

North West Strategic Assessment of Heritage / Archaeology Effects

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Responsibility	Name
Author	Dr. Hans-Dieter Bader
Reviewer	Dr. Janice Adamson
Approver	John Daly

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Abbreviations

Acronym/Term	Description
AEE	Assessment of Effects on the Environment
ASH	Alternative State Highway
AT	Auckland Transport
AUP:OP	Auckland Unitary Plan Operative in Part
BCI	Brigham Creek Interchange
CC2W	City Centre to Westgate
FTN	Frequent Transit Network
FULSS	Future Urban Land Supply Strategy
FUZ	Future Urban Zone
NAL	North Auckland Line
NoR	Notice of Requirement (under the Resource Management Act 1991)
RMA	Resource Management Act 1991
RTC	Rapid Transit Corridor
RAMC	Regional Active Mode Corridor
RUB	Rural Urban Boundary
SG	Te Tupu Ngātahi Supporting Growth
SH16	State Highway 16
The Council	Auckland Council
Waka Kotahi	Waka Kotahi NZ Transport Agency

Glossary of Acronyms / Terms

Acronym/Term	Description
Auckland Council	Means the unitary authority that replaced eight councils in the Auckland Region as of 1 November 2010.
Strategic Assessment Package	Four Notices of Requirement (for ASH, RTC, Station Road and SH16) and one alteration to an existing designation (SH16 Main Road) for the Whenuapai Arterial Transport Network for Auckland Transport.
CHI	Cultural Heritage Inventory – a legacy database of historic and archaeological sites of the Auckland Council
NZAA	New Zealand Archaeological Association which runs the Site Recording Scheme. For a long time the Scheme was paper based but has recently been lifted onto a GIS application, the so called ArchSite
ArchSite	The online database of the Site Recording Scheme of the NZAA. It is the de facto national database of archaeological sites.

1 Executive Summary

Assessment undertaken

1. The assessment is based on
 - a review of the heritage databases at Auckland Council, New Zealand Archaeological Association Site Recording Scheme and Heritage New Zealand Pouhere Taonga
 - a review of historic maps
 - published and unpublished publications on the history of the study area
 - previously undertaken archaeological investigations and research
 - landscape and environment
 - oral traditions where available

2. Assessment criteria used are from
 - Heritage New Zealand Pouhere Taonga Act
 - Resource Management Act and
 - Auckland Unitary Plan (OP)

3. All cultural heritage sites, archaeological sites, risk areas (including unrecorded sites) and sub-surface archaeological features within 200 metres of the extent of each NoR route have been considered as part of this assessment. Heritage buildings are mentioned as heritage sites but are discussed in the separate Built Heritage Assessment. Heritage buildings are often surrounded by curtilage (services, cess pits and the like) which are considered archaeological sites. The curtilages of historic buildings as likely archaeological sites are considered in this report. All heritage and archaeological sites as well as risk areas have a number specific to this report and the graphics in this report (e.g.: #022). In addition each item that is recorded in the Cultural Heritage Inventory (CHI), a legacy database, has a CHI number, each heritage item scheduled under the AUP:OP has a number and each archaeological site has a New Zealand Archaeological Association (NZAA) Site Recording Scheme (Archsite) number (e.g.: R11/98). The same site may or may not be present in several of these lists and databases.

NoR S1 Alternative State Highway (ASH), including Brigham Creek Interchange (BCI)

Results of assessment and recommended measures

4. There are no recorded archaeological sites within the extent of the proposed route. In terms of actual and potential features within the route and within 200m of the route, these are:
 - One historic building is recorded (#026) in the CHI within the proposed route and one possible archaeological site (#027). The possible archaeological site is the reported location of an early church which is within the route. Both would be impacted partially by the proposed route.

- Five historic buildings (four recorded in the CHI only, one is also scheduled in the AUP;OP), two archaeological sites, one scheduled notable tree and one scheduled historic heritage place is within the 200m buffer. One of the historic buildings is so close to the extent of the proposed route that the curtilage might be affected by the earthworks.
- Four significant streams (#010_12, #035, #036 and #037), three which were likely navigable by waka in pre-Contact times, are within the proposed earthworks footprint. These are areas of high risk to encounter archaeological features that have not been recorded previously as archaeological sites.

There are potential adverse effects on historic heritage and the archaeology by the proposed works.

5. Positive effects may arise as a result of construction around wetlands and streams, as these works will allow environmental archaeological research to be undertaken that could clarify the dates, sequence and details of the anthropogenic vegetation change from forest to open fern lands as it is recoded in 1853.

All earthworks that include topsoil stripping (not just within the extent of the NoR but also haul roads, laydown areas etc.) must be considered for potential unrecorded archaeological deposits and features.

Documentation of a suitable level of the historic building (fruit packing shed, #026) before demolition and investigation of the sub-floor assemblage and curtilage would allow preservation through documentation.

There are no operational effects on archaeological or heritage sites.

6. There is a reasonable risk of potential adverse effects through encountering unrecorded archaeological sites. One historic building (fruit packing shed #026) within the works footprint is discussed in the Built Heritage Report.
7. A precautionary archaeological authority would mitigate the risk of encountering unrecorded archaeological sites. The historic building (#026) is post 1900 and therefore does not fall under the HNZPT Act.
8. Any processes regarding tikanga, especially around koiwi, should be discussed with manawhenua before the start of the project.

Conclusion

9. In conclusion there is an adverse effect on historic heritage by the proposed development of S1.

NoR S2 SH16 Main Road Upgrade

Results of assessment and recommended measures

10. There are no recorded archaeological sites within the extent of the proposed route. In terms of actual and potential features within the route and within 200m of the route, these are:

- One historic building is recorded close to the proposed route, a historic railway shed (AUP:OP reference #00483), and the curtilage of three more is within the route (#016, #017, #018, #019, they will be impacted by the RTC and discussed in detail there). They are within the 200 m buffer zone, but right next to the planned route extent. Two of the buildings are scheduled as historic places in the Auckland Unitary Plan (AUP:OP references #00482 and #00483).
- There are three significant streams (#038, #039, and #040), two of which were likely navigable by waka in pre-Contact times are within the proposed earthworks footprint. These are areas of high risk to encounter archaeological features that have not been recorded previously as archaeological sites.

There are adverse effects on historic heritage and potential adverse effects on archaeology by the proposed development.

11. Positive effects may arise as a result of the construction around wetlands and streams in that these works will allow environmental archaeological research to be undertaken that could clarify the dates, sequence, and details of the anthropogenic vegetation change from forest to open fern lands as it is recorded in 1853.

All earthworks that include topsoil stripping (not just within the extent of the NoR area but also haul roads, laydown areas etc.) have to be taken into account for potential unrecorded archaeological deposits and features.

Documentation of any historic building before demolition and investigation of the sub floor assemblage and curtilage would allow preservation through documentation.

The railway shed (AUP#00483) has been shifted to its current location and does not contain any potential archaeological curtilage. The alignment does extend into the heritage overlay of the Huapai Tavern (AUP#00482) and might encounter some of the curtilage of the building.

There are no operational adverse effect on archaeology or heritage.

12. There is a reasonable risk of potential adverse effects by encountering unrecorded archaeological sites. One historic building area scheduled in the AUP:OP (#00482) is affected by the earthworks but the historic building itself seems to be just outside of the proposed earthworks. These are major cultural heritage adverse effects.
13. An archaeological authority would mitigate the risk to encounter features that has not been recorded as archaeological sites. An archaeological authority is required to move or demolish the scheduled historic place/building or undertake earthworks within the potential curtilage of heritage buildings.
14. Any processes regarding tikanga, especially around koiwi, should be discussed with manawhenua before the start of the project.

Conclusion

15. In conclusion there is an adverse effect on historic heritage by the proposed development of S2.

NoR S3 Rapid Transit Corridor (RTC), including the Regional Active Mode Corridor (RAMC), **NoR KS** Kumeū RTC Station and **NoR HS** Huapai RTC Station

Results of assessment and recommended measures

16. There are no recorded archaeological sites within the extent of the proposed route. In terms of actual and potential features within the route and within 200m of the route, these are:

- Two historic buildings are recorded (Huapai Tavern #016, historic house #023 report specific numbers displayed on the graphics) within the proposed route and one possible archaeological site which is the location of the original Kumeū train station building (#041), is within the route. One of the historic buildings, the Huapai Tavern, is scheduled as a historic place in the AUP:OP (reference #00482).
- The curtilage of three further historic buildings or structures (#017, #019, #020) might be impacted by the proposed route extent. These three buildings/structures are right next to the proposed route extent and there is one further heritage building (#024) within the 200 m buffer zone.
- There is a small risk of potential adverse effects by encountering unrecorded archaeological sites on the footprint of the Kumeū RTC Station, as heritage buildings are recorded on historic maps but have likely been destroyed by the developments of the 19th and 20th century.
- There are three significant streams (#038, #039, and #040), two of which were likely navigable by waka in pre-Contact times are within the footprint of the planned earthworks. These are areas of high risk to encounter archaeological features that have not been recorded previously as archaeological sites.

There are adverse effects on historic heritage and potential effects on archaeology as a result of the proposed development.

17. Positive effects may arise as a result of the construction around wetlands and streams in that these works will allow environmental archaeological research to be undertaken that could clarify the dates, sequence, and details of the anthropogenic vegetation change from forest to open fern lands as it is recorded in 1853.

All earthworks that include topsoil stripping (not just within the extent of the NoR area but also haul roads, laydown areas etc.) have to be taken into account for potential unrecorded archaeological deposits and features.

Documentation of the historic buildings before demolition and investigation of the sub floor assemblage and curtilage would allow preservation through documentation.

A preferable mitigation process to documentation only would be to keep the Huapai Tavern (scheduled in AUP:OP as #00482, displayed in the graphics of this report as #016) on its original location and incorporate it into the function of the proposed train station. As a second best option is the development of a heritage precinct next to the Kumeū Rapid Transport Station. This is an opportunity to enhance the social wellbeing of the community. This could include the shifting of three of the structures (the Huapai Tavern - AUP #00482 (#16), the railway shed - AUP #00483 (#19) and the train carts of the railway café (#17)) into a dedicated heritage precinct on the area or close to the future Kumeū train station. Both these latter buildings have previously moved onto

their current location and therefore contain no heritage curtilage. The final mitigation measures will be confirmed as part of the Historic Heritage Management Plan which is a condition of the proposed designation.

There are no operational adverse effects on archaeology or heritage.

18. There is a reasonable risk of potential adverse effects by encountering archaeological features that have not been recorded as archaeological sites along the RTC and within the footprint of the Kumeū Station as well as close to the 19th railway corridor at the Kumeū and Huapai RTC stations. Two historic buildings, one of them scheduled must be either moved or demolished for the planned corridor (a railway shed, scheduled as AUP:OP #00483, and railway carriages). These are major cultural heritage adverse effects.
19. An archaeological authority would mitigate the risk to encounter archaeological features that have not been recorded as archaeological sites. An archaeological authority is necessary to move or demolish any historic places/buildings.
20. Any processes regarding tikanga, especially around koiwi, should be discussed with manawhenua before the start of the project.

Conclusion

21. In conclusion there are adverse effects on historic heritage by the proposed development of S3. The demolition of heritage buildings is a major adverse effect, even mitigated by a detailed documentation before the demolition. Incorporating them into new developments is a better option. As a second best option the buildings can be moved instead of demolished though there are still negative effects, but which could be mitigated, even more so if the new location of the buildings serves the purpose to educate the public about the heritage of the area.

NoR S4 Access Road Upgrade

Results of assessment and recommended measures

22. There are no recorded archaeological sites within the extent of the proposed route. In terms of actual and potential features within the route and within 200m of the route, these are:

- One historic building is recorded within the 200 m buffer zone.

There are no adverse effects on historic heritage and only a small risk to encounter archaeological features that have not been recorded as archaeological sites by the proposed development.

23. All earthworks that include topsoil stripping (not just within the extent of the NoR area but also construction areas) have to be taken into account for potential unrecorded archaeological deposits and features.

There are no operational adverse effects on archaeology or heritage.

24. There is a very small risk of potential adverse effects by encountering archaeological features that have not been recorded as archaeological sites.

25. An Accidental Discovery Protocol would mitigate the very small risk to encounter archaeological features that have not been recorded as archaeological sites. It is recommended to align it with any Cultural Monitoring Protocol that might be developed by manawhenua in the future.
26. Any processes regarding tikanga, especially around koiwi, should be discussed with manawhenua before the start of the project.

Conclusion

27. In conclusion there is no adverse effect on historic heritage by the proposed development of S4.

Wider Conclusion

28. Overall, the most severe impact onto the cultural heritage by the RTC corridor and Kumeū Station projects is onto the few remaining historic buildings and structures of early Kumeū from the time when it was a service centre for a rural community. These buildings form a strong tie to the past and the local identity. Demolition of these structures would sever this tie. The construction of a Kumeū transport station can be seen as a unique opportunity to bring these buildings together and strengthen the local identity with a dedicated heritage centre. The final mitigation measures will be determined during detailed design stage and form part of the Historic Heritage Management Plan (which is a condition of the proposed designation).
29. Nothing is visible of the pre-Contact history of the region and the crossing of several navigable streams by the strategic projects open the risk of encountering sub-surface archaeological features that have not been recorded as archaeological sites. We know from historical sources and oral traditions that Kumeū has been occupied by manawhenua. The works are also an opportunity to retell those histories and bring back some of the footprints of this pre-Contact occupation.
30. The adverse effects can be mitigated within the legal framework by archaeological authorities which would involve preservation by documentation of existing and newly discovered sites and places of significance. This includes the Huapai Tavern and the Railway shed (AUP:OP #00482 and 00483) from the perspective of the Heritage New Zealand Pouhere Taonga Act (2014), but the schedule in the AUP:OP needs to be considered for these two sites. The Huapai Tavern should not be moved but integrated into the station as a best outcome. Moving it is the second-best option and demolition and preservation through documentation is the last resort.

2 Introduction

This heritage landscape assessment has been prepared for the North West Strategic Projects Notices of Requirement (**NoRs**) for Waka Kotahi NZ Transport Agency (**Waka Kotahi**) and Auckland Transport (**AT**) (the “**Strategic Assessment Package**”).

The NoRs are to designate land for future strategic and local arterial transport corridors as part of Te Tupu Ngātahi Supporting Growth Programme (**Te Tupu Ngātahi**) to enable the construction, operation and maintenance of transport infrastructure in the North West area of Auckland.

This report assesses the transport effects of the North West Strategic Assessment Package identified in Figure 5-1 and Table 2-1 below. Refer to the AEE for a more detailed project description.

Table 2-1: North West Strategic Assessment Package – Notices of Requirement and Projects

Notice	Project
NoR S1	Alternative State Highway (ASH), including Brigham Creek Interchange (BCI)
NoR S2	SH16 Main Road Upgrade
NoR S3	Rapid Transit Corridor (RTC), including the Regional Active Mode Corridor (RAMC)
NoR KS	Kumeū RTC Station
NoR HS	Huapai RTC Station
NoR S4	Access Road Upgrade

2.1 Purpose and Scope of this Report

This assessment forms part of a suite of technical reports prepared to support the assessment of effects within the Strategic Assessment Package. Its purpose is to inform the AEE that accompanies the Strategic Assessment Package sought by Waka Kotahi and AT.

This report considers the actual and potential effects associated with the construction, operation and maintenance of the Strategic Assessment Package on the existing and likely future environment as it relates to effects onto heritage and archaeology and recommends measures that may be implemented to avoid, remedy and/or mitigate these effects.

The key matters addressed in this report are as follows:

- a) Identify and describe the heritage and archaeological context of the Strategic Assessment Package area.
- b) Identify and describe the actual and potential effects onto heritage and archaeology of each Project corridor within the Strategic Assessment Package.

- c) Recommend measures as appropriate to avoid, remedy or mitigate actual and potential effects onto heritage and archaeology (including any conditions/management plan required) for each Project corridor within the Strategic Assessment Package; and
- d) Present an overall conclusion of the level of actual and potential effects onto heritage and archaeology for each Project corridor within the Strategic Assessment Package after recommended measures are implemented.

2.2 Report Structure

The report is structured as follows:

- a) Overview of the methodology used to undertake the assessment and identification of the assessment criteria and any relevant standards or guidelines.
- b) Description of each Project corridor and project features within the Whenuapai Assessment Package as it relates to historic heritage and archaeology.
- c) Identification and description of the existing and likely future heritage landscape, separated into physical environment, Māori settlement history, European settlement history and previous archaeological projects as far as it is relevant to describe positive and adverse effects.
- d) Description of the actual and potential positive effects on heritage and archaeology of each Project corridor.
- e) Description of the actual and potential adverse effects on heritage and archaeology of construction of each Project corridor.
- f) Description of the actual and potential adverse effects on heritage and archaeology of operation of each Project corridor.
- g) Recommended measures to avoid or mitigate potential adverse effects on heritage and archaeology; and
- h) Overall conclusion of the level of potential adverse effects on heritage and archaeology of each Project corridor after recommended measures are implemented.

This report should be read alongside the AEE which contains further details on the history and context of the Strategic Assessment Package. The AEE also contains a detailed description of works to be authorised for each NoR, likely staging and the typical construction methodologies that will be used to implement this work. These have been reviewed by the author of this report and have been considered as part of this assessment of effects on historic heritage and archaeology. As such, they are not repeated here, unless a description of an activity is necessary to understand the potential effects, then it has been included in this report for clarity.

2.3 Preparation for this Report

Preparation for this report included desktop investigations and drive by visits from public land.

Sources for desktop research include:

- NZ Archaeological Association (NZAA) online site recording database Archsite
- LINZ database of historic maps and survey plans via Quickmaps
- Heritage New Zealand Heritage List/ Rārangī Kōrero
- Heritage New Zealand online reports database
- Auckland Council Geomaps GIS viewer

- Auckland Council Cultural Heritage Inventory (CHI)
- Auckland Council Archives (online resources)
- Archives New Zealand (online resources)
- Local histories – published and unpublished
- Archaeological reports
- Aerial photographs
- National Library cartographic collection
- Alexander Turnbull Tiaki online collection
- Auckland Museum pictorial collections

The following archaeological reports were of particular interest:

Foster, R., Felgate, M., 2011, *Archaeological Investigation of Field Cottage and Ocklestone House*, Unpublished report to NZ Transport Agency, Auckland.

MacReady, S., 2019, *SH16 IMPROVEMENTS, BRIGHAM CREEK TO WAIMAUKU: PRELIMINARY ARCHAEOLOGICAL ASSESSMENT*, Unpublished report to NZ Transport Agency Safe Roads Alliance, Auckland.

Shackles, R. et.al., 2019, *COASTAL WALKWAY SUNDERLAND-HUDSON PRECINCT, HOBSONVILLE POINT: ARCHAEOLOGICAL MONITORING AND INVESTIGATION REPORT*, Unpublished report to Hobsonville Land Company, Auckland.

The drive by used only public roads and public land to get close to areas of interest pinpointed by the desktop research. The drive by were sufficient for the purpose of the report but did not require landowner consent and time-consuming surface and sub-surface investigations.

3 Assessment Methodology

3.1 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)

This assessment considers heritage places and archaeological sites as defined in the HNZPT Act, scheduled sites in the AUP OP, and also heritage sites that are recognised in the Auckland Council's Cultural Heritage Inventory (CHI).

3.1.1 Heritage New Zealand Pouhere Taonga Act 2014

Heritage New Zealand Pouhere Taonga (HNZ) administers the HNZPTA. The HNZPTA contains a consent (authority) process for any work affecting archaeological sites, where an archaeological site is defined as:

- “6(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*
- 6(b) includes a site for which a declaration is made under section 43(1)”*

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 HNZ. The process applies to sites on land of all tenure including public, private and designated land. The HNZPTA contains penalties for unauthorized site damage or destruction.

The archaeological authority process applies to all sites that fit the HPA definition, regardless of whether:

- The site is recorded in the NZ Archaeological Association Site Recording Scheme or registered by HNZ;
- 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 Pouhere Taonga also maintains The New Zealand Heritage List Rārangī Kōrero of Historic Places, Historic Areas, Wāhi Tupuna/Tipuna, Wāhi Tapu and Wāhi Tapu Areas. The List Rārangī Kōrero includes some significant archaeological sites. The purpose of The List Rārangī Kōrero is to inform members of the public about such places and to assist with their protection under the Resource Management Act (1991).

