

FOSTER CRESCENT, SNELLS BEACH – PROPOSED SUBDIVISION: ARCHAEOLOGICAL ASSESSMENT

Prepared for
Prime Property Group Ltd
OPC Creative Planning Solutions



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By

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INTRODUCTION

Project Background

Prime Property Group Ltd is proposing the residential subdivision of the currently vacant lot at Foster Crescent, Snells Beach, Auckland (Figure 1, Figure 2). The legal description of the property is Lot 1 DP 149776. The proposal involves the subdivision of the 4.64ha property into 59 residential lots with associated roading and coastal access ways (Figure 3).

An archaeological assessment was commissioned by Prime Property Group Ltd and OPC Creative Planning Solutions 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), Auckland Council's Cultural Heritage Inventory (CHI), Auckland Unitary Plan (AUP) schedules and the Heritage New Zealand Pouhere Taonga (Heritage NZ) New Zealand Heritage List were searched to determine whether any archaeological or other historic heritage sites had been recorded on or in the immediate vicinity of the property. Literature and archaeological reports relevant to the area were consulted (see Bibliography). Early plans held at Land Information New Zealand (LINZ) and the Alexander Turnbull Library (ATL) were checked for information relating to past use of the property.

A visual inspection of the property was conducted on 8 October 2017. 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 property to determine whether buried archaeological deposits could be identified or establish the nature of possible archaeological features. Particular attention was paid to the northern end of the property close to the tidal inlet and river bank where archaeological sites within the area are often found to be located. Photographs were taken to record the topography and features of interest.

