



Report on  
**Social and Cultural Impact Assessment Report on  
Mangere Puhinui Rural Zone Review**

Prepared for  
**Makaurau Marae**

***i*** Integrated Research Solutions Limited  
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## Section One

# EXECUTIVE SUMMARY

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Changes to District Plans and specifically to zoning have potentially far-reaching consequences for local communities, and particularly for mana whenua groups, as the impact of such alterations may have cultural and spiritual dimensions, as well as socio-economic effects. Makaurau Marae already plays an active role in the local community, and is a vital stakeholder in any Council decisions regarding land usage in the area. This report explores the history of Maori and Taiwi in the area, and examines the possibilities for the people of Makaurau Marae in the present and in the future, and the role of partnerships and shared strategic development as part of this future.

Major infrastructure projects planned by the Council over the next several years have necessitated a review of the Manukau Operative District Plan, which in turn will have significant consequences for the members of the Makaurau Marae community. Recent and proposed changes include upgrading the Mangere Wastewater Treatment Plant, the opening of Oruarangi Creek, the Council's acquisition of Otataua Stonefields Historic Reserve, and perhaps most importantly in the context of social, cultural, and economic impacts, the construction of a proposed second runway at Auckland International Airport, and the re-zoning of surrounding land.

With changes of this magnitude, it is vital that mana whenua groups have a prominent voice in the decision-making process, and more importantly, are able to participate in that process in a way that the final decisions ultimately reflect the views and aspirations of the mana whenua groups and the wider community. A key component in this course of action is the application of the Treaty principles of partnership and participation, which need to be demonstrated in the relationship between the mana whenua group and the Council.

The principle objectives of this research can be divided into two categories: first, to conduct a broad-ranging historical audit of the area, encompassing Maori and Taiwi; and second, to evaluate the effects of the Council's proposed changes to the District Plan and zoning on those groups, and what opportunities can be identified for a partnership approach to these changes between these two stakeholder groups at both micro and macro levels.

One of the means of achieving this latter strategy is through establishing impact assessments. These can be used to review progress in the relationship, and to set in place concrete outcomes that are achievable, measurable, and reviewable.

Another area of examination that is undertaken in this study is a review of the relationship between the Council and Makaurau Marae. To assist in this process, an evaluation is conducted of the extent to which current systems either hinder or facilitate this relationship, and what possible improvements could be made.

The report concludes with a series of recommendations relating to the various areas of impact that have been assessed. In summary these are:

- The visual impact resulting from construction that will occur following the proposed zoning changes will need to take into account the potential effects on the views of the people of Makaurau Marae, and the extent to which these changes will affect the sense of community that exists in the area.
- Adverse changes in noise and pollution will need to be mitigated by the Council, and distinct noise corridors and noise screening may be necessary;

- The impact of increased volumes of traffic, and the accompanying extension of the roading network will require planning to ensure that the heavier traffic flows occur as far away from the Ihumatao kainga as possible, and that strategies are put in place to minimise the interference of heavier traffic flows with the day-to-day life of the kainga;
- The possible extension of residentially-zoned land would need to be done so in a manner that does not threaten the character of the kainga and the surrounding land. The principal requirement would be that the natural features of the area which are significant to the people of Makaurau Marae are not adversely affected by an extension of housing;
- The possible environmental effects of the proposed zoning changes will have to take into consideration traditional Maori understandings of what the environment is and how it needs to be protected. Active implementation of kaitiakitanga principles will also need to be demonstrated by the Council;
- Land access to sites of spiritual and cultural significance will have to be guaranteed, and beyond this, the routes to these sites and the nature of land usages around the sites will also need protection;
- The cultural impact of the proposed zoning changes will be considerable, and will need to be taken into consideration and acted on by the Council; and
- The relationship between tangata whenua and the Council could be impaired as a result of the re-zoning if the ensuing changes adversely affect the Ihumatao kainga. There is a need to maintain the present working relationship, which can best be achieved by the Council actively acknowledging and respecting tangata whenua rights in the area.

## Section Two

# REPORT STRUCTURE

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There are six main areas that are addressed in this report. The following sections are a summary of the content of each of these areas, and how they integrate with the overall aims of this report.

## 2.1 Regional Profile

The first stage constructs a profile of the region – focusing on the general demographical features, analysing ethnicity, employment, income, families, and household make-up, and other constituent elements of the local population.

## 2.2 Iwi/Hapu

This section investigates the history of Maori settlement in the area, and through this, explores the identity of the hapu and iwi which hold mana whenua status. The principal methods used to obtain this information were through interviews with relevant individuals in the area, and through surveying existing literature on the topic – especially that produced by the Waitangi Tribunal in the 1985 Manukau Claim.

Attached to this area of research is the identification of sites of particular cultural and/or natural significance, and those areas that have certain heritage values.

The next stage in this section builds a general profile of the socio-economic elements of the members of the Makaurau Marae and surrounding areas, and assesses some of their particular development issues and requirements.

The culmination of this phase of the research is the construction of a specific vision for the future, based on the aspirations of the group under consideration. This material forms the basis of the subsequent analysis of the needs of the hapu/iwi in relation to the Council's proposed changes to the District Plan.

## 2.3 Taiuiwi

This section initially provides an overview of the history of Taiuiwi settlement in the area, and then moves on to a profile of their current socio-political condition.

At this juncture, issues of cultural heritage sites of significance to Taiuiwi are also explored, and a cross-cultural matrix is used so as to be able to locate both similarities and areas of divergence in the views of both groups.

A similar evaluation to that in the hapu/iwi section is made of the plans for the future that Taiuiwi hold in this area. Again, the opportunity exists for contrasts and similarities to be profiled, thus allowing a comprehensive picture of the community's position in relation to the proposed changes to the District Plan.

## 2.4 Zone Review

The next aspect of the profile is a detailed review of the proposed changes to the District Plan being made by the Manukau City Council. This will provide a contextual setting for the subsequent analysis. This review is based primarily on data produced by the Council.

## 2.5 Impact Assessment

There are a variety of social and cultural impacts flowing from the Mangere Puhinui Rural Zone Review. These have been divided into the relevant categories in this section of the report, and are supported by local, national, and where relevant, international research.

## 2.6 Recommendations

The report concludes with a series of recommendations relating to:

- The partnership between the mana whenua groups and the Council;
- The methods of achieving the resource management and other objectives of the whanau;
- The key issues that are of concern to the people of Makaurau Marae; and
- Ways by which the proposed re-zoning can accommodate the cultural and social requirements of the affected tangata whenua group.

## Section Three

# REGIONAL PROFILE

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This section of the report deals primarily with the statistical profile of Manukau City, with a focus on social and economic indices as a means of constructing an overall profile of the City, using national comparisons where necessary to highlight distinct aspects of the area and its people.

## 3.1 Population

The area under the authority of the Manukau City Council amounts to 55,200 hectares, which is divided into seven administrative wards: Pakuranga, Clevedon, Mangere, Otara, Howick, Manurewa and Papatoetoe. The 2001 census results showed that the city had a population of 283,197 people. This represented a growth of over eleven per cent in the preceding five years, compared with a national population growth of just over three per cent for the same period.<sup>1</sup>

The census figures also revealed 27.0 per cent of people in Manukau City were under the age of 15 years, compared with 22.7 per cent for all of New Zealand, and that 8.3 per cent of people in Manukau City were aged 65 years and over compared with 12.1 per cent for all of New Zealand.<sup>2</sup>

## 3.2 Ethnicity

The following table shows the break-down of ethnicity in the region as at the 2001 census compared with New Zealand as a whole:

**Ethnic Groups – Total Responses**

	Manukau City	New Zealand
European	51.6%	80.1%
Maori	16.5%	14.7%
Pacific Peoples	26.9%	6.5%
Asian	15.1%	6.6%
Other	1.2%	0.7%

## 3.3 Income

The average median income for people in Manukau City is \$19,000 per annum, compared with a national average of \$18,500.

