



NZ TRANSPORT AGENCY
WAKA KOTAHI

Roads of national significance



Ara Tūhono – Pūhoi to Wellsford



Pūhoi to Warkworth

Heritage Assessment Report

August 2013

Clough
& ASSOCIATES LTD

New Zealand's Foremost Heritage Consultancy



Pūhoi to Warkworth

Document title: **Heritage Assessment Report**

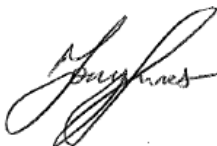
Version: Final

Date: 20 August 2013

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File name: 500-050 Heritage Assessment Report_Final_20 August 2013

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Glossary of abbreviations

Abbreviation	Definition
ARC	Auckland Regional Council (preceded the Auckland Council)
CHI	Auckland Council's Cultural Heritage Inventory
HPA	Historic Places Act 1993
LINZ	Land Information New Zealand
NGTR	Northern Gateway Toll Road
NZAA	New Zealand Archaeological Association
NZHPT	New Zealand Historic Places Trust
NZTA	NZ Transport Agency
RMA	Resource Management Act 1991
RoNS	Roads of National Significance

Glossary of defined terms

Term	Definition
Archaeological site	Defined in section 2 of the Historic Places Act 1993 as any place in New Zealand that – (a) Either: (i) Was associated with human activity that occurred before 1900; or (ii) Is the site of the wreck of any vessel where that wreck occurred before 1900; and (b) Is or may be able through investigation by archaeological methods to provide evidence relating to the history of New Zealand.
Auckland Council	The unitary authority that replaced eight councils in the Auckland Region as of 1 November 2010.
Construction footprint	The area affected by earthworks during the construction phase of a project.
Earthworks	The disturbance of land surfaces by blading, contouring, ripping, moving, removing, placing or replacing soil or earth, or by excavation, or by cutting or filling operations.
Heritage site	A site that contributes to an understanding and appreciation of New Zealand's history and cultures. A heritage site can be derived from archaeological, architectural, cultural, historic, scientific and technological fields.
Midden	A type of archaeological site consisting of deposits of food waste (predominantly shell, but also fish, bird and animal bone), often mixed with charcoal and burnt stone.
Pa	A type of archaeological site consisting of a defended Māori settlement or refuge.
Pit	A type of archaeological site consisting of an excavated pit, usually rectilinear, used for food storage.
Project	The Pūhoi to Warkworth section of the Pūhoi to Wellsford Road of National Significance Project.
Project area	From the Johnstone's Hill tunnel portals in the south to Kaipara Flats Road in the north.
Terrace	A type of archaeological site consisting of an artificially levelled area on a slope, generally used for house sites or storage structures

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1. Introduction

Ara Tūhono Pūhoi to Wellsford Road of National Significance (RoNS) Pūhoi to Warkworth Section (the Project) has the potential to affect both recorded and unrecorded historic heritage. An Assessment of Environmental Effects (AEE) on historic heritage has therefore been prepared to identify archaeological and built heritage in the vicinity of the Project area and to assess the potential effects of the Project on historic heritage values. The Historic Heritage report does not assess potential effects on Māori cultural values: these have been addressed in the Hōkai Nuku Cultural Effects Assessment Report.

The Project area is divided into six sectors between the Johnstone's Hill tunnels in the south and the Kaipara Flats Road in the north. Running from south to north, these are referred to as the Pūhoi, Hungry Creek, Schedewys Hill, Moirs Hill Road, Perry Road and Carran Road sectors.

The proposed designation boundary and indicative alignment have been designed following consideration of a range of options that were subject to earlier assessments. These earlier assessments included heritage assessments relating to the initial options (Farley, Burnett & Clough, August 2010), a refined range of options (Farley, Burnett & Clough, September 2010) and an indicative alignment that was substantially the same as the current proposal (Farley, Burnett & Clough, 2011).

We carried out further field assessment with other specialists in 2013 when additional properties became accessible for inspection. Some changes to the indicative alignment were made in order to avoid a previously unrecorded pa site in the Pūhoi sector and to reduce environmental impacts in the Perry Road sector. We assessed these changes in terms of their potential effects on historic heritage values.

1.1 Purpose and scope of this report

The NZ Transport Agency (NZTA) proposes to upgrade State Highway 1 (SH1) between Pūhoi and Wellsford as a RoNS. The RoNS comprises two sections, a southern section (from the Johnstone's Hill tunnels to the Warkworth access) and a northern section (from the Warkworth access to Wellsford).

This report constitutes an Assessment of Environmental Effects (AEE) on historic heritage relating to the southern section of the RoNS (the Project). It identifies archaeological and built heritage sites in the vicinity of the Project and identifies potential effects from a historic heritage perspective.

This assessment of effects on historic heritage does not include an assessment of effects on Māori cultural values. Māori cultural concerns may encompass a wider range of values than those associated with archaeological sites and built heritage and an assessment of such values is being undertaken independently of this assessment.

1.2 Brief description of the Project

The Project is divided into six sectors:

- Pūhoi Sector – Johnstone’s Hill tunnels northern portal to Pūhoi Viaduct northern abutment. Includes links between Hibiscus Coast Highway and existing SH1, realignment of Billings Road, northbound motorway off-ramp and southbound motorway on-ramp at Pūhoi;
- Hungry Creek Sector – Pūhoi Viaduct northern abutment to Schedewys Viaduct northern abutment. Includes private access overpass to service forestry land (Hungry Creek Overpass), and Hikauae Viaduct;
- Schedewys Hill Sector – Schedewys Viaduct northern abutment to Moirs Hill Road Underpass;
- Moirs Hill Road Sector – Moirs Hill Road Underpass to Perry Road Viaduct southern abutment;
- Perry Road Sector – Perry Road Viaduct southern abutment to Woodcocks Road Viaduct southern abutment. Includes Wyllie Road Overpass and access road along the eastern side of the indicative alignment to service properties southeast of Wyllie Road; and
- Carran Road Sector – Woodcocks Road Viaduct southern abutment to tie-in with existing SH1 near Kaipara Flats Road / Goatley Road intersection . Includes realignment of SH1 and provision of new roundabout.

The Project will involve the construction of a new road to the west of the existing SH1, with modification of existing alignments for the tie-ins at the southern end of the Pūhoi Sector and northern end of the Carran Road Sector. The indicative alignment can be found in the main Drawing Set (Road Alignment Plans R-100 to R-115).

1.3 Previous heritage reports

A series of heritage reports have previously examined various route options and an earlier alignment and assessed the impact these options may have upon heritage values:

- An initial options assessment for the full Pūhoi to Wellsford route was completed in August 2010 (Farley, Burnett & Clough, August 2010), and found that some options had the potential to impact upon a far greater number of heritage sites than others. Locations such as Pūhoi and Warkworth were identified as areas that had clusters of heritage sites. In these locations the built heritage environment is significant, and associated with sites of early European settlement such as cemeteries, while Pūhoi was also a significant area of Māori settlement. During the finalisation of an indicative alignment many of these areas were avoided;
- A second report completed in September 2010 examined a more focused range of route options (Farley, Burnett & Clough, September 2010). At this stage a total of three heritage sites were considered likely to be affected, with at least nine more potentially affected. However, when this report was completed the Auckland Council Cultural Heritage Inventory (CHI) information that was relied upon relating to the US military camp locations was incomplete and inaccurate. The use of this information led to the identification of a lower number of potentially affected sites than was actually the case. Subsequently, however, the

refined route option assessment avoided the potential for impact at some of the more significant heritage sites; and

- A third report completed in May 2011 (Farley, Burnett & Clough 2011) assessed the effects of the alignment¹ on heritage values. At this stage a total of six archaeological or other cultural heritage sites clustered around Pūhoi (three archaeological sites and three historic structures) and two World War II military camp locations near Warkworth were identified as potentially affected. However, one of the archaeological sites and two of the house sites were not accessible for assessment.

1.4 This assessment

Clough and Associates have been retained to complete the heritage assessment for the Project. This Report documents the history of the areas traversed by the Project, identifies sites within or in close proximity to the proposed designation boundary, describes the archaeological and built heritage sites with the potential to be affected by the Project, and assesses the effects of the Project on historic heritage. It incorporates the results of further fieldwork carried out when access to properties that had not previously been visited was granted, or in response to changes to the indicative alignment.

¹ This alignment was substantially the same as the indicative alignment discussed in this assessment. However, some changes were subsequently made to avoid a newly discovered pa site in the Pūhoi Sector and to create the Kauri Eco Viaduct in the Perry Road Sector.

2. Methodology

Our assessments involved:

- An initial review of archaeological and heritage databases to identify recorded heritage sites in the vicinity of the proposed designation: the New Zealand Archaeological Association (NZAA) site record file (ArchSite); the Auckland Council's Cultural Heritage Inventory (CHI); the New Zealand Historic Places Trust (NZHPT) Register of Historic Places; and the Auckland Council District Plan (Rodney Section) schedules.
- A review of archaeological reports to obtain information on previous archaeological research in the Project area.
- A review of Land Information New Zealand (LINZ) plans and other plans relevant to the area for information on former land use and potential heritage features.
- Background historical research using general and archival sources to provide a broad history of the study area from pre-European times to the modern era, with more detailed research on some of the heritage sites identified.
- GIS mapping to produce an overlay of the locations of the identified archaeological and other historic heritage sites on aerial maps. All recorded sites within the proposed designation boundary, or within c.200m from the centreline of the indicative alignment (if this was a greater distance) were included. Near the northern end of the Project area a wider area was examined due to the presence of a related group of sites (World War II military camps) that extended into the proposed designation boundary and up to 1km from the indicative alignment centreline.
- A series of field surveys within the proposed designation boundary, and in particular within the indicative construction footprint, to examine previously recorded sites and establish whether any unrecorded sites were present. 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). This included examination of exposed and disturbed soils for evidence of earlier modification, and to gain an understanding of the local stratigraphy, and subsurface probing and test pitting with a spade at various points across the indicative construction footprint to determine archaeological potential. Photographs, GPS coordinates and field notes were used to record archaeological sites. Existing records in the NZAA database (ArchSite) were updated for any sites visited, and a new record was filed for a previously unrecorded site. The surveys were undertaken on 16 July 2010 (an initial drive-by), on three days during September and October 2010, and in 2013, when previously inaccessible properties were inspected with Hōkai Nuku representatives on several occasions during March and April.
- Updating of the GIS with new locational information and the additional recorded site following field survey.

One property in the Pūhoi sector containing recorded heritage sites (the Stanaway property) was not accessible for survey.

2.1 Background research

We examined a number of databases of heritage and archaeological information to identify the locations of recorded heritage sites. The databases were the New Zealand Archaeological Association (NZAA) site record file (ArchSite), the Auckland Council's Cultural Heritage Inventory (CHI) and the New Zealand Historic Places Trust (NZHPT) Register of Historic Places. We also consulted the former Rodney District Council's District Plan and reviewed archaeological reports, Land Information New Zealand (LINZ) plans and other plans relevant to the area.

We undertook background historical research using relevant sources to provide a broad history of the study area from pre-European times to the modern era. The sources ranged from local histories to Waitangi Tribunal reports, and conservation plans for heritage buildings. We also collected further information from both the Warkworth and District Museum and Archive, and Archives New Zealand.

We brought together most of the information for the Project within a GIS program, overlaying aerial maps with the extent of archaeological surveys previously undertaken in the region (Figure 1) and with the locations of recorded archaeological and other heritage sites (Figure 2). All recorded heritage sites within the proposed designation boundary or within c.200m of the centreline of the indicative alignment (if this was a greater distance) were included. The inclusion of all sites within c.200m, even if outside the designation boundary, was to provide broader contextual information and because archaeological sites may extend further than is apparent from the point data recording their locations. Near Warkworth we examined a larger area due to the presence of a related group of sites (World War II military camps) that extended into the proposed designation boundary and up to 1km from the indicative alignment centreline. We derived the survey information and locations of recorded archaeological sites from the Auckland Council CHI.

2.2 Field assessment

We then undertook field surveys to examine sections of the proposed designation and indicative construction footprint considered to have archaeological potential based on the known distribution of sites and topographic analysis, and to revisit recorded sites of either built heritage or archaeological significance.

We examined the ground surface 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). This included examination of exposed and disturbed soils where encountered for evidence of earlier modification, and to gain an understanding of the local stratigraphy. We carried out subsurface probing and test pitting with a spade at points across the indicative construction footprint to determine archaeological potential, and we took photographs and GPS coordinates when necessary to record archaeological sites and compile field notes. We prepared and filed new or updated site record forms relevant to the Project in the NZAA database (ArchSite).

We conducted an initial 'drive-by' field survey on 16 July 2010, with more detailed field surveys conducted on 2 and 8 September and 22 October 2010.

We surveyed some previously inaccessible properties that were known to contain heritage sites, or which were considered to have potential for unrecorded archaeological sites, on 11, 20 and 27 March, 17 and 23 April, and 13 May 2013. One property in the Pūhoi Sector containing recorded heritage sites (the Stanaway property) was not accessible for survey.

Iwi representatives from Hōkai Nuku accompanied our archaeologists on the field visits in 2013.

Following field assessment, we updated the GIS with any new locational information and recorded an additional site.

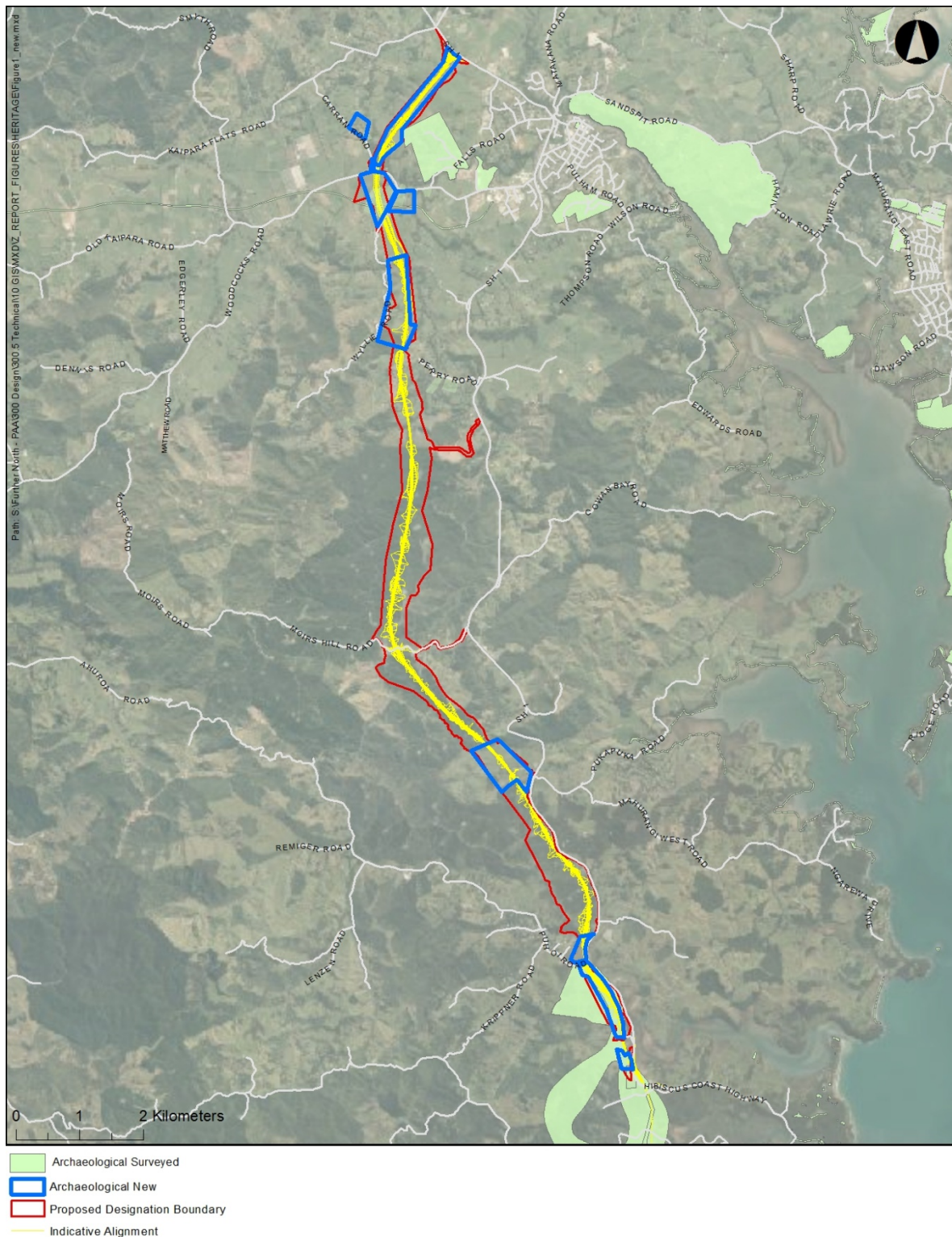


Figure 1: Aerial map of the Project area showing the locations where archaeological surveys had previously been carried out (green shading) and the proposed designation boundaries (red). The areas surveyed as part of the Project are shown in blue (modified from the Auckland Council CHI)

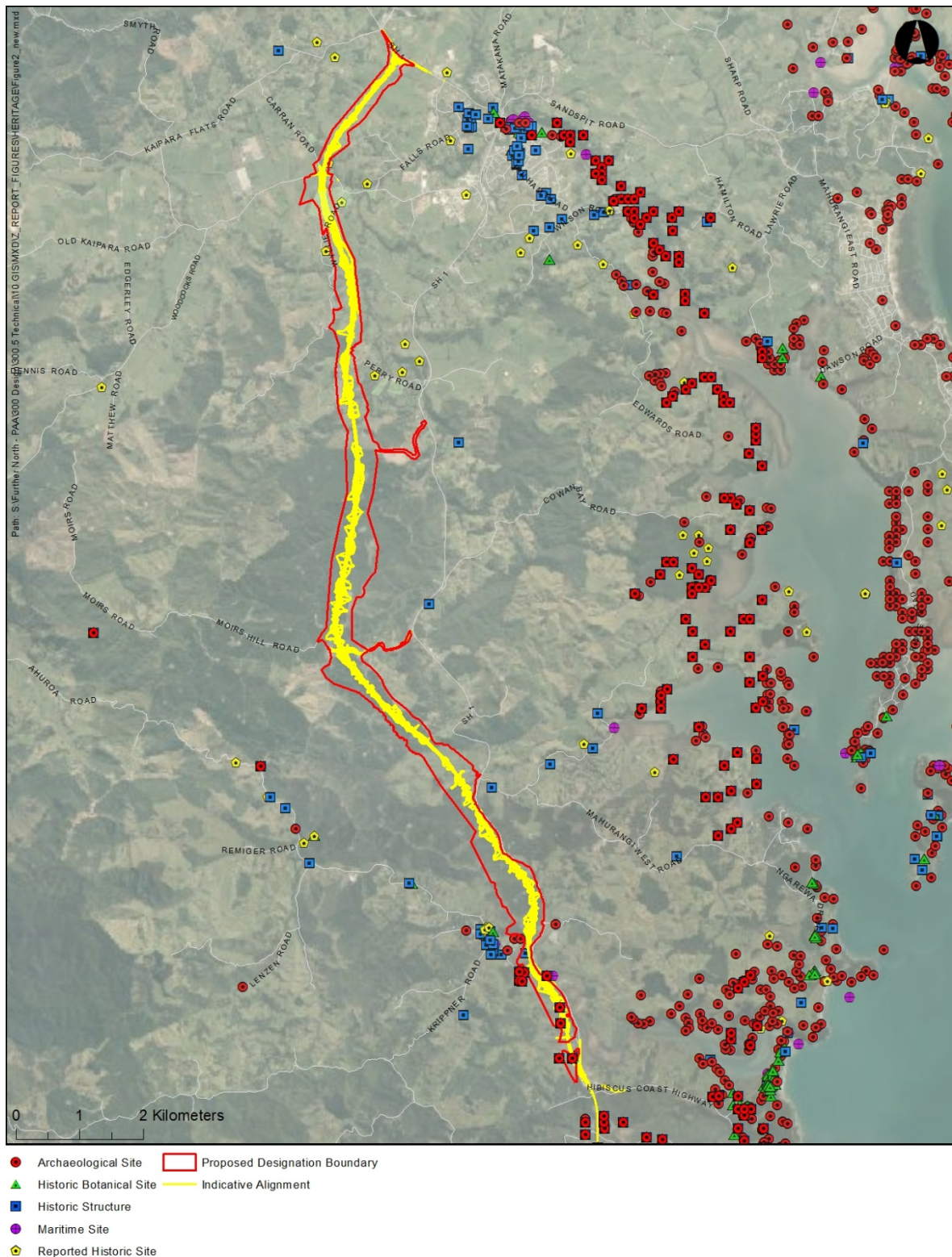


Figure 2: Aerial map of the Project area showing distribution of recorded archaeological and other heritage sites (source: Auckland Council CHI)

3. Statutory context

The RMA 1991 includes historic heritage in section 6 as a matter of national importance that must be recognised and provided for. There is a duty under section 17 to avoid, remedy, or mitigate any adverse effects on the environment arising from an activity, including effects on historic heritage.

In addition to any requirements under the RMA 1991, the HPA 1993 protects all 'archaeological sites', which may not be damaged or destroyed unless NZHPT has issued an 'Authority' to modify an archaeological site.

3.1 Resource Management Act 1991

Historic heritage is included in section 6 of the RMA 1991 as a matter of national importance that must be recognised and provided for:

In achieving the purpose of this Act, all persons exercising functions and powers under it, in relation to managing the use, development, and protection of natural and physical resources, shall recognise and provide for the following matters of national importance:

....

(e) The relationship of Māori and their culture and traditions with their ancestral lands, water, sites, waahi tapu, and other taonga;

(f) The protection of historic heritage from inappropriate subdivision, use, and development.

In section 2 of the RMA 1991 historic heritage is defined as:

(a) Means 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; and

(b) includes:

(i) historic sites, structures, places, and areas; and

(ii) archaeological sites; and

(iii) sites of significance to Māori, including waahi tapu; and

(iv) surroundings associated with the natural and physical resources.

There is a duty to avoid, remedy, or mitigate any adverse effects on the environment arising from an activity (section 17), including effects on historic heritage (as defined in section 2).

3.2 District Plan

There are no scheduled heritage sites within the proposed designation boundary. Pūhoi Historic Village, which is listed in the Auckland Council District Plan: Operative Rodney Section 2011 as a Special Zone (No. 14), is located outside of the designation boundary.

3.3 Regional Policy Statement

The Auckland Council Regional Policy Statement Chapter 6 (6.3) includes the following objectives relevant to historic heritage:

1. *To preserve or protect a diverse and representative range of the Auckland Region's heritage resources.*
2. *To maintain, enhance or provide public access to the Region's heritage resources consistent with their ownership and maintenance of their heritage value.*

The following policies give effect to Objective 1:

6.4.1 Policies – heritage preservation and protection

1. *The significance of natural and physical resources in the Auckland Region which are of value as heritage resources will be established by reference to the criteria set out in Policies 6.4.7-1 and 2, 6.4.13-1 and 6.4.16-1. 3. The subdivision of land, and use and development of natural and physical resources shall be controlled in such a manner that:*

(i) the values of heritage resources of international, national or regional significance are preserved or protected from significant adverse effects.

(ii) where preservation or protection and avoidance of significant adverse effects on the values of such significant heritage resources is not practicably achievable, such significant adverse effects shall be remedied, or mitigated.

(iii) In the context of this Policy, significant adverse effects would include:

- *the destruction of the state and physical integrity of significant heritage resources ... ;*
- *the destruction of or significant reduction in the educational, scientific or amenity value of a significant heritage resources [sic], or of that heritage feature's contribution to significant natural character and landscape values;*

....

- *a significant reduction in the value of significant heritage resources in their wider historical, cultural, and landscape contexts;*
- *the loss of significant historic places, areas and waahi tapu;*
- *a significant modification of the viability or value of significant heritage resources as a result of the use or development of other land in the vicinity of the heritage resource.*

The following criteria are to be used in assessing the significance of historic heritage.

6.4.16 Policy: Evaluation of cultural heritage

The significance of cultural heritage resources in the Region, and the identification of the qualities and values which give rise to their significance, shall be determined using criteria which include the following:

- (i) the extent to which the place reflects important or representative aspects of Auckland's or New Zealand's history;*
- (ii) the association of the place with the events, persons, or ideas of importance in Auckland's or New Zealand's history;*
- (iii) the potential of the place to provide knowledge of Auckland's or New Zealand's history;*
- (iv) the importance of the place to Tangata Whenua;*
- (v) the community association with, or public esteem for, the place;*
- (vi) the potential of the place for public education;*
- (vii) the technical accomplishment or value, or design of the place;*
- (viii) the symbolic or commemorative value of the place;*
- (ix) the importance of historic places which date from periods of early settlement in Auckland;*
- (x) rare types of historic place;*
- (xi) the extent to which the place forms part of a wider historical and cultural complex or historical and cultural landscape;*
- (xii) the integrity and state of preservation.*

3.4 Historic Places Act 1993

In addition to any requirements under the RMA 1991, the HPA 1993 protects all 'archaeological sites' (as defined in the HPA 1993) whether recorded or not. Such sites may not be damaged or destroyed unless an 'Authority' to modify an archaeological site has been issued by the NZHPT.

