

Project Number: 2-37400.00

# Nukuhau Structure Plan

## Archaeological Assessment for the Nukuhau Structure Plan Change, Taupo

7 September 2021



## Contact Details

### *Kirsty Sykes*

WSP  
19 Henry Street  
Blenheim 7012  
+64 3 520 9500  
+64 21 243 2899  
kirsty.sykes@wsp.com

### *Document Details:*

Date: August 2021  
Reference: 2-37400.00  
Status: Final

### *Prepared by*

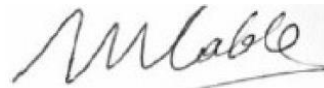
Kirsty Sykes



Senior Archaeologist

### *Reviewed by*

Nick Cable



Senior Archaeologist

## Document History and Status

Revision	Date	Author	Reviewed by	Approved by	Status
1	05/08/2021	K. Sykes	N. Cable		Draft 1
2	24/08/2021	K. Sykes	N. Cable		Draft 2
3	27/8/2021	K. Sykes	N. Cable		Final

## Revision Details

Revision	Details
1	Initial draft
2	Initial reviewer amended comments
3	Reviewer amended comments

## Disclaimers and Limitations

This report ('**Report**') has been prepared by WSP exclusively for Lexus Trustees 11 Ltd, Dentistry Revisited Ltd and CN Top Investment Ltd ('**Client**') in relation to the Nukuhau Structure Plan Change Project ('**Purpose**'). The findings in this Report are based on and are subject to the assumptions specified in the Report. WSP accepts no liability whatsoever for any reliance on or use of this Report, in whole or in part, for any use or purpose other than the Purpose or any use or reliance on the Report by any third party.

In preparing the Report, WSP has relied upon data, surveys, analyses, designs, plans and other information ('**Client Data**') provided by or on behalf of the Client. Except as otherwise stated in the Report, WSP has not verified the accuracy or completeness of the Client Data. To the extent that the statements, opinions, facts, information, conclusions and/or recommendations in this Report are based in whole or part on the Client Data, those conclusions are contingent upon the accuracy and completeness of the Client Data. WSP will not be liable in relation to incorrect conclusions or findings in the Report should any Client Data be incorrect or have been concealed, withheld, misrepresented or otherwise not fully disclosed to WSP.

# Contents

Disclaimers and Limitations .....	1
1 Introduction.....	4
1.1 Purpose of this Report.....	4
1.2 Site Location and Proposal.....	4
2 Statutory Requirements.....	6
2.1 The Heritage New Zealand Pouhere Taonga Act 2014.....	6
2.2 The Resource Management Act 1991.....	6
3 Methodology.....	7
3.1 Sources of Information.....	7
3.2 Assessment of Effects.....	8
4 Constraints and Limitations.....	9
5 Environmental Setting.....	9
6 Historic Background.....	9
6.1 Pre-European Maori Archaeology.....	10
6.2 Historic Archaeology.....	10
7 Review of Information Sources.....	10
7.1 Recorded Archaeological Sites.....	10
7.2 Heritage Sites.....	12
7.3 Historic Survey Plans and Aerial Photography.....	12
8 Site Visit.....	14
8.1 Summary of Results.....	19
9 Assessment of Archaeological and Other Values.....	19
9.1 Archaeological Values.....	19
9.2 Assessment of Heritage Values.....	20
10 Assessment of Effects.....	20
10.1 Proposed Works.....	20
10.2 Potential Effects.....	20
11 Conclusions and Recommendations.....	21
11.1 Recommendations.....	21
References.....	22

## List of Figures

Figure 1: Site location indicated by the red box.....	4
Figure 2: Site with areas A, B and C indicated. Source: WSP .....	5
Figure 3: Archaeological site records (stars) within the vicinity of the proposed Site (red polygon). Image from ArchSite .....	11
Figure 4: A 1917 Māori Land survey showing Area A in part and indicating pine, manuka, fern and a 'deep gully' (HNC ML 5271 G: Quickmaps).....	12
Figure 5: Excerpt from ML5271 (1882) showing various place names and roads in the vicinity of the lake front and Waikato River but outside the Site area (blue - source: QuickMap).....	13
Figure 6: 1945 aerial photograph of the Site (indicated by the red polygon).....	13
Figure 7: View west of the southern portion of Area B.....	14
Figure 8: View west across the central portion of Area B.....	15
Figure 9: Typical stratigraphy in Area B; Thin topsoil overlaying a light brown tephra B horizon. ....	15
Figure 10: View south of Area C.....	16
Figure 11: Typical stratigraphy in Area C; Topsoil overlaying an orange tephra B horizon.....	16
Figure 12: Locations of depressions within Area C (blue polygon).....	17
Figure 13: Locations of two depressions within Area C indicated by the red dashed circle.....	17
Figure 14: Looking south at depression within Area C.....	18
Figure 15: Test pit dug within Figure 9 depression.....	18

## List of Tables

Table 1. Archaeological Values of pre-European pit site. ....	19
Table 2. Statement of archaeological values for the site type pre-European Maori pits.....	20

# 1 Introduction

## 1.1 Purpose of this Report

Lexus Trustees 11 Ltd, Dentistry Revisited Ltd and CN Top Investment Ltd (the Client) commissioned WSP to undertake an archaeological assessment for the proposed Nukuhau Structure Plan Change in Taupo (see Figures 1 and 2). The plan change request seeks to change the zoning of 77.76 hectares of Rural Environment zoned land to a mix of General Residential, Medium Density Residential, Local Centre zoning and areas of stormwater and recreation reserves. These proposed zone changes will enable the future development of approximately 780 dwellings in an area identified in the Taupō District 2050 - Growth Management Strategy (TD 2050) as a northern growth area. The area within Nukuhau to be affected by the Plan Change (the “Site”) is located west of Taupo and currently comprises of farmland and fields mixed with lifestyle blocks.

This report presents an archaeological assessment of the effects of the Plan Change on the Site. It evaluates the potential for archaeological sites to be present within the Site and assesses the effects on archaeological values that the Plan Change and subsequent change in development will have.

## 1.2 Site Location and Proposal

The Site is located on the western fringe of the Taupo residential area and the Waikato River (Figure 1). The existing area is zoned for future suburban residential development, but the Plan Change looks to amend the zoning to include general and medium density residential housing, a neighbourhood shopping centre, as well as associated infrastructure including roads, services, access paths, recreational areas and landscaping. For the purpose of this report, the Site area has been split into three areas: A, B and C (Figure 2).

