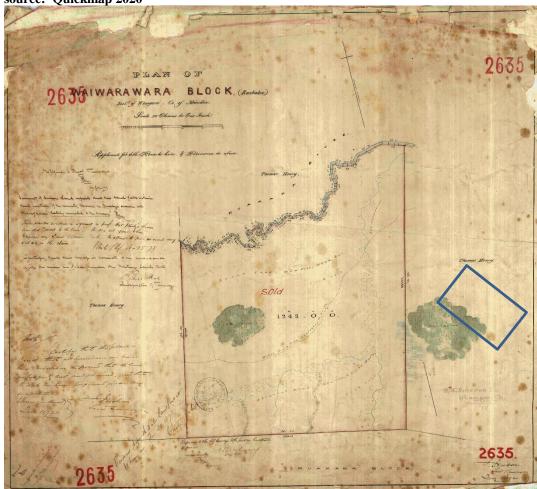


Figure 13. ML 2635 (1873) 'Plan of Waiwarawara Block'. The general subject area is outlined and detail is shown on the Figure below. Plan source: Quickmap 2020



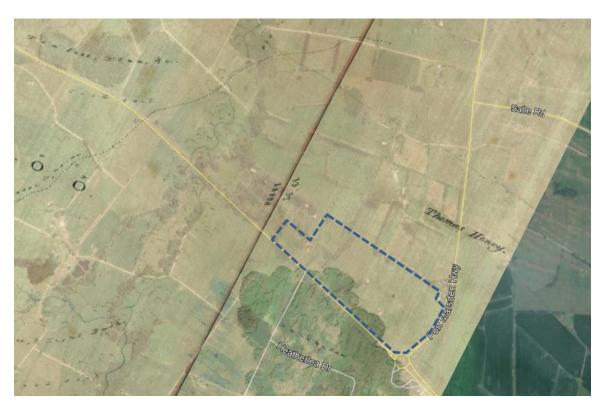


Figure 14. Detail of ML 2635 overlaid onto a modern aerial map (Google Earth 2020). The approximate bounds of the project area are outlined.





Figure 15. DP 919 (1889) entitled 'Plan of Bellevue Blocks VI.VII.X.XI.V. Ruakaka Survey District Provincial District of Auckland'. Plan source: Quickmap 2020



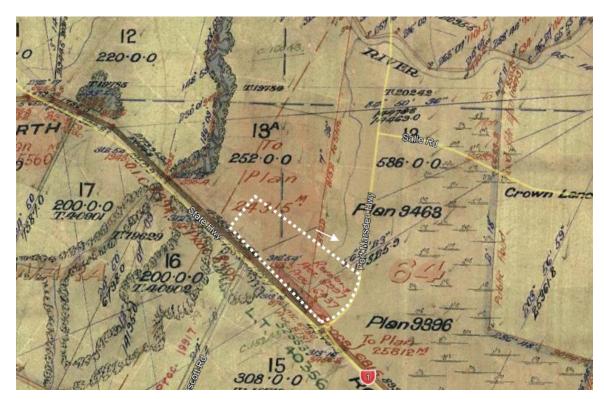


Figure 16. Detail of DP 919 (1889) overlaid onto a modern aerial map (Google Earth 2020), showing the approximate bounds of the current project area outlined and the location of a small tributary to the Ruakaka River (marked with arrow).

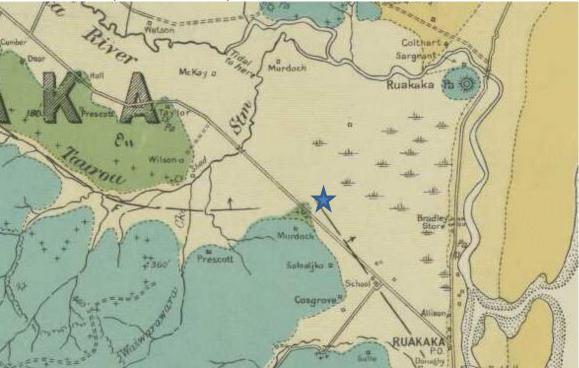


Figure 17. Detail from 1928 geological map entitled 'Geological map of Ruakaka survey district' drawn by G. E. Harris from data obtained from the Lands and Survey Department and from Admiralty charts 1851, new ed. 1914; additional surveys and geology by H. T. Ferrar and W. H. Cropp of the Geological Survey Branch of the Department of Scientific and Industrial Research. Source: National Library. The location of the current project area is marked with a star.



