

Archaeological assessment of effects (desktop)

“Awanui Links” – 28 Telephone Road

Report prepared for: Swordfish Projects Limited



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Contents

Summary.....	2
Introduction	3
Statutory requirements	4
Waikato District Plan	4
Heritage New Zealand Pouhere Taonga Act (HNZPTA) 2014	4
The Resource Management Act (RMA) 1991	4
Background	5
Landform and soils.....	5
Geology of the Middle Waikato Basin	6
Previously recorded archaeology	8
Historical Background.....	9
Historic plans and aerials	12
Historic plans	12
Historic aerials	13
Lidar data	14
Assessment of Archaeological Values.....	14
Assessments of effects on archaeological values	14
Conclusions and recommendations.....	14
References & Bibliography.....	16

Figures

Figure 1. Location for the proposed Awanui Link development (Site) in the wider landscape (Source: LINZ).....	3
Figure 2. Proposed Awanui Link development (Site) Masterplan.	3
Figure 3. Excerpt from S-MapOnline (Source: LRIS).	6
Figure 4. Map from Lowe (2010) showing the Hamilton Basin.	6
Figure 5. Block diagram showing the principal landform units of the Hamilton Basin (Lowe 2010:4).....	8
Figure 6. Archaeological sites recorded within ArchSite database surrounding Puketaha.	9
Figure 7. James Thomas Parsell and Neighbour at Puketaha, 1938. (source: Te Aroha Museum).	11
Figure 8. Excerpt from SO 634 (Source: Quickmap).	12
Figure 9. Excerpt from DP 4095 (Source: Quickmap).	12
Figure 10. Excerpt from earliest available aerial photography from XXX (Source: Retrolens).	13
Figure 11. Excerpt from aerial photography from XXX (Source: Retrolens).	13
Figure 12. Lidar derived hillshade model from DEM data taken in 2021 that shows the Site as mostly flat areas and some lower hills to the north (Source: LINZ).	14

Summary

Barker & associates, on behalf of Swordfish Projects Limited, commissioned Redox Cultural Heritage Services Ltd (RCHS) to compile the following desktop based Archaeological Assessment of Effects for a proposed subdivision across 22 land parcels close to 28 Telephone Road, Puketaha, Hamilton (Lot 2 DPS 15049, Lot 3 DPS 15049, Lot 4 DPS 15049, Lot 1 DP 36551, Lot 7 DPS 15049, Lot 6 DPS 15049, Lot 5 DPS 15049, Lot 6 DPS 14821, Lot 5 DPS 14821, Lot 4 DPS 14821, Lot 7 DPS 14821, Lot 8 DPS 14821, Lot 9 DPS 14821, Lot 10 DPS 14821, Lot 11 DPS 14821, Lot 12 DPS 14821, Lot 3 DPS 14821, Lot 2 DPS 14821, Lot 1 DPS 14821, Lot 19 DPS 14821, Lot 18 DPS 14821, Lot 17 DPS 14821, Lot 16 DPS 14821, Lot 15 DPS 14821, Lot 14 DPS 14821, and Lot 13 DPS 14821). The area affected is referred to collectively in this assessment as the Site; the total area for the proposed development is approximately 116 hectares.

The Site has been subject to a desktop background study to identify the potential for archaeological sites, features or deposits, whether recorded or unrecorded, within the Site. This review includes any relevant/available historic documents, aerial imagery, historic maps, archaeological reports, and archaeological site data held in the New Zealand Archaeological Association database, ArchSite. Results from the desktop research did not identify any evidence of archaeology within the Site. Therefore, no changes are recommended to the proposed Site regarding archaeological values. Since there are no recorded archaeological sites within the Site and the potential for unrecorded archaeology is very low to nil, an Authority from Heritage New Zealand Pouhere Taonga is not recommended.

Mana Whenua should, however, be consulted at an early stage regarding this assessment, the conclusions reached, and the cultural effects of the proposed development, which can differ from archaeological effects.

Introduction

Barker & Associates, on behalf of Swordfish Projects Limited, propose to undertake a development called Awanui Links. The Site will constitute a mixed-use development that combines high-end tourism, lifestyle living, retirement accommodation, and employment-generating industrial land uses within a rural setting. The development will be anchored by an 18-hole golf course and associated infrastructure, a wellness centre, fine dining venue, hotel and event centre, and a café. Accommodation offerings will comprise 10 large and 52 small luxury villas, 63 rural residential lots, and a retirement village with a dedicated care facility. The project also features nine light industrial lots, a solar farm, landscaped open spaces, wetlands, and integrated infrastructure, aiming to deliver a destination that supports regional growth, tourism, housing diversity, and environmental resilience. The desktop review/study identified that there are no recorded archaeological sites within the Site boundary.