An 'archaeological site' is defined in section 2 of the HPA 1993 as:

Archaeological site means any place in New Zealand that:

- (a) Either –*
 - (i) Was associated with human activity that occurred before 1900; or*
 - (ii) Is the site of the wreck of any vessel where that wreck occurred before 1900; and*
- (b) Is or may be able though investigation by archaeological methods to provide evidence relating to the history of New Zealand.*

Authorities to modify archaeological sites can be applied for either under section 11 of the HPA 1993, in respect to a particular site or sites, or under section 12, for all sites that may be present within a specified area. Applications made under section 12 that relate to sites of Māori interest require approval by the Māori Heritage Council of the NZHPT. An application to undertake an archaeological investigation can also be made under section 18 of the HPA 1993. The tangata whenua must be consulted regarding applications to modify, destroy or investigate archaeological sites that have Māori cultural associations.

Any buildings or structures pre-dating 1900 that are to be demolished or removed from their original location are considered by NZHPT to come under the archaeological provisions of the HPA 1993 (NZHPT 2006: 1).

Under section 15(1) of the HPA 1993, the NZHPT may impose an Authority condition requiring that an archaeological investigation is carried out, if this is *'likely to provide significant information as to the historical and cultural heritage of New Zealand'*. This provision allows the information contained within a site affected by development (and any associated artefacts) to be recorded and preserved, in mitigation of the modification of the site.

Under Part 2 of the HPA 1993, the NZHPT has the power to register historic places, historic areas, waahi tapu and waahi tapu areas 'if the place or area possesses aesthetic, archaeological, architectural, cultural, historical, scientific, social, spiritual, technological, or traditional significance or value' (section 23). The purpose of registration is to inform members of the public and landowners about the values of significant historic places and to assist in their protection under the RMA 1991 (section 22). The criteria used to assign the level of significance (Category I or II) are set out in section 23(2), and generally form the basis of the assessment criteria used by Regional Councils (as listed in Section 3.3 of this Report). None of the identified archaeological or other heritage sites within the proposed designation boundary are on the NZHPT Register.

4. Historical and archaeological background

The background historical and archaeological research provided a context for the recorded historic heritage sites and also allowed us to identify areas where unrecorded archaeological and other heritage sites were more likely to be present. Within the Project area the main locations of settlement in both pre- and post-contact Māori and early European times were around Pūhoi and Warkworth, both of which are located on navigable waterways – an important factor in periods when transport, communications and access to important coastal resources were largely dependent on canoes or boats.

The Kaipara and Mahurangi areas have a long history of Maori occupation. Several tribes and sub-tribes claim affiliation with these areas and today the mana whenua of the area are Ngati Manuhiri, Ngati Mauku/Ngati Kauwae, Ngati Rango and Ngati Whatua.

The traditional Māori settlement pattern in the Kaipara and Mahurangi districts involved seasonal movement between kainga (villages). The east and west coasts provided abundant marine resources, while the inland forest supplied hunting and resource gathering opportunities. Rivers such as Pūhoi and Mahurangi supplied plentiful fresh water, and sandy soils near coastal areas were highly suited to kumara cultivation.

At various periods there was competition between tribes for important resources, such the muru or small spotted shark, which could be dried and used as a winter food source, and this led to a protracted conflict between Te Kawerau and Hauraki tribes in the 1700s. Further wars took place in the 1820s and 1830s when raiding Ngapuhi from the north, armed with muskets, launched a series of attacks throughout the tribal territories of Ngati Whatua. Māori of the Kaipara and Mahurangi, armed only with traditional weapons, fled the invasion, leaving the region deserted for several years.

By the late 1830s small numbers of Ngati Whatua began to return to their traditional occupation areas in the Kaipara and Mahurangi. Te Kawerau/Ngati Rongo Māori of the Mahurangi were now under the leadership of Te Hēmara Tauhia, a very important figure in the history of the area, and they settled north of Wenderholm, at Te Muri. Te Hēmara Tauhia died in October 1891 and was taken for burial at Te Rurunga on the eastern shores of the Kaipara.

The first Europeans visited the area in the early 1830s and the purchase of land from its Maori owners by the Crown was negotiated between 1841 and 1853 (the Mahurangi Purchase). Early European settlements were established at Warkworth from the 1850s and Pūhoi from the 1860s.

Pūhoi was gazetted as a 'German Special Settlement' of 10,000 acres in January 1863, and the first settlers to Pūhoi arrived in June 1863 from Bohemia, a province in the northern part of the former Austro-Hungarian Empire, with further Bohemian groups arriving in 1866, 1872 and 1873. The early settlers were dependent on assistance from Ngati Rongo, who provided transport and food and built whare. The road connection to Auckland was initiated in 1869 and completed in 1876, and a regular steamship supply service was also established in that year. By the 1880s the settlement boasted a post office, general store, boarding house, hotel

and small school, and by the turn of the century had a Catholic church, town hall and a thriving dairy farming industry.

The Pūhoi Historic Village (scheduled on the District Plan, but outside the proposed designation) includes several heritage buildings related to the early settlement. Three heritage buildings associated with early settler families were identified within the designation boundary, but research has established that these were built later, in the early 20th century.

The early township of Warkworth was established almost a decade earlier than Pūhoi. The historic centre and its heritage buildings are located outside the proposed designation. A later period in Warkworth's history is, however, relevant to the Project. During World War II several US Military Camps were established in the area around Warkworth, occupied by the 3rd Marine Corps Division, the 25th Infantry Division, and the 43rd Infantry Division. Some of these extend within the proposed designation.

A review of archaeological surveys undertaken in the general Project area indicated that these surveys had mainly focussed on the areas around Pūhoi and Warkworth, and correlated with the known clusters of recorded archaeological sites relating to Māori and early European settlement. A number of archaeological sites were identified by these surveys within or close to the proposed designation. However, we would not expect similar densities of sites in other parts of the Project area that have not been surveyed, because conditions would have been less favourable for early settlement over much of the Project area, being well away from the coast and navigable waterways.

4.1 Māori history

The proposed designation transects two significant areas of traditional Māori occupation – Kaipara and Mahurangi. Several tribes and sub-tribes claim affiliation with the land in these districts and today the mana whenua of the area are Ngati Manuhiri, Ngati Mauku/Ngati Kauwae, Ngati Rango and Ngati Whatua (Hōkai Nuku Cultural Effects Assessment Report).

The tribes of Ngati Whatua descend from the ancestor Tuputupuwhenua, and are affiliated with the Mahuhu-ki-te-rangi canoe which landed between the Hokianga and Kaipara Harbour. By the mid-18th century, the southerly expansion of Ngati Whatua tribes had extended the boundaries of the confederation from the Hokianga to Tamaki (Auckland) (NZMCH 2006: 196-197).

Control of the northern Kaipara and parts of the eastern inland region, including Wellsford, was claimed by Te Uri-O-Hau (Ngati Whatua), led by Haumoewharangi, whose son Rongo and his descendants established Ngati Rongo on the north-eastern Kaipara Harbour (NZMCH 2006: 198). Although conflict occurred with other groups, close relationships were largely maintained between the Ngati Whatua tribes, with tracks and portage routes between the west and east coasts providing effective means of communication. Inter-marriage was also used to secure peace, notably in the marriage of Moerangaranga (daughter of Rongo) and Ngawhetu (of Te Kawerau), which forged important links between Ngati Rongo and Te Kawerau of the Mahurangi.

Te Kawerau descended from Ngati Awa, who migrated north from Kawhia in the early to mid-17th century. Led by Maki, Te Kawerau occupied Auckland before expanding as far north as Te Arai

Point. Maki occupied the Mahurangi for a time before continuing further north, leaving his son Ngawhetu behind to claim control of the land between Whangaparaoa and Pūhoi. The descendants of Ngawhetu and Moerangaranga remained in the Mahurangi, and by the time of European arrival were known variously as Te Kawerau and Ngati Rongo (Mackintosh 2005: 2).

Māori in the Kaipara and Mahurangi districts did not occupy permanent year round settlement sites, but moved between their kainga (villages) in accordance with the seasons. The east and west coastal boundaries provided abundant marine resources, while the inland forest supplied Māori with hunting and resource gathering opportunities. Rivers such as Pūhoi and Mahurangi supplied plentiful fresh water, and sandy soils near coastal areas were highly suited to kumara cultivation (Murdoch 1992; Pearson Architects 2003: 11).

Competition for control of one of the most highly prized resources of the Mahurangi – the muru or small spotted shark, which could be dried and used as a winter food source – led to protracted conflict between Te Kawerau and Hauraki tribes in the 1700s. Known as the Marutuahu confederation, these Hauraki tribes comprised Ngati Paoa, Ngati Whanaunga, Ngati Maru and Ngati Tamatera. Battles continued intermittently throughout the 18th century, with Marutuahu eventually gaining permanent control of the fishing grounds. (Murdoch 1992).

Further warfare occurred in the 1820s and 1830s when raiding Ngapuhi from the north, armed with muskets, launched a series of attacks throughout the tribal territories of Ngati Whatua. Māori of the Kaipara and Mahurangi, armed only with traditional hand combat weapons such as mere and taiaha, were swiftly defeated. Most fled the invasion, leaving the region virtually deserted for several years. (Murdoch 1992).

By the late 1830s small numbers of Ngati Whatua began to return to their traditional occupation areas in the Kaipara and Mahurangi, eventually re-establishing themselves in the districts. Te Kawerau/Ngati Rongo Māori of the Mahurangi were now under the leadership of Te Hemara Tauhia. They settled north of Wenderholm, at Te Muri, where a kainga (village), large gardens and an orchard were established (Mackintosh 2005: 4-5).

Te Hemara Tauhia was baptised *Te Hemara* after the CMS Missionary James Hamlin. He died in October 1891 and was taken for burial at Te Rurunga on the eastern shores of the Kaipara. Te Hemara Tauhia laid claim to three primary land blocks – Te Akeake, Maungatauhoro and Pūhoi (see below) (Hōkai Nuku Cultural Effects Assessment Report: section 3.1). Descent formed the means of the claims from Haumoewarangi to Rongo, and in particular the union between Moerangaranga and Ngawhetu of Kawerau. The couple lived in the Kaipara, Waiwera and Pūhoi river valley (Hōkai Nuku Cultural Effects Assessment Report: section 3.1).

4.2 European purchase

Missionaries and sawyers began appearing in the Kaipara and Mahurangi districts by the early 1830s and, with the arrival of Europeans, Ngati Whatua tribes came under increasing pressure to relinquish land (Mackintosh 2005: 5). Although several Ngati Whatua chiefs signed the Treaty of Waitangi in 1840, including Te Roha from Te Uri-O-Hau, large tracts of land were lost through Crown purchases, pre-1840 claims and Native Land Court proceedings (NZMCH 2006: 199).

Further pressure was placed on Ngati Whatua land after the decision by Governor Hobson to relocate the colonial capital southwards from the Bay of Islands shortly after the signing of the Treaty of Waitangi. Hobson ordered his Surveyor General, Felton Mathew, to investigate every inlet from the Bay of Islands to the Firth of Thames, including the Mahurangi River, which was surveyed in June 1840. In Mathew's report of the Mahurangi he noted that:

...it would be highly desirable that the Government should obtain possession of this harbour and a considerable portion of the surrounding country. A settlement once formed here, would I have no doubt, rapidly attain a very flourishing condition. Several Europeans lay claim, I believe, to this portion of the country, but their titles, I am informed, are of no value. And even among the native chiefs a dispute exists to the right of ownership. The government should therefore have no difficulty in taking possession of it. I did not see the slightest trace of native inhabitants during the time I was in the place (Locker 2001: 61-2).

When the Tamaki isthmus was chosen as the site of the new capital, land in the Mahurangi became even more essential to the Crown, as it was now one of the main gateways to Auckland (Rigby 1998: 11).

On 13 April 1841, the Crown acquired its first large tract of land in the area, known as the Mahurangi Purchase. This included the Mahurangi and Omaha Block (Deed No. 192) comprising 100,000 acres, 'more or less', with boundaries stretching from Takapuna in the south to Te Arai Point in the north (Locker 2001: 64). The land was not obtained from Ngati Whatua, but from Hauraki tribes who claimed ancestral control of the area from the 18th century. The Mahurangi Purchase made Ngati Rongo theoretically landless, and the sale was therefore disputed by their chief Te Hemara Tauhia before it was finalised. Te Hemara appealed for the return of Mahurangi to Ngati Rongo, in particular Te Pūhoi (Mackintosh 2005: 6).

In 1853 the Pūhoi (or Te Hemara) Reserve was granted to Ngati Rongo, the boundaries of which ran 'from the south shore of the Pukapuka to Waiwera, and inland to the western boundary of the [Mahurangi] Purchase' (Locker 2001: 80). In 1866 the title to this reserve was granted to Ngati Rongo at a Native Land Court hearing. The Pūhoi Reserve was eventually surveyed into ten blocks, with Te Hemara retaining the titles to Maungatauhoro (70 acres), Orokaraka (8 acres) and Pūhoi (2537 acres) (Mackintosh 2005: 6).

Following the final settlement of claims against the Mahurangi Purchase in 1853, surveying and land sales in the district continued. Ngati Whatua tribes were among the signatories of several large land purchases by the Crown, including: the Ahuroa–Kourawhero Block (Deed 201) on 22 June 1854 for £1200; the Wainui Block (Deed 200) on 22 June 1854 for a first instalment of £600, with a final payment of £200 made on 22 January 1855; the Komokoriki No. 1 Block (Deed 203) on 29 September 1862 for £3,500 and the Komokoriki No. 2 Block (Deed 204) on 4 November 1862 for £39-10 (Locker 2001: 81) (Figure 3).

Across the western boundary of the Mahurangi Purchase line, Te Uri-O-Hau negotiated the sale of the Oruawharo Block No. 1 (Deed 161) on 27 January 1860 for £500 and the Oruawharo Block No. 2 on 2 February 1860 for £700 (Turton 1877: 212-213). Within the Oruawharo Blocks the Paraheke Native Reserve, which was waahi tapu, was set aside. Ngati Whatua were also involved in the protracted sale of the Hoteo Block, which was eventually sold to the Crown in 1868, with a total

purchase price estimated to have been over £10,000, which was paid out in instalments (Goldsmith 2003: 62) (Figure 4).

4.3 Pūhoi

Pūhoi (meaning 'slow water') was established within the eastern extremity of the Komokoriki Block, which had been sold to the Crown in 1862. The 395 acre Komokoriki No. 2 Block (Deed 204) became the Pūhoi village reserve, and is now the location of the Pūhoi Historic Village. Pūhoi was gazetted as a 'German Special Settlement' of 10,000 acres in January 1863, under the provisions of the Auckland Waste Lands Act of 1858. This Act guaranteed 40 acres of land to every adult, and 20 acres for every child over 5 years, provided they paid the cost of their own passage to New Zealand (Rigby 1998: 67-69; Scott 2007: 24). The first settlers to Pūhoi arrived in June 1863 from Bohemia, a province in the northern part of the former Austro-Hungarian Empire (Eghalanda Association 1984: 1). Ngati Rongo transported the settlers along the Pūhoi River to the settlement site where they had erected two nikau whares, each 20ft by 10ft (6.1 x 3m). Further Bohemian groups arrived in the area in 1866, 1872 and 1873. Some of these later settlers were allocated land in the adjacent Ahuroa Block, under the Homestead Act (Scott 2007: 19-21).

Early pioneering industry in Pūhoi was dominated by the timber trade, as settlers attempted to clear their 40 acres of dense bush and forest trees. Pūhoi villagers had ready access to kauri, rimu, totara and puriri, which were made into house-blocks, palings and shingles, wharf piles, fencing posts and railway sleepers, most of which was shipped to the burgeoning Auckland market. Wood was also used for furniture manufacture, firewood and burned for charcoal. Subsistence farming on cleared land was also vital to early Pūhoi residents. By December 1869 the *Weekly News* reported that settlers had 600 acres of land under cultivation with some 200 head of cattle (Scott 2007: 37-39). The first sheep were introduced in the 1870s, and by 1895 the *New Zealand Gazette* listed over 100 sheep on 13 Pūhoi farms (Mabbett 1977: 275-276).

Limited transportation and communication links to Pūhoi restricted the amount of incoming resources to early settlers. In 1869 the Government authorised the construction of a road through Pūhoi, which provided regular employment for many men in the district. The Pūhoi Road Board was established in 1873. The Board initiated several projects including building culverts, bridge repairs and the construction of two new roads (Straka's Road and Paul's Road) within its first year. The Board was also instrumental in the founding of Pūhoi's first Post Office in 1874. By 1876 a section of the Great North Road through Pūhoi had been completed, and the steamship *Tam o' Shanter* (for which a wharf and wharf shed were provided in 1877) became the first regular vessel to stop at the village, both supplying Pūhoi with regular traffic and trade (Scott 2007: 32, 34-35).

Further development continued in 1876 with the opening of a general store, boarding house and hotel by brothers John and Vincent Schischka. The first liquor license in Pūhoi had been obtained by an Irishman named Meaney in 1873, who converted his four roomed shanty into a saloon, but was forced to abandon the venture due to competition from John Schollum, who established the German Hotel. This was followed by the Pūhoi Hotel, which was opened by Vincent Schischka in 1879 (Mooney 1963: 55). By 1881 the Catholic church of Saints Peter and Paul had been opened, and in 1884 a state school (replacing an earlier building dated 1872) was erected along with a School House. The Pūhoi Town Hall followed in 1900 (Turnwald 1993: 2-4). By the turn of the century dairy farming in Pūhoi had experienced rapid growth. The opening of the nearby Glyn Dairy Factory in 1910 sustained development, and by the 1920s dairying had become Pūhoi's

foremost industry (Scott 2007: 40).

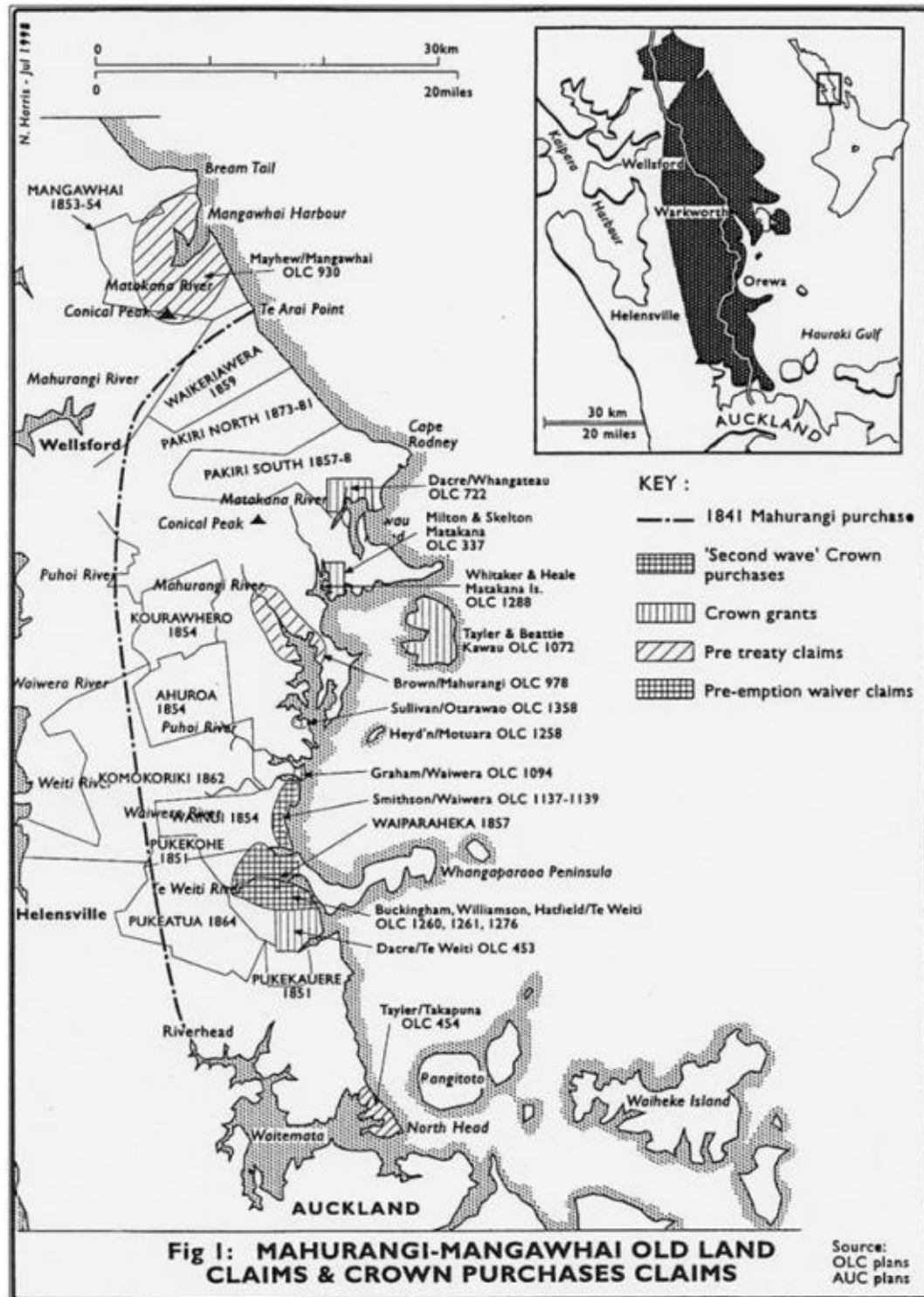


Figure 3: Plan showing land claims and Crown purchases in the Mahurangi (source: Rigby 1998: 3)

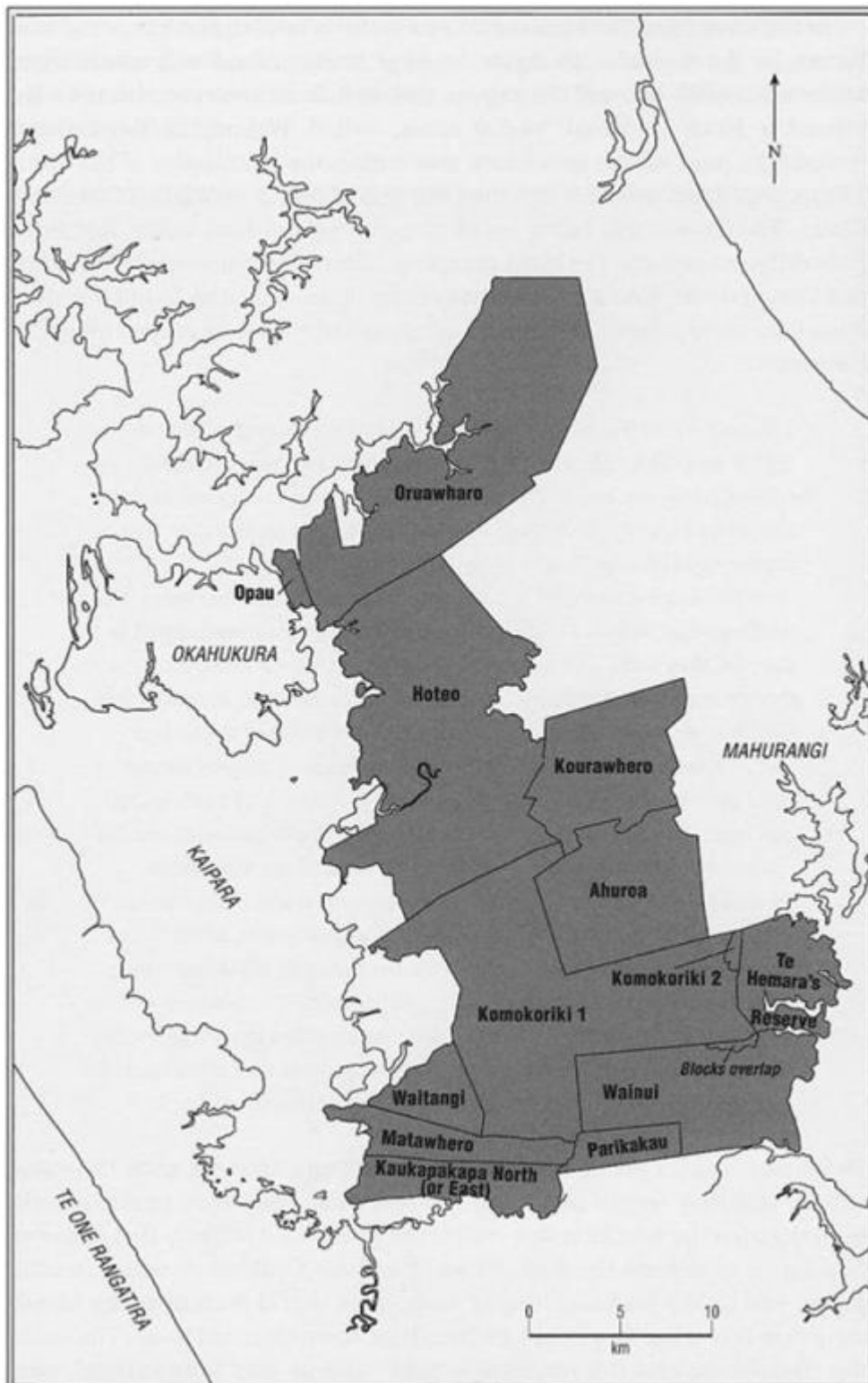


Figure 4: Plan showing Crown purchases in the Mahurangi and Kaipara (source: Goldsmith 2003: 36)

4.4 Titford House and Cottage

We carried out more detailed research relating to two buildings known as Titford House and Titford Cottage that are located within the proposed designation boundary (see Section 5), to establish their history and date of construction. These buildings are situated on Pt Lot 1, Pt Section 8, Block III of the Waiwera Survey District. Section 8, which originally comprised 117 acres, was acquired by Gregor Wenzlick, a settler, on 4 November 1886; his land is visible on an undated plan.² Wenzlick had immigrated to New Zealand from the village of Litice (now part of the Czech Republic) in 1865. Following his arrival he settled in Thames before moving to Pūhoi to join family members around 1880. It is unknown whether Wenzlick constructed any buildings on his land; however he is known to have worked as a carpenter at Pūhoi and was employed as a builder on the first Hotel and Spa at Waiwera.³ CHI records for Titford Cottage note that it was made from the timbers of the 'very old Titford house (gone) originally further uphill on the site.'⁴ This earlier building may have been constructed by Wenzlick, but further historic research would be needed to verify this.