However, within the Auckland region, the median income for people in Manukau City is the lowest of the four city councils that comprise the region.

The following table shows the figures for income distribution in Manukau City in 2001:

**Income Distribution – Manukau City<sup>3</sup>**

<b>Income Range</b>	<b>Number of People</b>	<b>Percentage of People %</b>
Loss	324	0
Zero Income	507	1
\$1 - \$5,000	1,248	2
\$5,001 - \$10,000	1,701	2
\$10,001 - \$15,000	4,443	5
\$15,001 - \$20,000	3,930	5
\$20,001 - \$25,000	2,757	3
\$25,001 - \$30,000	4,797	6
\$30,001 - \$40,000	5,949	7
\$40,001 - \$50,000	6,162	7
\$50,001 - \$70,000	11,214	14
\$70,001 - \$100,000	9,651	12
\$100,001 or More	9,027	11
Not Stated	21,309	26
Total	83,019	100

### 3.4 Employment

In 2001, the unemployment rate in Manukau City, was 10.1 per cent, compared with 7.5 per cent for all of New Zealand. The most popular occupational group in Manukau City was Clerks at 17.4 per cent of those employed, whereas the most popular occupational group for New Zealand as a whole was in the Service category.

In the past two years, unemployment in Manukau City, along with most other parts of the country, has been in decline, although anecdotal evidence suggests that the fall in unemployment rates has been felt more unevenly in Manukau City than in other parts of the Auckland region.

The following table shows the figures for the categories of employment in Manukau City in 2001:

**Employment in Manukau City<sup>4</sup>**

<b>Employment Type</b>	<b>Number of People</b>	<b>Percentage of People %</b>
Paid Employee	92,946	79
Employer	6,087	5
Self-Employed and without Employees	11,382	10
Unpaid Family Worker	1,596	1
Not Stated	5,073	4
Total	117,084	100

### 3.5 Families

The following table shows the break-down of family types in the region as at the 2001 census compared with New Zealand as a whole:

**Family Structures**

	<b>Manukau City</b>	<b>New Zealand</b>
Couples with child(ren)	48.8%	42.1%
Couples without children	28.5%	39.0%
One parent with child(ren)	22.7%	18.9%

### 3.6 Households

The following statistics produced by Statistics New Zealand from the 2001 Census and the 2001 Household Expenditure Survey summarise some of the main features of households in Manukau City:

- The average household size in Manukau City was 3.3 people, compared with 2.7 for all of New Zealand;
- 94.7 percent of households in Manukau City had access to a telephone, compared with 96.3 percent for all of New Zealand;
- 39.4 percent of households in Manukau City had access to the internet, compared with 37.4 percent for all of New Zealand;
- 90.7 percent of households in Manukau City had access to a motor vehicle, compared with 89.9 percent for the whole of New Zealand;
- There were 83,019 households in Manukau City;

- For dwellings that were rented, the average weekly rent paid for permanent private dwellings in Manukau City was \$204, compared with \$174 for New Zealand as a whole;
- 65.3 percent of dwellings in Manukau City were owned with or without a mortgage, compared with 67.8 percent for all of New Zealand; and
- The total average annual spending for households in Manukau City was \$49,350 compared with \$43,682 for the whole of New Zealand.<sup>5</sup>

### 3.7 Industry

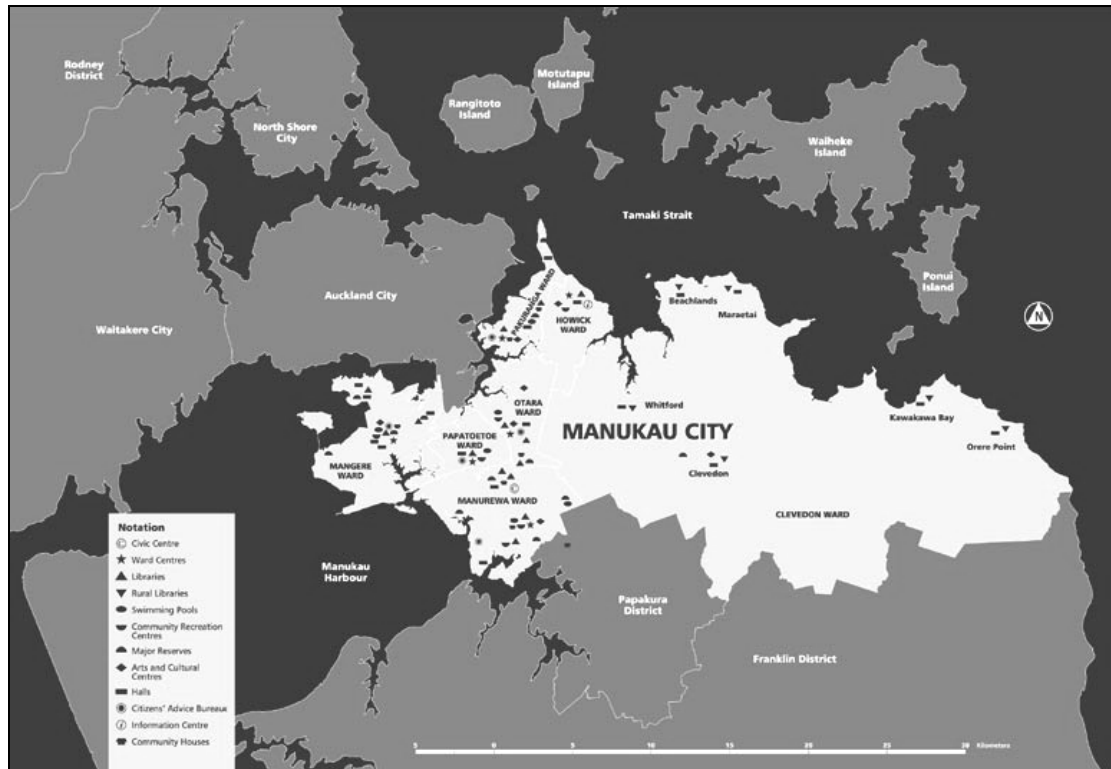
The following table shows the break-down of industry types in the region as at the 2001, and the employment statistics for each category:

**Employment in Industry – Manukau City<sup>6</sup>**

Industry Sector	Number of People	Percentage of People %
Agriculture, Forestry and Fishing	1,245	1
Mining	72	0
Manufacturing	22,209	19
Electricity, Gas and Water Supply	360	0
Construction	7,242	6
Wholesale Trade	10,800	9
Retail Trade	14,187	12
Accommodation, Cafes and Restaurants	4,461	4
Transport and Storage	6,876	6
Communication Services	1,848	2
Finance and Insurance	3,642	3
Property and Business Services	13,065	11
Government Administration and Defence	2,118	2
Education	7,695	7
Health and Community Services	7,455	6
Cultural and Recreational Services	2,076	2
Personal and other Services	3,915	3
Not Elsewhere Included	7,821	7
Total	117,084	100

### 3.8 Location

The following map shows the location of Manukau City and its position on the Auckland isthmus.