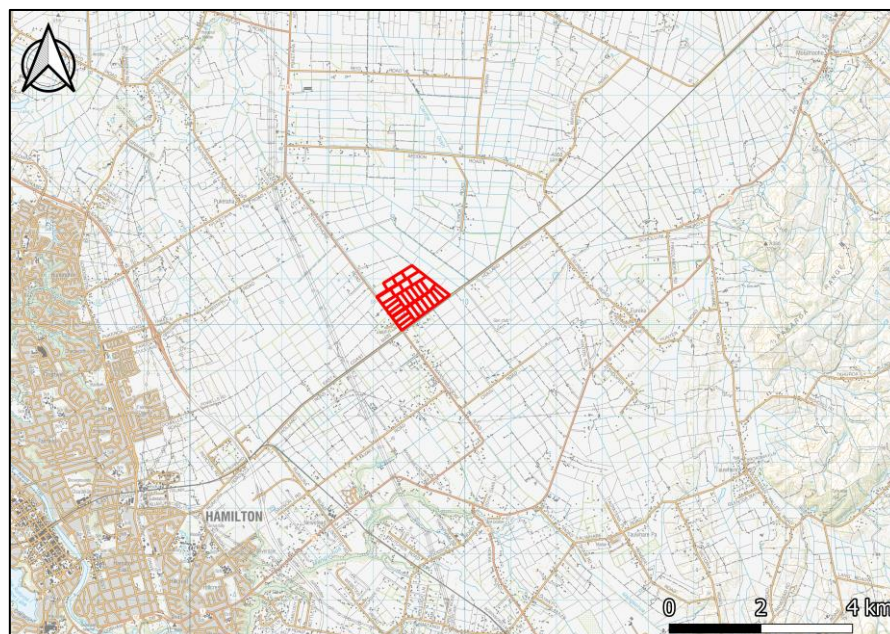


Figure 1. Location for the proposed Awanui Link development (Site) in the broader landscape (Source: LINZ).



Figure 2. Proposed Awanui Link development (Site) Masterplan.

Statutory requirements

The management of archaeological, historical, and cultural sites and landscapes are controlled by the Resource Management Act (RMA) and its associated District Plans and Regional Policy Statements. Archaeological sites are also explicitly protected through the archaeological provisions of the Heritage New Zealand/Pouhere Taonga Act (NZHPTA 2014). This Act prevents archaeological sites from being modified or destroyed without an Authority from Heritage New Zealand (HNZ).

Waikato District Plan

The Waikato District Plan (fully operative April 2013) outlines operative objectives and policies relating to Historic heritage and archaeology in Part 1, Section 12. Historic heritage items and archaeological sites are listed in Part 3 Appendices, in C: Historic Heritage. Archaeological sites S14/374 and S14/468 were recorded subsequent to the formation of the District Plan and are not listed.

Policy clause 12.2.7 states that *'archaeological sites and areas, sites of significance to Māori (including wahi tapu sites and wahi tapu areas), and places of historic significance should be protected from adverse effects of development or activities on those sites.'* Clause 12.3.6 clarifies that any work that may modify, damage or destroy an archaeological site associated with pre-1900 human activity will require an authority from the Historic Places Trust (now HNZPT).

Heritage New Zealand Pouhere Taonga Act (HNZPTA) 2014

The HNZPTA provides blanket protection to all archaeological sites meeting the definition in the Act, whether they are recorded or not. Protection and management of sites is managed by the archaeological authority process, administered by HNZPT. It is illegal to destroy or modify archaeological sites without an authority to do so from HNZPT.

The HNZPTA 2014 (s6) defines an archaeological site as:

(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 that 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) of the Act¹.

Any person who intends to carry out work that may modify or destroy an archaeological site, or to investigate an archaeological site using invasive archaeological techniques, must first obtain an authority from HNZPT. The process applies to sites on land of all tenures, including private, public and designated land. The HNZPTA contains penalties for unauthorised site damage.

The Resource Management Act (RMA) 1991

¹ Such declarations usually pertain to important post-1900 remains with archaeological values.

The *Resource Management Act 1991* (RMA) requires City, District and Regional Councils to manage the use, development, and protection of natural and physical resources in a way that provides for the well-being of today's communities while sustaining the potential of natural and physical resources for future generations. The protection of historic heritage from inappropriate subdivision, use, and development is identified as a matter of national importance (section 6f).

Historic heritage is defined as those natural and physical resources that contribute to an understanding and appreciation of New Zealand's history and cultures, derived from archaeological, architectural, cultural, historic, scientific, or technological qualities.

