AN ASSESSMENT OF THE POTENTIAL IMPACT THAT ANY EXPANSION AND DEVELOPMENT OF THE RUAKURA ESTATE MIGHT HAVE ON CULTURAL VALUES AND MANAWHENUA

A REPORT
Prepared for
TAINUI GROUP HOLDINGS LIMITED & CHEDWORTH PARK LTD
By
NaMTOK CONSULTANCY LTD.

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Whakatauaki

“ I whakawhiti atu ai te koopu mania o Kirikiriroa. Me ona mara kai te ngawha whakatupu ake te whenua momona”

King Tawhiao.

“ I cross the smooth belly of Kirikiriroa, its gardens bursting of the fullness of good things”

King Tawhiao used these words in his wiata tangi as a tribute to the famed Ngati Wairere gardens and cultivations on the slopes of Te Koopu Mania O Kirikiriroa (Garden Place). In this way he acknowledged the gardening expertise of Ngati Wairere ancestors who had developed lush cultivations in Kirikiriroa. The produce from the gardens has provided food for trade and to feed the local people over many centuries.

Many of the Ngati Wairere people who developed and maintained the gardens live in Kirikiriroa Pa which was located between what is now London and Bryce Streets. Ngati Wairere abandoned the pa in 1864 just prior to the arrival of British troops.

This whakatauki is now used as a metaphor for growth and development.
1 INTRODUCTION

Tainui Group Holdings (TGH) and Chedworth Park Limited (CPL) own land at Ruakura, Hamilton – Ag Research currently occupy the TGH land. TGH and CPL (referred to below as “the Parties”) have determined that it is now appropriate and timely to develop their respective land at Ruakura. Their proposed plans envisage a comprehensive, staged development of the land.

In order to undertake the proposed works, the Parties require resource consent from Hamilton City Council and Waikato Regional Council. Under sections 5, 6 (e) 7, & 8 of the Resource Management Act 1991, developers undertaking such works are required to consult with local Tangata Whenua. Hence, the Parties have requested NaMTOK Consultancy Ltd to provide an assessment of:

a the Maori cultural values associated with the land to be developed
b any impact that the development might have on these cultural values
c possible mitigations to alleviate any such impacts

This report presents that assessment. It identifies:

- the history of the land to be developed
- concerns and issues that manawhenua might hold with regard to the development of the land
- mitigations which will appropriately address these concerns framed in terms of the tikanga and kawa of the hapu upon whose traditional lands the development is to be undertaken.

In this context it should be noted that whilst the development of the Ruakura site is planned to occur in several stages, this report deals with all of the land which is proposed for development during the whole of the development. In this way it covers not only the land immediately planned for the first stage of development, but all the remainder of the existing site that will be developed in future stages.
2 SOURCES OF INFORMATION.

The information presented below is drawn from a number of sources:

a Interviews undertaken over the past fifteen years with Kaumatua and Kuia of the seven hapu upon whose traditional lands Hamilton City and its hinterland have been developed. Of particular importance is the information from elders of Ngati Wairere, the hapu which is manawhenua for the land proposed for development. These Kaumatua and Kuia have recounted their personal knowledge of the history of land supported by the knowledge that was handed down to them by their ancestors.

b Historic information passed to Mr Wiremu Puke (the author of this report) by Ngati Wairere Kaumatua and Kuia who have now passed away. These include Mrs Rangi Skinner, Mr Roro Puke, Mr Mana Martin, Mrs Cath Sunnex and Mrs Hinemutu Manihera.

c Information passed to Mr Wiremu Puke by the late Mr Hare Puke which had been reported to him by local farmers who have lived in the Puketaha/Ruakura area and who have reported finds of artefacts on their farms.

d Unique, private and confidential ancient documents and diaries written by previous chiefs of Ngati Wairere, now held by their direct descendants. These include histories written by Te Puke Waharoa, who died in 1895 and his son Waharoa Te Puke. It was recorded in a Waikato Times obituary dated 13 January 1957 that Waharoa Te Puke was “a well known figure amongst the leading Waikato Maori who was one of the last remaining chiefs of the Waikato tribes, died aged 88 years”.

e Information provided by Emeritus Professor John Mc Craw, previously Professor of Earth Sciences at the University of Waikato, and Professor Bruce Clarkson about the current soil types and the past ecology of the proposed development area.

3 THE STUDY AREA.

The area for development (study area) is part of the land upon which the Ruakura Ag Research facilities are currently sited, and includes land adjacent to:

- Part of Tramway Road heading north, Gordonton Road
- Left into Greenhill Road heading east to the designated Waikato Expressway Corridor.
- Along parts of the “Ring Road” to Ruakura Road.
- Off Ruakura Road to state Highway 26 to the south with the new Waikato Expressway to the east.

As part of the current investigation a site visit was undertaken on 21 September 2011. Representatives of TGH and Ngati Wairere attended the site visit.
4 MAORI HISTORY OF THE AREA.

The Ruakura area has an extensive and rich pre-European Maori history.

The Ruakura land port site and surrounding hinterland has always been a centre of occupation for Ngati Wairere. It has been fought over and occupied by a number of different hapu claiming descent from Wairere over past centuries. Consequently, it is claimed as part of the traditional lands of several hapu of the Waikato Tainui Iwi, including Ngati Wairere and their related and associated sub tribes such as Ngati Parekirangi, Ngati Waikai, Ngati Waihongi, Ngati Pakari, Ngati Iranui and Ngati Ngamurikaitaua.

Ruakura is an ancient name, but it is not known when the name was first used. Whilst the area was undoubtedly occupied by the first Polynesian Maori inhabitants of Aotearoa (the Nga Iwi people) there are no records of any archaeological assessments that might establish the specific activities of these people in this area. The earliest evidence of habitation of the area was given when an ancient cultivation ground was uncovered in 1999 on the corner of Hukanui Road and Wairere Drive, during stage II of the construction of Wairere Drive, Chartwell. Archaeological excavation of this site revealed charcoal deposits which were carbon dates to between 1550 and 1625. (Higham & Gumley 1999)

In pre-European times the landscape and vegetation of this area was very different from that of today. However, most of this former environment has been altered or destroyed by draining of the wetland areas and intensive farming activities of European farmers since the 1860s. This has certainly been the case in the study area as since the establishment of the Ruakura Agricultural Research Station in the early 1920s, the land has been used for intensive farming research.