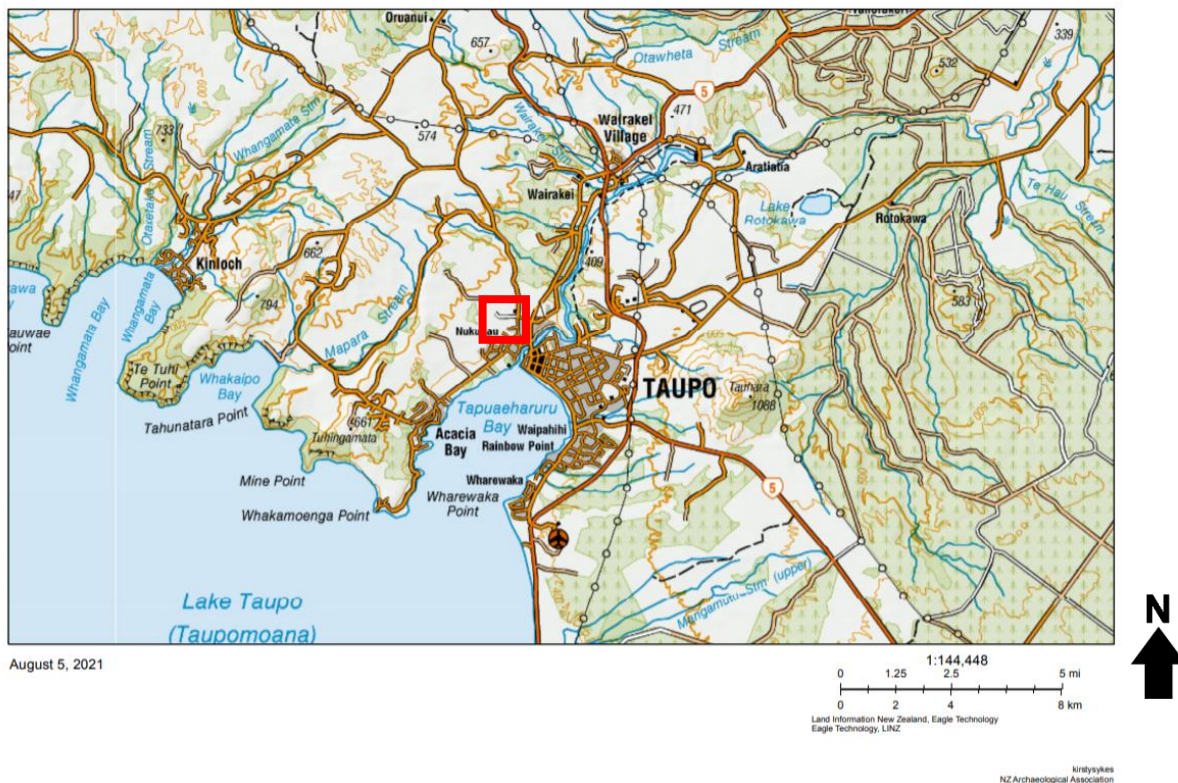


Figure 1: Site location indicated by the red box.

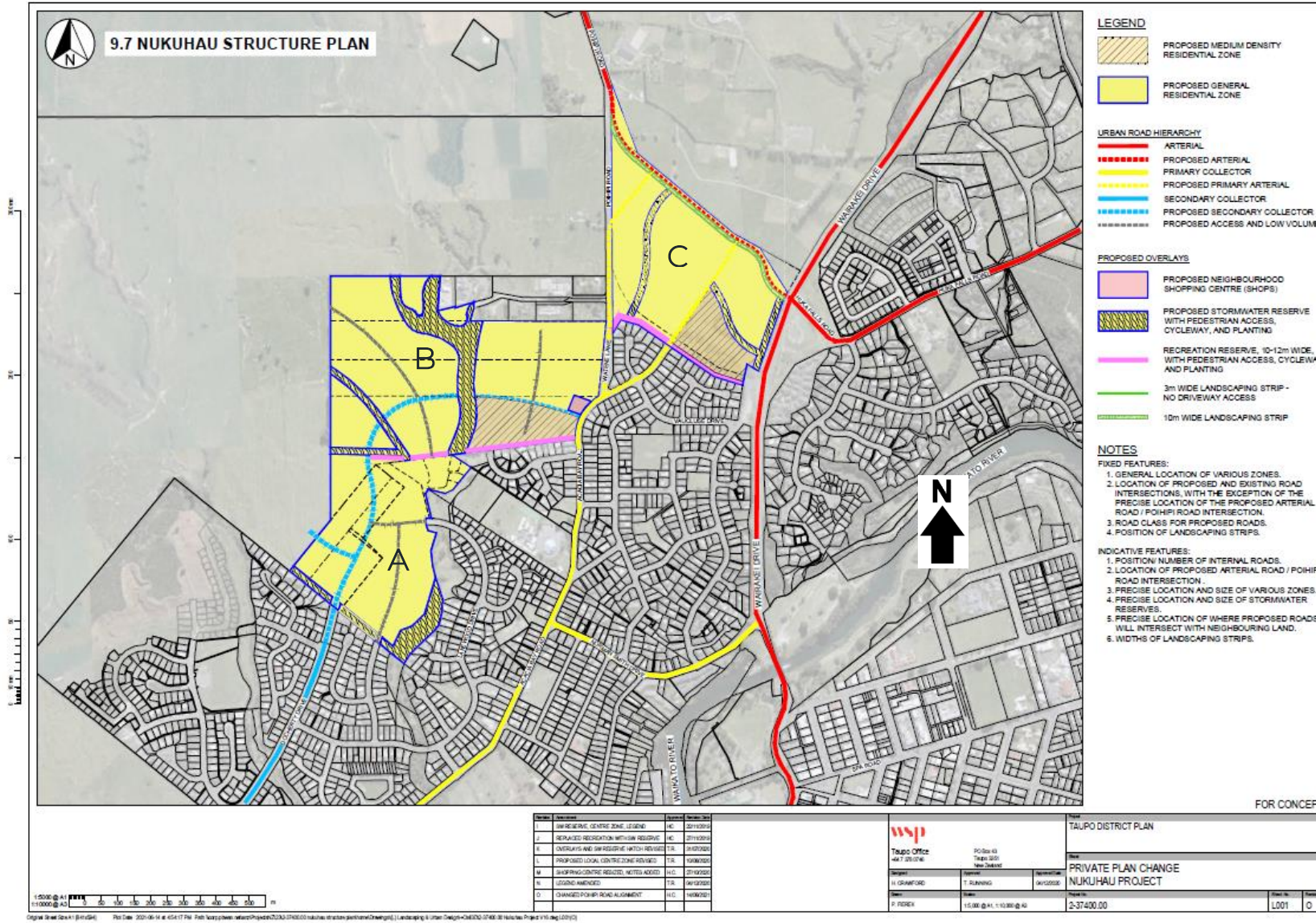


Figure 2: Site with areas A, B and C indicated. Source: WSP

## 2 Statutory Requirements

There are two main pieces of legislation in New Zealand that control work affecting archaeological sites. These are the **Heritage New Zealand Pouhere Taonga Act 2014** (HNZPTA) and the **Resource Management Act 1991** (RMA).