The Manukau City area is concentrated immediately to the south of the Otahuhu isthmus, the narrowest connection between Auckland City and the Northland region and the rest of the north island. At its narrowest, between the Otahuhu Creek arm of the Tamaki River (itself an estuarial arm of the Hauraki Gulf) in the east and the Mangere Inlet (an arm of the Manukau Harbour) to the west, the isthmus is only some 1500 metres across.

The area to the south of the isthmus contains the heart of Manukau, sprawled on either side of State Highways 1 and 20, the latter of which approaches from the west after crossing Mangere Bridge. The area known as Manukau central is located close to the junction of these two highways, some 20 kilometres southeast of the centre of Auckland city.

Considerable rural and semi-rural land to the east of Manukau central is also within the city's limits. This extends towards the Hunua Ranges close to the Firth of Thames, and takes in such communities as Clevedon and Maraetai.

Beyond Manukau to the south lie Papakura and the Franklin district, which are less urban but still part of the Auckland Region and to some extent regarded as an integral part of Auckland's urban area.

Auckland International Airport is located in Mangere, in the west of Manukau, close to the waters of the Manukau Harbour.<sup>7</sup>

The City is approximately 80% rural and 20% urban. Bounded by the Hauraki Gulf to the east and the Manukau Harbour to the west, Manukau has some 300 kilometres of coastline.

The City has around 7,500 hectares parks and reserves. Manukau enjoys 2148 hours of sunshine annually (national average 2000) and has an annual rainfall of 1157mm (national average 1000mm).

Most of Manukau's streams are small and threatened by rural and urban development activities including modification, the removal of riparian vegetation and pollution by sediments and waste. The Wairoa River in the rural Clevedon Ward is the City's largest freshwater body whilst the Puhinui, Pakuranga and Otara streams are major urban waterways. Significant stream restoration responses are being provided through Council's catchment management planning and water quality improvements, Parks Strategy, Flat Bush development policies and Wai Care and Parks volunteer programmes. The City's most significant environmental challenges arise from activities associated with rapid development, which require large land resources, intensive capital investment and gives limited time in which to respond to environmental impacts.<sup>8</sup>

### 3.9 Location

The significance of this data is that it provides a general summary of the setting in which the Ihumatao kainga is located. The Manukau community has a higher than average Maori population, lower average incomes than in other parts of Auckland, but higher than the national average, significantly higher unemployment, larger households, and a broad range of industry types. What is perhaps most significant about the kainga is that it has not been absorbed into the city in a way that would make it lose its identity. The Ihumatao community has had continuous settlement in the area for roughly a thousand years, and has maintained its identity and sense of culture throughout that period. This is what sets it apart from the rest of the Manukau community, and what makes it unique in any urban setting in the country.

## Section Four

# IWI/HAPU

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This section examines the history of Maori in the area of Manukau City. The significance of this history is that it establishes the evolution of the people who have mana whenua status in the area, and helps explain why the territory of Manukau City is of such cultural and spiritual importance to those mana whenua groups.

## 4.1 History

Maori have lived in the Auckland isthmus since around 850 AD. The original inhabitants, identified as Tamaki and Maruiwi, settled along parts of the northern shores of the Manukau Harbour in about 900 AD. Toi Kai Rakau and his people arrived later, about 950 AD, and intermarried with them. From there the Kawerau people formed to take the north-eastern area from the Manukau Heads to Karangahape, and Waiohua formed to take the area around Tamaki.<sup>9</sup>

There was a second surge of migration from around 1350 with the arrival of the Tainui waka in the Manukau Harbour. This waka was commanded by Hoturoa. He initially landed the waka on the east coast of the North Island, and then travelled along parts of the coast around Auckland looking for a possible way through to the east coast of the island.

Eventually, Hoturoa took his waka up the Tamaki Estuary and found a narrow strip of land separating what later became known as the Manukau and Waitemata harbours. Oral histories of this journey contain the account of the naming of the region which occurred while Hoturoa was crossing the isthmus. A number of birds were seen taking to flight as he and his crew moved across the land. Another account says that as the waka paddled down the harbour, its occupants heard what sounded like people calling out to them. Fearing a possible enemy hiding somewhere along the shore, Hoturoa sent an advance party of warriors to find out what was happening. On their return, they told Hoturoa 'He Manu kau noa iho' (they were only birds) in reference to the sound they had heard. From this response comes the name Manu kau, or Manukau.

The Tainui Waka stayed at Manukau for a while before moving south to Paraninihi at Taranaki, and from there to Kawhia, which was its final resting place. It is also possible that the ocean-going double-hulled waka was separated when exploring the inlets of the harbours of the North Island –to make them more manoeuvrable, and that there were actually two waka.<sup>10</sup>

The emergence of Te Waiohua occurred as members of the Tainui waka settled around the isthmus and began to intermarry with the people of Te Wai-o-Hua. Over the course of a few generations, the result of this amalgamation led to Tainui being recognised as the waka for the region.

The Waitangi Tribunal cited evidence of some of the early settlement in the eastern shores of the Manukau Harbour: 'For the Ngati Tamaoho people of Whatapaka marae on the eastern shores of the Manukau there is a special relationship with the harbour. They claim descent from Papaka, who is depicted on the maihi of their meeting house. Papaka, it is said, was put off the Tainui in the middle of the Manukau Harbour. He swam to the sand bar in the interior of the waters where he survived on the kai-moana or sea food of the harbour. In time Papaka

became half man and half crab. His children left the waters in the form of man and intermarried with the local people. Thus it was claimed, 'The Manukau not only belongs to us but we to it. We are a people begotton from within the depths of its waters'.<sup>11</sup> This evidence was used to support the long-standing links between the people of the area and the land and coast that they inhabited.

Around the end of the sixteenth century, the people inhabiting the Auckland isthmus became known as Te Waiohua, following the death of the paramount chief Hua Kaiwaka (the consumer of canoes/the terminator). At this time, Maori settlement in the Manukau area was concentrated on the eastern shores and land surrounding the harbour, such as Ihumatao, Maangere, Pukaki, Wiri, Papatoetoe, Manurewa, Otara and Papakura.

The region proved to be a prosperous one for their occupants, and soon started to attract other people to the area. This is one explanation as to how Tamaki acquired its extended name of Tamaki-makau-rau (Tamaki, the bride sought by a hundred lovers) – as an indication of the popularity and desirability of the region.

In the mid-eighteenth century Te Taou, a sub-tribe of Ngati Whatua of the Kaipara district, moved to occupy Tamaki and parts of the Manukau.<sup>12</sup>

Further intermarriage and co-habitation in the same area strengthened the bond between the two hapu. There was a definite political and military benefit to this union. When Nga Puhi invaded in 1822, Ngati Whatua provided assistance to the Waikato people when trying to fend off the Nga Puhi attack.

At the Waitangi Tribunal in 1985, evidence was presented of an agreement in 1834 whereby the people of Te Waiohua returned to their homes after the invasions under the protection of the Waikato confederation, Te Taou of Ngati Whatua giving lands at Awhitu and Mangere to Ngati Mahuta of central Waikato to secure their presence and protection.<sup>13</sup>

Despite the Nga Puhi conquests in the region, the northern iwi did not follow up their military victories with occupation, and the Manukau area continued to be occupied by the various Waikato hapu, together with the related Kawerau, Waiohua and Ngati Whatua tribes. There were also trade, visitations, and reciprocal rights between these hapu and the inland Waikato iwi – something that was maybe fortified as a result of the Nga Puhi raids in the 1820s. This accounts for the evidence presented to the Waitangi Tribunal in 1985 in which the Tainui boundaries were compared with aspects of a waka: 'The stern is at Manukau where Potatau presided, the prow at Mokau where Wetini sat, and in the middle is Maungatoatoa where Rewi Maniapoto stood'.<sup>14</sup>

Waikato, Kawerau, and Waiohua occupied the Manukau area in 1840. These tribes were the mana whenua groups in the Auckland region. From the mid-1840s, following the establishment of the country's capital in Auckland, Maori agriculture in Manukau boomed, serving export as well as local markets.