In pre-European times, topographically the area was generally flat to gently rolling country intersected with shallow gully systems. There were areas of peat wetlands and swamp, interspersed with mixed forests of native trees such as Kahikatea, Tawa, Hinau, Totara and Miro which grew on the dry areas. Manuka, Toetoe, flax, Raupo, Wiwi (native sledge), ferns, Maire and Manawa grew in the swamps themselves, with stands of Nikau around the margins. Kanuka and ferns grew in the gully system.

Pigeons, Komako (Bell bird), Kaka (native parrot), and Kiwi were abundant in the Kahikatea forests, with Pukeko and abundant duck life tuna (eels) in the swamps. Parohe (native trout) and Kokopu (the large silver bellied eel) swam in the streams in the gullies.

There was no extensive settlement of the wetland and swamp areas, but they provided abundant and essential food sources for the Maori people who lived in the surrounding areas. Hence, a network of pathways or walking tracks was developed along the ridgelines of the area to give easy access to these wetland food resources. In other areas trees were felled and dry peat areas were burnt off and the resources gathered from the clearing process were used for a variety of purposes.

For example, the felled trees were split and trimmed, using stone adzes, to be used as the main structural components in the construction of domestic houses and ceremonial buildings such as Pataka (storage houses) and Whata (Ceremonial platform structures). Kauri and Totara were used to produce the traditional carved elements of buildings and other timbers for construction of defence structures, such as the palisades around fortified
Pa. Kauri and Totara trees over 30 meters in height were recorded on the Ruakura ridgelines at the time of the first settlement of the inland Waikato basin by early Polynesian Maori (Prof. Bruce Clarkson pers.com 2011).

Setting fire to the forests cleared large areas for a variety of purposes. The burn-off allowed the construction and maintenance of the many walking tracks that traversed this whole area. These tracks were the routes for people to travel and communicate between the various centres of population, food gathering and cultivation throughout the area and by war parties invading the region. One such track used by Ngati Wairere crossed the ridgelines of Ruakura in a north-south direction. It linked the hill ridges in the north at Puketaha with the headwaters of the Komakorau creek at Puketaha. It then ran along the levees and banks of the Komakorau stream to the settlements such as Karamu Pa, Purematoto and Te Tupe O Hanui located at Hukanui (Te Puke 1922 Puke whanau records).

Many of the present day major roads within the city and its environs are constructed on top of these ancient walking tracks. For example, portions of State highway 26 are constructed over a walking track which ran through this area. It ran from Karipukau (now Newstead), crossing the Mang-o-rua gully, through the Tamahere plains to the large Ngati Haua Pa named Maniapoto Pa. The site of Maniapoto Pa overlooks what is now the underpass of Tauwhare Road and State Highway 1.

Clearing large areas by burning off forests and vegetation was also the first step in ancient Maori cultivation of crops. Once an area was burned off the first crops to be established were fern root plantations - ferns establish themselves naturally in newly burned soils. The young fern roots were harvested, pounded with wooden fern root beaters to soften them and chewed raw or cooked as cakes or patties. Fern roots were an important and common source of food for pre-European Maori. As in many other areas, the ridgelines in the Ruakura area were burned off allowing Rauwhe (bracken and fern root) to establish along the walking tracks. This thereby provided an easy and accessible source of food for people travelling along the tracks. However, because of the relatively poor soil types within Ruakura area these fern-root may not have been the most preferred variety and hence may not have tasted too good. (Prof John Mc Craw & Prof Bruce Clarkson pers.com 2011).

Great care was taken over which areas of forest were burned-off. For example, the Kahikatea bush stands that permeated this area were not destroyed as they were highly prized for the abundant bird life and berries that they produced. These were therefore important food sources for the Maori people of the area. The were so highly valued that particular stands were the property of individual chiefs and their tribal groupings.

To protect these food resources, prior to the burn-off, earth dams were constructed to contain the water discharging from the wetlands. In this way, should the burn-off get out of control, the earth dams would be breached and the water released to protect any valuable Kahikatea bush stands that might be in danger.

Often the burn offs would set areas of dry peat alight and these fires would be left to smoulder for years thereby providing a continual source of fire for every day domestic use. In addition, the smoke from the smouldering peat denoted that a particular hapu owned the land by right of occupation - this embodies the Maori concept of Ahi Ka or home fire.
Although the overall topography of this area was relatively flat, the wetlands, hill ridges, streams and shallow gullies had tribal significance as boundary markers or food sources. Several of these natural features were given names to commemorate a chief, tribal deity or an historic event, such as a battle, that occurred in the area.

There were several significant Pa and cultivation grounds that belonged to Ngati Wairere and their sub-tribes located in present day suburbs of the Claudelands, Puketaha and Hamilton East area. These localities were the traditional lands of Ngati Parekirangi, Ngati Haanui, Ngati Iranui and Ngati Waikai. They have been occupied, abandoned and re-occupied by those various hapu over centuries. For example, in the 1820's Ngati Parekirangi abandoned the area prior to the arrival of Nga Puhi warriors from the north, armed with muskets. Ngati Parekirangi re-occupied the land once these Northern invaders had been driven out of the area by warriors under the command of Te Wherowhero. They occupied a pa named Waipahihi located overlooking the Putikitiki gully (Hamilton East) during the 1850s and were responsible for planting groves of peach trees along the Te Ara Rewarewa track, which gave rise to the now named Peach Grove Road.

During the late 1820's to 1860's, Ngati Parekirangi cultivated and harvested the flax from this area to trade with Europeans for agricultural implements and muskets using Waipahihi Pa as one of their principal settlements. Two tons of processed flax bought one musket. Europeans processed the flax and manufactured it into sails and ropes for rigging sailing ships. Ngati Parekirangi along with other related hapu continued to harvest flax and dig gum from this area up to the 1890's. These hapu also provided work gangs to assist European farmers in farm drainage schemes, clearing scrub, hauling and splitting swamp Kauri logs from drained peat swamps for saw milling.

5 THE HAPU OF THE AREA.

Whilst the whole of the Waikato region is the traditional lands of Waikato Tainui, each of the individual Hapu who make up Waikato Tainui have their own traditional land areas within the region. Ruakura and the surrounding district were developed upon the traditional lands of several of those Hapu. The following paragraphs give a précis of some of these Hapu who occupied these lands up to the time of Raupatu (1863-1865) but who maintained manawhenua status to this present time.