On 7 March 1902, Section 8 was transferred to Mary Titford (née Schollum), wife of James Titford.⁵ Mary and James were both descendants of well-known Bohemian settlers in Pūhoi, and when they married in 1891 around 800 people attended the ceremony.⁶ By the time Mary purchased Section 8, Block III, the couple had four children - John William, Frederick James, James Charles Leo and Gustave Frances.⁷ James Titford Snr worked as a farmer and was later publican of the Pūhoi Hotel.⁸ It seems likely that the construction of Titford Cottage on Section 8 was undertaken shortly after the purchase of the land by Mary Titford in 1902.

Titford House was also constructed on the property in the 20th century. A valuation of the property dated 1940 stated that the house was constructed of wood with an iron roof and was approximately 20 years old. A later insurance assessment dated 1947 noted the existence of more than seven buildings on the property including Titford House, which comprised five rooms and conveniences, and the old Titford Cottage, which was used as a workshop. An accompanying handwritten letter, also dated 1947, detailed that the age of the house was 30 years and that the cottage was floored but not lined.⁹ A newspaper article from 2009 recorded an interview with Maureen Straka (née Titford), who was born in Titford House in 1924 and recalled that her parents James and Elizabeth had built the house shortly after they were married.¹⁰ James Charles Leo Titford, a saddler, and Elizabeth Mary Christina Turnwald were married in 1918 and had four

² NA 50/186, LINZ.

³ The Wenzlick family of New Zealand website, see: <https://sites.google.com/site/wenzlickfamilyofnewzealand/Home>.

⁴ CHI Record No. 16252.

⁵ NA 50/186, LINZ.

⁶ *Observer*, 14 February 1891, p.17.

⁷ BDM 1891/12473, BDM 1893/6310, BDM 1894/12659, BDM 1900/6056.

⁸ *New Zealand Herald*, 11 June 1910, p.5.

⁹ BBAE A2 5632 Box 777 q, Application for consent to sale – James Charles Titford to Allan A Stanaway, 1947, Archives New Zealand.

¹⁰ *Rodney Times*, 20 January 2009, np.

children – Evelyn, Philip, Maureen and Rona.¹¹ Given the dates proposed by the historical sources the likely date range of construction for Titford House is between 1918 and 1920.

Section 8 was eventually conveyed to James Charles Leo Titford by his mother Mary Titford in 1927.¹² James retained ownership of the land until 1947 when it was conveyed to Allan Archibald Stanaway, a farmer.¹³ The land was subsequently divided; however Pt Lot 1, Pt Section 8 on which the two buildings stand remained under the ownership of the Stanaway family until the present day.¹⁴

4.5 Warkworth

In 1840 the Surveyor-General, Felton Mathew, sailed up the Mahurangi Harbour with the intent of investigating the suitability of the land for settlement and industry. Mathew's report noted:

Brick earth is abundant, and the forest in every direction presents a profusion of timber for building, almost entirely Kowdie [sic] [Kauri]. The river is perfectly adapted for navigation by steamers or small vessels; and the harbour forming the depot for shipping being at so short a distance I consider the spot I have described as being most admirably adapted for the formation of a town (Locker 2001: 62).

The opportunities of the timber trade had already attracted a few Europeans to the area. From the late 1820s, camps of up to 300 seamen had been employed cutting and dressing spars for the Royal Navy, and a spar station at the Mahurangi Heads had been established by Captain Ranulph Dacre and Gordon Davies Browne in 1832 (Keys 1954: 18, 23).

Following the Mahurangi Purchase of 1841, it would be a decade before surveying was completed and land offered for sale to settlers along the Mahurangi River. In the interim, the Crown sought revenue from the land by issuing timber licenses (to cut wood or firewood) at £5 a year. One of the first licenses issued was to John Anderson Brown in 1844 (Locker 2001: 66). Brown had lived in the Mahurangi as a squatter since 1843, and by the following year had constructed a dam, water-race and mill along the left bank of the Mahurangi River (Keys 1954: 32). This was the first water-powered timber mill in the district, and for a time the area was known as 'Brown's Mill'.

In 1853 Brown purchased 153 acres of land situated between the River and the proposed Great North road for £68 17s (Keys 1954: 35). Brown renamed the area Warkworth, and by 1854 quarter acre Lots were advertised at £6-15 each (Locker 2001: 75). Settlement progressed at a slow rate, and by 1864 those town Lots that had not been sold were put up for public auction.

The Mahurangi Library and the Mahurangi Post Office were opened in 1859, with Brown appointed as Postmaster. Brown was also elected chairman of the Mahurangi Highway Board in 1863, the same year in which the first Mahurangi School was established. Local industry expanded with the development of Henry Palmer's flour mill, which was in operation on the right side of the river by 1868, and the manufacture of lime for which Warkworth would become renowned (Keys 1954: 41-42).

¹¹ BDM 1918/4627, *Rodney Times*, 20 January 2009, np.

¹² NA 462/204, LINZ & NA 488/105, LINZ.

¹³ NA 488/105, LINZ.

¹⁴ NA 20d/1469, LINZ.

John Sullivan was the first to begin lime production in Warkworth as early as 1849, with Combes and Daldy advertising lime for sale in the *Southern Cross* by 1850. The first lime-works were in operation by the 1850s, and were situated near Brown's Mill on the right bank of the Mahurangi river. A second lime production site, down river from Warkworth, was acquired in 1857 by John Southgate who built a hotel and several lime kilns on the land. Southgate sold to Nathaniel Wilson in 1864, who continued manufacturing lime on the site, eventually establishing the Wilsons Cement Works in 1884. The company was credited with being the first producer of Portland cement in New Zealand and the Southern Hemisphere, and was responsible for the material used to construct the Warkworth Bridge in 1899 (Pearson Architects 2005: 9-12).

4.6 World War II US Military Camps

Several United States military camps were located throughout the wider Warkworth area during World War II. American forces stationed at these camps comprised elements of the 3rd Marine Corps Division, the 25th Infantry Division, and the 43rd Infantry Division (Figure 5 and Figure 6). The first division to establish camps in the area was the 43rd, which arrived in October 1942. The division remained for only a few weeks but later returned in March 1944. Elements of the 3rd Marine Corps Division, including the 21st Regiment, 12th Artillery Regiment and 3rd Tank Battalion, were stationed in Warkworth for several months from March 1943. Last to arrive in the area was the 25th Infantry Division, which occupied camps from December 1943 to February 1944 (Bioletti 1989: 27-29).

Most US military camps in the area consisted of several native timber 'two-and four-men huts' (Figure 7, Figure 8). These were mostly constructed with louvre windows (Bioletti 1989: 111). Khaki pyramidal tents were also erected in some camps, and were fitted with wooden floors and pot-belly stoves (Bioletti 1989: 131). Wells were dug by troops at certain farm camps to provide fresh water sources, some of which are still in use today (John Wynyard, local landowner, pers. comm.).

By 4 August 1944 the Evening Post reported that a group of the Warkworth army camps had been handed over by the New Zealand Army to the War Assets Realisation Board. The article noted:

The camps are built to the usual New Zealand Army pattern, and consist largely of prefabricated huts and various auxiliary buildings, including stores, kitchens, mess-rooms, and drying rooms... The camps which have now been vacated by the New Zealand Army provided accommodation for many thousands of soldiers. The Warkworth group alone had room for about 5000 (Evening Post, 4 August 1944: 5).

Detailed layouts of the camps in the Warkworth area are shown on a series of military plans dated September 1943. These plans record the positions of various personnel and ancillary buildings as well as services such as water supply, drains and power lines, and notable other buildings and roads in the immediate surrounds of the camps. We located the original copies of these plans within the records held by Archives New Zealand. Plans of some of the more relevant (to the Project) camp sites are presented in Figure 9 through Figure 16 below.¹⁵

¹⁵ Note that the camps located near Wyllie Road were known as Wyllies [sic] Road Camps D1, D2, E, F and G. The correct historical spelling is used in this Report when referring to the camps.

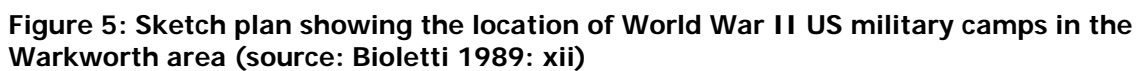




Figure 7: A photo by Tudor Collins showing a typical US military camp with two- and four- men huts. SH1 heading north to Wellsford is visible in the photo (source: Bioletti 1989: 27)



Figure 8: Photograph facing south showing Wyllies Road Camps D1 and D2, with Camp G in background. Intersection of Wyllie and Woodcocks Roads present on right of image below hedge line. Date unknown but must be between October 1942 and August 1944 (source: Warkworth and District Museum Archive)

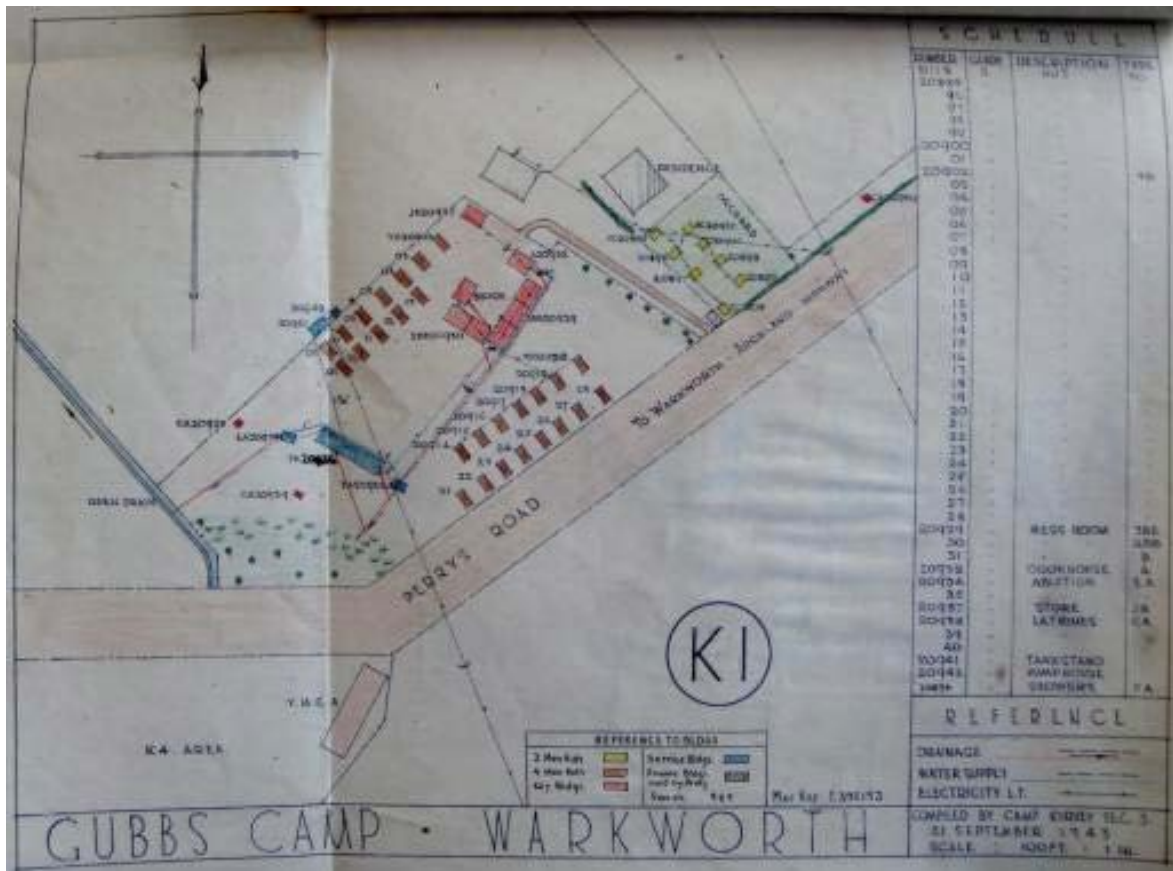


Figure 9: Plan detailing the layout of Gubbs Camp K1, situated along Perry Road (source: Archives New Zealand, ACIO 8722 6/ 79/1)

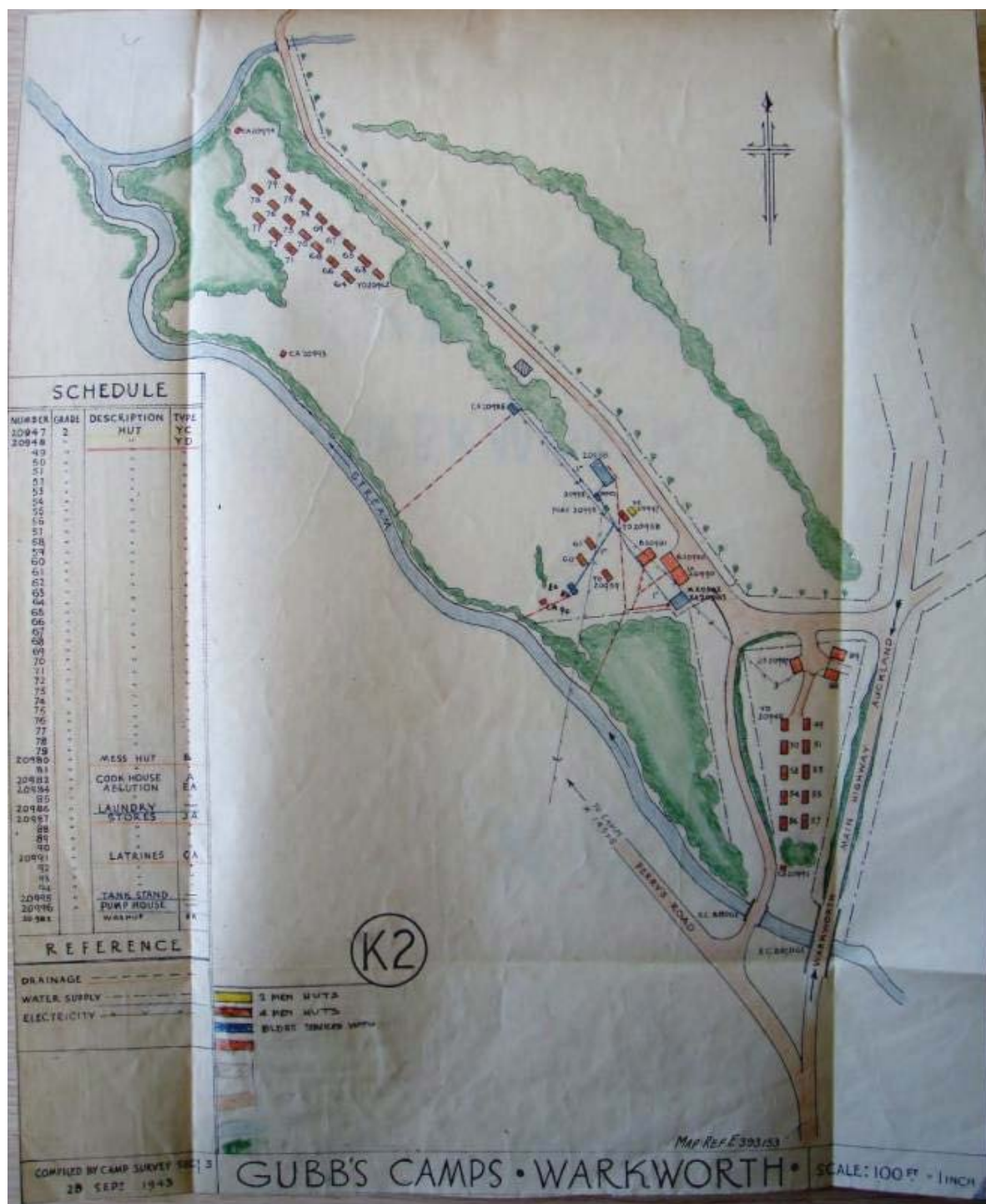


Figure 10: Plan detailing the layout of Gubbs Camp K2, situated along Perry and Twin Stream Roads (source: Archives New Zealand, ACIO 8722 6/ 79/2)

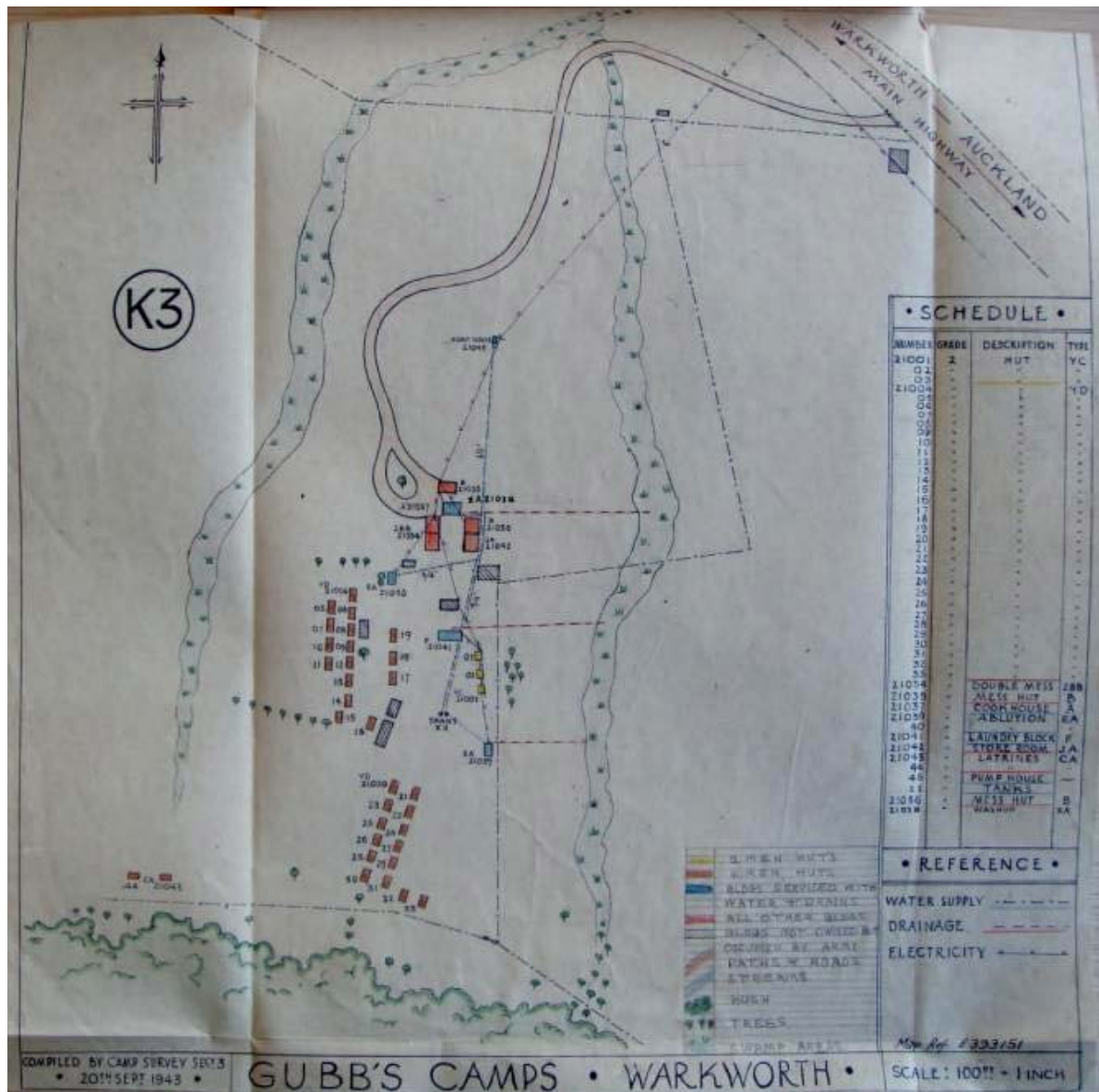


Figure 11: Plan detailing the layout of Gubbs Camp K3, situated along SH1 (source: Archives New Zealand, ACIO 8722 6/ 79/3)

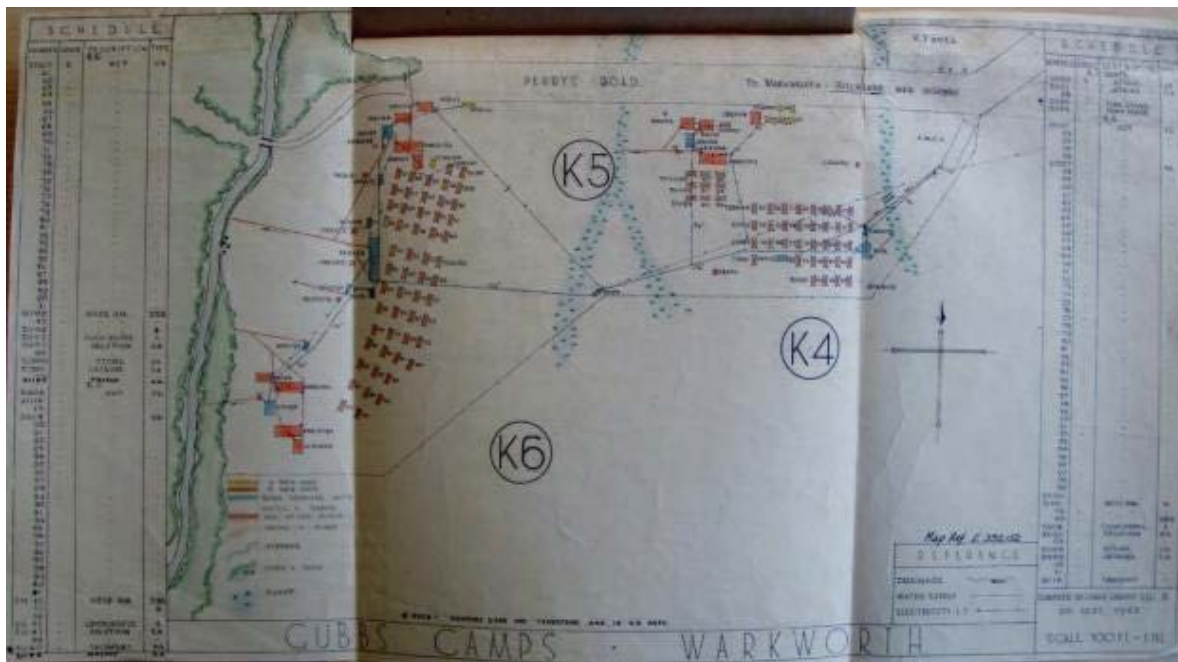


Figure 12: Plan detailing the layout of Gubbs Camps K4, K5 and K6, situated along Perry Road (source: Archives New Zealand, ACIO 8722, 6/ 79/4)