Historic heritage includes:

- historic sites, structures, places, and areas;
- archaeological sites;
- sites of significance to Māori, including wahi tapu;
- surroundings associated with the natural and physical resources (RMA section 2).

These categories are not mutually exclusive, and some archaeological sites may include above-ground structures or be places of significance to Māori.

Where resource consent is required for any activity, the assessment of effects is required to address cultural and historic heritage matters (RMA 4th Schedule).

Background

Landform and soils

The Site is located within the Middle Waikato Basin in Puketaha, approximately 4 km north of the Mangaonua Stream, on the corner of Holland Road and Telephone Road. This landscape has been dominated by the meandering Waikato River, which, now entrenched in its current alignment, flows approximately 8.5 kilometres southwest of the Site. Landforms within the Site, for the most part, comprise flat lowland areas with smaller paleochannels and levees. The primary soil classification identified across the Site was Organic (Figure 3); soils formed in the partly decomposed remains of wetland plants (peat) or forest litter. Organic soils may contain some mineral material, but the soil is dominated by organic matter. These soils often occur in wetlands throughout the Waikato and New Zealand, or under forests that produce acid litter in areas with high precipitation, covering 1% of New Zealand. Organic soils are inherently very poorly drained and peaty in texture, making them poorly correlated with archaeological deposits/sites within the Waikato.

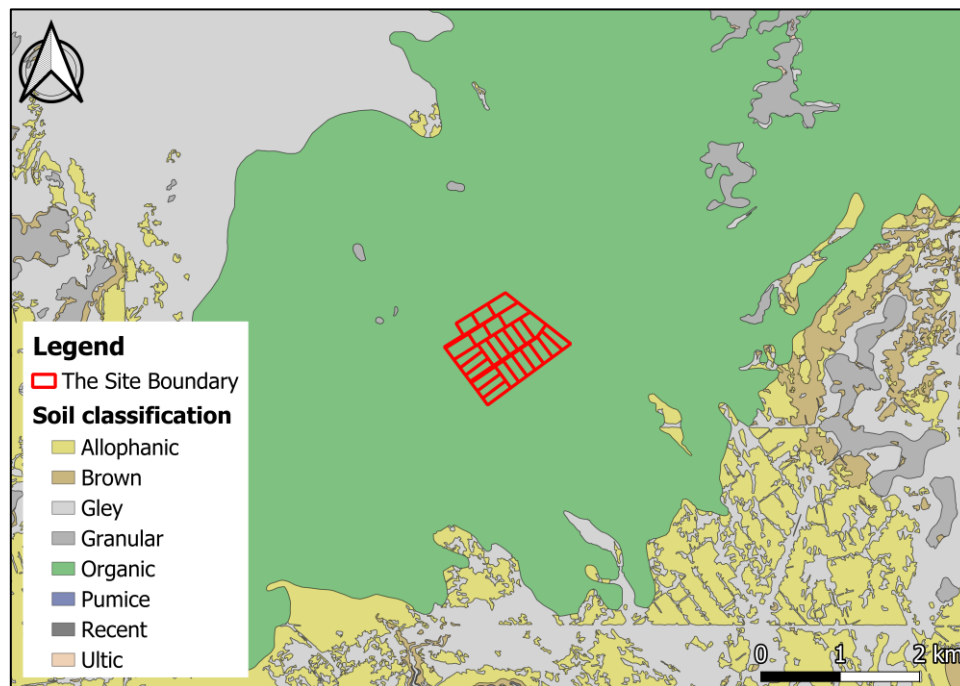


Figure 3. Excerpt from S-MapOnline (Source: LRIS).

Geology of the Middle Waikato Basin

The Hamilton Basin features diverse landscapes and soils shaped by geological and climatic processes over thousands of years. It is characterised by four central landscape units: low rolling hills, alluvial plains, low terraces, and gullies; evolving over more than a million years, with significant geological deposits from volcanic activity (Figure 4).



Figure 4. Map from Lowe (2010) showing the Hamilton Basin.

The Hinuera Formation, consisting of volcanogenic alluvium, is a key feature of this landscape, with its material deposited over the last 20,000 years. A key factor in the formation of this landscape is the Waikato River, which has changed it through sediment deposition and river migration before its more recent entrenchment.

