Hamo Te Rangi
Design for a contemporary urban Marae

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Master Thesis Explanatory Document

An explanatory document submitted in partial fulfilment of the requirements for the degree of Master of Architecture (Professional), Unitec New Zealand, 2011
I have chosen “Hamo Te Rangi” because I descend from the principle lines of Hamo-Te-Rangi and Porourangi the eponymous ancestors of Ngati Porou Iwi.

Porourangi ===== Hamo-Te-Rangi

| Hau===== Takotowaimua | [Principle wife] |
| Kehutikoparae===== Manutangirua |
| Hingangaroa===== Iranui | [sister of Kahungungu] |
| Hautiti===== Kahukrait | [Daughter of Rongowhakaata] |
| Kahukuranui===== Tawhipare | [daughter of Poroumata =Whaene] |
| Tautini===== Hinetamatea | [from Rongomaiwahine] |
| Te-Aotawarirangi===== Apahika | [son of Iwirakau = Rakaitemia] |
| Hinematakai===== Te-Atuakairoa |
| Hunengaro===== Houngata |
| Te-Rangihopukia===== Pukehore |
| Tuakore===== Ngawhare |
| Rangitukia===== Huhana Tihe |
| Hiria Kapaika===== Charles Ryland |
| Hori Kauahi Ryland===== Harata =Akuhata |
| Ihaia===== Pera Ryland |
| Reupena===== Teorahi Tamaunu (Teo) |
| Alwyn (Hoot)===== Patsy Goodall |
| Steven Hutana |
Figure 1: Te Ariuru Pa – Tokomaru Bay with canoes drawn up on the foreshore and Endeavour moored offshore. The sketch is a copy of the lithograph based on an illustration from Bank’s diary 1769

Ko Ngapunarua te maunga
Ko Waitakeo te awa
Ko Kakepo te tauranga waka
Ko Te Ariuru te marae
Ko Te Whanau a Te Aotawairangi te hapū
Acknowledgements

This research could not have been written without the ongoing support from my supervisors Dr Mike Austin and Rau Hoskins M. Arch (Hons.), who encouraged and challenged me throughout this process.

I would like to acknowledge and extend my heartfelt gratitude to the following people who took the journey with me in the research: Aunty Maggie (Ryland), Aunty Mary Chaffey, Barry Soutar, Tui Ah loo and Ngati Porou ki Tamaki reference group; for attending all the meetings and for giving of your knowledge. Papakura Marae; for your hospitality and valued insights. Geoff Allen; for all the cold nights. Miles Heine; for delivering every time. Carin Wilson, Jacob Scott; for imparted words of wisdom. Nga Aho.

Most especially to my loving and patient wife Kelly and our three lovely children; Kabali, Keira and Rembrandt; thank you for being so supportive and awesome.

And especially to God, who makes all things possible.

Figure 2: Te Aotawarirangi (1845), Te Ariuru Marae, Tokomaru Bay, also known as Te Poho o Te Ao ¹, named after the founding ancestress of Te Whanau a Te Aotawarirangi. Mike, Aunty Maggie (Ryland), Aunty Mary Chaffey (Pewhairangi) and Steve Hutana. Photo by Kelly Hutana 2011.

¹ Research of the left Amo (carving) above represents the Tupuna of Hingangaroa, Hauiti his son and Tautini which was restored by artist and carving restorer Cliff Whiting at Te Papa Museum prior to the Museums official opening in 1998. This was a surprising revelation due to my active involvement as a member of the design team at Jasmax Architects from 1992 - 94. Aunty Maggie and Cliff Whiting. (personal communication)
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Abstract

How do urban marae^2 fulfil contemporary Maori urban needs? What processes do urban Maori engage to negotiate and plan for future needs? And how do designers and architects engage with these communities in culturally appropriate, meaningful ways?

This dissertation explores the use of traditional Maori forms within contemporary urban design; proposes Maori architecture as a culturally distinct tradition; and develops a specific design proposal for an urban Maori community.

The research develops out of personal and family experiences of urban migration and separation of Maori communities from their ancestral homelands. This project is further contextualised in relation to historical accounts of Apirana Ngata’s social reformation policies, to Princess Te Puea Herangi grass roots approach to development within Tainui. Both these initiatives helped to advance Maori architecture through different building projects. The research also draws on discussions with whanau and iwi representatives from Te Whanau a Te Aotawarirangi (TWOTA) and Te Taurahere Ngati Porou ki Tamaki (NPKT), Papakura Pan Urban Marae (PPUM), and Te Noho Kotahitanga.

The research includes:

- A review of related literature on Matauranga Maori and Maori design
- Personal reflection on work processes in sketch journals
- Drawing and conceptual modelling with digital clay (massing), in Revit architecture, i-phone applications, digital photography and Photoshop as well as traditional sketch mediums, laser cutting and physical 3-d modelling, and virtual architecture through augmented reality.

Outcomes of this research may be used to inform Ngāti Porou ki Tamaki plans for a new urban marae, and provide reference material to other groups wishing to engage tikanga and kaupapa Māori in contemporary design contexts.

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^2 The Marae is a turangawaewae (place for people to stand) on Papatuanuku (mother earth) and speak to the living and those who have passed on. It is a wahi rangatira mana (place of greatest mana), wahi rangatira wairua (place of greatest spirituality), wahi rangatira iwi (place of dignity) and rangatira tikanga Maori (Ultimate expression of Maori customs). The Marae is a place for Tangata whenua (people of the land,) to host manuhiri (visitors) in Hui (meetings), Tangi (funeral) and celebrations together. Hospitality is a key part of Marae in hosting guests with Kai (food) served in the Whare Kai (dinning room), meeting and sleep in the Wharehui (meeting house) and Whare Paku (ablutions). Tauroa and H. Tauroa, *Te Marae: A Guide to Customs and Protocol* (Penguin Group New Zealand, Limited, 2009).
Architectural Proposition

How can design processes and architecture inform Maori communities through incorporation of social, environmental and spiritual dimensions and engage them in meaningful and beneficial ways?
1 Social and Cultural contexts

1.1 Maori urban drift – a brief family history

In the mid 1930’s my grandparents, Reupena and Teo (Nana Teo) Hutana, left Tokomaru Bay on the East Coast, in search of work in Auckland. They were part of what was considered the ‘Māori urban drift’. They initially settled in Newton central Auckland for six months before settling in Howick. They took on the European surname ‘Newton’ for a period of time in order to avoid discrimination. Dad was 1 year old. There was no urban marae for Ngāti Porou whanau in Auckland. My grandparents would often take the arduous 10 hour journey back to Te Ariuru Marae on the East coast for tangi, Hui and other family celebrations.

Figure 3: Nana Teo far left promoting Maori culture during one of her many world ocean cruise voyages in the 1960’s.

She was an active member of the CWA country woman’s association and worked for her whanau on the marae.

My father returned to the East Coast rarely and I did not visit Tokomaru Bay until the age of 32. Of my two 2 brothers and sister, two of them have never been onto the Marae.

It is my hope that there will be a Marae in Auckland for our whanau to connect to. This project arises out of this personal history of separation.

For urban Maori like my father, the absence of an urban marae in Auckland did not diminish the longing to maintain tribal or whanau connection and identities. Community centres, sports clubs, music venues and pubs were often adopted as urban meeting places, acting at times like marae, providing a turangawaewae or place to stand. For my Dad, the Westward Ho Pub, located between Kelston and Glen Eden in West Auckland became a make shift, ‘urban marae’, one he attended.
faithfully for 15 years, 5-6 evenings a week. Joan Metge noted at the time she was writing in the early 1950’s that most Auckland Maori were conscious of belonging to groups of kinsmen who had some collective identity\(^3\).

When Dads spray painting skills were replaced by robots at the Wiri Nissan Datsun car manufacturing plant in 1983 the publican Westward hoe Marae provided the support he needed. He spent three years working on the P.E.P scheme (Project Employment Programme for the unemployed) in Henderson, overseeing road laying gangs. His father had done similar road laying work during the 1930’s. The Pub Marae provided them both with kinship, a place to be together. When Dad died in 1985, aged 48, his friends from the Publican Marae helped give a fitting send off for Dad, with many in attendance at the funeral.

1.2 Urban Marae - Tamaki Makaurau

Ngati Whatua ki Orakei holds mana whenua in the central Auckland isthmus in spite of losing ownership of most of their traditional land. Their principal marae is at Orakei. In 1950, the Orakei marae at Okahu Bay was burnt down and their land confiscated under the Public Works Act. In 1991 the Marae, papakainga lands, church and urupa (cemetery) were returned to Ngati Whatua o Orakei (NWoO) as part of the crown response to the 1987 Waitangi Tribunal recommendations.\(^4\) Other iwi traditionally based in the Auckland area includes; Tainui, Ngati Paoa, Waiohua, Ngai Tai.

![Figure 4: Local Tamaki Makaurau Iwi Marae in proximity to the intended site of Hamo Te Rangi Marae. Images by Maori maps.com](image)

Between 1948 and 1965 the Maori community centre located on the corner of Fanshawe and Halsey Street was a centre for Maori social gatherings including Saturday evening dances in Auckland. Anne


Salmond did not regard this as a Marae due to having no Marae Atea, or ownership group. Few Tangi were held there\(^5\).

Since the 1960’s various groups started to build urban marae\(^6\). Te Unga Waka Catholic Marae in Epsom, which opened in 1966, is regarded as the first urban Marae in Auckland. Anne Salmond, however, did not regard Te Unga Waka as a marae either because it lacked a marae atea. Hoani Waititi Marae opened in Glen Eden in 1980, and Papakura Marae opened in 1990. Both these marae had marae atea and looked more like traditional marae. Hoani Waititi Marae now hosts a Kohanga reo, Kura Kaupapa Maori\(^7\), along with various Maori community based initiatives including Te Whanau Awhina, Patua Te Ngangara and Kapa haka groups.\(^8\)

75 marae are presently listed within the Tamaki Makaurau (Auckland) Marae directory\(^9\). These are categorised as Mana whenua (Tribal), Pan Tribal/Urban, Taurahere (link) and Institutional. For the

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\(^6\) The marae is a chiefly place first and foremost, where the heights of Maoridom and its values are expressed in terms of wairua, mana and tikanga. The marae ātea is a place to stand tall, to be nourished by Papatuanuku (mother earth), provides a Turangawaewae, or place to stand. P. Tauroa and H. Tauroa, *Te Marae: A Guide to Customs and Protocol* (Penguin Group New Zealand, Limited, 2009).

In order for a traditional marae to fulfil its customary obligations of offering hospitality it needs a marae ātea, a whare nui (meeting house), whare kai (dining hall). Surrounding Pakeke Kainga, homes for kaumatua and the elderly and other buildings Salmond, *Hui: A Study of Maori Ceremonial Gatherings*.

\(^7\) Kura Kaupapa Maori= Primary school


purposes of this survey religiously affiliated Marae have been combined with institutional marae and Taurahere marae with Mana whenua marae. An additional heading called “Not specified” has been added for those marae listed in the directory with no category specified.

<table>
<thead>
<tr>
<th>Tamaki Makaurau Marae locations</th>
<th>Mana whenua</th>
<th>Pan Tribal/Urban</th>
<th>Institutional</th>
<th>Not specified</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>North</td>
<td>6</td>
<td>1</td>
<td>2</td>
<td>5</td>
<td>14</td>
</tr>
<tr>
<td>West</td>
<td>1</td>
<td>1</td>
<td>5</td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td>Central</td>
<td>3</td>
<td>1</td>
<td>7</td>
<td></td>
<td>11</td>
</tr>
<tr>
<td>South</td>
<td>15</td>
<td>9</td>
<td>7</td>
<td>11</td>
<td>42</td>
</tr>
<tr>
<td>Sub Total</td>
<td>25</td>
<td>12</td>
<td>21</td>
<td>17</td>
<td>Total =75</td>
</tr>
</tbody>
</table>

Table 1: Tamaki Makaurau Marae directory by location, category and number

Each of the urban Marae noted have developed tikanga\textsuperscript{10} in response to urban site constraints, different ownership groups and traditional tribal practices from different Iwi. A case study of the Papakura pan-urban Marae below includes acknowledgement of tangata whenua within the plan, protocols adopted for the marae, and an outline of challenges faced in its design and construction.

1.3 Ngati Porou

Ngati Porou is the name of an Iwi comprised of 45 separate hapu. Located on the East coast of the north Island of New Zealand, they share connection to one another and whakapapa to the eponymous ancestor Porourangi whose wife was Hamo te Rangi.

Ngati Porou tikanga and kaupapa extend from shared traditional knowledge, practices and beliefs of individual whanau and hapu connected through whakapapa to their eponymous ancestor, Porourangi, within the Ngati Porou rohe.