The next major wave of Maori migration that affected the area took place following the Second World War, when there was a major exodus of Maori from rural to urban areas. This was accelerated by the establishment of large industrial areas in the Manukau area, including the construction of an international airport, the opportunities for employment, and the provision of state housing. While 74% of Maori lived rurally immediately following World War Two, by 1966 the figure had changed dramatically with 62% of Maori living in major urban areas. Of the Auckland Maori, by the 1960s, 43% settled in Mangere, Otara and Papakura.<sup>15</sup>

## 4.2 Makaurau Marae Profile

Makaurau Marae is one of the northern most of the sixty-seven raupatu marae of Tainui. The Marae is a location of great historical and cultural significance for the Tainui people. The following map indicates its location in relation to the other marae affiliated to the Tainui waka.

The Makaurau marae is situated inland a short distance along the Oruarangi Creek which extended for over a mile into the country, and is approximately five kilometres from the Auckland International Airport. In the immediate vicinity there are approximately 68 houses with over 400 residents in the area. The majority of tangata whenua live outside of Makaurau Marae. Approximately two thirds of Makaurau Marae residents are children under the age of 18 years and less than five percent over the age of 60 years. The majority of residents are descendants of the original Te Waiohua inhabitants.



#### 4.2.1 Developments in the Makaurau Marae area

One of the important aspects the people of Makaurau Marae have had to contend with in recent decades has been the neighbouring sewerage treatment plant, and changes to the foreshore and seabed caused by a variety of factors associated with the growth of the city. In 2003, the National Centre for Aquatic Biodiversity and Biosecurity issued the following statement on how those affiliated with Makaurau Marae have been instrumental in efforts to preserve sources of kai moana in the rohe from the effects of growing urbanisation, and how NIWA intends to implement a series of proposals aimed at preserving this traditional cultural resource:

Over the past 40 years the people of Makaurau Marae, Ihumatao, in Mangere witnessed the disappearance of their traditional kai moana reef Nga Kuia e Toru. However, recent developments have changed the environment and renewed hope that the reef may soon return. NIWA's National Centre for Aquatic Biodiversity & Biosecurity is working with the marae to monitor the reef as it undergoes an 'ecological metamorphosis'.

Nga Kuia e Toru is in Manukau Harbour, off Puketutu Island, which originally had a deep marine channel around it. In the 1960s a series of huge sewage oxidation ponds was built around the island, creating a major obstacle for the tidal stream and a massive area of silting on the reef. At about the same time Pacific oysters began to flourish on the reef, possibly due to the change in water flow and quality. These oysters have continued to grow, covering the original reef so that only the very top is visible.

The removal of the walls around the oxidation ponds a year ago significantly affected the reef. For example, the steep cliffs of oyster beds are now being eroded by the fast tidal stream. This means that the reef may once again be visible, and should again support a more diverse community of plants and animals.

The importance of this new development was highlighted during a NIWA hui at Makaurau Marae. Here, kaumatua and others identified their urgent wish to document marine resources on Nga Kuia e Toru, so they could teach coastal marine biodiversity to future generations. NIWA scientists are now working with the marae to develop field guides and teaching tools. They have catalogued the species on the reef, identified all the large (over 10 mm) marine animals and plants, and photographed various specimens for a field guide with information about each species. They will also gather information on the number of different species present and their habitat. This will set up a base for future monitoring that could document changes in the animals and plants living on the reef.<sup>16</sup>

Efforts such as this to restore sources of kai moana are integral to the preservation of the character of the Ihumatao kainga. So, too, is the acknowledgement by the people of Makaurau Marae that the physical character of the extended kainga area, which stretches from the current boundary of the airport in the south, along the coast to the west, and north and east to the current urban limit constitute a critical element in this sense of character of the area and the identity of the people with it.

As for the Mangere-Puhinui region as a whole, the Council has provided the following description:

The Mangere-Puhinui rural area is situated at the western extremity of the City. The area is defined by the urban limits of the City to the east and north, and by

the Manukau Harbour to the west and south. The Mangere-Puhinui rural area is separated from the eastern and southeastern part of the rural area by the urban area of the City. This rural area is identified in the *Proposed Auckland Regional Policy Statement* as being outside of the Metropolitan Limits. A policy of the *Proposed Auckland Regional Policy Statement* is that urban development is permitted only within the metropolitan urban area as defined by the metropolitan urban limits. This policy seeks to achieve, amongst other things, the objectives of avoiding adverse effects on the environment and the effective and efficient use of natural and physical resources.... While the Mangere-Puhinui area lies outside the urban area, it does face considerable pressure for urbanisation. The area is broken up into relatively small pockets of rural lands which are each bordered by residential or business areas.

The area is significantly influenced by the presence of two large utility facilities, namely the Mangere Sewage Purification Works and the Auckland International Airport, both of these facilities are of regional significance and regional importance. A large area of land in farming use is set aside by Auckland International Airport Ltd by way of designations for future airport operations. Until such time as the land is needed for airport expansions, or if such expansion does not take place, it is essentially part of the continuum of rural lands in the vicinity.

Further rural lands to the north of the Auckland International Airport designations and adjoining the Oruarangi Creek are currently farmed and are partly encompassed by the designation for a proposed second runway. At the time the designated land is developed by Auckland International Airport the future of the area will need to be examined as the remaining land may not be viable or suitable for farming. The date of the establishment of the proposed second runway may be outside the life of this Plan. Uncertainties as to the timing and nature of the development to the north of that runway mean that if there is a need to address a new management strategy for these rural lands it may be accomplished by way of a Plan Change. Lands and waters in the Kirkbride Road area are designated by Water Care Services Ltd for the Mangere Wastewater Treatment Plant. Options for the disposal of wastes from the Auckland metropolitan area have been under consideration by Water Care Services, and may involve a significant alteration to the operations at Mangere with consequential changes to the land requirements of operations. The Mangere Wastewater Treatment Plant has adverse effects on the amenity values and environmental quality of the rural and urban area nearby. The anticipated outcome of the upgrading works is improvement of the environment around the Waste Water Treatment Plant.

A further major characteristic of the area is its proximity to the Manukau Harbour. Much of the area may be considered to be within the coastal environment, due to its proximity of the Manukau Harbour and its tributaries and the influence of the coast on the ecological, recreational, cultural and spiritual values and visual character of the area.