Both the Waikato River, the Oranui eruption, and the Taupo pumice alluvium (Hatepe Eruption) have caused significant changes to the landscape of the middle Waikato basin, shaping the modern environment (Figure 4). Over the last 100 millennia, a meandering, braided Waikato River has both eroded and deposited sediment across the landscape. This has transformed the landscape into a rolling, somewhat flattened environment made up of gently rolling hills composed of raised levees, depressed swales and lower swamps and lakes. After the Oranui eruption, the Waikato was forced to change course, being redirected away from the Firth of Thames into the Waikato basin, and finally through to its current outlet at Port Waikato (deposition occurred between 23,500–17,000 years BP, with the river beginning to entrench in its modern channel around 17,500 BP) (Lowe 2010). The Waikato's high-energy braided river system distributed sediment across the Hamilton Basin in various thicknesses and consistencies. This landscape, represented as a braided fan, has now been classified as the Hinuera surface, an accumulation/sequence of deposited tephra since the rivers' entrenchment (Lowe 2010: 5; McLeod 1984:2).

After the river's final course had settled into the current alignment, an eruption at Hatepe (c. 1800 BP) directed a lahar flow down the river (Taupo pumice alluvium-TPA). This, through erosion and deposition, created a series of new river terraces along the river's banks, which are still visible today (Lowe 2010). Aside from natural modification, humans have also significantly modified this landscape.

Within the Hamilton Basin, soil types reflect a diverse landscape and soil parent materials with varying and distinct drainage characteristics. These soil classification units can be divided into different qualities, including volcanic ash, weathered soils, and soils modified by humans. Well-drained soils usually lie on raised deposits, while less freely draining to poorly drained soils lie lower down in swales. For the Hamilton Basin, the key soil series include Horotiu (well-drained), Bruntwood (moderately well-drained), and Te Kowhai (poorly drained). These soil types have direct importance/correlation with archaeology, especially horticulture, and with the likelihood of sites. Solis are primarily formed from volcanic ash and alluvium, with varying clay types. Tamahere soils (man-made) have also been identified on soil maps. These are anthropogenic, modified soils used for agriculture, particularly the growing of tubers such as kumara (Lowe 2010).

From the effects of climate change and the recent influx of humans, the Basin has undergone significant changes due to climatic shifts and human activity. Studies indicate that the original shrubland-grassland changed successively to a broadleaf-podocarp forest circa 17,500 years ago. During the influx of Māori into inner New Zealand, deforestation and agricultural practices significantly impacted the environment in a relatively short period of time; this was exacerbated by the later influx of Europeans. As a result of deforestation and climate changes, sedimentation led to the additional formation of lakes and peat bogs (Lowe 2010).

Primary soil types within the Hamilton Basin include a variety of parent materials and how they are situated in the landscape (Figure 5). Low rolling hills include Hamilton, Kainui, and Ohaupo series, characterised by weathered tephra and clay-rich profiles. Plains soils such as Horotiu, Bruntwood, and Te Kowhai series exhibit varying drainage and clay types, influenced by alluvial deposits. Low terrace soils, primarily Waikato series, are weakly developed due to

their young age from recent flood deposits. Gully soils include the Tamahana and Kirikiriroa series, formed from recent sediment and colluvium. Horotiu soil is classified as Typic Orthic Allophanic Soils, indicating its tephric and mixed rhyolitic composition. Te Kowhai soil profile presents a contrasting structure and composition compared to Horotiu soil. It is classified as Acidic Orthic Gley Soils, reflecting its tephric and rhyolitic nature. As mentioned above, there are also large areas of organic soils from former peat swamps which have now been drained in the modern era (Lowe 2010).