3.1.2 Resource Management Act 1991

The RMA promotes the sustainable management of natural and physical resources (RMA Section 2, 5(1)).

RMA Section 2, 5(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 people and communities to provide for their social, economic, and cultural well-being 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

The protection of historic heritage from inappropriate subdivision, use, and development is identified as a matter of national importance (section 6(f)).

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

Historic heritage includes:

- historic sites, structures, places, and areas;
- archaeological sites;
- sites of significance to Maori, including wāhi tapu;
- surroundings associated with the natural and physical resources

(section 1 Interpretations).

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

In Auckland the AUP:OP, there are specific provisions for historic heritage and places of significance to manawhenua. Those places of significance to manawhenua have the potential of containing archaeological value too. Note that scheduled historic heritage places have a stronger protection than archaeological sites, as these are not scheduled in the Plan.

3.1.3 Assessment Criteria

The basis for the used assessment criteria is defined by the Heritage New Zealand Pouhere Taonga (HNZPT) as follows:

“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, and current research questions and hypotheses about New Zealand’s past. An understanding of the overall archaeological resource is therefore required”(Heritage New Zealand Pouhere Taonga 2019:9).

The assessment criteria are split into two sections, Main Archaeological values and Additional values.

The first archaeological values look at an *intra* (within the) *site* context.

- **Condition:**
How complete is the site? Are parts of it already damaged or destroyed?
Condition varies from undisturbed to destroyed and every variation in between. It is also possible that the condition of various parts of the site varies.
- **Rarity/Uniqueness:**
Rarity can be described in a local, regional and national context. Rarity can be rare as a site, or rarely examined or today a rare occurrence in the records.
- **Information Potential:**
How diverse are the features to be expected during an archaeological excavation on the site?
How complete is the set of features for the type of site?
Can the site inform about a specific period or specific function?

The second set of archaeological values are *inter site (between sites) context* criteria:

- **Archaeological landscape / contextual value:**
What is the context of the site within the surrounding archaeological sites?
The question here is the part the site plays within the surrounding known archaeological sites. A site might sit amongst similar surrounding sites without any specific features. Or a site might occupy a central position within the surrounding sites. Though a site can be part of a complete or near complete landscape, whereby the value of each individual site is governed by the value of the completeness of the archaeological landscape.
- **Amenity value:**
What is the context of the site within the physical landscape?
This question is linked to the one above, but focuses onto the position of the site in the landscape. Is it a dominant site with many features still visible or is the position in the landscape ephemeral with little or no features visible? This question is also concerned with the amenity value of a site today and its potential for onsite education.
- **Cultural Association:**
What is the context of the site within known historic events or to people?
This is the question of known cultural association either by manawhenua or other descendant groups. This question is also concerned with possible commemorative values of the site.

Other values could include (Heritage New Zealand Pouhere Taonga 2019:9):

- 1 Architectural
- 2 Historic
- 3 Scientific
- 4 Technological
- 5 Cultural

The last value, cultural, acknowledges if there is an impact onto Māori cultural values. This assessment will not evaluate these, but rather state their relevance in relation to the other values. The HNZPT Act requires an assessment of Maori values as part of archaeological authority applications. Generally, HNZPT prefers that such an assessment be provided by manawhenua (Heritage New Zealand Pouhere Taonga 2019:10).

In addition, the Auckland Unitary Plan (Part 1, Chapter B: 5.2.2) outlines a place as having historic heritage value if it has one or more of the following values.

Identify and evaluate a place with historic heritage value considering the following factors:

(a) historical: the place reflects important or representative aspects of national, regional or local history, or is associated with an important event, person, group of people, or with an idea or early period of settlement within New Zealand, the region or locality;

(b) social: the place has a strong or special association with, or is held in high esteem by, a particular community or cultural group for its symbolic, spiritual, commemorative, traditional or other cultural value;

(c) Mana Whenua: the place has a strong or special association with, or is held in high esteem by, Mana Whenua for its symbolic, spiritual, commemorative, traditional or other cultural value;

(d) knowledge: the place has potential to provide knowledge through archaeological or other scientific or scholarly study, or to contribute to an understanding of the cultural or natural history of New Zealand, the region, or locality;

(e) technology: the place demonstrates technical accomplishment, innovation or achievement in its structure, construction, components or use of materials;

(f) physical attributes: the place is a notable or representative example of:

(i) a type, design or style;

(ii) a method of construction, craftsmanship or use of materials; or

(iii) the work of a notable architect, designer, engineer or builder;

(g) aesthetic: the place is notable or distinctive for its aesthetic, visual, or landmark qualities;

(h) context: the place contributes to or is associated with a wider historical or cultural context, streetscape, townscape, landscape or setting.

The methodology applies to all NoRs (NoRs S1, S2, S3, KS, HS, S4) and to both construction and operation stages.

4 Background

4.1 Physical Environment

The physical environment is low lying undulating. The study area (for all NoRs) is framed by the Ngongetepara Stream (off Brigham Creek) with the Totara Creek as a side stream and the Waiarohia Creek and Stream. The latter forms a natural boundary to the Hobsonville peninsula, called Onekiritea in pre-Contact times.

Brigham Creek and the Kumeū Stream that runs to the north of the study area forming a pathway between the Waitemata and the Kaipara harbours. The upper reaches of the Kumeū stream turn south and the study area is crossing the alluvium flats of the River on these upper reaches.

The soils of the area are allophanic soils impeded (LI) (<https://soils-maps.landcareresearch.co.nz/>). These soils are made from volcanic materials and this is reflected by the area made from East Coast Bays formation (Mwe: sand and mudstone with mixed volcanic content), Puketoka formation (Pup: pumiceous mud, sand and gravel including alluvial deposits) and Taupo Pumice alluvium (Q1a: estuarine and swamp deposits) (Figure 4-1).

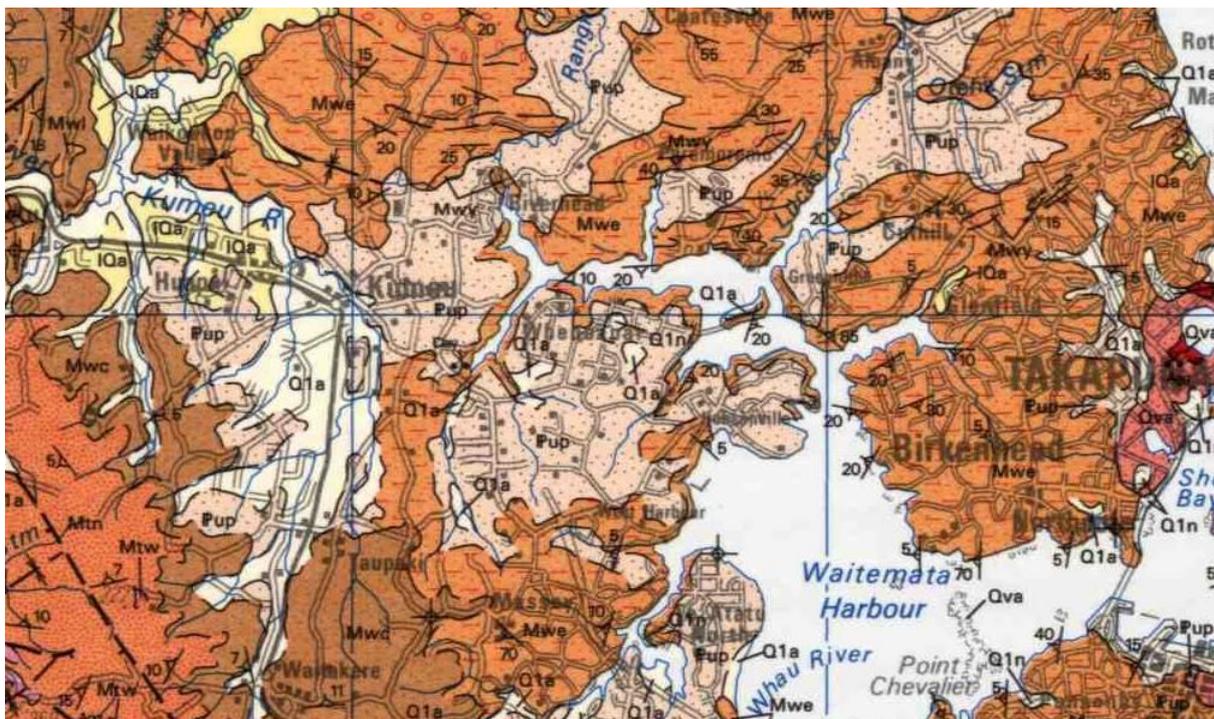


Figure 4-1: Detail of geological map, Auckland (Copyright Crown).

Historically the area was covered in Kauri forest like the rest of West Auckland, but with contact since European settlement this forest has given way to 'undulating fern lands' (Figure 4-2).

The modern use for farming and grazing shows that the volcanic content of the soils adds fertility to the general silty clay soils. The question is therefore how the area was used in pre-Contact times. The fertility of the soil would have supported growing of taro and other crops and swamps were seen as 'food baskets' for the availability of birds, eels and other resources like raupo. Is the observed

deforestation during pre-Contact times simply a matter of burning the forest or is it a sign of horticulture that left little archaeological signatures?

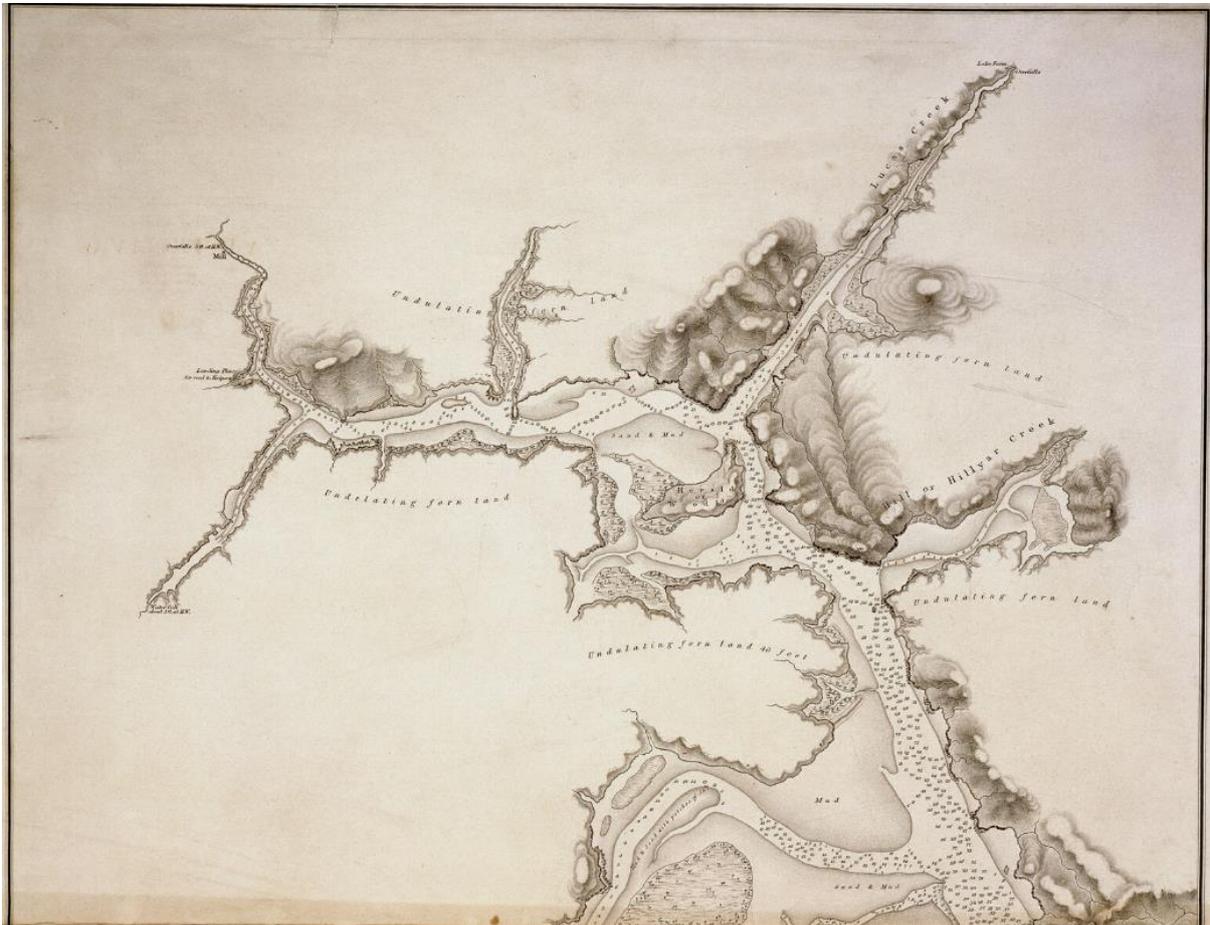


Figure 4-2: Detail of: 'Waitemata River from Kauri Point Auckland Harbour to its sources, surveyed by Comr. B. Drury and the officers of H.M.S. Pandora 1854'-(Auckland Libraries Heritage Collections Map 3909).

4.2 Pre-Contact Settlement

Whenuapai is on the cross roads for several portages between Kaipara and Waitemata Harbour and close to one of the portages between Waitemata and Manukau harbours, Ngongitapata and Te Whau (Hooker 1997). The meaning of the 'Whenua pai' might be 'fertile' or 'good' land (Simmons 1980) which contradicts the view of the early European settlers of the land being of poor quality as it is low lying, often flooded and clay soils (Rutherford 1940). An alternative, possibly older Māori name of the area is Waimarie which could be translated as 'calm water' (Simmons 1980). Most recorded archaeological sites are along the harbour or creek edges indicating that exploitation of kai moana was an important food source.

Like most places in Tāmaki Makaurau many different iwi have a relationship with the place. Te Kawerau, Wai o Hua and Ngāti Whātua and their many hāpu had a particular influence in the study area. The most recent of these inter tribals conflicts was attacks by Ngāpuhi under Hongi Heke.

Armed with muskets they inflicted a defeat on Ngāti Whātua as utu for being defeated in the previous century. For some years few people lived in the district as Ngāpuhi did not establish settlements¹.

One of the first visits by a European to the area was by Samuel Marsden in 1820 who reported that plenty of food was around the Kaipara. Ngāti Whātua settlements near Kumeū are reported for this period (Dunsford 2002; Stone 2001). A land claim map from 1867 might indicate one of the areas of settlement (see figure below).



Figure 4-3: Detail of ML533, 1867, shows an area of a Maori claim along the stream called Turakiawatea. The red line indicates the area taken for the railway. This includes the area of Kumeū. It seems possible that one of the pre-Contact settlements was located within the area.

¹ (<https://www.kaiparamoana.com/k-rero-o-mua-our-history>).

4.3 Post Contact Settlement

For a short moment in time Governor Hobson considered Hobsonville as an area to start the Auckland settlement (Foster and Felgate 2011).

Between 1844 and 1865 pre-emptive waiver transactions, Crown purchases and Native Land Court sales reduced Māori customary land occupation in the Kaipara area to about a third².

The Waiparera Block is part of the study area. It was sold to the Crown in 1853 (Turton 1877). It is one example how the land changed hands. Brigham's land claim and later Crown Grant in 1857 is another example. Brigham's Creek is named after this land speculator.

Dense Kauri forest within the Kumeū area and throughout the Waitakere Ranges drew European commerce into the area. Within a few decades all timber able to be milled was cut down (Morris 1996). Gum diggers followed the timber mills but little is known of this activity through historic sources.

Towards the end of the 19th century the clay on the Hobsonville peninsula and surrounding areas was used for brick and pipe works which supplied the growing Auckland with this valuable building resource.

4.4 Archaeological Background

The NZAA (New Zealand Archaeological Association) Site Record Scheme has several site records close to the study area. It is mainly coastal shell midden and a few early historic structures. Historic structures including historic houses are recorded in the Cultural Heritage Inventory. Several sites from both these databases are scheduled in the Auckland Unitary Plan.

Each NoR has been buffered by 200 metres and all recorded historic sites as well as archaeological site potential are discussed individually in relation to these individual buffer zones. The following figures show the previously recorded archaeological sites on ArchSite (the NZAA Site Recording Scheme online), on CHI (Cultural Heritage Inventory of the Auckland Council online) and the relevant sites only in relationship to the 200m buffers of all NoRs discussed in this report (the study area).

² <https://www.kaiparamoana.com/wai312-claim-to-settlement>

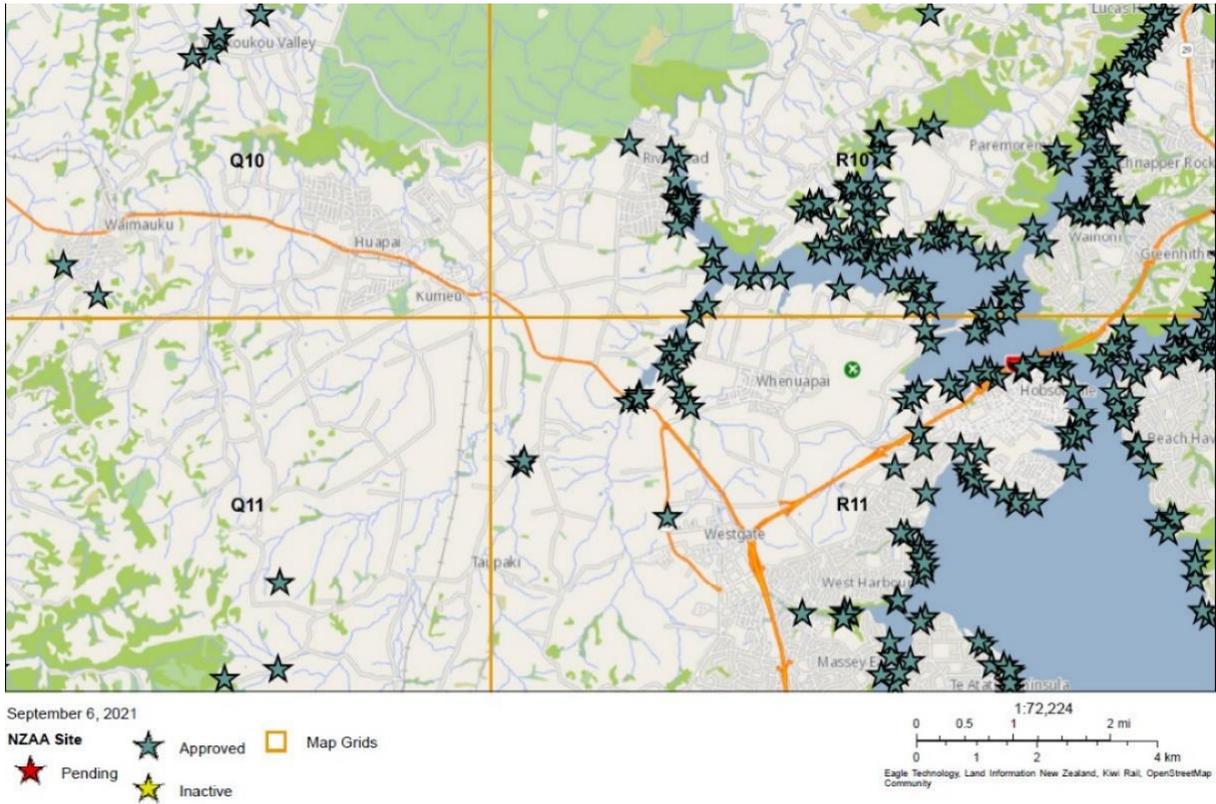


Figure 4-4: Archsite site distribution in the vicinity of the study area.