The patterns of land ownership and land activities, and the presence of features of ecological, heritage, cultural or spiritual significance vary throughout the area, as discussed in the following paragraphs. In the Kirkbride Road area the land is highly fragmented and is intensively farmed, largely in horticultural use. The Otuaataua area is in pastoral farming, with a large area containing archaeological sites which are protected under the Historic Places Act. The Pukaki Road area is rural in character, generally in horticultural use with Pukaki Lagoon being a

significant landscape feature with considerable spiritual significance to tangata whenua. The Pukaki area is a traditional settlement area for tangata whenua, with papakainga housing in the area being re-established in recent years. The Puhinui Peninsula is rural in character, being generally in horticultural and pastoral farming use. The Puhinui Reserve is a large area of public open space which protects the coastal and ecological values of the end of the Peninsula, in addition to providing an area for recreational opportunities. The Papatoetoe Cemetery and Crematorium located at the intersection of Puhinui Road with State Highway 20 is a notable activity with an open space character, and somewhat removed from the more sensitive coastal areas. The Puhinui Peninsula area as a whole, has come under considerable development pressure with the establishment of the Eastern Access route to the Auckland International Airport.<sup>17</sup>

### 4.3 Aspirations of Makaurau Marae for the Future

The following table outlines some of the culturally significant issues that the people of Makaurau Marae are placing an emphasis on as part of their aspirations for the future, and how these issues might be approached:

**Future Issues of Cultural Significance to the People of Makaurau Marae**

<b>Issue</b>	<b>Approach</b>	<b>Explanation</b>
<b>Te Reo Maori</b>	<i>Kohunga Reo and Kura Kaupapa Maori.</i>	Te Reo Maori is seen as a vital component in the preservation of the culture and history of the people of Makaurau Marae, and equally as an element for the development of young people in a way that helps them appreciate their background, culture, and even their identity.
<b>Conservation</b>	<i>Increased role of Marae in conservation issues.</i>	As part of the kaitiakitanga functions of the Marae, it is vital that there be a continued and improved level of consultation with local authorities to ensure that the conservation issues that are important to the Marae are heard at the City level, taken into account in planning, and reflected in policy and practice.
<b>Treaty of Waitangi</b>	<i>Recognition of the principles and provisions of the Treaty.</i>	The Treaty of Waitangi is recognised as one of the founding documents of the country, and is the covenant which binds iwi and the Crown in a shared relationship. One of the principal obligations which flows from this is for there to be evidence of partnership and participation in this relationship.
<b>Land Usage</b>	<i>Consultation and education about land usage issues.</i>	The people of Makaurau Marae have had a long and uninterrupted relationship with the surrounding land, and wish to maintain this relationship and ensure that successive generations are educated on its significance. Part of ensuring that the Marae can have a continued stake in decisions affecting the surrounding lands is to maintain and strengthen its presence at the relevant points within the local and regional authorities.

<b>Community Integration</b>	<i>Programmes and events to offer opportunities to Tauiwi to learn about local Maori culture and heritage.</i>	There is a perceived need for greater understanding and awareness of the different cultures in the area. At times, some Maori feel as though their relations with other groups, particularly local bodies, is a case of ‘us and them’, and this has the potential to inhibit effective working relations.
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## 4.4 Culturally Significant Sites

Throughout the area under consideration in this report, there are sites of considerable cultural, historical and spiritual significance to the people of Makaurau Marae. Most of these were not listed in the 1985 Manukau Report of the Waitangi Tribunal because they were not directly relevant to the Tribunal’s findings. One of the functions of this report has been to identify these sites and explain the type of significance they have for the people of Makaurau Marae.

The definition of cultural or historical importance has been derived from the Council’s own working definitions which describes such locations as:

- The site is known to be of particular significance to tangata whenua or other ethnic groups for its religious, mythological, spiritual or other symbolic significance;
- The site or feature is associated with the life or activities of a person, group, organisation, or institution that has made a significant contribution to Manukau or New Zealand; and
- The site or feature is associated with, and effectively illustrative of, broad patterns of cultural, social, political, military, economic or industrial history.<sup>18</sup>

There are various sites throughout the area that are of cultural or spiritual significance to the people of Makaurau Marae. However, as one Marae member put it, most of the details surrounding the purpose, location and significance of these sites is sacred knowledge, and to list them in a report would make it common knowledge, and therefore subject to common theft. For this reason, the specifics of the sites are not included in this report. However, at a general level, it can be mentioned that they include burial caves, middens, urupa, an ancient canoe landing, battle sites, and former sites of occupation and horticulture. One of these sacred sites is the Otutataua Stonefields which is protected under the Historic Places Trust (refer to section 6.3).

There is another layer of significance which also deserves attention. This is the area as a whole. The range of sites listed above need to be considered not just as individual locations, but also in a cumulative sense. Their close proximity adds to the cultural and spiritual significance of the area as a whole. Moreover, the area in which Makaurau Marae is located is one of the oldest continuously occupied Maori Kainga in the greater Auckland region. It also has a culturally autonomous character, and this continues to fortify the bond between the people of the marae and their physical surrounds.

In addition to this, consideration needs to be given to historical aspects of the kainga. Its strong association with Tainui ancestors (outlined in section 4.1 above) gives the land a significance that could suffer with the encroachment of commercial, industrial, or residential developments. The long history of involvement by significant ancestors on this land gives the territory a tapu nature. This is made even stronger by the fact that this land was part of the Crown’s raupatu – or confiscation – during the land wars in the 1860s, and was a place where blood was spilt in defence of the whenua. This makes the land even more tapu, and gives a

spiritual and cultural significance to it which transcends a site-specific approach to defining areas of importance.

## Section Five

# TAUIWI

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The presence of Tauwiwi (non-Maori) in Manukau is also an important aspect of the region's development, especially in the post-Second World War era, when the impact of Tauwiwi groups has been far more dramatic. This section considers not only some statistical and historical data relating to the Tauwiwi presence, but also contains some empirical data on the cultural and social aspirations of these groups.

## 5.1 Growth of Tauwiwi Presence

Into the early twentieth century, Manukau was predominantly an agricultural area. After the Second World War, however, there was substantial and rapid development of commercial and industrial centres in parts of the region. Accompanying these developments were the formation of suburbs for local workers, and the associated services of schools, hospitals and other related infrastructure.

Among some of the more distinct developments in the region were:

- The construction of the Southern Motorway in the 1950s, as a supplement and later an alternative to Great South Road;
- The establishment of the Mangere Sewage Treatment Plant in the 1960s;
- The construction of the Auckland International Airport, officially established in 1966;
- The implementation of a major state housing programme from the 1950s; and
- The establishment of major shopping centres, such as the most recent project at Botany Town Centre.

These initiatives contributed to a growth of the Tauwiwi population in the area following the Second World War. At present, as has been mentioned, the Tauwiwi population makes up 83.5 per cent of the total population of the city – a slightly lower figure than for the country as a whole.

In addition, the Manukau City Council has had an active policy of urban expansion, which has contributed to the influx of Tauwiwi into the region. The Mayor, Sir Barry Curtis, recently summed up the key component of this strategy:

‘It was clear decades ago that Auckland City and the North Shore had little land available for large-scale future housing development, but the east of the region, which is now Manukau City, did. That was clearly where the population and business growth would be, and that's exactly what happened. Putting in quality infrastructure was the point of difference of Manukau. The business community invested here because they had confidence that the necessary roading and other essential services would be there. Now, Manukau is the business powerhouse of the region’.<sup>19</sup>

Moreover, Manukau City is the favoured destination for the majority of immigrants who arrive in New Zealand. This has been a major factor in the city having the highest population growth rate of any city in the country.<sup>20</sup> However, this comparative dependence in immigration can lead to fluctuations. In August 2005, it was reported that while employment and commercial construction in Manukau continued to rise, overall economic growth fell in

that quarter. A report by the Manukau City Council's community and economic development unit showed that the city's growth rate dropped to 3.5 per cent in the year to March 2005. This figure compared to 5.8 per cent in the December year. The figures put Manukau below the national growth rate (4.2 per cent) for the first time since the year ending September 2003.<sup>21</sup>

The following table shows the figures for Taiwi populations in Manukau City in 2001:

**Taiwi Populations in Manukau City<sup>22</sup>**

Ward	Percentage of Taiwi %
Clevedon	92
Manurewa	72
Howick	97
Otara	79
Mangere	80
Pakuranga	94
Manukau City	84
Papatoetoe	82

The area under consideration in this report – Mangere – has the second lowest percentage of Taiwi in Manukau city.