In most cases the Hapu (tribe and sub-tribes) are named after a renowned ancestor who started the genealogical line of that Hapu. All of these ancestors ultimately came from one of the original travellers on the Tainui canoe or others through intermarriage. The names of some of the Hapu quoted in this report are not generally known to the present generation of Waikato Tainui. However, there are many descendants who can still trace their whakapapa to the lands of Ruakura, and whose ancestors suffered the direct effects of the Waikato Land Wars and the land confiscations between 1863-1865.

NGATI WAIRERE

Wairere was the son of Tamainupo, Kokako's son and Tukotuku, the daughter of Mahanga. Wairere had many wives and noted descendants.
The birth of Wairere had a considerable significance for the Waikato region, a significance that remains even today. This was recalled in the 1950's, when Waharoa Te Puke, of Ngati Wairere passed the following history to the present day leaders of Ngati Wairere.

In ancient times, the Waikato River was called Te Awanui O Taikehu, the great river of Taikehu, after a famous navigator on board the Tainui canoe. In the 1500s, two Tainui chiefs Mahanga and Kokako were continually at war with each other. Part of the reason for this feud was that Mahanga blamed Kokako for the death, or murder, of his father and Mahanga wanted revenge.

Kokako had a son Tamainupo, but it appears that Kokako did not take any note of this son. Indeed Tamainupo did not discover until later in life that Kokako was his real father as he had never met him.

Hence, unknown to Kokako, Tamainupo married Tukotuku, the daughter of his most deadly foe Mahanga. Whilst Mahanga knew about the marriage, he did not know that Tamainupo was the son of Kokako.

In one particular battle Tamainupo fought against Kokako he killed many of Kokako's warriors. Kokako escaped from the battle but left many of his personal items behind. By now Tamainupo had become aware that Kokako was his father, but Kokako still did not know Tamainupo was his son. Together they hatched a plan to make Mahanga believe that his enemy Kokako had been killed and to thereby stop the warring between the two chiefs.

To achieve this, an arm and a mangled tattooed head were cut off a warrior who had similar tattoo markings to Kokako, but who had died in the battle. These body parts, along with the personal items that belonged to Kokako, were brought to Mahanga at Purakau Pa, near Whatawhata. This convinced Mahanga that Kokako was finally dead and stopped the war.

Some time later Tamainupo and Tukotuku had a son. Under ancient Maori custom the son had to be "formally named" and it was the responsibility of the grandfather to perform the sacred ritual for naming the new born child. Hence, Tamainupo and Tukotuku travelled by raft with the child to Kokako's home on Taipouri, an island in the river just north of present day Huntly. At this meeting Kokako for the first time became aware that Tamainupo was his son. It is said that at this meeting Kokako wept over his grandson Wairere and on becoming aware of his new daughter-in-law Tukotuku, was the daughter of Mahanga.

To perform the naming ceremony, before sun rise, Kokako, with Tamainupo holding the baby in his arms went into the river up to waist level. Kokako uttered the tapu chants of the sacred Tohi (baptism), invoking the various deities and ancestors that linked the genealogies to the child. At the same time he dipped sprigs of Karamu into the river and sprinkled the water over the baby's head.

Kokako named the child Wairere (flowing water) in reference to the river water flowing around him, thereby bonding this special child to the river. The ritual was concluded
with Kokako letting the sprigs of Karamu go in the river current and "plucking" the water with his hand.

In commemoration of this profound event, the name of the river was changed from Te Awanui O Taikehu to Waikato - Wai meaning water and Kato meaning to pluck - in reference to Kokako plucking the water at the conclusion of the baptism. The birth of Wairere, who was a grandson to both Kokako and Mahanga, brought a complete end to the feuding between Kokako and Mahanga and a new name to the river.

Wairere had several wives through whom his descendents link with several major Iwi throughout New Zealand. As identified later in this report, a possible mitigation for the development would be for these key ancestors to be commemorated by naming the main streets and roads within the Land Port development after them.

NGATI PAREKIRANGI. Parekirangi was a direct female descendent of Wairere. Ngati Parekirangi is a small hapu whose traditional lands are now part of Hamilton East, Ruakura and Claudelands. They were the principal hapu who were manawhenua for these lands. They hunted and fished the swamplands of Ruakura. Parekirangi lived at a number of Pa in the area, but her principal places of residence were Waipahihi, Te Parapara and Manga-o-nua. In the 1850’s Waipahihi Pa had become the principal Pa of Ngati Parekirangi, with planted cultivations along Te Ara Rewarewa (Peachgrove road).

Te Pirihi Tomonui was one of Parekirangi’s more recent descendants of note. He was a significant member of King Potatau Te Wherowhero’s Runanga (parliament) and fought against the British troops at the battle of Rangiriri in 1863. Te Pirihi Tomonui died at Tauhei in 1891. He was responsible for the dismantling of the large meeting house, named Wairere, which stood at Te Rapa Pa, now Cobham Drive, near the Waikato Hospital. Te Pirihi Tomonui was deeply aggrieved at having Ngati Parekirangi lands confiscated by the Crown after the land wars.

NGATI KOURA.

Koura was the daughter of Paoa through his first wife Tauhakari. Koura was named after an incident involving Paoa’s older brother Mahuta. A ridgeline in present day Rototuna/ Flagstaff bears her name is called Te Turanga O Koura.

Mahuta was on his way to visit his brother Paoa at Kaitotehe Pa, which was located opposite Taupiri Mountain on the western side of the Waikato River. To reach the Pa Mahuta had to cross a stream named Mangatoketoke, which currently crosses the Gordonton road near Taupiri.

As it was late in the day, instead of crossing the stream, Mahuta camped on the bank and fished for eel. However, instead of catching eel he caught fresh water crayfish, known to Maori as Koura. The next day he crossed the stream, still carrying some of the Koura that he had caught and was greeted by his brother Paoa at Kaitotehe Pa.
Maori custom requires that travellers should be fed and entertained when they arrived at a Pa. However, because there was a shortage of food in Kaitotehe Pa, the inhabitants of the Pa could not feed Mahuta and so he ate the Koura that he had caught in the stream. On several occasions after this he recounted to a number of people how he had to eat the Koura he had caught rather than being fed by his brother and people of the Pa. Paoa became ashamed and embarrassed by this tale of his inability to feed his older brother. Because of his shame Paoa left Kaitotehe Pa, leaving his wife Tauhakari, who was pregnant. Because this incident caused the loss of her husband, when her daughter was born, Tauhakari named her Koura as a reminder of the crayfish Mahuta caught in the Mangatoketoke stream.