### 2.1 The Heritage New Zealand Pouhere Taonga Act 2014

The HNZPTA promotes the identification, protection, preservation, and conservation of the historic and cultural heritage of New Zealand. It provides blanket protection to all archaeological sites whether they are recorded or not. The provisions of the HNZPTA are administered by Heritage New Zealand Pouhere Taonga (Heritage New Zealand). It is illegal to destroy, damage, or modify archaeological sites without first gaining an archaeological authority to do so from Heritage New Zealand.

The HNZPTA contains a consent (authority) process for any work affecting an archaeological site. An archaeological site is defined under section 6 of the HNZPTA as: (a) any place in New Zealand, including any building or structure (or part of a building or structure), that (i) was associated with human activity that occurred before 1900, or is the site of the wreck of any vessel where the wreck occurred before 1900; and (ii) provides or may provide, through investigation by archaeological methods, evidence relating to the history of New Zealand; and (b) includes a site for which a declaration is made under Section 43(1) of the Act.

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

The archaeological authority process applies to all archaeological sites, regardless of whether:

- The site is recorded in the New Zealand Archaeological Association (NZAA) Site Recording Scheme (ArchSite) or included in the Heritage New Zealand List;
- The site only becomes known about as a result of ground disturbance; and/ or
- The activity is permitted under a district or regional plan, or a resource or building consent has been granted.

Heritage New Zealand also maintains the New Zealand Heritage List/ Rārangī Kōrero of Historic Places, Historic Areas, Wāhi Tupuna and Wāhi Tapu Areas (the List). The List can include archaeological sites.

### 2.2 The Resource Management Act 1991

Part II of the RMA outlines the Purpose and Principals of the RMA. In outlining the purpose of the RMA, section 5 states:

- (1) The purpose of this Act is to promote the sustainable management of natural and physical resources.
- (2) In this Act, “sustainable management” means managing the use, development and protection of natural and physical resources in a way or at a rate, which enables the people and communities to provide for their social, economic, and cultural wellbeing and for their health and safety while-



- a. Sustaining the potential of natural and physical resources (excluding minerals) to meet the reasonably foreseeable needs of future generations; and
- b. Safeguarding the life supporting capacity of air, water, soil and ecosystems; and
- c. Avoiding, remedying, or mitigating any adverse effects of activities on the environment.

Section 6 of the RMA outlines that “in achieving the purposes 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.” The 2003 amendments to the RMA elevated historic heritage to a matter of national importance under section 6(f), which identifies the need for “the protection of historic heritage from inappropriate subdivision, use and development.”

A definition of historic heritage was also added with the amendments to the RMA. This defines historic heritage as:

- a) 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;
  - (ii) archaeological sites;
  - (iii) sites of significance to Māori, including wāhi tapu; and
  - (iv) surroundings associated with the natural and physical resources.

As such, when considering applications under the RMA, the consenting authority must recognise and provide for historic heritage as a matter of national importance.

## 3 Methodology

### 3.1 Sources of Information

This assessment report is based on research from known information sources on archaeological values and a field survey of the Site. Research was carried out using a range of information sources including:

- New Zealand Archaeological Association (NZAA) Site Recording Scheme (ArchSite);
- New Zealand Heritage List/ Rarangi Kōrero;
- Previous archaeological reports and assessments;

- The District Plan;
- Aerial imagery; and
- Historic archives, web-based resources, maps and plans.

Senior Archaeologist Kirsty Sykes undertook a site visit on 6<sup>th</sup> July 2021 to inspect the Site. A site walkover was undertaken, and a visual inspection of the surrounding ground was engaged in to inspect any potential surface indicators of archaeological material.

Based on the information review and site walkover, it was possible to determine (a) whether any archaeological sites are currently located within the Site; and (b) what potential types of archaeological sites might otherwise exist.

## 3.2 Assessment of Effects

### *Criteria for Assessing Archaeological Values*

Under the HNZPTA, archaeological assessments are directed to determine whether proposals will directly impact archaeological sites and hence require an authority to modify or damage archaeological sites from HNZPT.

HNZPT regards the following values as important in determining whether an authority can be granted and what mitigation conditions should be attached to an authority decision (NZHPT 2019:9-10):

- i. *The **condition** of the site(s).*
- ii. ***Rarity:** Is the site(s) unusual, rare or unique, or notable in any other way in comparison with other sites of its kind?*
- iii. *Does the site possess **contextual value**?*
- iv. ***Information Potential:** What current research questions or areas of interest could be addressed with information from the site(s)?*
- v. ***Amenity Value:** Does the site(s) have potential for public interpretation and education?*
- vi. *Does the site(s) have any special **cultural associations** for any particular communities or groups?*

### *Criteria for Assessing Heritage Values*

The RMA informs a prescriptive assessment process for determining environmental effects (Schedule 5). As part of an Assessment of Environmental Effects (AEE), an assessment of heritage effects must assess the effects of a proposal on the heritage values of recognised heritage sites and identify appropriate mitigation or avoidance measures for these effects.

An Archaeological Assessment should consider both archaeological values relevant to the HNZPTA authority process and heritage values relevant to RMA decision making in determining effects on heritage values.

The RMA lists a number of qualities for assessing historic heritage in order to provide a robust analysis to withstand, for example, Environment Court scrutiny.

These qualities are **archaeological**; **architectural**; **cultural**; **historic**; **scientific**; and **technical** (RMA s2).

Section 66(3) of the HNZPTA lists criteria that should be used to assess the heritage significance of a historic place:

- a) The extent to which the place reflects important or representative aspects of New Zealand history.
- b) The association of a place with events, persons, or ideas of importance in New Zealand history.
- c) The potential of a place to provide knowledge of New Zealand history.
- d) The importance of the place to tangata whenua.
- e) The community association with, or public esteem for, the place.
- f) The potential of the place for public education.
- g) The technical accomplishment or value, or design of the place.
- h) The symbolic or commemorative value of the place.
- i) The importance of identifying historic places known to date from early periods of New Zealand settlement.
- j) The importance of identifying rare types of historic places.
- k) The extent to which the place forms part of a wider historic and cultural area.