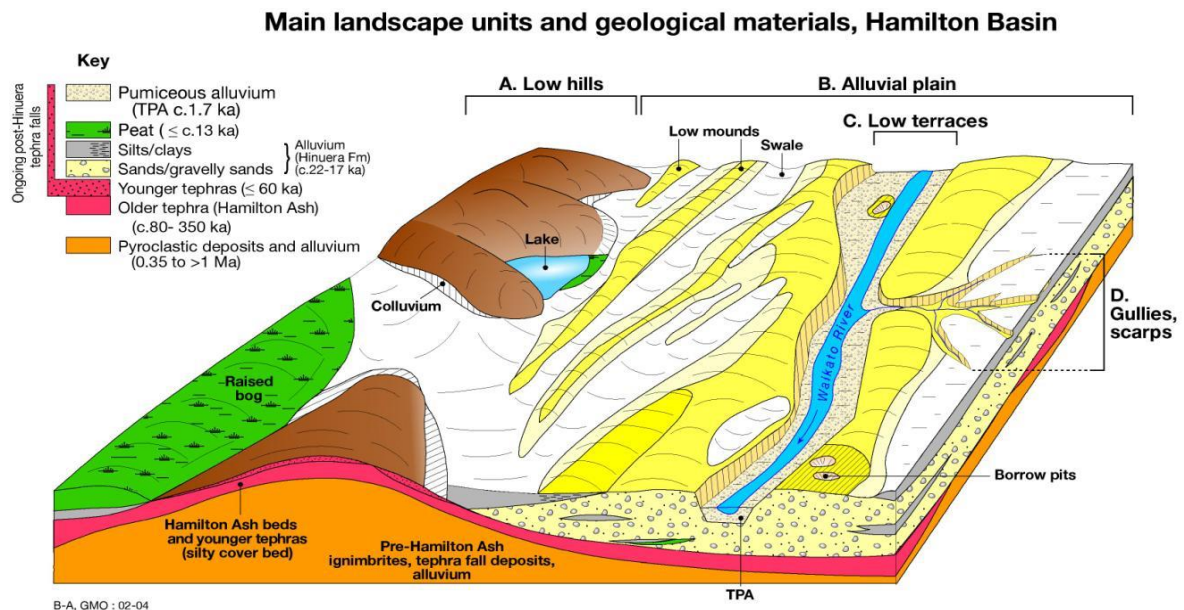


Figure 5. Block diagram showing the principal landform units of the Hamilton Basin (Lowe 2010:4).

Previously recorded archaeology

The closest recorded archaeology is approximately 5 km to the west of the Site (S14/508) (Figure 6). S14/508 is a historic era (AD 1840–1900) field drain, which forms part of a larger field drainage system first identified in historical survey plans. Two further historic-era drains, S14/334 and S14/335, have previously been identified to the south of S14/508. Manga-o-Tupua Pā (S14/128), approximately 6.5 km northeast of the Site, is a ring ditch pā located to the northeast of Eureka, east of the intersection of Schollum Road and State Highway 26. Finally, approximately 7 km to the northwest of the Site, a cluster of archaeological sites is recorded on the banks of the Komakorau Stream (S14/437, S14/438, S14/439, and others). These archaeological sites form part of an extensive pre-European Māori horticultural landscape, known as The Waikato Horticultural Complex (see Gumbley, 2021). These archaeological sites primarily consist of clusters of borrow pits (pumice sand and gravel quarries) and associated modified “Māori-made” soils (Tamahere series) recorded by Gumbley and Hutchinson (2013). As discussed above, the primary soil classification identified across the Site was Organic. Organic soils are not suitable for pre-European Māori horticultural practices, and no evidence of archaeological deposits related to these activities have been identified within or surrounding the Sites boundary.