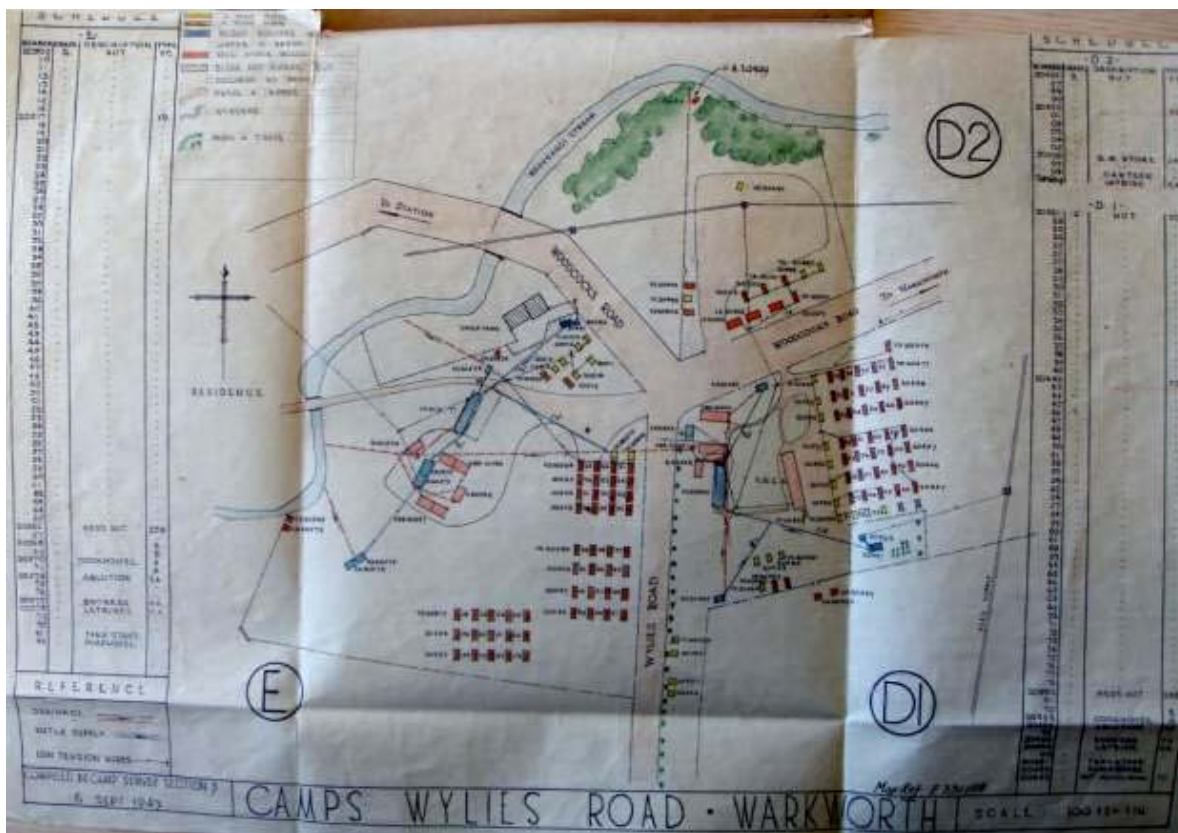


Figure 13: Plan detailing the layout of Wylies Road Camps D1, D2, and E, situated near the intersection of Wylie and Woodcocks Roads (source: Archives New Zealand, ACIO 8722, 6/ 73)

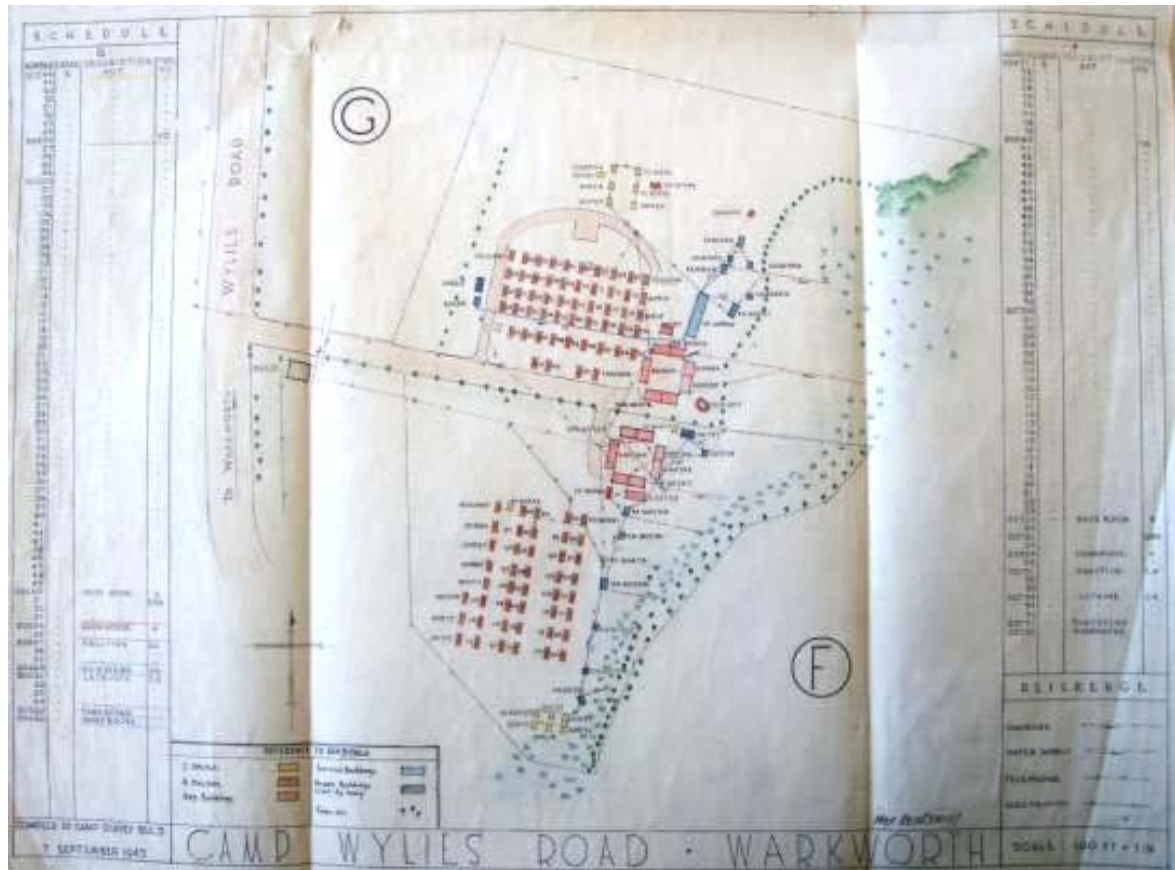


Figure 14: Plan detailing the layout of Wylies Road Camps F and G, situated along Wylie Road (source: Archives New Zealand, ACIO 8722 6/ 75)

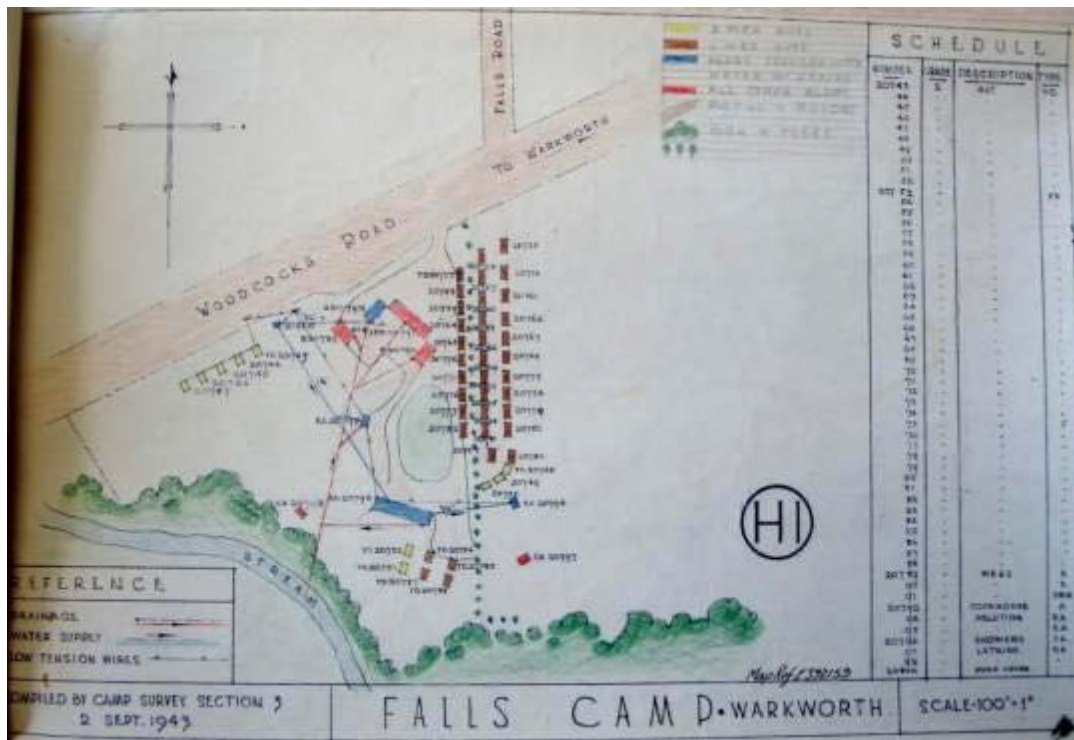


Figure 15: Plan detailing the layout of Falls Camp H1, situated along Woodcocks Road (source: Archives New Zealand, ACIO 8722 6/ 77/1)

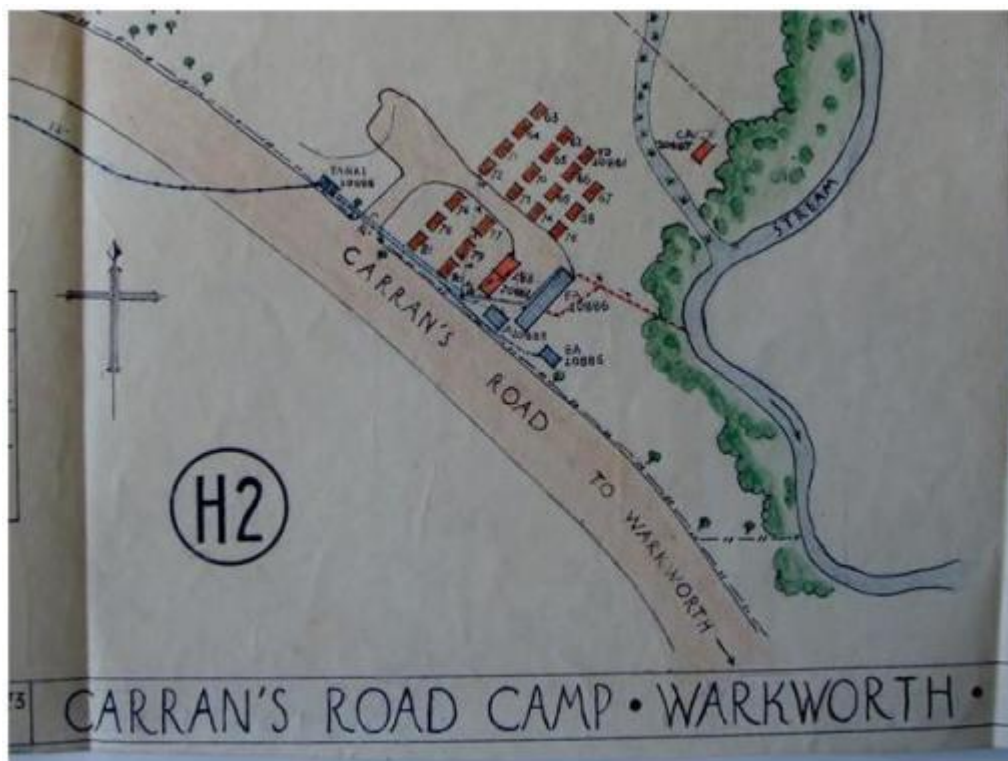


Figure 16: Plan detailing the layout of Carran Road Camp H2, situated along Carran Road (source: Archives New Zealand, ACIO 8722 6/ 77/2)

4.7 Archaeological background

As Figure 1 above shows, the majority of the Project area had not been archaeologically surveyed prior to our investigations. While the Auckland Council bibliographic Cultural Heritage Inventory (CHI) database does not include all areas recently surveyed, any survey areas not included in the database are likely to be small scale surveys carried out for resource consent purposes.

The following relevant surveys are recorded within the CHI Database:

- Beca Carter Hollings and Ferner Limited (1992) examined a number of route options associated with the realignment of SH1. Beca examined the area between Orewa and the Johnstone's Hill tunnels. A total of 11 new archaeological sites were identified, but 10 of those are south of Johnstone's Hill. The one site to the north (NZAA site no. R10/727) is situated nearly 200m to the west of the centreline of the indicative alignment;
- Harlow (1998) examined a large block of land situated along Falls Road. The European ownership of this land was noted to have dated from a Crown Grant made in 1852, although the date of the earliest occupation is not known. No archaeological sites were identified during the survey;
- Foster (1999) examined the Stanaway property to the west of SH1 at the southern end of the indicative alignment. As part of the works associated with the Northern Gateway Toll Road (NGTR, then called ALPURT B2) it was proposed to fill a steep gully with surplus material. This assessment did not find any new archaeological sites; and
- Prince (2004) surveyed a large block of land (Part Section 3 and 12 of Block III Waiwera) as part of a proposed residential development. The land is situated west of SH1 and south of Pūhoi Road. This survey identified six previously unrecorded archaeological sites, of which two (CHI 15857 = NZAA site no. R10/1106 and CHI 15872 = R10/1107) are within the indicative alignment. The remaining four are situated within 200m of the centreline of the indicative alignment, but outside the proposed designation boundary.

Areas not shown as having been surveyed in the CHI Database (Figure 1) include the following surveys carried out by Clough & Associates along or close to the indicative alignment:

- Clough (2006) examined a large block of land bordered by Pūhoi in the south, Ahuroa Road in the west, Moir Hill in the north and SH1 in the east. This report noted the potential for unrecorded sites in the area, particularly in areas close to Pūhoi. However, a survey of proposed house Lots high on the ridges found no new sites;
- Farley and Clough (2004) assessed the proposed installation of a cell tower near the western end of Schollums Access Road, but found no archaeological sites;
- Farley and Clough (2007) examined a property on the northern side of Woodcocks Road, Warkworth, but did not identify any archaeological sites;
- Farley and Clough (2009) examined a property situated back from the intersection of Woodcocks Road and Mason Heights, Warkworth. This assessment found no archaeological sites; and

- Judge and Clough (2009) examined an area of land on the western side of the intersection between SH1 and Hudson Road. No archaeological sites were identified.

Other unpublished surveys will have been carried out within the Project area. If any archaeological sites were identified by archaeologists, we would expect these to have been recorded on the NZAA and/or Auckland Council CHI databases that we have reviewed.

Within the Project area, surveys have clustered around Pūhoi and Warkworth and correlate with the known clusters of recorded archaeological sites. However, similar densities of sites would not necessarily be expected in other parts of the Project that have not been surveyed, as Māori and early European settlement sites are predominantly located in reasonable proximity to coastal areas and navigable waterways, while much of the Project is well removed from such locations.

A number of archaeological sites have been recorded along and in proximity to the indicative alignment as a result of the previous surveys carried out in the area (see following section).

5. Existing environment

Twenty-four historic heritage sites, including one new site identified during the field survey, are located within or near the proposed designation boundary. These include archaeological sites, heritage buildings, and other sites of 20th century heritage significance, including a related group of eight World War II US military camp sites in the Perry Road and Carran Road Sectors. These are listed in Table 1.

Of the sites identified, nine are located within the proposed designation boundary, the majority (seven) in the Pūhoi Sector and two in the Perry Road Sector. These are listed in Table 1 and Table 3 and their locations are shown in Figure 17 to Figure 21 and Figure 23 to Figure 24.

At the southern end of the Pūhoi sector, three sites are located within the Stanaway property overlooking the existing route of SH1 just to the north of the Johnstone's Hill tunnels: Titford Cottage (CHI No: 16252), Titford House (CHI 16248) and Te Pā o Te Hēmara Tauhia (CHI 12063 = R10/921). However, this property could not be accessed to assess the current status of the sites.

Te Pā o Te Hēmara Tauhia, located just outside the indicative alignment, is described as being partly destroyed where cut through by SH1, and modified by 19th and 20th century development, including by infilling of the defensive ditch. Outside the pa (defined as the area within and including the defensive ditch), other areas of midden have been reported.

Titford House is also located just outside the indicative alignment, while Titford Cottage falls within it. Historic research has established that Titford Cottage was probably built around 1902 and Titford House between 1918 and 1920.

To the north of Okahu Creek, near Billing Road on the Straka property, partly within the proposed designation but outside the indicative alignment, a previously unrecorded pa site was identified during field survey in 2013, and has now been recorded as R10/1369. The pa is small (43m E-W, c.30m N-S), and located on a small ridge spur which continues to the northeast down to the river. It has a 17m long transverse ditch oriented north–south situated on the westerly approach, and another remnant wider ditch oriented east–west along the northern side of a platform forming the top of the pa. It is associated with a large (c.50m) natural terrace that would have been suitable for cultivation, midden and possible pit features. Like Te Pā o Te Hēmara Tauhia (R10/921) south of the creek, this pa would have had a commanding view of the lower Pūhoi River, and would also have had views to the north. Both sites would have provided defensible locations from which movement along the river and smaller streams and estuaries could be observed. They are now collectively referred to by Hōkai Nuku as Ngā Pā o Te Hēmara Tauhia.

Slightly to the north of the newly rediscovered pa (R10/1369), and probably associated with it, two shell midden sites, CHI 15857 = R10/1106 and CHI 15872 = R10/1107, are located within the indicative alignment. The former, located approximately 80m west of SH1, consists of a 35m x 5m platform around which four midden deposits have been recorded. The latter, located about 200m west of SH1, consists of a 15m x 8m platform with midden spread around its front scarp. Descending from the platform to the watercourse below is a historic period log skid that has been recorded as part of the same site.

The seventh site within the Pūhoi Sector is an unnamed historic building (CHI 16249) associated with the Schollum family, located close to SH1 and immediately adjacent to the indicative alignment. Initial historic research has suggested a tentative date of 1906 for the construction of this building, and also indicates occupation on the property dating back at least as early as 1891, which suggests potential for 19th century archaeological remains in the vicinity.

The two sites in the Perry Road sector are World War II US military camp sites, known as Wylies Road Camp E (CHI 17006) and Wylies Road Camps F and G (CHI 17007). Both fall within the indicative alignment. Of these only Camp E could be inspected. We noted fragments of concrete with water rolled pebble inclusions that are likely to have been utilised in camp structures, such as ablution blocks and kitchens and probably as general foundations. Inspection of two other camps near the proposed designation revealed similar material, and it is likely that Wylies Road Camps F and G also contain such remains.

The possibility that unidentified subsurface archaeological sites may be present within the proposed designation boundary can never be completely excluded but is unlikely over most of the Project area. There are no known heritage sites within or near the proposed designation boundary in the Hungry Creek, Schedewys Hill or Moirs Hill Road Sectors, and very little potential for any unidentified subsurface archaeological sites to be present. Some field survey was carried out in the Hungry Creek Sector on the Fernbrook Farm property, but no heritage sites were identified, and we did not consider it necessary to carry out any survey in the Schedewys Hill or Moirs Hill Road Sectors.

5.1 The indicative alignment

The Project extends from the existing motorway at the Johnstone's Hill tunnels north to the Carran Road area, terminating at the Warkworth access. The indicative alignment runs roughly parallel to, and on the western side of, SH1 through the Pūhoi and Hungry Creek Sectors. The indicative alignment begins to diverge significantly from the existing highway just to the south of Mahurangi West Road in the northern part of the Hungry Creek Sector.

The indicative alignment then curves to the northwest in the Schedewys Hill Sector, into forested blocks, crossing Moirs Hill Road into the Moirs Hill Road Sector and a forestry access road before changing to a more northerly course. This course continues through the Moirs Hill Road Sector and southern part of the Perry Road Sector until the northern end of Lot 8 DP 113848, south of Perry Road, where the indicative alignment swings to the west and runs west of the Genesis Aquaculture facility. The indicative alignment continues in a northerly direction down through the river valley, west of the right branch of the Mahurangi River and east of Wyllie Road, before turning westward

within Lot 1 DP 587. The indicative alignment then crosses Wyllie Road, then Woodcocks Road into the Carran Road Sector. From this point the indicative alignment curves back to the east before connecting with the existing alignment of SH1.

Twenty-four heritage sites (including a new site identified during our field survey) have been recorded within or near the designation boundary (Table 1). These include archaeological sites, heritage buildings, and other sites of 20th century heritage significance. We have based the condition descriptions in Table 1 either on recent field assessments, where we visited sites during our assessment, or on information from site records for sites that we did not visit. The sites are described below by Sector.

Table 1: Heritage sites identified within or near the designation boundary. Those within the designation boundary are shaded

CHI No.	NZAA No.	Easting	Northing	Site Type	Site Name	Category	Visited	Condition	Relationship with proposed designation boundary
Pūhoi Sector									
996	N/A	1749788	5957282	Wharf/shed	Pūhoi Wharf	Maritime site	N	Extant reasonable/good condition	Outside designation boundary
10786	R10/727	1749891	5955983	Midden/Terrace	N/A	Archaeological Site	N	Extant, fair condition	Outside designation boundary
10801	R10/766	1749688	5957282	Midden	N/A	Archaeological Site	N	Extant, fair condition	Outside designation boundary
13394	R10/1026	1749282	5957865	Midden	N/A	Archaeological Site	N	Extant? Good condition	Outside designation boundary
15849	R10/1102	1749338	5957341	Midden/?Terrace/?Pit	N/A	Archaeological Site	N	Extant, reasonable/good condition	Outside designation boundary
15850	R10/1103	1749258	5957351	Terrace/Midden	N/A	Archaeological Site	N	Extant, reasonable/good condition	Outside designation boundary
15869	R10/1104	1749258	5957211	Midden	N/A	Archaeological Site	N	Extant, poor condition	Outside designation boundary
15856	R10/1105	1749308	5957201	House Site		Archaeological Site	N	Extant, largely subsurface remains only,	Outside designation boundary

CHI No.	NZAA No.	Easting	Northing	Site Type	Site Name	Category	Visited	Condition	Relationship with proposed designation boundary
								fair condition	
16252	N/A	1750117	5955967	Historic Building	Titford Cottage	Historic Structure	N	Extant but details unknown	Within designation boundary
16248	N/A	1750131	5955993	Historic Building	Titford House	Historic Structure	N	Extant but details unknown	Within designation boundary
12063	R10/921	1750124	5956006	Pa	Te s Pā o Te Hēmara Tauhia	Archaeological Site	N	Extant but details unknown	Within designation boundary
15872	R10/1107	1749912	5956535	Midden / Platform and Historic log skid	N/A	Archaeological Site	Y	Extant good condition	Within designation boundary
15857	R10/1106	1749899	5956793	Midden / Platform	N/A	Archaeological Site	Y	Extant good condition	Within designation boundary
16249	N/A	1749337	5957627	Historic Building ('Schollum house')	N/A	Historic Structure	Y	Extant good condition	Within designation boundary
N/A (new site)	R10/1369	1749850	5956445	Pa	N/A	Archaeological Site	Y	Good condition	Partly within designation boundary

CHI No.	NZAA No.	Easting	Northing	Site Type	Site Name	Category	Visited	Condition	Relationship with proposed designation boundary
Perry Road Sector									
16997	N/A	1747438	5967182	U.S Military Camp	Gubbs Camp K1	Historic Structure	N	Demolished but subsurface remains likely	Outside designation boundary
16998	N/A	1746982	5966702	U.S Military Camp	Gubbs Camp K2	Historic Structure	N	Demolished but subsurface remains likely	Outside designation boundary
16999	N/A	1747399	5966745	U.S Military Camp	Gubbs Camp K3	Historic Structure	N	Demolished but subsurface remains likely	Outside designation boundary
17000	N/A	1747690	5966917	U.S Military Camp	Gubbs Camp K4:K5:K6	Historic Structure	N	Demolished but subsurface remains likely	Outside designation boundary
17004	N/A	1746872	5969727	U.S Military Camp	Falls Camp H1	Historic Structure	N	Demolished but subsurface remains likely	Outside designation boundary
17006	N/A	1746446	5969431	U.S Military Camp	Wylies Road Camp, D2 and E	Historic Structure	Y	Demolished but subsurface remains present	D2 outside designation boundary E within designation boundary
17007	N/A	1746221	5968660	U.S Military Camp	Wylies Road Camp F and G	Historic Structure	N	Demolished but subsurface remains likely	Within designation boundary

CHI No.	NZAA No.	Easting	Northing	Site Type	Site Name	Category	Visited	Condition	Relationship with proposed designation boundary
Carran Road sector									
17005	N/A	1745852	5970057	U.S. Military Camp	Carran Road Camp H2	Historic Structure	Y	Demolished but subsurface remains present	Outside designation boundary
17006	N/A	1746446	5969431	U.S Military Camp	Wyllies Road Camp, D1 [<i>NB. continuation of 17006 within Perry Road sector</i>]	Historic Structure	N	Demolished but subsurface remains likely	Outside designation boundary

5.2 Field surveys

As stated in Section 2.2, we conducted an initial 'drive-by' field survey on 16 July 2010, and a more detailed field survey on 2 and 8 September and 22 October 2010. Visibility was good in most areas, with many properties currently grazed.

We carried out an additional field survey in March 2013 to examine properties that had not previously been accessible, including those in the vicinity of Billing Road and Pūhoi Road in the Pūhoi Sector (inspected on 20 and 27 March respectively). The survey methods we used were as described in Section 2.2. We identified one previously unrecorded site (a pa) on the Straka property, Billing Road (Lot 1 DP 339166), and this site is described further in Section 5.3.2, below.

On 11 March 2013 we undertook a field survey of the Woodcocks Road and Carran Road properties shown in Figure 1, and of the Fernbrook Farm near Hungry Creek on 17 April 2013.

On 23 April and 13 May 2013 we undertook an additional field survey of the Straka and Pūhoi Road Farm properties near Billing Road.