Section 66(4) and (6) provide that additional criteria may be prescribed by regulation.

## 4 Constraints and Limitations

The NZAA *ArchSite* was the primary resource used for identifying recorded sites in the area. It is important to note that the archaeological site location data in *ArchSite* should be regarded as a guide only and is generally based on reconnaissance rather than on accurate survey information. The coordinates of many of the sites in the database are of variable accuracy. In addition to this, the areal extents for many recorded sites are poorly defined.

This report does not include an assessment of Māori cultural values. Statements are made as to the location and nature of archaeological sites and their archaeological values. There are no statements on the cultural significance of the Site area nor are the views of tāngata whenua represented in this report. An assessment of cultural significance will not necessarily correlate with an assessment of the archaeological significance of the area.

## 5 Environmental Setting

The Site is located on the western edge of the Waikato River near its source at Lake Taupo. The Site lies in the Taupo Volcanic Zone with its soils come from the pumice and ignimbrite rock thrown out during the major Taupo eruptions (Forsyth and Aitken 1995:23).

The area is currently used as lifestyle blocks and for agricultural purposes on the western fridges of the Taupo residential area. The majority of the Site is rolling volcanic hills and gullies in pasture with patches of scrub.

## 6 Historic Background

No attempt is made here to synthesise the rich and detailed record of Māori oral traditions and whakapapa concerning the area. Inexpert synthesis of information based on traditions and whakapapa can be damaging to the interests of mana whenua. Therefore, such material is

omitted. Rather, the reader is referred to any records of Māori history where such information is available.

## 6.1 Pre-European Maori Archaeology

Williams (1988) attempted to synthesise the data for the Lake Taupo area. The area hasn't had systematic archaeological survey and additions to the archaeological records since Williams work have tended to have resulted from ad hoc archaeological records.

Williams concluded that early visits to the Lake Taupo district by early Maori were likely of a temporary and/or seasonal nature with a greater dependence on forest resources than later in the record. This occupation likely focused on the Waikato River and lake shores. Later settlement of the area comprised primary and satellite settlements based on resource procurement with a focus on the north, east and southern shores of the lake (Williams 1988 in Mallows 2007:16).

## 6.2 Historic Archaeology

The first European reached the Taupo district in the 1830s; mainly missionaries then traders and scientific explorers (Greenfield 1996:9-10). The township area itself is reported to have been largely unoccupied at that time (Campbell et al. 2013). There was limited interaction in the area Europeans in the following decades until the arrival of the armed constabulary in 1869 when they established a military post at the present day Taupo Reserve on the western edge of the current Taupo CBD (Greenfield 1996:9-10; Mallows 2007:6-7). The Tapuaeharuru Redoubt was established to protect the route between Napier and Taupo as well as being positioned at the strategic convergence of several Maori tracks at the source of the Waikato River (Mallows 2007:7). The later decades of the 19th century saw the slow development of the Taupo township and the town continues to slowly grow with its primary attractions being forestry, agriculture, geothermal energy and tourist attractions.

# 7 Review of Information Sources

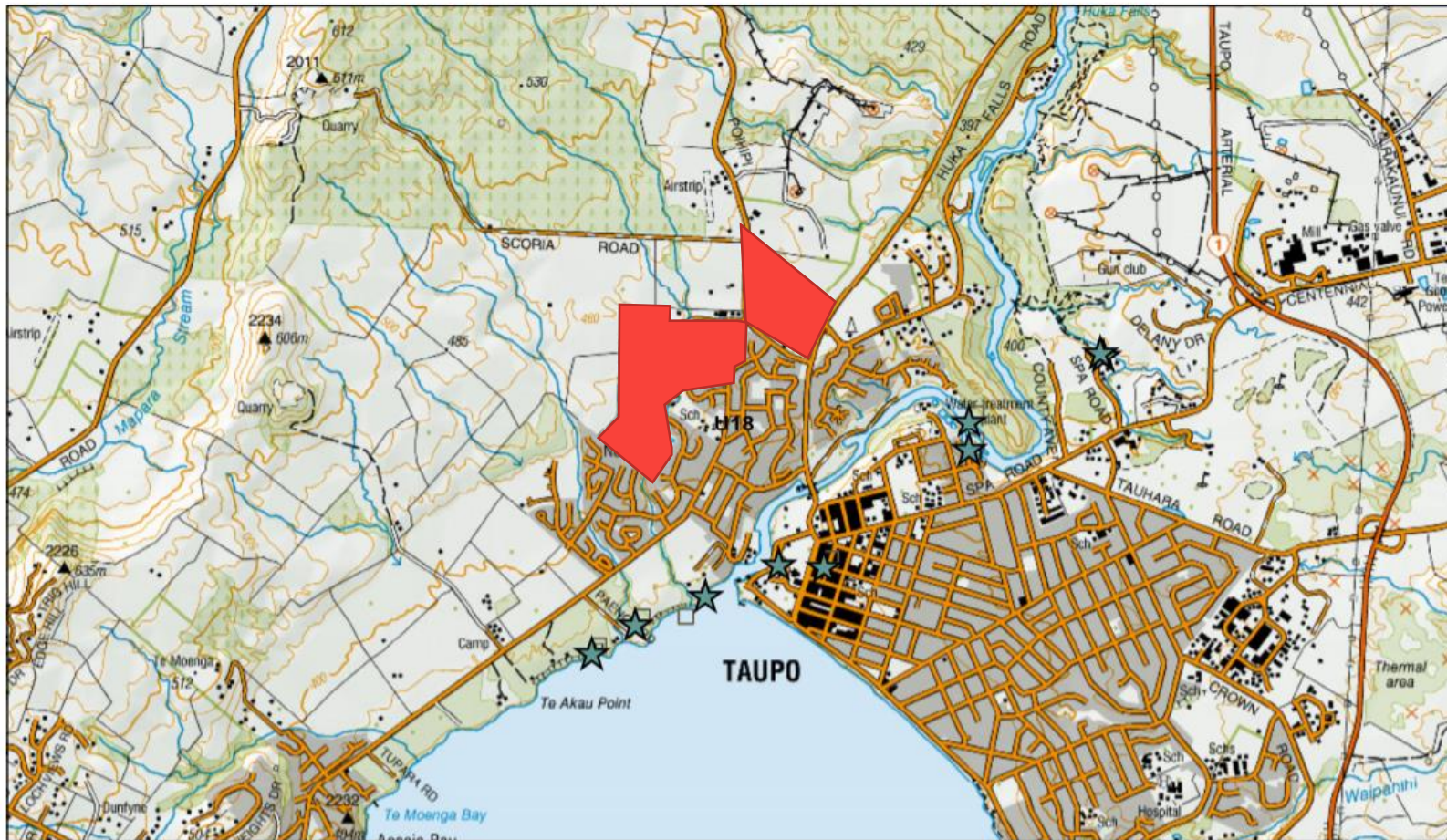
## 7.1 Recorded Archaeological Sites

The *ArchSite* database holds information on all recorded archaeological sites; the database is managed by the New Zealand Archaeological Association (NZAA).