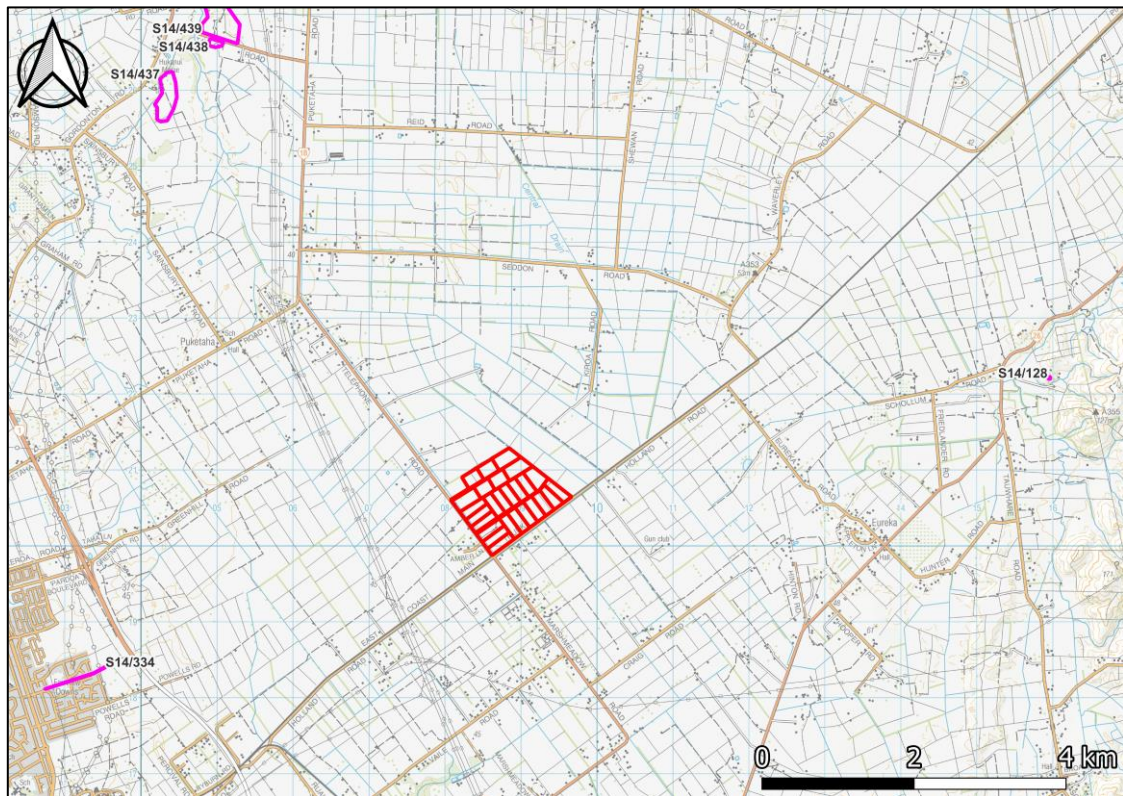


Figure 6. Archaeological sites recorded within ArchSite database surrounding Puketaha.

Historical Background

Māori

Today, the Waikato is a much-altered landscape from what it once was. Its swamps have been drained and vegetation cleared to create pasture and exotic forests. However, features of the landscape, especially those used by Māori for identity, remain, for example, the sentinel mountains – Taupiri, Karioi, Pirongia, Kakepuku, Maungatautari, Maungakawa, Te Tāpui and Te Aroha - and the Waikato River.

Waikato is the ancestral region of tribes descended from people who came to New Zealand on the Tainui waka. The waka, commanded by Hoturoa, explored both coasts of the central North Island before making its final landfall at Kāwhia Harbour, settling there first, before spreading to the north, east and south. In later generations, Tainui ancestors founded tribes which spread throughout and beyond the Waikato region. For the Tainui tribes, the harbours, rivers and swamps of Waikato provided food and other resources, and its mountains and ranges were strongholds. Settlements sprang up throughout the region, usually on hilltops or beside lakes. Harbours were traditional centres of population, as were mountains such as Maungatautari. As waka traffic increased along the rivers during the 1800s, settlements in these areas increased (Swarbrick 2025).

After the initial occupation of coastal New Zealand, the Māori diaspora led inland towards the Middle Waikato Basin. To access the Waikato, navigable waterways and accessible land were used to locate suitable areas for horticulture and occupation; this is evidenced by the plethora of recorded archaeological sites along the Waikato River, its tributaries, and gully systems. Recorded archaeological sites within this landscape include defensive structures, established at higher elevations to provide a watershed for the area. Pā are also closely linked to

surrounding settlements and gardens, utilising the fertile soils adjacent to the river for the cultivation of kumara and other crops.

Following the signing of the Treaty of Waitangi in 1840, Europeans increased pressure on Māori to sell their land. In response to increasing European pressure, some chiefs decided to unite and stave off the threat to land, customs, and mana. The Government responded by planning an invasion of the Waikato, which led to the wars of the 1860s. Governor George Grey had accused the Waikato chiefs of disloyalty. And following this, he announced his intention to send troops into Waikato on 11 July 1863. A result of the Waikato Wars was that most Māori-owned land was confiscated under the NZ Settlements Act (NZSA) 1863 (Swarbrick 2025).

European

Following the first European settlers of traders and missionaries, permanent Europeans were often soldiers guarding militia townships, for example, Cambridge. Settlers earmarked for these areas formed the Waikato militia, consisting of four regiments recruited from Otago and Australia (1863), with the promise of land grants post-service. Following the wars and the disestablishment of the militia (1865–66), and the formation of the armed constabulary (1867) to guard the confiscation line, many men were released from service. They were granted land in the region confiscated from Māori under the NZSA 1863. This land was usually allotted into 50-acre blocks drawn up on survey plans, and it mostly turned out to be less ideal for agriculture, being inaccessible and swampy. Lots of these allotments were left, sold, or cleared and drained for use. Following the close of the war around circa mid-1864, new towns were surveyed at Alexandra (now Pirongia), Cambridge and the former Māori villages of Kihikihi and Kirikiriroa (renamed Hamilton). Also, former military outposts were also settled at Te Awamutu, Ōhaupō, Whatawhata, Huntly and Ngāruawāhia.

During the early influx of European settlers, Māori continued as they had since their arrival into the Waikato. Initially, the Waikato was not considered favourable for farming or cultivation by Europeans, as it was deemed difficult, too swampy, and relatively inaccessible. Little land changed hands during this period due to its ‘unfavourable’ nature. However, Māori with newly acquired agricultural skills, tools, modern farming techniques, and crop species (often introduced by Missionaries) changed Europeans’ perceptions. Māori farming and exports became very successful (Phillips 2014). Most likely, this success prompted, to a degree, the Crown’s invasion of the Waikato (1863). The land acquired was used by European settlers and allotted to militiamen. Following the land wars, large tracts of Māori-owned land were confiscated and allocated to militiamen. Later, this land was often sold by the men, since they, too, thought it too difficult to clear and cultivate. This is the case for the Site and the surrounding area around Cambridge, where land was confiscated and allotted to militiamen following service.

