13 Archaeology and built heritage

Overview

Construction works associated with the proposed Expressway will damage or destroy 20 recorded archaeological sites located within the Project designation, comprising mainly middens, pits and terraces. In addition, construction is likely to result in the modification, damage or destruction of unknown or yet to be identified archaeological sites in discrete areas along the proposed Expressway alignment.

To address the effects on these sites arising from the Project, an integrated and comprehensive set of mitigation measures is proposed, which include archaeological investigations (which comprise systematic site investigations, construction monitoring and an Accidental Discovery Protocol), a detailed geophysical survey of the Takamore urupā and the detailed recording of any archaeological discoveries. Information derived from the archaeological investigations will contribute to an increased understanding of the history of occupation and settlement on the Kāpiti Coast.

With regard to built heritage, adverse effects on listed structures (either scheduled in the Kāpiti Coast District Plan or registered by the New Zealand Historic Places Trust) or on unlisted structures with known historic heritage values resulting from either the construction or operation of the proposed Expressway will be negligible to minor. Further, any effects that might arise during construction will be addressed through the Construction Environmental Management Plan.

13.1 Introduction

Detailed investigations have been undertaken to profile the existing environment in relation to archaeology and built heritage, and to assess the Project's potential impacts on these sites and structures. The reports that contribute to this overall assessment are:

- the Archaeological Scoping Report (Technical Report 9); and
- the Assessment of Built Heritage Effects (Technical Report 10).

These technical reports are included in Volume 3 of this AEE.

Technical Report 9 presents an archaeological assessment of the proposed Expressway and includes sites of Māori origin. This report does not constitute an assessment of Māori cultural values, as there are sites of significance to Māori for their spiritual and traditional values that have no physical remains and therefore cannot be assessed in terms of archaeological value. Information relating to sites of cultural value has been obtained from the Takamore Trust and Te Rūnanga o Āti Awa ki Whakarongotai and is contained in the associated Cultural Impact Reports (Technical Reports 11 and 12 respectively) and discussed in Chapter 14, Volume 2 of this AEE.

Existing environment - archaeology and built heritage 13.2

Within the broad physical setting of the Project, 286 recorded archaeological sites and 10 listed built heritage structures have been identified. 109 However, of this total only 20 recorded archaeological sites are located within the Project designation and no listed built heritage.

Māori occupation and settlement¹¹⁰ 13.2.1

As discussed in more detail in Chapter 14 of this AEE, various tribal groups, such as Waitaha and Muaupoko, moved into and out of the Kāpiti Coast region up until about 1822, after which point the region was occupied and settled by Te Ati Awa and Ngāti Toa. The period of pre-European occupation and settlement along the coast is predominantly characterised by the following archaeological site types:

- Middens¹¹¹ the area was recognised by early Māori as an environment rich in kaimoana. This is evidenced by the high occurrence of recorded midden and ovens on the sand dunes along the coast, a fact that appears to reflect the major contribution that kaimoana made to the subsistence economy that existed prior to European settlement; and
- Burials¹¹² a number of burial sites have been recorded in the area. These are largely located within sand dunes and range from sites where individuals are interred through to more extensive urupā.

The area comprises a number of sites where some excavation or modification of the ground surface has already occurred.113 These include pits, terraces and platforms largely thought to be used by Māori for habitation or crop storage purposes.

The area north of the Waikanae River, to the west of Greenaway and Te Moana Roads, is an area of historical and cultural significance and contains several sites of archaeological and cultural significance, including:114

¹⁰⁹ These archaeological sites represent the total number recorded on the New Zealand Archaeological Association's Archaeological Site Recording Scheme database (ArchSite) between Paekākāriki and Peka Peka Road, while the heritage structures represent entries included on the Kāpiti Coast District Plan Heritage Register and the New Zealand Historic Places Trust Register of Historic Places that are situated within one kilometre either side of the centre line of the proposed Expressway alignment.

¹¹⁰ Further information relating to Māori occupation and settlement is also included in Chapter 14 and Technical Reports 11 and 12.

¹¹¹ Middens account for 65% of the total number of recorded archaeological sites within KCDC's boundaries.