One of Koura's grandsons was the famous warrior Hotumauea. He and Hanui, another renowned warrior, drove the pre-Tainui Nga Iwi people from these lands, thereby claiming them for Ngati Koura. From the time of Hotumauea, his descendants built or occupied a number of Pa and cultivation grounds such as Te Rapa, Pukete, Te Owhango and Te Hunga O Toroa.

When Paoa left Kaitotehe Pa, abandoning his first family, he moved to the Hauraki district. There he took a second wife named Tukutuku and with her had two sons Tipa and Horowhenua.

In his old age, Paoa returned to the Waikato and searched for his first family, eventually finding them at Te Hoe O Tainui. However, the second family resented Paoa's actions and as a consequence a battle ensued in which Toapoto and Toawhana, Koura's two older brothers, were killed by Tipa and Horowhenua outside the Pa where they lived.

Tipa and Horowhenua then challenged any one inside the Pa, who was bold enough, to come out and fight them. Koura, armed with a Taiaha named Hua Katoa, came out to answer the challenge. Because it was a woman who answered their challenge Tipa and Horowhenua realised that they had killed all of the senior male line of Koura's family, but did not realise that Koura was indeed their half sister. As there was no more male line and they would not fight a woman, Tipa and Horowhenua declared peace between the two families.

Koura buried the sacred Taiaha, Hua Katoa, on the peak of Mount Hangawera. At the same time she declared that all the lands from Mt Hangawera to the West should be invaded and taken over from the Nga Iwi who lived there. This was achieved by her grandson Hotumauea, the renowned warlord, who thereby established the traditional lands of Ngati Koura.

Koura had several husbands, one of whom was Waenganui, a famous war Chief whose descendants, Ngati Waenganui, live at Parawera.

Ngati Koura became numerous and prosperous and constructed a number of Pa, not only along the Waikato river, within what is now the Hamilton City boundaries, but as far afield as Te Awamutu. The Pa at Te Awamutu, called Otawhao, had a fully carved meeting house which was sketched by George Angus in 1844. When Koura died her bones were deposited in a burial cave named Katokato near Taupiri. The location of this cave is still known to her descendants.
Ngati Koura has many significant people who were part of, or associated with, the hapu. A trader name Merant was one of the first Europeans to settle in the Hamilton area. He married a Ngati Koura woman, Te Rangikauw, and they lived on the Waipa River, near the Te Ohote Stream, which discharges into the Waipa River.

Merant was one of the settlers who introduced European gardening practices to the region. He also often acted as an interpreter during the 1830’s

Te Ao Katoa, the last Tohunga (priest) of the Io cult (the most sacred traditional Maori religion) was also of Ngati Koura. He was described as having a white beard and incomplete facial moko. He regularly accompanied King Tawhiao and assisted with the exhumations of the ancestors of Ngati Koura from the Urupa in the city and their re-interment at Tauhei and Hukanui. He is particularly remembered as accompanying King Tawhiao during his visit to Hamilton in 1881 to mourn over the sacred Urupa that had been built over by the settlers during the construction of Hamilton City. Te Ao Katoa died in 1889 at Aotearoa Marae, near Te Awamutu and was buried there.

NGATI HAANUI

Haanui was the third child of Maramatutahi and Paretauri. Paretauri was the eldest sister of Mahuta and Paoa.

Haanui became one of Ngati Wairere's greatest hand-to-hand combat warriors. It was Hanui and Hotumauea who conquered the Nga Iwi people of this region and claimed their lands for Ngati Wairere. On his death Haanui was buried at Karamu Pa in Gordonton. In 1892, his bones, and those of Hotumauea, were exhumed under the supervision of King Tawhiao and Te Puke Waharoa, to protect them from possible degradation from settler farmers and various colonial land acquisition policies.

They were reburied at Taupiri Mountain. The location of these burial sites is still known to a few of their living descendants.

Ngati Haanui constructed a number of Pa throughout their lands, but the remnants of only one, Miropiko Pa on River Road, are still visible today. A member of the Ngati Haanui hapu named Hohaia Ngahiwi and his son Pene Ngahiwi had lands near the Claudelands Railway station in 1886 had provided work gangs to the Europeans who settled Claudelands, Hamilton East and Ruakura.

NGATI NGAMURIKAITAUA. This hapu derives its name from an event which occurred sometime during the 1600’s. Following an unidentified battle, a number of dead warrior’s bodies were placed in a canoe moored on the Waikato river to await their burial. However the canoe broke from its mooring and floated down stream, where it was seized by another hapu grouping as it floated by.

They cooked the decomposing bodies in a specially constructed Umu (oven) and ate them. From then onwards this group were known as Ngamurikaitua, the name describing the eating these decomposing bodies (H Apiti 1996)

Ngati Ngamurikaitua warriors took part in the famous Hingakaka battle, fought near Ohaupo close to the shores of Lake Ngaroto. This was one of the largest pre-
European battles. Detailed descriptions of this battle are given in Dr. Pei Te Hurinui Jones book “Potatau” and Prof. Bruce Bigg’s book “Nga Iwi O Tainui”.

Apart from being fierce warriors, Ngati Ngamurikaitua were renowned for making a particular type of rain cape called Pureki, woven from very rough flax fibres. The hapu was also renowned for the special rituals which they performed prior to going into battle.

Ngati Ngamurikaitua built and occupied several Pa and cultivated extensive cultivation grounds in what is now the Hamilton City area.

**NGATI IRANUI.** Iranui was the second son of Wairere from his first wife Hinemoa. He was famous as a cultivator of Kumara on his land at Taupiri. Because of this fame, Ngati Mahuta attacked and drove him away so that they could occupy and cultivate his fertile land. He later occupied Mangaharakeke Pa, located behind the Anchor Dairy factory site at Te Rapa and "farmed" a number of cultivations within what are now the Hamilton City boundaries.

Iranui was not only a renowned cultivator but was also a warrior of note. He lead a war party to attack a famous warrior – Rangipotiki – at Aotea Harbour on the west coast. Iranui killed Rangipotiki and hung his body up on a Karaka tree for a time, before cutting it up and distributing parts to various people in the war party.

In retaliation, Rangipotiki's hapu from Aotea Harbour raised a war party which came to Mangaharakeke Pa where Iranui lived. At that time they did not know the specific identity of the people who had killed Rangipotiki. As part of the traditional greeting ceremony at the Pa, Iranui served them cooked human flesh, including parts of Rangipotiki. The leaders of the war party recognised some of Rangipotiki’s tattoos on the flesh which they had been given to eat and hence realised that Iranui, their host, had killed Rangipotiki.