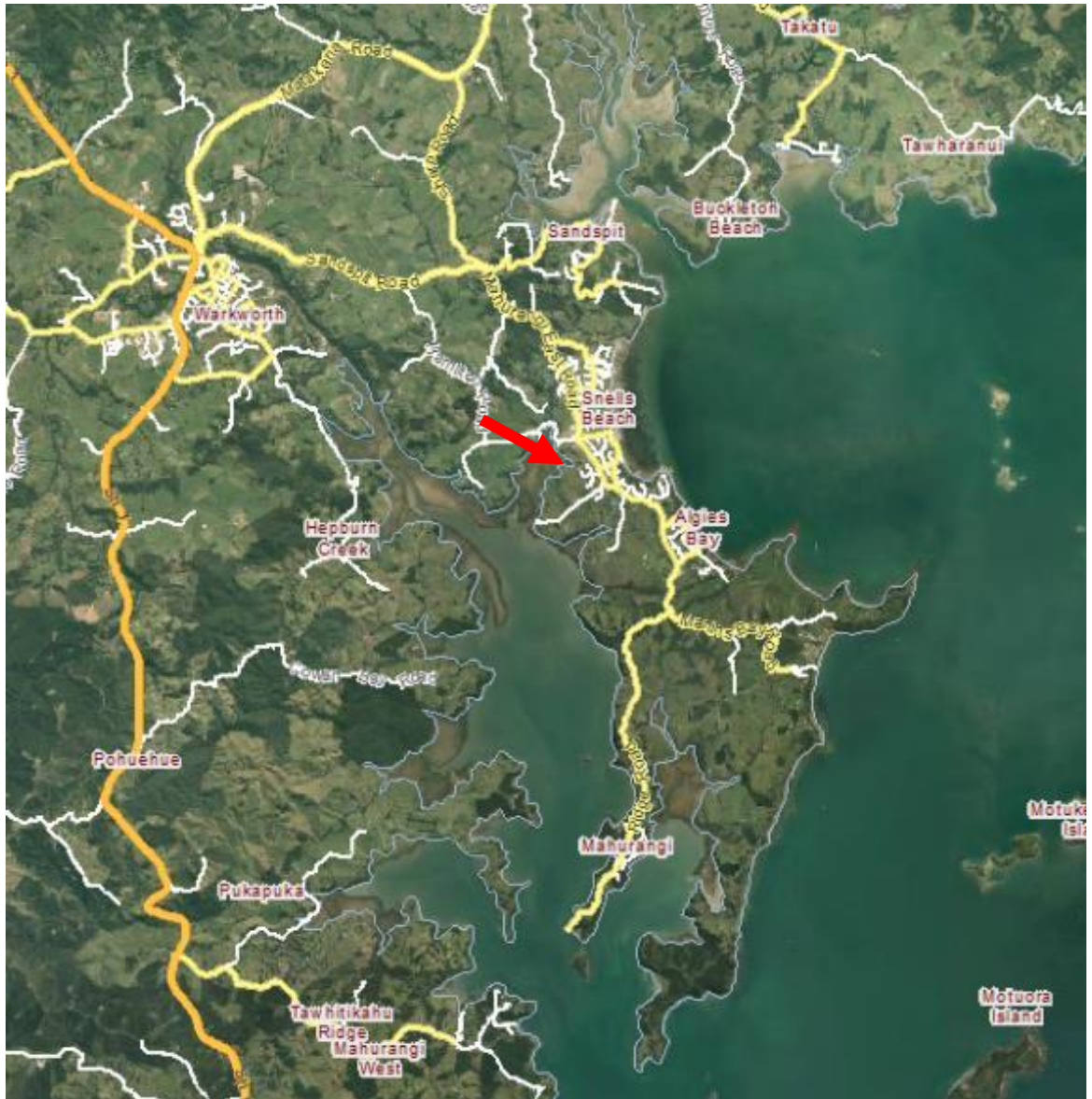


Figure 1. Aerial showing location of subject property (marked with arrow). Aerial source: Auckland Council GIS 2017



Figure 2. Aerial showing location of subject property (outlined in red). Aerial source: Auckland Council GIS 2017

