

**BEFORE THE HEARING PANEL  
AT TAUPO**

**IN THE MATTER** of the Resource Management Act 1991

**AND**

**IN THE MATTER** of Plan Change 36 – Whareroa North

**BETWEEN** The Proprietors of Hauhangaroa No 6.

**AND** Taupō District Council

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**STATEMENT OF EVIDENCE OF SIAN REBECCA KEITH**

**Dated 1<sup>st</sup> May 2020**

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## INTRODUCTION

1. My full name is Siân Rebecca Keith.
2. I am a Principal Archaeologist and the Director of Sian Keith Archaeology Ltd, a company I formed in 2016.
3. I hold a Master of Science in Maritime Archaeology from the University of Ulster (2001) and a Bachelor of Science in Archaeology from Glasgow University (1998).
4. I have over twenty years of experience as a field archaeologist in New Zealand, Ireland, the United Kingdom, and Australia. I have been working in New Zealand for the past eleven years.
5. I have a wide range of experience as both a field and consultant archaeologist, including site identification, assessments, interpretation, preservation, excavation and technical report writing. I have primarily worked within the Waikato and Bay of Plenty regions over the past nine years and am familiar with the archaeology of these regions. I have prepared archaeological assessments for a wide range of projects within the Waikato Region, including: the Hamilton Section of the Waikato Expressway; a GIS review of the heritage landscape for the Coastal Marine Plan for Waikato Regional Council; and a GIS review of SH1 from Piarere to Waionuru for the NZ Transport Agency.
6. I am familiar with the project area and have undertaken a site visit on 28 April 2020.
7. I have been engaged by the Proprietors of Hauhungaroa 6 Block to provide an archaeological assessment of the proposed Whareroa North Plan Change.

## CODE OF CONDUCT

8. I have read the Environment Court Code of Conduct for expert witnesses contained in the Environment Court Practice Note 2014 and agree to comply with it. I confirm that the opinions expressed in this statement are within my area of expertise except where I state that I have relied on the evidence of other persons. I have not omitted to consider materials or facts known to me that might alter or detract from the opinions I have expressed.

## SCOPE OF EVIDENCE

9. My evidence responds to the Heritage New Zealand Pouhere Taonga (HNZPT) Submission (Submission No. 16), and the S42A Report including the Technical Specialist's evidence (Attachment G to the s 42A Report).
10. My evidence is drawn primarily from my Assessment of Archaeology Effects (AAE), a document which has been prepared to assess the archaeological values of the land subject to the Plan Change and the effects of the Plan Change on those values (**Attachment 1** to this evidence).
11. My evidence does not cover the cultural significance of the project area, and does not represent the views of tangata whenua.

## SUMMARY OF EVIDENCE

12. I have completed an AAE in response to the HNZPT submission (Submission No.16) (**Attachment 2** to this evidence).
13. I have determined that the Plan Change will have no known effects on archaeological values.

14. There is a moderate to minor risk that archaeological deposits will be located on the south side of the Whareroa Stream where the connecting road and bridge are proposed. This is based on proximity to the likely location of a former kāinga. I have recommended that an archaeological authority from HNZPT be obtained for earthworks in this portion of the proposal.
15. The risk of uncovering archaeological deposits in the land to the north of the stream is currently assessed as low. However, to better manage this risk I have recommended that a site visit be undertaken following vegetation clearance of the bush block. This is because the environment is currently difficult to access. A site visit will help to determine if there is a requirement to include this area in any authority application to HNZPT.
16. Ken Phillips has reviewed the earlier Archaeological Assessment by Don Prince (2005) on behalf of TDC. He has determined that a new archaeological assessment should be commissioned and that an archaeological authority be obtained to manage the risk of encountering subsurface archaeological material.