Information from Early Aerials

Analysis of historic aerial photographs of the project area is useful to determine historic landuse which may have affected archaeological remains. An aerial dating to 1961 shows the property in pasture with small hedgerows evident and minimal planting along the waterway that runs north-east to south-west through the property (Figure 18).

Later aerials dating to the early 2000s show evidence of cropping across much of the eastern end of the property (Figure 19, Figure 20). While a more recent aerial dating to 2018 shows cropping within the paddocks along the eastern boundary (Figure 21). Detail from an aerial dated to January 2020 shows earthworks around the existing farmhouse that fronts onto State Highway 1 (Figure 22).



Figure 18. Detail of 1961 aerial photograph showing the project area (outlined). Aerial source: Retrolens ref. Crown 212-414-64





Figure 19. 2010 aerial photograph showing the project area (outlined). Aerial source: Google Earth 2020

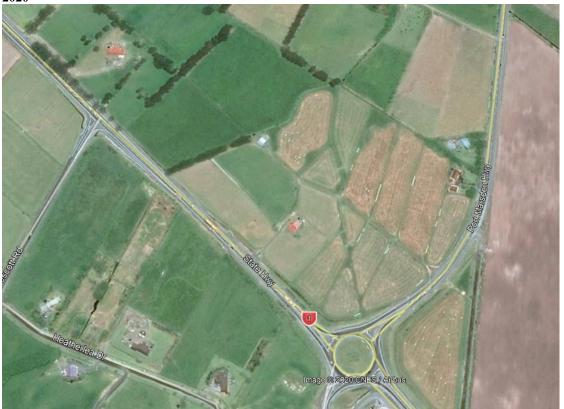


Figure 20. 2016 aerial photograph showing the project area (outlined). Aerial source: Google Earth 2020



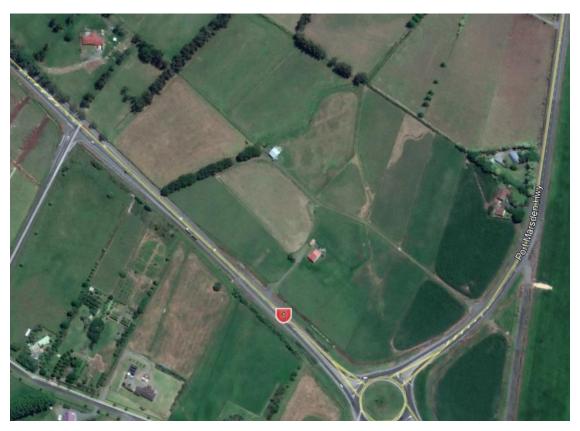


Figure 21. 2018 aerial photograph showing the project area (outlined). Aerial source: Google Earth 2020



Figure 22. January 2020 aerial photograph showing earthworks within the southern corner of the property. Aerial source: Google Earth 2020



ARCHAEOLOGICAL BACKGROUND²

Archaeological survey and excavation have been carried out around Whangarei Harbour since the 1960s. Nevin and Nevin (1981, G. Nevin 1984) carried out the main surveys on the southern side of the Whangarei Harbour and identified a large number of the sites which have been identified in the Ruakaka area. These site comprised mostly midden deposits located near the coast. Further inland, G. Nevin (1984) identified a wider range and large numbers of sites in the Takahiwai hills, including pa, pits and terrace and evidence of gardening along with midden sites.

In the inland areas around Takahiwai and near Ruakaka, the Maori settlement pattern appears to have been focussed around the higher ridges. Pa sites offered some defence from raiding parties travelling through the area. Gardening was carried out in this hinterland. Easy access to the rich marine resources would have been undertaken on a seasonal cycle with groups likely moving down to the dune lands to collect food for storage and perhaps exchange.