It was not possible to gain access to the Stanaway property to assess Te Pā o Te Hēmara Tauhia, Titford House or Titford Cottage prior to the writing of this Report. The property will be surveyed at a later date.

Iwi representatives from Hōkai Nuku accompanied our archaeologists on the field visits in 2013.

A number of the landowners requested to be present, at least for an initial meeting with the archaeologist, during the survey. In some cases this was helpful as they knew of locations where items of interest had previously been observed.

We visited additional properties that currently have no recorded archaeological sites but we thought had the potential for unrecorded sites, or to contain parts of the largely unrecorded US military camps. These visits largely focused on the landscape between Perry Road and Philips Road to the west of Warkworth, and on areas near Pūhoi. Figure 1 shows all the areas we surveyed as part of our assessment.

5.3 Pūhoi Sector

5.3.1 Previously recorded sites

Prior to the field surveys conducted for this assessment there were 14 sites recorded within or close to the proposed designation boundary in the Pūhoi sector, six of which fall within the boundary (see Figure 17 and Table 1). The remaining eight sites are located outside of the proposed designation boundary: three midden, three midden and terrace sites (two associated with possible pits), a house site and a wharf site.

Of the six recorded sites within the proposed designation boundary, three are historic structures and three are archaeological sites. Figure 17 through to Figure 21 show the locations of recorded heritage sites in relation to the indicative alignment in the Pūhoi Sector.

At the southern end of the Sector, in the Stanaway property, three sites are recorded within the proposed designation boundary. These sites are: Titford Cottage (CHI No: 16252), Titford House

(CHI 16248) and Te Pā o Te Hēmara Tauhia (CHI 12063 = NZAA No. R10/921: see Figure 18). These buildings and the pa site overlook the existing route of SH1 just to the north of the Johnstone's Hill tunnels, within Pt Lot 1 DP 55676. Further historic research (see Section 4.3) has established that Titford Cottage was probably built around 1902 and Titford House between 1918 and 1920.

Te Pā o Te Hēmara Tauhia is described in the site record as a pa site sited on the end of a ridge overlooking the river, partly destroyed where cut through by SH1. A number of 19th and 20th century developments on the site have also modified its condition, and the defensive ditch has been infilled and is no longer evident. Several midden scatters, some extensive, have been reported around the pa, particularly to the west and south of the main defences (see Figure 18). The pa itself is located outside the indicative alignment and indicative construction footprint, but associated midden deposits to the southwest may fall within the indicative alignment.

Two archaeological sites (CHI 15857 = R10/1106 and CHI 15872 = R10/1107: see Figure 19 and Figure 20), both primarily consisting of shell midden and a platform (levelled area), have been recorded on ridges located approximately 600m north of Te Pā o Te Hēmara Tauhia. Both sites are located within Part Section 3 Block III Waiwera SD, although R09/1106 extends east onto Section 65 Block III Waiwera SD, within the indicative alignment.

Site R10/1106 (Figure 19) is located approximately 80m west of the existing SH1 and consists of a 35m x 5m platform around which four midden deposits have been recorded. These are described in the NZAA Site Record Form (see Appendices A.1 and A.2) as follows: the first measures 12m x 3m and is situated to the west, the second measures 10m x 4m on the east side of the frontal scarp, the third measures 4m x 2m on the west side of the frontal scarp, while the fourth is 3m x 2m and spread over the approach to the knoll truncated by SH1.

Site R10/1107 (Figure 20) is located approximately 200m west of SH1 and consists of a 15m x 8m platform with midden spread around its front scarp. Descending from the platform to the watercourse below is a historic period log skid that has been recorded as part of the same site (Figure 20).

An unnamed historic building (CHI 16249: see Figure 21) is recorded near the existing highway at Pūhoi within Part Okahu. It is described in the CHI as a corner bay villa with a corrugated iron roof, built for a member of the Schollum family. No date for its construction is given, but the family was one of the pioneering families at Pūhoi. Initial historic research has suggested a tentative date of 1906 for the construction of this building, following the marriage of Mr W. J. Schollum to Mary Wenzlick in April of that year (J. Schollum, pers. comm.). Mary Wenzlick's father, John Wenzlick, who had owned the property since at least 1891, had a house nearby to the north (Figure 22). A person with the surname Ryan had previously owned the property since at least 1873 (SO 984), but it remains unclear whether he ever built on the property. This research indicates that other archaeological remains relating to earlier occupation may still be preserved on the property.

Based on the distribution of the recorded sites, we recognised a high potential for additional sites of Māori occupation in the Pūhoi Sector, and it was subject to further investigation in 2013 when access could be obtained. Indeed, a new pa site was discovered located to the south of midden site R10/1107, and is now recorded on the NZAA database as R10/1369.

5.3.2 Field survey results

In March 2013 we reconfirmed the recorded heritage sites within the proposed designation boundary that had the potential to be directly impacted by the Project, except for Te Pā o Te Hēmara Tauhia (R10/921), Titford Cottage (CHI 16252) and Titford House (CHI 16248), which could not be accessed prior to the writing of this Report, but will be surveyed when possible. One new archaeological site was found (an unnamed pa, which we recorded on the NZAA database as site R10/1369).

Newly identified Pa Site (R10/1369) and Middens R10/1106 and 1107

We identified the new pa site, now recorded as R10/1369, close to Billing Road on the Straka property, overlooking the estuary and Te Pā o Te Hēmara Tauhia to the south, and Pūhoi River to the east (Figure 23, Figure 24). The pa is small (43m E-W, c.30m N-S), and located on a small ridge spur which continues to the northeast down to the river. It has a 17m long transverse ditch oriented north–south situated on the westerly approach (Figure 25–Figure 27). Another remnant wider ditch is oriented east–west and runs along the northern side of the platform forming the top of the pa (Figure 25 and Figure 27). The southern edge of the platform is slightly mounded (Figure 28). A number of mature totara are present on top of the pa, obscuring surface identification of pit and other features. To the south is a large (c.50m) natural terrace (Figure 29) which the property owner states had been used for growing kumara sometime prior to his family's purchase of the property about 60 years ago (John Straka, pers. comm.). The terrace continues to the east a short way before connecting with the ridge spur extending to the northeast. A small midden deposit was located along this spur, within the roots of a totara tree. The deposit was sparse and highly eroded (Figure 30). We also identified two possible pits on the terrace. However it was unclear whether they are related to Maori settlement or tree throws/bowls, as they were not typically rectilinear (the shape normally associated with kumara storage pits) and were more oval in shape.

We observed an additional small midden deposit on the western side of the pa and probed it to establish its size. The midden is eroding out of the side of the east–west running ditch, and has a diameter of c.1.5m. The midden is highly fragmented and in poor condition, with its greatest thickness being 3cm.

Further to the west of the pa, behind the Straka house, is another smaller area that appears to be part of the natural terrace, and to the north of this a flat area with many mature puriri trees. It is likely that these areas were also used for settlement and/or horticulture, although no pits or other features were observed on the surface.

We also surveyed the land between SH1 and R10/1369 for archaeological remains. There was evidence of extensive benching and movement of soil related to construction of the modern house located on the property, with a clear absence of topsoil in the benched paddock. Several thin (1cm) ephemeral scatters of midden were observed near some poultry houses, but no intact deposits were observed or discovered through probing. It is likely therefore that midden was present in this area prior to construction of the house, but as the area has been extensively modified these remains have been destroyed.

Two archaeological sites – midden/platform/log skid R10/1107 and R10/1106 middens – within the indicative alignment in this area had previously been recorded and we had previously visited them.

Site R10/1107 is located immediately to the north of the pa, at the end of a small ridge spur (Figure 17, Figure 19 and Figure 20). It is likely that this midden is also connected with the pa site, and it overlooks the small valley which was cut by a stream draining into a now silted and boggy landscape. The midden is largely as described on the NZAA record (**Appendix A.2**), although erosion is being accelerated by cattle trampling. Figure 31 is a long range view showing the location of the shell midden, platform and log slide site CHI 15872 (R10/1107) on the hillside. The log slide is just visible running down the ridge to the left of the image.

The second midden site, R10/1106, which consists of four midden deposits, is located on the next ridge spur to the north. This midden is also being eroded by cattle resting under the totara trees. Figure 32 is a close up view of the shell midden and platform site CHI 15857 (R10/1106). This image shows midden exposed in the cattle trample around the edges of the central platform.

The pa is located across the Okahu Creek from R10/921, Te Pā o Te Hēmara Tauhia, which held a commanding view of the lower Pūhoi River. This newly discovered pa site would also have had commanding views, but also views to the north not afforded by Te Pā o Te Hēmara Tauhia. It was certainly smaller in size, but had a large terrace which would have been suitable for habitation and/or horticulture. The midden sites located nearby are probably linked to the same settlement.

The heritage landscape in this area appears to be related to settlement – either temporary or permanent – on the ridgeline and spurs located closest to Pūhoi River. These high points in the landscape provided natural vantage points for observation of movement along the river and smaller streams and estuaries, and fortifications during periods of unrest. At the same time, access to the resources and 'highway' that the river provided were close by and easily accessible to those living on the ridgelines.

Historic House (CHI 16249)

We inspected the historic house associated with the Schollum family and tentatively dated the building to 1906 (see Section 5.3.1) from the outside. Figure 33 shows the frontage. We noted no other features of heritage interest during our site visit, but there may be subsurface archaeological deposits associated with the house or earlier use of the property.

We also inspected the land surrounding the property extending down to Pūhoi River and probed it for archaeological remains, but found none.

Other features noted, Pūhoi Road/ SH1Corner

We observed several old farm buildings, concrete foundations and a trough possibly related to a sheep dip in the northern extent of the Pūhoi Road Farm property near to the farm house (Figure 34). However, contamination tests could not confirm that these remains were from a sheep dip, although traces of pesticides were present (Wijnand Udema, pers.comm.). These remains appeared fairly modern in date, certainly built within the last 50 years.

We observed a remnant shell midden among the roots of a row of oak trees close by (Figure 34). After probing the area, we established that the midden was present in very small patches of eroded subsoil, was highly fragmented and likely to be in secondary or tertiary deposition. Furthermore, there was evidence of modern land clearance (mounds of dirt) and drainage cuts in the area just east of the oak trees, indicating that this location has been heavily modified.

Therefore, the remnant midden was not recorded as an archaeological site as no intact in situ deposits were present.

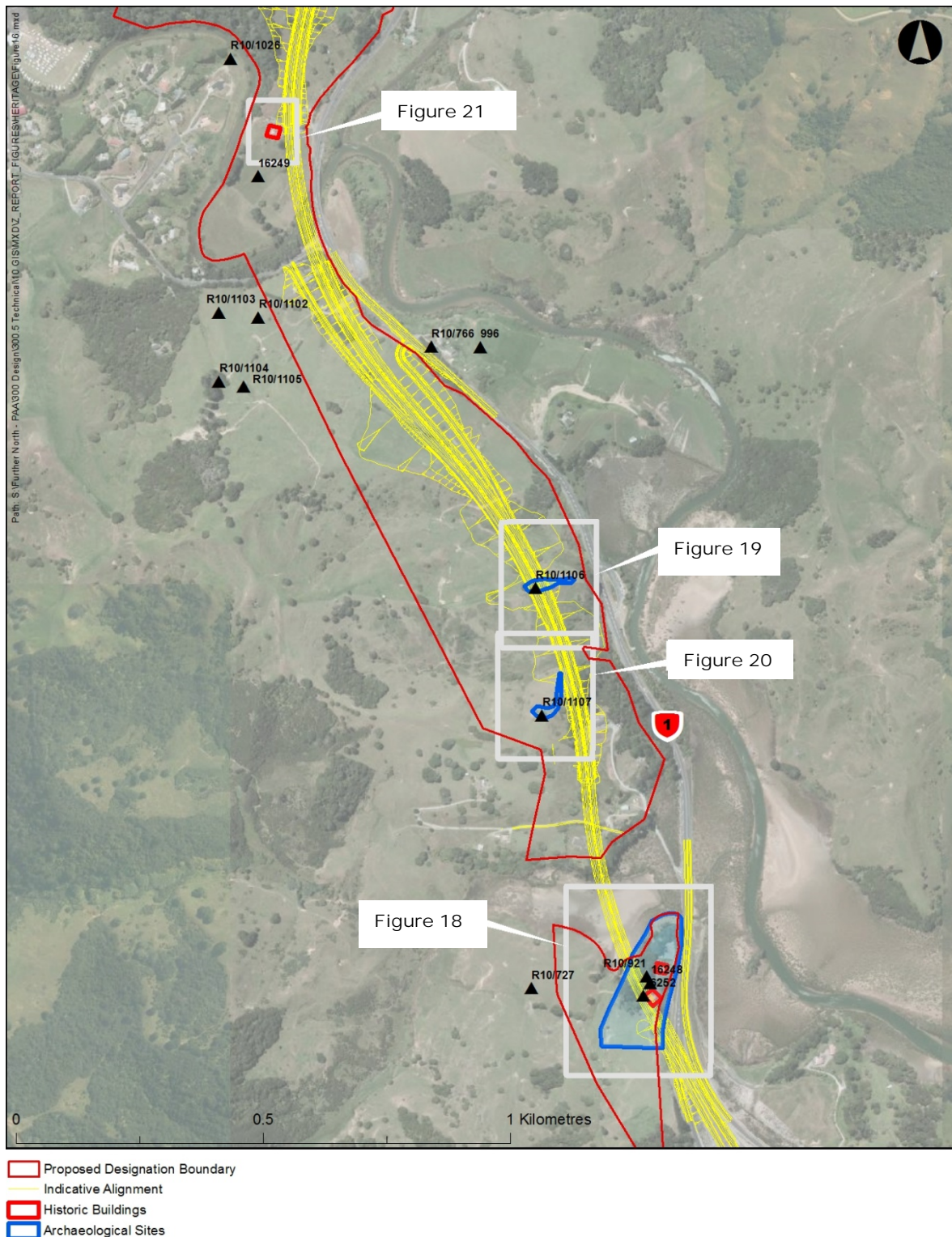


Figure 17: Aerial map showing recorded sites in the Pūhoi Sector and the extent of close-up views presented in Figure 17-20

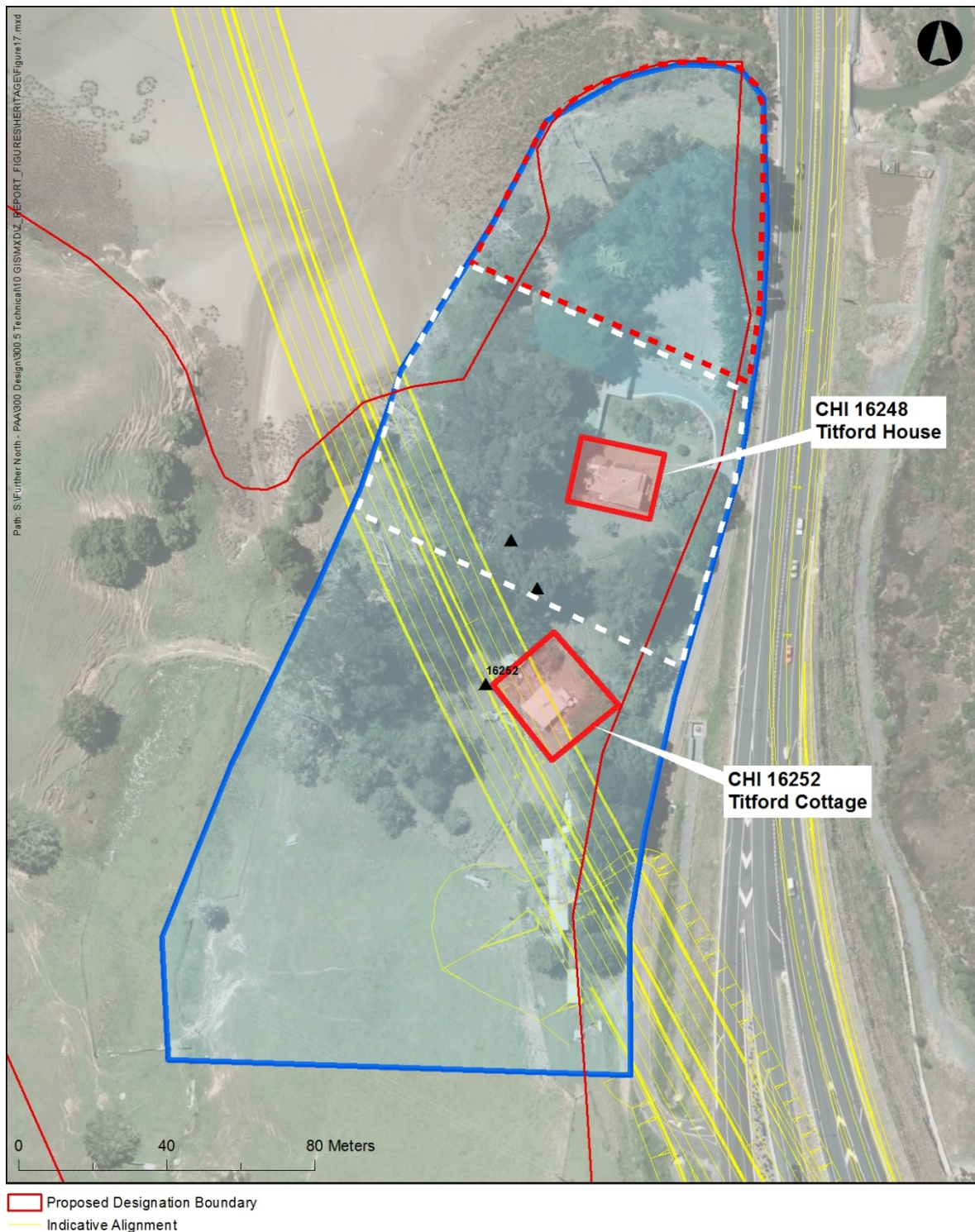


Figure 18: Aerial map showing the part of the Pūhoi Sector where CHI Nos. 16252, 16248 and 12063 are located. The defined area of site R10/921 (12063) (Te Pā o Te Hēmara Tauhia) is indicated by the dashed red line, and the white dashed line indicates the area within which shell midden has been noted (see site record form in Appendix A.2). The area defined by the blue line is considered to have potential for archaeological remains



Figure 19: Aerial map showing R10/1106 (CHI 15857). Blue lines mark the approximate dimensions of the site

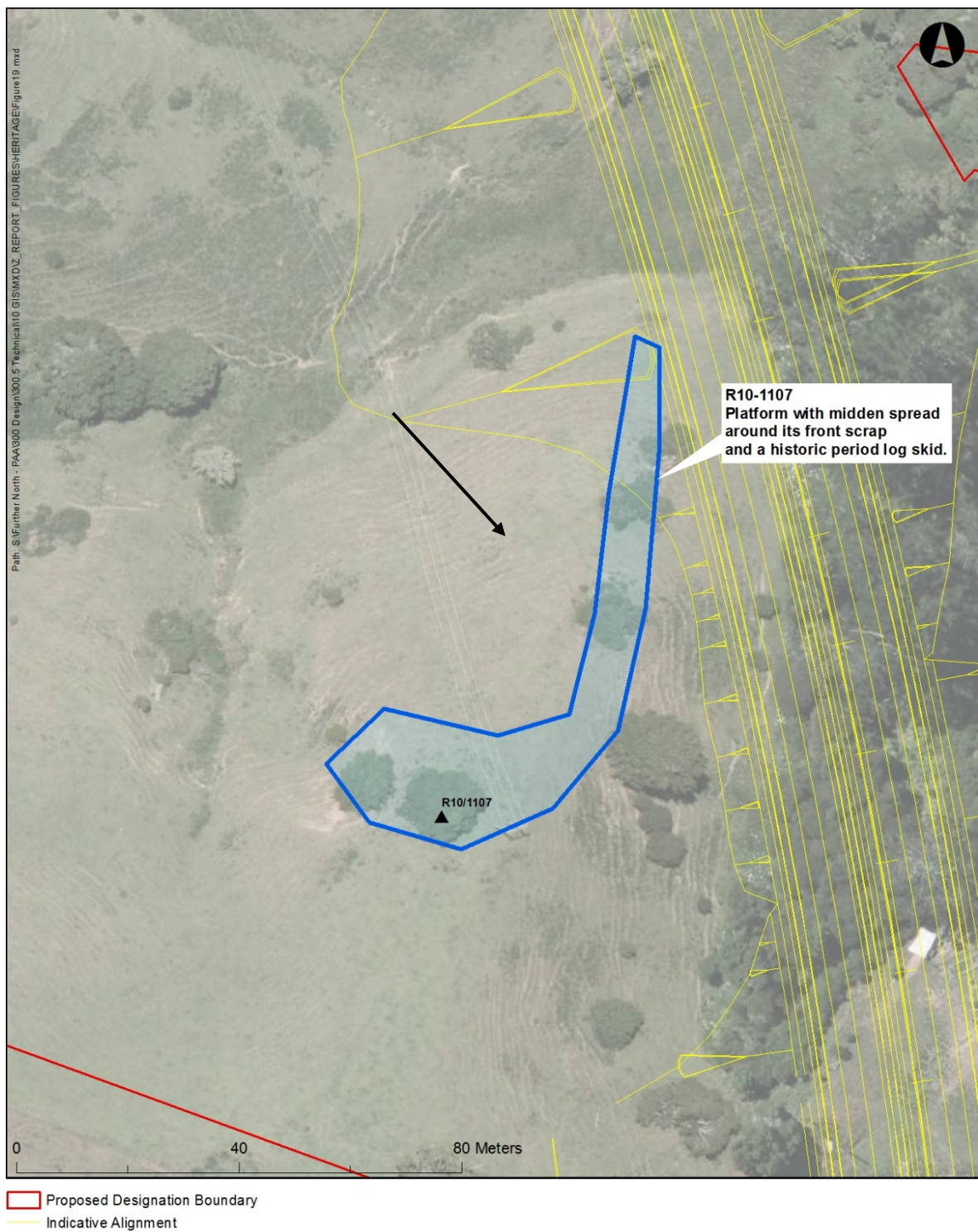


Figure 20: Aerial map showing R10/1107 (CHI 15872). Blue lines mark the approximate dimensions of the site. The arrow indicates the log skid



Figure 21: Aerial map showing historic Schollum homestead (CHI 16249)



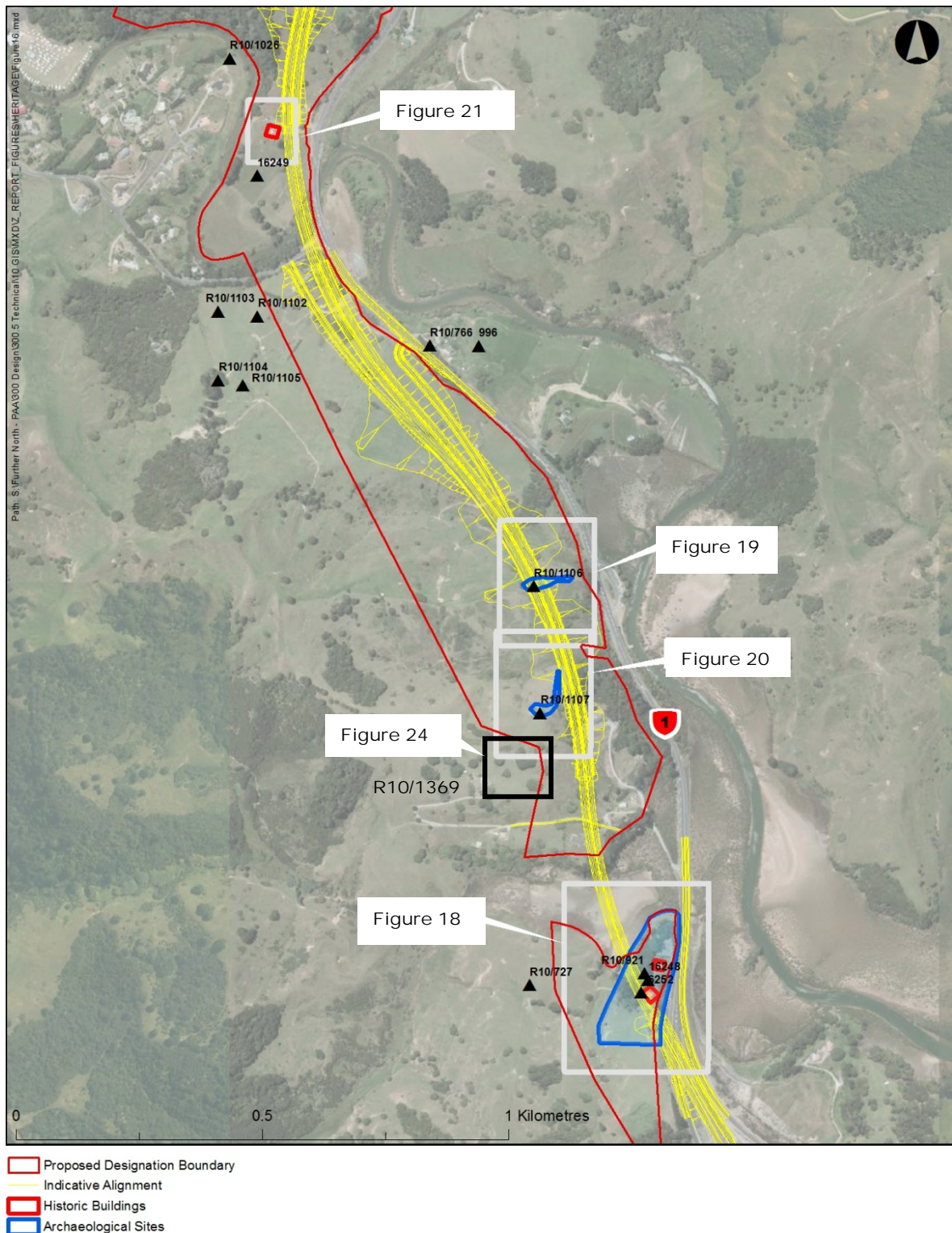


Figure 23: Location of the rediscovered pa site R10/1369 in relation to the proposed designation boundary and indicative alignment