These whakapapa trace the origins of existence from the realms of Te Kore and Te Po, from the realms of void and darkness, the separation of Ranginui and Papatuanuku and their descendants into the world of light\textsuperscript{11}.

\textsuperscript{10} Tikanga= correct procedure, custom,

\textsuperscript{11} Te Runanga o Ngati Porou, "Report to the Ministry for the Environment," (September 1998).
From Ranginui and Papatuanuku, seventy principle Atua were conceived. These Atua included:

- Tane Mahuta - atua of the forests and all living things within them
- Tangaroa - atua of the fish in the sea and sea life
- Tumatauenga - atua of war and guardian of the marae atea
- Tawhirimatea - atua of the winds and storms
- Ruamoko - atua of earthquakes
- Haumiatiketike - atua of fern roots and other wild foods
- Rongomatane - atua of kumara and of cultivated foods
- Tutewhiwehi - Grandson of Tangaroa and the atua of amphibians and the inland water creatures

Holistic approaches to environmental management in both customary and contemporary Ngati Porou contexts stem from knowledge pertaining to these whakapapa. Recognition of the Atua in customary contexts influenced the development and practice of specific karakia, kawa and tikanga, a regime of social practices helping to maintain the integrity of whanau and hapu structures and resources. A contemporary interpretation of wellness in contemporary Maori contexts has been developed by Mason Durie. This knowledge has also helped inform the design strategy for this project.

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12 Barry Soutar (Personal communication)
13 See appendix 7.
14 Porou, "Report to the Ministry for the Environment."
Ngati Porou hapu and whanau connect to approximately 49 different marae within the Ngati Porou rohe, which extends from Potikirua near Potaka in the north-east, to Te Toka a Taiau, within Gisborne’s harbour, to the south.\textsuperscript{15} Ngāti Porou constitutes the second largest iwi in Aotearoa by population, and according to the 2006 census\textsuperscript{16}, over 13,000 of its total population of more than 72,000 live in Auckland.

My own Ngati Porou connection is primarily through Te Whanau a Te Aotawarirangi from Tokomaru Bay. Te Aotawarirangi’s whakapapa extends back through Hauiti\textsuperscript{17} to Ruatapu\textsuperscript{18}, Tangaroa\textsuperscript{19} and Papatuauanuku. Our family marae, Te Ariuru\textsuperscript{20}, named after our ancestress Te Aotawarirangi, is located within what was once a strategically important pa on the East Coast associated with Tawhiti and surrounding lands, protecting one of the few all weather safe launching places for canoes on this section of the coast, our tauranga waka (Kakepo), and reef, kapata kai. These and other iwi assets and resources are managed by the Whanau a Te Aotawarirangi marae committee\textsuperscript{21}

 Tau Para Para\textsuperscript{22}

\begin{tabular}{ll}
Te Kune & The form acquired \\
Te Pu & The origin, the source \\
Te More & The tap roof \\
Te Weu & The fibre, the root \\
Te Aka & The long roots, the vines \\
Te Rea & The growth \\
Te Waonui & The prime evil forest \\
Te Whe & The creeping sound of the tree branches \\
Te Kore & The not yet perceived \\
Te Po & The night the darkness \\
\end{tabular}

\begin{flushleft}
\textsuperscript{15} Te Runanga o Ngati Porou, “Ngatiporou.Com,” Te Runanga o Ngati Porou


\textsuperscript{17} Hauiti= Son of Hingangaroa

\textsuperscript{18} Ruatapu brought the art of carving back from Tangaroa. The carved house named after him is in the Chicago Field museum.

\textsuperscript{19} Ruatapu= who first made wood carving known. Also the name given to the whanau Marae in the Chicago Field museum.

\textsuperscript{20} Tangaroa = god of the sea

\textsuperscript{21} See appendix 5.

\textsuperscript{22} M. Ruatapu and A. Reedy, Ngā Kōrero a Mohi Ruatapu, Tohunga Rongonui O Ngāti Porou (Canterbury University Press, 1993).
\end{flushleft}
Figure 7: Ngati Porou Rohe (East coast) showing Marae affiliations. Image courtesy of Ngatiporou.com
1.4 Research Reference Groups

Discussions and wananga were held with representatives of my whanau from Tokomaru Bay, Te Whanau a Te Aotawarirangi, in Tokomaru Bay, in Gisborne and in Auckland. This included discussions with Aunty Maggie Ryland who is a repository of tribal and whanau knowledge, Mary Chaffey, marae trustee, and Moana Nepia. I also had meetings and discussions with individuals from Papakura Pan urban marae, Te Noho Kotahitanga marae, master carver and sculptor Dr Lyonel Grant, artist and architectural designer, Jacob Scott.

Ngati Porou ki Tamaki (NPKT) were also invited to take part in this project as a research reference group made up of Ngati Porou whanau living in Auckland23. Their activities include social, cultural and sporting activities. Porou Ariki Kapa haka team compete in regional and national competitions. NPKT expressed a need for a Ngāti Porou marae in Auckland. Their president, Barry Soutar hoped that this research might be useful in their plans for an Ngati Porou Auckland marae as a home away from home for the 13200+ Ngati’s living in Auckland. Several meetings with the group and with Barry were held over the last year.

Figure 8: Porou Ariki Kapa haka team. Image from: http://www.ngatiporouauckland.co.nz

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23 See Appendix 8 for distribution graphs of Ngati Porou living in Auckland and Maori living in Mangere.
NPKT reference group wanted:

- A Ngāti Porou tikanga-based approach to marae layout, including tapu and noa concepts;
- A Marae that included a Pakeke Kainga village, Kohanga reo, modern business hub, Whare Tapere for Kapahaka practises, crafts, reception and administration
- A contemporary design that included potential for future growth

The President of (NPKT) Barry Soutar, suggested Hamo Te Rangi as the name for this proposed marae site, in memory of the wife of the tribal ancestor, Porourangi, and the whakapapa that extends from this union. His suggestion for the name of the wharenui is Te Pua o te Roku, after the historic famous Ngati Porou bird hunting grounds on the east coast.
1.5 Urban Marae of Auckland

It can be argued that if iwi and hapu marae already exist within tribal rohe, why are urban marae needed? While attending a Wananga at Papakura Marae in May 2011 a senior carpenter from Papakura who oversaw the construction of the Wharenui in the early 1980’s commented on. How there was an urgent need at the time for an adequately catered place to host tangi according to different tribal tikanga protocols as facilities to accommodate sleeping and hospitality were severely challenged within the host’s home and neighbourhood. A senior practice manager of the Papakura

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24 See appendix 1
Marae Health clinic also recounted how prior to the establishment of the urban marae clinic many hapu Māori women living in the Papakura district were urgently seeking assistance from trained Māori midwives and nurses. Therefore based upon these accounts it is argued that; urban marae contribute significantly to physical, social, spiritual and symbolic well being of urban Maori needs.

Traditionally, marae were built on ancestral land, passed on from one generation to the next. Sometimes they were taken in conquest. Today urban iwi, hapu and whanau groups such as (NPKT) must seek permission from Tangata whenua in a desired area to build an urban Marae then acquire land and build.

When Unitec first proposed building an institutional marae on its Mt. Albert campus, permission was humbly sought from Ngāti Whātua ki Orakei, who hold mana whenua in this part of Auckland. Master carver/sculptor Dr Lyonel Grant discussed the vision for Te Noho Kotahitanga Marae with Ngāti Whātua iwi, and in due course a decision/approval was given to Unitec to locate and build the Marae.

Rangi Walker makes reference to Apirana Ngata’s success in promoting the cultural revival of Māori arts, crafts and the building of meeting houses as a focal point of community sentiment and tribal pride. Urban marae today often extend traditional models of marae with wharenui, wharekai and wharepaku. Urban Marae such as those at Papakura (1990) and Hoani Waititi (1980) have in

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addition to their traditional whare structures, many additional community, education and commercial facilities operating within the marae site.

2 Papakura Marae Case Study

Papakura Marae hosts a range of full and part time staff in addition to voluntary and consultant staff. The various whare constructed at the marae were built over a period of ten years between 1985 and 1995. The whare kai was built first in 1985 followed by the wharenui, Te Ngira, in 1990 when the Marae was officially opened.

Over the course of time the marae has expanded to meet growing community needs in the areas of health, whanau/social services, managerial/governance expertise. Refer Appendix A for full list of services provided. Additionally the wharenui fulfils customary hosting for Hui, Tangi, unveilings, weddings, and sleep over for 80 people. The Whare nui and Whare kai hold 200+ seated for Hui and such like.

Site observations suggest a constrained and fractured master plan with a large car park dominating the front half of the site. South westerly winds blow through the exposed walkway between the whare kai and whare paku. Problematic circulation routes force visitors to the rear of the marae site to access reception and meeting spaces. It appears these issues may have arisen as a consequence of integrating a more traditional rural marae master plan, with a number of other buildings and facilities over an extended period of time.

Plans for the proposed Hamo Te Rangi marae attempt to address these issues through careful consideration of links between whare, public access, and streamlined circulation routes, strategic positioning of rubbish, reception/administration and community services.
2.1 **Marae as place**

How should urban marae respond to people and place while maintaining iwi, hapu and whanau tikanga? Leonie Pihama (1993) notes how distinctive modes of theorising that emerge from Maori communities have as a common element, the validation of Te Reo and Tikanga Māori. This was framed under Tino Rangatiratanga, Māori Sovereignty, Māori perspectives and Kaupapa Māori. These modes of analysis and theory are not only contemporary phenomena; they are rooted in historical precedents based upon Māori relationships to land as Tangata Whenua\(^28\).

Based on various Hui, Wananga and discussions held at Papakura Marae throughout 2011 it is reasonable to suggest that for all its apparent shortcomings of restrictive site constraints and differing views of how best to get things done, this urban Maori collective has literally defined what Urban Marae is about. The well being of whanau and community.

Te Noho Kotahitanga Marae at Unitec institute of technology is an institutional marae fulfilling various educational Hui with offices to the rear of the wharenui which operate from 9 -5pm with some community use after 5pm and in some weekends.

The marae has a reliance on the institutional community to sustain its sense of place and reason for existence. Without people it becomes a museum piece of curiosity. Therefore the founding Kaupapa which precedes the Unitec wharenui must acknowledge needs and aspirations of the Marae within the institutional community.

The Unitec marae has no whare kai at present, though one is planned in the near future\textsuperscript{29}. Tauroa states that the wharekai (dining room) is an essential part of the marae complex along with the marae atea and wharenui. Its significance is emphasised in this proverb: Te tohu o te marae, ko te pataka. Evidence of a good marae is the size of the pataka (food storehouse)\textsuperscript{30}. 

\textsuperscript{29} See appendix 2-3

\textsuperscript{30} Tauroa and Tauroa, \textit{Te Marae: A Guide to Customs and Protocol}. 
2.2 Design Strategy

This Maori design strategy is based upon Matauranga Maori, Maori knowledge that reflects Maori world views and concepts.

The design proposal for Hamo Te Rangi Marae draws together inherited Ngāti Porou knowledge with knowledge from Te Wai o Hua, the Tainui iwi who hold mana whenua in the Mangere region. This involves processes of consultation and wananga with individuals and communities to whom that knowledge belongs.
The mauri or life essence of the people for whom this project is being developed is honoured through depicting their narratives and histories within the design, empowering them within the design process. Concern for their psychological, spiritual, physical, and social well-being reflects Mason Durie’s Whare Tapa Wha model. (Refer appendix 6).

The design strategy for this urban marae proposal is based upon the following concepts:

**Kotahitanga** – Collective cooperative and effective partnerships and collaboration with community. It is intended that Hamo Te Rangi offer a range of services for local community use. A recent study undertaken in East Mangere by Visitor Solutions identified community needs that were not currently being met within local community. The outcomes of the study highlighted three areas of need. Better youth and young family services support, opportunities for Elderly community engagement. Need for a facility to offer a range of activity types at varying times. Hamo Te Rangi will contribute to meeting these community needs through offering a conference and whare kai facility, Whare Tapere for community performance and crafts, Kohanga reo preschool, substantial business and community facility space for lease/use and local weekend ‘Ngati’ Maori food and craft market on site.

![Figure 16: illuminated pounamu forms amongst the whenua.](image)

**Wairuatanga** – The spiritual connection with the environment that links people. Acknowledgement of Mangere and Hikurangi maunga through building orientation and use of heritage markers (pou)


32 Mangere is the name of the maunga after which the suburb is named.

33 This includes reference to Hikurangi in Rarotonga, Te Tai Rawhiti, and Te Tai Tokerau.
to enhance site lines. Strategic Marama spaces between building programs on the southern side of the Marae will allow for connections to important heritage icons such as Mt Mangere to the west and Maungakiekie to the North West.