Iranui managed to escape from the Pa, pursued by the war party from Aotea Harbour, and swam across the Waikato river. As he travelled along one of the walking tracks to Te Papanui, which is now the Five Cross-roads area, he was caught by the Aotea war party and killed. In retaliation for having killed Rangipotiki, they degraded his body and mana by hanging him upside down from the post of a Pataka (carved food house).

**NGATI WAIKAI:** Waikai was the youngest daughter of Maramatutahi, but at present little is now known about her. Her brother was Hanui, the famous warrior described above. From the vast lands which he conquered, Hanui set aside pockets of land for Waikai to settle. This included the present day Puketaha and Chartwell areas.

**NGATI WAIHONGIA**

Waihongia or Waihongi was another sister to Hanui who lived at lake Tunawhakapeke, at Rototuna and had established manawhenua rights to the gathering of tuna from the lake.
NGATI PARETAUA

Paretaua was one of the wives of Hanui. Little is known about her except that a hapu bearing her name lived at Opoia Pa, near the Claudelands Bridge. It is believed that she was buried at Karamu Pa at Hukanui alongside Hanui, her husband. Her remains were uplifted in 1892.

6 SITES OF SPECIFIC SIGNIFICANCE IN THE AREA.

a ONUKUTARA.

Just south of Greenhill road there is evidence (Aerial Photograph NZMS Series 3, Feb 1954) of borrow pits along the bank of the gully (known as Onukutara), which runs beneath Gordonton and Crosby Roads. Onukutara is the correct and now re-instated name for the Kirikiriroa gully. A well-preserved Patu Rauwhe (fern root beater) was found in October 2002, during the development of the Magnolia subdivision on Crosby Road, not far from the location of these borrow pits. This artefact was found by a contractor working on the site and passed to the developer who passed it to Mr Hare Puke. This taonga now resides with Nga Mana Toopu O Kirikiriroa Trust. The Onukutara Gully system provided a watershed discharge for the wetlands that covered much of Ruakura.

b RUAKURA.

Ruakura is named after a pit in the area that was used to burn iron oxide. Traditionally, large pieces of iron oxide found in swamps were heated, by burning in a fire, to produce a powdery red pigment. This was mixed with water to produce the sacred red Kokowai (ochre) which was used for painting tapu ceremonial objects, koiwi and carvings. Burning the red oxide stained the pit red thereby giving rise to the name Rua (hole or pit) kura (red).

c MOHOKOPIKI

There is a hill in the area around Greenhill Road which was known to pre-European Maori as Mohokopiki because of a mythical taniwha bird of that name, which was believed to have lived in this location. The hill and the surrounding hinterlands were therefore referred to as Mohokopiki.

d TE PANGONUI.

This was the name of the once vast swampland that occupied the flats near what are now Silverdale and Ruakura Roads. The name is derived from the black peaty soils and springs of the area that that yielded puna paru. Flax textiles were emersed in the springs thereby dying them brown and black.
e KARIPUKAHU.

Karipukahu was the name of a large expansive kahikatea/tawa forest stand that covered much of present day Newstead and the surrounding margins of the Pangonui swamp. There was also a burial ground at Karipukahu which was exhumed and relocated by Waharoa Te Puke in 1922.

f TE ARA Rewarewa.

This was the old name for a significant walking track that extended from Rototuna northwards to Te Parapara Pa located where Hamilton Gardens now stands. Peachgrove Road and Hukanui Road are constructed over the top of this old track. There were many cultivation grounds and friable soils along its route which were cultivated for over 300 years.

g TE KAREAREA.

Te Karearea was another important landmark in pre-European times renowned as a source for gathering berries, native pigeons and flaxes. Te Karearea once extended across what is now the Ruakura Research Centre and southwards, along the swampy plains below Waikato University. Small caches of ancient Maori artefacts (stone adzes, and grinding stone for sharpening stone adzes) were found in 1978 in one of the paddocks of the Ruakura Research Centre towards the Tramway area. These were found, and retained, by Mr Eric Warner, a former employee of the Ruakura Research Centre.

h WAIPAHIHI PA.

This Pa was located overlooking the Putikitiki Gully (Hamilton East Gully) with many cultivations that extended on to and next to the Te Ara Rewarewa track now known as Peachgrove Road.

i OPOIA PA.

This Pa was occupied by Ngati Parekirangi, Ngati Haanui and Ngati Paretaua. Maramatutahi, the eldest son of Wairere and Tukapua lived at this Pa. Poukawa was one of the principal chiefs who occupied Opoia Pa during the early 1800s and was engaged with battles with Ngati Wakatere of Ngati Raukawa at Hurimoana. The site of Opoia Pa is now occupied by Sonning Carpark and the Claudelands Railway Bridge.

j TE PAPANUI.

Te Papanui was another famed large kahikatea/tawa forest that once covered what is now the modern suburb of Claudelands and Fairfield spreading across what is now Tramway Road and onto the Ruakura campus. Te Papanui like many other famed forest stands was hunted for native pigeons by the hapu who had manawhenua over these resources. The only remnant of Te Papanui is a 5 hectare Park reserve known
as Jubilee Park located on the corner of Boundary road and Brooklyn Roads near 5 cross roads and the small stands of Kahikatea found on the school grounds of Deanwell School.

7 WAAHI TAPU AND OTHER STRUCTURES.

Given the centuries of occupation of this area by pre-European Maori, there will inevitably be remnants or artefacts of that occupation buried in the land. In particular there were a variety of temporary wooden structures associated with:

- religious ceremonies
- hunting birds
- gathering other food resources
- food preparation or
- camp sites

along the hill ridges within the Ruakura area. Remnants of some of these features, along with discarded artefacts and possibly Koiwi may still be buried to be uncovered during earthworks for the development of the Land Port and supporting infrastructures.

a STRUCTURES

The structures that were recorded as being used in this area by local hapu and hence their remnants that might be unearthed include:

i) WHATA – (Drying Platform). These were essentially raised flat platforms. Kumara and Gourds were laid out on them to dry in the sun, thereby preserving them for future use. Whata were still in use in Aotea and Hukanui up to the mid 1930’s.

ii) WHARE PORA – (Manufacturing houses). Whare Pora were houses specifically constructed for the preparation of flax (muka) and the manufacture of textiles and garments from flax fibres. In the Whare Pora women, and sometimes men, scraped the flesh from the leaves to extract the strong fibres. These were then woven in the Whare Pora into Korowai (cloaks), other garments, kete (baskets), lashings, cords and ropes. Manufacturing flax into lashings, cords and particularly ropes for sailing ships provided Maori with an important economic base once Europeans arrived in the area.