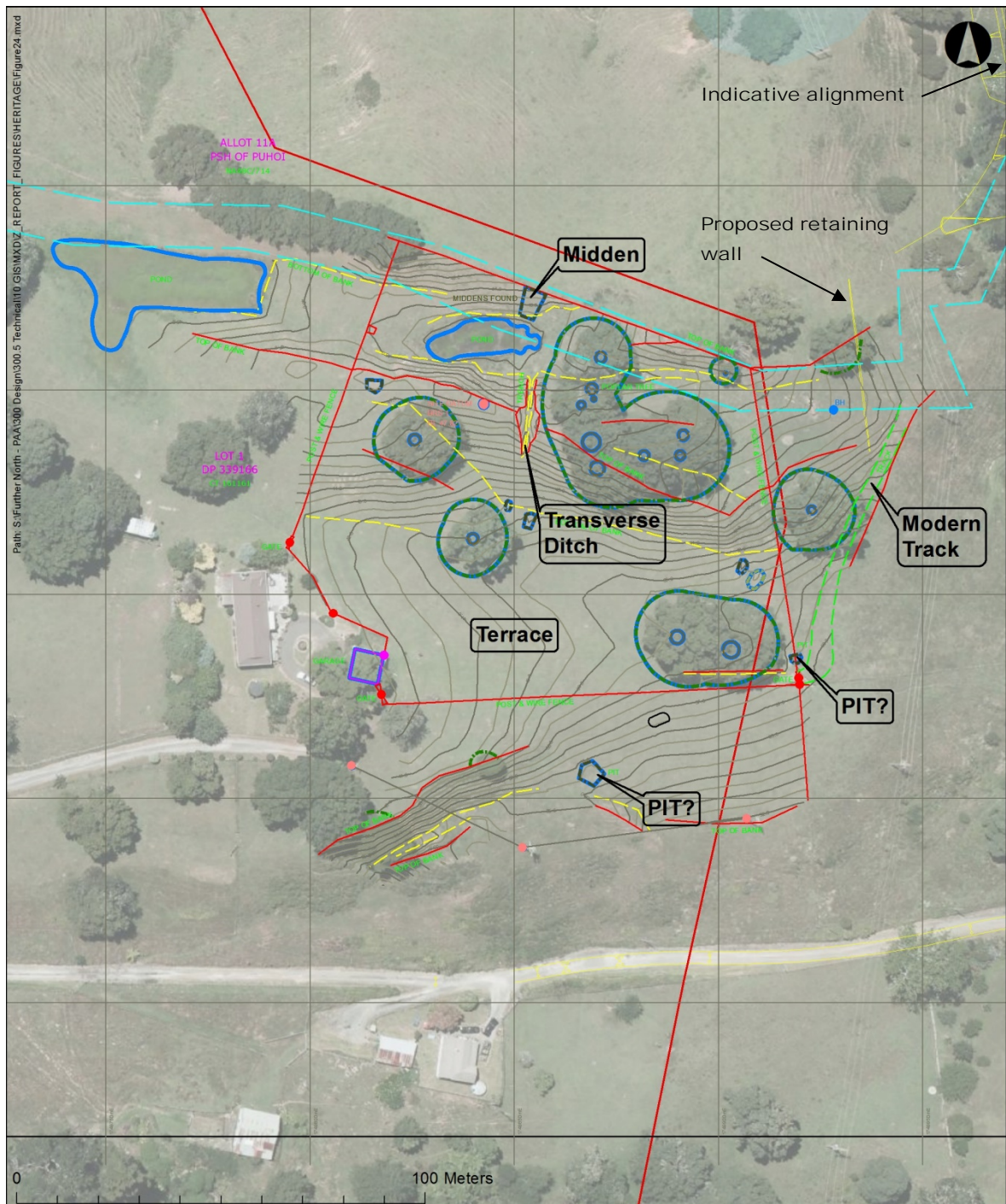


Figure 24: Survey drawing illustrating the location of the rediscovered pa site R10/1369 in relation to the indicative alignment and proposed retaining wall

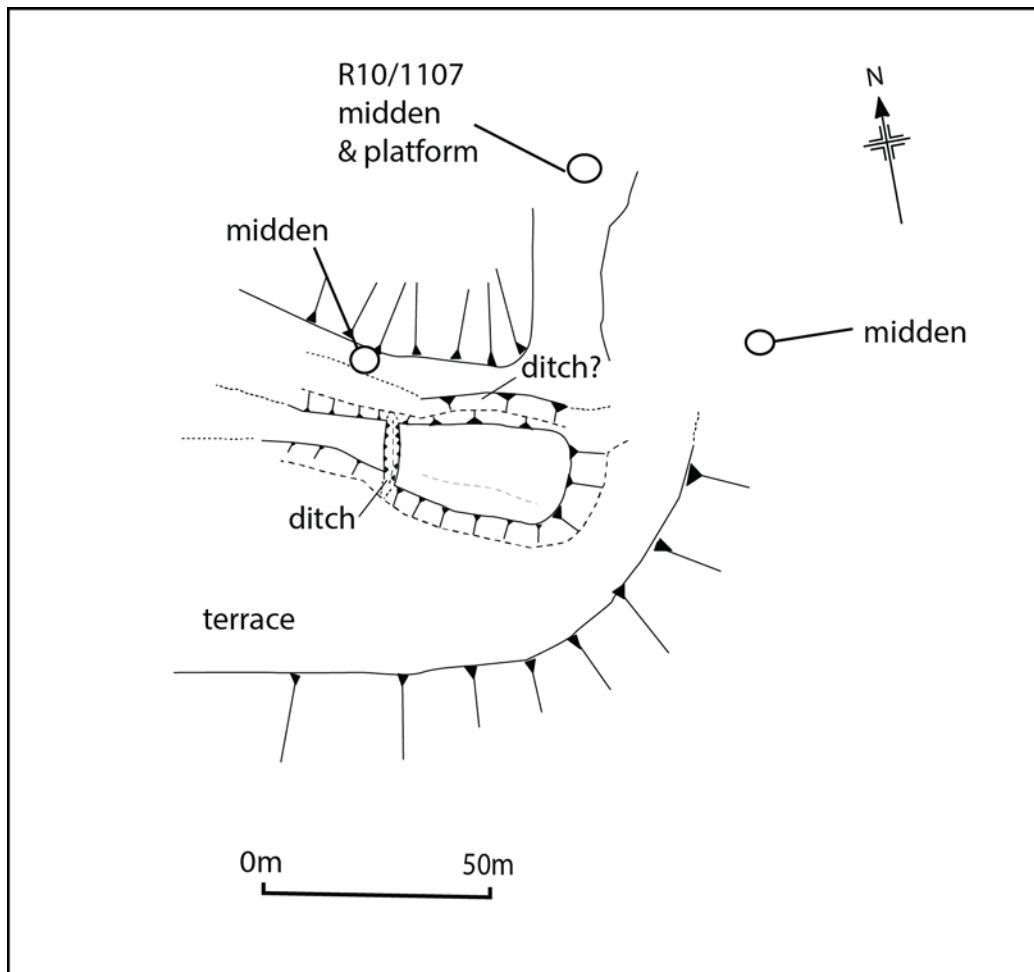


Figure 25: Sketch plan of newly discovered pa site in relation to R10/1107



Figure 26: The transverse ditch. Facing west



Figure 27: Looking east at the pa site, with the transverse ditch in the middle ground. The east-west oriented ditch is indicated by the arrow



Figure 28: Slightly mounded southern edge of the platform. The terrace is also visible below



Figure 29: The large terrace which formed part of the pa. Facing southeast



Figure 30: Sparse midden deposit beneath totara tree



Figure 31: View facing south showing site CHI 15872 (R10/1107); main portion is marked by a blue arrow, and the log skid is indicated by the red arrow



Figure 32: View facing east along flattened ridge with site CHI 15857 (R10/1106). Midden is exposed in cattle trample. Pūhoi River in the background



Figure 33: View facing west showing frontage of site CHI 16249 ('Schollum house')

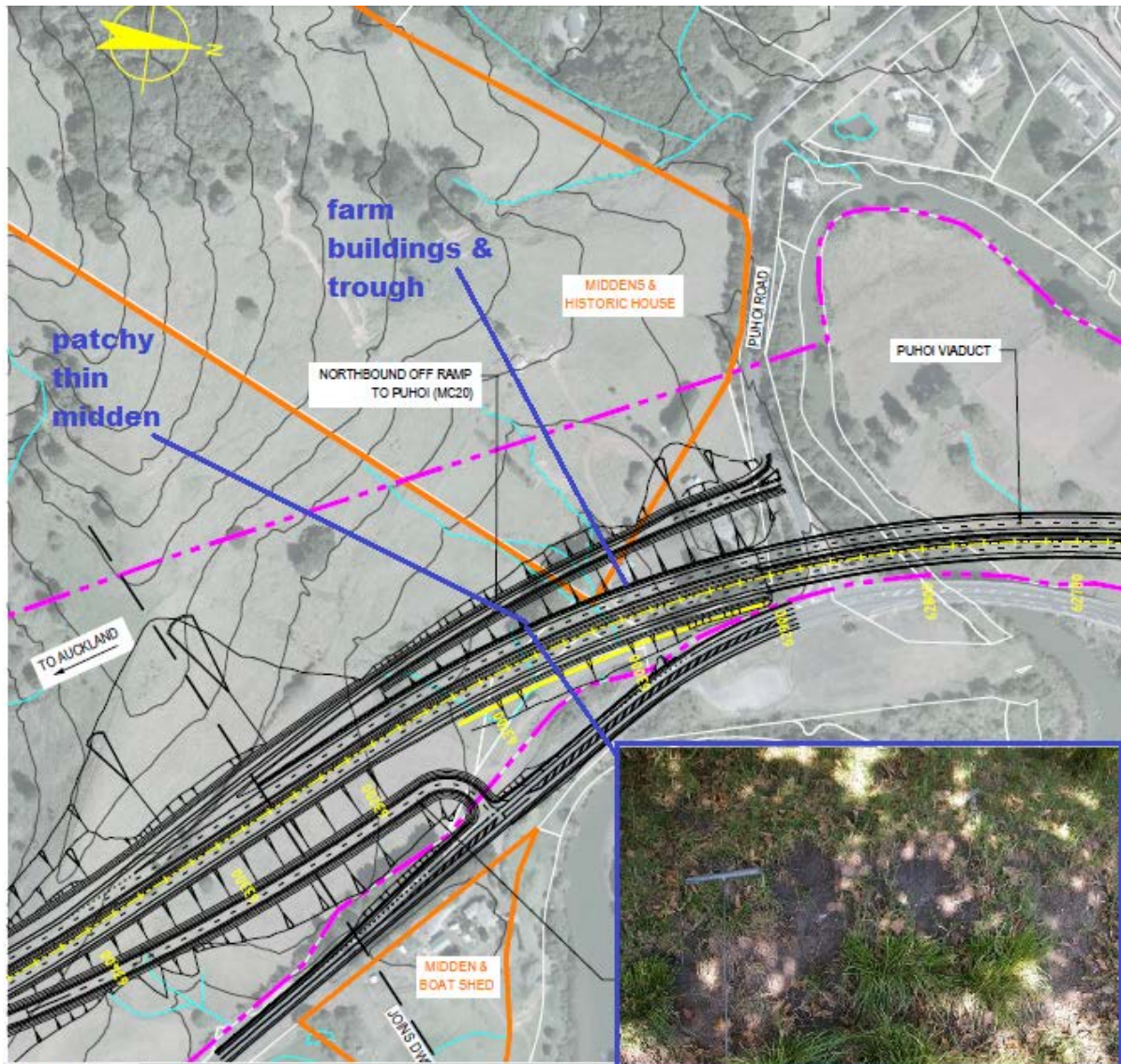


Figure 34: Location of the sparse/patchy midden in redeposited topsoil and photo (inset), and the location of the farm buildings and trough

5.4 Hungry Creek Sector

There are no recorded heritage sites within the proposed designation boundary or within 200m of the indicative alignment centreline within the Hungry Creek Sector.

We completed a field survey of the Fernbrook Farm property alongside the existing State highway, although our expectations of encountering archaeological sites were low based on the results of desktop analysis. The existing land-use is primarily grazing and surface visibility was good. The landscape is undulating with a number of slips clearly having occurred in the past. We did not identify any archaeological features or deposits.

There are a number of existing houses and ancillary structures on the properties in this area, and all appear to be of early to mid 20th century construction.

5.5 Schedewys Hill Sector

There are no recorded heritage sites in the Schedewys Hill sector within the proposed designation boundary or within 200m of the indicative alignment centreline within the Schedewys Hill Sector.

The Schedewys Hill Sector is in rugged topography under pine forest. We consider the archaeological potential in this area to be low/nil, and as such we have not undertaken field survey in this Sector.

5.6 Moirs Hill Road Sector

There are no recorded heritage sites in the Moirs Hill Road sector within the proposed designation boundary or within 200m of the indicative alignment centreline within the Moirs Hill Road Sector.

The Moirs Hill Sector has similarly rugged topography, the majority of which is under pine forest. As with the Schedewys Hill Sector, we consider the archaeological potential in this area to be low/nil, and as such we have not undertaken field survey in this Sector.

5.7 Perry Road Sector

5.7.1 Previously recorded sites

There are seven related recorded heritage sites in the general vicinity of the proposed designation within the Perry Road Sector, all of which are 'reported' historic sites (i.e. reported on the basis of historical evidence rather than field survey). Figure 35 shows the location of the recorded heritage sites in relation to the alignment in the area of the Perry Road and Carran Road sectors (see also Table 1).

All the reported historic structures are US military camps and date from the Second World War. As they are post-1900 in date, they are not archaeological sites as defined under the HPA 1993. However, they are historic heritage resources as defined under section 2 of the RMA 1991. The camps, known as Falls Camp H1, Gubbs Camp K1–K6, Wylies Road Camp D1, D2, E, F and G (H1 = 17004, K1 = 16997, K2 = 16998, K3 = 16999, K4, K5, and K6 = 17000, D1, D2 and E = 17006, F and G = 17007: see Figure 35 and Table 1), are located across the countryside to the west of Warkworth. Two of these sites are partly located within the proposed designation boundary and are transected by the indicative alignment.

Plans of Falls Camp H1 (17004, see Figure 15) show this camp was located on the south side of Woodcocks Road at the intersection with Falls Road. The indicative alignment will pass some 700m to the west of this location, which is outside the designation boundary.

Plans of Gubbs Camp K1 (16997, see Figure 9) and K2 (16998, see Figure 10) show they were situated near the eastern end of Perry Road. K1 is situated within Lot 1 DP 130129 on the northern side of Perry Road. K2 is situated within Lot 1 DP 49386, Part Lot 1 DP 91603, and Allotment 207, Parish of Mahurangi. The eastern side of this camp is bordered by the existing alignment of SH1, and is bisected by Twin Stream Road. These camps are at least 1km away from the indicative alignment, and are outside the designation boundary.

Gubbs Camp K3 (16999, see Figure 11) was situated approximately 500m south of the Perry Road intersection with SH1, west of SH1. The camp is located within the eastern portion of Lot 1 DP 321568 and all of Lot 4 DP 321568. This area is some 700m away from the indicative alignment, and outside the designation boundary.

Plans of Gubbs Camp K4 and K5 (see Figure 12) show these were located along the southern side of Perry Road. The camp sites are situated within Lots 1 and 2 of DP 399884, Lot 1 DP 194879, Lot 3 DP 98215 and Lot 1 DP 205823, on the southern side of Perry Road. These are located some 600m to the west of the indicative alignment, and outside the designation boundary.

Plans show that Gubbs Camp K6 (Figure 12) was situated furthest to the west of all the Gubbs camps. It was situated within Lots 1 and 2 of DP 205823, on the southern side of Perry Road. The indicative alignment passes approximately 400m to the west of the site, which is outside the designation boundary.

Situated near the intersection with Wyllie Road and Woodcocks Road are three US military camps (all recorded under 17006, see Figure 35) dating from the Second World War. These are named Wylies Road Camps D1 (within the Carran Road sector), D2 and E. Plans show that D1 is situated within Lot 1 DP 96751, and D2 within Lot 4 DP 344497 (see Figure 13 and Figure 35). Both of these locations are 200-400m to the east of the indicative alignment, and outside the designation boundary.

Camp E is the largest camp in this group and is thought to be present across several properties, Lots 3 and 6 of DP 329024, Lot 2 DP 171314, Lot 3 DP 136923, Lots 1 and 2 of DP 199822, and Lots 1 and 4 of DP 168411 (see Figure 13). The indicative alignment passes through several of these allotments, and through the area believed to be the centre of the camp compound.

Situated further south along Wyllie Road are two US military camps (17007) dating from the Second World War, named Wylies Road Camp F and G. Plans show that these camps are situated near the southern boundary of Lot 4 DP 344497, with the majority extending into Lot 1 DP 587 (see Figure 14). The indicative alignment crosses through the location of Camp F. Camp G is located further to the northeast, but may extend within the indicative construction footprint.

5.7.2 Field survey results

The majority of the recorded US military camp sites are located in this Sector (see Figure 35). We identified some additional remains relating to the US military camps during the field survey. We noted fragments of concrete with water rolled pebble inclusions on several farms in the vicinity of Wylies Road camps D2 and E. This material is likely to have been used in camp structures, such as ablution blocks and kitchens and probably as general foundations. It is likely that similar remains are present within all the camp sites.

Figure 36 is a landscape shot facing north showing the valley alongside Wyllie Road. Locations, as identified by field survey and historic plans, of US military camp sites 17006 (D1, D2 and E) and 17007 (F and G), which extend into the proposed designation, are shown.

Figure 36 to Figure 41 show the landscape and some of the items observed within Lot 4 DP 344497 that relate to Wylies Road Camp D2, recorded as 17006.

Figure 40 and Figure 41 show the landscape and some of the items observed within Lot 2 DP 199822 that relate to Wylies Road Camp E, recorded as 17006.

Field surveying in this area was restricted by denial of access to Lot 1 DP 587. During the field survey, however, near Wylies Road camps F and G we were informed by John Wynyard that pieces of military ordnance had previously been uncovered near the boundary with Lot 1 DP 587 (John Wynward, landowner of Lot 4 DP 344497, pers. comm.).

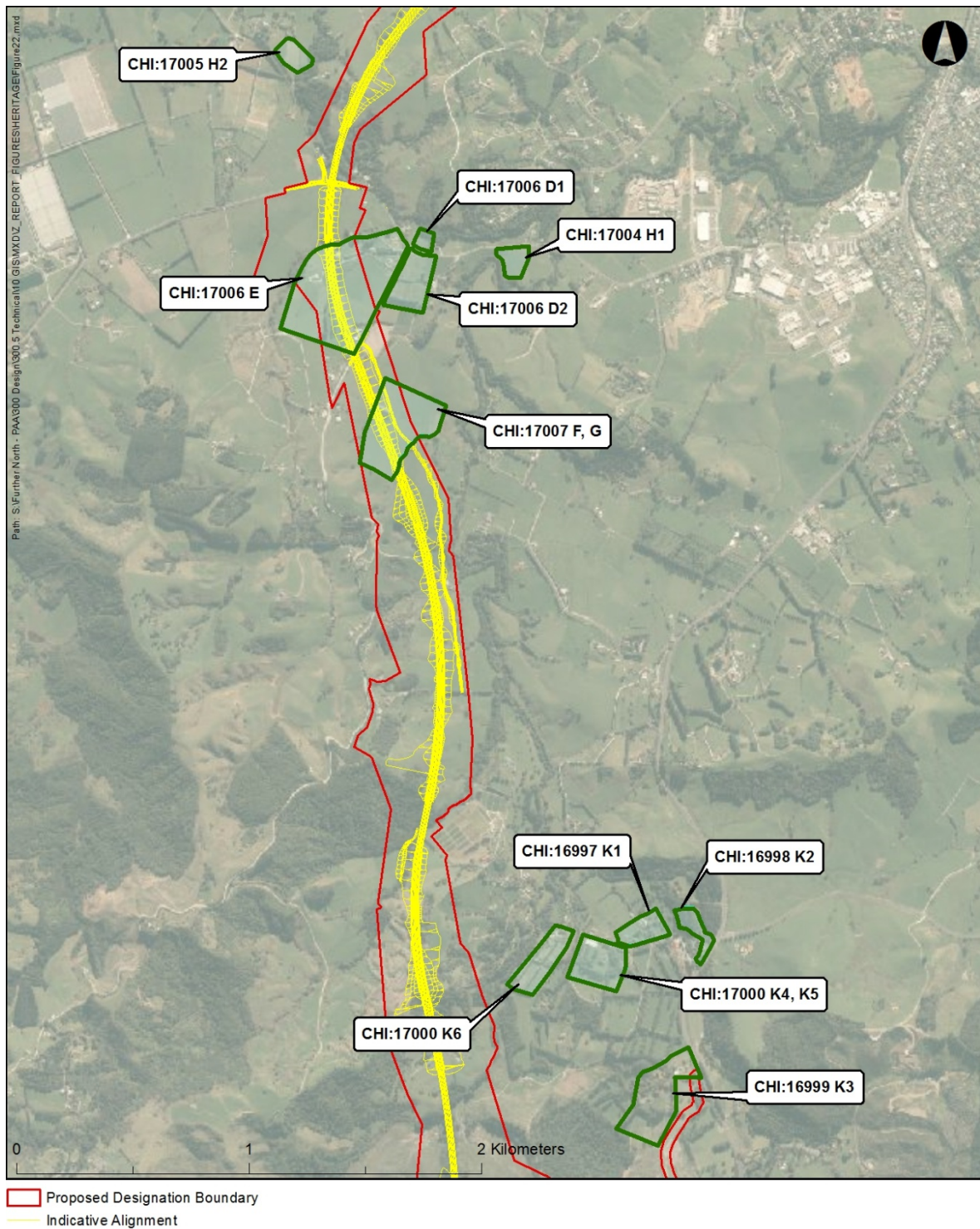


Figure 35: Aerial map showing the location of WW2 camp sites in relation to the Project within the Perry Road and Carran Road Sectors



Figure 36: View facing north towards Woodcocks Road, with Wyllie Road running down ridge on left of image. Location of Wylies Road Camps F and G (CHI 17007) marked by a blue arrow. Identified locations of Camps D2 and E (CHI 17006) are marked by blue arrows



Figure 37: View showing old farm pump believed to be situated over a military well, part of Wylies Road Camp D2 (CHI 17006)



Figure 38: View showing typical ground cover in areas where material remains of Wylies Road Camp D2 (CHI 17006) were found



Figure 39: View showing an example of material relating to the Wylies Road Camp D2 (CHI 17006). Note numerous fragments of rusted metal exposed around the concrete pile



Figure 40: View facing north showing the location of some of the observed concrete relating to the Wylies Road Camp E (CHI 17006)



Figure 41: View showing further examples of exposed concrete relating to Wylies Road Camp E (CHI 17006)

5.8 Carran Road Sector

There is one additional recorded heritage site within the Carran Road Sector: the Carran Road Camp H2 (CHI 17005). This site is located c.200m to the west of the indicative alignment, and is therefore outside the proposed designation boundary. We observed concrete remains similar to those found in Wylies Road camps D2 and E in the Perry Road Sector, during a brief inspection of the site. Part of CHI 17006 also extends into this Sector (Wylies Road Camp D1) (see Figure 35 and Table 1), but is also outside the designation boundary.

We conducted a walkover survey of the properties between the existing SH1 and Woodcocks/Carran Roads on 11 March 2013. Based on the results of desktop analysis we did not expect to find features of high archaeological or heritage interest in this sector.

No archaeological features or deposits were identified during the walkover. Information from the landowner identified some small items of possible but low heritage interest, including a possible piggery, a concrete slab, and a slaughter house, but these were not noted as heritage items.

A small cemetery was noted near, but outside and to the east of the proposed designation boundary on SH1 on Part Lot 1 DP 180823 (Figure 42). The cemetery had not previously been recorded as a heritage site in the CHI, and is not listed on the District Plan.