**Manaakitanga** – Acceptance and hospitality given to visitors, and protection, security of community. Access to traditional medicinal and kai resources such as kumara gardens, Harakeke (flax) and hangi pits with direct access to open civic, community spaces. Marae serve as a secure environment for Pakeke to live out their lives in a secure environment. Restricting access to the Pakeke Kainga with a single bridge access point through a lockable door restricts unwanted access to the whare. Open well lit spaces create a sense of safety to the site in the evening.

**Rangatiratanga** – Community lead and take responsibility for creating, determining their own future. A mixed use density living environment of clustered whare is to be located around the centrally positioned Marae Atea with dedicated large open spaces either side. Whare programs are tailored for community use throughout the day to suit booking times.

**Orangatanga** – Maintain health and wellbeing of the community. Open spaces to host weekend community markets, dedicated children’s play area and cultivation gardens to be accessed via linked, covered and open walkways to encourage walking and investigating about the Marae site.

**Mauritanga** – Life force or essence of a natural environment. Maximise passive sustainability where possible from sustainable material selection in the Architecture (recycled timber), Grey water recycling systems, passive solar energy and existing swale drain to the southern boundary.

**Whanaungatanga** – Participation and membership in the community and social setting. Weekly Ngati Maori markets for the local community to access kumara, vegetables, Harakeke crafts, hangi food and Ngati entertainment will help create a local identity.

**Kaitiakitanga** – Protection of local landscape features important to the local community. To help support the protection of important environmental and cultural features of the whenua it is intended that the architecture be integrated into the whenua. This approach will help to reduce the felt impact of the whare forms on the urban environment. Curved forms with Marama spaces between buildings will allow sight lines to environmental features. Green roofs will help to further integrate building form into landscape. By retaining kumura cultivation on the south of the site will further assist to mitigate the felt impact of the Marae. The collective curved footprint of the various southern based whare acknowledges Kai whare’s tail (stingray), one of the Kaitiaki (Guardians) of the Manukau harbour. Kahu pokere (black harrier hawk) is the other kaitiaki of the area.

**Matauranga** – Knowledge and understanding of community history, identities and character. It is intended to acknowledge the original Tangata whenua Ngati Te Ata and Te Akitai of Wai-O-Hua of Tainui through education of local traditional living and farming practices via onsite education classes.

Sinclair notes that Maori love of land and identification with it is perhaps closer than any other race due to spiritual relationship with the land stemming from traditional concepts of the basic

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origin of mankind derived from the loving union of mother earth, Papatuanuku, with the sky-father, Ranginui.  

Rolleston states that urban development and intensification has not only affected the natural and built environment, but also affected the relationship Maori have with the natural world. Maori environmental value systems are consistent with concepts of sustainability and can provide a positive contribution to environmental management and urban design practice.  

3 Historical precedents - Apirana Ngata

Apirana Ngata proposed biculturalism as an alternative to assimilation by the dominant Pakeha culture. Under his guidance, Ngati Porou sought to hold on to traditional Maori world values while taking up the tools offered by Pakeha knowledge and technology. Ngata’s reforms led to improved health conditions, land incorporation, and many new wharenui on the East Coast and marae projects elsewhere that became symbols of tribal identity and cohesion.  


36 S Rolleston, "Maori Perspectives of Urban Design, Preliminary Findings" (Wellington City Council, Ministry for the environment, 2005).

37 He encouraged Maori to be bicultural: “turn your hands to the tools of the Pakeha for the wellbeing of your body. Turn your heart to the treasures of your ancestors as a crown for your head” Walker, *Ka Whawhai Tonu Matou = Struggle without End*. 194.

38 — — —, *He Tipua: The Life and Times of Sir Apirana Ngata*.

Ngata also established the school of Maori Arts at Rotorua in 1928. Pine Taiapa was one of the first students who went on to be trained under Eramiha Kapua, a strict carver of the old traditions (Neich: 70)\(^40\) Referred to today as the Te Puia Rotorua NZ Maori Arts and crafts institute. There is no Maori school of architecture to date.

Princess Te Puea observed Ngata’s incorporation schemes at work first hand in 1928, during a fund raising tour through the East coast where she was given large sums of money at Tokomaru Bay and Waiomatatini. She noted the people were in good health resulting in part from the successful integration and acquisition of European technology in housing. She also noted that Ngati Porou had been europeanised but that the Maori spirit remained. This experience led to her acquiring many of the same amenities for Turangawaewae over subsequent years. \(^41\)

The success of Ngata’s bicultural rural living strategy model laid the foundation for Maori to develop design and building strategies for future generations. Organisations, such as Nga Aho, the National Network of Maori Design Professionals, may be seen as a contemporary response to these initiatives.

Each year Unitec offers architecture students a Māori studio project which is over seen by Maori Architect, Rau Hoskins and Maori designer, Carin Wilson. This studio exposes architecture

\(^40\) The near extinction of the art of carving on the coast leads to his decision. Roger Neich noted that by the 1920’s the art of Maori carving was in dire straits. Ngata said in the second decade of the century that outside the Arawa tribe there were only two experienced carvers, one in the Urewera country whom may have been Te Tuhi Pihopa and the other Hone Ngatoto amongst Ngāti Porou of the east coast. Roger Neich, *Carved Histories: Rotorua Ngāti Tarawhai Woodcarving* (Auckland: Auckland University Press, 2001).69.

students to Māori world views and challenges them to incorporate Māori thinking within architectural briefs.

Figure 18: Carved Poupou by Master Carver and sculpture Dr Lyonel Grant of Sir Apirana Ngata (right) and Princess Te Puea (left) inside Te Noho Kotahitanga Marae Unitec Auckland. Used With permission.

4 Site Analysis

The proposed Marae site is strategically located in an area of Auckland where there is a high density of (NP) and other Maori and pacific communities. (Refer Appendix 7)
Figure 19: Proposed Hamo Te Rangi Marae 3D Site Plan showing significant urban links to Mt Mangere (West), Auckland CBD (North West), One Tree hill (North West).
Existing site contours rise gradually 2.5m across the length of the site from east to west. To the south contours fall sharply 4.0m into an existing swale drain beyond the boundary. To the north contours fall gradually 1m to the Savill Drive boundary. (Refer Appendix 7)
The intended site on Mangere East Savill Drive site is located within a zone 4 and 5 green belt flanked to the south by well established residential housing. The national refugee centre and the proposed Maile Ua community centre are next door and also accessed via Cleek road. Directly adjacent to Savill drive to the north is a large industrial land block with the Pacific Steel mill located to the North West with distribution warehousing to the centre. To the north east is a large container storage depot. Additional container storage overflow is located the full length of the far eastern lot boundary.

The southern site boundary is shared with the proposed Maile Ua community centre. An existing deep swale drain abuts the entire southern boundary. It is intended that the Auckland city council will be extending Cleek rd up to Savill drive in the near future.
5  Hamo Te Rangi Marae Master Plan

Hamo Te Rangi Marae will function as the physical, spiritual and symbolic communal space to host Whanau and Manuhiri for; meeting together within the tender embrace of Papatuanuku.

*Te Uranga o te ra. The landing place of the sun*

A series of design iterations was undertaken over a period of six months. Four of these emerged as pivotal to the finalised design.

5.1 Iteration 01

Master planning began with an exploration of an idea referred to as a “collective separation” design approach. The site was to be arranged into four primary zones:

1. Cultural  
   Traditional spaces and buildings - Marae Atea, whare nui, whare kai and whare paku
2. Community  
   Pakeke Kainga, business, education and performance
3. Circulation routes  
   access routes, car parking and Waharoa
4. Cultivation spaces  
   Kumara to be retained, week end market, and dedicated link to residential area in close proximity to the Marae.

Figure 23: Various Master planning iteration design sketches of Hamo Te Rangi Marae

The master plan of the intended Marae site considered the relationship between whenua and whare. The notion of the architecture emerging from the whenua gave rise to a series of anthropomorphic building sketches derived from traditional Wharenui. Acknowledgement of Iwi,
hapu, and Atua were manifested in different parts of the whare. Further sketch studies of poupou Pakeke Kainga and other buildings were developed. Exploration into the use of coloured glass for use as cladding/glazing was made (refer appendices 3).

Moulding of existing site terrain was investigated as a prime strategy to excavating whare into the immediate surrounding landscape. A benefit of this allowed for the formation of a 5m wide ramped (promenade) to run the entire length of the Marae site with access to all whare off this path. Given the sheer length of the pathway (1300m) a central secondary outdoor circular paved court was included as an informal secondary meeting area leaving the Marae atea for ceremonial hui, tangi and celebration. The secondary courtyard acted as a weekend Market space where produce from the gardens could be given to those within the community who needed it.

Early explorations looked into elevating the Marae Atea with access via a proposed ramped bridge across a void. The design intent was to make manifest the mythological space created by Tane whereby the living (Manuhiri) inhabit the space separating Rangi and Papa. This proved problematic as the journey made by Manuhiri (visitors) from the waharoa to the marae atea was in excess of 60m, which meant the karanga call from either side might not be heard.

Important physical and cultural links were identified and acknowledged in the planning of the whare with marama (light) spaces introduced between buildings to acknowledge important urban site lines to mountains. The wharenui was located to the centre of the site tangential to the Marae atea facing north to maximise all day sun onto the mahau. This orientation conveniently provided direct line to Savill Drive for hosting the Waharoa.

Discussions with NPKT revealed a desire for inclusion of a Pakeke Kainga (retirement village apartments). Pakeke could be actively involved with their community in marae activities. The design intent was for two 5 storey apartment blocks with x4 living floors comprising 12 two bed room units per floor with a shared common area. Given the size of the buildings, they were located to the south side of the Marae where there was opportunity to recess the whare 3.5m into the whenua. This was due to the sharp 4m drop of the topography on the southern boundary.

The whare would act as a wind and acoustic buffer to the prevailing south westerly wind and take advantage of a north facing aspect. Design and landscaping incorporated sustainable use of thermal massing (heating), solar panels (power)/hot water, grey water via green roof collection + natural air ventilation via selected manual wall louvers. Strategic placement of trees to further reduce wind and integrate the bulk of the whare is to be located within the southern boundary.

Outcomes:

. The collective separation approach failed after many attempts to arrive at a working master plan.

. The introduction of a promenade access link, to act as means of demarcating spatial zones, emerged instead.

. This was further agitated with a secondary atea emerging larger than the main Marae Atea causing confusion.
Access links between whare became cumbersome and overly complex

Figure 24: Early master planning Iteration 1 with colour represented collective separation zones and Bridge to Marae Atea indicated.

5.2 Iteration 02

Based on the outcomes of the first iteration two vital lessons were acknowledged. The Marae Atea was required to be relocated to the centre of the Marae to provide a genuine fulfilment of its function as the nourisher of Papatuanuku and that in this instance the Atea take the shape of a circle in resemblance of the unbroken relationship between whanau and Papatuanuku. Secondly that the idea of communal separation be abolished in preference for a more natural whare and whenua relationship whereby the Architecture seeks to integrate where possible with the natural topographical features of the whenua. This decision meant that the intended anthropomorphic building forms with glass skin emerging from the whenua would be revised to accommodate a more integrated design led approach.

Subsequently as a result the locality and integration of various whare progressed in quick succession. It can be argued that Matauranga, Tikanga processes are primly geared to correspond with Papatuanuku hence, all decisions, actions stem spiritually, culturally and physically from the Marae Atua. Up until the decision was made to centralise the Marae Atea some 4 weeks of intense research design was flittered.
Enquiry was made into the proposed incorporation of the Ngati Porou Star navigation compass into the Marae Atea with 32 point poupou around the edge of the marae atea. Observations were made whist constructing a Maori Star Navigation compass for Heck Busby at his whare at Tiapa bay in Northland as part of a Masters Studio project in 2010.

The Kaitiaki (guardian) “stingray” in the Manukau harbour is acknowledged in the master plan through the curved building forms of the Pakeke Kainga and Whare Kai resembling the tail of the stingray. This important axis links the envisaged Marae to the past history of Mangere East and the Manukau harbour.
Interest in the legend of Tane separating his parents Rangi and Papa resulted in the attempted story telling via recreation of Tane space. By cutting and battering away of the existing terrain to reveal a 4m recess cut at the Atea edge accessed via a ramped bridge symbolising the tongue of the Tupuna which spans the void placing Manuhiri in the newly formed space created by Tane. Mature Native trees then grow up either side of the ramp to further heighten the experience. Inspiration for the Rangi and Papa story came from a photo of Ngati Hine at Ruapekapeka pah site located in Northland where ingenious adaptation of the whenua to form caves and deep redoubts for defensive purposes was created.
The design intention was for the ceremonial Wharenui, Whare kai and Whare paku to be located on the highest part of the site in a citadel type arrangement just as a chief would on a pa site at the top of the Maunga with his iwi, hapu spread about him below.