Puketaha

Puketaha, situated approximately 12 km northeast of Hamilton City, surrounded by Gordonton, Eureka and Newstead, began as a hillside subdivision of the Woodlands Estate, initially owned by the Loan and Mercantile Agency (following confiscation by the Crown). The name “Puketaha” was officially adopted in 1917, derived from “Puke” (hill) and “Taha” (side), describing the slopes north and east of Crosby’s Hill. While information about the pre-European Māori occupation of Puketaha is limited, nineteenth-century historical records

suggest the area has deep cultural roots for both Māori and European settlers (see Puketaha School 1991).

In 1902, the Woodlands Estate began selling plots of land in Puketaha for closer settlement, which in 1905 was primarily a partly drained deep peat swamp. Settlers brave enough to take up sections were presented with a wasteland of flax, Titree, Kahikatea bush and rushes. Notably, there were no roads, no school and no meeting places for the settlers. However, a few big dewatering drains provided outlets for drains yet to be dug. Some of these earliest landowners are recorded in historical documents, including James Taylor (1902), Norman Taylor (1905), FR Seddon (1903), John Wells Chapman (1904), Edwin Thomas (1907), Denby Sainsbury (1907), Joseph & Albert Chapman (1909), Hannibal Rickard (1912), Matthew Findlay (1914), Norman Speedy (1914), WH Worster (1917).

Later, these larger blocks were further subdivided pre-WW2, and the Seddon property was sold to the NZ Government in 1947 under the Land Acquisition Act for the rehabilitation of returned servicemen at £14 per acre. The first ex-servicemen moved into the district in the early 1950s, and subdivision into 'ballot farms' continued into the late 1970s. The district was prone to flooding, and the drainage systems installed by hand in the early part of the 20th century remain a vital asset to this low-lying farming area. Removing stumps and ironstone was a way of life to enable pasture to be established (Figure 7). A local school was finally opened in 1916, with the War Memorial Hall eventually constructed in 1954. The Hall was extended in 1977, and the school roll grew from 20 children in 1916 to around 300 in 2016.



Figure 7. James Thomas Parsell and Neighbour at Puketaha, 1938. (source: Te Aroha Museum).

Historic plans and aerials

Historic plans

A review of historic survey plans in Quickmap identified two plans directly relevant to the Site: SO 634 and DP 4095. Despite the Quickmap review, no plan identified any archaeological interest. The identified plans visualise allotments given to militiamen following the termination of their service, and one of the original subdivisions of the “Hillside Estate” in Puketaha (Figures 8–9).

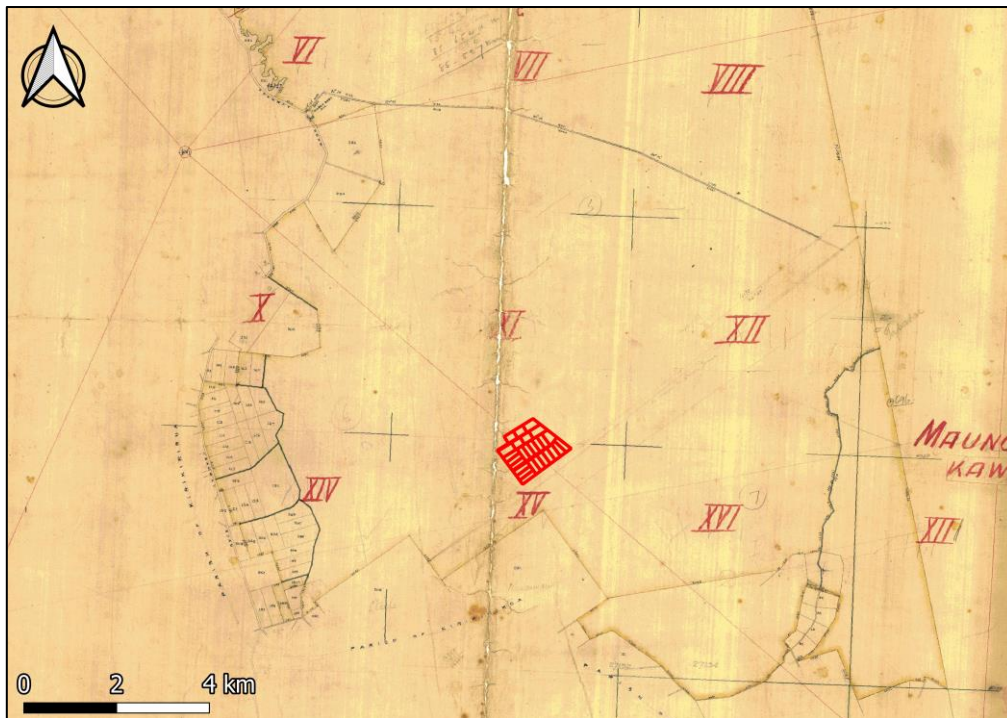


Figure 8. Excerpt from SO 634 (Source: Quickmap).