## 5.2 Matrix of Cultural Values

With such an ethnically diverse community, it is difficult to determine precise commonalities in terms of shared aspirations. However, anecdotal evidence, based on a subjective and small sample, has produced the following data which can help to at least give some impression of the cultural (using the term in its broadest sense) values placed by Maori and Taiwi in the city. The sample size was fifteen, with five Pacific Island, five Asian and five Pakeha respondents interviewed over a two-week period in August 2005. Because of the relatively small sample size, the emphasis is on qualitative rather than quantitative data. The intention was not to produce any statistical data, but to provide a snapshot impression of some of the cultural issues that may be relevant to a broader sector in the community. Because of the restrictions of time and the qualitative nature of the research questions, a small sample size was used. This is consistent with sample sizes used for focus groups, and has no pretence of being a representative summary of all opinions held by people in the area.

The following table outlines some of the culturally significant issues that some Taiwi in Manukau City are placing an emphasis on as part of their aspirations for the future, and how these issues might be approached:

### Future Cultural Issues Significant to Tauwi in Manukau City

Issue	Explanation
<b>Tertiary Education</b>	At present, Manukau City is not served directly by a university – unlike Auckland and North Shore Cities. Consequently, there is a feeling that Manukau City may remain a less-educated region, with people having to travel outside to do higher-level tertiary training.
<b>Environment</b>	Most Tauwi questioned on the environment see some need for improvement of the coastal regions, and for significant improvement of some of the denser and older urban areas in the city.
<b>Local Employment</b>	Many of the respondents indicated that if there were more local employment opportunities, then this could improve the culture of the City and increase the sense of pride in the City. There were views expressed by some that Manukau City is the provider of labour to other parts of the Auckland region, but that there should be more employment opportunities within the city.
<b>Cultural Venues</b>	There was a clear delineation of opinion here among Tauwi respondents. Those of Pacific Island descent or origin saw churches as a major focus point for cultural gatherings and for cultural identity. For Asian respondents, there were some religious buildings and the use of local halls for special events with some cultural significance – such as weddings, religious festivals and so forth. For Pakeha respondents, there was no immediate sense of there being venues for cultural purposes, although when questioned, this group of respondents were uncertain what a specifically Pakeha cultural venue would be.
<b>Sport</b>	Involvement in sport, either as a player, spectator or administrator, was a pronounced issue of cultural importance to the respondents, although more so for Pacific Island and Pakeha than for Asian interviewees. Participation in sport was seen as a means of building loyalty to the local communities in Manukau City, and as an effective means of overcoming ethnic/racial prejudice.
<b>Places of Worship</b>	Some respondents indicated that the presence of churches, temples, and other places of worship in the region contributed to the cultural make-up of Manukau City. As with cultural venues in general, places of worship were where cultural expression – usually of fairly precise forms – could occur.

The following table combines the data in the Iwi/Hapu section of this report – specifically with the aspirations of the people of Makaurau Marae – and shows where it intersects with the cultural significance Tauwi place in the region.

### Future Cultural Issues Significant to People of Makaurau Marae and to Tauwi in Manukau City

Cultural issue important to people of Makaurau Marae	Potential area of commonality	Cultural issue important to Tauwi of Manukau City
<i>Te Reo Maori</i>	Both focus on the importance of education for current and future generations.	<i>Tertiary Education</i>
<i>Conservation</i>	The area of common concern here is well-established and there appears to be shared interests in general conservation issues.	<i>Environment</i>

<i>Land Usage</i>	Fostering local employment opportunities and protecting areas of local cultural importance are not mutually exclusive. Employment within Manukau City, and the growing characteristic of the city as being a desirable place to live could be enhanced if its distinct features are preserved.	<i>Local Employment</i>
<i>Treaty of Waitangi/ Community Integration</i>	Places of cultural expression are already well provided for in the City. However, the opportunity of shared cultural experience usually has some room for improvement. An acknowledgement of the principles of the Treaty, coupled with Treaty education, could be useful in achieving greater community integration.	<i>Cultural Venues/Places of Worship/ Sport</i>

What is evident from even a cursory survey of local opinions across various ethnic groups is that there is a distinct sense of cultural importance attached to living in Manukau City. Expectedly, this sense is far deeper among tangata whenua groups, but has been enhanced by the perceptions and values of other cultures living in the City.

## Section Six

# ZONE REVIEW

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The issue of the Zone Review is central to this report, and to the people of Makaurau Marae. This section effectively deals with this in two parts. Firstly, a brief outline of the Mangere Puhinui zone, then a background to some of the areas that may be affected by the zone review. The third part details the various aspects of the proposed changes.

## 6.1 The Mangere Puhinui Zone

The following summary is taken directly from the Council's proposal for the re-zoning, and summarises the Council's approach and the rationale behind the proposed changes:

Manukau City Council is currently undertaking a review of the Mangere Puhinui Rural zone contained in the Manukau Operative District Plan 2002 in the area to the north of Auckland International Airport. As part of this review Council is in the process of exploring options for the future development of this area.

According to the Council, a review of the Mangere Puhinui Rural zone is necessary as a result of major infrastructure projects planned for this area including; the upgrade of the Mangere Wastewater Treatment Plant, the associated reopening of Oruarangi Creek to tidal influence, Council's purchase of the Otutataua Stonefields Historic Reserve, the proposed second runway at Auckland International Airport and associated development. There is also continued development pressure on business land in Manukau particularly in proximity to Auckland International Airport.

The review relates to the Mangere Puhinui Rural zone in the area to the north of Auckland International Airport. The southern extent of the study area is defined by the Mangere Puhinui Rural Area underlying Designation 231 Auckland International Airport Land Use to the north of the boundary with the underlying Airport Zone. The eastern extent of the study area is George Bolt Memorial Drive to Oruarangi Creek in the north east. The western extent and northern extent is the Manukau Harbour and the Otutataua Stonefields Historic Reserve.

The study also includes two other isolated areas of the Mangere Puhinui Rural Zone further to the north. This area includes the site at 1 Oruarangi Road. The area between Ascot Road to the south, Greenwood Road to the west, Kirkbride Road to the east and Creamery Road to the north, but excludes the area beneath Designation 144B Wastewater Treatment Purposes and Odour Buffer Area.<sup>23</sup>

## 6.2 Background to the Airport

The Waitangi Tribunal has provided the following summary of the role of the Auckland International Airport in relation to the mana whenua groups in the affected areas:

The Auckland International Airport was cited as an example of the way recent major developments for Auckland have been proposed on or near to the last remaining pieces of Maori land. After hearing submissions on behalf of the

Auckland Regional Authority and the Civil Aviation Division of the Ministry of Transport, we are satisfied that the Mangere site was not chosen, as some thought, because some of the affected lands were Maori land and therefore easy to acquire. It appears that a number of other factors influenced the site decision made by Cabinet in 1955. By the same token there was no indication that Maori land was involved. No consideration was given to the fact that Maoris ought to be protected in the ownership of their land. We were referred to only one factor seen as an obstacle, namely 'that the area was high quality agricultural land (dairying).

The Auckland International Airport and its future extensions occupy a total area of about 1285 ha including reclaimed land on what was once a fishing bank. It is to the effect of the airport on Maori fishing that we now refer.