A search of this database indicated that there are currently no recorded archaeological sites within the Site area (Figure 3). Taupō is poorly represented in ArchSite, with the lack of recorded sites indicative of a lack of systematic archaeological surveys. Those few recorded archaeological sites within the wider area indicate both pre-European Māori and historic activity in the Taupō township itself and along the margin of the lake and Waikato River. The closest recorded archaeological sites record highly visible archaeological sites including pa, urupa/cemetery and a redoubt (e.g. U18/93; U18/87; U18/85; U18/2; U18/100; U18/97; U18/98). Currently the recorded archaeological sites indicate a focus of activity around the lake and rivers, in other words, not within the typological landscape in which the Site sits.

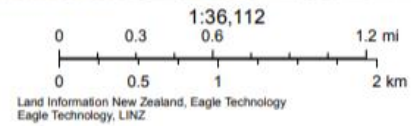
It is understood that the area around present day Taupō township, and the mouth of the Waikato River, was strategically important to Māori and likely heavily occupied relative to surrounding interior regions.

There are currently no relevant archaeological reports from previous archaeological investigations that have been produced for the study area or in the immediate vicinity. A summary of wider studies was included in the background section.



August 6, 2021

- |                  |            |                      |
|------------------|------------|----------------------|
| <b>NZAA Site</b> | ★ Approved | □ NZAA Site Area     |
| ★ Pending        | ★ Inactive | □ NZAA Site Accuracy |
|                  |            | □ Map Grids          |



kirstysykes  
 NZ Archaeological Association

Figure 3: Archaeological site records (stars) within the vicinity of the proposed Site (red polygon). Image from ArchSite.

## 7.2 Heritage Sites

Review of Rāangi Korero / the New Zealand Heritage List and the Taupo District Plan indicated that there are no historic places entered onto the list and plan in within or in close proximity to the Site.

## 7.3 Historic Survey Plans and Aerial Photography

An examination of historic survey documents indicates that Area A of the proposed rezoning (as identified in this document see Figure 1) was in pine plantation, fern and manuka in 1919 (Figure 4). While buildings and other features e.g. graves are marked on the plan, none are located within the proposed Site area.

A number of Māori Land Court and other historic surveys were examined in relation to Areas B and C, and whilst nothing of archaeological note was identified within the parcels, the presence of pre-1900 pā and other named places were shown at the lake and river edge (Figure 5). This fits with the known archaeological risk in those areas.

Review of historic aerial photography indicates the area was in pasture or scrub in 1945 with no visible structures or modifications noted bar the occasional track (Figure 6). Aside from the development of roads in the 1960s and small areas of disturbances, such as houses and quarrying from the 1970s, the Site area has remained largely unmodified from the 1945 photograph.

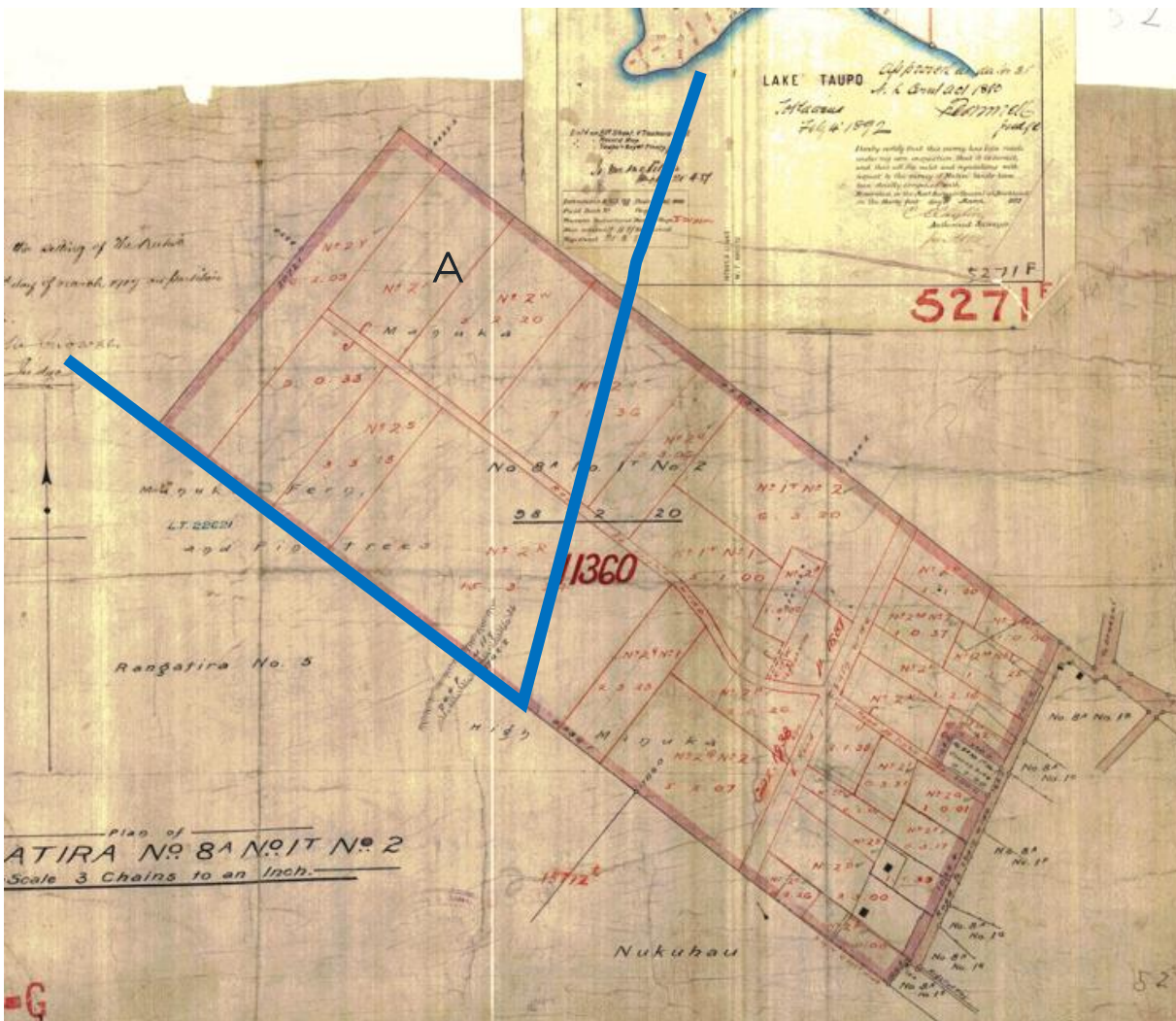


Figure 4: A 1917 Māori Land survey showing Area A in part and indicating pine, manuka, fern and a 'deep gully' (HNC ML 5271 G: Quickmaps).