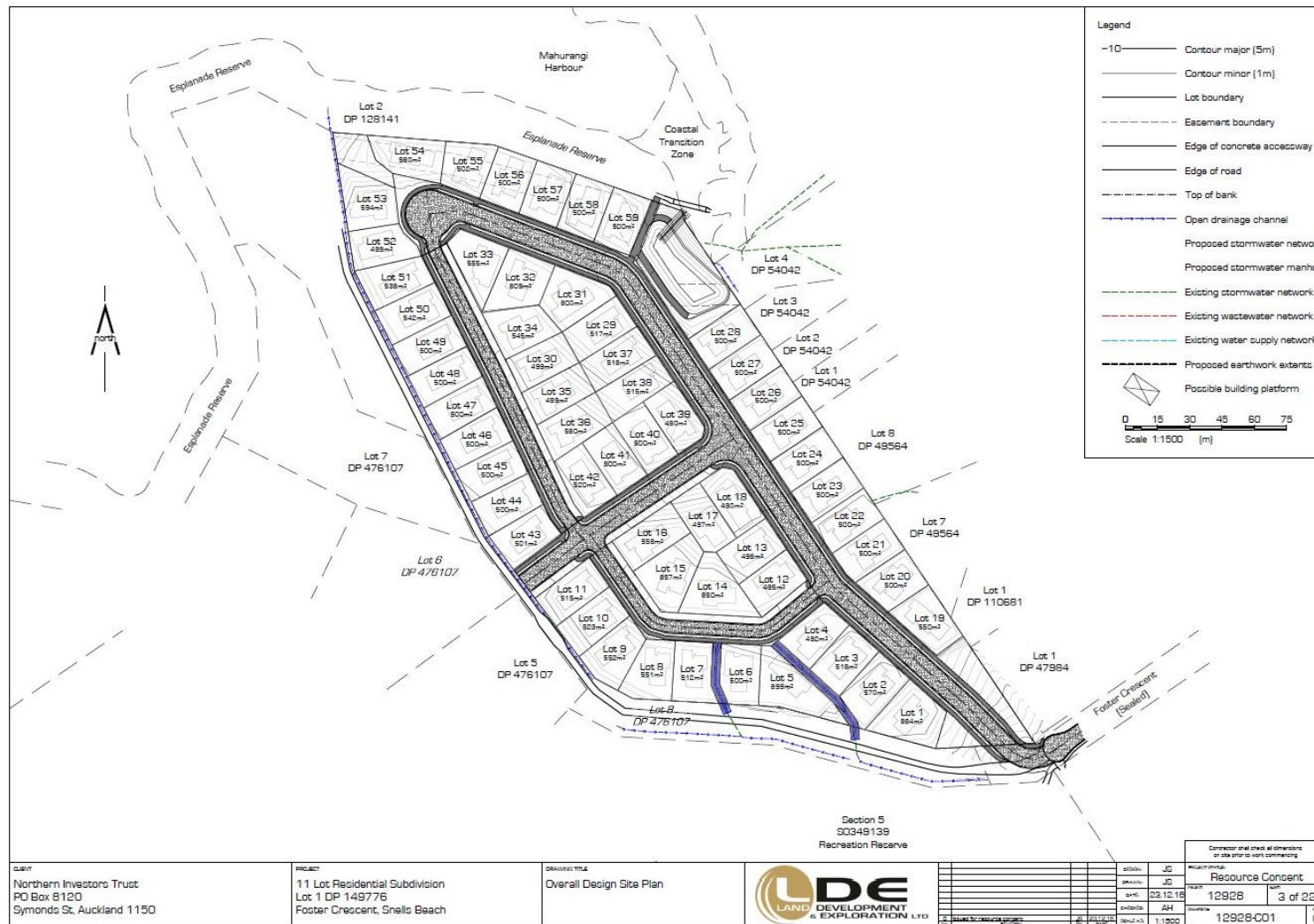


Figure 3. Proposed Subdivision Plan (Land Development and Exploration Ltd 2017)

HISTORICAL BACKGROUND¹

Maori Settlement

The Mahurangi area has long been valued for its shark fishing grounds, control of which was the cause of much intertribal conflict. Shark meat was dried and kept as a winter food supply, while shark liver oil was mixed with pigments to produce paint. The inland forests provided bird and plant resources and were easily accessed via the Puhoi and Mahurangi rivers. Canoe travel along the coast and rivers and overland routes to the Kaipara Harbour provided good communication with other areas (ARC 2005). The main focus of settlement and agriculture focussed on the coastal areas of the peninsula, particularly to the south and along the south-western coast.

Snells Beach and Algies Bay on the eastern coast of the Mahurangi Peninsula clearly played defensive roles, looking out over Kawau Bay and The Hauraki Gulf. Pa were constructed on the headlands at the ends of the bays, with midden sites recorded within the bays.

European Settlement

The first European land purchase recorded in the area was a transaction completed (c.1838) between an American, William Webster, and the Hauraki iwi for 4,046 hectares between Point Rodney and Tawharanui for a price of £490, without the knowledge of Ngati Raupo, its former occupants (Murdoch 1991:7). Subsequently, in 1841, the Crown negotiated the 'Omaha and Mahurangi Purchase', an extensive tract of land that included the entire coastline between Pakiri and Takapuna. However, as the purchase was carried out between the Crown and tribes of the Hauraki without consulting Ngati Raupo, Ngati Rongo and Ngati Manuhiri, occupiers of the coastline immediately to the north, the transaction was not completed for a further 13 years (Murdoch 1991:7). Te Hemara Tauhia and his people continued to occupy their lands in the meantime.

After the Omaha and Mahurangi Purchase was finalised in 1853 European settlement of the Mahurangi area proceeded fairly rapidly. The earliest European settlement in the Mahurangi (and in the Auckland region) dates back to 1832, when a spar station was established by Gordon Browne for Captain Ranulph Dacre on the Pukapuka Peninsula on the western side of the Mahurangi River. Browne had obtained cutting rights from Hauraki Maori and employed many Maori labourers. The venture ended in 1834 when Captain Sadler arrived on HMS *Buffalo*, having obtained permission from the Ngapuhi chief Titore to take spars for the navy, and took over the supply of trees and the work force. Logging continued around the harbour and in 1844 the first sawmill was established at Warkworth by John Brown. After the foreshore area had been cleared, logging extended inland, continuing until the late 1930s, by which time all the kauri had been logged. (ARC 2005).

Other early industries included shipbuilding, which flourished from c.1849 until 1880. At least 75 vessels were built in the Mahurangi area in this 30 year period. Lime kilns producing quicklime for mortar were established on the Mahurangi River by 1850, and the Wilson's cement works was established at Warkworth in 1872, producing the first Portland cement in the country by 1885. Farms progressively replaced kauri forest. (ARC 2005).

¹ Adapted from Farley & Clough 2008.

ARCHAEOLOGICAL BACKGROUND

Kawau Bay, the Mahurangi Harbour and Matakana River were shark breeding grounds and traditional fishing areas visited by many whanau/hapu during the summer months. Many temporary encampments were established around the bays and inlets taking advantage of these rich fishing grounds – hence the concentration of midden sites around the coastal margins (Figure 4). Produce was gathered and processed in volume – preserving supplies for the winter. Occasionally, small gardens were planted in advance of the fishing season (Farley & Clough 2008).

Previous archaeological surveys undertaken close to the current survey area have included assessments for proposed subdivisions and developments, civil works and Council initiated coastal surveys. The earliest extensive site recording between Snells Beach and Algies Bay on the eastern side of the peninsula was undertaken by Walton in 1976. A total of 38 sites were located within the coastal margins of this area, predominantly comprising isolated shell midden deposits, with one pa, a cultivation area and one pit site also noted (Walton 1976).