Auckland International Airport was a joint undertaking between the Crown and local government (the Auckland Regional Authority), the partnership being formalised in a deed of arrangement of 1966. The airport is now owned and managed by Auckland International Airport Limited (AIAL). AIAL is a publicly listed company. The Civil Aviation Division of the Ministry of Transport is still responsible for such things as monitoring the operation and control of the runways.

270.2 hectares of harbour land were vested in the Auckland Regional Authority for airport purposes in 1975. In addition to foreshore actually reclaimed, airport operations have resulted in restrictions being imposed on anchoring and fishing in an area surrounding the existing runway covering approximately 950 hectares. This includes banks and creeks traditionally fished by people of nearby Makaurau and Pukaki marae.

Anchorage and fishing restrictions were introduced as a result of a bird hazard. We were informed of the enormous damage that can be sustained through bird strikes, the unusually high degree of bird activity in the area, and the measures taken to combat the problem. Acting on the advice of the Wildlife Service of Internal Affairs, the Civil Aviation Division requested the Auckland Harbour Board to establish a prohibited anchorage zone in the harbour adjacent to the airport. By law 57 (a) was notified as a result in 1966. Further legislative action was seen to be necessary as fishermen continued to work the area although not anchoring. The Fisheries (General) Amendment Regulations of 1970 prohibited taking, possessing or conveying fish in the restricted area. This provision is now contained in the Fisheries (Manukau Harbour Prohibition) Notice 1983.

The Ministry of Transport regards the prohibition as an important aspect of its programme to reduce bird hazards. Fishing activity, and particularly gutting, attracts birds to the airport environs. In addition, the prohibition on public entry on the water provides a sufficient barrier to negate the need for extensive security fencing which would cost nearly \$0.5 million. It was pointed out that the prohibition restricts the activities of all members of the public within the specified area and not just the Maori people.

We could see immediately the need for stringent controls where lives and property are at risk. In formulating the policy, however, it was clear that no particular consideration had been given to the fact that the affected Karore and Oriori banks were old fishing grounds for the Makaurau and Pukaki people, that the prohibition on the conveyance of fish across the prohibited area prevented the Pukaki people from using their traditional access to the harbour along the Pukaki

inlet for fishing, and that Maori people have their own prohibition on gutting fish at sea.<sup>24</sup>

## 6.3 Background to Makaurau Marae and the Sewerage Works

In 1985, the Waitangi Tribunal also reported on the sewerage works and their impact on and relationship with mana whenua groups. The following extract is worth reproducing because it is one of the most concise statements on this matter:

At about the same time as the International Airport was proposed the then Auckland Metropolitan Drainage Board announced proposals for the disposal of Auckland's sewage and trade wastes to the Manukau Harbour using comprehensive oxidation ponds built over a substantial area of the harbour bed. This project was again to adjoin the little Maori land remaining in the area, this time adjacent to the Makaurau Marae.

We were told the creek was noted for its clear wide waters and white sand. It provided access to the harbour and swimming and recreation. It was also a bountiful source of seafood and was renowned for pipi and mullet. The marae people were able to obtain all their seafood from this one creek. Other tribes from Te Atatu visited there to gather. In addition the creek led to oyster and scallop beds on the reefs around Puketutu Island.

The sewage works and oxidation ponds were built across the oyster and scallop beds, the oxidation ponds extending to Puketutu Island itself. The treatment plant works and oxidation ponds occupy an area of approximately 720 ha. Oruarangi and Waitamakoia Creeks were closed and are now dry land. The people lost the benefit of a beautiful creek adjoining their marae, access to the harbour and the whole of their traditional seafood resource. They had also to suffer stench and midge nuisances.

It was claimed that the people were orally offered quick connection to the sewage system, private access to the harbour, and compensation of \$8,000. Thirty years after the works were commissioned the marae houses have only just been connected to the sewage system. Makaurau was one of the last places in Auckland to be connected. Access is limited and compensation has not been paid.

The Auckland Regional Authority was unable to confirm or deny that the specific promises had been made. It referred to the notes of a meeting in 1956 between the then Auckland Metropolitan Drainage Board and the Maori people where questions of compensation were raised. There is no record of a specific promise. The Authority referred also to a boat ramp from the oxidation pond restricted to use by local European and Maori owners. The claimants contend that they did not have access to it until one of them, a works employee, happened to obtain a key to the gate. They claimed the gate was used mainly by commercial fishermen.

We made enquiries into the payment of compensation. In 1960 certain of the Makaurau people engaged a private legal firm to file a compensation claim in the Maori Land Court. A claim was lodged in 1961. In 1962 the Maori Land Court's

jurisdiction to assess compensation was removed and the Maori Trustee was empowered to claim compensation on behalf of Maori owners, if asked. Thereafter the solicitors presumed that the Maori Trustee would pursue the matter. The Maori Trustee considered that he had not been formally approached and in any event, the Court still had jurisdiction in respect of claims filed before 1962. In the result no one did anything. In 1974 the Maori Land Court dismissed the 1961 application for want of prosecution.

We were told that the owners of European lands affected made compensation claims and that these were properly pursued and settled.

The Auckland Regional Authority has stated it will pay compensation provided there is some body properly able to settle the amount due. It would have no objection to the reinstatement of the claim in the Maori Land Court. For our part we do not consider settlement of compensation by the Maori Land Court would give any real satisfaction. In accordance with the legal scheme of things compensation is payable to the property owners who happen to adjoin the river or harbour for the losses sustained by them. There is no concept of providing compensation for a tribal or communal loss or the loss of enjoyment of communal facilities. In addition the law has never admitted that a section of Maori people could own a seafood resource, and the loss of that resource is not legally compensatable.

The Mangere Sewage Purification Works ranked high in the claimant's concerns. At paras 5.6 and 6.3.1 we noted how the Works destroyed the traditional harbour fishing grounds of the Makaurau marae and the Oruarangi creek that provided both seafood and harbour access. In addition, the largest input of plant nutrients to the Manukau undoubtedly comes from the works effluent.

The conditions for the discharge from the Works to the harbour were worked out in 1954. Briefly they are to treat sewage and industrial wastes from Metropolitan Auckland at a reasonable cost, with a minimum of nuisance to surrounding properties and without creating objectionable conditions in the receiving waters. They are not the specific conditions that one would expect in modern water right grants. The words used are too vague and inadequate as yardsticks for performance. We think there ought to be proper criteria. This discharge, along with any other existing use discharges that have not been the subject of a public inquiry, ought to be referred to the Regional Water Board to reformulate appropriate conditions.

In the meantime no claim to replace or abandon the works or the point of discharge was seriously pursued and there was certainly no evidence to support an alternative proposition. Most of the claimants appeared to accept the Works as a fact that had to be lived with. We felt there was a genuine concern to seek continual improvements and to treat the broad and general nature of the 1954 conditions as creating a social obligation to do that. But we still urge clearer and better conditions so that performance can be measured against minimum standards.

We were referred to a midge nuisance and strong smell that once caused serious concern. We are satisfied that that was due to operational problems that have now been resolved. Further problems may well present themselves due to unusual weather conditions or otherwise but we have no doubt the search for improvements will continue too.

An unexpected result of the substantial release of nitrogen nutrients to the harbour has been a better algae growth, more food for fish and the unusual growth of red seaweed (*gracilaria*) on the mudflats around the outfall.