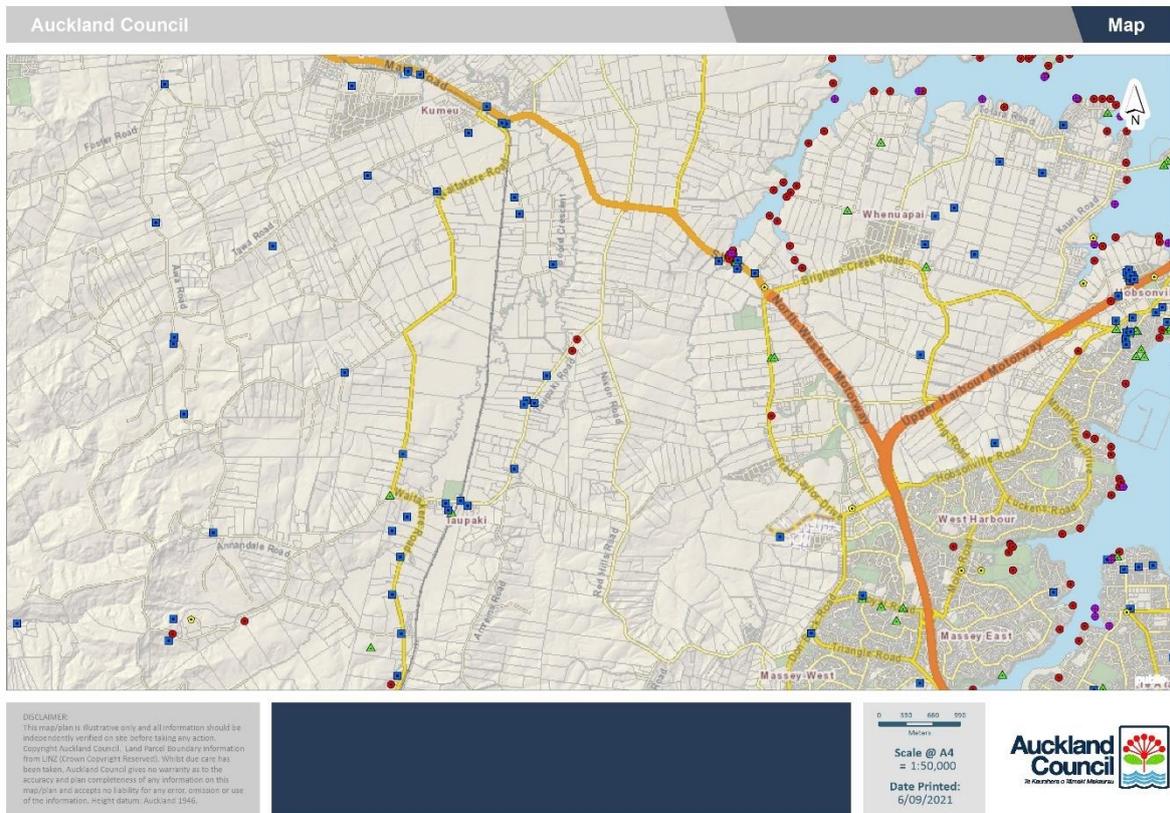


Figure 4-5: CHI sites in the vicinity of the study area.

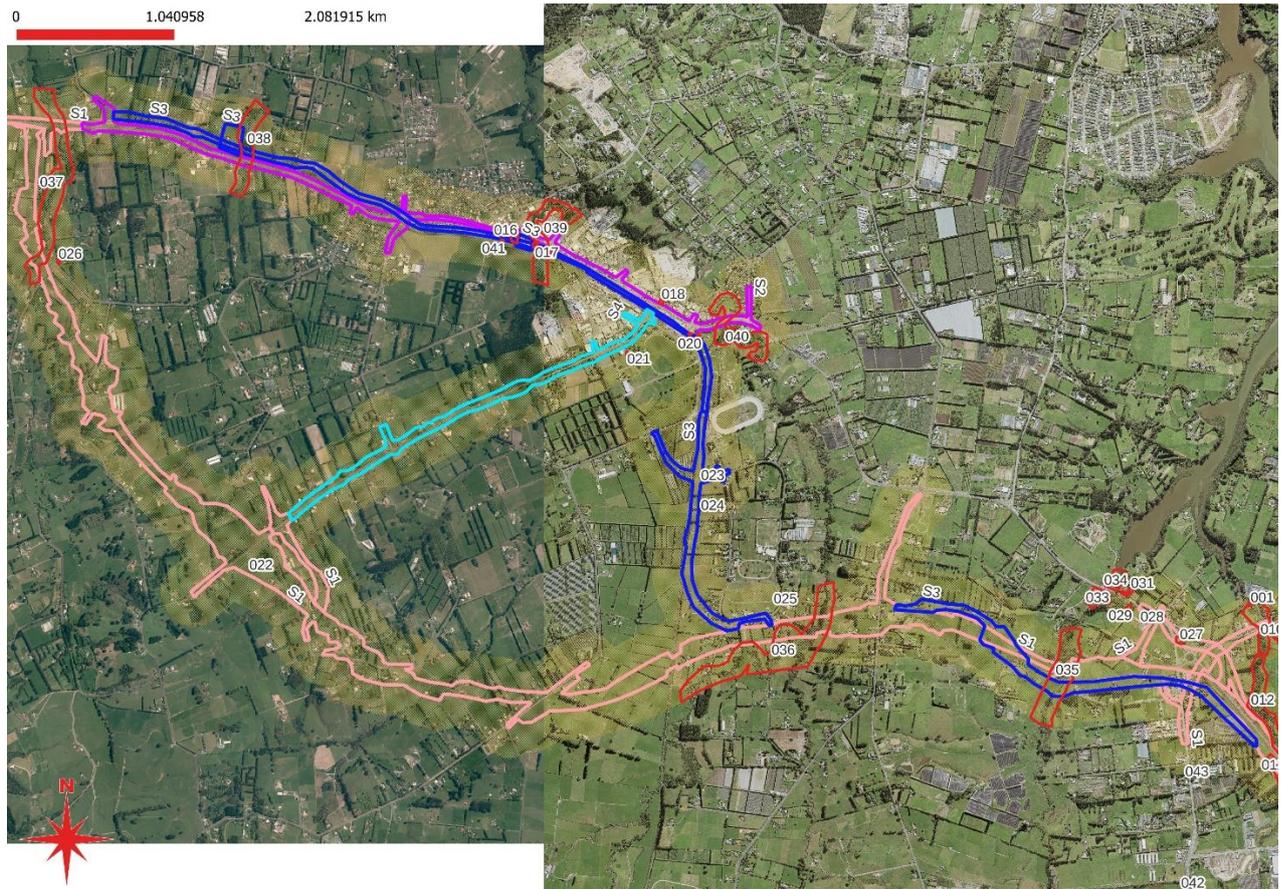


Figure 4-6: NoRs corridors (S1 – S4 in various colours) with 200m buffer zones (hatched areas surrounding NoR corridors), all heritage sites (numbered 027 - 034) and high risk areas (numbered 035 - 040) within these buffer zones.

Details of the sites and the risk areas are discussed within each NoR (see below).

4.5 Previous Archaeological Investigations

A number of assessments and monitoring exercises have taken place in the area between Hobsonville and Kumeū (see bibliography (Macready 2019)). Only a handful of these projects added anything significant to our knowledge of the study area (Foster and Felgate 2011; Hawkins and Campbell 2020; Shackles 2019).

Investigations of site damages to a few shell midden along the northern coastline along Hobsonville showed a long occupation history using continuous kai moana exploitation (Shackles 2019).

Another investigation focused on the homestead and its development of one of the early settlers in the area, the Ocklestons (Foster and Felgate 2011). It paints a vivid picture of the changes and continuations of the rural life on the edge of Auckland, which is today replaced by suburbia. The 1940 aerial shows the study area dominated by orchards and grazing (Figure 4-7).

A similar case study was undertaken during moving a heritage house from its original position (Hawkins and Campbell 2020).

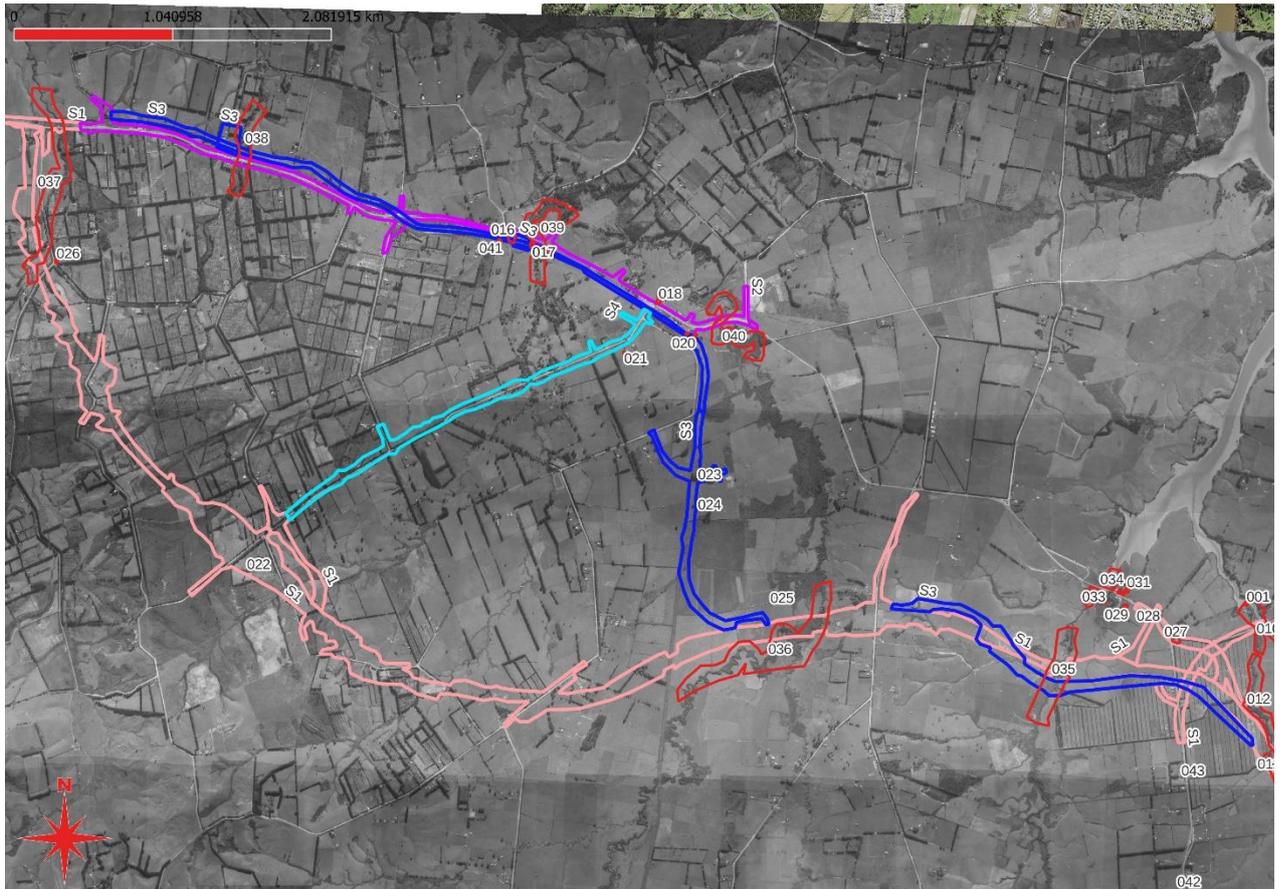


Figure 4-7: Rural character of the study area in 1940. Many shelterbelts of orchards can be seen.

5 Strategic Assessment Package Overview

An overview of the Strategic Assessment Package is provided in Figure 5-1 below, with a brief summary of the Strategic Assessment Package projects provided below.

Figure 5-1: North West Strategic Assessment Package – Overview of NoRs for Assessment

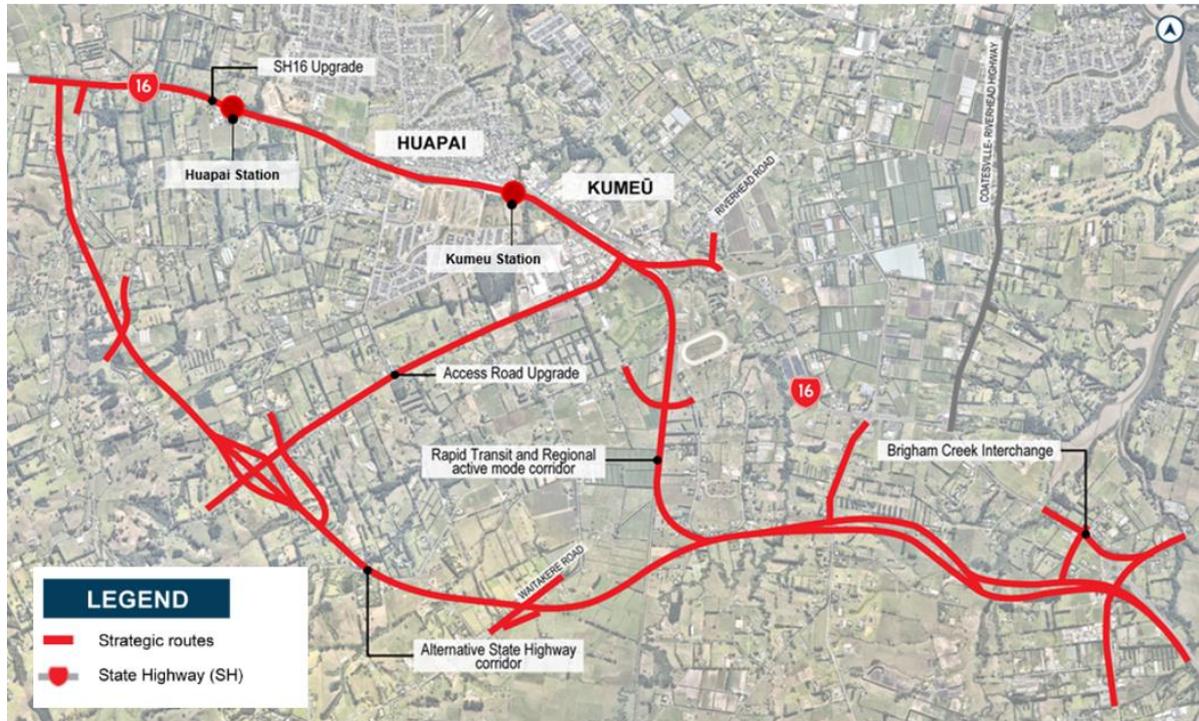


Table 5-1: Strategic Assessment Package Project Summary

Corridor	NOR	Description	Requiring Authority
Alternative State Highway	S1	A new four-laned dual carriageway motorway and the upgrade of Brigham Creek Interchange.	Waka Kotahi
State Highway 16 Main Road Upgrade (alteration to existing designation 6766)	S2	Upgrade to urban corridor including active modes and realignment of Station Road intersection with SH16.	Waka Kotahi
Rapid Transit Corridor	S3	New Rapid Transit Corridor and active mode corridor in one co-located corridor.	Waka Kotahi
Kumeū RTC Station	KS	New rapid transit station, including transport interchange facilities and accessway.	Waka Kotahi
Huapai RTC Station	HS	New rapid transit station, including transport interchange facilities, park and ride and accessway.	Waka Kotahi
Access Road Upgrade	S4	Upgrade of Access Road to a four-lane cross-section with separated cycle lanes	Auckland Transport

Corridor	NOR	Description	Requiring Authority
		and footpaths on both sides of the corridor.	

Please refer to the AEE for further information on these projects, including a project description, key project features and the planning context.

6 Positive Effects

The nature of historic heritage, especially archaeological features, recorded and unrecorded, is that all disturbances including construction have a negative effect that cannot be remediated only mitigated.

Nonetheless construction around wetlands and streams will allow environmental archaeological research to be undertaken that could clarify the dates, sequence and details of the anthropogenic vegetation change from forest to open fern lands. This is relevant for NoR S1, S2 and S3.

Any pre-Contact horticulture like frequent harvesting of fern root rhizomes or taro fields have not been observed in the study area. Large linear developments like the ones proposed here are a perfect opportunity to close this gap in the current archaeological knowledge of the study area. This is relevant for all NoRs.

The construction of a Kumeū transport station can be seen as a unique opportunity to bring heritage buildings together and strengthen the local identity with a dedicated heritage centre close to the transport station. The Huapai Tavern, a railway shed, railway carts setup as a café are all impacted by NoR 2 and 3, but there is also a packing shed, and early residential houses that are impacted (NoR 1) as well as heritage buildings like the Ponomā Hall that could potentially contribute to a heritage centre. None of the latter buildings are protected however have heritage value and could be considered to form part of a heritage centre. The final mitigation measures will be confirmed through the Historic Heritage and Management Plan, which is a condition of the proposed designations.

7 NoR S1: Alternative State Highway, including Brigham Creek Interchange

It is proposed to submit a Notice of Requirement (NoR S1) to designate the land required to implement the new four-laned dual carriageway motorway referred to as the Alternative State Highway (ASH) and the upgraded Brigham Creek Interchange (BCI).

7.1 Project Corridor Features

The ASH extends from the future State Highway 16 (SH16) / Brigham Creek Interchange (north of Massey) to a proposed new intersection with SH16 near/at Foster Road on the western edge of the FUZ, west of Huapai. This proposed state highway corridor will be approximately 11km long, travelling westward across rural farmlands to the southwestern side of Kumeū and Huapai, with an additional interchange proposed at Tawa Road.

An overview of the proposed design is provided in Figure 7-1 below.



Figure 7-1: Overview of the Alternative State Highway, including Brigham Creek Interchange

7.2 Existing and Likely Future Environment

7.2.1 Planning context

The Alternative State Highway (**ASH**) corridor, including the Brigham Creek Interchange (**BCI**), is largely rural and is proposed to traverse land zoned under the AUP:OP as Rural – Countryside Living Zone, Rural – Mixed Rural Zone and Rural – Rural Production Zones.

The ASH corridor will also traverse two separate areas of FUZ in Redhills North and Kumeū-Huapai with the BCI also currently sitting within FUZ land.

Table 7-1 below provides a summary of the existing and likely future environment as it relates to the ASH and BCI.

Table 7-1: Alternative State Highway and Brigham Creek Interchange Existing and Likely Future Environment

Environment today	Zoning	Likelihood of Change for the environment ³	Likely Future Environment ⁴
Rural	Rural - Mixed Rural Zone, Rural - Countryside Living Zone Rural - Production Zone	Low	Rural
Undeveloped greenfield areas	Future Urban	High	Urban

³ Based on AUP:OP zoning/policy direction

⁴ Based on AUP:OP zoning/policy direction

7.2.2 Heritage Environment

This section describes in detail the heritage features within a 200 m buffer of the NoR area.

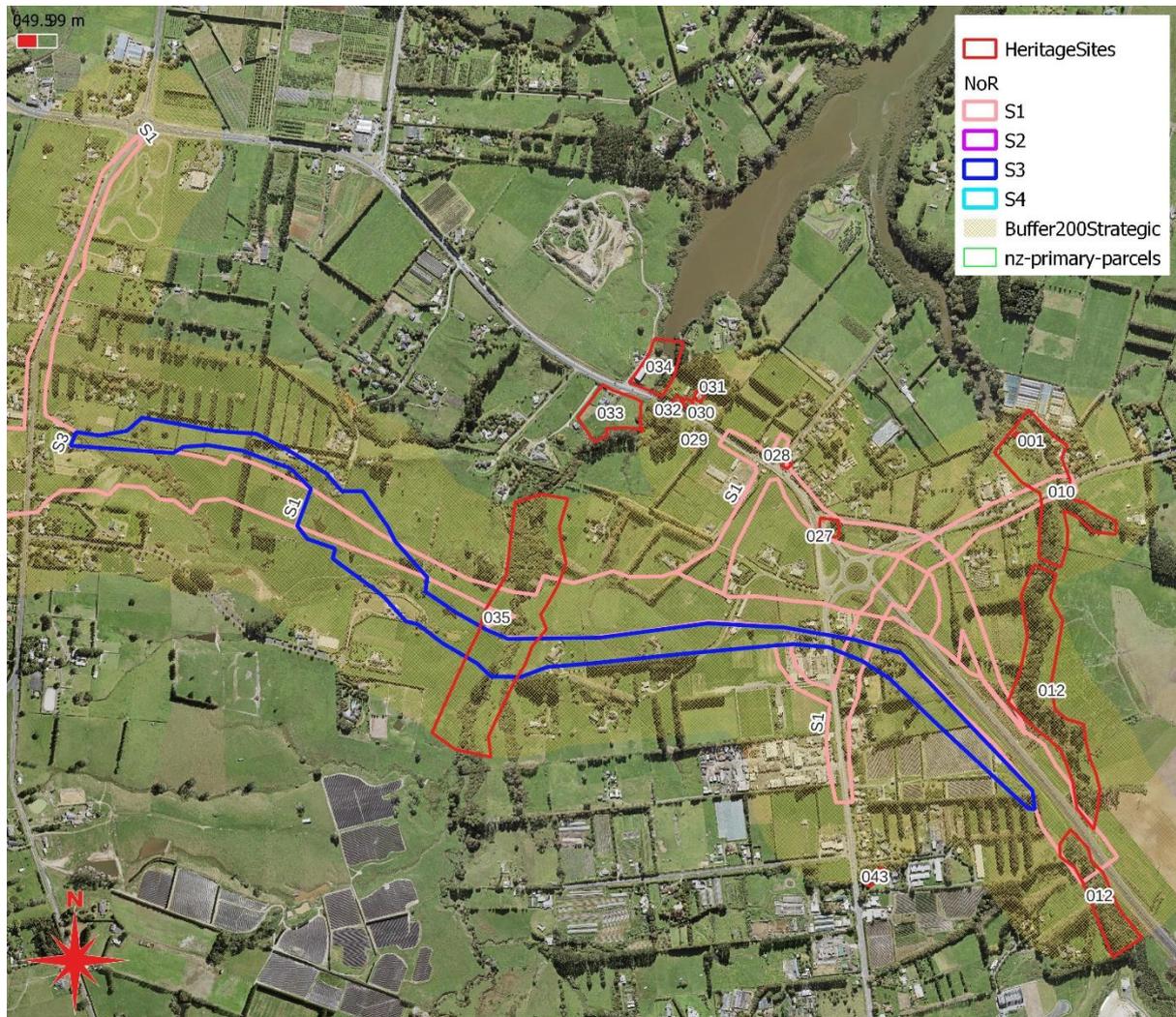


Figure 7-2: Eastern section of NoR S1. Site 027 (location of demolished church) is within the extent of NoR S1. Sites 001 (shell midden), 028 to 034 (historic structures mostly related to the Sinton family) are within the 200 m buffer zone around NoR S1. High Probability areas around streams 010, 012 (Totara Creek) and 040 (Ngongetepara Stream) are indicated.