This proved problematic as it appeared to revert back to the issues of program separation evidenced in iteration 1. As a result this enquiry was terminated and consideration of how best to arrange the whare on site in a cohesive unified way was initiated.

Design of the business hub was undertaken during the second iteration. A series of sketch studies sought to capture in suspended animation Maui’s physical struggle in fishing up the North Island. The buildings form seeks to capture anthropomorphically Maui’s body rising out of the whenua.

Discussions with the reference group called for a cutting edge business, community hub that allowed for future growth as the iwi expanded over the next 20-30 years. This brief called for some sizable structures. Use of the Matauranga strategy soon provided an exciting alternative to multi storey vertical towers which would reactive with the urban environment.

By overlapping three inclined curve linear forms of 2 and 3 stories each with 50% of the entire whare suspended above the whenua on structural legs thereby increasing permeability and shaded spaces for dwelling all year round. Sustainable harnessing of free heating, cooling, air, solar power + green roof for grey water technologies incorporated into the design.
5.3 Iteration 03

The revised design intent was for all the whare to run in a continuous flowing curve around the Atea and Whare nui thereby acknowledging the importance of the Marae atea in nourishing all functions within the site through its mana. This arrangement also allowed full visual connection with all whanau and Manuhiri throughout the Marae.
The Marae atea radius was increased from 12m to 19m full circle. Further exploration of integrating the compass points as a radial architectural grid was undertaken. The grid was used in the part formation of most whare and their structural grid layouts. The outcome proved a surprise with the Atea then able to offer traditional Ngati Porou Star and wind navigation onsite training with key architectural geometric building forms aligned to the Marae atea star compass.

The Pakeke Kainga 5m wide outdoor dedicated living court was retained in this iteration as the building made best use of the severe contour drop to the southern boundary. By recessing the whare and court 3m below existing ground level allowed the Whare to integrate with whenua.

The Wharenui was repositioned with the Mahau facing south east establishing a direct link Mt Hikurangi in the East coast. This revised orientation was well suited for the relocation of the Waharoa beyond the Marae Atea. The Whare Paku, linen and dry room with reception and administration was introduced directly behind the Whare nui for easy access between the surrounding programs.

Design of the Whare Kai began during iteration 3.

The intention of the design was to compliment with the Wharenui design. A series of design sketches sought to create a design that was light in form, whose footprint integrated naturally with surroundings and allowed internal open space for up to 400 people seated. This enquiry led to a cultural tectonic arrangement of the structural forms in natural Gluelam timber with the cantilevered tops of the columns carved into poupou. To compliment the lightness of the form inspiration from the korowai (cloak) was used for the creation of the roof in draped form. By use of a post and beam pivoting point allows for the structure to adapt to the varied angles of the roof. The footprint allowed for outdoor dining with a large commercial kitchen at one end with servicing unloading zone and rubbish collection.
Outcomes

As a result of ongoing discussions with the research reference group and supervisors the following issues were highlighted. It was observed that when viewing the Marae from the main road approach the eastern site car park visually dominated the vista leaving the Whare nui significantly obscured. Views of to the Whare Nui were further challenged by the whare nui location facing south east along with the protrusion of one of the Business whare wings. The Whare nui south east orientation meant that the Mahau (Porch) was in shade from 12pm onward. This was problematic for our Pakeke kaumatua and kuia.

The Whare paku and administration’s location behind the Whare nui appeared condensed with the programs design conflicting with Whare Nui aesthetically.

5.4 Iteration 04 – Finalised master plan
Finalised Architectural program

| B1 | Whare Nui – Hui, Tangi and celebration + Sleeping for 100 people |
| B2 | Waharoa (gathering place), Main entry to Marae |
| B3 | Marae reception and administration located in left wing of Whare Tapere |
| B4 | Whare Tapere (Performance and Arts/crafts) + External main pathway to Waharoa |
| B5 | Whare Kai and Commercial Kitchen |
| B6 | Whare Kai or Conference space + Open Marama space between buildings |
| B7 | Whare Paku (Ablutions with shower/mattress store + Dry rm and Care taker rm) |
| B8 | Pakeke Kainga (x2 4 storey Apartment blocks with Marama tower space) |
| B9 | Kohanga Reo (Ages 0-6 years old) + Car parking for drop off and collection |
| B10 | Business and community Hub complex |
| B11 | Marae Atea + Ngati Star navigation compass + Manuhiri Shelter |
| B12 | Atea (outdoor) Weekend market space |
| B13 | Eastern car park with dedicated recycling, rubbish and loading zones |
| B14 | Exterior Hangi pits with seating |
| B15 | Cultivation area for existing Kumara and Harakeke (flax) to south east corner |

The following amendments were made to the master plan in response to the outcomes raised from the third major Master planning iteration.

It was felt that the position and size of the Atea at the centre of the Marae was appropriate for its intended use. The Whare nui however was rotated from its south easterly axis to a north easterly aspect to take advantage of all day sun on the Mahau. Along this north easterly access the Manuhiri path was relocated giving direct access to the Waharoa from Savill drive. The Whare nui now faces towards Hikurangi Te maunga in Rarotonga from where Ngati Porou originally took the name for their Maunga on the East coast.

Resulting from the Whare nui new north easterly aspect concern were raised by the reference group over the location of the whare kai in relation to the Whare nui. The concern was based on Tikanga as one should not be able to view the whare kai from the Mahau of the Whare nui given the Whare kai is noa. As a result of the raised concern the whare kai was relocated to the south east and its design reconfigured to a more gentle curved shape flanking the right side of the Whare nui with the Pakeke Kainga remaining on the left side.
Consequently the business/community whare was relocated to the north western corner of the site. It can be noted that this relocation dramatically improved the amount of daylight and passive solar gain opportunities to this whare. The building envelop was flipped over to fit into the new location and the design altered to include improved access points into the building with a private courtyard opening out towards Savill Drive. An atrium was designed into the building form to allow further daylight into the 3 storied building.

The Reference group were satisfied with the type, size and placement of the programs and general circulation around the Marae site. The focus then turned towards development of the internal requirements of the various whare. Note Harakeke and hangi pits were included into the Marae site design.
5.5 Marae Car Parking

5 zones have been allocated for car parking in and around Hamo Te Rangi Marae site. A dual ramped vehicle access way from Savill Drive leads to a podium level car park for employees and community/office workers. The second vehicle ramp is intended for service, medical access to both Pakeke Kainga village apartment blocks to the southern side of the boundary. This basement access lane is 6m at the widest point.

Ample street parking is available along Savill Drive with a dedicated bus parking lane close to the Waharoa (gateway). A landscaped 60 bay car park set 1m below existing ground level to the eastern boundary will provide access from Cleek rd extension with a dedicated pedestrian access path along the northern site boundary leading to the Waharoa (Gateway entrance) gathering point. The Marae Reception and Administration will be located directly adjacent to the Waharoa for public access and meeting appointments. Finally a dedicated 50 bay staff car parking, unloading zone and main recycling, rubbish collection access to be located from Cleeks Rd extension to the south east of the site in proximity to the Kauta.

6 Architectural Design Intent

6.1 Planning Aspirations

The outlining intent of the architectural proposition to the research called for a contemporary Maori architecture whose foundations grow out of a Ngati Tikanga, Matauranga based design and landscape strategy approach along with tapu, noa, tapouri and marama practice.

Early planning sessions with Ngati Porou Ki Tamaki reference group revealed the following aspirations for the proposed Marae. Good connection to Papatuanuku for each of the 5 key whare which include a Whare Nui, Whare Kai, whare Paku, Pakeke Kainga, Whare huhiuinga (business/community) and Whare Tapere for performances and arts.

Of the main five whare it is intended that for this research the Whare nui, Whare kai and Pakeke Kainga will be further resolved to a developed design level of completion in the research.
A key aspect to this architectural intent sought to explore various whare forms, locality and function including integration with the whenua and circulation between whare and around the Marae Atea as a proposition for the creation of a contemporary Marae in an urban environment.

### 6.2 A Maori World View toward design

A number of prime objectives were considered prior to design work being undertaken. It was decided with reference group input that any architectural objectives stem from a Maori world view. This approach led to an enquiry of the story of Rangi and Papa and in particular their son Tane (one of the principle 8 children) who’s conquest to separate his parents bound together in a dark void culminated in light and space. The story of Maui and the magic fishhook who fished up the North Island of New Zealand was also referred to. In addition observations of the anthropomorphic characteristics of Maori Wharenui were made through surveys and discussions at Te Ariuru (East coast), Te Noho Kotahitanga (Unitec) along with observations of Papakura pan urban Marae in South Auckland.
It is argued that Maori embellishment of whare is more than just mere decoration and that modernist architectures rejection of "peasant art" implied that Maori decoration was separate from Architecture; further Austin suggests that architecture must be considered as a cultural whole from landscape to structure to surface treatment. Brown in her book on Maori Architecture points out that between 1500 and 1800Ad a Unique Maori culture began to develop from which a distinct Maori Architecture emerged.

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7 Te Pua Ote Roku Wharenui design intent

7.1 Historical Narratives to design

When the Horouta canoe first landed at Whakatane, men were sent from Ohiwa harbour to the famous bird hunting grounds near Tokomaru bay called Te Pua Ote Roku. Design of the wharenui embodies a people travelling together and also a destination. The roof of the wharenui rises out of the waves with light filtering through the roof, trailing as a wake along the side of the building. The visitor enters through waves of light in suspended animation. The entrance rises as the prow of a canoe towards Hikurangi maunga in Rarotonga.
The Horouta waka brought the kumara from Hawaiki under the command of Paoa 800 years ago. At least five major land blocks in the area form a single contiguous set making up a once prolific hunting ground spanning over 10,000ha. Each land-block is named after the various parts of a bird-snar in the Ngati Porou dialect. The name also occurs in Tainui and wananga teachings on both sides (make relevant to the design or cut).

Of the North Island state this was the name of an original hunting ground possibly in the Tahitian group.

A survey of the Marae floor plan of Te Noho Kotahitanga wharenui at Unitec was used on a comparative basis for establishing the internal floor area. It is intended that the area shall be 25m long internally with external walls tapering in from 15m wide at the mahau down to 12m wide at the tuarongo (rear wall). A concealed rear door for fire egress and mattress storage shall be located on the whare Kai side of the rear wall.
7.2 Anthropomorphic Design

The Whare Nui for Ngati Porou ki Tamaki is a most sacred Taonga (treasure). Iwi and hapu are nourished by our Atua who are anthropomorphically embodied in the Wharenui through ancient architectural practice. The primary parts of the Atua’s body represented in the architecture are listed here;

<table>
<thead>
<tr>
<th>Part</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maihi</td>
<td>Arms spread out in welcome to all</td>
</tr>
<tr>
<td>Raparapa</td>
<td>Arms spread out in welcome to all</td>
</tr>
<tr>
<td>Tekoteko</td>
<td>located at the base of the Maihi</td>
</tr>
<tr>
<td>Tahuhu</td>
<td>located at the apex of the Maihi on the front of the Marae</td>
</tr>
<tr>
<td>Heke</td>
<td>Continuous internal ridge beam in the form of a carved Heke</td>
</tr>
<tr>
<td>Amo</td>
<td>Internal rafters</td>
</tr>
<tr>
<td>Poutokomanawa</td>
<td>Internally carved uprights either side of the Maihi</td>
</tr>
<tr>
<td>Poupou</td>
<td>Internally carved uprights either side of the Maihi</td>
</tr>
</tbody>
</table>

Ancestors represented in whakairo (carved style) poupou either side of the whare nui are linked to the Tahuhu (ridge beam) representing the Atua (primary ancestor) via the Heke (rafters). It is envisaged that the Ngati-reference group will nominate their Ancestors and position them within the whare nui based on ancient Ngati tikanga customs not covered here.

It was conceived from the outset of this research that Te Pua Ote Roku wharenui seek to architecturally resonate with traditional Maori Whare design while also reflecting a new contemporary Maori architectural expression. A kaupapa strategy for the whare design was formed to assist in the process.

1. Acknowledgement and integration of Kawa, Tikanga and Matauranga practices.
2. Progressive consultation and input from research reference group members.
3. Architectural survey of Te Noho Kotahitanga wharenui to gain understanding of traditional and contemporary marae construction techniques.
4. Research overview of traditional Maori Whakairo (carving), Kowhaiwhai (painted scroll ornamentation) and Tukutuku (ornamental lattice work).
5. Marae surveys undertaken at Papakura Pan Urban Marae, Te Noho Kotahitanga Marae (Unitec) and Te Ariuru Marae (East Coast)

In addition to conforming to wharenui Tikanga protocols other issues arising were concerned with the form of the whare, use of natural light and site line connections, opportunities to dwell in the whare throughout the day, a strategy for assisting Pakeke for sleeping in the wharenui on Ngati Pods (hydraulically raised bed platforms).