¹¹² Burial sites account for 5% of the total number of recorded archaeological sites within KCDC's boundaries.

¹¹³ Earthworks account for 18% of the total number of recorded archaeological sites within KCDC's boundaries.

- Takamore urupā the urupā is a burial ground located on a dune ridge top and is part of the larger Takamore wāhi tapu area, an area of high cultural significance to iwi;
- Maketu tree this is a large macrocarpa growing on the grave site of the tupuna Maketu; the headstone (erected towards the end of the 19th century) is within the bolus of the tree;
- Tuku Rakau village the village was established by Wiremu Parata in 1849 and occupied until 1886 when it was relocated to Waikanae; and
- Takamore wāhi tapu area an area of high cultural significance to iwi, which includes the Takamore urupā.

The Takamore Wāhi Tapu Area is registered by the New Zealand Historic Places Trust (NZHPT) and included in its Register of Historic Places, Historic Areas, Wāhi Tapu and Wāhi Tapu Areas. 115 The Maketu Tree, urupā and wāhi tapu are also included in the Kāpiti Coast District Plan Heritage Register. 116 The impact of the Project on the Takamore Wāhi Tapu Area and associated mitigation is discussed in Chapter 14 of this AEE.

13.2.2 European settlement

Prior to the construction of the Wellington-Manawatu Railway in 1886, the Kāpiti Coast was relatively isolated and, as a consequence, European settlement was somewhat limited. Settlement commenced with mission stations such as those that established in Waikanae and Ōtaki in the 1840s, followed by the growth of flax production and sheep farming and the emergence of Ōtaki and Paekākāriki as rural service centres in the 1850s.

The construction of the railway facilitated better access to the Kāpiti Coast, thereby enabling more intensive European settlement to occur at a time when Māori land in the region was being divided into individual titles. A significant proportion of the listed built heritage within the wider Project setting comprises structures and objects from the post-railway construction period onwards.

Of this built heritage, two structures are located in the near vicinity of the proposed Expressway alignment:

the Greenaway Homestead, 14 Kauri Road, Waikanae - a house constructed in 1911 that was designed by notable architect Cyril Mountfort for Leonard Greenaway, an early settler in the area; and

¹¹⁴ Additionally the sites and places within the precinct are known to be of high cultural and spiritual value to the iwi as discussed in Chapter 14 and Technical Reports 11 and 12.

¹¹⁵ In January 2012 the NZHPT confirmed an extension of the physical boundaries of the registered Takamore wāhi tapu area in response to an application for review lodged by the Takamore Trust.

¹¹⁶ This register forms Part I of the District Plan, with entries included on the register protected by associated objectives, policies, rules and standards contained in Parts C and D.

the former St. Luke's Church at El Rancho, Kauri Road, Waikanae - a timber church constructed in 1896 in the Carpenter Gothic style that was used by the Anglican congregation of Apiti (Manawatu) as a place of worship until relocated to the El Rancho Christian Holiday Camp in 1990.

Both structures are listed on the KCDC Heritage Register, although neither is included on the NZHPT Register of Historic Buildings, Historic Areas, Wāhi Tapu and Wāhi Tapu Areas.

In addition, a further contemporary structure, the Stringer 'Wind Rain' House, 117 was identified by the NZHPT as being of potential historic heritage value. It is located in Raumati and is sited in close proximity to the proposed Expressway alignment.

Although the structure is not currently listed in either the Kāpiti Coast District Plan Heritage Register or the NZHPT Register of Historic Buildings, Historic Areas, Wāhi Tapu and Wāhi Tapu Areas, it has been assessed by an architectural conservator and is considered to have local to regional significance (in terms of architectural and technological values) as the second of two vernacular 'Wind Rain' houses on the Kāpiti Coast designed by well-regarded Auckland architect Nigel Cook.

13.3 Assessment of effects on archaeology and built heritage

Adverse effects on archaeology will occur as a consequence of the construction and operation of the proposed Expressway. The actual or potential effects of these activities on built heritage, particularly the Greenaway Homestead and the former St. Luke's Church, has been assessed as negligible to minor with the exception of the Stringer 'Wind Rain' House, which is located within close proximity of the proposed Expressway.