iii) KAUTA – (Shed for storing firewood and hangi stones). Kauta were open sided, wood framed sheds with thatched Raupo rooves. They were used for storing firewood and hangi stones to keep, dry. Often, in bad weather, the hangi would be constructed and the food cooked under the Kauta. Stones were also transported to a temporary site as so bird hunters could use them for rendering down of native pigeons in kumete (bowls) then pouring their fat deposits into taha huahua (gourds).
iv) **UMU.** This an old term used to describe ovens used for the cooking of various food items for domestic purposes.

b **WAAHI TAPU.**

There were various types of waahi tapu (listed below) that were common in this area, in pre-European times.

i) **TUAHU** – (Ceremonial Shrine). Ngati Wairere deities were believed to reside in Tuahu. They had a variety of shapes and construction depending on the origin of the deity that they commemorated. One form of Tuahu derived from the Ngati Wairere practice of giving a chief who was slain in battle the status of a deity.

These chiefly deities were commemorated by construction of a Tuahu which was a fenced off area in which the preserved tattooed head of the chiefs were displayed, mounted on sticks. Other Tuahu were simply earthen mounds with talisman stones placed on their surface. Tuahu were usually fenced around their perimeter to keep dogs out. The fences also protected the Tuahu from damage by dogs, or later by pigs, once they were introduced by European settlers.

ii) **WHANGAI HAU** – (Ceremonial Ovens). Pre-European Maori constructed Umu (in ground ovens) for cooking food. The Whangai Hau was a special ceremonial oven, used only for cooking the bodies of slain enemy warriors prior to consuming their flesh.

iii) **MAURI**- (Stone objects) which were sometimes planted under the roots of certain berry fruiting trees for sacred rituals associated with bird hunting.

iv) **TAUMATA ATUA**- (A carved figure) which houses a sacred spirit, which protects the area.

v) **AHI KOMAU**- sacred fire that was lighted as part of the most sacred rituals and left to burn and smoulder slowly in a specially constructed manner under the ground once the fire was established.

vi) **RAKAU TAPU** - These were selected tapu trees that were used as repositories for koiwi and taonga. Often hollow Rata and Pukatea were used for these purposes. Sometimes koiwi were stored in closely woven kete and placed on specially constructed platforms or wrapped in prized korowai, whaariki, totara bark with braided cordages of muka or specially carved burial chests.
8 POSSIBLE SITES WHERE TAONGA MAY BE UNEARTHED.

There is a rich history of significant pre-European Maori activity over a considerable period of time on the lands of Ruakura and other nearby localities. Consequently there is high likelihood that taonga and other objects of significance may be unearthed during the proposed development.

For example, in times of invasion, it was common practice to hide Taonga, particularly wooden carvings, in wet lands or water logged peat areas or puna, as the water content protected and preserved the carvings. As a result of this practice, wooden and textile taonga have been discovered in the Hamilton City area and its outlying districts. One of most significant finds occurred in 1978 with the discovery and recovery of a fully carved late seventeenth century paepae pataka (threshold beam) belonging to Ngati Wairere. This is now displayed in the Waikato Museum of Art and History.

Locations where such Taonga may be unearthed include:

a Ridge lines.

These area may yield Taonga associate with camp sites: charcoal from old fires, shattered umu stones, small steep pits used for trapping the kiore (rat), charcoal enriched soils from past burn offs, fresh water mussel shells and associated middens used to scrape flaxes, obsidian flakes, stone tool implements such as toki onewa (stone adzes) and introduced European items such as clay pipes, steel ship nails, glass shards and ceramics, broken gum digging spears and spades.

b Puna

Hidden or covered Puna (water springs) may still exist at the base of the ridges and may contain taonga or koiwi that were buried in or near them.

c Peat lands and margins.

Ancient (now drained) peat lands may yield Taonga such as: wooden stakes, lashing vines and posts associated with eel weirs, traditional woven hinaki (eel pots) pouraka (traps) kupenga kokopu baskets and other types of nets used for fishing eels and kookopu. Larger items may include wooden carvings from buildings, wakatiwai and other wetland type canoes.

d Former kahikatea forested areas.

These may contain charred or buried bones of many wetland and forest birds of many species both surviving and extinct including kuri (native dog). These may again reveal camp sites associated with preparing native pigeons and other birds for potting, small infilled holes that were used as traps for snaring the native kiore (rat) Tao, (bird spears), taratara (bird spear points) made of human bone, pounamu or hard wood Mamaku.
Past burnings of the peat and ridgelines may reveal preserved pollen in water logged silts and peat that may provide an indication of the first activities associated with ancient Maori habitation. These deposits may be unearthed through core samples taken as part of any archaeological or geotechnical survey.

9 MITIGATIONS - COMMEMORATIONS AND PROTOCOLS.

This land in the study area has been modified over the past 170 years by farming, development of the Ruakura Research facility and construction of Hamilton City. Hence any surface physical expression of the pre-European Maori occupation of this area was destroyed decades ago. However, subsurface remnants of the history of Maori occupation and the Mauri (life force) of the land survived this destruction.

Tangata Whenua recognise that the physical items that stood at this site can never be brought back. Consequently, when considering the effects that developments such as the current proposal have on the land, their approach has been to require formal, tangible recognition and commemoration of their historic association with the land, rather than attempting to stop the development. That approach has been followed in this section on mitigation of the effects of the development on the land.

Given the significance of this area, particularly to Ngati Wairere, to gain their support for this development, it is appropriate to commemorate the history and their ancestors who are buried in the land, in the following ways.

a HAPU EMPLOYMENT OPPORTUNITIES

Local hapu should be included in all considerations for employment opportunities as part of the development of Ruakura.

b COMMEMORATIONS AND ANCIENT CULTURAL CONSIDERATIONS

Any commemoration must take cognisance of the following cultural considerations:

i) Historical cultural considerations:

- Recognition of the importance of the Onukutara gully system as a pre-European Maori flax and food resource locality. To implement this any run-off water from the Ruakura site, either during construction work or after completion of the re-development, should be managed to ensure that no contaminants or sediment enter the gully or associated streams.
With (i) above in mind, where possible, drains on site should be contoured so that flow travels into natural streams and the drains should be planted appropriately with locally sourced flaxes and other wetland plantings. Traps should be installed in the drains and streams to ensure koi carp from establishing and to protect/reinstate traditional migration routes of tuna (eels) and parohe (native trout). Water quality should be regularly monitored and any revival of the wetland ecology should be recorded and reported every 5 to 10 years. All care must be taken to prevent contaminants from being discharged into and through the peat lands.