![Figure 40: Ancient Ngati Porou Marae Kowhaiwhai patterns replicated in water colour by Albert Percy Godber (1876-1949)](image)

7.3 Connecting with the whenua

A strong link between Ngati Porou Horouta waka and the existing Savill Drive kumara garden site emerged when the reference group noted that it was Horouta te waka which brought the precious kumara to Aotearoa. This relationship served as a catalyst for the wharenui design to acknowledge the historical link between Horouta waka and the whenua. It was envisaged to capture the movement of Horouta te waka as its bow rises up at the same time exposing the hoe (paddles) in the Architecture.

Early design iteration investigated the notion of the wharenui emerging from the whenua at a continuous angle however this proved problematic as the internal space appeared as a cave at the back of the wharenui with a low roof and side walls which tapered away to nothing at the back wall.

Resulting from these shortcomings the wharenui design was amended during iteration 3 whereby the roofs form rather than angling would instead gradually curve in an arch upwards starting at the back wall (lowest height) rising steadily to the Maihi (barge boards) at the highest point.

In order to accommodate the desired 80-100 people sleeping in the Wharenui it was felt necessary to taper the Whare foot print thereby increasing open space to the front half of the Wharenui (15m). This decision again impacted directly on the roof design though it can be argued that the tapered roof footprint with the arched ridge line gave the whare an organic shape which integrated with the surrounding whenua while architecturally contrasting appropriately against the backdrop of the Whare Kai and Pakeke Kainga.

7.4 Heke Design

The organic shaped roof provided the perfect canvas to evoke a contemporary architectural response. Continuing on the theme of the waka by the exposing of the paddles again provided the perfect catalyst needed. Arranging the heke on an obtuse triangular roof grid and mirrored each
side of the tahuhu sought to convey a sense of suspended animation in the heke like paddlers rowing in tight unison together through water. It was intended that the triangular roof skylights convey the wake left by the paddle at the end of the stroke.

### 7.5 Natural Light study

Early consideration was given to the restricted use of natural daylight as a means to opening up the wharenui thereby creating a greater level of transparency for viewing into and out of the wharenui. A series of digital models were conceived to study possible locations of the use of glass in the whare. Resulting from this exercise it was felt that glass could be placed between selected Poupou (carved panels) on external walls and between selected heke on the roof.

![Figure 41: Futuna chapel – Hastings (1954-56) by Architectural designer John Scott: Image: Mike White](image)

The next phase of the design research looked into controlling the daylight. Following a survey of John Scott’s use of coloured Perspex glass in Futuna chapel (1954-56) located in Hastings it was decided to use coloured etched glass. In selecting the glass colours, consideration of the natural surrounding environment in East Mangere was made and a selected pallet of colours ensued. These colours would also be used on the whare Kai, Kauta (kitchen) and Whare Tapere.

<table>
<thead>
<tr>
<th>Colour</th>
<th>Meaning</th>
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</thead>
<tbody>
<tr>
<td>Green</td>
<td>Tane</td>
</tr>
<tr>
<td>Purple</td>
<td>Ngati Porou colour</td>
</tr>
<tr>
<td>Yellow</td>
<td>Tama nui te ra</td>
</tr>
<tr>
<td>Red</td>
<td>Papatuanuku</td>
</tr>
<tr>
<td>Blue</td>
<td>Ranginui</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Environment</th>
<th>Colour</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kumara</td>
<td>Purple</td>
</tr>
<tr>
<td>Sun</td>
<td>Yellow</td>
</tr>
<tr>
<td>Enriched soil of Mangere</td>
<td>Red</td>
</tr>
<tr>
<td>Sky</td>
<td>Blue</td>
</tr>
</tbody>
</table>

The coloured glass window panels will convey selected imagery through etching onto the panels thereby linking to traditional tukutuku within the whare in a contemporary manner.

In order to maintain Tikanga practice there shall be no glass installed within 7 meters of the rear back wall as this is a darkened space for remembering those who have gone before us.

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45 Jacob Scott (personal communication). Jacob confirmed that the coloured windows are Perspex.
For controlling daylight in the roof of the whare use of dual shade screen ply panels was considered. Research of selected Ngati Porou kowhaiwhai patterns was undertaken for potential use in dual ply panelling to be suspended beneath the wedged shaped roof skylights located between exposed heke to the inside face of the wharenui. The design intent is for the dual shade screening panels to be operated (manoeuvred) as required to reduce the amount of daylight through the skylights. It is further envisaged that the light passing through carved panels will cast kowhaiwhai shadows onto the floor of the wharenui through out the day. (Refer Appendix 5)

In order to assist the whare for nourishing of whanau and manuhiri throughout the day and evening, deep cushioned dwelling/seating spaces will be installed between the Poupou inside the wharenui with coloured tukutuku glazing recessed back 500mm to the outside wall. These spaces provide intimate restful dwelling spaces.

Research into improving opportunities for Pakeke to sleep more comfortably in the wharenui was considered. In response the Ngati Pod bed platform was conceived whereby a single bed platform hydraulically driven rises up 450mm from floor level onto which a mattress is supplied. Throughout the day the Ngati Pod returns flush with the floor.

Imaginative use of solar powered fibre optics will create a subtle lit glow of the Marae in the evenings to evoke the Mauri (essence) of Te Pua Ota Roku whare nui.
8 Whare Kai Design Intent

The name Te Pua ote Roku anchors the Whare Kai to ancient tribal narratives.\textsuperscript{46}

The design takes inspiration from the Narrative of the famous Ngati Porou haka, Ruaumoko, performed by the 28th Maori Battalion at Waitangi in 1940 which was lead by Apirana Ngata and seeks to re-frame this story through use of tectonic expression of the timber structure. A further narrative is explored through the traditional korowai cloak which provides warmth and health. The intended shape of the roof form seeks to replicate a floating korowai delicately draped over structural timber framing with generous north facing daylight and solar gain with natural ventilation and green roof for collecting grey water for the kumara gardens located next to the whare kai. A speaker system is available for formal occasions with a stage for speaker elevation when needed for visual connection within the wharekai.

\textsuperscript{46} Barry Soutar – personal communication.
Figure 45: Sir Apirana Ngata at Waitangi 1940 with 28th Battalion performing the Haka.

A green roof in the shape of a korowai (Maori cloak) draped over the people to keep them warm in the wairua of their Tupuna. The brief was for the whare kai to host up to 400+ seated but be able to divide off for hosting conferences when needed.
It was decided to split the whare kai into two, with a transitional 7m wide ‘Marama light space’ exhibition in the middle that could be opened and or closed to allow for flexibility. Large bi fold doors allow for indoor-outdoor extension, with main access via the Northern elevation.

The Marama exhibition space between the conference and whare Kai is positioned to take maximum advantage of all day sun light and passive solar gain through thermal mass on to concrete floors and to allow natural site lines to important geographical features of the area. The floor layout is designed to allow for direct eye contact with all people in the whare.

### 8.1 Façade treatment

The Whare kai structure is in exposed timber. The structural columns and beams will operate from a single pivoting point thereby enabling structural support of the organic shaped green roof. Additional decorative columns will provide additional support while providing a suitable substrate for timber louvers to assist in reducing solar gain during summer months. Rain water is harvested...
from the roof and used for grey water to feed plants and gardens. The north facing sun and rain screen is provided to assist in reducing solar gain in summer and rain in winter months. Taniko patterns incorporated in costume sashes worn by Ngati Porou ki Tamaki Kapa haka group, Te Hokowhitu Atu kapa haka team from Tokomaru Bay and other Ngati Porou groups are incorporated within the exterior textural language for the Marae.

9 Kauta (kitchen) design intent

Pō! Pō! E tangi ana Tama ki te kai māna!
Waiho me tiki ake ki te Pou-a-hao-kai, Hei ā mai te pakake ki uta rā
Hei waiū mō Tama!
Kia mauria mai e tō tipuna, e Uenuku!
Whakarongo! Ko te kūmara ko Pari-nui-te-ra.
Ka hikimata te tapuae o Tangaroa,
Ka whomata te tapuae o Tangaroa.
Tangaroa! Ka haruru!

Baby! Potiki! The boy is crying for food!
Let it be fetched from the pile of netted seafood, And the whale be driven ashore
As mother’s food to make milk for the boy!
Let it be brought by your ancestor, the rainbow-god Uenuku!
Listen! The kumara is from the Great Cliffs of the Sun
The footstep of the sea-god Tangaroa is begun,
The foot-stamping ritual honouring Tangaroa is performed.
Tangaroa! The steps resound!

This excerpt from the oriori “Po Po” celebrates the arrival of the kumara from Hawaiki to Ngati Porou on the waka Horouta48.

The local ancient kumara gardens of Mangere create a strong connection with NP and local together cultures through the long association with Kumara. The Kitchen design seeks to celebrate this tradition and link between tangata whenua and Ngati Porou.

The inspired koru shape spire speaks of the unending connection between Man, Whenua and Kai while the subtle use of colours in the glass reflects the many natural tones of nature imbued in all aspects of Maori culture. It is intended that the stories of Kumara and other traditional and modern foods be etched into the glass thereby creating an opaque transparency for privacy and reduced solar gain to the north face cladding.

The Kauta is strategically located with dedicated internal access to the wharekai. Direct external service access via the east car park is available with location of rubbish, recycling and convenient unloading zone. It is intended for two hangi pits to be located to the rear corner (south east) in close proximity to the Kauta. It is envisaged that the kitchen will provide daily Kai needs to the Pakeke Kainga in addition to the whare kai and conferences.

47 (Refer figure 8)

Figure 48: Tongan Gardner on site at Savill Drive East Mangere harvesting the Kumara. Image by S.Hutana May 2011
10 Pakeke Kainga Village Design Intent

Figure 49: Pakeke Kainga – Early Iteration 1 Model

10.1 A Kainga for our Pakeke

Based on 2006 Auckland census data it is apparent that NPKT suffers a high exodus of Pakeke aged 65 years old and over from Auckland back to the coast. This age group are the carriers of the culture and in particular the unique Te Reo-Ngati dialect. As a consequence of this census data and discussions with the NPKT, it was decided to integrate two four-storey apartment buildings for Pakeke.

Figure 50: Pakeke Kainga – Iteration 2 - Façade modular cladding + spatial planning + canopy and column design testing

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The Kainga will consist of two four storey apartment buildings comprised of three “living” floors with x12 two bedroom apartments per floor. The fourth level will comprise a basement 3m below existing ground level, dedicated for communal laundry; medical clinic, games and reading room and whanau sleepovers. A further dedicated 6m wide outdoor communal space with vegetable and rose gardens with access to tenant basement car parking will be provided facing north. All floors to be accessed via lifts and stairs with a single formal access bridge centrally located between the apartments within an enclosed feature glazed Marama space for easy direct access to the community, Marae Atea space. Doors to be access coded for tenant access only safety.

Figure 51: Pakeke Kainga Front Elevation with section through Kohanga reo and basement tenant/staff parking. Atuas (structural columns tectonically expressed as Atua)

Figure 52: Pakeke Kainga village typical floor plan sketch study showing Marama enclosure + link bridge between whare
10.2 Sustainable design solutions

Figure 53: Pakeke Kainga Whare sustainability concepts

Structural columns along the south face of the two Pakeke apartments overlooking East Mangere will incorporate poupou dedicated to Atua and Ngati Porou Tupuna:

1. Maui Tikiti a Taranga (male)
2. Murirangawhenua (female)
3. Ruamoko (m)
4. Hineraumaukuuku (f)
5. Tangaroa (m)
6. Hineruru (f)
7. Tinirau (m)
8. Paikea (m)
9. Whakataupotiki (m)
10. Irawhaaki (m)
11. Houkuu (f)
12. Taikehu (m)
13. Hinetakawhiti (f)
14. Hinenuipepo (f)
15. Tama-i-waho (m)
16. Matukutangotango (f)

These will be carved by Toihoukura under the direction of Derek Lardelli.

A number of challenges arose through the design stages of the apartments. In the early stages of the design the intent was to have 4 levels of living apartments and x1 podium level to cater for x48 two
bedroom units. This proved problematic due to excessive heights of the apartments which adversely impacted on the relationship to the whenua and cut off urban site lines to the surrounding living environment.