Actual or potential adverse effects on archaeology and built heritage arising from the Project that have been identified are:

- the destruction, modification or damage of archaeological sites arising from construction of the proposed Expressway; and
- noise, visual, vibration and amenity effects on built heritage arising from the construction and operation of the proposed Expressway.

^{117 &#}x27;Wind/Rain Houses' are buildings designed around a glazed, environmentally controlled central core. The core, expressed as a courtyard, is both the living and circulation space for the house and air-flow is controlled by a computer through externally located sensors that monitor the weather, temperature and humidity. The glazed cladding provides protection from the wind and rain, hence the name.

Archaeological site destruction or damage 13.3.1

Construction works will result in the 20 recorded archaeological sites located within the Project designation being damaged or destroyed. The sites affected are as follows:

Site No.	Location	Description
R26/369	Mazengarb Road to Waikanae River	Possible pit and terraces
R26/370	Mazengarb Road to Waikanae River	Midden and two possible terraces
R26/409	Mazengarb Road to Waikanae River	Midden/oven
R26/455	Mazengarb Road to Waikanae River	Possible terrace
R26/368	Waikanae River to Te Moana Road	Midden
R26/281	Waikanae River to Te Moana Road	Te Rakau village site
R26/38	Te Moana Road to Ngarara Road	Midden
R26/39	Te Moana Road to Ngarara Road	Midden
R26/363	Te Moana Road to Ngarara Road	Midden
R26/365	Te Moana Road to Ngarara Road	Group of 6 terraces, possible pit and dense midden
R26/429	Te Moana Road to Ngarara Road	Platform
R26/431	Te Moana Road to Ngarara Road	Midden
R26/430	Te Moana Road to Ngarara Road	Pit and midden
R26/433	Te Moana Road to Ngarara Road	Platform, pits and terraces
R26/70	Ngarara Road to Peka Peka Road	Midden
R26/366	Ngarara Road to Peka Peka Road	Midden and possible terrace
R26/373	Ngarara Road to Peka Peka Road	Platform and midden
R26/377	Ngarara Road to Peka Peka Road	Terrace and depression
R26/447	Ngarara Road to Peka Peka Road	Terrace
R26/448	Ngarara Road to Peka Peka Road	Eel channel

Significant efforts were made to avoid known and recorded archaeological sites during the process of identifying and designing the proposed Expressway alignment. However, absolute avoidance was not practicable given the requirements of the Project and the archaeological profile of the Kāpiti Coast, one which is characterised by a concentration of archaeological sites throughout the area's extensive dune system.

In addition, the predictive model developed as part of the archaeological assessment of the Project indicates that construction is also likely to result in the damage, modification or destruction of unknown or yet to be identified archaeological sites in certain areas along the proposed Expressway alignment (for example, the area between Te Moana Road and Ngarara Road).

Again, total avoidance is not practicable as:

- the likelihood that unknown and unrecorded archaeological sites are present in the dunes within these areas is high; and
- the precise location of these sites is not known as they are not visible on the ground surface.

13.3.2 Effects on built heritage

The construction and operation of the proposed Expressway will generate noise, visual and vibration effects that may affect the amenity values of the surroundings of the three structures of recognised historic heritage values: the Greenaway Homestead, the former St Lukes Church and the unlisted Stringer 'Wind Rain' House.

In respect of the first two structures, factors such as topography, the extent of existing on and off-site vegetation and proposed landscape planting and noise bunding will collectively contribute towards mitigating the effects of the proposed Expressway on the amenity values of these buildings and their surrounds. Further, any noise or vibration effects that might arise during construction will be avoided or mitigated through the CEMP (Appendix F). While the presence of the proposed Expressway will be noticeable from these sites, the effects would have negligible to minor effects on the historic heritage values of the buildings.

In regard to the Stringer Wind Rain house, the building is located approximately 5 metres from the edge of the designation and 25 metres from the edge of the proposed Expressway. Consequently, the ambience and general amenity associated with the house and its setting will be compromised due to traffic noise and the loss of a large part of the garden for proposed Expressway purposes.