A large scale survey for an extensive proposed subdivision at the end of Goodall Road on the western side of the peninsula was undertaken by Foster in 1999. The assessment located six archaeological sites, all of which were located within c.200m of the coast. No sites were located further inland within the study area (Foster 1999).

In 2004/05 an extensive coastal survey of the Mahurangi Harbour was undertaken by Judge for the former Auckland Regional Council (Brassey 2010). This survey resulted in the recording of numerous previously unrecorded archaeological sites related to both pre-European Maori and early European settlement of the coastal Mahurangi area.

In 2007 Clough & Associates undertook an assessment of the proposed new primary school on Dawson Road, Snells Beach (Judge & Clough 2007). No archaeological sites were identified.

In 2013 Clough & Associates undertook a survey for a proposed new watermain riser along Mahurangi East Road, Brigitte View and Dawson Road. No archaeological sites were located (Judge 2013).

In 2014 Clough & Associates undertook a survey of the proposed Snells Beach to Algies Bay replacement wastewater line (Judge 2015). The assessment ran from the wastewater treatment plant in the north, crossing through the northern end of the Te Whau Esplanade Reserve and along the western edge of the subject property, continuing south to culminate south of Algies Bay.

An assessment of Te Whau Esplanade Reserve was first undertaken by CFG Heritage Ltd in 2013 (Harris 2013). The assessment relocated two previously recorded coastal shell midden sites R09/1080 and R09/1081. The sites had originally been recorded during the 2004/5 survey of the Mahurangi Harbour (CHI site records). The Reserve was again surveyed by Clough & Associates in 2015 (Judge 2015b). In addition to the previously recorded sites, a further three coastal shell midden deposits were identified. Monitoring works undertaken for the project under Heritage NZ Authority No. 2015/1079 resulted in the modification of three of the recorded sites. No additional features were exposed as a result of the works and the midden deposits were interpreted as short term seasonal encampments along the banks of the Mahurangi River (Judge 2017).

Few excavations of pre-European Maori sites have previously been undertaken within the general area. In 2006, Clough & Associates undertook the investigation of a shell midden site (R09/152) located at Algies Bay on the eastern shores of the Mahurangi Peninsula (Farley and Clough 2008). The site was found to comprise a scatter of shell with three associated hangi and a posthole and limited artefacts including obsidian flakes and chert located on a natural terrace. The remains identified indicated a short term settlement site located on the natural terrace overlooking the bay. There was no indication of long term settlement in the form of food storage pits or house floors. Shellfish comprised predominantly cockle and pipi. The midden also contained a small amount of snapper and mackerel bones, indicative of fishing. The site was thought to have originally been more extensive; however, post depositional modification, mainly the result of farming activities, was likely to have modified the site.

Also in 2006, Clough & Associates undertook the investigation of two shell midden sites at Whisper Cove, Snells Beach. The investigations showed patches of shell midden with no associated occupation features, once again indicating that these were likely to have been the remains of temporary fishing encampments (Farley & Clough 2007).



Figure 4. Aerial map showing distribution of recorded archaeological and heritage sites within the general project area. Source: Auckland Council GIS 2017

No archaeological sites have previously been recorded within the bounds of the subject property. The closest recorded archaeological sites comprise shell midden deposits identified within the Te Whau Esplanade Reserve (Figure 5, Figure 6), the closest of which is located c.200m to the west (Figure 6).