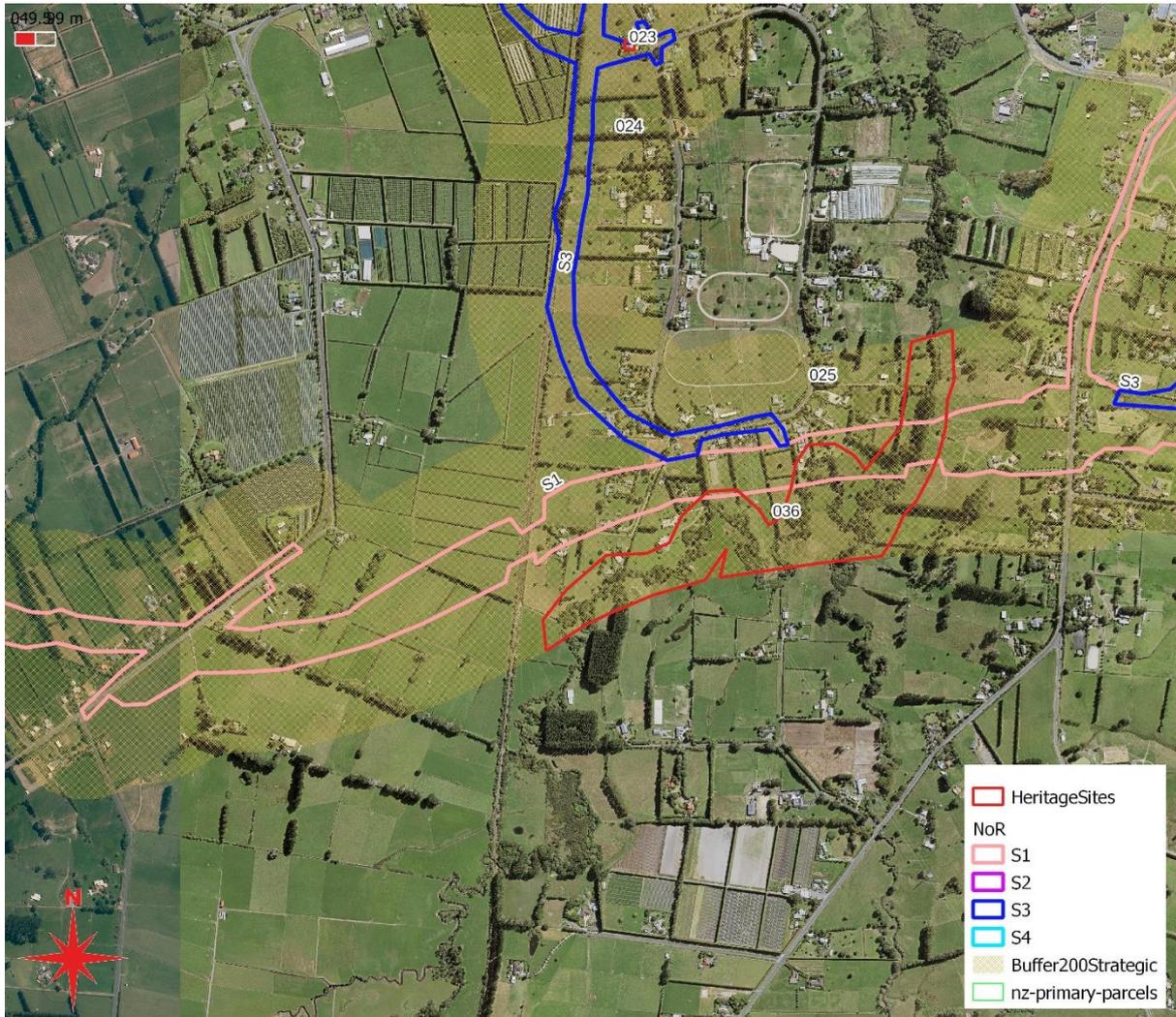


Figure 7-3: Eastern middle section of NoR S1. High probability area of the Kumeū stream (036) crossing the extent of NoR S1. Site 025 (a post 1940 heritage house) is within the 200 m buffer of NoR S1.

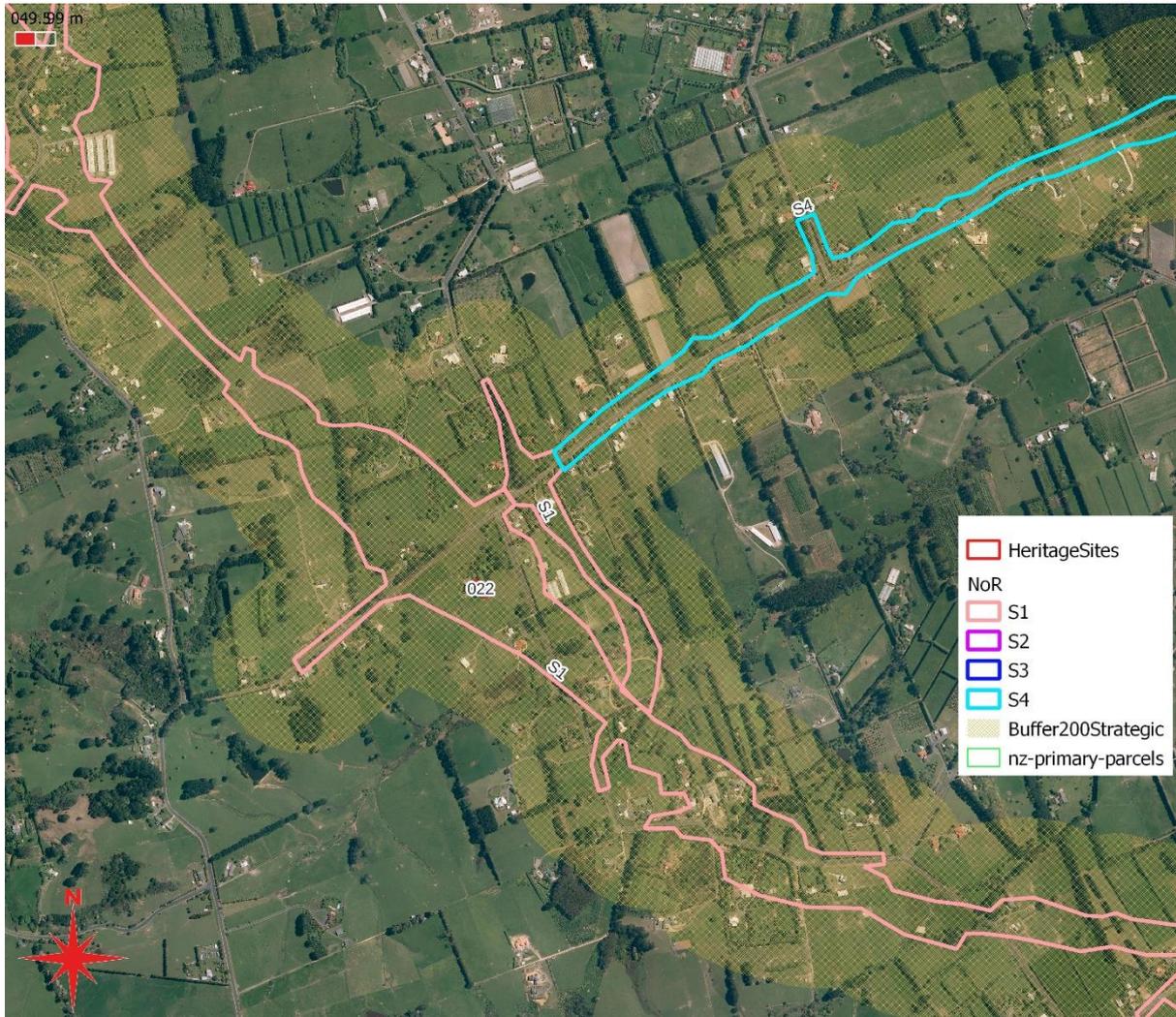


Figure 7-4: Western middle section of NoR S1. Red rectangle is 022, a historic house. It is within the extent of NoR S1.

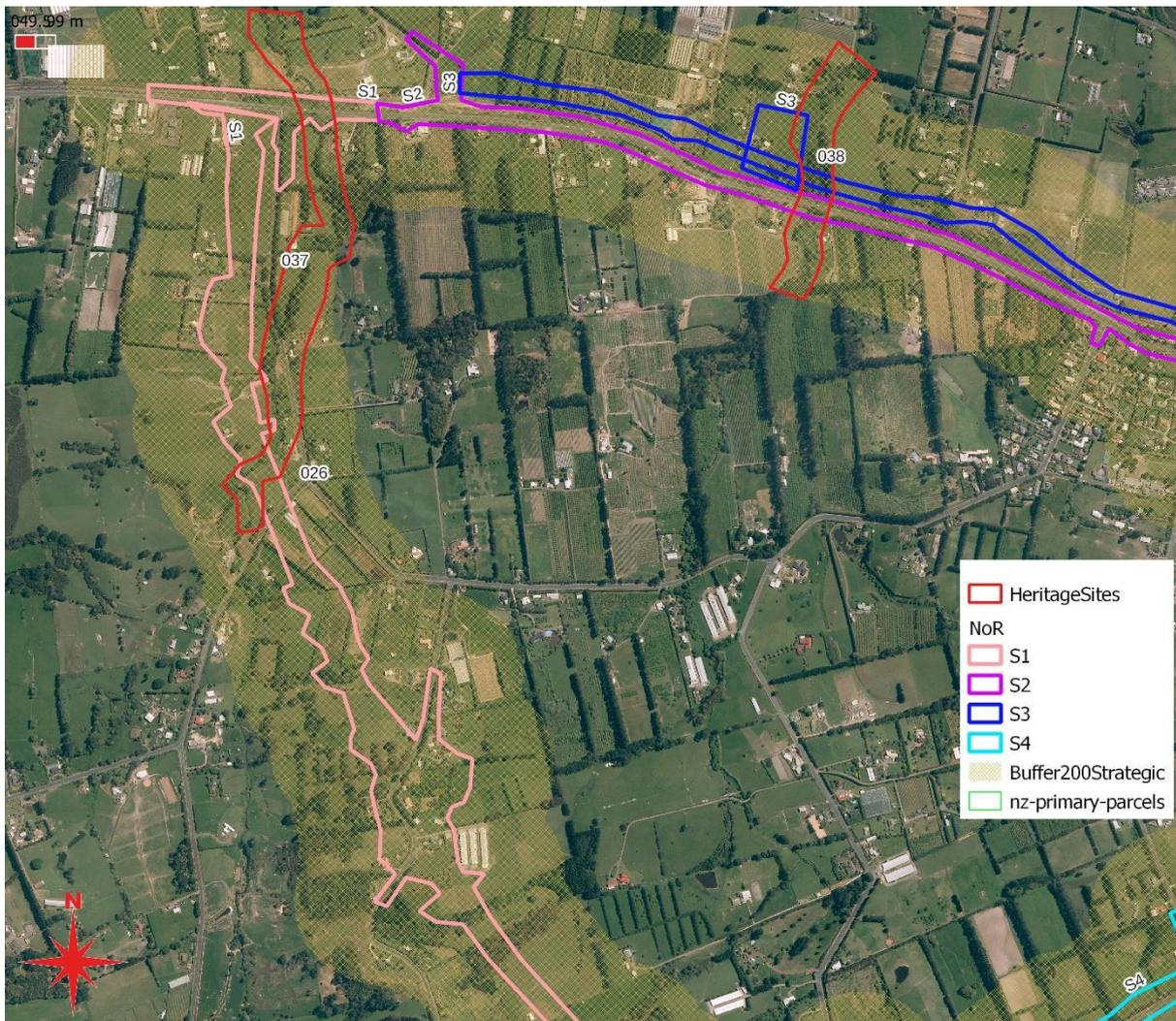


Figure 7-5: Western section of NoR S1. The Ahukuramu stream will be crossed twice by S1 (037). An early fruit packing shed is outside the extent but within the 200 m buffer zone (026).

Remains of a Presbyterian church are recorded in the CHI as #3711 (Figure 7-2). The church can still be seen on the 1940 aerials and it seems that about half of it has been disturbed/destroyed by recent road works for SH16 (Figure 7-6, Figure 7-7). It seems that no records of the early history have survived⁵. There is some probability that some few features of the church might have survived sub-surface (Figure 7-9).

A post 1940 commercial building (Sun Kwong Takeways) is recorded as a historic structure in the CHI #3713 and the extent of NoR S1 runs through the middle of the building (Figure 7-7 and Figure 7-8). This building seems to have replaced the original Sinton shop (032) that has been demolished. Despite the late date of the commercial building it might have been a late part of the historic complex in this area related to the Sinton family. The curtilage of earlier buildings, gone now, might still be sub-surface.

⁵ <https://www.presbyterian.org.nz/archives/AucklandPresbytery.htm>



Figure 7-6: Presbyterian church clearly visible in 1940 aerial (027). Recorded shop to the north of it is still a paddock in 1940.



Figure 7-7: Location of demolished church shown. Historic structure (CHI#3713) 'Sun Kwong Takeways' shown. Both are within the extent of NoR S1. The historic structure is post 1940.



Figure 7-8: Former Sun Kwon Takeway.

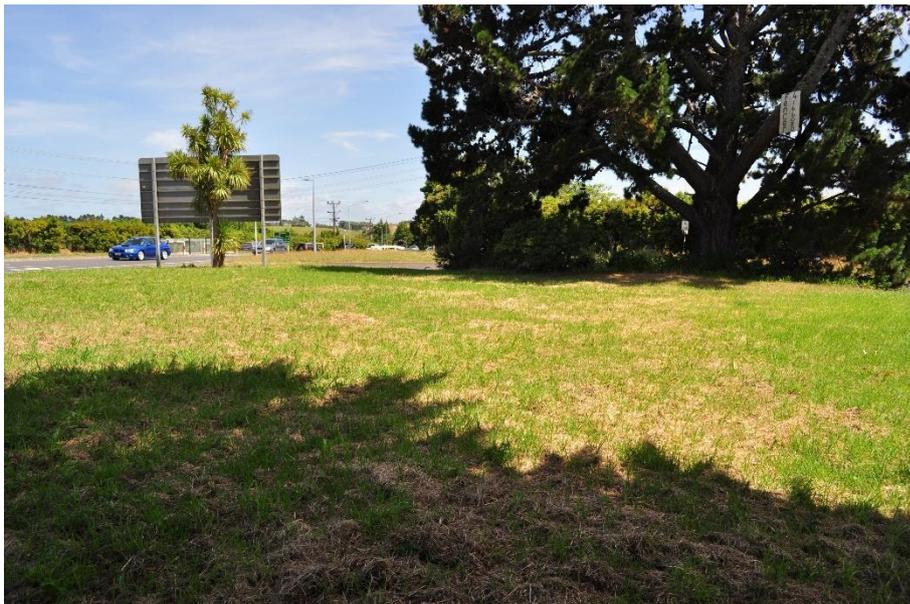


Figure 7-9: Approximate location of Church. SH16 in the background.

Several historic buildings, some of them still standing and some of them demolished, as well as the remains of an early bridge / river crossing to the north of the current one, are within the 200 m buffer zone. One of the sites is scheduled in the AUP, but has been shown to be post 1940 (Druskovich 2016). None of them are impacted by NoR S1.



Figure 7-10: Heritage structures within the 200 m buffer zone along SH16. 033 is scheduled in the AUP. None of them will be impacted by the NoR S1.



Figure 7-11: Historic house (029).



Figure 7-12: Significant tree (030). Not impacted by NoR S1.

Further to the west NoR S1 crosses the Kumeū stream/river (#036, Figure 11) twice. It is unclear how far the river was navigable by waka before European style farming and draining of the wetlands had started. It is possible that both crossings are still within that navigable range and therefore have to be considered high probability areas to encounter archaeological features that have not been recorded as archaeological sites. The same is true for the Ngongetepara stream (#035, Figure 7-3).

A historic house has been recorded within the 200 m buffer zone in this mid-eastern area of the NoR S1, but it is post 1940 and not visible from the road (#025, Figure 7-13).

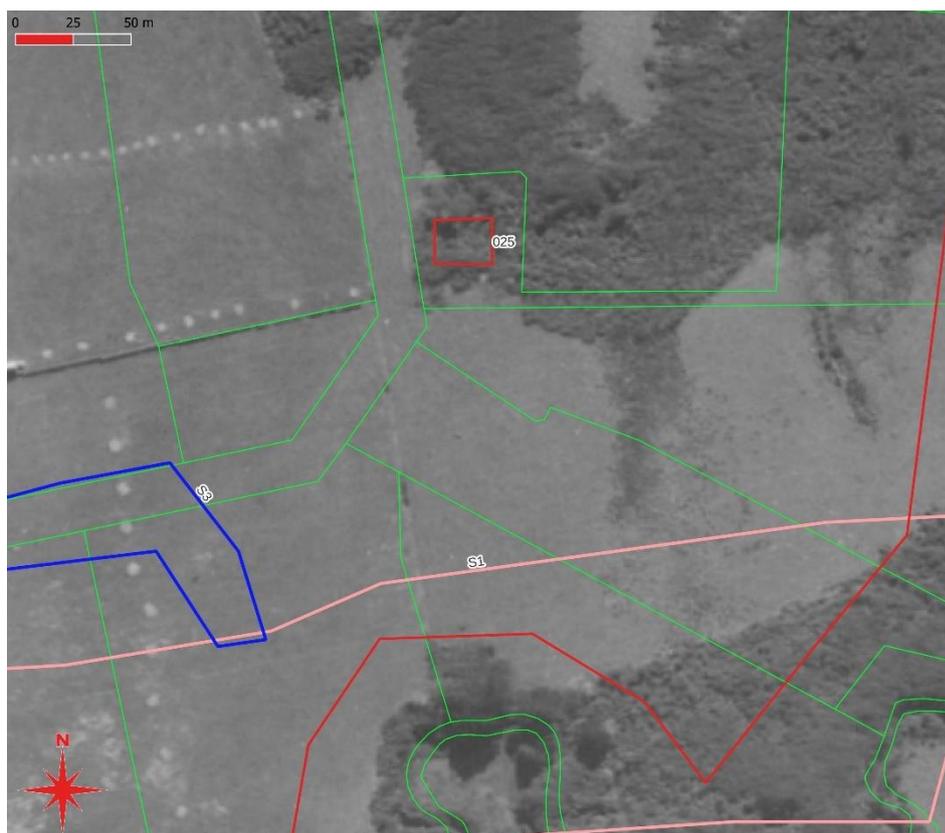


Figure 7-13: Location of historic house on the 1940 aerial showing paddocks and scrubs (025).