13.4 Measures to avoid, remedy or mitigate actual or potential adverse effects on archaeology and built heritage

To address the effects on archaeology and built heritage identified in Sections 13.3.1 and 13.3.2 of this AEE, a range of measures are proposed. In addition, archaeological authorities under Part 1 of the Historic Places Act will be sought for the Project prior to construction and an archaeological management plan is likely to be required as an associated condition of these authorities.

13.4.1 Archaeological site destruction or damage

As the adverse effects of the Project on actual and potential archaeological sites within the proposed designation will be significant, an integrated and comprehensive set of mitigation measures is proposed as follows: 118

Archaeological investigations

Archaeological investigations are likely to be a condition of any authorities granted for the Project under Part 1 of the Historic Places Act, and will help to inform associated archaeological mitigation measures implemented under the RMA. Two types of archaeological investigation are proposed to be undertaken during the course of the Project:

¹¹⁸ Further complementary measures are also outlined in Chapter 14.

- Systematic investigations of discrete sections of the proposed Expressway that have a high archaeological probability. The investigative work would be undertaken by a team of archaeologists and take place prior to construction. It would comprise an extensive and detailed analysis of archaeological features present within each of the relevant sections of the proposed Expressway. The information derived will facilitate an increased understanding of the physical, spatial, temporal, social and functional relationships between all the sites within an area. The associated value of this type of investigation is that it enables data to be gathered from a large number of archaeological sites, and for the values of these sites to be analysed on a collective as opposed to sporadic site-by-site basis; and
- Monitoring during the course of constructing sections of the proposed Expressway that have a low to moderate archaeological probability, and where archaeological site density is not anticipated to be high. Such monitoring would enable any archaeological sites encountered to be recorded and sampled during construction although not to the same level of detail as the systematic investigations referred to above.

Additionally, work in areas of very low archaeological probability will be undertaken under the direction of an Accidental Discovery Protocol for the Project developed in consultation with the NZHPT, Te Āti Awa ki Whakarongotai and the Takamore Trust.

Roadside interpretation

A series of fixed interpretation panels are proposed to be developed in conjunction with iwi that reflect the story of the history of human occupation of the Kāpiti Coast, as seen through the archaeological resource and cultural tradition which are linked visually to the landscape (for example, the Takamore cultural precinct, sand dunes and wetlands). The intention is that the panels will be placed at significant or strategic locations along the proposed cycleway/walkway to enhance the experience of users.

However, where individual archaeological site investigations yield significant information specific to that place it may also be appropriate to include additional panels at or near to these locations.

Travelling stories

In addition to the fixed interpretive panels a set of complementary portable panels relating to the history of occupation on the Kāpiti Coast are also proposed. As these panels are intended to be moveable they have the potential to be displayed in a variety of community locations, such as marae, schools, or the local library or civic centre.

Geophysical Survey and Recording at Takamore Urupā

Subject to the agreement of the Takamore Trust, a detailed geophysical survey could be undertaken at the Takamore urupā. Such a survey would facilitate the following:

The identification and physical marking of currently unmarked burials of tūpuna. These could be marked on the ground surface with pegs or similar to indicate their location and the extent of unused ground that could be made available for further burials; and

the precise cadastral boundary of the urupā to be marked out on the ground with tape or similar instead of relying on the current fence line as a proxy.

13.4.2 Noise, visual, vibration and amenity effects

The effects from noise, dust and vibration associated with the construction of the proposed Expressway on the amenity values of the surroundings of the two listed buildings will be managed through the implementation of the CEMP. The adverse noise, visual, vibration and amenity effects of the operation of the Project on the surroundings of the two listed buildings will be mitigated through the acoustic and landscape treatment measures proposed along that section of the proposed Expressway.

In regard to the effects on the amenity values on the surroundings of the Stringer 'Wind Rain' House, there are a number of options available:

- Demolition:
- A change in its use to an activity that is not as sensitive to noise; or
- Its relocation, preferably to another location on the Kāpiti Coast.

The NZTA is proposing to work with the NZHPT to identify the best outcome, assessing the costs of the options with the relative values of the building.