Excavations undertaken around the Ruakaka area include Best's (1999) investigation of a small pit and terrace complex (Q07/897) where a sequence of pollen data was retrieved illustrating environmental impacts of human occupation of centuries within the area. The site included a cache of digging implements of unknown but relatively 'modern' age (i.e. 1800s onwards where radiocarbon dating techniques become problematic) and a radiocarbon date from a midden on the ridge above the cache returned a date of between 1640-1870AD.

Other investigations at Ruakaka were carried out by Johnson and Callaghan (2007) during subdivision development. They recorded four small midden sites (Q07/1229, 1231, 1233 and 1234) at Tamure Place, resulting from short-term seasonal settlement in the late pre-Contact period. Similar middens (Q07/1205, 1261 and 1267) were investigated at Tamure Place by Prince (2008).

Extensive archaeological investigations have also been undertaken within the One Tree Point area and are ongoing. These include excavations by Phillips and Harlow (2001) where a series of midden deposits were excavated which ranged from small concentrations of hangi/firescoops overlain with shells through to large complexes of firescoops, hangi, stakes and post holes. The archaeologists determined that the site represented summer occupation of the One Tree Point area for large scale processing of shellfish from 1500AD onwards. Most appeared to have only been used during a single season, but in at least one case there was evidence for multiple seasonal returns.

Work at One Tree Point has also been undertaken by Campbell (2005, 2006), Prince (2003) and Bickler et. al. (2007), all illustrating similar patterns of occupation and activity as that investigated by Phillips & Harlow (2001). Further archaeological survey and investigation work at One Tree Point has been undertaken by Clough & Associates and in ongoing (Dawson et. al. 2017).

² Macready & Judge 2020



The Current Project Area

The current project area is located within an area of Ruakaka peatlands which were once a network of wetlands and swamps. Landscapes such as these provided plentiful food (fish, birds, eels, roots), plants such as flax for weaving and thatching, raupo for whare construction, thatching etc. and other plants used for medicinal purposes (including the kahikatea tree). The navigable waterways through and around the wetlands also provided access to these resources and access further inland.

Recorded archaeological sites within the general Ruakaka area tend to be focussed around the coast, across the Takahiwai hills (north-west of the project area) and along the banks of navigable waterways (Figure 23). The density of site distribution decreases further inland.

There is currently one archaeological site recorded within or immediately adjacent to the project area. The site comprises a shell midden recorded as Q07/334. The site is discussed in detail below. A further three archaeological sites (Q07/333, Q07/335 and Q07/336) are recorded in close proximity to the project area (Figure 24). All three additional sites are deposits of shell midden.

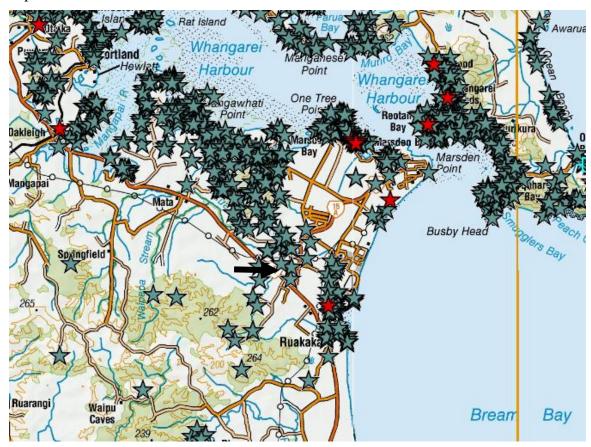


Figure 23. Map showing the distribution of recorded archaeological sites (marked as stars) within the wider Ruakaka/Whangarei Harbour area. The current project area is marked with an arrow. Map source: NZ Archaeological Association ArchSite 2020