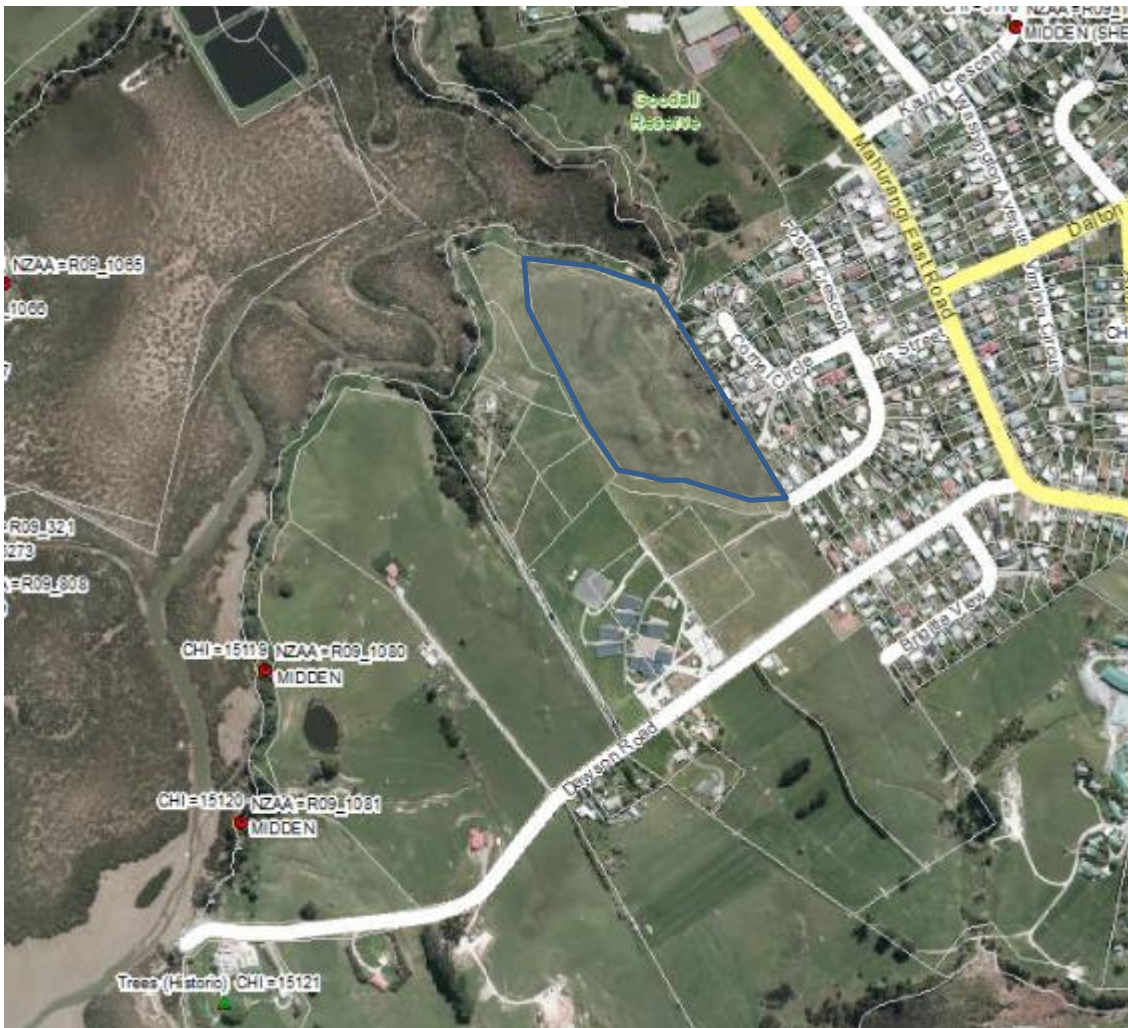


Figure 5. Aerial showing distribution of archaeological sites (red dots) recorded within the Auckland Council CHI 2017 in relation to the subject property (outlined)