In the western section of NoR S1 (Figure 7-4 and Figure 7-5) one historic house is within the extent of the NoR (022). It is visible in the 1940 aerial, and it seems likely that it originates from the 19th century (Figure 7-14, Figure 7-15, Figure 7-16). We have to consider it a probable archaeological site too if the building date is pre 1900.

The Ahukuramu stream will be crossed twice (Figure 7-5). It is unclear how far the river was navigable by waka before European style farming and draining of the wetlands had started. It is possible that both crossings are still within that navigable range and therefore have to be considered high probability areas to encounter archaeological features that have not been recorded as archaeological sites.

A fruit packing shed, probably of early 20th century date and visible in the 1940 aerial is within the 200 m buffer zone but will not be impacted (Figure 7-17, Figure 7-18).



Figure 7-14: Historic house 022 on modern aerial.



Figure 7-15: Historic house on the 1940 aerial.



Figure 7-16: Historic house as seen from the road (022).



Figure 7-17: Early fruit packing shed with later extension in the 200 m buffer zone (026).



Figure 7-18: Fruit packing shed in the middle of orchards on the 1940 aerial (026).

7.2.3 Heritage Environment Overview

One possible archaeological site and two heritage sites with varying historic values are within the boundaries of the proposed development. One of the historic sites is likely pre 1900 and its curtilage has potential archaeological values.

A shell midden site is close by and indicates that the stream crossings (Totara Creek, Waiarohia / Ngongepetara Stream and Ahukuramu Stream) are high risk areas for the discovery of sub-surface, unrecorded archaeological features.

A group of buildings and one notable tree relate to the Sinton family are close by. They are outside the boundary of the proposed development.

GIS ID	AUP #	CHI #	NZAA #	Type	Description
001		13579	R11/2084	Shell midden	Not impacted
010-012				High probability area	Totara Creek – 2 crossings
027		3711		Archaeological site?	Location of Presbyterian church – full impact.
028		3713		Historic house	Sun Kwong Takeaways (post 1940) - impact
029		3486		Historic house	No impact (Sinton homestead)
030		12896		Significant tree	No impact
031		3379		Historic house	No impact (Sinton homestead)
032		20452		Archaeological site	No impact (Sinton Store)
033		13241	R11/2828	Historic house	No impact (Sinton house, post 1940)
034		20450, 13589, 185, 13588	R11/2081, R11/2079, R11/2080	Several features, old stream crossing	No impact
025		16380		Historic house, post 1940	No impact
022		16387		Historic house, archaeological site	Removal or demolition
026		16400		Historic structure	Fruit packing shed, no impact
037				High probability area	Ahukuramu Stream, two crossings
036				High probability area	Kumeū River, two crossings
035				High probability area	Ngongetepara stream, one crossing

7.3 Assessment of Effects on Historic Heritage and Archaeology and Measures to Avoid, Remedy or Mitigate Actual or Potential Adverse Effects

Potential adverse effects are unrecorded archaeological features close to the Totara Creek, Waiarohia / Ngongepetara Stream and Ahukuramu Stream crossings. Any archaeological features are likely from seasonal camps to exploit local resources like the shell midden close to the development along the various streams. They would not have been rare but are rarely investigated comprehensively and their information potential is high considering that only coastal pre-Contact sites have been recorded or documented. As any sites would be sub-surface, they have no amenity value and their cultural association would be the known relationship of iwi and hapū to the area. No additional assessment criteria are applicable.

It is unlikely but possible that archaeological remains are still in situ at the location of a Presbyterian Church (#027).

One historic house (#022), possibly of late 19th century origin is within the extent of the NoR. Both the house and the curtilage will likely have good information potential to the living conditions of the early settlers in the district. These sites are rarely investigated. The amenity value of the historic building could be preserved by moving it rather than demolish it. This is as a preferable mitigation process.

Several heritage structures and features are within a 200 m buffer zone, and some might be impacted by construction works (#029 to #032).

The documentation conditioned by an archaeological authority would mitigate the loss of heritage structures through preservation by documentation and the risk of construction delays by encountering yet unrecorded archaeological features.

In conclusion there are some adverse effects on archaeology by NoR S1. The risk of encountering unrecorded archaeological features and the loss of a possible heritage structure (#022) can be mitigated by the conditions of an archaeological authority applied for with Heritage NZ Pouhere Taonga under the Heritage NZ Pouhere Taonga Act.

7.3.1 Positive Effects

Potential positive effects are mentioned in Section 5.

7.3.2 Assessment of Construction Effects

There are no additional adverse effects during construction.

7.3.3 Recommended Measures to Avoid, Remedy or Mitigate Construction Effects

It is recommended to include all areas of earthworks or topsoil stripping during construction into any precautionary archaeological authority. Laydown areas, haul roads and other ancillary construction areas should avoid heritage structures that are close to the proposed development.

7.3.4 Assessment of Operational Effects

There are no additional adverse effects during operation.

7.3.5 Recommended Measures to Avoid, Remedy or Mitigate Operational Effects

There are no recommended measures to avoid operational effects as there are no adverse effects.

7.4 Conclusions

In conclusion there are small residual negative effects with the recommended mitigation in place as the loss of the original location of one heritage structure cannot be remediated, only mitigated.

In conclusion there are some adverse effects on archaeology by NoR S1. The risk of encountering unrecorded archaeological features and the loss of a possible heritage structure (022) can be mitigated by the conditions of an archaeological authority applied for with Heritage NZ Pouhere Taonga under the Heritage NZ Pouhere Taonga Act. The amenity value of the historic building could be preserved by moving it rather than demolish it. This is as the preferable mitigation process.

Any processes regarding tikanga, especially around koiwi, should be discussed with manawhenua before the start of the project.

8 NoR S2: SH16 Main Road Upgrade

It is proposed to submit a Notice of Requirement (NoR S2) to designate the land required to implement the upgrade of the existing State Highway 16 (SH16) to a two-lane corridor with walking and cycling facilities.

8.1 Project Corridor Features

The SH16 Main Road Upgrade extends approximately 4.5km between Old Railway Road, east of Kumeū to Foster Road, west of Huapai. The SH16 Main Road is currently a 20m wide two-lane urban arterial with no active mode facilities on either side of the corridor.

SH16 Main Road is proposed to be upgraded to a 24m urban corridor traversing through well-established retail, commercial and residential environs. The corridor generally follows the existing SH16 Main Road alignment and includes a 600m section of active mode only upgrade between Oraha Road and Tapu Road. As part of this project, Station Road will be realigned to form a new signalised intersection with SH16 and Tapu Road.

An overview of the proposed design is provided in Figure 8-1 below.



Figure 8-1: Overview of the SH16 Main Road Upgrade

8.2 Existing and Likely Future Environment

8.2.1 Planning context

SH16 Main Road is proposed to be upgraded to a 24m urban corridor along the urban extent of SH16 traversing through well-established retail, commercial and residential environs through Kumeū Huapai. This corridor contains a range of business, residential and open space and rural land uses under the AUP:OP between the eastern extent of the Kumeū-Huapai township and the western extent of the upgraded corridor (the intersection with the proposed ASH).

Table 8-1 below provides a summary of the existing and likely future environment as it relates to the SH16 Main Road Upgrade.

Table 8-1: SH16 Main Road Upgrade Existing and Likely Future Environment

Environment today	Zoning	Likelihood of Change for the environment ⁶	Likely Future Environment ⁷
Rural	Rural Mixed Rural Zone, Rural Countryside Living Zone	Low	Rural
Business	Business (Industrial)	Low	Business (Industrial)
	Business (Local Centre)	Low	Business (Local Centre)
	Business (Mixed Use)	Low	Business (Mixed Use)
Residential	Residential	Low	Residential
Open Space	Open Space – Sport and Active Recreation	Low	Open Space
Undeveloped greenfield areas	Future Urban	High	Urban

⁶ Based on AUP:OP zoning/policy direction

⁷ Based on AUP:OP zoning/policy direction

8.2.2 Heritage Environment

The following chapter shows NoR S2 in relation to all Heritage structures and risks within a 200 m buffer zone. It includes a discussion of each of the Heritage items.

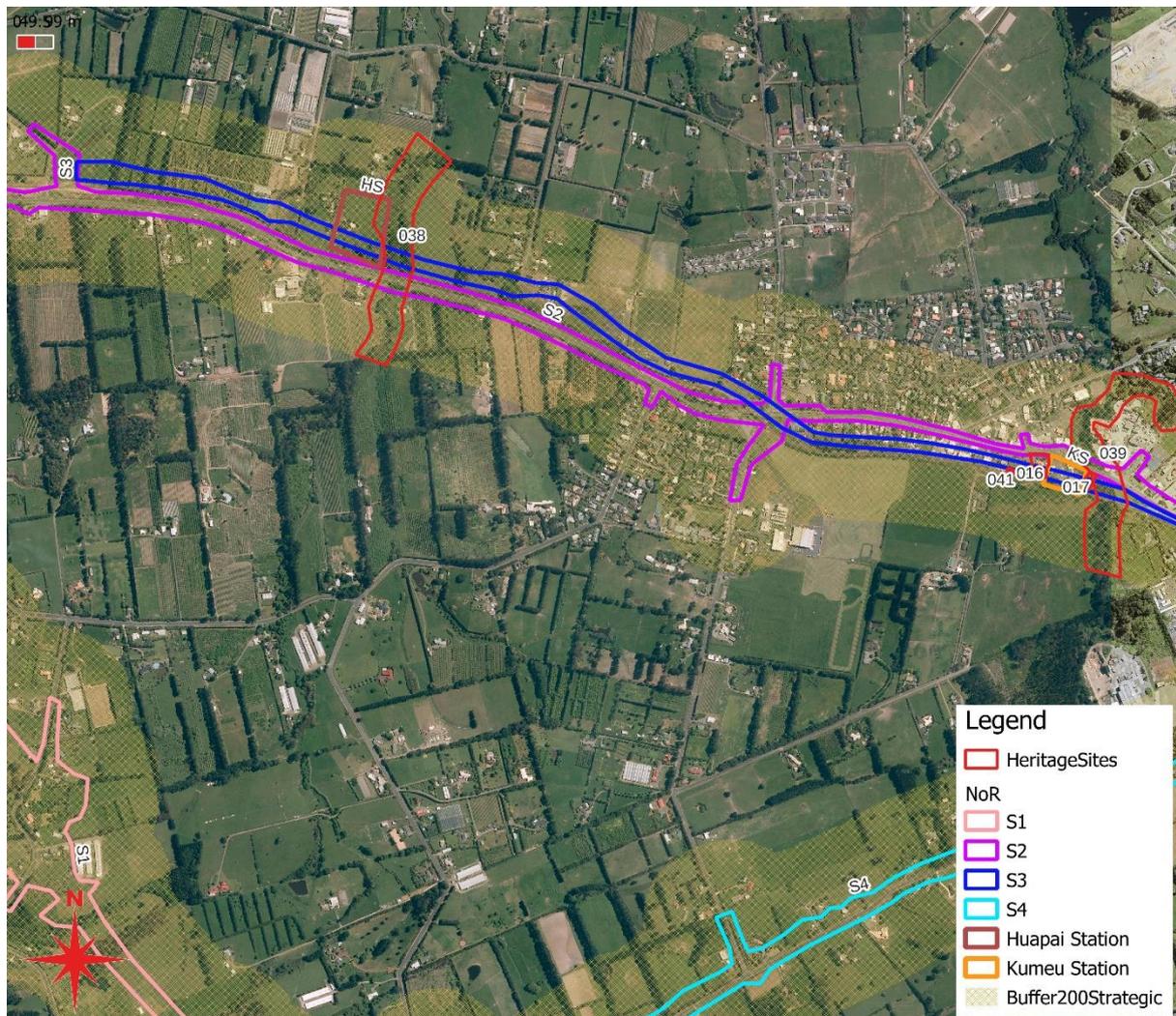


Figure 8-2: Extent of western part of NoR S2 in magenta with 200 m buffer zone. One potential heritage site (017) is impacted partially by NoR S2. One other (016), scheduled with the AUP is very close to the development and the curtilage of the site might be impacted. Two stream crossings (038 and 039) are high probability areas to encounter yet unknown archaeological sites.

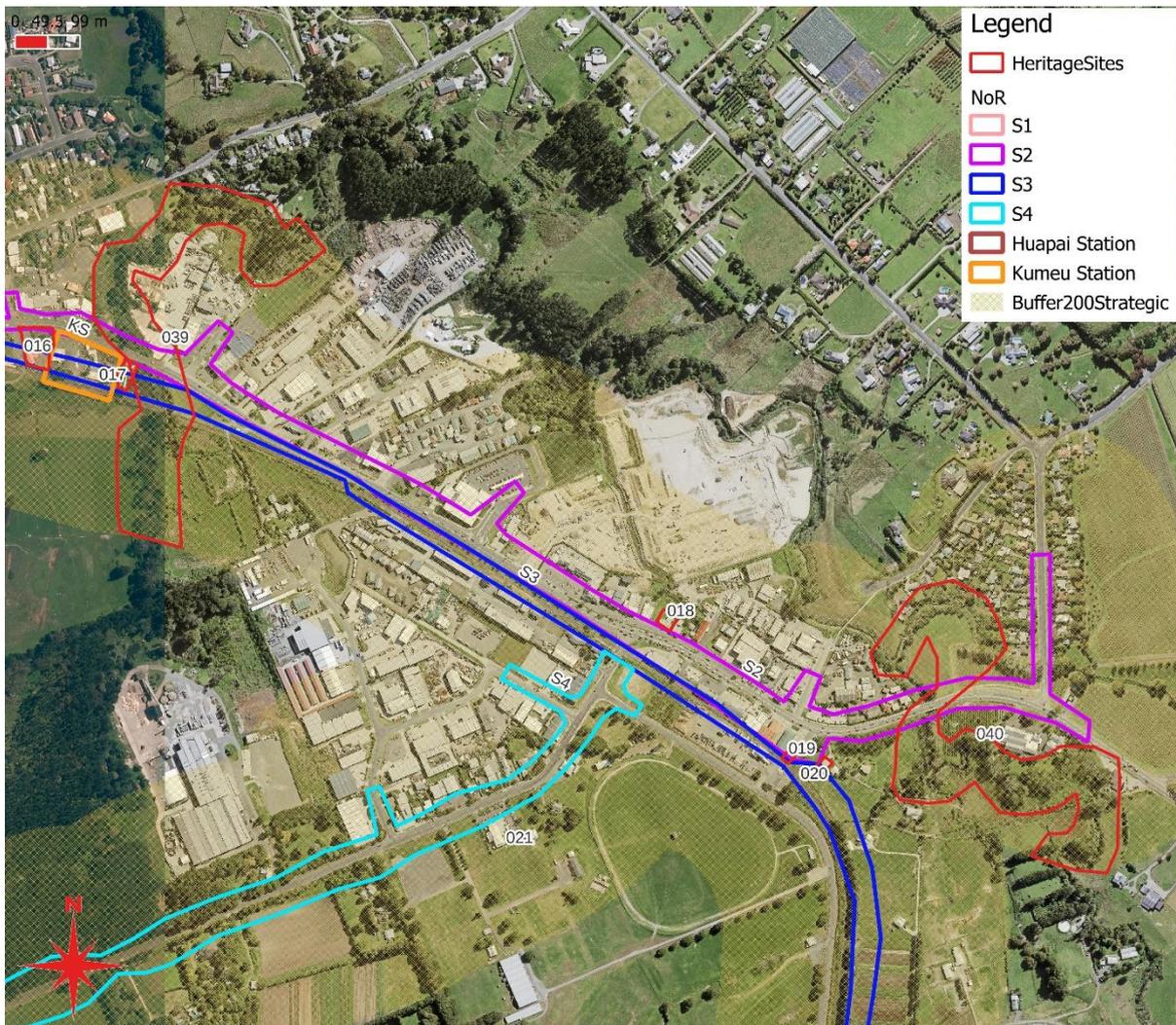


Figure 8-3: Extent of eastern part of NoR S2 in magenta with 200 m buffer zone. Historic site (019) scheduled in the AUP is partially impacted. Two further historic site (018 and 020) are very close to NoR S2 and them or their curtilage might be impacted by the construction. The Kumeū river crossing (040) is a high probability area to encounter yet unknown archaeological sites.

Several historic sites are either partially impacted by NoR S2 or are very close to the extent and could be impacted during construction or their curtilage sub-surface might be impacted upon.

The one historic site impacted by NoR S2, is the railway carriages (#017 in Figure 3) used for a café, with the CHI #18493. The railway shed (#019 in Figure 3), which is scheduled as #00483 in the AUP:OP is close to the proposed development. Both these structures seemed to have been moved to their current locations, therefore there exist no historic curtilage to be aware of.



Figure 8-4: Location of scheduled railway Goods Shed (019), scheduled in the AUP and two historic buildings next to NoR S2 (018 and 020), the Masonic Lodge building and a residential house.

Some sub-surface features of the curtilage of the Huapai Tavern (scheduled with AUP;OP referenced as #00482) could be impacted by the extent and construction of NoR S2. The building itself is not impacted but the heritage overlay (AUP;OP 00482) is impacted which contains the possible curtilage of the building – archaeological features sub-surface that relate to the building. This site is further discussed as the impacts from the RTCs in the discussion of NoR S3 and NoR KS.

The Masonic Lodge and a residential house are recorded in the CHI as #16388 and #16385. Both are outside the proposed development but very close to the extent of the NoR S2. Construction could impact on those structures, or any existing sub-surface curtilage could be clipped by NoR S2.



Figure 8-5: Railway carriages (017) next to SH16.



Figure 8-6: Railway shed (019) scheduled in the AUP;OP, next to the railway line.



Figure 8-7: Masonic Lodge (018), next to the extent of NoR S2.



Figure 8-8: Residential historic house (020), right next to the extent of NoR S2 and NoR S3.

Three stream crossings (identified as #038, #039 and #040 in Figure 2 and 3) are high risk areas to encounter archaeological features that are not recorded as archaeological sites. Of these three streams one is unnamed, and the remaining two are the Turakiawatea and the Kumeū river. The areas along the Turakiawatea and the Kumeū River have a high potential for pre-Contact or early Contact occupation. A Māori Land plan from 1868 shows this area claimed by Tautari.



Figure 8-9: Detail of ML 533 (1868) showing the Turakiwatea stream, and the land block named after the stream. This is a high-risk area to encounter somewhere along the rivers or streams early occupation.



Figure 8-10: Turakiawatea stream crossing. It seems that very little earthworks have been done along its banks previously.

8.2.3 Heritage Environment Overview

One heritage site, railway carts (#017), is partially within the boundaries of the proposed development. The railway carts have been moved to their current location and therefore do not have any archaeological, sub-surface values.

The stream crossings (Kumeū river, Turakiawareta stream and an unnamed stream) are high risk areas for the discovery of sub-surface archaeological features not recorded as archaeological sites, especially along the named rivers and streams, as both could have been navigable by waka.

Four heritage places and buildings (#016, #018, #019 and #020) are outside the boundary of the proposed development, but closely adjacent to it. The heritage overlay as per AUP;OP #00482 (Huapai Tavern) is impacted by NoR S2 but not the buildings themselves.

8.3 Assessment of Effects on Historic Heritage and Archaeology and Measures to Avoid, Remedy or Mitigate Actual or Potential Adverse Effects

There is the potential to uncover archaeological material close to the stream crossings. Any archaeological features are likely from seasonal camps to exploit local resources along the various streams. They would not have been rare but are rarely investigated comprehensively and their information potential is high considering that only coastal pre-Contact sites have been recorded or documented. As any sites would be sub-surface, they have no amenity values and their cultural association would be the known relationship of iwi and hapū to the area. No additional assessment criteria are applicable.

The railway carriages are recorded as heritage items and are partially impacted by the NoR S2. They have been moved to their current location. They are of local significance as one of the few remains of a regional important context, the railway line. They have served the community as a landmark and café for many years.

Two heritage buildings and a scheduled heritage area are within a 200 m buffer zone very close to the NoR and might be impacted by construction works. Subsurface archaeological features could be part of the curtilage of historic structures, which might be impacted by the NoR area.

An archaeological authority would mitigate the risk of encountering archaeological features that have not been recorded as archaeological sites.

In conclusion there are some adverse effects on historic heritage by NoR S2. The risk of encountering archaeological features that has not been recorded as archaeological sites can be mitigated by the conditions of an archaeological authority applied for with Heritage NZ Pouhere Taonga under the Heritage NZ Pouhere Taonga Act. Relocation of the historic railway carriages is a preferable option to demolition.