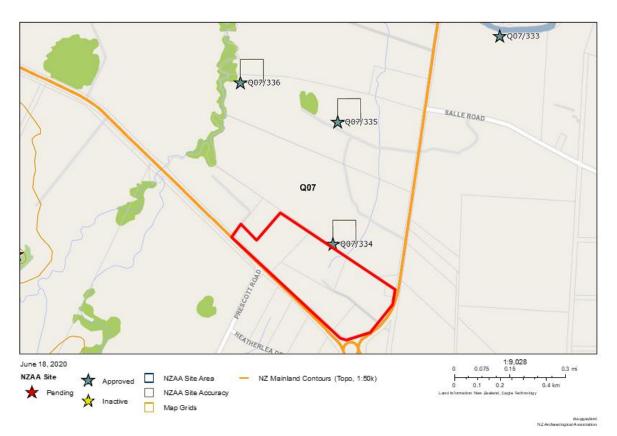


Figure 24. Archsite map showing sites recorded within, or within close proximity to the project area (outlined in red). Source: Archsite 2020

Q07/334 Shell Midden:

The site was originally recorded by Nevin in 1981 as a shell midden located 'in a low peat covered sand ridge adjacent to a stream, now drained'. Midden was identified in four places around a house and in drains. Three of the deposits were described as 'cultivated'. The descriptions of the separate deposits are as follows:

- a) In garden of house, 20 x 10m, dense. 99% cockle, 35mm and a few pipi, cominella sp., Dosinia anus, tuatua and fire cracked stones.
- b) 20m S.E. of a, in the side of a large drained stream, 8m long clean profile: 40cm clay topsoil
 - 3-5cm black peat soil
 - 1-5cm crushed cockle, pipi and fire cracked stones
 - Then at least 60cm clay
- c) Paddock, immediately North of house, with some cabbage trees. Shell turned up here by ploughing, not visible at time of visit, under good pasture.
- d) 100m to North, cultivated soil in passionfruit orchard. 10 x 10m and 10 x 6m scatters, 99% cockle 20-35mm and a few; pipi, Dosinia anus frags, Cominella sp and fire cracked river stones.

The site record has not been updated since original recording.



PHYSICAL ENVIRONMENT

Pedology

The project area is located within a geographical zone identified as 'undulating terraces and lowlands'. Soils of this area are typically imperfectly to very poorly drained. The soils of the project area are recorded as comprising Waipu clay (YU) across the majority of the property, and Ruakaka peaty sandy loam (RK) along the north-eastern edge of the property (Figure 25; Department of Lands and Survey 1988).

Waipu clay soils (YU) are found on terraces and alluvial fans that are generally located above flood level and although originally deposited by water, these soils are no longer replenished by sediment in floodwater. These soils are generally reasonably fertile however have no natural drainage (Northland Regional Council n.d.).

Ruakaka peaty sandy loam soils (RK) formed from peat and windblown sand adjoining sand dunes or downstream of old dune terraces. Over time, moving sand dunes and changes in sea level blocked off basins and valleys, with partially decayed vegetation accumulating in water logged areas, forming peat. The resulting soil is very high in organic matter and low in pH. Drainage is necessary within these areas as they are low lying and very poorly drained. The extremely low pH of these soils restricts plant growth making the addition of additives such as lime essential. These soils also have no rock base and are therefore deficient in major trace elements that are need for plant growth (Northland Regional Council n.d.).

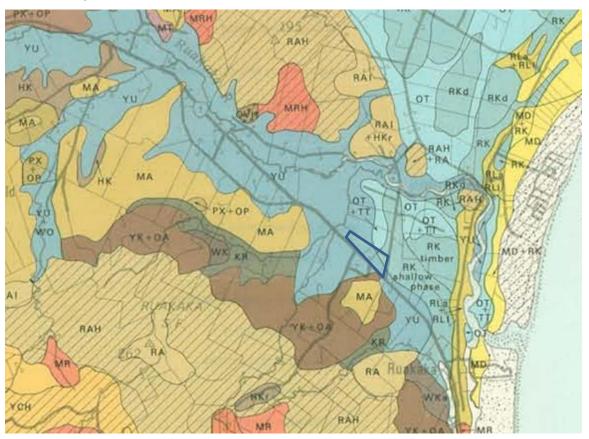


Figure 25. Detail of soil map of 'Hukerenui-Whangarei' (Department of Lands and Survey 1988).