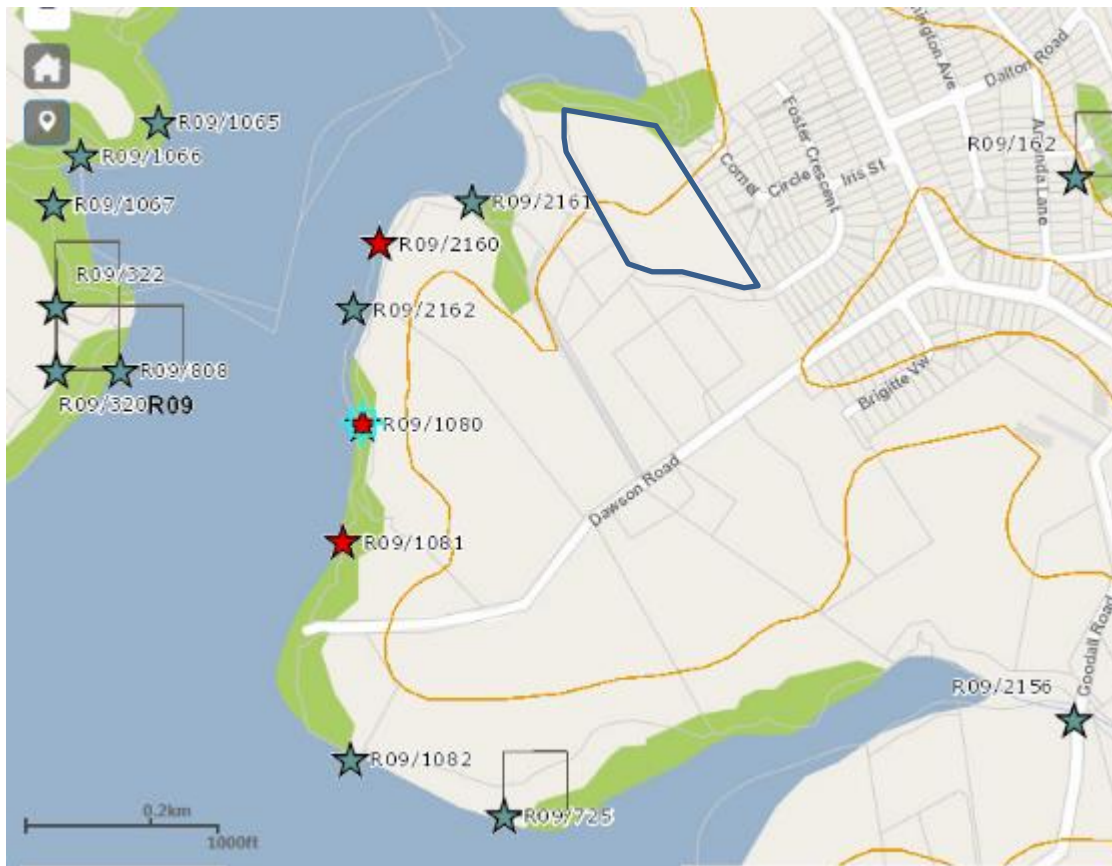


Figure 6. Map showing distribution of archaeological sites recorded within the NZAA site recording scheme within general proximity to the subject property (outlined). Source: Archsite 2017

HISTORICAL SURVEY

Detail from the 1928 Geological Map of Mahurangi and Kawau Survey Districts shows a number of historic farm settlements across the Mahurangi Peninsula (Figure 7). No buildings or other features are recorded within the area of the subject property.

No other information relevant information relating to early land use on the property was noted in a search of early survey plans.