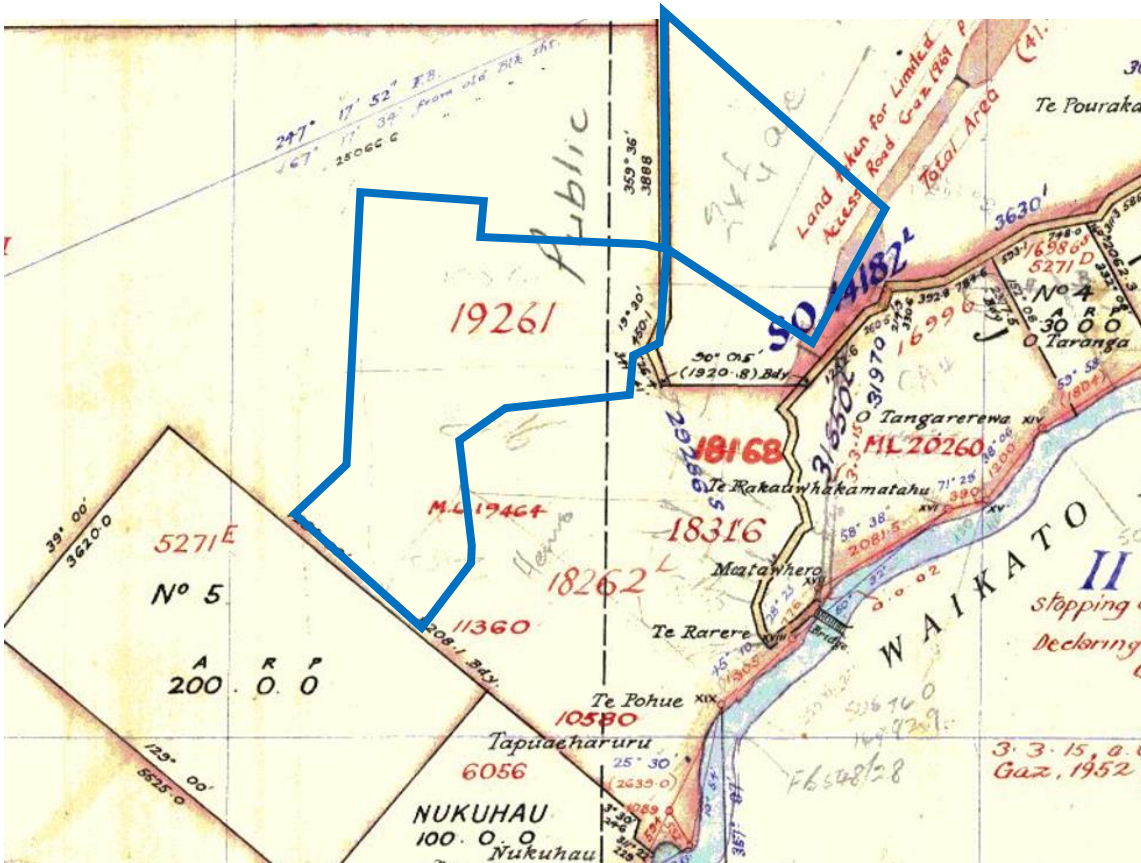


Figure 5: Excerpt from ML5271 (1882) showing various place names and roads in the vicinity of the lake front and Waikato River but outside the Site area (blue - source: QuickMap).

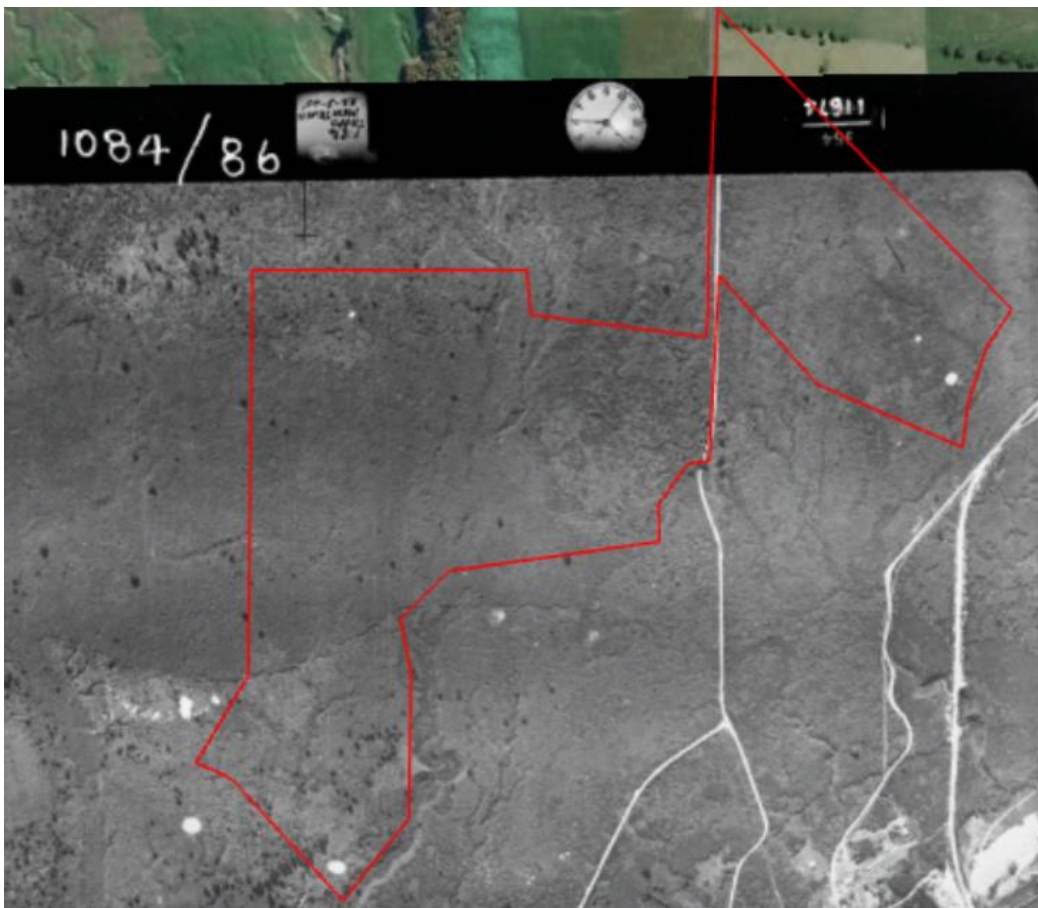


Figure 6: 1945 aerial photograph of the Site (indicated by the red polygon).