8.3.1 Positive Effects

Potential positive effects are mentioned in Section 5.

8.3.2 Assessment of Construction Effects

There are no additional adverse effects during construction.

8.3.3 Recommended Measures to Avoid, Remedy or Mitigate Construction Effects

It is recommended to include all areas of earthworks or topsoil stripping during construction into the precautionary archaeological authority.

8.3.4 Assessment of Operational Effects

There are no additional adverse effects during operation.

8.3.5 Recommended Measures to Avoid, Remedy or Mitigate Operational Effects

There are no recommended measures to avoid operational effects as there are no adverse effects.

8.4 Conclusions

In conclusion there are possibly small residual negative effects with the recommended mitigation in place as the loss of potential archaeological sites cannot be remediated, only mitigated. The risk of encountering unrecorded archaeological features and the possible loss or damage of heritage structures (019 and 017) can be mitigated by the conditions of an archaeological authority applied for with Heritage NZ Pouhere Taonga under the Heritage NZ Pouhere Taonga Act.

Any processes regarding tikanga, especially around kōwhiri, should be discussed with manawhenua before the start of the project.

9 NoR S3: Rapid Transit Corridor and Regional Active Mode Corridor; NoR KS: Kumeū Rapid Transit Station and NoR HS: Huapai Rapid Transit Station

9.1 9.1 Project Corridor Features

A Notice of Requirement (NoR S3) is proposed to designate the land required to implement the new Rapid Transit Corridor (RTC) and Regional Active Mode Corridor (RAMC) in one co-located and integrated corridor.

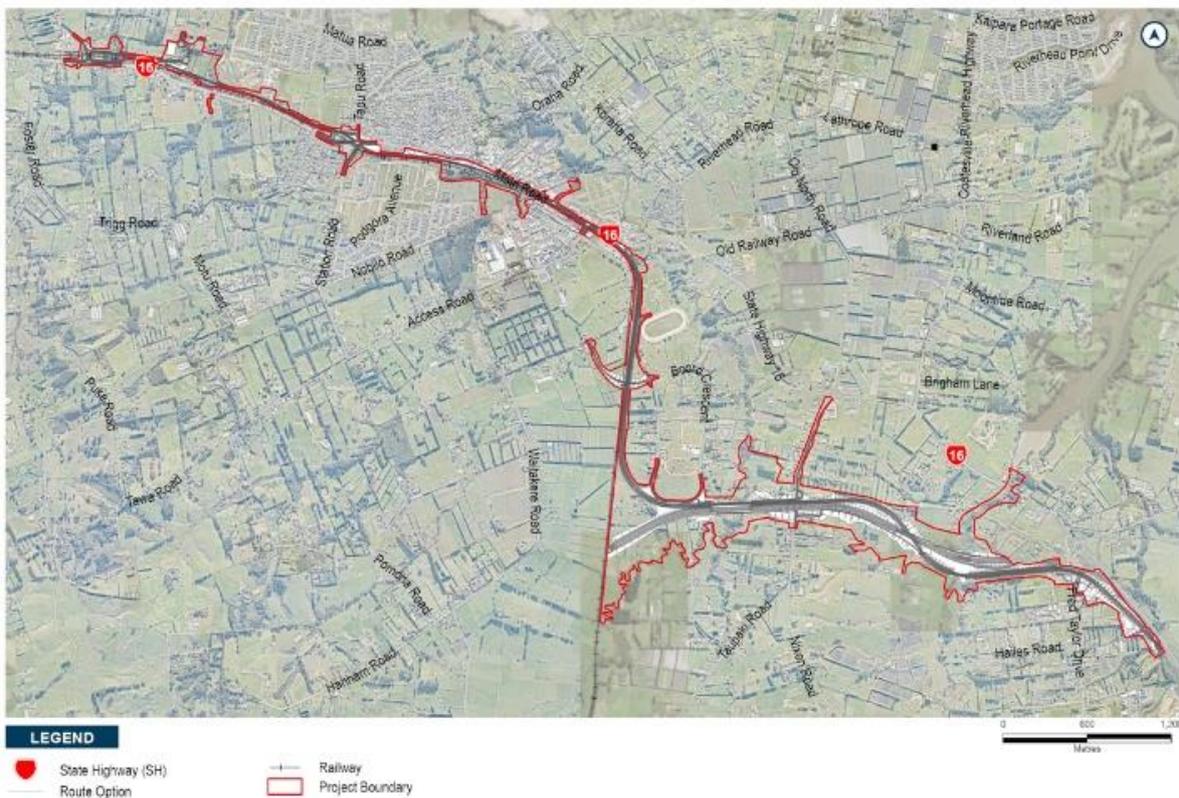


Figure 9-1: Rapid Transit Corridor and Regional Active Mode Corridor Overview

Two RTC stations are proposed. The future Kumeū Station is located between Harikoa Street and John MacDonal's Lane and the future Huapai Station is located opposite Meryl Avenue.

The Regional Active Mode Corridor (RAMC) is a segregated walking and cycling corridor that is located adjacent to the RTC alignment from the Brigham Creek Interchange to the western edge of Kumeū- Huapai, terminating at the signalised intersection of SH16 Main Road and Weza Lane. The corridor is co-located and integrated with the RTC and is proposed to be route-protected as a single NoR. The segregated corridor provides the opportunity for long-term amenity as a key cycling corridor, while connecting to the wider North western Cycleway and ultimately to the Auckland city centre network.

9.2 Existing and Likely Future Environment

9.2.1 Planning context

The Rapid Transit Corridor (**RTC**) and Regional Active Mode Corridor (**RAMC**) form a single, integrated transport corridor between Brigham Creek Interchange and the eastern entrance to Kumeū. The RTC only then continues through Kumeū Huapai and terminates at Matua Road. Two Stations are proposed Kumeū Station and Huapai Station.

The RTC corridor traverses both rural and urban land, as set out below:

- The **rural section** of the RTC runs from the Brigham Creek Interchange to the entry to Kumeū-Huapai township and is co-located with the RAMC along this section. This rural section traverses land zoned under the AUP:OP as Rural – Countryside Living Zone, with an area zoned as FUZ in Redhills North.
- The **urban section** of the RTC runs from northern end of Waitakere Road to Foster Road and is co-located with the proposed SH16 Main Road upgrade along this section. This urban section contains a range of land uses zoned under the AUP:OP as a mix of business zonings between the eastern extent of the Kumeū-Huapai township and Station Road

Table 9-1 below provides a summary of the North West existing and likely future environment as it relates to the RTC and the RAMC.

Table 9-1: RTC and RAMC Existing and Likely Future Environment

Environment today	Zoning	Likelihood of Change for the environment ⁸	Likely Future Environment ⁹
Rural	Rural	Low	Rural
Undeveloped greenfield areas	Future Urban	High	Urban
Business	Business (Industrial)	Low	Business (Industrial)
	Business (Local Centre)	Low	Business (Local Centre)
	Business (Town Centre)	Low	Business (Town Centre)
Residential	Residential	Low	Residential
Open Space	Open Space – Informal Recreation	Low	Open Space
	Open Space – Sport and Active Recreation		
Future Urban Zone / Undeveloped greenfield areas	Future Urban	High	Urban

⁸ Based on AUP:OP zoning/policy direction

⁹ Based on AUP:OP zoning/policy direction

The RTC stations - Kumeū Rapid Transit Station and Huapai Rapid Transit Station - are located in the urban section of the RTC corridors.

Kumeū Station is proposed to be located on land at 299 and 301 Main Road on the western side of a Kumeū River tributary. The land is zoned under the AUP:OP as Business - Town Centre Zone. An active modes overbridge is proposed across the NAL with active mode connections to:

- the Huapai Triangle crossing land zoned in the AUP:OP as Green Infrastructure Corridor and Residential - Mixed Housing Suburban Zone; and
- Wookey Lane crossing land zoned in the AUP:OP as Green Infrastructure Corridor and Residential - Mixed Housing Suburban Zone; and Business - Light Industry Zone.

Table 9-2: Kumeū Rapid Transit Station Existing and Likely Future Environment

Environment today	Zoning	Likelihood of Change for the environment ¹⁰	Likely Future Environment ¹¹
Business	Business (Industrial)	Low	Urban
	Business (Town Centre)	Low	Urban
Residential	Residential - Mixed Housing Suburban Zone	Low	Urban
Open Space (located to the north of the proposed station location)	Open Space – Informal Recreation Open Space – Sport and Active Recreation	Low	Open Space

Huapai Station is proposed to be located on land at 29 and 31 Meryl Avenue on the western side of the Ahukuramu. The land is zoned under the AUP:OP as Business - Town Centre Zone. An active modes overbridge is proposed across the NAL and SH16 to FUZ land. Future connections will be determined as part of structure plan process.

Table 9-3: Huapai Rapid Transit Station Existing and Likely Future Environment

Environment today	Zoning	Likelihood of Change for the environment ¹²	Likely Future Environment ¹³
Residential (located to the east of the proposed station location)	Residential – Single House Zone	Low	Urban
Future Urban Zone / Undeveloped greenfield areas	Future Urban	High	Urban

¹⁰ Based on AUP:OP zoning/policy direction

¹¹ Based on AUP:OP zoning/policy direction

¹² Based on AUP:OP zoning/policy direction

¹³ Based on AUP:OP zoning/policy direction

9.2.2 Heritage Environment

The northern part of NoR S3 is shown on the overview maps of S2 as areas with a blue boundary (Figure 8-2 and Figure 8-3). It should be noted that the scheduled historic area of the Whenuapai Tavern and the scheduled area of the Railway Goods Shed (AUP:OP reference #00482 and #00483) are within the NoR area extent. The location of the original Kumeū train station is also within the area (#041) and there is potential for archaeological features still being sub-surface.

The railway Goods Shed has been discussed in NoR S2 (#019, Figure 8-6) as it is in close vicinity to NoR S2 it. NoR S3 does impact onto it.

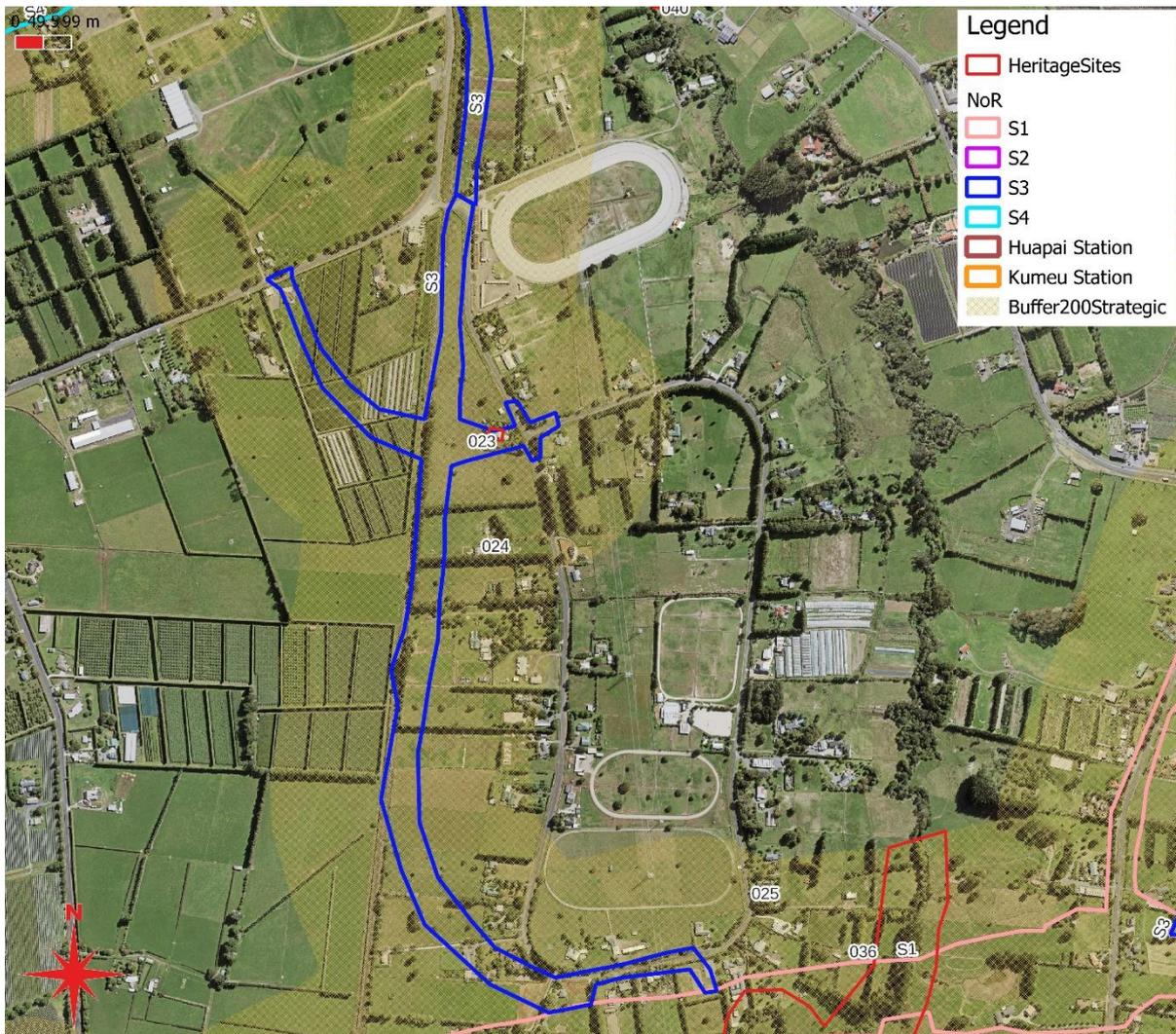


Figure 9-2: Southern extent of NoR S3 with 200 m buffer zone. One historic building is within the area of S3 (023) and two are within the 200 m buffer zone (024, 025). The buildings within 200 m will not be impacted by the proposed development.

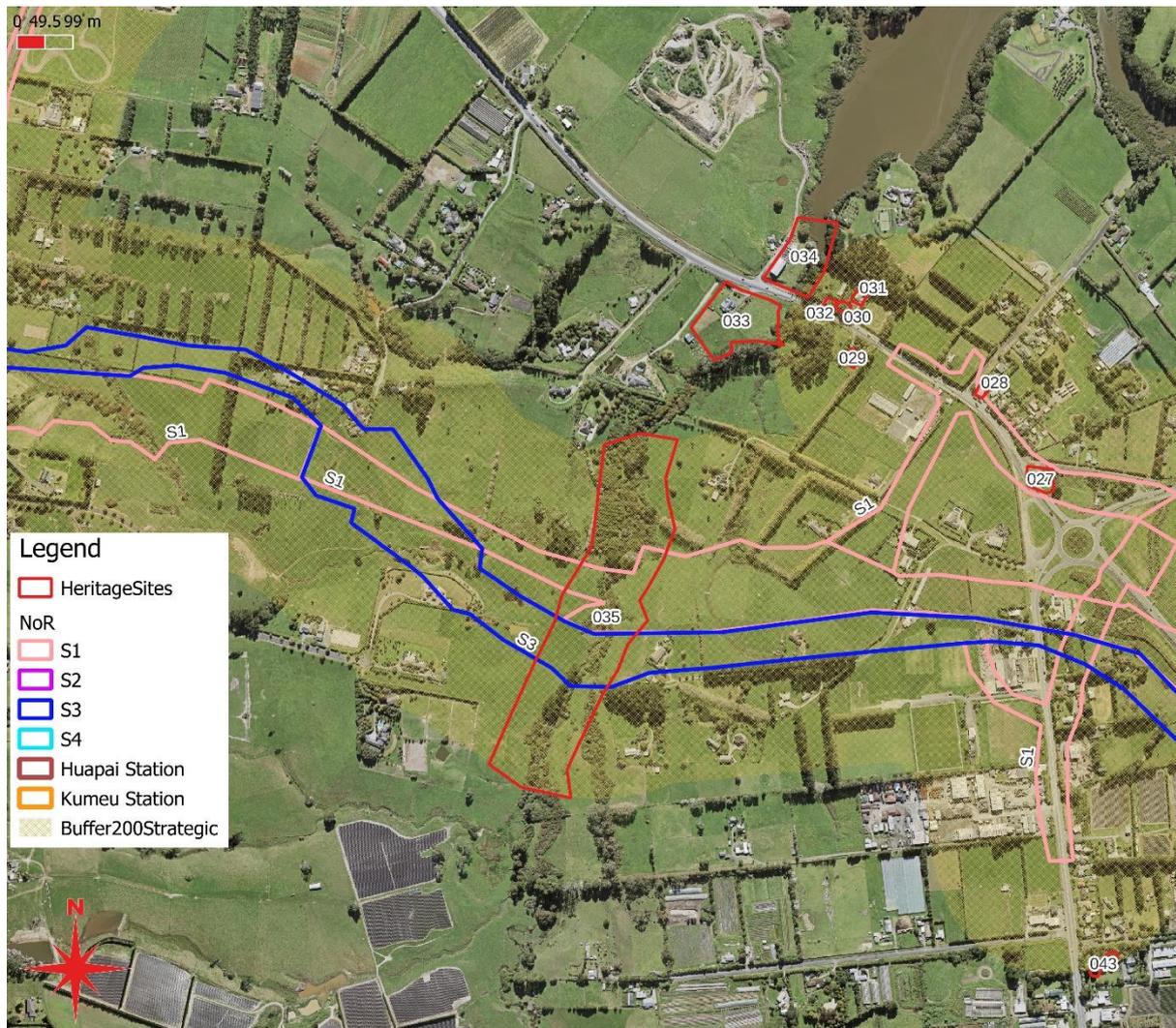


Figure 9-3: The south-eastern extent of NoR S3 with a 200 m buffer zone. One stream crossing (035) is shown as a high-risk area to encounter archaeological features that are not recorded as archaeological sites. The stream was likely still navigable by waka around the crossing.

The development of the Huapai Tavern can be traced back to the 1870s¹⁴ (Dunsford 2002). Overlaying historic maps and historic aerials shows the development of the small cluster of buildings in the vicinity (Figure 9-4 to 43). Part of this grouping of buildings are pre 1900 buildings and these are still forming part of the modern Huapai Tavern. The extent of NoR S3 cuts through parts of the scheduled Historic Heritage Extent of Place (AUP:OP reference #00482). The scheduled area is larger than the buildings footprint and takes into account the curtilage of the heritage buildings. (Figure 9-8).

The following sequence of overlays seems to indicate that mainly the modern part of the scheduled heritage place, built post 1940, is impacted by NoR S3 (Figure 9-5, Figure 9-6, Figure 9-7, Figure 9-8), however a detailed investigation of the building and its curtilage is required to confirm this. If this assumption is correct, there is a chance to re design the current building complex and keeping its main heritage elements in place.

¹⁴ <https://www.huapaitavern.co.nz/history-of-the-huapai-tavern>

The historic railway carriages (CHI #18493) are impacted by NoR S3.

The footprint of the Kumeū Station sits right between the scheduled Historic Heritage Extent of Place (#00482) and the railway carriages. The new station and upgraded roads and railway will transform this area into a busy hub, which opens the opportunity to create a new heritage precinct that keeps the function of the tavern, re-uses the railway carriages as a café and could incorporate other heritage buildings from the area.