In order to mitigate these issues the fourth storey was removed and the podium level lowered down 3 meters thereby connecting the apartments into the whenua. The lowered podium created a further benefit through creation of a dedicated 6m wide out door lower court to the north side of the build for maximum daylight. The inclusion of the court resulted in a 6m setback from the edge of the whenua to the north facing apartments which in turn created a sense of privacy for the Pakeke with secure access to the apartments via a fully enclosed bridge leading to two lifts and stairs to each level of the three living levels and lower communal floor with outside courtyard.

![Figure 54: Pakeke Kainga sectional cutaway view with covered main access ramp + Upper and lower canopies shown](image)

### 10.3 Strategies for Climate Comfort

As part of the Matauranga design strategy to sustainability, a series of innovations were utilised in an attempt to achieve year round climatic comfort for the Pakeke and whanau residents. The north face opens to allow for controlled daylight, thermal gain and natural ventilation. Decks, kitchenettes and stairs were added to the façade in vertical columns of varied width and depth. The stacking affect created deep soffits to each level which assist to mitigate solar gain in summer and rain in winter. The second strategy used to assist with regulating climate comfort of the whare included a glass and timber morphed shaped canopy running the full length of the apartments and extending out 6m to cover the lower outdoor court. The canopy will be covered with glass applied thin layered amorphous solar panels.

The canopy’s design seeks to acknowledge the Atua Tane who separated his parents Rangi and Papa. The structural columns tectonic treatment to reflect the trunks of trees attempts to
enlighten the viewer to the story of Tane with the canopy design based on the Tane tree canopy, which serves to protect against the wind, sun and rain.

11 Business Hub

Figure 55: Business Hub footprint in the form of Maui as he fishes up the North Island.

Inspiration for the design of the Business hub came through a series of journal sketches that sought to explore an organic architectural form with close connection to whenua. Discussions with the reference group highlighted a desire for a contemporary hub that could include space for future expansion of community, education and business initiatives. This brief acknowledged the need for a large multi-storey building or a series of buildings. This proved problematic due to the effect one large or three separate buildings would pose on the amenity of the Marae and living environment.
Enquiry into Maui was made after viewing one of Cliff Whiting carved murals of Tawhirimatea. Of interest was the contrast of Tawhirimatea with sharp edges contending with his children the wind, storms and clouds sent against his brothers for separating their parents Rangi and Papa. This served as inspiration for the architectural design of the Business hub. Maui is anthropomorphically expressed in the shape of the large multi level curve linear structure which symbolically expresses Maui’s body tension as he fishes up the north island.

During the third iteration various whare were relocated due to the centralising of the Marae Atea. The business hub was relocated to the northern west part of the site facing Savill drive. This proved problematic due to the raised topography. To integrate the business hub, the podium level was lowered 1m into the whenua. The revised podium floor height also matched the external circulation path and Kohanga reo floor level.

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However bridges would now be required to access the various entry points into the hub. 50% of the business hub is suspended above the ground on columns providing ample opportunities for covered dwelling spaces and circulation. A primary benefit of this is extended to the Kohanga reo outdoor space which can be utilised for shade in summer and winter.

The three wings of the building were incrementally reconfigured to acknowledge the relocation and inclusion of a central atrium between the wings for increased daylight. An extended podium opens towards Savill drive.

The external façade of the business hub is based on a 1200x1200mm cultural geometric base pattern with reflective glazing to mimic surroundings and timber cladding panels configured into NP taniko patterns. A selection of NP taniko patterns are list here;

- poutama (striving upwards)
- patikitiki (flounder)
- Roimata (tear)
- Kaokao (bend or side of the ribs)\(^\text{51}\)

\(^\text{51}\) See appendix 9 for larger list of pattern types
12 Whare Tapere

The position of the external walls of the Whare Tapere are aligned to the star navigation cultural grid which works ideally for this building as the kapa haka group practices and performances are facing directly to the Marae Atea and are viewable through Hamo te Rang Marae. The buildings spatial arrangements are a direct response to the functional needs of the space.

The left wing contains a reception closest to the waharoa, shared with an Administration and toilet/kitchen facilities. The centre open plan space generously caters for NP KT kapa haka group with indoor out door flow both to the north acknowledging Savill drive and to the south facing towards the Marae Atea, Wharenui, wharekai and Pakeke Kainga. The right wing services craft programs and Te Reo language classes. Opportunity was taken to extend out an external wall and massed up materially to act as NP 28th Maori Battalion wall of remembrance.

The buildings three parts nestled into the whenua in a semi irregular manner seek to reflect the intended purpose of creativity in a sense of fun and exploration for young and old through careful use of muted timber cladding and block work with a continued theme of coloured etched glass with green roof and other active sustainable strategies employed in all the whare where practical.

![Figure 59: Whare Tapere Floor plan layout with reception and Administration](image-url)
13 Whare Paku

Figure 61: Whare Paku (Ablutions) floor play out plan
Figure 62: Proposed Ngati Porou 28th Battalion war memorial wall with Poutama step motif. Wall connected to the Whare Tapere

Figure 63: Proposed outdoor marama exhibition space located between Whare Kai and overflow/conference whare
Kohanga Reo

Figure 64: Kohanga Reo + outdoor/covered court

Figure 65: Kohanga Reo with basement car park below shown
14 Materials and textures

Inquiry of a select range of traditional Marae architectural crafts was undertaken for inclusion in the design of the various Whare as a means to achieving a common textural language throughout the Marae.

![Figure 66: Early Tessellation panel study with recessed motif](image)

Determining where and how to engage with traditional Maori crafts such as Whakairo, tukutuku kowhaiwhai and taniko has been an exciting challenge of whether to emulate on existing designs, enhance new design ideas and processes or keep it minimal. Jacob argues that Maori designers are struggling to transition from traditional to contemporary Maori architecture and art, suggesting they are stuck in an emulation mode of thinking and creating based on what they know of their ancestors achievements. Scott calls this dilemma a memory image emulation whereby designers are overcome by the technical prowess of our Tupuna. He states one plausible reason for memory image emulation stems from the fact that Cultures like to build on their traditions and so default to their memory images, locked up in a look instead of developing new images to meet changing times.  

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To assist in the process by which traditional architectural crafts should be developed for use in the design of the various whare at Hamo te Rangi Marae it was decided to spend two days dwelling at Te Noho Kotahitanga Marae at Unitec Auckland. It was hoped that time spent at the wharenui would assist to clarify how to engage with Maori craft/s to focus design development. However the outcome of this time spent though beneficial in other related areas did not lead to the expected results due to emulation overload! Essentially it was too hard to think beyond the Wharenui.

Inspiration did however arise soon after the site visit, while viewing a photograph of Ngati Porou ki Tamaki kapa haka group during a performance (refer figure 4). The Taniko geometric shapes presented on their sash were visually stimulating. This observation led to an enquiry of Taniko geometric base patterns.
"It is all exciting when you feel what is being done is a continuation of that forever thing from the past. To be relevant in one’s own time is all I can hope I can be. Any job at any time represents a solution for that moment only, based on criteria applying then. Solutions vary but the aesthetic problem is the constant that keeps me going - without it there would be no point in operating"  

Figure 69: Modular and textural panel study

From a distance, Whakairo and kowhaiwhai design on the wharenui at Te Ariuru Marae (figure two) morph together to create an integrated whole. Close up another layer of detail emerges. It was my intention to explore this effect in different ways within different parts of the marae.

A dominant feature of present day Maori performing costumes is the use of geometrical patterns, traditionally in red, black and white in taniko head bands, belts, bandoliers, and bodices. Mead suggests there are two style traditions in taniko weaving, Pre Classical and Classical style traditions. The Pre classic style, which ended around 1770, comprises elaborate geometrical arrangements. A variation on the pre-classic, squared meander, geometric shape as named by Roth will be used on the various Marae whare.

A modularised cultural façade grid is planned for selected whare, as a means to providing a rich textural language throughout the Marae. The next phase of the enquiry led to determining an

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53 Ibid. (John Scott)
48.
55 Mead states that there no known reference to which iwi the pre classical squared meander pattern design comes form
appropriate panel size. A series of digital clay models were created with different panel size modules to help determine an appropriate panel size. The outcome led to a 1200x1200mm panel size being selected due to repeating floor to floor heights of 3600mm. The selected panel size enabled taniko geometric patterning of either cladding or glazing panels to be used together. The 1200x1200mm panel proved the most appropriate module size when viewed from distances of 50m, 100m and 200m. Use of colours and individual taniko patterning onto select whare panels are to be used as a means for generating a finer grained textural language for close up viewing.

Modular cultural façade grids were used on the following Whare within Hamo Te Rangi;

Pakeke Kainga village apartments. North face only - 1200x1200mm precast and glazed panels with additional 600x600mm timber and glazed panels configured to Taniko geometric patterns running vertically for stair wells with aluminium composite panel cladding to be used elsewhere.

Kohanga reo: Entire façade - 1200x1200mm panels of precast and glass configured to taniko geometric patterns.

Whare Kai: North face only (outer sun and rain screens) - 600x600mm panels of timber and coloured glass configured to linear taniko geometric patterns.

Business hub complex: The entire façade based on 1200x1200mm panels of timber panelling and glazed panels configured to taniko geometric patterns

Further enquiry of modular grid patterning was made for use on the north facing Pakeke Kainga canopy. An arrow shaped sub frame pattern was selected for its iterative appeal and tree canopy-like configuration. The canopy grid was morphed to mimic a tree canopy and the columns designed to resemble tall trunks of Tane Mahuta.
15 Conclusion

The proposal for Hamo Te Rangi Marae endeavours to fulfil needs and aspirations of urban Maori through the provision of a Maori cultural environment that nourishes and sustains whanau, hapu and tribal identities. The proposal and processes involved in its development have been informed by discussions with groups and individuals from both tangata whenua and Ngati Porou. This project is contextualised through reference to selected case studies, local and historical precedents for Maori social and cultural development.

The final design is overtly Maori. It acknowledges geographical and cultural contexts, historical narratives, Atua, Tupuna and Maori design elements within its overall conceptualisation and design.

The final outcome exceeded my expectations. Each building has distinct aesthetic characteristics that meet functional needs, but they also work together as a cohesive whole. The proposal will enhance its local urban environment through providing a mixture of social amenities.

Some of the original ideas, including anthropomorphic forms developed for some of the original sketches, were either lost or compromised in the process of consultation. But some of these initial ideas still represent what I consider to be exciting opportunities to develop in the future.

A decision to minimise reference of individual hapu within the marae design at one stage was based upon advice from NPKT. Subsequent discussions with whanau enhanced my level of understanding about the interdependent historical nature of the relationships between whanau, hapu and iwi. Acknowledgement of connections between people is an enduring Maori value. Incorporating knowledge from my own whanau and creating space and opportunities for acknowledgement of hapu and whanau within the overall proposal has enhanced the richness and quality of the final proposal. This would require further detailed research and development should the proposal be realised. Whether or not the project is eventually realised is dependant on funding beyond my control.

The project also involved two months of research into virtual architecture, which did not become incorporated into the final design. This remains, however, an area of personal interest for further research and investigation.

Through establishing personal connections and engaging with whanau, hapu and iwi representatives in this project, I have deepened my own sense of Maori identity, and understanding of knowledge and practices pertaining to my own hapu and iwi traditions.

A Maori definition or conceptualisation of architecture has to incorporate social, environmental, and spiritual dimensions. For designers and architects to engage with Maori communities in culturally appropriate, meaningful ways, they must engage with Maori histories, narratives, values and traditions of thinking linking people to specific places, and to each other. Building trust and confidence in relationships with Maori clients is dependent upon this level of engagement.

Ma te whaia te pua, o te atua e piringa mo tatau.
16 Appendices 1

Papakura Marae Field notes April 2011
Discussion had with Judee Flavell, Tony K,

- A DVD recording of the Papakura Wananga held in May 2011 at Papakura Marae to hear from the visionaries and builders of the Marae and it came to be is available upon request from S.Hutana

- Audio taped recording of discussions that took place on the Marae are available upon request.

Papakura marae on Hunua rd Papakura was built over 10 years with the whare kai completed first in the mid 1980,s and the wharenui completed in the early nineties. A well sized atea space is located between the wharenui and car park with a sheltered Manuhiri seating to the left of the Marae. A large whare kai angles away to the right of from the marae thereby increasing the atea space and creating a second atea to the right side of the wharenui and wharekai which by its locality acts a wind break to the prevailing south westerly wind. Covered side access to the marae reception located to the side/rear of the Marae.

A service access is located to adjacent side of the whare kai. A multi staffed Marae community medical clinic is located to front of the Marae site adjacent to the car park. Additional community facilities are positioned adjacent to the Marae with two separate buildings dedicated to management, admin, community used facilities. The Marae has use of the public reserve directly align to the eastern boundary. The large reserve has a disused clubrooms and large open fields used/hired for midsized public events.