#### **ASSESSMENT OF ARCHAEOLOGICAL EFFECTS**

17. Sian Keith Archaeology Ltd was engaged to undertake an assessment of archaeological effects (AAE) by the Proprietors of Hauhungaroa 6 Block of the proposed Whareroa North Plan Change.
18. The AAE was written in response to the matters raised in the HNZPT's submission (Submission No. 16) on the Plan Change.
19. The AAE involved a review of historic plans and photographs of the project area, records held by the New Zealand Archaeological Association (**NZAA**), historic references, information provided by tangata whenua, and

unpublished archaeological reports pertaining to work undertaken in close proximity to the project area. I also undertook a field survey.

20. The project area is located between known pre-1900 AD settlement sites at Poukura, Whareroa (South), and Piripekapeka. All the evidence collected indicates these were sites of Māori occupation dating from the late 1700s AD.
21. There is one archaeological site recorded on the NZAA database in the project footprint. This is site T18/9 which is recorded as Whareroa Pā, on the north side of the Whareroa Stream within the location of the proposed connecting road.
22. Based on the evidence obtained, my assessment determines that there was no 'Whareroa Pā'. Additionally, there is no evidence of an archaeological site in the given location of T18/9, and no reason to suspect that an archaeological site would be located there.
23. The location of a settlement at Whareroa has been closely studied in the AAE and it has been determined that there was a kāinga on the south side of the Whareroa Stream, and a defensive pā on the Rangitukua hill. The kāinga and pā at Whareroa have likely been recorded in the historical documents under one umbrella term of Whareroa.
24. The defended position known as Piripekapeka Pā is located on the Rangitukua hill, c. 750m to the south-west of the subject site.
25. The kāinga was positioned on the south side at, or close to the stream mouth, and close to the lake edge on the lower terraces. It was probably 40m or more to the east/ south-east of the subject site. This is the general location of the current Whareroa South subdivision and reserves.

26. The field survey undertaken included close inspection of the wider landscape south of the stream with a view to identifying evidence for the former kāinga. There was no evidence for intact archaeological deposits or features in any of the surveyed landscape<sup>1</sup>.
27. No exact location is given for the kāinga, but based on what can be gained from historic, archaeological, and iwi sources, it is likely to have been at the Whareroa Stream mouth and on the lower terraces. NZAA site T8/9 should be moved to this location.
28. I have determined that the projected extent of the kāinga site will not be impacted by the proposed footprint. However there maybe outlying archaeological evidence such as fireplaces and horticultural activity within the footprint of the connecting road. This is because it is situated c.40m or more of the probable location of the kāinga. I therefore consider there to be a low to moderate risk of encountering archaeological material on the south side of the Whareroa Stream.
29. Desk-top research of the remainder of the project footprint did not lead to the identification of any other archaeological sites or areas of archaeological interest.
30. The field survey of the project footprint to the north of the Whareroa Stream did not reveal any evidence to suggest that the land holds pre-1900 archaeological values. The bush block is also highly disturbed by pig activity, a situation identified 15 years ago in the Prince (2005) Report. This land is on a plateau with a steep cliff to the lake edge and cut off from easy access to the settlements in the south and north by the Whareroa and Waitapu Streams respectively. The landscape is therefore not considered to have been a favorable location for settlement. Pre-1900 horticultural practices

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<sup>1</sup> Refer to Section 8 of the AAE.

may have taken place here but, as the land is less accessible than other favorable locations, this is considered to be unlikely.

31. Current information would indicate that the subject site on the north side of the Whareroa Stream has no known archaeological values and low potential for archaeological evidence. I therefore conclude that there will be no known effects on archaeological values as a result of the Plan Change within this part of the project. However, because there was a limitation to the fieldwork due to dense bush cover, I recommend that a field visit is undertaken following vegetation clearance in the bush block to better inform this conclusion. This recommendation was also provided by Prince (2005) and in the submission by HNZPT (Sub No.16).