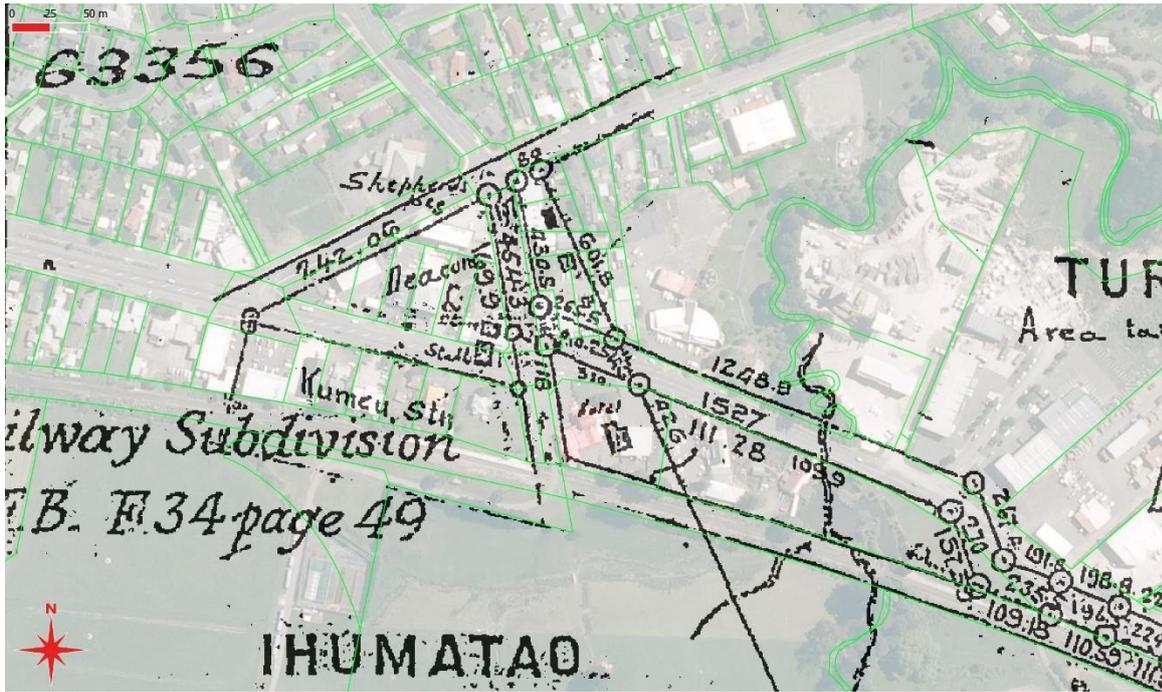


Figure 9-4: Hotel 1885 (SO 3938 - Road taken from Block Turakiawatea). The map shows the Hotel (owned by Deacon) shed and stables and the extent of the Kumeu Station property at the time.

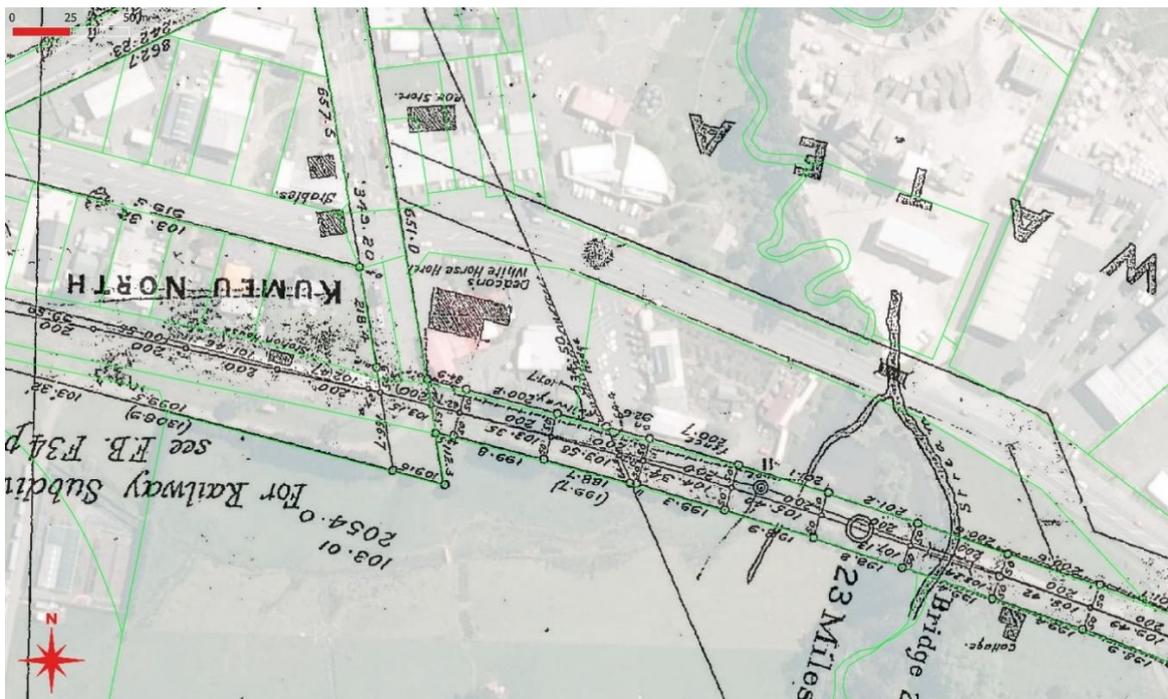


Figure 9-5: Hotel 1893 (Railway maps – Deacon's White Horse Hotel, Orientation of building is likely drawn incorrectly, probably due to the map being drawn with south to the top rather than the traditional north to the top). Showing the same buildings as in 1885 with the addition of a Store. This map also shows the

location of the small Station building (shown in the overview maps as 041). Road and railway bridges over the stream are also shown.

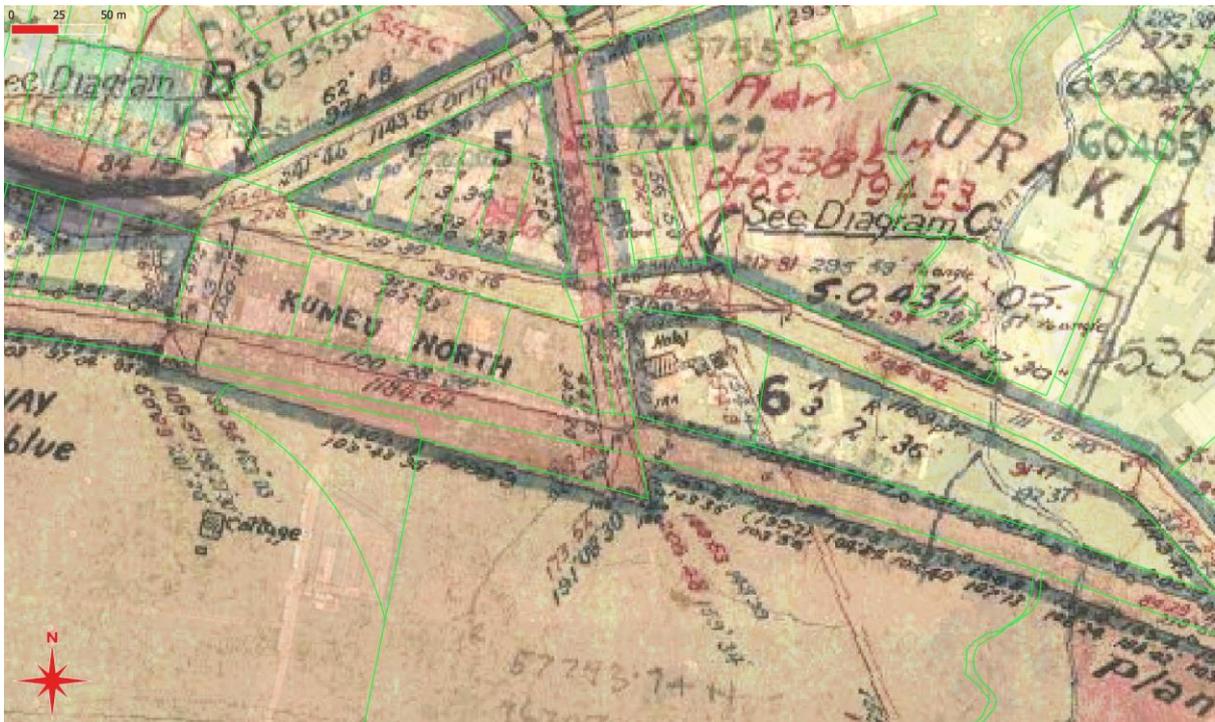


Figure 9-6: Detail of DP 8948, 1913, showing the Hotel with additional buildings attached. Shed and stables seem to have gone but the store is still there.

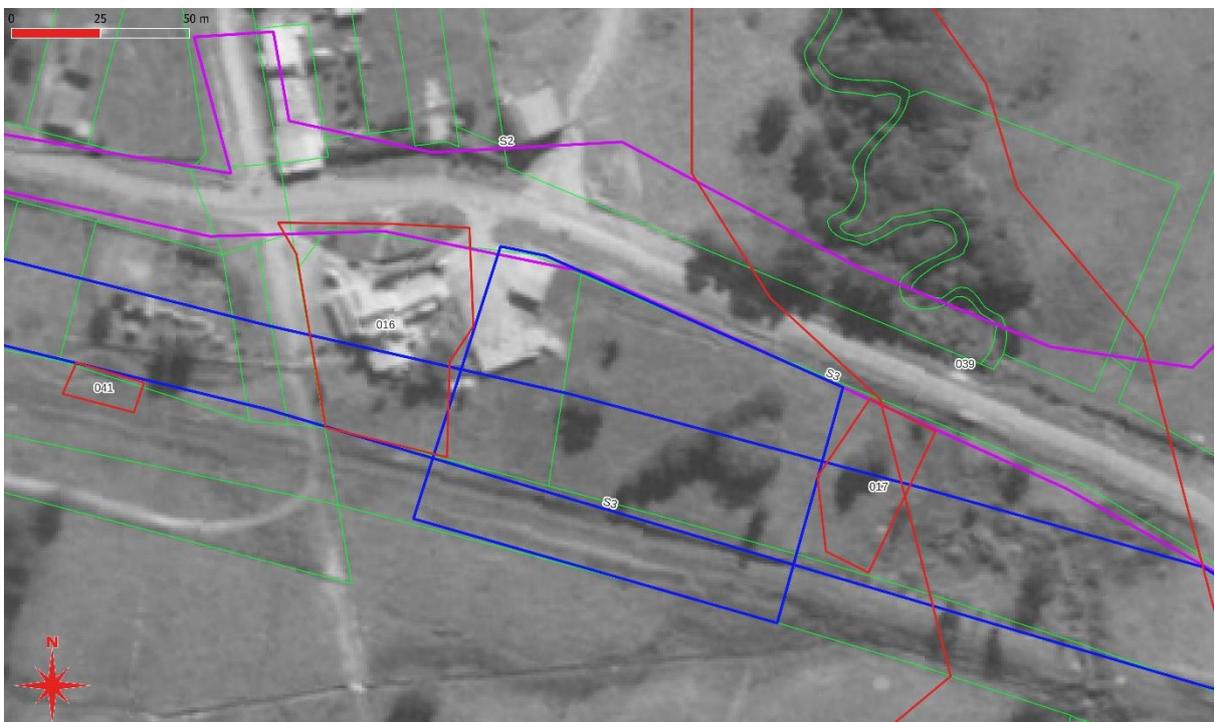


Figure 9-7: The Huapai Tavern in 1940 with further additions (scheduled area shown as 016). The store also shows further building additions but the train station building (041) seems to have gone.



Figure 9-8: Current cluster of Hotel buildings - all encompassed by scheduled extent of place (016) in comparison to S3 and one option of the Kumeū station.



Figure 9-9: Old sections of the Huapai Tavern.



Figure 9-10: Main buildings of the Huapai tavern. Modern extensions to the right.



Figure 9-11: Railway carriages (017) overlooking the Turakiawatea stream.



Figure 9-12: Railway bridge over the Turakiawatea stream.

A historic house (CHI # 16381) is within the extent of S3 and will be impacted by the proposed development (#023 on Figure 2). This structure is likely pre1900 and therefore will require an archaeological authority to be moved or demolished. The curtilage and sub-surface floor assemblage will require an archaeological authority too.

Two further historic houses are recorded within the 200 m buffer zone (CHI #16379 and 16380) but neither will be impacted by the development and both seem to be built post 1940 or have been moved to their current location post 1940 (#024 and #025, Figure 3).

One further historic house is right next to the extent of the proposed development (CHI #16385) and the curtilage could be impacted by NoR S3 (#020, Figure 8-8)

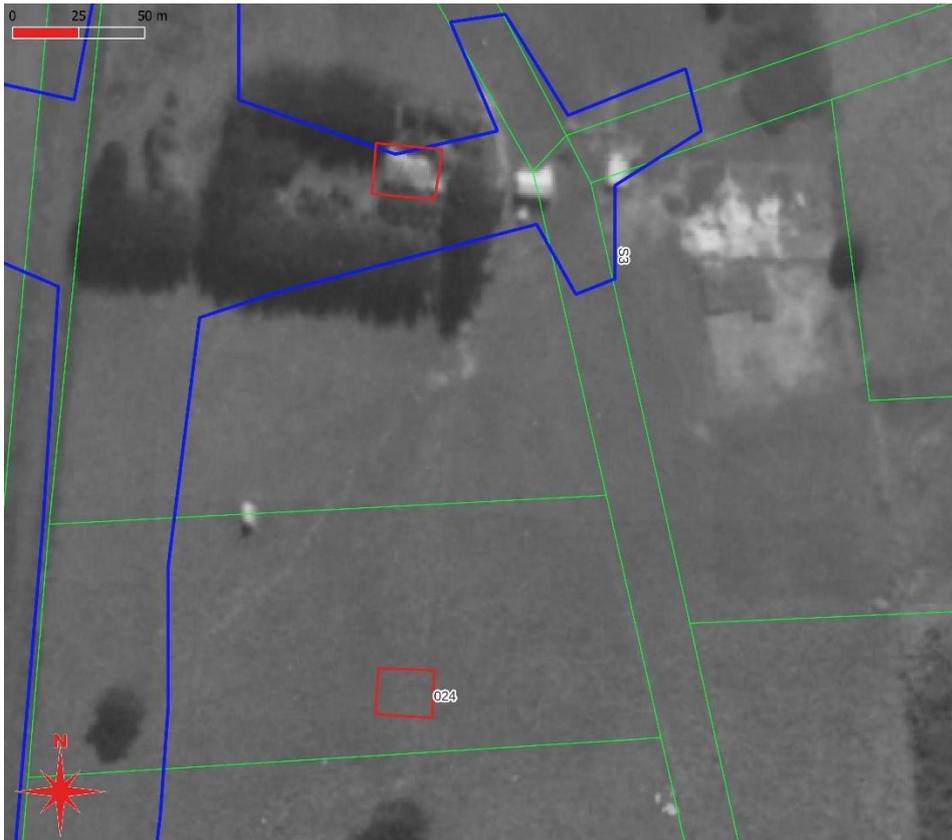


Figure 9-13: 023 and 024 on the 1940 aerial. S3 shown in blue.



Figure 9-14: View onto historic house (023) from the road. It looks like a pre 1900 villa but it will require detailed documentation of the house structure.

Another stream crossing (#035) is a high-risk area to encounter archaeological features that have not been recorded as archaeological sites, as it seems likely that the stream was still navigable by waka in pre and early Contact times before the stream silted up (Figure 9-3).



Figure 9-15: Approximate area of the Huapai Transit Station. It is next to a high risk area along the unnamed stream to encounter as yet unknown archaeological sites (038).

Regarding the development of the station, the area is considered high-risk to encounter archaeological features that have not been recorded as archaeological sites along the banks of an unnamed tributary of the Kumeū River (#038, Figure 48).



Figure 9-16: Stream banks (038) seems to be undisturbed and could still contain archaeological deposits.

Potential adverse effects are unrecorded archaeological features close to the stream. Any archaeological features are likely from seasonal camps to exploit local resources along the various

streams. They would not have been rare but are rarely investigated comprehensively and their information potential is high considering that only coastal pre-Contact sites along the creeks have been recorded or documented. As any sites would be sub-surface, they have no amenity values and their cultural association would be the known relationship of iwi and hapū to the area.



Figure 9-17: One of the options for the Kumeū Station. This option is closest to important heritage areas and structures. But no heritage site is within the extent of the station.

There are no heritage structures within the extent of the Kumeū Station. NoR KS is close to heritage spaces, structures and buildings. The details of the Huapai Tavern (#016) and the Railway carriages (#017) are discussed above.

The oldest part of the Huapai Tavern is outside the footprint of NoR S3 and KS. One possible option is to leave this part of the Tavern in its original location. It could form the nucleus of a heritage centre. This should be left in its original location. The modification of the currently scheduled heritage area around the Huapai Tavern would allow to create a heritage precinct for additional heritage buildings, for example, the Railway carriages and the Railway Goods Shed to be moved close to the Tavern. The carriages are moveable and the Railway Goods Shed has most likely been moved to its current location as it is not shown on the 1940s aerial. Both these heritage elements have already lost their original setting and moving them again will not impact onto their heritage values. One of the criteria for heritage values is their context and connection to place, which in this case has already been lost. The situation now where several heritage structures are dispersed over a large area is not ideal. Bringing them together is a better option than demolition in situ.

9.2.3 Heritage Environment Overview

Four heritage sites with varying historic values (Huapai Tavern extent of heritage place AUP:OP #00482, Railway Shed AUP;OP# 00483, railway carts CHI #18493 and a historic house CHI #16381) are within the boundaries of the proposed development. Two were likely moved to their current location and therefore these two places don't have any archaeological, sub-surface values. The historic house and the Huapai Tavern both have likely sub-surface archaeological deposits in situ.

One possible archaeological site is the location of the original Kumeū train station (#041).

The three stream crossings are high risk areas to encounter archaeological features that have not been recorded as archaeological sites, especially along the named rivers and streams, as these could have been navigable by waka.

Four heritage buildings are outside the boundary of the proposed development, but one is closely adjacent to it. The curtilage of this building could be impacted by the development (#020).

None of the railway stations impacts onto historic heritage, but there is a risk that some subsurface historic features – part of the curtilage of the Huapai Tavern, but outside the scheduled area – are present within the footprint of the planned Kumeū Station (NoR KS). NoR HS is close to a stream crossing, a high-risk area to encounter archaeological features that are not recorded as archaeological sites. There is an impact on the amenity values of the Huapai Tavern in its current location if it will be overlooked by high bridging structures.

GIS ID	AUP #	CHI #	NZAA #	Type	Description
016	00482	13234		Huapai Tavern	Heritage Extent of Place is impacted, including some of the buildings
017		18493		Railway carriages	Impacted, have been moved to this location
019	00483	13243		Railway Goods Shed	Impacted, has been moved to this location.
020		16385		Historic house	No impact – close vicinity
023		16381		Historic house	Impacted – requires demolition or must be moved
024		16379		Historic house	No impact
025		16380		Historic house	No impact
035				Stream crossing	High-risk area
038				Stream crossing	High-risk area

GIS ID	AUP #	CHI #	NZAA #	Type	Description
039				Stream crossing	High-risk area
041				Possible archaeological site	High-risk area

9.3 Assessment of Effects on Historic Heritage and Archaeology and Measures to Avoid, Remedy or Mitigate Actual or Potential Adverse Effects

There is the potential to uncover archaeological material close to the stream crossings. Any archaeological features are likely from seasonal camps to exploit local resources along the various streams. They would not have been rare but are rarely investigated comprehensively and their information potential is high considering that only coastal pre-Contact sites along the creeks have been recorded or documented. As any sites would be sub-surface they have no amenity values and their cultural association would be the known relationship of iwi and hapū to the area. No additional assessment criteria are applicable.

One scheduled heritage building, the railway Goods Shed, is partially impacted by NoR. It has been likely moved to its current location. Moving the Goods Shed into a safe area will mitigate the adverse effects better, as it is a better heritage outcome, compared to the mitigation of preservation through documentation only, if the building is demolished.

The extent of a scheduled heritage space around the Huapai Tavern, which goes back to the 1870s, is impacted by NoR S3 and it will require an authority with conditions of the authority to mitigate any adverse effects. It seems likely that conditions of an authority will include systematic archaeological excavation and analysis.

One possible pre 1900 heritage building (#023) is within S3 and its demolition or relocation will require an authority, its curtilage and sub floor assemblage are archaeological deposits will also require an authority for any earthworks on them. An archaeological investigation under an exploratory archaeological authority could establish a more accurate date for the building.

Three heritage buildings are within a 200 m buffer zone. One of them is very close to the NoR S3 and might be impacted by construction works. These sites often have a curtilage of historic structures, which might be impacted by the NoR area.

An archaeological authority would mitigate the loss of heritage structures through preservation by documentation and/or moving the heritage structure and the risk of encountering archaeological features that are not recorded as archaeological sites.

In conclusion there are some adverse effects on historic heritage by the NoR of S3. The risk of encountering unrecorded archaeological features and the loss of heritage structures can be mitigated by an archaeological authority applied for with Heritage NZ Pouhere Taonga under the Heritage NZ Pouhere Taonga Act. Relocation of any historic building is a preferable option to demolition as the negative impact on heritage values is much less significant.