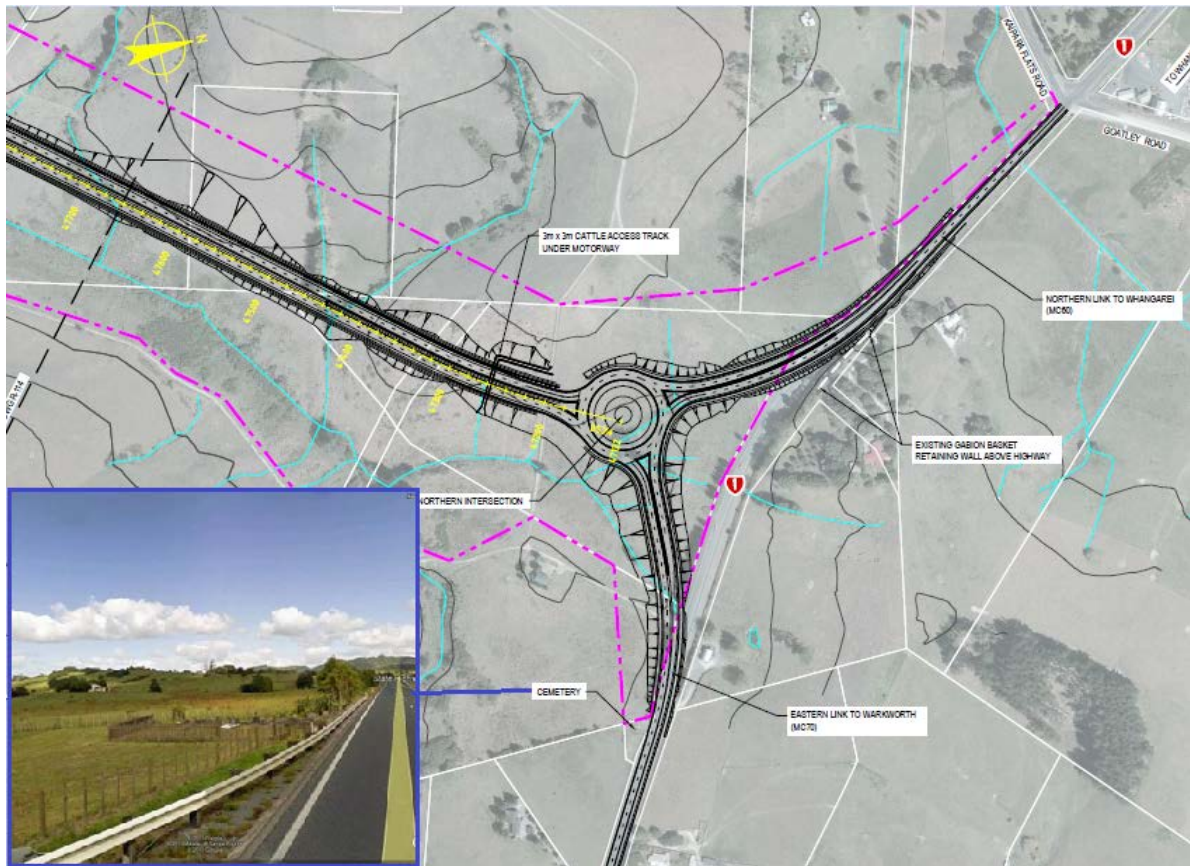
5.9 Summary of sites identified

Overall we have identified 24 archaeological and other cultural heritage sites in the vicinity of the proposed designation (Table 1). Of these, nine are located within the proposed designation boundary; seven are located within or partly within the indicative construction footprint (see Table 3, below). The majority are sites previously recorded in the NZAA archaeological sites database and the Auckland Council CHI, but an unrecorded pa site was identified in the Pūhoi Sector on the Straka property, and has now been recorded as site R10/1369.

The sites within the designation boundary consist of two pa, two midden and three historic buildings in the Pūhoi Sector; and the locations of two US military camps in the Perry Road Sector. No known sites are located within the proposed designation boundary in the Hungry Creek, Schedewys Hill, Moirs Hill Road or Carran Road Sectors.

Te Pā o Te Hēmara Tauhia, Titford House and Titford Cottage south of the Pūhoi River could not be visited prior to the writing of this Report, but will be assessed at a later date.

Table 3 (see next section) lists the sites identified within the proposed designation boundary and their location relative to the indicative construction footprint.



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6. Discussion and Assessment of Effects

Heritage significance

The heritage significance of the archaeological and other heritage sites identified within the proposed designation boundary was assessed with reference to standard archaeological criteria and the criteria set out in the Auckland Regional Policy Statement (Chapter 6 Policy 6.4.16 – see Table 2). As noted earlier, this did not include an assessment of the sites from a Māori cultural perspective, as that should be undertaken by mana whenua.

Based on the criteria the archaeological sites in the Pūhoi Sector are of variable heritage significance. Te Pā o Te Hēmara Tauhia (R10/921), although modified and potentially of only moderate archaeological value, was associated with the noted 19th century chief Te Hēmara Tauhia, and overall we consider that its heritage significance is high. Similarly, we consider the significance of the newly rediscovered pa located on the Straka property on the northern side of the estuary (R10/1369) to be high in view of both its contextual value and information potential.

The two midden sites associated with levelled areas (R10/1106 and R10/1107), while in good condition, are not complex or extensive sites. Their contextual value is increased through their probable association with the pa (R10/1369), but overall we consider them to be of low to moderate archaeological value and heritage significance. The logging skid associated with site R10/1107 has some historical significance as a visible landscape feature which reflects the early European history of the area, but has little archaeological value.

The archaeological sites collectively form part of an archaeological landscape of moderate significance surrounding the Pūhoi River and estuary relating to Māori occupation, and must also be seen as part of the significant wider heritage landscape of Pūhoi Village and its surrounds, which includes sites and heritage structures relating to both Māori and early European occupation.

The three heritage buildings in the Pūhoi Sector – Titford House (CHI 16248), Titford Cottage (CHI 16252) and the house associated with the Schollum family further to the north in the Pūhoi sector (CHI 16249) – are associated with early settler families in the Pūhoi area, but are of early 20th rather than 19th century date. We consider that they have moderate heritage significance based on their age and associations, although further heritage assessment by a conservation architect would be required to accurately determine their historical and architectural significance. The buildings also have contextual value as elements of the Pūhoi Village heritage landscape centred on, but not confined to, the Pūhoi Historic Village Special Zone defined in the District Plan.

The two World War II US military camps in the Perry Road sector are of some historical significance based on their role in the defence of New Zealand and the Pacific during World War II, but have low physical heritage value. They form part of a wider group of historically related land areas in the Perry Road and Carran Road Sectors used as military encampments, but as there are few visible remains representing their history they have no significant heritage landscape value.

Historic heritage effects of the Project

The Project has the potential to affect seven identified heritage sites in the Pūhoi Sector and two in the Perry Road Sector that are located within the proposed designation boundary.

Of the seven sites within the Pūhoi sector, three can be avoided: Te Pā o Te Hēmara Tauhia (R10/921), and Titford House (CHI 16248) are located outside the indicative alignment and construction footprint, while the indicative alignment has been redesigned to avoid effects on the rediscovered pa site R10/1369. This has involved moving the viaduct to the east, raising it, and designing a 45m long 5m high retaining wall to the east of the pa to ensure that the lower terrace is not encroached upon.

However, middens have been recorded around Te Pā o Te Hēmara Tauhia, and it is possible that they may be disturbed by piling for the viaduct in this area. Titford House and Te Pā o Te Hēmara Tauhia will both be adversely affected from a visual perspective and by impacts on their setting and surrounds, as they will be hemmed in between the proposed new road on the west and the existing SH1 on the east.

Based on the indicative construction footprint, Titford Cottage (CHI 16252) will be directly impacted on by the viaduct and would be destroyed, and the majority of midden site R10/1106 will be completely destroyed. The lower portion of the log skid recorded as part of midden site R10/1107 will be destroyed, but the midden itself would remain unaffected. Effects on these sites will also have some impact on the archaeological landscape surrounding the pa (R10/1369), with which they are probably associated.

The building associated with the Schollum family (CHI 16249) would also be impacted as the proposed viaduct merges with a formed slope just in front of the house, with areas of fill directly abutting the northeast corner of the house. Even if the house could be avoided the proximity of the new road would result in adverse visual effects on and from the heritage building. In addition there is potential for subsurface archaeological deposits relating to the house or to earlier occupation of the property to be disturbed.

The two US military camp sites within the Perry Road Sector (Wylies Road Camps E (CHI 17006), and F and G (CHI 17007)) are transected by the indicative alignment. Material remains relating to the camps, in the form of concrete fragments derived from demolished buildings and rusted metal elements, would be destroyed, but we consider the adverse effects on heritage remains in this sector to be less than minor in view of the limited significance of the sites.

The Project also has some potential to impact on unidentified subsurface archaeological remains that might be exposed during construction. This mainly applies to the Pūhoi sector, a focus of both Maori and early European settlement where a number of recorded archaeological sites are present in the vicinity of the proposed designation. Within other sectors, however, there is little potential for unrecorded archaeological remains.

The Project design has ensured that adverse effects on the sites of highest significance (the two pa in the Pūhoi sector) can be avoided. Overall we consider that the adverse effects of the Project on heritage values are moderate and can be appropriately mitigated.

6.1 Summary of results

Archaeological and other heritage sites in the vicinity of the Project relate to both Māori and early European occupation, and include a number of sites related to World War II (US Military Camp locations). Māori in pre-European times generally occupied lands close to the coast or navigable rivers, and initial European settlement followed a similar pattern. Early settlements at Pūhoi and Warkworth were accessed from nearby rivers. It is in these locations, or nearby, that archaeological sites and heritage buildings are most likely to be situated.

The majority of the Project area had not been subject to archaeological survey prior to this assessment. However, most of the Project area is located inland some distance from rivers or early townships, and there is therefore a low probability of unrecorded archaeological sites and early heritage buildings throughout much of the Project area. Our field survey of areas within the proposed designation boundary that we considered to have some (though not high) archaeological potential confirmed this expectation. We discovered a significant new site (a pa) located close to previously recorded sites in the Pūhoi Sector within an area we considered to have a higher probability of archaeological sites than most of the Project area, on the basis of known site distribution and topography. We were also able to gather some limited additional information regarding the location of the US military camps in the Perry Road Sector.

A total of 23 archaeological or heritage sites had previously been recorded within or near the proposed designation boundary, and the new pa site identified through field survey for the Project brings the total to 24 (Table 1).

The sites are located within two distinct clusters. The first of these is situated around the township of Pūhoi in the Pūhoi Sector: here both pre- and post-contact Māori and early Europeans settled and left a material impact upon the landscape. Fifteen sites are located within this cluster (two pa, five midden, three midden and terrace sites (one associated with a possible pit), three historic houses, a historic house site, and a wharf site).

The second cluster is along the right branch of the Mahurangi River, where a number of military camps dating from the Second World War are found. Seven recorded military camps are located within the Perry Road Sector, with part of one camp and an additional camp located within the Carran Road Sector.

Research and field surveys have confirmed that nine of the heritage sites fall within the proposed designation boundary: three historic houses, two pa and two midden in the Pūhoi Sector; and two US military camp sites in the Perry Road Sector. Six of these sites fall within the indicative construction footprint, while the two pa and one of the historic houses are located outside the footprint but in close proximity to it.

6.2 Heritage significance

As noted earlier, this Report assesses archaeological and built heritage values and does not assess Māori cultural values. A separate cultural impact assessment for the Project has been prepared by Hōkai Nuku. Hōkai Nuku representatives met with our heritage assessment team and accompanied us on the site survey visits conducted in 2013. The historical association of the general area with tangata whenua is evident from the recorded traditional histories and the known Māori place names. Recorded sites of Māori cultural association are all located in the Pūhoi area and those

within the proposed designation boundary comprise: Te Pā o Te Hēmara Tauhia (CHI 12063 = R10/921); a nearby pa identified during the field survey for the Project (R10/1369), which Hōkai Nuku have termed the 'rediscovered Te Pā o Te Hēmara Tauhia'; and two midden/platform sites (CHI 15857 = R10/1106 and CHI 15872 = R10/1107) that are probably related to the newly rediscovered pa site.

In considering the heritage significance of the archaeological sites and other heritage sites and buildings, we took account of both standard archaeological criteria and the criteria set out in the Auckland Regional Policy Statement Chapter 6 Policy 6.4.16 (see Table 2).

6.2.1 Archaeological sites

The four archaeological sites recorded within the proposed designation boundary are all located in the Pūhoi Sector. The two pa (Te Pā o Te Hēmara Tauhia, R10/921, and the new site R10/1369, the former located on the southern side and the latter the northern side of the Okahu Creek estuary) are significant features. The two shell midden/platform sites (R10/1106 and R10/1107), the second of which includes a historic logging skid, are probably related to the pa R10/1369.

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 through the use of archaeological investigation techniques, and the research questions that the site could help resolve. The ability of a site to provide information depends on a range of factors including condition and rarity, extent and complexity, and date. For example, generally pa are more complex sites and have higher information potential than small midden (unless of early date). The surviving extent, complexity and condition of sites are the main factors that influence their ability to provide information through archaeological investigation.

Te Pā o Te Hēmara Tauhia (R10/921) has been affected by the construction of SH1, approximately 50% of the site having been removed. In 1997 there was little surface evidence of the pa visible apart from shell midden (see site record in Appendices A.1 and A.2). The defensive ditch was no longer visible but was located just to the north of the current garage and is probably still present subsurface. In view of its damaged condition, we consider the pa to be of moderate archaeological value, but its heritage significance is increased by its association with the noted 19th century chief Te Hēmara Tauhia. Overall we consider that its heritage significance is high. To the south and southwest of the pa (defined by its defensive ditch) extensive midden has been reported in the past (Figure 18 and Appendices A.1 and A.2), but the extent and significance of these associated archaeological remains today will have to be confirmed through future field survey.

The newly rediscovered pa located on the Straka property on the northern side of the estuary (R10/1369) is small, with one well-defined defensive ditch and a second remnant ditch. The extent of features within the defended area is unclear due to tree cover, but there is a large terrace outside the defences that would have been suitable for habitation and/or cultivation. The pa is probably associated with the two midden sites located nearby, and in view of its contextual value and information potential we consider that this pa also holds high archaeological value and significance.

The two midden sites associated with platforms (levelled areas) are in good/fair condition (see Appendices A.1 and A.2). The date of the sites is not known, but they may be relatively recent (19th century). They are not complex sites, but gain some contextual value from their probable

association with the pa site R10/1369. As such, we consider that these sites are of low to moderate archaeological significance (see Table 2).

The logging skid associated with site R10/1107 has historical significance as a visible landscape feature which reflects the early European history of the area, but has little archaeological value.

The archaeological sites collectively form part of an archaeological landscape of moderate significance surrounding the Pūhoi River and estuary relating to Māori occupation, and must also be seen as part of the significant wider heritage landscape of Pūhoi Village and its surrounds, which includes sites and heritage structures relating to both Māori and early European occupation. Hōkai Nuku recommend that these sites and the wider Pūhoi area should be referred to as Ngā Pā o Te Hēmara Tauhia (Hōkai Nuku Cultural Effects Assessment Report: section 3.1).

6.2.2 Heritage buildings

The three recorded heritage buildings in the Pūhoi Sector comprise: Titford House (CHI 16248) and Titford Cottage (CHI 16252), adjacent to Te Pā o Te Hēmara Tauhia; and a house associated with the Schollum family further to the north (CHI 16249).

The construction date of the Titford Cottage is most likely 1902, and Titford House was built between 1918 and 1920. The date of construction of the third building is not known but may have been c.1906. However, the buildings post-date the earliest days of European settlement in the Pūhoi area, with Titford Cottage reportedly having been built from the timbers of the earliest house on the property. As construction of the buildings post-dates 1900, they do not have archaeological value in terms of the definition of an archaeological site under the HPA 1993. However, we consider that they have moderate heritage significance due to their association with early settler families in the Pūhoi area and their early 20th century date. A full heritage assessment would be required to accurately determine their historical and architectural significance, and this is particularly recommended in the case of Titford Cottage and the Schollum House, which will be directly impacted on by the Project. We consider this assessment should be undertaken by a conservation architect, and we recommend this assessment be required as a condition of consent (see next section).

While these buildings lie outside the Pūhoi Historic Village Special Zone defined in the District Plan (No. 14), they form part of the wider heritage landscape that extends beyond this zone and have heritage significance as elements of that landscape.

6.2.3 World War 2 US military camps

The military camps in the Perry Road Sector are of some historical significance but have low physical heritage value. They played a brief but important role in the defence of New Zealand and the Pacific during World War II. Little evidence of the camps is apparent today, but remnant concrete foundations and other features are still present in some areas. Being of 20th century date, they do not meet the definition of an archaeological site under the HPA 1993. They meet the definition of historic heritage in the RMA 1991, but have not been scheduled for protection on the basis of their heritage values.

The two camp sites are part of a wider group of historically related land areas used as military encampments in the Warkworth area, but as there are few visible remains representing their history, we consider they have no significant heritage landscape value.

Table 2: Significance assessment of sites located within the proposed designation boundary based on Auckland Regional Policy Statement criteria (Section 6.4.16)

CHI/NZAA number	15857 R10/1106	15872 R10/1107	12063 R10/921	R10/1369	16248	16249	16252	17006, 17007
Site type/name	Midden/ Platform	Midden/ Platform	Te Pā o Te Hēmara Tauhia	Pa	Titford House	Historic Building (‘Schollum house’)	Titford Cottage	US Military Camps (Wylies Road Camp E; Wylies Road Camp F and G)
(i) The extent to which the place reflects important or representative aspects of Auckland's or New Zealand's history.	Low	Low	High	Moderate to high	Moderate	Moderate	Moderate	Moderate
(ii) The association of the place with the events, persons, or ideas of importance in Auckland's or New Zealand's history.	Low	Low	High - Tauhia Hemara	Moderate	Moderate - Titford Family	Moderate - Schollum Family?	Moderate - Titford Family	High - WWII
(iii) The potential of the place to provide knowledge of Auckland's or New Zealand's history.	Low	Low	Moderate	Moderate to high	Moderate	Moderate	Moderate	Moderate
(iv) The importance of the place to Tangata Whenua.	TBD*	TBD*	TBD*	TBD*	TBD*	TBD*	TBD*	TBD*
(v) The community association with, or public esteem for, the place.	None	None	Unknown	None	Low	Low	Low	Low
(vi) The potential for the place for public education.	Low	Low	Low	Low	Low	Low	Low	Low

CHI/NZAA number	15857 R10/1106	15872 R10/1107	12063 R10/921	R10/1369	16248	16249	16252	17006, 17007
Site type/name	Midden/ Platform	Midden/ Platform	Te Pā o Te Hēmara Tauhia	Pa	Titford House	Historic Building (‘Schollum house’)	Titford Cottage	US Military Camps (Wylies Road Camp E; Wylies Road Camp F and G)
(vii) The technical accomplishment or value, or design of the place.	Low	Low	Low	Low	Low	Low	Low	Low
(viii) The symbolic or commemorative value of the place.	Low	Low	Low	Low	Low	Low	Low	Low
(ix) The importance of historic places which date from periods of early settlement in Auckland.	None	None	Low	Low	Moderate	Moderate	Moderate	None
(x) Rare types of historic place.	Common	Common	Moderately uncommon	Moderately uncommon	Common	Common	Common	Uncommon / Rare
(xi) The extent to which the place forms part of a wider historical / cultural complex or historical / cultural landscape.	Low	Low	Moderate	Moderate	Moderate part of wider landscape	Moderate part of Pūhoi Village landscape	Moderate part of wider landscape	Moderate
(xii) The integrity and state of preservation.	Moderate	Moderate	Poor	Good	Good	Good	Good	Unknown but probably poor

*To be determined through consultation with the relevant iwi groups.

6.3 Historic heritage effects of the Project

Adverse effects on known historic heritage sites will be confined to the Pūhoi and Perry Road Sectors, where nine of the 24 heritage sites recorded in the vicinity fall within the proposed designation boundary.

6.3.1 Pūhoi Sector

The Project has the potential to affect seven heritage sites in the Pūhoi Sector located within the proposed designation boundary. Of these, three can be avoided, and four will be impacted (see Table 3).

The Project is unlikely to affect the known extent of Te Pā o Te Hēmara Tauhia (CHI 12063 = R10/921), and Titford House (CHI 16248). These sites are on the periphery of the indicative alignment and can therefore probably be avoided. The Project design provides for a viaduct, passing to the west of Titford House and the pa itself, therefore avoiding direct physical impact. However, as extensive middens have been recorded around Te Pā o Te Hēmara Tauhia, it is possible that they may be disturbed by piling for the viaduct. Titford House itself will not be impacted directly by the viaduct, although any subsurface remains related to occupation of the property (such as rubbish pits) may be disturbed by the piles. Titford Cottage (CHI 16252) will be directly impacted by the viaduct and will be destroyed. Effects could be mitigated by preserving a detailed record of the cottage, or by relocating it (subject to further assessment of its heritage values and condition). Titford House and Te Pā o Te Hēmara Tauhia will be adversely affected from a visual perspective and by impacts on the setting/surrounds of the sites, as they will be hemmed in between the proposed new road on the west and the existing SH1 on the east.

The indicative alignment and construction footprint have been redesigned to avoid pa R10/1369. This redesign has involved moving the planned viaduct to the east in this area, and designing a 45m long 5m high retaining wall to the immediate east of the pa which will protect the lower terrace.

Based on the indicative construction footprint, the majority of midden site R10/1106 will be destroyed by the planned cut. The lower portion of the log skid recorded as part of midden site R10/1107 will be destroyed, but the midden will be unaffected. We consider both of the midden/platform sites to be of low to moderate significance archaeologically, but they are probably related to pa, which is of greater archaeological significance, and effects on these sites will therefore have some impact on the archaeological landscape associated with the pa. Adverse effects would require mitigation through investigations under the HPA 1993 to recover information about the history of the area before the midden sites are damaged or destroyed. While there will be adverse visual effects on the pa through construction of the road in close proximity, the effects could be mitigated by incorporating interpretation on the retaining wall panels and through the creation of walkways to allow the area to be accessible (subject to consultation with Hōkai Nuku).

The other affected site is an unnamed historic building (CHI 16249) associated with the Schollum family. The indicative alignment runs approximately 12m east of the villa and the design provides for a viaduct which merges with a formed slope just in front of the house, with areas of fill abutting the northeast corner of the house. The house itself would therefore be affected, and during works, subsurface archaeological deposits relating to the house or to earlier occupation of the property may be exposed. Even if the house could be avoided the proximity of the new road will result in

adverse visual effects on and from the heritage building as well as adverse effects on its surrounds. Because this is a timber house, relocation further from the indicative alignment is feasible to mitigate the adverse effects.

6.3.2 Perry Road Sector

There are eight recorded US military camp sites in the vicinity of the Perry Road and Carran Road Sectors, but only two fall within the proposed designation boundary and indicative alignment (see Table 3). The two sites that will be affected consist of several US military camps, recorded under two site numbers. The camps are named Wylies Road Camps D1, D2 and E (17006), F and G (17007). However, only Camps E, F and G extend into the indicative alignment and will be affected. Field surveys revealed some material remains relating to the camps within the indicative alignment in the form of concrete fragments and rusted metal, and any such remains falling within the construction footprint would be destroyed.

The locations of Second World War military sites are not archaeological sites as defined in the HPA 1993. Therefore, there are no HPA 1993 requirements relating to modification of these sites. However, the camps are associated with a highly significant historical event and meet the definition of historic heritage under the RMA 1991. While the sites are not scheduled on the District Plan and there are no rules relating to effects on these camps, we consider that some recording of any remaining camp features would be appropriate as mitigation for adverse effects.

6.4 Potential effects on unrecorded archaeological sites

In any area where archaeological sites have been recorded in the general vicinity it is possible that unrecorded subsurface remains may be exposed during earthworks, and appropriate provision for the possibility should be made through the implementation of the NZTA Accidental Discovery Protocols.

There is little potential for unrecorded archaeological remains over most of the indicative alignment and wider designation boundary apart from in the Pūhoi Sector, near the recorded archaeological sites and heritage buildings, and in particular in the vicinity of Te Pā o Te Hēmara Tauhia (R10/921) and the newly rediscovered pa R10/1369.

6.5 Effects overall

Table 3 summarises the effects of the Project on heritage values. As noted above there is also potential for effects on unidentified subsurface archaeological remains exposed during construction.

The majority of the indicative construction footprint will have no effects on any known heritage sites and little potential for effects on unrecorded subsurface sites, and the same applies to the wider designation boundary. Effects on the most significant sites, the pa sites in the Pūhoi Sector, have largely been avoided and in the case of the newly rediscovered pa this has been achieved through redesign of the indicative alignment. The two nearby midden sites will be adversely affected, but one potentially only to a limited extent. The adverse effects on the sites can be mitigated, with recommendations provided in the following section. Two of the historic houses within Pūhoi Sector will be affected but effects can be mitigated through detailed recording of the buildings and relocation, although in the case of Titford Cottage this should be subject to further

assessment of its values and condition. We consider that the effects of the Project on historic heritage in the Perry Road Sector are less than minor, as only some of the World War II camp sites would be affected and the sites are of low physical heritage value and have no significant heritage landscape value.