32. Based on my research and analysis, the recommendations in the AAE are as follows:

1. There are no alterations to the current proposal based on known archaeological values.
2. An archaeological authority be sought from HNZPT to manage the risk of encountering intact archaeology on the south side of the Whareroa Stream.
3. A field inspection should be undertaken of the connecting road, and bush areas to the east of the development, as part of the preliminary stages outlined above:
  - 3.1. This inspection should be undertaken following the vegetation removal and prior to earthworks (e.g. track formation).
  - 3.2. If archaeological material is identified, or there is reasonable cause to assume that archaeological material will be present, then an application to HNZPT for an archaeological authority should be submitted.
  - 3.3. If no archaeological evidence is uncovered the earthworks to install services and infrastructure and to form the subdivision should be undertaken under the provisions of an ADP. To this end: -
    - 3.3.1. if sub-surface archaeological evidence (shell midden, hangi, storage pits, etc) be unearthed during construction, work should cease in the immediate vicinity of the remains and HNZPT should be contacted.

- 3.3.2. if koiwi (human remains) be exposed during development, work should cease in the immediate vicinity and the tangata whenua and HNZPT should be contacted so that appropriate arrangements can be made.
4. Site T18/9 should be relocated to the south side of the Whareroa Stream on ArchSite.
5. The formal recording on ArchSite of Piripekapeka Pā should be the subject of a discussion with tangata whenua.

#### **ADDITIONAL RECOMMENDATION**

33. I have not assessed any archaeological effects of the replanting and footpaths proposed in the mitigation package. This is because no formal plans have been provided to inform an assessment. However, I acknowledge that an assessment of the archaeological potential of the mitigation planting and footpaths should be undertaken following the production of final proposed plans and prior to the implementation of the ground works. I have provided further discussion on this matter in response to the S42a Report below.

#### **RESPONSE TO SUBMISSIONS**

34. I have been asked to respond to the Heritage New Zealand Pouhere Taonga (Submission No.16) submission in opposition to the Plan Change. The submission seeks additional archaeological assessment, as the current application is considered deficient in terms of an appropriate basis to support the Plan Change on archaeological grounds.
35. The HNZPT submission states that the new AAE should respond to the current footprint of the Plan Change 36 including the mitigation package of replanting and walkways.

36. In response to the HNZPT submission, my AAE<sup>2</sup> provides a more in-depth and detailed assessment of the archaeological values of the subject site. It includes the additional fieldwork and provides a direct response to the current footprint of Plan Change 36.
37. My AAE was limited in terms of access to the bush block. In response to the HNZPT's submission, and in-line with the recommendations of Mr. Prince I have recommended that an archaeologist surveys the bush block following vegetation clearance in the Preliminary Stages of the development.
38. The mitigation package for replanting is still being developed and therefore there is currently insufficient information available to undertake a detailed assessment of the archaeological effects of these activities. Additionally, owing to time constraints it was not possible to survey along the route of the probable mitigation area. Nevertheless, the AAE has determined that the vast majority of archaeological sites are anticipated to be at the lake edge, next to the rivers and streams. For this reason, it is not anticipated that extensive archaeological evidence will be encountered in the mitigation package areas. I therefore consider that the mitigation planting and walkways can be assessed by an archaeologist at a later stage to determine if this work will require management of heritage values under an archaeological authority from HNZPT.

#### **S42A REPORT**

39. I have reviewed Technical Specialist Report - Archaeology (Attachment G) prepared by Kenneth Philips and the s42A report by Matt Bonis, reporting planner on behalf of TDC.
40. Philips reviewed Donald Prince's 2005 archaeological assessment for the 'Proposed Whareroa Village North Subdivision', and available

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<sup>2</sup> Keith 2020.

archaeological information for the general area which was primarily limited to records held by the NZAA.