Topography and Land Use

The project area generally encompasses low lying flat farmland intersected by deep drainage features which may be modified minor tributary alignments (Figure 26). The area is wholly covered in grazing pasture with occasional tree planting for use as windbreaks or to enhance residential areas (Figure 27), two residential houses with associated garaging and farm sheds. Currently, the majority of the survey area is utilised for grazing cattle. The area appears to have been subject to modification through drainage in order to convert the landscape into farmland.



Figure 26. Main stream alignment that runs through the property





Figure 27. View looking north over grazing pasture towards areas of tree planting



FIELD ASSESSMENT

Field Survey Results

Field survey of the project area was undertaken on 9 June 2020. Conditions were clear and visibility was excellent within most areas for the purpose of this assessment. The assessment of the project area included pedestrian survey and examination of exposed scarps, in addition to systematic probing and the digging of test pits within grazing areas (Figure 28). The focus of the survey was on the proposed area of earthworks, however the far western end of the property was also inspected.

Test pits were largely consistent over the central and western sections of the property, displaying silty soils of a mid-brown grey colour (Figure 29), although test pits towards the eastern boundary of the property revealed the natural peaty subsoils, consistent with a band of Ruakaka peaty sandy loam soils (RK) that is recorded within this area (Figure 30). Test pits around the central farm house showed a modern modified soil profile (Figure 28 – Test Pits 12 & 13). A concrete pad identified beneath grass cover within the vicinity of Test Pit 5 (Figure 28) is likely associated with mid-20th century activity rather than pre-1900 occupation.

One archaeological site was identified within the project area as a result of the recent field assessment. The site was identified on the slightly elevated peaty ridge located at the far north-eastern corner of the property (Figure 31). The site comprises a subsurface heavily disturbed deposit of shell midden that has been spread (no doubt through modern cultivation) across an area of c.20 x 5m across the crest of the low lying ridge. The midden deposit comprises a 10-12cm thick layer of highly fragmented shell in a charcoal stained mixed soil, located immediately beneath the turf. The midden was identified through probing and was confirmed in Test Pit 17 (Figure 28, Figure 33). The midden forms part of recorded site Q07/334. No other archaeological material was identified within the area and it is likely that other recorded deposits are located within the adjacent private properties.

No other archaeological sites were identified within the project area.





Figure 28. Aerial showing locations of test pits undertaken within the project area (outlined). Aerial source: Google Maps 2020



Figure 29. Typical soil profile across the central and western sections of the property





Figure 30. Dry peat soils exposed in Test Pit 1 at the eastern boundary of the property



Figure 31. Aerial showing the location of the identified portion of Q07/334 (outlined in white) in relation to the eastern property boundary (overlaid in blue).





Figure 32. View looking southwest over the location of shell midden Q07/334



Figure 33. Test Pit 17 showing the profile of midden deposit Q07/334



DISCUSSION AND CONCLUSIONS

Summary of Results

One archaeological site was identified within the proposed development area as a result of the current assessment. The site comprises part site Q07/334 (shell midden), located close to the north-eastern boundary of the development area. No previously unrecorded archaeological sites were identified.

Maori Cultural Values

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

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 wahi tapu and other sites of traditional significance to Maori, especially where these have no physical remains.

Archaeological Value and Significance

Heritage NZ has provided guidelines setting out criteria that are specific to archaeological sites (condition, rarity, contextual value, information potential, amenity value and cultural associations) (Heritage NZ 2006:9-10). These criteria have been used to evaluate the value and significance of archaeological site Q07/334 (see Table 1) which is located within the wider development site.

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 pa 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, traditional and amenity values.

Overall, the identified component of site Q07/334 is considered to have limited archaeological value based on the criteria discussed. Shell midden sites are the most common site type throughout the region and this particular example has been heavily modified through modern cultivation activities. The known component of the site retains



limited information potential due to its poor condition. The cultural values of the site can only be determined by mana whenua.

Table 1. Assessment of the archaeological values of site Q07/334 based on Heritage NZ criteria

(Heritage NZ 2006:9-10).