The formal marae is based on a traditional marae layout and is very active within the community whose existing core arrangement of Whare nui, whare Kai and whare puku building programs Papakura Marae is a prime example of a pan urban Marae who have within 20yrs outgrown the existing facilities.
Papakura Marae Field notes June 2011

Opened in 1990

**Health**
Whare Kai – first whare to be constructed in 1985
Health centre (te here hoeorah), CCM (CRONIC CARE MANAGEMENT), specialist services, pharmacy.
Gout clinic, anti natal,
Whitiki maurea

**Whanau/Social services (in the back top right)**
Family start
Teen parenting
Kai toku whanau
Early years service hub.
Hapu tanga ora
Community councillor
Te kooti o rangi tahi (youth court) fort nightly

**Crafts**
Korowai class
Te Reo

**Marae Formal Occasions**
Tangi, hui, celebration, unveiling, weddings, reunions

**TE whare o te aroha (other three health services are here)**
Tamariki ora,
Health promotions
Outreach immunisation

**Management**
Reception
Admin
Office
Finance management
17 Appendices 2

Te Noho Kotahitanga wharenui and Poupou

Audio iphone recording of discussions with Andy Pivac senior carpenter on Te Noho Kotahitanga Marae are available upon request.

Intent

Research in consultation with Dr Lyonel Grant be made into virtual technology as a proposition for the placement of select poupou in virtual space around the waharoa as a means to generate points of interest for the attraction of Manuhiri to view via smart phones from beyond the Atea. It was intended to test the research on one of the poupou within Te Noho Kotahitanga wharenui by virtually replicating the poupou through augmented reality thus enabling a permanent virtual GPS location onto the verge of the Marae Atea within Unitec.

Introduction

Master Carver and sculpture Dr Lyonel Grant gave permission for research on the Wharenui and a single poupou within Unitec Te Noho Kotahitanga Marae under a specific set of conditions. Research of a single poupou could only be undertaken if the research could clearly establish a link to a nominated single poupou within my whanau Te Ariuru Marae. An Amo was substituted due to no poupou in the whanau Marae. The following research steps were undertaken;

Stage 1

A Hui was held at Te Ariuru Marae in Gisborne where kuia Aunty Marg and Aunty Mary shared their knowledge of the Wharenui and the carved Amo. A site survey was undertaken with photos taken. During this phase a site survey of Te Noho Kotahitanga was also undertaken. This resulted in the creation of 3D digital model of the Wharenui to assist in understand how the Marae was constructed. Further discussions about the methodologies employed during the construction phase were held with Master carpenter Andy Pivac. The gathered research was compiled and submitted to Dr. Grant for review and approval.

Dr Grant gave permission to proceed to stage 2 with instructions to spend some time with the whare then find a maximum of x5 poupou that could whakapapa to the Poupou (Amo) of my Marae. Of these five if found, I was then instructed to spend further time in the whare until one of the five would reveal itself.

Stage 2

Two weeks were spent on and off at the Whare and a number of discussions were held with Marae Manager Papa Hoe. X5 poupou were found that could whakapapa to the Amo of the whanau Marae. This information was submitted to Papa Hoe who assisted to confirm the relationships of the 5 poupou and affirmed Dr Grant’s instruction to proceed to wait and see which one would resonate the loudest.

Stage 3
Over a two day period many hours were spent dwelling in the whare and Mahau alone contemplating, listening, and watching the shadows stretch until the Mauri of Sir Apirana and Princess Te Puea poupou spoke through their composition, whakairo, and ancestral association to the research. The finding was submitted initially to Papa Hoe who again affirmed the Poupou selection.

In a discussion held with Dr Grant at the marae. He outlined the significance and diverse contribution felt in Tamaki Makaurau of Sir Apirana Ngata and Princess Te Puea which inspired him to join the two onto a single Poupou as a way to pay tribute to the contributions made from two complete opposite approaches. Ngata with the pen and politics and Te Puea through her hands on led approach. Andy Pivac shared in a discussion at Unitec that this particular Poupou aligned well to Unitec broad educational spectrum which offers everything from Trades through to Masters Level Qualifications.

Sir Apirana Ngata and Princess Te Puea were leading figures in the regeneration of Marae in the East coast and Waikato regions respectively which culminated in their unified contributions on Mahinarangi Marae at Turangawaewae.

The nominated Poupou was submitted in person to Dr. Grant along with the humblest request to proceed on to the next stage of creating a virtual 3D poupou to serve as a part of the intended research.

It must to be stated here that as a lead up to the envisaged stage 4, separate research into a range of virtual technologies was being undertaken into, how to capture, store and view objects in the round in 3D, virtual architecture and augmented reality technology. This is covered in following case studies.

Outcome

The results of the research proved problematic as Dr Grant concluded that in his view the specific architectural research and intended test model poupou were not adequately aligned. After careful consideration of the points presented Dr Grant denied permission for the Ngata/Te Puea poupou to be virtually recorded in the round. However Dr Grant did approve for the research on the poupou including a photo and the construction model to be included in the research.

Conclusion

It is suggested that virtualisation of isolated parts of Maori architecture alone does not integrate well with physical architectural intentions. However it can be argued that further research into virtual Maori architecture is warranted.

The Ngata and Te Puea Poupou in Te Noho Kotahitanga assisted in centring the research.
Beyond the Atea

Beyond the atea is a transitional space between the car park and the atea typically occupied by a pavement, grassed berm with a boundary fence and waharoa (gateway) onto the marae atea.

It can be argued that for many New Zealanders this transition space is problematic due to individual’s choice that says it’s not my world. A popular world view argues that we are all New Zealanders but try and describe one? Some argue that there is neither this nor a that. Andy suggests that we are a or a that based on our cultural makeup which makes us unique and therein lies the cultural tension present in urban environments.

At what level are they talking? If my world view is particular to me, then am I considered in some eyes as a New Zealander, then cannot I consider myself a Maori? A popular world view argues that we are all New Zealanders but try and describe one, some argue that there is neither this or a that yet the reality is that we are a this or a that. Thus the cultural tension remains in New Zealand between Maori and Non Maori.

Part of the architectural proposition seeks to bridge these cultural tensions which exist beyond the atea through the legitimate extension of the living ancestor (koruru) manifest in the wharenui architecture through augmented reality architecture (ARA) as his virtual finger nails (poupou) in the pathway across the front of the Atea.

It was envisaged that the ARA (pathway) create points of interest beyond the atea with the intention of encouraging participants to enquire further beyond the atea by forming an ara that leads either to the waharoa (gateway) or to the kiosk information centre located to the front side of the marae site. The augmented reality architecture can be viewed from any iphone or android phone with GPS capabilities or via ARA glasses available from the kiosk. It is intended that the ara will continue once inside the Marae where ARA and sculptures will be strategically located throughout the marae.
Virtual Architecture and Augmented reality

The research sought to record a single selected poupou in the round using a 3D camera. Stage one of the researches has been initially sanctioned by Dr Lyonel Grant master sculpture and carver of Te Noho Kotahitanga at Unitec with subsequent stages to follow upon Dr Grant’s approval at each stage.

Part of the intended architectural proposition argues for the inclusion of augmented reality technology which will seek to bring cultures together through the intervention of real and virtual architecture beyond the atea (ceremonial out door space) of the intended Marae while aligning to Maori design principles of Tikanga, Tapu and Noa.

It is envisaged that the virtual architecture represent the symbolic finger nails extending from the Raparapa (bargeboard) which are an extension of the manifested living creator embodied in the Wharenui (meeting house)

The design intent seeks to redefine the experience by which people visit the Marae through creation of a dedicated space beyond and or around the main Atea for public to interact with virtual architectural space through augmented reality.

Design thoughts

Vision: Create ara (pathway) for people to travel. The Path taken to each poupou acknowledges a significant historic event undertaken in the area over past 700 years. Ironically ara also forms an acronym for Augmented reality architecture.

It is envisaged for x3 virtual Poupou (vertical columns or other) to be located either side of the open Atea space. Through careful selection of Poupou locations allows for public interaction with ARA (Augmented reality architecture)

Virtual and Augmented Reality

Field notes 30 March 20011

Subject: Augmented reality
Virtual layer Hosting firm: Virtual Tours
Contact: Chris
Location: New York
Virtual Art + Architecture viewing phone app: Called Layers (available free from www.itunes.com) At time of research app. to be used with iphone.
Idea:

“Revealing the hidden” through virtual replication which would then allow selected Poupou to be exhibited beyond the walls of the Whareniu onto the edge of the Marae Atea for creating points of interest through virtual architecture while acknowledging tikanga protocols on the Marae. That the architecture seek to draw in those people who may have never visited a Marae by creating points of interest beyond the Atea through virtual architecture

Architectural Intent:

To raise points of interest in Maori architecture through public virtual slices of Marae forms exhibited as sculptural forms in selected sites around Unitec campus. Further exploration could be expanded to interest points in the CBD as way of regenerating specific interest in Art and Architecture through hosting virtual augmented reality technology.

Investigating augmented reality led to contact with Virtual art in the USA. The firm specialises in Virtual art installations using Google Earth layering. The technology allows a person armed with a smart phone which has inbuilt GPS to view virtual art installations at a disclosed location. To view the virtual forms the viewer needs to download the free layers phone app. Once at the site simply activate the app pointing the phone at the space to reveal the Virtual augmented reality sculpture at the GPS location specified.

Chris stated that it could be possible to not only view but walk inside virtual architecture at the hosted location. He attested to having walked under a virtual sculpture viewing it in the round! No further specifics were revealed.

At the time this research was undertaken there was no virtual sites being hosted in New Zealand.

Outcomes

Chris from Virtual tours USA agreed to work with the research with the intent of hosting a virtual Poupou via Virtual tours into Google Earth for viewing via preloaded Layers app on a smart phone such as iphone or iPad. Chris offered further if paid to come to Unitec New Zealand and host workshops on the technology and its application while assisting on the virtual research further. This offer was politely declined due to cost restrictions.

Te Noho Kotahitanga – Field notes

Discussions with Dr Lyonel Grant (chief carver) and Andy Pivac (chief carpenter) March 2011

Lyonel’s carved poupou of Ngata and Te Puea side by side acknowledges the blending of those two worlds coming together from different spectrums. Princess Te Puea worked with her hands and Ngata with his political academic abilities. The carver brings them together in an institute which prides itself on the fact that they do academic level PHD through to trade level training and yet Unitec brings this together on a very level footing.

This poupou (internal structural columns) represents the coming together of applied trades and academic. In their own lives one said do it this way with the shovel and the other with the pen.
This embodies what Unitec is about, the coming together of two worlds from Architecture to plumbing. In the whare the Tupuna (ancestors) of all cultures are depicted on the back wall with blank faces and no defining features. They are the ones who passed through leaving us here today and we are the only evidence that they passed this way, so any culture can stand in the Unitec Marae and whakapapa to their Tupuna from their respective countries, regions.

Unitec are proud of the Marae, very proud. Some people see it as an integral part of their place in the institute; other have not and never will visit the marae as it has no connection for them.

Research Reference Group – Field notes from first Hui (meeting) 15.March 2011

A meeting was held with Barry Soutar, president of Ngati Porou and Wyne Osborne from M.U.M.A to outline the intent of the Research reference group. Discussion held as to what the future needs of an urban marae might hold for the 13000+ Ngati Porou Tamaki tribe.
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Glass and Light

Some time ago my wife and I visited the Louvre museum in Paris. This Museum boasts at its heart a massive glazed pyramid atrium which punctuates above and below ground level allowing natural light to permeate into the museum while in the evenings the tip of the pyramid illuminates the public outdoor square like an exposed diamond in the ground.

A local comparison of a micro level occurs when New Zealand green stone is observed with a backdrop of natural light. The green gem illuminates vibrantly.

It is envisaged that the glass design of the intended whare (buildings) will stem from the following core ideas.

Glass and its many attributes offer excellent benefits as a building element. It can be argued that few buildings architecturally venture beyond variants of conventional vertical glazing systems in New Zealand with the exception of the NZi building in Auckland’s CBD which does adequately attempt to push glass technology beyond the predictable humdrum of design and build glazed facades.

The proposition seeks to investigate new ways of utilising glass with steel and timber that will enhance user/observer experience. The envisaged design will look to mimic selected naturalistic gem forms through the use of glass in the following ways.

- Organic shaped and or angular (faceted in XY and Z directions) glazed cladding
- Replication of greenstone colouring and texture within a glazed framing system
- Structural spider fixings and structural support systems
- Glazing which spans from above to below grassed ground level with landscaped sculptures
- Selected coloured opaque (white frosted or sim.) glazed facades
- Sustainable glazing system
- All intended external/internal glazed building elements (walls, floors, roofs) to exceed min. internal/external climatic, seismic, acoustic, thermal rigours through innovative systems as used on the NZI building facades in central Auckland.