41. Philips has determined that 'Prince rightly concludes that the coordinates provided by Moore (NZAA Site Record Form) were arbitrary and the actual location of Whareroa Pa has not been established'. Furthermore, Philips states that 'it is my opinion that the Prince report provides an adequate assessment of the archaeological landscape within land covered by his survey however it is my opinion that his recommendations do not adequately provide for appropriate mitigation of possible unrecorded archaeological sites potentially encountered during earthworks associated with residential subdivision development'.
42. Philips considers that the HNZPT submission is primarily concerned with the potential for unrecorded subsurface archaeological sites to be encountered and destroyed without appropriate mitigation of the earthworks associated with proposed plan change. He considers that the request for an updated AAE is reasonable and that the new AAE should clarify the potential for possible unrecorded subsurface archaeological sites to be present within the property and provide clearer recommendations regarding requirements specifically relating to the Heritage New Zealand Pouhere Taonga Act.
43. Philips recommends that the applicant applies for an archaeological authority under the provisions of section 44a of the HNZPT Act 2014. He states that this will allow for a qualified archaeologist to identify possible unrecorded archaeological sites during topsoil stripping and for the immediate recording, sampling and investigation of any sites encountered to allow earthworks to proceed with minimal delays.
44. Whilst limited in the extent of additional fieldwork owing to the same accessibility issues encountered by Mr Prince, my AAE does provide a more

in-depth study of pre-1900 AD settlement patterns around Lake Taupō. It highlights that earlier period settlements are most likely to be found along the lake front and specifically where the watercourses empty into the lake, with any associated defended positions on higher ground. From the mid-nineteenth century settlements are also identified along the bush edge (as it was in the 1800s), this being further back from the lake than the Plan Change site.

45. There is the possibility that evidence for the kāinga will be uncovered during earthworks to form the connecting road and bridge. This road is planned to be c.40m or more from the likely location of the kāinga. No evidence is visible within the footprint, and therefore there are no known archaeological values to avoid. I have recommended an archaeological authority to manage the potential for uncovering subsurface archaeological evidence for this portion of the works.
46. I consider that the northern side of the Whareroa Stream is unlikely to have been the location of a former settlement. This is based on the landscape, the desk-top research, the field visit by Prince and my recent field visit. No evidence for potential archaeological evidence has been identified. The bush block cannot be fully surveyed at this stage, and it has been significantly damaged by pigs. Nevertheless, I have recommended that this area be surveyed following vegetation removal at the Preliminary Stages of the development to assess if this area holds potential for subsurface archaeological evidence. Should this be the case then an archaeological authority application is recommended.
47. I agree in principle with Philips' conclusions, but consider that additional field survey should be undertaken prior to lodging an authority application which covers the whole footprint of the subject site. This will aid in determining the appropriate strategy for managing any archaeological risk prior to lodging an application for the entire project footprint.

48. Mr. Bonis concluded that the approaches of both Mr Prince and Mr Philips were not far apart with each considering that additional assessment was necessary, stating that 'where they differ is when this is undertaken, with the latter seeking an additional investigative report now; but both considering that an Archaeological Authority is required for subsequent development'.
49. My AEE has determined that it is unlikely additional archaeological sites will be encountered on the north side of the Whareroa Stream. There may be minor evidence for archaeological activity such as fire features and evidence for horticulture. This risk can be managed by additional field survey following vegetation clearance in the Preliminary Stage of the development.
50. My AAE has determined that the footprint of the subject site on the south side of the Whareroa Stream is relatively close to where I consider the Whareroa Kainga to be. There is no visible physical evidence for this settlement, and the footprint on this side of the stream is small. There is no known reason to alter the footprint based on archaeological values, however an archaeological authority should be sought from HNZPT to manage the risk of uncovering subsurface archaeological evidence. This is likely to be outlying features such as fireplaces and horticultural evidence.
51. In summary I support Mr. Bonis' recommendation to include in the 'Preliminary Stage' a recommendation for an Archaeological Authority pursuant to s44a Pouhere Taonga Act 2014 prior to any development to ensure any archaeological evidence is identified and recorded or protected', but that this recommendation should be subject to additional prior field survey to determine if the north side of the Whareroa Stream should also be included in this application.

**CONCLUSION**

52. Based on the current evidence, I can confirm there are no known adverse effects on archaeology which prevent me from supporting the confirmation of Plan Change 36. Adverse effects on archaeological values are likely to be minor and can be effectively managed by the recommendations provided in Paragraph 32.

53. This conclusion is not intended to supplant Māori cultural values. Such values may encompass a wider range of values than those considered archaeological.

Sian Rebecca Keith

**1<sup>st</sup> May 2020**