## 8 Site Visit

Kirsty Sykes (the author – Senior WSP Archaeologist) undertook a site visit to the Site on the 6<sup>th</sup> July 2021. Area A was not inspected as access for the site visit was not provided.

A visual inspection of Area B was undertaken aside from the middle portion, which is in thick scrub. Aside from the houses and outbuildings, the area inspected was primarily in short pasture and stocked with sheep and horses (Figures 7 - 9). No archaeological features were noted during the inspection.

The visual inspection of Area C was undertaken with good visibility as the area was, for the majority, in short pasture with grazing horses (Figures 10-11). Two depressions, both approximately rectangular and measuring up to 6 m were noted in close proximity in the southern portion of Area A at E1866744 N5715213 (Figures 12- 14). A test pit was undertaken to a depth of approximately 40cm in the larger of the depressions. The test pit indicated mixed A and B horizon beyond the depth of the test pit indicating disturbance but was inconclusive as to the source of this disturbance. A review of historic aerial photograph did not identify any potential recent explanations for the depressions, such as trees etc. There is risk that these depressions may represent archaeology features such as pits, however, further investigations would be required to determine the actual nature of the depressions. No other features of archaeological note were identified during the site visit.



*Figure 7: View west of the southern portion of Area B.*





*Figure 8: View west across the central portion of Area B.*



*Figure 9: Typical stratigraphy in Area B; Thin topsoil overlaying a light brown tephra B horizon.*



*Figure 10: View south of Area C.*



*Figure 11: Typical stratigraphy in Area C; Topsoil overlaying an orange tephra B horizon.*

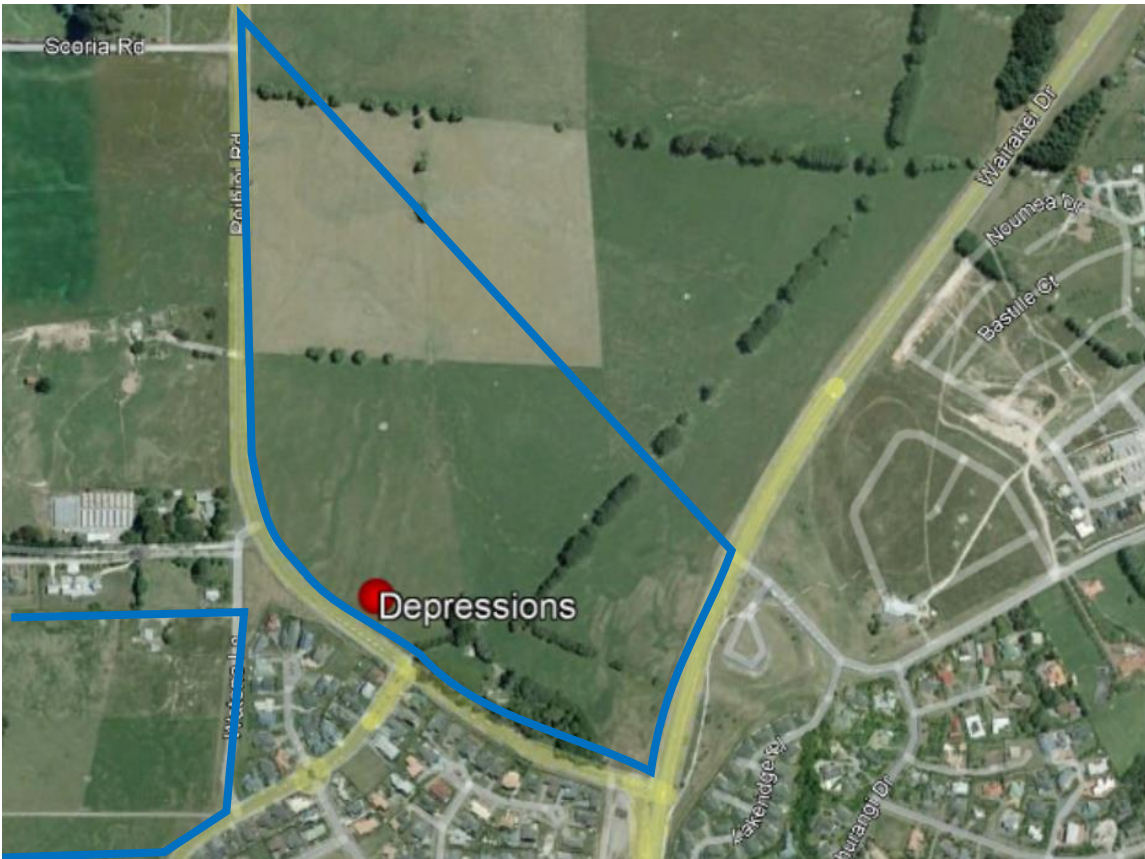


Figure 12: Locations of depressions within Area C (blue polygon).



Figure 13: Locations of two depressions within Area C indicated by the red dashed circle.



Figure 14: Looking south at depression within Area C.



Figure 15: Test pit dug within Figure 9 depression.

## 8.1 Summary of Results

There are currently no recorded archaeological sites within the Site. The topography of the Site is not located in the known high-risk archaeological zone for this area. However, the general area is under recorded archaeologically due to a lack of systematic survey and the size of the Site area and its general intactness increases the risk for potential archaeology. Two depressions in Area C of the Project area require further investigation to determine if they are archaeological in nature. Aside from this area of risk, the remainder of the Site is considered to have low archaeological risk.

## 9 Assessment of Archaeological and Other Values

Archaeological values relate to the potential of a place to provide evidence of the history of New Zealand. This potential is framed within the existing body of archaeological knowledge, current research questions and hypotheses about New Zealand's past.

Statements are made below in relation to the specific area within the Site that holds archaeological potential. The majority of the Site is considered to be of low archaeological risk, however, the two depressions within Area C may represent pits and are therefore assessed as a potential site below.