9.3.1 Positive Effects

Potential positive effects are mentioned in Section 5. Moving the Railway Goods Shed to a better location so it can be appreciated by the public and serve a public purpose is one of the opportunities for positive effects.

9.3.2 Assessment of Construction Effects

There are no additional adverse effects during construction.

9.3.3 Recommended Measures to Avoid, Remedy or Mitigate Construction Effects

It is recommended to include all areas of earthworks or topsoil stripping during construction into the archaeological authority. This is to mitigate the risk of construction delays by the discovery of any archaeological features that have not been recorded as archaeological sites.

9.3.4 Assessment of Operational Effects

There are no additional adverse effects during operation.

9.3.5 Recommended Measures to Avoid, Remedy or Mitigate Operational Effects

There are no recommended measures to avoid operational effects as there are no adverse effects.

9.4 Conclusions

In conclusion there are negative effects and impacts to historic heritage resource and potential negative impacts to the archaeology through the proposed development of NoR S3, KS and HS. Impacts are on scheduled heritage sites and areas, as well as unscheduled heritage sites (recorded in the CHI). There are also several areas with a high risk to encounter yet unrecorded subsurface archaeological features. These negative effects can be mitigated by either recording heritage structures in detail before demolition or can be better mitigated by relocation of these structures, especially if the relocation serves to improve the public understanding and appreciation of these heritage structures. The loss of yet unrecorded archaeological sites/features can be mitigated by preservation through documentation. All mitigation processes will require conditions set through an archaeological authority issued by Heritage New Zealand Pouhere Taonga through the relevant Act.

There are small residual negative effects with the recommended mitigation in place as the loss of potential archaeological sites cannot be remediated, only mitigated through documentation and analysis.

Any processes regarding tikanga, especially around kōiwi, should be discussed with manawhenua before the start of the project.

10 NoR S4: Access Road Upgrade

10.1 Project Corridor Features

Access Road/Tawa Road is an existing arterial corridor that runs along the eastern RUB of Kumeū-Huapai. The proposed upgrade extends from the intersection of Access Road with SH16 (and entry to the Kumeū-Huapai township) in the east and continues into Tawa Road to its intersection with Puke Road in the west.

It is proposed to widen the existing Access Road/Tawa Road corridor from its current width of 20m to accommodate a 30m wide four-lane cross-section. The cross-section of the corridor transitions from the rural edge cross-section to an urban cross-section west of the Wookey Lane intersection. Along the western section of Access Road, which is a low-speed rural section, the corridor has a rural southern edge (swales, typically 9m wide top width) with walking and cycling facilities along its northern urban edge. Through the business and industrial area, a 30m urban corridor is provided, including walking and cycling infrastructure along both sides of this eastern section.

An overview of the proposed design is provided in Figure 10-1 below.



Figure 10-1: Overview of Access Road Upgrade

10.2 Existing and Likely Future Environment

10.2.1 Planning context

Access Road/Tawa Road is an existing arterial corridor that runs along the eastern RUB of Kumeū-Huapai.

- The northern side of Access Road is zoned under the AUP:OP as FUZ, with Business – Light Industry Zoning at the north-eastern section of Access Road.
- The southern side of Access Road is predominantly zoned under the AUP:OP as Rural – Countryside Living, with exception to the Kumeū Showgrounds which are zoned as Rural – Mixed Rural Zone are identified as a precinct (1517 Kumeū Showgrounds Precinct) in the AUP:OP.

Table 10-1 below provides a summary of the existing and likely future environment as it relates to Access Road.

Table 10-1: Access Road Upgrade Existing and Likely Future Environment

Environment today	Zoning	Likelihood of Change for the environment ¹⁵	Likely Future Environment ¹⁶
Business	Business (Light Industrial) Zone	Low	Business (Light Industrial)
Rural	Rural – Countryside Living Zone Rural – Mixed Rural Zone	Low	Rural
Undeveloped greenfield areas (Future Urban Zone)	Future Urban	High	Urban

¹⁵ Based on AUP:OP zoning/policy direction

¹⁶ Based on AUP:OP zoning/policy direction

10.2.2 Heritage Environment

This chapter discusses historic and archaeological heritage structures/features/deposits within the 200 m buffer of NoR S4.

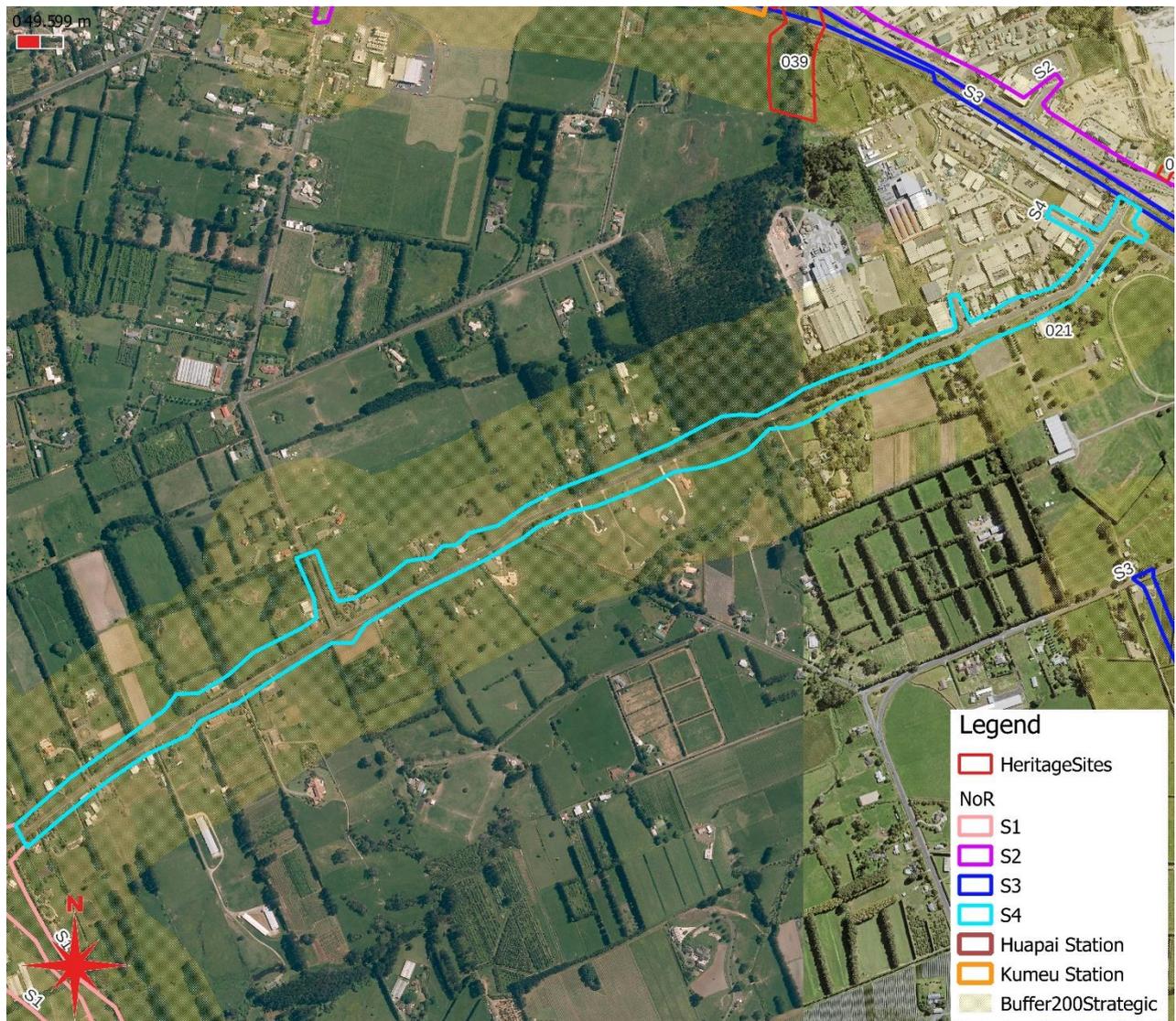


Figure 10-2: NoR S4 with 200 m buffer. One heritage site is within the buffer (021). It is the relocated Pomona Hall, restored and moved onto this location by the Council in 2010.

There is no archaeological or heritage site, place or building within the extent of NoR S4.

The only heritage building nearby has been moved in 2010 onto this location. The Pomona Hall (#021) is currently used as an antique shop. It is not impacted by the proposed NoR. A further heritage structure is recorded in the CHI (reference #16377, gates and shed) but could not be found on the ground or on recent aerials. It seems that it has been destroyed during recent building works on the property.



Figure 10-3: The Pomona Hall next to the Kumeū community Centre.

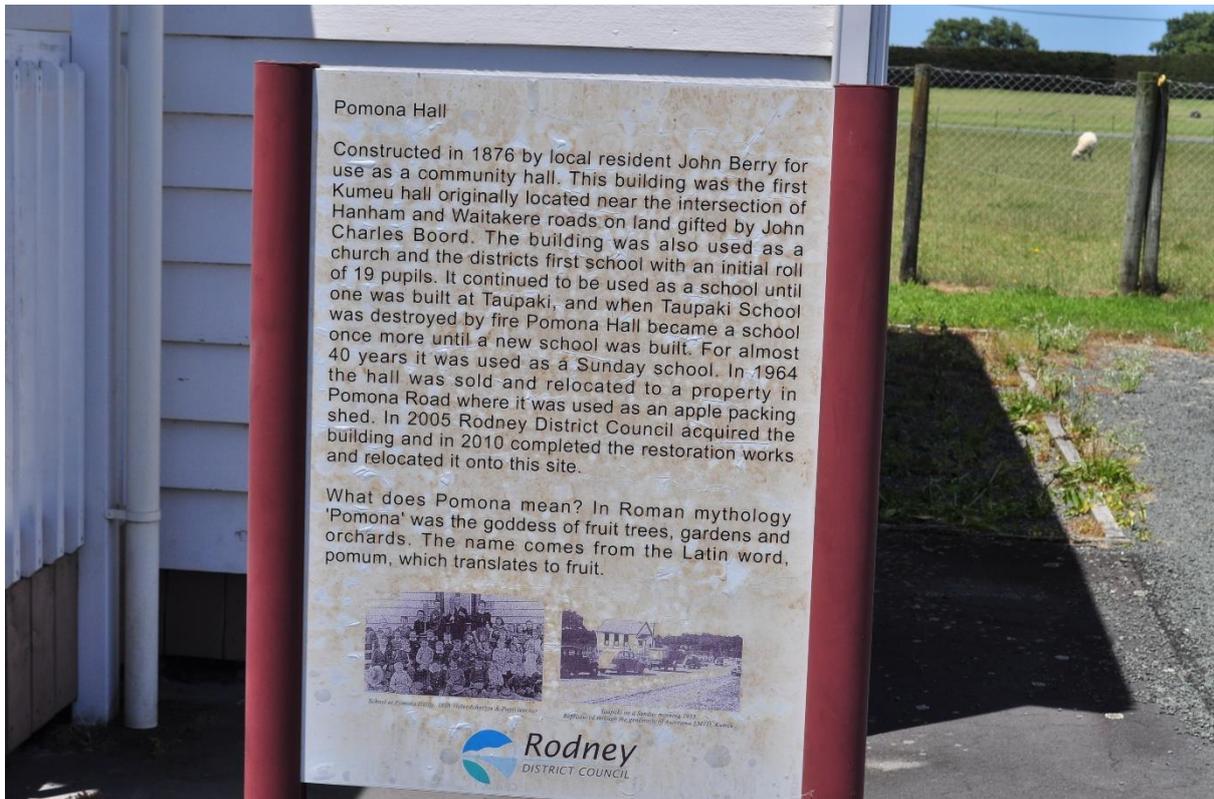


Figure 10-4: Information panel for the Pomona Hall.

10.3 Assessment of Effects on Historic Heritage and Archaeology and Measures to Avoid, Remedy or Mitigate Actual or Potential Adverse Effects

There are no adverse effects on Historic Heritage and Archaeology. The small residual risk to encounter archaeological features can be mitigated by an Accidental Discovery Protocol.

10.3.1 Positive Effects

Potential positive effects are mentioned in Section 5.

10.3.2 Assessment of Construction Effects

There are no additional adverse effects during construction.

10.3.3 Recommended Measures to Avoid, Remedy or Mitigate Construction Effects

It is recommended to include all areas of earthworks or topsoil stripping during construction into the accidental discovery protocol.

10.3.4 Assessment of Operational Effects

There are no additional adverse effects during operation.

10.3.5 Recommended Measures to Avoid, Remedy or Mitigate Operational Effects

There are no recommended measures to avoid operational effects as there are no adverse effects.

10.4 Conclusions

In conclusion there are no residual negative effects with the recommended mitigation in place.

Any processes regarding tikanga, especially around koiwi, should be discussed with manawhenua before the start of the project.

11 Conclusion

There are two recommendations that relate to several of the NoRs:

Regarding NoR S1, S2 and S3:

Precautionary Archaeology Authority

Any stream crossing or earthworks along the banks of a stream have a high risk to encounter as yet unknown archaeological sites. This risk increases where the streams can be navigable by waka in pre-Contact times before European style land use and drainage works reduced the water flow and increased the silt load of these streams. Any archaeological features are likely from seasonal camps to exploit local resources along the various streams. They would not have been rare but are rarely investigated comprehensively and their information potential is high considering that only coastal pre-Contact sites along the creeks have been recorded or documented. As any sites would be sub-surface, they have no amenity value, and their cultural association would be the known relationship of iwi and hapū to the area. No additional assessment criteria are applicable.

An archaeological authority would mitigate the risk of encountering yet unrecorded archaeological features and mitigate the loss of these potential archaeological sites through preservation by documentation.

In conclusion the risk of encountering unrecorded archaeological features can be mitigated by a precautionary archaeological authority applied for with Heritage NZ Pouhere Taonga under the Heritage NZ Pouhere Taonga Act.

Regarding NoR S2, S3 and KS:

Relocation of Heritage Buildings

The other recommendation that impacts several NoRs, - NoR S2, S3 and KS (possibly includes S1) - is a potentially positive effect. There is an opportunity to create a heritage precinct with the necessary re-design of the AUP scheduled places #00482 and #00483, the Huapai Tavern and the Railway Goods Shed, in close connection to the future Kumeū Rapid Transport Station. It seems that only the more modern part of the Huapai Tavern is impacted by NoR S3 (see discussion at NoR S3 chapter). We still require a detailed investigation of the building and its curtilage to have certainty. But if this assumption is correct, there is a chance to re design the current building complex and keeping its main heritage elements in place. There is an opportunity to create a heritage precinct, with the necessary move of the Railway Carriages and the Railway Goods Shed (AUP #00483). During construction of S1 and the southern part of S3 two more heritage buildings (022 and 023) are impacted. Rather than a demolition of these building, there is the opportunity to move them into this newly designed heritage precinct connected to the Kumeū Station. With several structures/buildings in place this would allow many opportunities to enhance the local sense of community and sense of place. Alternatively, these buildings could be integrated into the functions and commercial life of the train station. The final mitigation measures will be confirmed as part of the Historic Heritage Management Plan which is a condition of the proposed designation.

In addition to these heritage buildings there could be some space to develop an adjacent but separate area for manawhenua to tell their own stories. For a starter the name of the stream next to the Kumeū Station, Turakiawatea, is not visible today (Figure 8-9).

The following section addresses each NoR separately.

NoR S1:

One possible archaeological site (#027) and two heritage sites with varying historic values are within the boundaries of the proposed development. One of the historic sites is likely pre 1900 and its curtilage has likely archaeological values (#022). The other is post 1940 and seems to be part of the long development around the Sinton farmstead and local shop (#028).

A shell midden site is close by (#001) and indicates that the stream crossings (Totara Creek, Waiarohia / Ngongepetara Stream and Ahukuramu Stream) are high risk areas for the discovery of sub-surface, unrecorded archaeological features.

In conclusion there are some adverse effects on historic heritage by the NoR of S1. The risk of encountering unrecorded archaeological features and the loss of a possible heritage structure can be mitigated by an archaeological authority applied for with Heritage NZ Pouhere Taonga under the Heritage NZ Pouhere Taonga Act. Relocation of the historic house is a preferable option to a demolition.

NoR S2:

Two heritage sites with varying historic values are just touched by the boundaries of the proposed development (017 Railway carriages and 019 Railway Shed). Both were moved to their current location and therefore both places don't have any archaeological, sub-surface values, as they are missing archaeological features related to historic buildings like rubbish dumps, service trenches etc, which is called curtilage of the historic building.

The stream crossings (Kumeū river, Turakiwareta stream and an unnamed stream) are high risk areas for the discovery of sub-surface, unrecorded archaeological features, especially along the named rivers and streams, as both could have been navigable by waka.

Three heritage places and buildings are outside the boundary of the proposed development, but closely adjacent to it. They might be impacted by the construction zone. The scheduled heritage area around the Huapai Tavern (AUP;OP reference #00482) is clipped by the NoR S2 but no structure is impacted by the development. There is a small risk to encounter some of the historic curtilage of the Tavern.

An archaeological authority would mitigate the loss of heritage structures through preservation by documentation and/or moving the heritage structure and the risk of encountering archaeological features that have not been recorded as archaeological sites.

In conclusion there are some adverse effects on historic heritage by the NoR of S2. The risk of encountering unrecorded archaeological features and the loss of heritage structures can be mitigated by the conditions of an archaeological authority applied for with Heritage NZ Pouhere Taonga under the Heritage NZ Pouhere Taonga Act.

NoR S3:

Four heritage sites with varying historic values are within the boundaries of the proposed development (#015, #017, #019 and #023). Two were likely moved to their current location and therefore these two places don't have any archaeological, sub-surface values (#017 Railway Carriages and #019 Railway Goods Shed). The historic house (#023) and the Huapai Tavern (#015) both have likely sub-surface archaeological deposits around the structures and in the vicinity in situ.

One possible archaeological site is the location of the original Kumeū train station (#041).

The four stream crossings are high risk areas for the discovery of sub-surface, archaeological features, especially along the named rivers and streams, as these could have been navigable by waka.

Four heritage buildings are outside the boundary of the proposed development, but one is closely adjacent to it. The curtilage of this building could be impacted by the development (020).

One scheduled heritage building, a railways good shed, is impacted by NoR S3. It has been likely moved to its current location. Mitigation, if practicable, would involve relocating the Good Shed to an alternative location in proximity to the NAL to maintain the connection with the railway.

The extent of a scheduled heritage space around the Huapai Tavern, which goes back to the 1870s, is impacted by NoR S3 and it will require the conditions of an archaeological authority to mitigate any adverse effects.

One possible pre 1900 heritage building (#023) is within S3 and its demolition or move will require the conditions of an authority for mitigation. Its curtilage and sub floor assemblage are archaeological deposits and will also require the conditions of an authority for any earthworks on them to mitigate the impact.

Three heritage buildings are within a 200 m buffer zone. One of them is very close to the NoR and might be impacted by construction works (#020).

An archaeological authority would mitigate the loss of heritage structures through conditioning the preservation by documentation and/or moving the heritage structure, and the risk of encountering unrecorded archaeological features.

In conclusion there are some adverse effects on historic heritage by the NoR of S3. The risk of encountering unrecorded archaeological features and the loss of heritage structures can be mitigated by the conditions of an archaeological authority applied for with Heritage NZ Pouhere Taonga under the Heritage NZ Pouhere Taonga Act. Relocation of any historic building is a preferable option to demolition as the impact onto the heritage values is lesser.

NoR HS

The stream next to the station area is a high risk area (#038) for the discovery of sub-surface, unrecorded archaeological features.

In conclusion the risk of encountering unrecorded archaeological features can be mitigated by a precautionary archaeological authority applied for with Heritage NZ Pouhere Taonga under the Heritage NZ Pouhere Taonga Act.

NoR KS

There are no adverse effects on heritage or archaeological values, any small risk to encounter archaeological features or deposits from the curtilage of the Huapai Tavern can be mitigated through a precautionary archaeological authority. There is an impact on the amenity value of the Huapai Tavern in its current location by overlooking it with bridging structures.

In conclusion the risk of encountering unrecorded archaeological features can be mitigated by a precautionary archaeological authority applied for with Heritage NZ Pouhere Taonga under the Heritage NZ Pouhere Taonga Act.

NoR S4

There are no adverse effects on heritage or archaeological values, any small risk to encounter archaeological features or deposits can be mitigated through an Accidental Discovery Protocol.

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