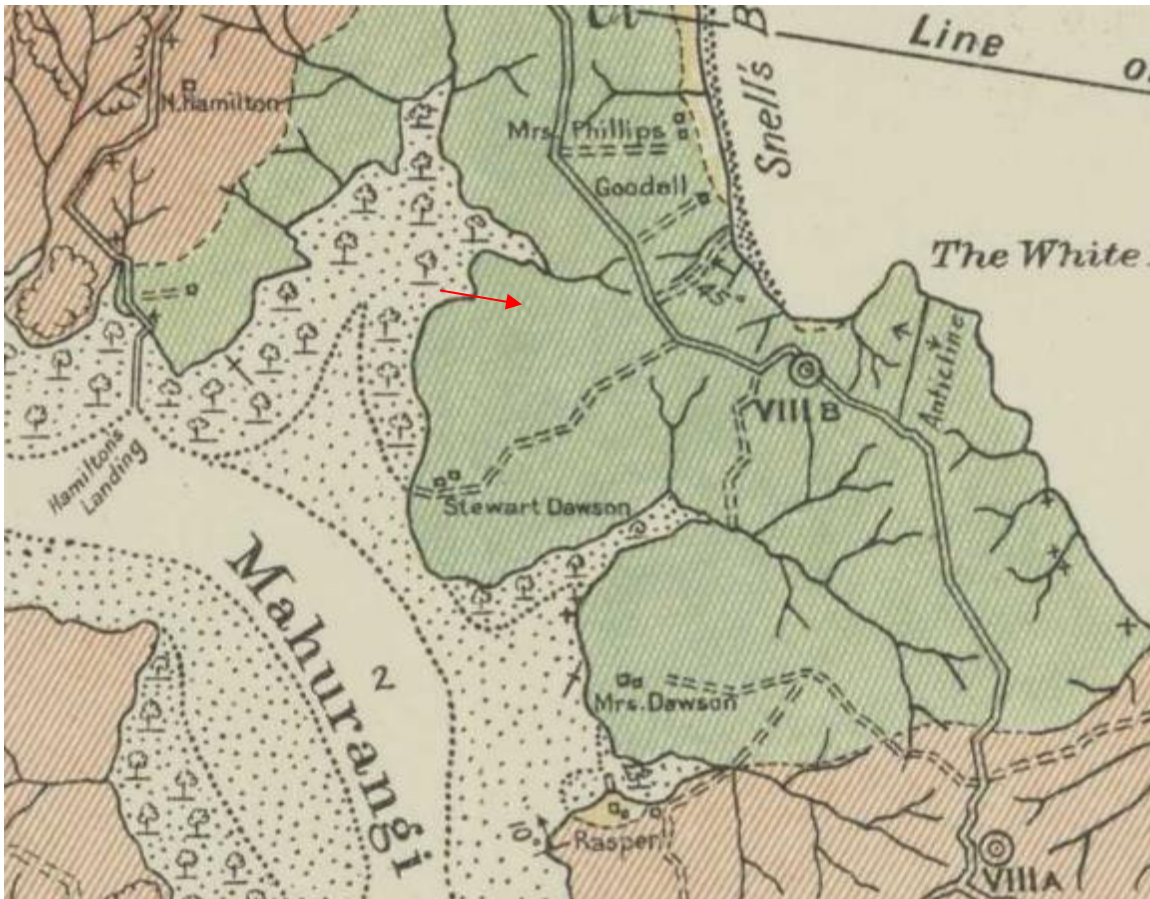


Figure 7. Detail of Geological Map of Mahurangi and Kawau Survey Districts drawn by G.E. Harris and J.E. Hannah 1928, with location of subject property indicated. Source: Alexander Turnbull Library

PHYSICAL ENVIRONMENT

The property covers a gently sloping and hummocky section of land located on the southern side of an inlet that runs into the eastern shores of the Mahurangi Harbour (Figure 8). The inlet is very shallow, comprising exposed mud and mangroves outside of high tide. The property is currently in rough pasture and appears previously to have been grazed by cattle. Areas of waterlogged swampy land were identified towards the eastern edge of the property where overland flow paths culminate.

A line of electricity pylons crosses the property in a south–north direction. The installation of these would have caused modification within the area of works, as has long term farming of the area.



Figure 8. Aerial map showing the contours of the property as well as overland flow paths (shown in blue). The legal boundaries of the subject property are outlined in red. Map source: Auckland Council GIS 2017

The underlying geology of the area comprises rocks of the Mangakahia Complex which are typified by ‘soft, poorly exposed and structurally complex rocks’ (Edbrooke 2001).

The soils are of the Albic Ultic type which are described as being ‘strongly weathered soils that have a well-structured, clay enriched subsoil horizon’. These soils are poorly drained and prone to livestock treading damage and erosion. They are also described as being strongly acidic with low nutrient reserves (Landcare Research 2017). This type of soil

would have proved unsuitable for the cultivation of Maori crops such as kumara, which typically require more free draining soils with greater nutrient content – although soil additives could be used (Furey 2006).

FIELD ASSESSMENT

Probing and test pitting were undertaken across the property to determine if subsurface archaeological remains could be identified. Access was good for the purpose of this assessment over most areas, although dense kikuyu grass across parts of the property and gorse growth at the far northern end limited surface visibility and access to a minor degree.

The property was found to be covered in rough pasture (Figure 9, Figure 10). Areas of waterlogged, swampy ground were identified around the overland water flow channels along the southern edge of the property (Figure 11). Test pitting and examination of exposed soils across the property showed a soil profile comprising a mixed pale grey clay soil to a depth of c.20-25cm overlying the sterile clay subsoil (Figure 12 - Figure 14).

No archaeological remains were identified within the bounds of the subject property as a result of the current assessment.



Figure 9. Looking north over the subject property from Foster Crescent



Figure 10. Looking north over property



Figure 11. Waterlogged overland flow paths down eastern side of property



Figure 12. Exposed pale grey clay soils along wheel ruts



Figure 13. Typical results of test pitting



Figure 14. Exposed soils evident along northern boundary of property

DISCUSSION AND CONCLUSIONS

Summary of Results

The property is located within the upper reaches of an inlet on the eastern side of the Mahurangi Harbour. No archaeological sites have previously been recorded within the bounds of the subject property, nor were any identified as a result of the current assessment.

Maori Cultural Values

This is an assessment of effects on 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.

The historical association of the general area with the tangata whenua is evident from the recorded sites, traditional histories and known Maori 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 wahi tapu and other sites of traditional significance to Maori, especially where these have no physical remains.