If any puna are identified during the development one should be set aside to be developed as a puna paru (source of traditional black dyes) which can be used by local weavers to colour their textiles.

Another area should be set aside for establishment of Pa Harakeke (flax plantations) containing high quality weaving flaxes.

Both areas identified in (iii) and (iv) above should be marked with carved Pou Rahui.

**Commemorative screen plantings.**

Flax and native trees should be incorporated into all planting schedules for the development to commemorate the pre-European vegetation of the area. Wherever possible, existing native trees should be retained. As part of any landscaping brief to ensure that Dense planting of native plant species should be undertaken at strategic positions along the margins of the Land Port to screen stacked storage shipping containers and other unsightly commercial operations.

**Art works, buildings and themes.**

During the design phase of the project, there should be consultation with, and involvement of, appropriately qualified Maori organisations and individuals to ensure appropriate Maori themes are incorporated into any proposed buildings, bridges, road side retaining walls within the development area. Given the close association of Ngati Wairere with this area these themes should be based on correct Ngati Wairere kawa and Tikanga and be planned and installed with a high level of quality control, appropriate placement and context.
iv) Entrances to the development.

It is important that people entering the developed area are reminded that they are entering the traditional lands of Ngati Wairere. To achieve this high quality art works that reflect the unique culture and heritage of both Ngati Wairere and Waikato Tainui should be developed and erected at the main entrances into the development.

These should be sited at the three proposed interchanges as follows:

- A full diamond interchange at Greenhill Road,
- A half diamond interchange with a north bound and south bound off ramp at State Highway 26
- A half diamond interchange at Cherry Lane.

Appropriate entrance artworks which commemorates the traditions of Waikato-Tainui as an Iwi who travelled and traded far and wide, would include the following themes and elements:

- A carved wooden Tuere or Tauihu (prow carving) of a wakataua and a Taurapa (stern carving) carved in Waikato style to depict the nature of travel, the journey and reaching journey’s end and rest at Ruakura.
- A wakatiwai and a wakataua, both river craft that were used by the ancestors. These could be made from non perishable materials.
- A carved wooden Pou erected in the open space reserve near the interchange of the Waikato Expressway and entrance into the Land Port. The central figure would depict the great ancestor Wairere holding a canoe paddle. Supporting figures would be other key Waikato ancestors that are related through whakapapa to this location.
- In addition, a series of artworks developed using lights to depict the stars used for navigation would be erected next to these art works to further welcome visitors to the Land port or the City of Hamilton. These artworks would be placed upon raised mounds at the Waikato Expressway entrance into Ruakura.

v) Naming of interchanges.

To commemorate the traditional names pre-European names which had significance to the Maori people who inhabited this area:

- the half diamond interchange at State Highway 26 should be named the Mokokopiki Interchange after the ancient name of the Greenhill area. The artwork to be erected at this interchange should incorporate the diamond taniko pattern.
The proposed half diamond interchange should be named the Ruakura Interchange as already proposed.

A half diamond interchange at Cherry lane should be named the Mangaonua interchange, thereby commemorating the presence and significance of the name of the main gully system where State Highway 1 crosses.

vi) Street names and roads - nga ingoa huarahi mo nga tupuna o nehe ra.

In Hamilton City there is a lack of the use of correct Maori place names that relate directly to the history of the land upon which the City has been built. The use of correct Maori names for streets or subdivisions has no effect on land values or property sales.

Hence, given the association of a Maori organisation such as TGH with this development, it is entirely appropriate that the names within the development commemorate the names pre-European Maori used for the landmarks of the area.

Presented below therefore are examples of names that relate directly to Ngati Wairere’s history and the Kingitanga with a particular emphasis upon those tupuna who lost their lands as a result of Raupatu. Many of these people were involved with the Kingitanga from its first inception during the 1850’s. The loss of their lands was devastating to these chiefs and its effects are still being felt today by their descendents.

- **Te Ara Rewarewa Drive** - Te Ara Rewarewa is the name of one of the main walking tracks that was used to support travel and trade in the area. It is therefore appropriate for the road into the Land Port. The road could be lined with closely planted groups of Rewarewa trees thereby visually linking it to the ancient walking track.

- **Hoera Taonui Road** – Hoera Taonui was the principal chief of Ngati Wairere who occupied Kirikiri Pa during the 1850’s and a strong advocate and supporter of the Kingitanga. He develop larger cultivation grounds where he grew European introduced crops to supply produce to the Auckland Markets. Hoera Taonui is believed to have been killed at Rangiriri in 1863.

- **Porokoru Street** - Porokoru (Ngati Koura) lived at Te Rapa Pa. He was a representative of Potatau Te Wherowhero and along with Patara Te Tuhi attended the Pukawa hui called by Te Heuheu to discuss the topic of Potatau Te Wherowhero being selected as the first Maori king.

- **Parekirangi Drive** – This name is appropriate for the proposed main road link. Its use would honour the ancestors Ngati Parekirangi who suffered at the hands of the British and the land confiscations.
- **Te Pirihi Tomonui Road** - Te Pirihi Tomonui was a Ngati Parekirangi chief who supported the Kingitanga at Rangiriri Pa during the battle against the British in 1863. His grandson Te Kakenga Tomonui of Tauhei was a foundation board member of the Tainui Maori Trust Board in 1946. Te Pirihi Tomonui established Tauhei as an Ngati Wairere settlement after the land wars.

- **Hakopa Te Waharoa Drive** - Hakopa Te Waharoa was a Ngati Wairere chief who established Hukanui Pa and resettled Ngati Wairere at Hukanui in 1864. He was the first sole land owner on the 146 Komakorau allotments which were originally surveyed as a Crown Reserve in October 1875 (Puke whanau records). Hakopa Te Waharoa was also a Ngati Haumi chief and cultivated the lands of Te Nihinihi now known as Hamilton East.