### 9.1 Archaeological Values

Table 1. Archaeological Values of pre-European pit site.

Value	Assessment
Condition	Unknown. No archaeological features but the two identified depressions appeared relatively intact and there is potential for additional intact subsurface features to be present.
Rarity/ Uniqueness	Any archaeological evidence identified in the risk zone of the depressions and surrounds would be considered rare but not unique. The present of pits suggests some form of settlement in this location, which is the first such evidence. Other settlements in the area are documented, so overall local significance here in potentially documenting a previously unrecorded settlement opposite Taupo.
Contextual Value	Depressions of an archaeological nature usually represent pits. These would site within the context of the pre-European Maori landscape and may be associated with gardening, storage and settlement.
Information Potential	If archaeological features are exposed there will be potential for scientific information to be recovered by archaeological means related to: <ul style="list-style-type: none"> <li>- Māori subsistence practices,</li> <li>- Timing of site formation,</li> <li>- Plant macrofossils and microfossils and microfauna can provide paleoenvironmental evidence.</li> </ul>
Amenity Value	Low amenity value for the proposed plan change. However, during proposed earthworks there may be opportunities for public information and/or preservation should the depressions be confirmed as archaeological.
Cultural Associations	Māori.
Overall Significance	Low - confirmation that these features are pits would lead to interpretation of this area as a settlement or gardening area, which is of local significance.

## 9.2 Assessment of Heritage Values

Table 4 below provides a summary of heritage values for the respective archaeology site type described above. The assessment is based on the criteria outlined in Section 3.2.

Table 2. Statement of archaeological values for the site type pre-European Maori pits.

Qualities	Assessment
<i>Archaeological</i>	Low significance – no other recorded archaeological sites in this area and further investigation needed to confirm the features as storage pits. If confirmed then indicates a wider landscape of settlement or gardening of local significance. Not currently confirmed or recorded as an archaeological site but may represent pre-European Maori pits.
<i>Architectural</i>	N/A
<i>Cultural</i>	No published reference to settlement in this location, but if confirmed, any archaeological evidence would have cultural significance to local Māori as representing previous occupation site.
<i>Historic</i>	Low – No known historical associations attached to this area and not recognized as having any existing archaeological or heritage sites.
<i>Scientific</i>	N/A
<i>Technical</i>	N/A
<b>OVERALL SIGNIFICANCE</b>	LOW HERITAGE VALUE – local significance only.

## 10 Assessment of Effects

### 10.1 Proposed Works

The plan change request seeks to change the zoning of 77.76 hectares of Rural Environment zoned land to a mix of General Residential, Medium Density Residential, Local Centre zoning and areas of stormwater and recreation reserves. These proposed zone changes will enable the future development of approximately 780 dwellings in an area identified in the Taupō District 2050 - Growth Management Strategy (TD 2050) as a northern growth area.

The rezoning would allow wide scale development of the Site, involving extensive earthworks. This report has been prepared to inform the project team of any archaeological concerns that need to be taken into account as part of the Plan Change.

### 10.2 Potential Effects

Aside from the two depressions identified as having archaeological risk on Area C, the Site is considered to have low archaeological risk. In both the existing zoning and proposed Plan Change, development of the Site would require significant earthworks. There is no material difference in regards to either zoning category as both would require development.

Given the low risk for archaeology across the majority of the Site and the low significance of the potential archaeological site around the visible pits, development of the site for the Plan Change or existing zoning designation is expected to have minor negative effects on archaeological values.  
 Mitigation of Effects

All pre-1900 archaeological sites are protected under the provisions of the HNZPTA, whether the sites are recorded or not. It is illegal to destroy, damage, or modify archaeological sites without an authority from HNZPT to do so.

Minor negative effects on archaeological values are typically mitigated by archaeological investigation and recording under an HNZPTA authority. The majority of the Site is considered to have low archaeological risk and thus, mitigation of archaeological values are, for the large part, not required. The exception to this is the area identified above as having low archaeological risk due to two depressions of an unknown origin. It is recommended that the minor effects of development of this area can be mitigated through archaeological investigation and recording under an HNZPTA authority.

On this basis, it is considered that the proposed Plan Change is an appropriate activity in regards to archaeological effects.

## 11 Conclusions and Recommendations

This report has been prepared to assess the environmental effects of the Nukuhau Structure Plan Change on archaeological values.

The majority of the Site is considered to have low archaeological risk and thus, low archaeological values. The exception to this is the two depressions identified during the site visit in Area C. There is potential that these may represent an unrecorded archaeological pit site, which in turn would indicate wider settlement or gardening in the general vicinity. Any such evidence would be considered of local archaeological relevance only and therefore is considered to be low significance.

The proposed Plan Change and subsequent development of the site is expected to have minor negative effects on archaeological values. These values can be mitigated through archaeological investigation and recording under an HNZPT authority. Development under the existing residential zoning designation has the same material effects so there no difference between the proposed designations.

The Nukuhau Structure Plan change is considered appropriate from an archaeological perspective, provided that the Archaeological Authority process is followed if required as per the below recommendations.

### 11.1 Recommendations

The following recommendations are made in this report:

- Stakeholders should be made aware of the archaeological potential of the Site. This may include, but is not limited to, the landowners, local iwi, Council and developers. The majority of the Site, with the exception of the two depressions in Area C, is considered to have low archaeological risk and low archaeological values;
- Further archaeological investigation should be undertaken as part of any future development of the part of Area C containing the two depressions. An Archaeological Authority should be sought from HNZPT for this work.

## References

Campbell, M., Maguire, W., & J. Harris. 2013. The Spa Hotel, Taupo: Archaeological Assessment of Standing Buildings and Management Plan. Unpublished report for Te Tikio Tamamutu Holdings Ltd and New Zealand Historic Places Trust.

Forsyth, P. & J. Aitken. 1995. New Zealand Minerals and Rocks for Beginners. Institute Geological & Nuclear Sciences Ltd, Lower Hutt.

Mallows, C. 2007. Tongariro Domain, Taupo: Riverside Park Development – Archaeological Monitoring. Unpublished report for Opus International Consultants, Hamilton.

Survey Plan ML5271 – LINZ.

Williams, A. 1988: Land and Lake: Taupo Maori economy to 1860. Unpublished M.A. thesis, Department of Anthropology, University of Auckland.

Greenfield, J.R. 1996. From Dust to Ashes: A Dynamic Community - A History of the Taupo District. Publisher unspecified.



wsp

[wsp.com/nz](http://wsp.com/nz)