Archaeological Value and Significance

The proposed area of works is located within the broader landscape of pre-European Maori and early European settlement of the Mahurangi River and Harbour. The majority of sites related to pre-European Maori occupation tend to be located along the coastal margins and river banks, with the vast majority relating to temporary encampments that were established around the bays and inlets of the harbour and up the navigable section of the Mahurangi River (as far as present day Warkworth) to take advantage of the rich fishing grounds and river access into the interior of the Mahurangi area. Sites indicating more permanent settlement along the banks of the river comprise pit, terrace and pa sites recorded within Duck Creek Scenic Reserve and Dunning Scenic Reserve. Additional pa and pit/terrace sites are located on the prominent headlands on the shores of the Mahurangi Harbour.

Extensive farms developed from the mid-1800s have resulted in damage to and probably the destruction of many of the sites within the general area, as has infrastructure and housing development, coastal erosion and tree removal and planting. However, many coastal and riverside shell midden sites have been identified within the wider area.

The subject property is located adjacent to an inlet on the eastern side of the Mahurangi Harbour within an area where recorded archaeological sites become scarcer. No archaeological sites have been identified within the subject property. The subject property therefore has no known archaeological value or significance.

Effects of the Proposal

The proposed subdivision will have no known effects on archaeological values as no archaeological sites were identified as a result of the current assessment.

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. While it is considered unlikely in this situation due to the results of the current assessment, the possibility can be provided for by putting procedures in place ensuring that the Council and Heritage NZ are contacted should this occur, or by obtaining an archaeological authority from Heritage NZ in advance of works (see below).

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 Maori and early European origin or human burials. In this location shell midden relating to Maori occupation would be the most likely subsurface archaeological remains.

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 rules of the RMA. The Auckland Unitary Plan Operative in Part is relevant to the proposed activity.

There are no scheduled historic heritage sites located on the property. This assessment has established that the proposed activity will have no effect on any known archaeological remains, and has little potential to affect unrecorded subsurface remains. If resource consent is granted, consent conditions relating to archaeological monitoring or protection would therefore not be required. However, if suspected archaeological remains are exposed during subdivision development works, the Accidental Discovery Rule (E12.6.1) set out in the Auckland Unitary Plan Operative in Part must be complied with. Under the Accidental Discovery Rule works must cease within 20m of the discovery and the Council, Heritage NZ, Mana Whenua and (in the case of human remains) NZ Police must be informed. The Rule would no longer apply if an Authority from Heritage NZ was in place, with the exception of significant post-1900 remains not covered by the Authority.

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 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)’

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.

While no known archaeological sites will be affected by the proposed works, there is some, but limited potential for unidentified subsurface archaeological remains to be exposed during development. If archaeological sites should be exposed during earthworks and cannot be avoided, an Authority will be required before works that affect the site can proceed.

Alternatively, to avoid any delays should unidentified subsurface features be exposed, consideration should be given to applying for an authority under Section 44(a) of the HNZPTA to cover all works undertaken for this project, as a precaution. This should be obtained before any earthworks are carried out. The conditions of the authority are likely to include archaeological monitoring of preliminary earthworks, and procedures for recording any archaeological evidence before it is modified or destroyed. This approach would have the advantage of allowing any archaeology uncovered during the development of the property to be dealt with immediately, avoiding delays while an Authority is applied for and processed.

Conclusions

No archaeological sites have previously been recorded within close proximity to the proposed subdivision at Foster Crescent, Snells Beach, nor were any identified as a result of the current assessment. While there is some potential to expose unidentified subsurface archaeological remains during earthworks, this potential is considered to be low.

As no known archaeological sites will be affected by the proposed works, an archaeological Authority under HNZPTA is not a requirement. However, if suspected archaeological sites should be exposed during earthworks the Accidental Discovery Rule in the Auckland Unitary Plan will apply, requiring works to cease in the immediate vicinity while the appropriate authorities are notified, and an Authority may have to be obtained before works can proceed. Alternatively, an archaeological authority under the Heritage NZ Pouhere Taonga Act 2014 could be considered in advance of works as a precaution if time frames are tight.

RECOMMENDATIONS

- There should be no constraints on the proposed subdivision on archaeological grounds, since no archaeological sites are known to be present and it is considered unlikely that any will be exposed during development.
- If subsurface archaeological evidence should be unearthed during construction (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), or if human remains should be discovered, the Accidental Discovery Rule (section E.12.6.1 of the AUP) must be followed. This requires that work ceases within 20m of the discovery and notification to the Auckland Council, Heritage NZ, Mana Whenua and (in the case of human remains) the NZ Police, who will determine the actions required.
- 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*).
- Alternatively, consideration could be given to applying for an Authority under Section 44(a) of the HNZPTA as a precaution prior to the start of works to minimise any delays once works are under way.
- 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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