Value	Assessment	
Condition	The site is currently in poor condition, having suffered significant damage through modern cultivation activities.	
Rarity	Shell midden sites such as these are the most common site type recorded throughout the region.	
Contextual value	The site forms part of the pre-European Maori cultural landscape of the Ruakaka area and provides evidence of activity and occupation within and around the Ruakaka wetlands.	
Information potential	The site retains limited information potential as there is no longer an intact cultural layer evident. Information may be limited to analysis of shell species and potentially a radiocarbon date if a suitable sample were to be obtained. There is some potential for previously unidentified subsurface features to be present within this area also (e.g. postholes, firescoops).	
Amenity value	The component of the site that is located within the subject property currently has no identified amenity values as it is located within private property and is located entirely subsurface.	
Cultural associations	The site is associated with Maori occupation and the cultural significance of the site is for tangata whenua to determine.	
Other	The cultural values of the site are for tangata whenua to determine.	

Effects of the Proposal

The current proposal involves the development of the service centre within the south-eastern portion of the property, along with substantial works required for stormwater management and landscaping. Although the development of the service centre in the footprint shown on the development plans will have no identified effects on site Q07/334, re-contouring works required for stormwater management currently propose substantial earthworks within the identified location of Q07/334. These works will comprise cuts of between 0.2-0.6m in depth across the area within which the site has been identified (Figure 34). Consideration should be given to whether the proposed works can be redesigned to avoid impacts on site Q07/334.

No other archaeological sites were identified within the proposed development area. However, 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 situation there is considered to be potential for unrecorded subsurface archaeological sites to be exposed during development, and it is therefore recommended that an Authority is applied for prior to the start of earthworks so that potential delays can be avoided should sites be exposed.



Archaeological features within this area are likely to comprise shell midden deposits or potentially wooden artefacts which can be found in wetland and drained wetland sites. Generally, archaeological 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 Maori and early European origin or human burials.



Figure 34. Earthworks plan showing the approximate identified extent of part Q07/334

Resource Management Act 1991 Requirements

Section 6 of the RMA recognises as matters of national importance: 'the relationship of Maori 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 Maori, including wahi tapu; (iv) surroundings associated with the natural and physical resources'.

Regional, district and local 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 Whangarei District Plan and Northland Regional Plan are relevant to the proposed activity.

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 (Section 42).

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 1900³; 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)'

Authorities to modify archaeological sites can be applied for either in respect to archaeological sites within a specified area of land (Section 44(a)), or to modify a specific archaeological site where the effects will be no more than minor (Section 44(b)), or for the purpose of conducting a scientific investigation (Section 44(c)). Applications that relate to sites of Maori 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 Maori 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.

If the identified extent of site Q07/334 that falls within the subject property cannot be avoided, then an Authority must be obtained from Heritage NZ before any work can be carried out that may affect the site. In addition, as there is potential for further previously unidentified archaeological remains to be present within the project area, an authority

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.



should include all proposed works as a precaution. The conditions of the authority are likely to include the archaeological recording/investigation of any remains affected.

Conclusions

One previously recorded archaeological site has been identified within the current project area. The site comprises part site Q07/334 (shell midden) which is located within an area proposed for contouring for stormwater management. Consideration should be given as to whether impacts on the site can be avoided. If the site cannot be avoided, an Authority under Section 44(a) of the HNZPTA must be obtained before any works are undertaken that may affect the site. In addition, as there is potential for further previously unrecorded archaeological remains to be present within the project area, it is recommended that an Authority is sought as a precaution prior to cover the extent of the proposed works as a precaution.



RECOMMENDATIONS

- Consideration should be given as to whether proposed stormwater management works can be altered to avoid impacts on the identified extent of Q07/334.
- If the identified extent of site Q07/334 cannot be avoided, then an Authority under Section 44(a) of the Heritage NZ Pouhere Taonga Act 2014 must be sought prior to the start of works. *Note that this is a legal requirement.*
- Because it is possible that additional previously unrecorded subsurface archaeological
 features will be exposed during development, an Authority should be applied for under
 Section 44(a) of the HNZPTA to cover the extent of the proposed works 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.
- Preliminary earthworks should be monitored by an archaeologist to establish whether any sites are present.
- If no authority has been obtained and subsurface archaeological evidence should be unearthed during earthworks (e.g. intact shell midden, hangi, storage pits relating to Maori 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 Council should be notified. An Authority must obtained before any further work can proceed which affects the archaeological site. (Note that this is a legal requirement).
- In the event of koiwi tangata (human remains) being uncovered, work should cease immediately in the vicinity of the remains and the tangata whenua, Heritage NZ, NZ Police and Council should be contacted so that appropriate arrangements can be made.
- Since archaeological survey cannot always detect sites of traditional significance to Maori, such as wahi tapu, the tangata whenua should be consulted regarding the possible existence of such sites on the property.