- **Te Puke Waharoa Road** - Known also as Paora Te Waharoa, in 1892, with King Tawhiao he supervised the exhumation of koiwi from urupa at Kirikiriroa and Hukanui. Of particular note was the exhumation of the bones of Haanui and Hotumauea from Karamu Pa. His marriage to Kameta Te Tuhi, granddaughter of Patara Te Tuhi of Ngati Mahuta, cemented his close links with the Kingitanga during this era. He received the large entourage that followed the funeral procession of King Tawhiao at Hukanui Pa in September 1894. Just under one year later, Te Puke Waharoa died at Hukanui on 24 May 1895.

- **Iraia Papoto Place** - Iraia Papoto was a famed Ngati Parekirangi warrior who fought Te Rauparaha at Te Horo near Whatawhata. He died in old age when he fell from his horse in 1883 at Tauhei and is buried there.

- **Hohaia Ngahiwi Road** - Hohaia Ngahiwi was a lay preacher who was based at Rangiowhia under Morgan and claimed whakapapa to Ngati Haanui. Hohaia Ngahiwi settled at Hukanui in 1872 and died there in 1892.

These are just a few of many names that would be appropriate. The final decision on naming should be made in consultation with Nga Mana Toopu O Kirikiriroa Trust and Ngati Wairere to ensure their relevance to the history and people of the Ruakura locality.

vii) **WAKA NAMES.**

Carved cairns could be placed on both sides of the entrances into the Land Port to commemorate the famed Waka that plied the Waikato River and the harbours within the Tainui rohe up to the 1863 Raupatu Land Wars. These war and trade waka were largely responsible for establishing Tainui as a regional superpower during the 1840’s.
A selection of waka names and their respective hapu is as follows.

Te Ihu karere- Ngati Wairere
Te Ruaki kaitangata- Ngati Wairere
Maramataka Ngati Wairere
Te Kata a Raukawa- Ngati Koura/ Ngati Raukawa
Te Runa Ngati Koura
Kotuiti- Ngati Paoa
Te Wahakaikuri Ngati Paoa.
Te Ata i rehia. Ngati Mahuta
Te Winika Ngati Mahanga/ Ngati Te Ata and Ngati Tipaa
Rakaumangamanga Ngati Mahuta
Tangi Te Kiwi Ngati Whaawhaakia/ Ngati Naho
Kauteuri Ngati Tipa
Taikiharau Ngati Pou
Maukuwai Ngati Mahuta
Tautearahi Ngati Mahuta
Te Ahahiaaroa Ngati Te Ata
Te Maramarua Ngati Tamaoho
Te Aparangi Ngati Naho
Ngapuhoro
Te Toki o Tapiri Rongowhakaata/ Ngai Tamanuhiri/Ngati Te Ata.

viii) Kaahui Ariki names.

The appropriateness of using Kaahui Ariki names for streets in the development should be discussed directly with the King’s office.

ix) Reserve names.

If public Reserves are established within the development area they should be named to commemorate the original names of the land and features of the area. These reserves should be planted with trees and vegetation that reflects the past ecology of those locations where practically possible. Some copses of kahikatea planting could also be developed to encourage native birds back into the area. Some appropriate names are presented below:

Te Karaerea
Te Pangonui
Mohokopiki
Karipukau
c CONTEMPORARY CULTURAL CONSIDERATIONS.

It was customary for ancient Maori to erect memorials to honour tribal deities or ancestors who had lived in the area. (See illustration attachment). The sites of these memorials were Waahi tapu (sacred place) and closed off with a protective Manuka fence.

Following this ancient tradition, to honour and protect the Mauri (life force) of:

- the people who will work on the re-development of the site and
- in the completed Ruakura Land Port and
- anyone who might pass away on site,

the following concepts should be implemented.

- The site should be blessed by Kaumatua of Nga Mana Toopu O Kirikiriroa Trust prior to starting any demolition of existing buildings, prior to the start of construction of new buildings and upon completion of new buildings before any "occupancy" starts.

- In keeping with ancient Ngati Wairere tikanga and kawa a Tuahu (ceremonial shrine) should be established on the highest geographical point of Ruakura, accompanied by a series of traditional carved Pou whenua overlooking the site and all enclosed in kanuka fence. The enclosure so created should be planted with kawakawa and karamu trees. Some of the carvings should depict Ngati Wairere ancestors and these should be carved by Ngati Wairere or carvers of their choice.

- During the construction works a Mauri (talisman) should be buried under a support post of each building which is part of the Ruakura development.

- A specially designed whare karakia should be constructed for staff at the Ruakura Land Port site to be used for Paimairire karakia or other inter denominational religious purposes.

- Representative of Ngati Wairere should be involved in all design works that depict or include Maori elements to ensure that quality control standards are maintained and to encourage other contemporary themes.

d FUTURE PAPAKAINGA.

As indicated on the plans, Nga Mana Toopu O Kirikiriroa Trust would like to assist with the future development of a papakainga within the Land Port in terms of any proposed names for streets and roads.
10 NGAA TIKANGA O NGAA PARAWHENUA: On site treatment of stormwater

Storm water discharging from roads inside the Land Port should be channelled into sumps, holding tanks and artificial wetland systems to remove any contaminants or sediment. This is to purify the water, so that when it discharges into peat lands it will not damage any Taonga, or local streams that may contain traditional Kai resources (eels, watercress etc).

In this context, discharging contaminated water directly into peat areas, burial grounds or food gathering areas is culturally similar to urinating directly into a town’s drinking water supply.


Direct land based discharges of waste water can cause land instability and slippages by disturbing water flows. Waste water treatment should therefore focus on use of modern technologies for up grading water quality rather than developing expensive, large-scale wetlands or treatment stations.

12 IMPORTANT PUNA KAI RESOURCES

In pre-European times the migrating tuna (eels) caught in the wetlands and gullies of this area were an important food resource for Ngati Wairere and other Waikato tribes (Ligar 1845). These waterways also provided abundant banded Kokopu, some times called Porohe (native trout: Mr Honiti Apiti pers com 1996) Hauhau, Inanga (whitebait) and Papanoko (torrent fish: Mr Mana Martin pers comm. 2000). Therefore, special care must be taken during the development to ensure that no contaminants enter these waterways and that water quality is enhanced thereby promoting the re-establishment of Kokopu and other freshwater species of fish in these waters.

13 PROTOCOLS.

All earthworks on the site must be undertaken under the terms of a set of protocols developed by Nga Mana Toopu O Kirikiriroa Trust. These detail the procedures to be followed in the event that Koiwi (human remains) and/or taonga are unearthed, or a death occurs during construction work on the site. A copy of these protocols is attached to this report.

Wiremu Puke for
NaMTOK Consultancy Ltd