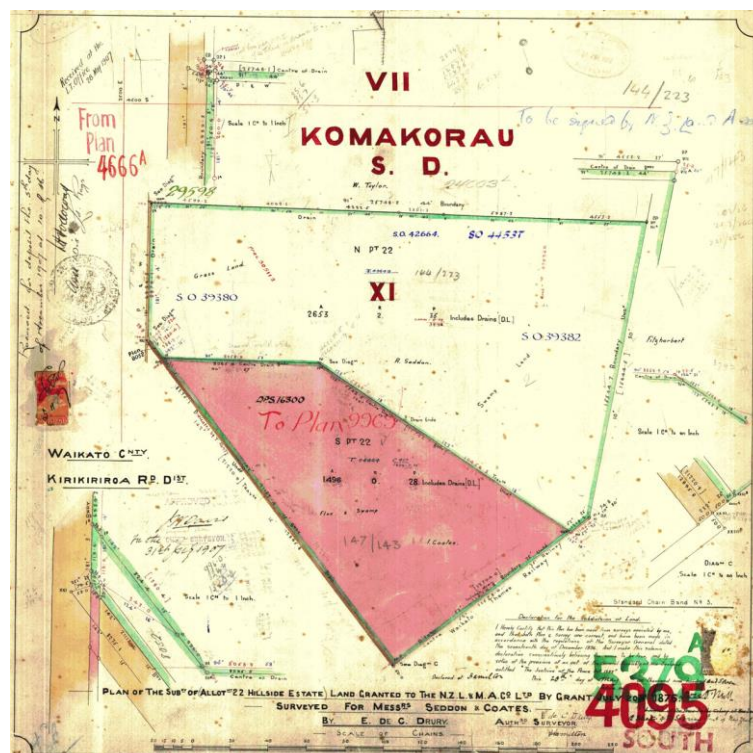


Figure 9. Excerpt from DP 4095 (Source: Quickmap).

Historic aerals

Aerial photographs were reviewed from Retrolens, with the earliest available images originating from 1938. They visualise the historic land use of the Site, which includes the transition from poorly drained peat swampland to pastoral grazing and crop production (Figures 10–11). More recent developments within the Site are also visible in later aerals, including residential land use, construction and maintenance of farm races, drainage ditches, and fences, etc. No historic aerial imagery identified any archaeological features of interest.



Figure 10. Excerpt from the earliest available aerial photography from XXX (Source: Retrolens).



Figure 11. Excerpt from aerial photography from XXX (Source: Retrolens).

Lidar data

The height data shown below provides an elevation model for the landscape and subject area in 2023. LiDAR data uses laser points collected from aircraft to create a height model of the landscape and can remove extraneous objects such as houses and trees. There is no visible evidence for archaeology within the Site based on available LiDAR data (Figure 12).



Figure 12. Lidar-derived hillshade model from 2021 DEM data showing the Site as mostly flat areas and some lower hills to the north (Source: LINZ).

Assessment of Archaeological Values

Since there are no recorded archaeological sites nor any areas of identified unrecorded archaeology within the Site, there are no values.

Assessments of effects on archaeological values

Due to the absence of identified archaeology, there can be no effects.

Conclusions and recommendations

The Site is assessed as having a very low to nil potential for unrecorded archaeology. Since there are no recorded archaeological sites within the Site and the potential for unrecorded archaeology is very low to nil, an Authority from Heritage New Zealand Pouhere Taonga is not recommended.

Recorded archaeological sites across the broader landscape relate to known Pā and, more broadly, Māori Horticulture. However, soil survey data, historical maps, and historical accounts identify most of the Site as poorly drained and as historic swampland. Through

consultation of historical documentation, it was determined that the Site is unlikely to contain any archaeological sites.

Recommendations:

1. Even if there is no recorded archaeology or identified potential for unrecorded archaeology, there is always the potential to uncover single unexpected finds in the landscape. It is therefore recommended that Accidental Discovery Protocols be used throughout the project. Protocols used should be those recommended by Heritage New Zealand.
2. Consultation should be undertaken with Mana Whenua at an early stage of the process. The results of this assessment should be discussed in detail so that Mana Whenua are aware of the report and its findings, and have the opportunity to comment on the project.

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