We consider that overall the adverse effects of the Project on heritage values are moderate, and can be appropriately mitigated.

Table 3. Summary of effects of the Project on known heritage sites

CHI Number	NZAA Number	Site Type	Site Name	Category	Significance	Relationship to Designation Boundary/Indicative Construction Footprint	Impact (based on indicative construction footprint)
Pūhoi sector							
12063	R10/921	Pa	Te Pā o Te Hēmara Tauhia	Archaeological Site	High	Within designation boundary but outside indicative construction footprint	N (but adverse effects on setting/surrounds, possible effects on associated midden remains, and adverse visual effects)
15857	R10/1106	Midden / Platform	N/A	Archaeological Site	Low to moderate	Within indicative construction footprint	Y
15872	R10/1107	Midden / Platform and Historic	N/A	Archaeological Site	Low to moderate	Within indicative construction footprint	Y
N/A (new site)	R10/1369	Pa	N/A	Archaeological Site	High	Partly within designation boundary but outside indicative construction footprint	N
16248	N/A	Historic Building	Titford House	Historic Structure	Moderate (on basis of current information. House not visited)	Within designation boundary but outside indicative construction footprint	N (but adverse effects on setting/surrounds and adverse visual effects)
16249	N/A	Historic	N/A ('Schollum	Historic Structure	Moderate (on basis of current	Within indicative construction	Y

		Building	house')		information. Interior not inspected)	footprint	
16252	N/A	Historic Building	Titford Cottage	Historic Structure	Moderate (on basis of current information. House not visited)	Within indicative construction footprint	Y
Perry Road sector							
17006	N/A	US Military Camp	Wylies Road Camp D2, E	Historic Structure	Low	Within indicative construction footprint	Y (only E)
17007	N/A	US Military Camp	Wylies Road Camp F and G	Historic Structure	Low	Within indicative construction footprint	Y

7. Recommendations and conclusions

As the Project has the potential to affect both known heritage sites and unrecorded subsurface archaeological remains that may be exposed during construction, we recommend the following general measures to manage and mitigate the potential adverse effects:

- Effects on recorded and unrecorded archaeological sites should be mitigated by detailed investigation and recording to recover information that will contribute to knowledge of the history of the Project area. This must be carried out in accordance with an Authority under the HPA 1993 issued by the NZHPT.
- All earthworks or other activities involving soil disturbance in the general vicinity of recorded archaeological sites, US military camps and the surrounds of heritage buildings should be monitored by an archaeologist to establish whether subsurface archaeological remains are present and to record any remains.
- An Archaeological Management Plan should be prepared, in consultation with Hōkai Nuku. This should include, as a minimum: provision for the training of contractors and subcontractors in the archaeological requirements of the project; project roles and responsibilities relating to archaeology; provision for protecting and minimising effects on archaeological sites during construction; specification of areas to be monitored by an archaeologist and Hōkai Nuku representatives; archaeological recording and investigation methodology and requirements; NZTA's Accidental Discovery Protocols, which stipulate that if any archaeological features or deposits, human remains or taonga are exposed during construction, work will cease in the immediate vicinity and the Council, NZHPT, Project archaeologist and (where relevant) tangata whenua representative(s) will be contacted so that appropriate action can be taken (in the case of human remains the NZ Police must also be contacted); reference to the statutory requirements under the HPA 1993; and reference to statutory requirements relating to taonga tūturu (Māori artefacts) under the Protected Objects Act 1975.

We also recommend the following specific measures:

- The defined extent of Te Pā o Te Hēmara Tauhia (R10/921) and the rediscovered pa R10/1369 as shown on Figure 43 should be protected and excluded from the final construction footprint.
- Te Pā o Te Hēmara Tauhia (R10/921) and the land surrounding it (as defined in blue on Figure 18) should be surveyed by an archaeologist when access has been granted to the property. Any areas that cannot be avoided in the final design should be investigated and recorded under authority from the NZHPT prior to construction earthworks.
- Due to the presence of a number of archaeological sites within the Pūhoi area, initial earthworks in the southern half of the Pūhoi Sector of the Project should be monitored by an archaeologist, particularly in the immediate vicinity of recorded archaeological and heritage sites.

- Sites and areas of sites that will be avoided (notably Te Hemara's pa R10/921, and pa R10/1369) should be temporarily fenced off during construction to protect them from accidental damage from heavy machinery.
- Detailed recording and heritage assessments of the Schollum house (CHI 16249) and Titford Cottage (CHI 16252) should be carried out by a conservation architect to determine their level of heritage significance and current condition.
- The Schollum house should be relocated on the property (or elsewhere within the Pūhoi area) prior to the start of works in its vicinity.
- If Titford Cottage is assessed as being of significant heritage value, and if its condition permits, it should be relocated on the property (or elsewhere within the Pūhoi area) prior to the start of works in its vicinity.
- A heritage management plan for both pa sites (Ngā Te Pā o Te Hēmara Tauhia) should be prepared in partnership with Hōkai Nuku, and should include appropriate provision for public access (by walkways and waterways); installation of information signage relating to the Māori and early European history and heritage sites in the area; vegetation management; and consideration of limited remedial work to the defensive ditch (subject to NZHPT approval).
- The US military camps affected by the Project in the Perry Road Sector, Wylies Road Camps E (CHI 17006), and F and G (CHI 17007), should be recorded in detail prior to construction works, and the camp sites monitored by an archaeologist during construction works so that any additional remains exposed can be recorded.
- Opportunities for providing information to the public on these and the other camp sites in the Warkworth area should also be investigated, for example by providing roadside signage, website information, and depositing a report on the camp site recording in the Warkworth library.

Conclusion

There are relatively few historic heritage sites within the proposed designation boundary: nine sites in total, of which three can be avoided. There is some potential for adverse effects on unidentified subsurface archaeological remains exposed during construction, but this is largely confined to the Pūhoi Sector.

The two sites that we consider to have the most heritage significance – the two pa in the Pūhoi sector – have been avoided, in one case by substantial redesign of the indicative alignment.

Provided that the proposed mitigation measures are adopted, we consider that effects of the Project will be minor, in view of the limited number of heritage sites affected, and the low to moderate heritage significance of the affected sites.

The provision of public access to sites that were previously inaccessible and information on the history of the area and its heritage sites would be a positive effect of the Project, as would ongoing future management of the pa sites in partnership with Hōkai Nuku.

7.1 Recommended management and mitigation of effects

We propose various measures to manage and mitigate the effects or potential effects of the Project on archaeological and other heritage values.

We recommend provision of public access to and interpretation of Te Pā o Te Hēmara Tauhia and the rediscovered pa, considered to be the most significant heritage sites within the proposed designation boundary, subject to further consultation with Hōkai Nuku. We recommend the development and implementation of a heritage management plan in partnership with Hōkai Nuku and possibly limited restoration works to the defensive ditch (subject to NZHPT approval). The plan would include provision of information in the form of interpretation panels on the Māori and early European history and heritage sites in the Pūhoi area; the provision of walkways and access from waterways; and appropriate vegetation and other management of the site. We consider this would be appropriate mitigation for the adverse effects on the setting and surrounds of the sites.

Te Pā o Te Hēmara Tauhia and the surrounding area were not accessible for survey at the time of writing this Report, but we recommend that a condition of consent requires that a survey of this site be carried out. It is likely that midden associated with Te Pā o Te Hēmara Tauhia will be damaged through pile construction, but the pa itself (defined by the defensive ditch) will not be affected. Any effects should be mitigated through archaeological recording and investigation to recover information relating to the history of the site.

Titford House and Titford Cottage were not accessible for inspection prior to the writing of this Report, but based on current records and historical research, they were constructed in the early 20th century and are of moderate heritage significance. As Titford Cottage would have to be removed or destroyed as part of the Project, we recommend that a condition be included requiring the Cottage to be recorded in detail and assessed by a conservation architect. Depending on its heritage value and condition, the Cottage could be relocated to another part of the property, if feasible, as further mitigation.

The Schollum house site and surrounds will be affected directly by the Project. We therefore recommend that a condition of consent requires that the house be recorded in detail and assessed by a conservation architect, and also that the house is preserved by relocating it elsewhere on the property (or within the wider Pūhoi area).

The effects on midden/platform/log skid R10/1107 (reduced through redesign of the road around the rediscovered pa) and midden R10/1106 should be mitigated through archaeological recording and investigation to recover information relating to the history of the sites.

We also consider it would be appropriate to mitigate effects on the World War II military camps in the Perry Road Sector by making a more detailed record of them, as these are of historical interest and constitute historic heritage in terms of the RMA 1991, even if not subject to the archaeological provisions of the HPA 1993. We consider opportunities for providing information to the public on these and other camp sites in the area should be investigated, in the form of roadside interpretation signage, NZTA website information, and provision of a report on the investigations to the Warkworth library.

Where archaeological sites cannot be avoided by the Project, archaeological investigation and recording of any affected archaeological remains in order to obtain information which will

contribute to our knowledge of the history and archaeology of the area is an appropriate form of mitigation. Modification of archaeological sites and any investigations will require an Authority from the NZHPT under the HPA 1993.

The Project could also impact on unidentified subsurface archaeological remains during earthworks. We recommend that this potential effect should be managed and mitigated by implementing NZTA's Accidental Discovery Protocols, and that any affected remains should be recorded by a qualified archaeologist prior to their removal.

We consider that the management and mitigation of adverse effects on recorded and unrecorded archaeological sites would be best achieved through the preparation of a comprehensive archaeological management plan.

Our recommendations for the management and mitigation of effects on archaeology are set out in the following two sections.

7.2 General recommendations

Effects on recorded and unrecorded archaeological sites should be mitigated by detailed investigation and recording to recover information that will contribute to knowledge of the history of the Project area. This must be carried out in accordance with an Authority under the HPA 1993 issued by the NZHPT.

All earthworks or other activities involving soil disturbance in the general vicinity of recorded archaeological sites, US military camps and the surrounds of heritage buildings should be monitored by an archaeologist to establish whether subsurface archaeological remains are present and to record any remains.

An Archaeological Management Plan should be prepared in consultation with Hōkai Nuku and should include, as a minimum:

- provision for the training of contractors and subcontractors in the archaeological requirements of the project;
- project roles and responsibilities relating to archaeology;
- provision for protecting and minimising effects on archaeological sites during construction;
- specification of areas to be monitored by an archaeologist and Hōkai Nuku representatives;
- archaeological recording and investigation methodology and requirements;
- NZTA's Accidental Discovery Protocols, which stipulate that if any archaeological features or deposits, human remains or taonga are exposed during construction, work will cease in the immediate vicinity and the Council, NZHPT, Project archaeologist and (where relevant) tangata whenua representative(s) will be contacted so that appropriate action can be taken. In the case of human remains the NZ Police must also be contacted;
- reference to the statutory requirements under the HPA 1993; and

- reference to statutory requirements relating to taonga tūturu (Māori artefacts) under the Protected Objects Act 1975.

7.3 Specific recommendations

Pūhoi Sector

The defined extent of Te Pā o Te Hēmara Tauhia (R10/921) and the rediscovered pa R10/1369 as shown in red on Figure 43 should be protected and excluded from the final construction footprint.

Te Pā o Te Hēmara Tauhia (R10/921) and the land surrounding it as defined in blue on Figure 18 should be surveyed by an archaeologist when access has been granted to the property. Any areas that cannot be avoided in the final design should be investigated and recorded under authority from the NZHPT prior to construction earthworks.

Due to the presence of a number of archaeological sites within the Pūhoi area, initial earthworks in the southern half of the Pūhoi Sector of the Project should be monitored by an archaeologist, particularly in the immediate vicinity of recorded archaeological and heritage sites.

Sites and areas of sites that will be avoided (notably Te Hemara's pa R10/921, and pa R10/1369) should be temporarily fenced off during construction to protect them from accidental damage from heavy machinery.

Detailed recording and heritage assessments of the Schollum house (CHI 16249) and Titford Cottage (CHI 16252) should be carried out by a conservation architect to determine their level of heritage significance and current condition.

The Schollum house should be relocated on the property (or elsewhere within the Pūhoi area) prior to the start of works in its vicinity.

If Titford Cottage is assessed as being of significant heritage value, and if its condition permits, it should be relocated on the property (or elsewhere within the Pūhoi area) prior to the start of works in its vicinity.

A heritage management plan for both pa sites (Ngā Pā o Te Hēmara Tauhia) should be prepared in partnership with Hōkai Nuku, and should include appropriate provision for public access (by walkways and waterways); installation of information signage relating to the Māori and early European history and heritage sites in the area; vegetation management; and consideration of limited remedial work to the defensive ditch (subject to NZHPT approval).

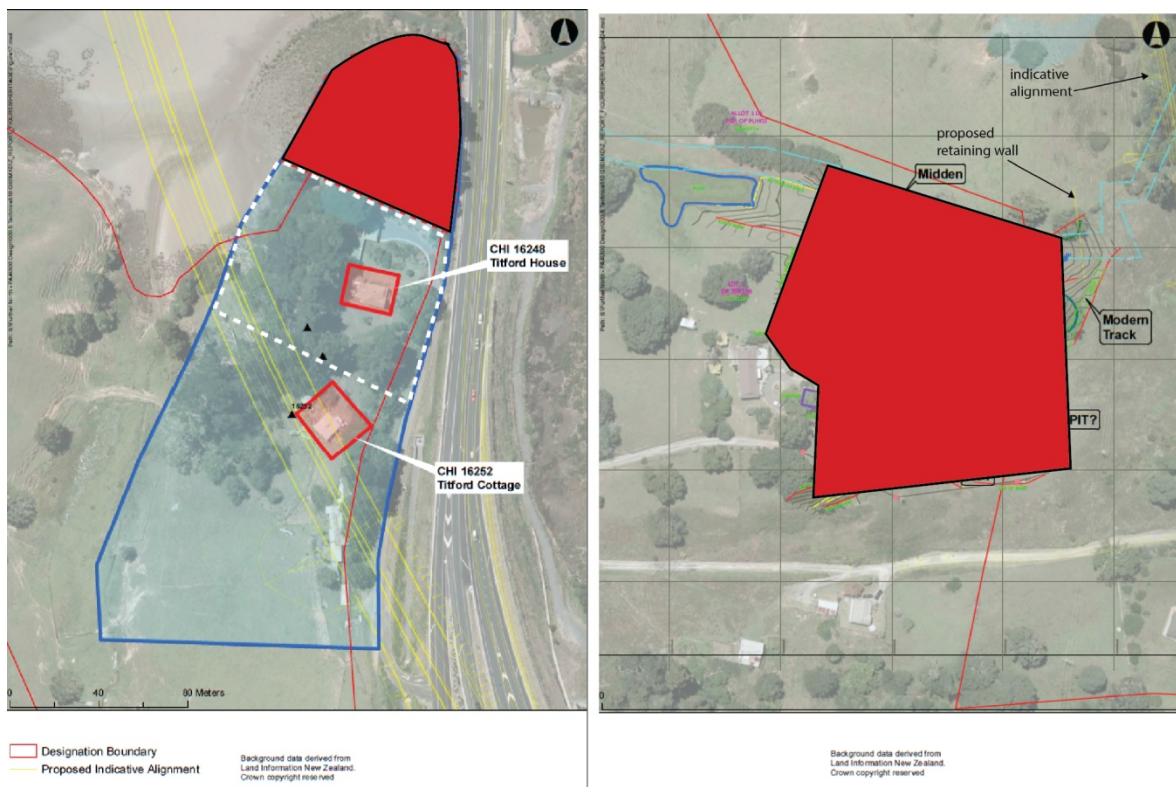


Figure 43. The defined extents of pa sites R10/921 and R10 /1369 (shaded red) which should be protected and excluded from the final construction footprint

Perry Road Sector

The US military camps affected by the Project, Wylies Road Camps E (CHI 17006), and F and G (CHI 17007), should be recorded in detail prior to construction works, and the camp sites monitored by an archaeologist during construction works so that any additional remains exposed can be recorded.

Opportunities for providing information to the public on these and the other camp sites in the Warkworth area should also be investigated, for example by providing roadside signage, website information, and depositing a report on the camp site recording in the Warkworth library.

7.4 Conclusions

There are relatively few historic heritage sites within the proposed designation boundary – nine in total comprising two pa, two midden sites, three historic buildings and two Second World War US military camp sites.

In the Pūhoi Sector the Project works will avoid, but affect the setting, surrounds and visual amenity of two significant pa sites (R10/921, Te Pā o Te Hēmara Tauhia, and newly rediscovered pa R10/1369), and one historic building (Tiford House). Two recorded midden sites of low to moderate archaeological significance would be damaged or destroyed, and there is potential for midden associated with (but outside) Te Pā o Te Hēmara Tauhia to be modified. Tiford Cottage (of early 20th century date) will be directly impacted by construction of the viaduct as it extends north from Johnstone's Tunnel. Construction in this Sector will also affect a recorded early 20th

century heritage building associated with the Schollum family (early settlers in the Pūhoi area) and possible subsurface archaeological remains associated with this house or with earlier use of the property.

In the Perry Road Sector the Project works will affect parts of two US military camp sites (out of eight recorded in the Warkworth area). These camp sites are of historical interest but low physical heritage or landscape value.

The potential for unrecorded subsurface archaeological sites is low along most of the route, with the exception of the Pūhoi area, where a number of archaeological sites and heritage buildings have been recorded, and where conditions were more favourable for both Māori and early European settlement.

NZTA has addressed its duty to avoid adverse effects on historic heritage by early identification of heritage values, avoidance of the majority of sites recorded in the immediate vicinity, and redesign of the indicative alignment to avoid the newly rediscovered pa site R10/1369.

We have recommended a range of measures to mitigate the adverse effects of the Project on heritage values. We also recommend the preparation of a detailed archaeological management plan to ensure that archaeological issues are managed appropriately during the construction phase.

If the mitigation measures we recommend are adopted, we consider the effects of the Project will be minor in view of the limited number of heritage sites affected, and the low to moderate heritage significance of the affected sites. The provision of public access to sites that were previously inaccessible and information on the history of the area and its heritage sites will be a positive effect of the Project, as will ongoing future management of the pa sites in partnership with Hōkai Nuku.

8. References

Beca Carter Hollings and Ferner Limited, 1992. SH1 Realignment: Route M Investigations Draft. Albany to Hatfields Beach. Environmental Impact Assessment. Prepared for Transit New Zealand.

Bioletti, H., 1989. *The Yanks are Coming: The American Invasion of New Zealand 1942-1944*. Century Hutchinson, Auckland.

Clough, R., 2006. Pūhoi-Mahurangi Estate: Stage 1 Rural Residential Subdivision - Archaeological Assessment. Clough & Associates report prepared for Prime Resources Ltd.

Clough, R. and D. Prince, 1999. Wellsford South Cell Site, Waiwhiu: Archaeological Assessment. Clough & Associates report prepared for Connell Wagner and Vodafone.

Dave Pearson Architects, 2003. Schischka Cottage, Pūhoi, Auckland: A Conservation Plan. Prepared for Auckland Regional Council.

Dave Pearson Architects, 2005. Wilsons' Cement Works, Warkworth: A Conservation Plan. Prepared for Rodney District Council.

Eghalanda Association (NZ), 1984 [?]. *Pūhoi: An Outline History*. Publication No. 1, Eghalanda Association (NZ), Pūhoi [?].

Farley, G., Burnett, Z. and R. Clough, August 2010. Pūhoi to Wellsford Motorway Alignment Options: Preliminary Heritage Constraints Report. Clough & Associates report prepared for SKM Consulting Limited.

Farley, G., Burnett, Z. and R. Clough, September 2010. Pūhoi to Wellsford Motorway Alignment Options: Heritage Constraints Report. Clough & Associates report prepared for SKM Consulting Limited.

Farley, G., Burnett, Z. and R. Clough, November 2010a. Pūhoi to Wellsford Proposed Indicative Route: Heritage Constraints Report. Clough & Associates report prepared for SKM Consulting Limited.

Farley, G., Burnett, Z. and R. Clough, November 2010b. SH1 Pūhoi to Wellsford Proposed Indicative Route: AEE (Historic Heritage). Clough & Associates report prepared for SKM Consulting Limited.

Farley, G., Burnett, Z. and R. Clough, January 2011. SH1 Pūhoi to Wellsford Proposed Indicative Route: AEE (Historic Heritage). Clough & Associates report prepared for SKM Consulting Limited.

Farley, G. and R. Clough, 2004. Pūhoi Straits, Schollums Access Road: Proposed Vodafone Cell Tower Archaeological Assessment. Clough & Associates report prepared for Vodafone Ltd.

Farley, G. and R. Clough, 2007. 70 Woodcocks Road, Warkworth, Rodney District: Preliminary Archaeological Assessment. Clough & Associates report prepared for Stockyard Holdings.

Farley, G. and R. Clough, 2009. Lot 2 DP 313511, Woodcocks Road, Warkworth: Archaeological Assessment. Clough & Associates report prepared for Gulf Corporation Ltd.

- Foster, R. 1999. ALPURT Sector B2 Proposed Fill Site – Stanaway Property: Archaeological Assessment. Prepared for Beca Carter Hollings and Ferner Limited.
- Harlow, D., 1998. Archaeological Survey and Assessment Report for Resource Consent Application for Peter Hull, Paparoa Farmlands Ltd, Falls Road, Warkworth. Prepared for Paparoa Farmlands Limited.
- Goldsmith, P., 2003. *The Rise and Fall of Te Hemara Tauhia*. Reed Publishing, Auckland.
- Hōkai Nuku Cultural Effects Assessment Report 2013. Pūhoi to Warkworth Hōkai Nuku Cultural Effects Assessment. Prepared by Gena Moses-Te Kani, Kaiwhakahaere.
- Judge, C. and R. Clough, 2009. Proposed Hudson Road Business Park, Warkworth: Archaeological Assessment. Clough & Associates report prepared for Warkworth Properties 2008 Ltd.
- Keys, H. J., 1954. *Mahurangi – The Story of Warkworth, New Zealand*. Cameo Press, Warkworth.
- Locker, R. H., 2001. *Jade River: A History of the Mahurangi*. Friends of the Mahurangi Incorporated, Warkworth.
- Mabbett, H., 1968. *Wellsford - Tidal Creek to Gum Ridge*. Lower North Weekly News, Wellsford.
- Mabbett, H. 1977. *The Rock and the Sky: The Story of Rodney County*. Wilson & Horton for the Rodney City Council, Auckland.
- Mackintosh, L., 2005. Wenderholm Regional Park: Our History. Auckland Regional Council Heritage Department, Auckland.
- Mooney, K., 1963. *From the Heart of Europe to the Land of the Southern Cross: A Story of Pūhoi 1863-1963*. Pūhoi Centennial Publications Committee, Pūhoi.
- Murdoch, G., 1992. Tawharanui Regional Park: Management Plan. Auckland Regional Council, Regional Parks Service.
- NZMCH 2006. *New Zealand Ministry for Culture and Heritage. Māori Peoples of New Zealand, Nga Iwi o Aotearoa. Te Ara – The Encyclopedia of New Zealand*. David Bateman Ltd & Ministry for Culture and Heritage, Auckland.
- NZHPT 2006. Guidelines for the Investigation and Recording of Buildings and Standing Structures. Archaeological Guidelines Series No. 1. New Zealand Historic Places Trust Pouhere Taonga.
- Prince, D., 2004. Pūhoi Residential Forest Park, Proposed Development of Part Section s 3 & 12 Surveyed Block III Waiwera, Rodney District: Archaeological Survey and Assessment of Effects.
- Rigby, B. 1998. The Crown, Māori, and Mahurangi 1840-1881: a historical report commissioned by the Waitangi Tribunal. New Zealand.
- Scott, R., 2007. *The Settlement of Pūhoi: An Incident in the Overseas Expansion of Central Europe*. 1934 thesis for the degree of Master of Arts, by Ruth Schmidt. Pūhoi Historical Society, Pūhoi.
- Turnwald, M., 1993. *Pūhoi Tapestry 1863-1993: Commemorating 130 Years of Achievement*. M. Turnwald, Pūhoi.

Turton, H. 1877. *Māori Deeds of Land Purchases in the North Island of New Zealand*: Volume One. George Didsbury, Wellington.

Archives New Zealand

ACIO 8722 6/ 73
ACIO 8722 6/ 75
ACIO 8722 6/ 77/1
ACIO 8722 6/ 77/2
ACIO 8722 6/ 79/1
ACIO 8722 6/ 79/2
ACIO 8722 6/ 79/3
ACIO 8722 6/ 79/4

BBAE A2 5632 Box 777 q, Application for consent to sale – James Charles Titford to Allan A Stanaway, 1947.

Births, Deaths and Marriages

BDM 1891/12473, BDM 1893/6310, BDM 1894/12659, BDM 1900/6056, BDM 1918/4627.

Websites

The Wenzlick family of New Zealand website:
<https://sites.google.com/site/wenzlickfamilyofnewzealand/Home>

LINZ

SO 984
NA 20d/1469
NA 50/186
NA 462/204
NA 488/105

Newspapers

Evening Post, 4 August 1944:5
New Zealand Herald, 11 June 1910.
Observer, 14 February 1891.
Rodney Times, 20 January 2009.

Warkworth and District Museum and Archive

World War Two archive box