One such architectural precedent pushing the use of glass is Steve Holl’s Nelson Atkins Museum of Art Extension in Kansas city USA. In his words the extension occurs through five new lenses forming new spaces, new viewpoints and new angles of vision. From the movement of the body through landscapes and the free movement threaded between light gathering lenses of the new extension new experience will be created.

It can be argued that Steven Holl’s lenses (buildings) form vertical walls which react with the rolling landscape and appeared placed instead of integrated. It is envisaged that the intended design of various wharenui (big buildings) act as organic shaped semi translucent gems growing out of a morphogenic relationship with the whenua (earth) and augmented reality architecture resulting in architectural gems integrated into place and space for people to move in and next to with delight.

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57 K. Frampton, Steven Holl Architect (Phaidon Press, 2007).
In his book Parallax, Steve Holl describes parallax as the change in the arrangement of surfaces that define space as a result of the change in the position of the viewer – is transformed when the movement axes leave the horizontal dimension. Vertical or oblique movements through urban space multiply our experiences\textsuperscript{58}. The research will seek to incorporate Maori design principles of Rangi (sky) and Papa (Earth) within the “inner cave space” provided by Tane (Forrest) allowing natural light to permeate throughout.

A second precedent that pushes the use of glass into new places is the glass pavilion, Toledo Museum of Art, Toledo, Ohio USA by Toshihiro Oki. Glass walls interact with the colours and characteristics of the surrounding environment, Glass wall are used both as physical separators and visual connectors, bring far to near, outside to inside providing a layering effect of the complexities of light\textsuperscript{59}. It can be argued that the glass pavilion like Steve Holl’s Lenses appear as man made machine extruded built forms.

When viewed in its context the forms appear as cold extrusion alien to its surroundings. My research seeks to address this cold, placed and man made façade through morphing the landscape and architecture to create Gems.

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Te Ariuru site and carving (Amo) survey: 11th Feb 2011. Tokomaru bay.

Hui held at Te Ariuru with Aunty Mary Chaffey, Aunty Maggie (Ryland), Mike, Steve Hutana and whanau of Kelly (wife) Kabali (12), Keira (10) and Rembrandt Hutana (7).

Figure 70: 3d view of Tokomaru bay (Google Earth). Te Ariuru marae on left half way along road (yellow). Hutana house located directly across the road on the ocean side in red.

Figure 71: Te Ao Tawarirangi site survey 11 FEB 2011
Site survey plan of Various Whare, urupa and Waka access within Te Ao Tawarirangi Marae.

Te Ao Tawarirangi Marae fine grained site survey.

Te Ao Tawarirangi Marae Survey of Te Ariuru whare wananga (1845)
Letter to Dr Lyonel Grant – Dated 23 March 2011

Submitted findings from attending whanau Hui and site survey at Te Ao Tawarirangi Marae with Aunty Maggie and Mary Chaffey as part of the Virtual Architecture for urban environments research.

Hi Lyonel

Thank you so much for the privilege to Record one of the precious Poupou at Te Noho Kotahitanga Marae and connect it to my Marae (Te Ariuru) in Tokomaru bay

As per your earlier instruction given I have recorded the meaning of one of the significant carvings from my Iwi Te Ariuru Marae and with your continued permission humbly request to now record a single poupou of Te Noho Kotahitanga Marae which relates to my Marae, Iwi/Hapu.

Te Marae Te Ariuru

Location: Situated in Tokomaru Bay, this ancient historic Marae (1845) is the most northern active marae of Te iwi O Te-Aitanga-a-Hauiti Iwi
Mohi Ruatapu scribe for Te Rawheoro Whare Wananga wrote that Horouta Waka was accompanied by 2 smaller waka which formed the hulls and were named Te Ariuru and Ariki-o-te-Tau. The writer records that the tohunga on Te Ariuru was Tonguing-o-te Rangi.

1845 a new wharenui was built by Hone Tau on completion he named it Te-Poho-o-Te Ao Tawarirangi.

The Carving

The Koruru - is Manutangirua (bird of two melodies) the split tongue identifies his dual role. He was lower in hierarchy than his wife Kehutikoparae the only child of the principle Porourangi line.

The Amo - Right Amo is Hingangaroa (founding carver) below him is Hauiti who through his prowess and conquest formed Te-Aitanga-a-Hauiti. It is this Carving I wish to tie to a related carving at Te noho Kotahitanga Marae to serve as part of my research.

The right Amo carving I refer underwent much needed restoration in the early 90’s by Cliff Whiting. My Aunty who was on site told me this story of the Amo. When Cliff arrived and saw the Amo he sat next to it and wrapped his arms around it remaining there alone for 4 hours. Aunty said it was profound. She also accounted that Cliff asked the whanau once the restoration of the Amo was completed at his curator workshop at Te Papa if the Amo could remain at Te Papa to bring blessing to the opening of Te Papa, He then reluctantly returned it, and such was the mana....
Figure 72: Te Ao Tawarirangi Amo of Te Ariuru Marae Amo representing Hingangaroa with Hauiti below him.

Figure 73: Te Ao Tawarirangi Amo of Te Ariuru Marae Manutangirua (bird of two melodies)
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Matauranga strategies

The following lists of Matauranga strategies were drawn on at various stages of the project research.

Figure 74: A Framework for the Development of Maori Knowledge by C. Royal 2002.

<table>
<thead>
<tr>
<th>Quality</th>
<th>Description</th>
<th>Purpose</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Matauranga</td>
<td>Knowledge and Understanding</td>
<td>Knowledge and understanding of history, people and environment</td>
<td>To promote and facilitate community understanding of local history and the importance of underlying cultural heritage and values</td>
</tr>
<tr>
<td>Whakapapa</td>
<td>Relationships and Connections</td>
<td>Understanding of the relationships and connections between people and place</td>
<td>To promote the relationships between people and place that reflect social connections with the environment</td>
</tr>
<tr>
<td>Whanaungaranga</td>
<td>Participation and Membership</td>
<td>Participation and membership in the community and social setting</td>
<td>To encourage community participation and pride through building and emphasising community identity</td>
</tr>
<tr>
<td>Kaupapa</td>
<td>Conservation and Protection</td>
<td>Protection of significant landscape features important to the local community</td>
<td>To support the protection of important environmental and cultural features through community ownership and collective responsibility</td>
</tr>
<tr>
<td>Rangatiratanga</td>
<td>Recognition and Acknowledgement</td>
<td>Recognition of community relationships with the surrounding environment</td>
<td>To promote the recognition and awareness of community relationships with natural environment and landscape</td>
</tr>
<tr>
<td>Takanga</td>
<td>Sustainable Management and Use</td>
<td>Sustainable use and management of resources important to the local community</td>
<td>To facilitate and promote the sustainable use of natural and physical resources</td>
</tr>
<tr>
<td>Mana Whakahaoare</td>
<td>Access and Admission</td>
<td>Community access to natural resources found within the community</td>
<td>To provide and encourage community access and sustainable use of natural and physical resources</td>
</tr>
</tbody>
</table>

Figure 75: Maori Settlement Design Qualities Chart

Suggested Identifier List of cultural differences for designers by Jacob Scott

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61 Rolleston, "Maori Perspectives of Urban Design, Preliminary Findings".

88
• structural
• abstraction / essence / gesture
• symbolism
• tapu/noa - positive negative / balance
• symbolism
• narrative - story telling
• community based / produced
• personification
• life giving/ Mauri
• characterisation
• environmental
• utilitarian
• curvilinear
• symmetrical
• asymmetrical
• repetition
• hard edged
• solid colouration
• texture
• technology conscious
• There is a community aspect to Maori art.
• Art is done on behalf of other people.
• Concepts of tapu and noa mean that the tradition underpinning our art is one which can take into account notions of good and bad and the balance between them, so that it is possible to have both included.
• The identification of moveable objects having a mauri so that there is personification in all things.
• Abstraction - making something new instead of trying to reproduce a reality that already exists.
• The notion that things can be hard or to juxtapose things that appears to be in conflict or not related.
• Allowing things to be themselves.
• The structure of things so that we concentrate on how things are joined and linked.
• And honesty, so that there is no attempt to cover up things.
• Innovation.

Jacob states that the list attempts to describe a cultural difference in terms of values and principles without concern for style or form or look.62

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Figure 76: Table of Tapu and Noa relationships for various rooms in a whare. Tapu refers to Sacred or prohibited. Noa refers to things or spaces that are common or profane.

Figure 77: Te Ao Maori chart.

<table>
<thead>
<tr>
<th>ATUA</th>
<th>REALM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Papatuanuku</td>
<td>Ko te Whaea</td>
</tr>
<tr>
<td>Ranginui</td>
<td>Skylapes including the night sky</td>
</tr>
<tr>
<td>Tāne Mahuta</td>
<td>Habitat, ecosystems, bio-diversity of flora and fauna</td>
</tr>
<tr>
<td>Tangaroa</td>
<td>He Wai - Water in its manifest forms - saline and freshwater, all resources and customary activities associated with Wai, includes foreshore and seaweed</td>
</tr>
<tr>
<td>Haumatioketeke</td>
<td>The wild productive landscape, capacity and potential for Tangata Whenua to access customary and contemporary resources. Flora and fauna actively monitored and sustainably managed.</td>
</tr>
<tr>
<td>Rongomātāne</td>
<td>The domesticated productive landscape, capacity and potential for Tangata Whenua to make productive use of their lands, balanced against the potential and constraints of the whenua.</td>
</tr>
<tr>
<td>Tawhirimatea</td>
<td>The ability to feel the sun, the wind and other elements</td>
</tr>
<tr>
<td>Rūāumoko</td>
<td>Geothermal energy</td>
</tr>
<tr>
<td>Tūmatauenga</td>
<td>Ko Ngā Tangata - The human domain, marae, housing, paparaenga, infrastructure, land use activities, employment</td>
</tr>
<tr>
<td>Taonga Tuku Iho</td>
<td>Cultural heritage - Te Rerā Māori, wahi tapu, sites of significance, Māyauranga Māori</td>
</tr>
</tbody>
</table>


Te whare tapa wha

The Māori philosophy toward health is based on a holistic health and wellness model called Te whare tapa wha. Developed by Dr. Mason Durie in 1992, it can be applied to any health issue, whether it involves physical or psychological well-being. Māori health is underpinned by four dimensions representing the basic beliefs of life: te taha hinengaro (psychological health), te taha wharau (spiritual health), te taha tinana (physical health) and te taha whānau (family health).

Te taha hinengaro - Psychological health

Te taha hinengaro refers to psychological health, with a focus on emotions. It is understood that the mind and body are inseparable, and that communication through emotions is important and more meaningful than the exchange of words. For example, someone who is unhappy in their career or work may manifest this in physical illness.

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Figure 78: Ethnic profile of Mangere Ward – Statistics New Zealand

Figure 79: Ngati Waiohua Rohe Map
Note; Puawaitanga o te Ringa pattern names and forms also used in Taniko design.

http://christchurchcitylibraries.com
Glossary

Maori

Hapu          Sub-tribe
Iwi           Principle tribe
Kaitiakitanga Guardianship, Stewardship
Kotahitanga  Unity, Collaboration, Community
Mana          Authority, Control, Prestige
Mana whakahaere Access, Admission
Matauranga   Knowledge, Expertise
Mauri         Life Principle, Innate life force
Ngati         Ngati Porou ki Tamaki or Ngati Porou
Rahui         Temporary Sanction
Rangatiratanga Autonomy
Tangata Whenua People of the Land
Taonga        Treasure, Prised
Tapu          Sacred, Sanction
Tikanga       Custom, Protocol, Process, Regulation
Whakapapa     Genealogy
Whanaungatanga Relationships

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Bibliography:


Porou, Te Runanga o Ngati. "Ngatiporou.Com." Te Runanga o Ngati Porou


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<td>TE ARIURU PA – TOKOMARU BAY with canoes drawn up on the foreshore and Endeavour moored offshore. The sketch is a copy of the lithograph based on an illustration from Bank’s diary 1769.</td>
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<td>2</td>
<td>TE AOTAWAIRANGI (1845), TE ARIURU MARAE, TOKOMARU BAY, also known as TE POHO O TE AO, named after the founding ancestress of TE WHANAU A TE AOTAWAIRANGI. MIKE, AUNTY MAGGIE (RYLAND), AUNTY MARY CHAFFEY (PEWHAIRANGI) and STEVE HUTANA. PHOTO BY KELLY HUTANA 2011.</td>
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<td>3</td>
<td>NANA TEO FAR LEFT PROMOTING MAORI CULTURE DURING ONE OF HER MANY WORLD OCEAN CRUISE VOYAGES IN THE 1960’S.</td>
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