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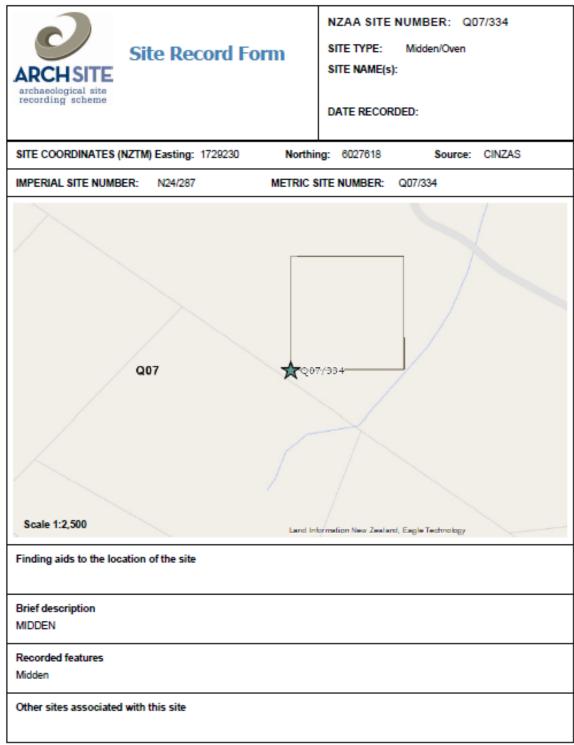


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APPENDIX A: SITE RECORD FORMS

NEW ZEALAND ARCHAEOLOGICAL ASSOCIATION





NEW ZEALAND ARCHAEOLOGICAL ASSOCIATION

SITE RECORD INVENTORY NZAA SITE NUMB

NZAA SITE NUMBER: Q07/334

Supporting documentation held in ArchSite

NEW ZEALAND ARCHAEOLOGICAL ASSOCIATION SITE RECORD FORM (NZMS1) NZMS 1 map number N2 4 NZMS 1 map name Naipu NZMS 1 map edition 4th Ed. 1975	NZAA NZMS 1 SITE NUMBER N24/287 DATE VISITED 2/6/81 SITE TYPE Midden SITE NAME: MAORI - OTHER -
Grid Reference Easting / 9 4 6	0,0 Northing 7 7 7 1 0,0
1. Aids to relocation of site (attach a sketch map)	
Around G.Parke's house.	
 State of site and possible future damage c, d cultivated, b in side of adjacent pesture. 	drain, probably intact under
(a) In garden of house, 20 x 10m few pipi, cominella sp., Dosinia (b) 20m S.E. of a, in the side of clean profile: 40cm clay topsoil	sed in 4 places around house, and , dense. 99% cockle, 35mm and a anus, tuatua and fire cracked stone f a large drained stream, 8m long t soil ockle, pipi and fire cracked stones eat soil
4. Owner G Parke One Tree Point Rd Whangarei	Tenant/Manager Address
5. Nature of information (hearsay, brief or extended visit, etc.	J Vioit.
Photographs (reference numbers, and where they are held)	No
Aerial photographs (reference numbers, and clarity of site)	Not at all
6. Reported by Nevin Address Whangarei PEP Scheme	Filekeeper S.Bartlett Date /2-7.8/ Aug.
 Keywords Middens, 4, cockle, pipi, 	Dosinia anus, on rise.
New Zealand Register of Archaeological Sites (for office up NZHPT Site Field Code	
A A Type of site A A Local environment today A C Land classification J B	-