The *gracilaria* growth has been bad and good. It is said to weigh down fishing nets, but according to the Auckland Regional Authority, the *gracilaria* is localised to the outfall area and save for prolonged gales does not spread to other parts of the harbour. It also has some good points. It binds fine sediments susceptible to disturbance thus decreasing the turbidity of the waters, it improves water quality by removing nutrients, and it produces high quality agar for which there is a world-wide demand. Harvesting for processing or export has potential and intensive mariculture in ponds seems practicable.<sup>25</sup>

## 6.4 Background to the Otuataua Stonefields

The Otuataua stonefields were purchased by the Manukau City Council in 1999, with assistance from the Auckland Regional Council, the Department of Conservation and the Lottery Grants Board, and were thereafter established as a reserve with a unique historical and cultural background. Originally, the stonefields were estimated to cover approximately 8000 hectares, but with the onset of widespread farming from the late nineteenth century, and rapid urbanisation from the 1950s, only approximately 200 hectares remained by the beginning of the 1990s. The Otuataua stonefields site comprises of 89 hectares of land – a little under half of the remaining stonefields area. The Stonefields themselves are derived from lava flows that erupted from Puketapapa (or Pukeiti) and Otuataua volcanic cones about 20,000 years ago.<sup>26</sup> The current site was part of the area settled by Maori when they first arrived in the region, and were a major area of agricultural activity until the wars of the early nineteenth century, when they were effectively abandoned.

According to one local researcher, ‘the Otuataua stonefields are of particular importance because they include a pa site on the Otuataua cone, and because descendants of the stonefields’ original Maori residents still live at the adjacent Makaurau Marae, while descendants of early Pakeha settlers remain on neighbouring farms. When [archaeologist] Rod Clough examined the stonefields’ gardens, he found stone formations up to 1,000 years old. The formations include dry stone walls, terraces, boundary markers, low-walled enclosures and pits...Clough also found garden plots for growing kumara, yams, hue (bottle gourd) and taro. Some plots had rock mounds constructed in them to absorb warmth from sunshine which stimulated the growth of hue vines which scrambled over them, and of other crops planted around the mounds. This practice of building mounds of stones added one month to the growing season, extending it from spring to mid-autumn. In the living areas, Rod Clough discovered the foundations of temporary huts (wharau) and of larger houses and cooking shelters. Paths and shell middens were also in evidence’.<sup>27</sup>

Pakeha involvement with the Otuataua stonefields began around the mid-1840s, probably in connection with missionary activity in the adjoining Ihumatao Mission Station, which was established in 1847. Increased Pakeha settlement occurred in the decades following the wars of the 1860s, and with it came more pressure to utilise the land.

The Director of Environmental Management at the Council observed that ‘The stonefields are the last of their kind in an urban environment. They can provide us with a history we can see for ourselves. A wonderful aspect of the Otuataua stonefields is not only its heritage significance, but that it’s part of quite a magnificent network of open space. This extends from Mangere Mountain, Ambury Regional Farm Park, the proposed rehabilitation of the foreshore at the Mangere Waste Treatment Plant through to the stonefields’.<sup>28</sup>

## 6.5 Summary of the Proposed Zone Review

Manukau City Council considers that a review of the existing Mangere Puhinui Rural zone contained in the *Manukau Operative District Plan 2002* is necessary in two main areas: the area between Kirkbride and Greenwood Roads, and the area west of the Oruarangi Creek and to the north of the existing airport designation and south of the Otuataua Stonefields historic Reserve. This review is seen as necessary as a result of upgrading the Mangere Wastewater Treatment Plant, the opening of Oruarangi Creek, the Council's acquisition of Otuataua Stonefields Historic Reserve, and the planned construction of a proposed second runway at Auckland International Airport.

The principal proposed zoning for that part of the study area under consideration for a change from the Mangere Puhinui Rural zone is categorised as Business 5 (Mixed) Zone. This is defined by the Council as follows:

The Business 5 zone applies to mixed areas of light and medium industry, offices, and a limited range of retailing activity. It is recognised that with increasing use of better technology and management practices the effects of industrial and manufacturing activities are compatible with or similar to a range of retailing and other activities.

Where the zone is at the interface with residential or other sensitive areas, a number of controls, such as yards, traffic, parking and noise standards have been put in place to maintain or enhance the environmental and amenity values of these areas. A broad range of activities may be established subject to meeting performance standards and other criteria.

A wide range of activities are permitted in the Business 5 zone. The zone in some cases acts as a buffer between the potentially offensive activities in the Business 6 zone and residentially zoned areas. Activities within the Business 5 zone and within 50m of residential zones are controlled activities to enable control of site layout to ensure that any potential adverse effects are minimised.

The Oruarangi Road Special Policy Area within the Business 5 zone has unique characteristics which are addressed by special provisions which apply to only that part of the Business 5 zone. These provisions largely relate to stormwater constraints and visual amenity values requirements.

The Waiouru Peninsula Special Policy Area within the Business 5 zone also has unique constraints and values that are addressed by special provisions which apply to only that part of the Business 5 zone. These provisions relate to the area's extensive coastline, the Pukekiwiriki Crater and its high visual amenity.<sup>29</sup>

The location of the particular Business 5 zone would extend in pockets from the land zoned for the airport extension (the nominal boundary of which runs along from the southern end of the quarry, through most of Ihumatao Road) northwards. Although exact locations are to be confirmed, the overall locations of the proposed re-zoning would place this mixed business usage land on three sides of the area in which the Makaurau Marae is centred. See Appendices 9.1 and 9.2 for details.

At present the quarry on the western edge of the area under consideration, adjacent to the current airport designation, has been granted a further twenty years of quarrying rights, whereafter, it is proposed that most of the quarry land be zoned for future urban development. See Appendix 9.2 for details.

To the north and north-east of Makaurau, land that is currently zoned rural has marginal profitability. This is more likely to be the case in subsequent as commercial, industrial and residential land usage encroaches on these sites. A report carried out in June 2005 on the viability of horticulture land use in the Mangere-Puhinui Zone concluded the following with respect to ongoing prospects for commercially viable horticulture in the area: ‘...the majority of land parcels in the study area are less than one hectare and are not of sufficient size to support individual horticultural businesses. Additionally, the largest parcels (4 ha or more) only have the capacity to generate a quarter of the average output of horticultural businesses in Manukau City’.<sup>30</sup>

Council is also investigating the location of the Metropolitan Urban Limit (MUL) contained in the Auckland Regional Policy Statement within the study area as part of this review. Changes to the location of the Metropolitan Urban Limit (MUL) may be necessary if the zone review identifies that parts of the study area were to be considered for urban use.

It has also been identified that if changes to the District Plan zones allowed urban uses then the Council’s existing stormwater catchment management plans may require review.

Approximately 400 hectares of Mangere Puhinui Rural zoned land underlies the northern part of the airport designation. The review has identified that this area should be rezoned to Airport zone to align the zoning and the designation. The authors understand that activities that are already permitted by the designation may have similar effects to those that could occur in the proposed extension of the Airport zone. The similarity of effects does not appear to be understood by local people so it has been hard for the authors to isolate and quantify the impacts that are currently permitted under the airport designation. This impact assessment is made more difficult by the fact that the designated area closest to Makaurau Marae is currently undeveloped and in farmland.

## Section Seven

**IMPACT ASSESSMENT**

There are a variety of social and cultural impacts flowing from the Mangere Puhinui Rural Zone Review. These have been divided into the relevant categories in this section. Each category contains a discussion of the particular impact, its relevance to cultural and/or social factors, and a summary of the issues involved.

One aspect which is important to stress is that some of the cultural and social impacts are not necessarily specific just to the culture of the people of Makaurau Marae. However, they none-the-less have the potential to affect this group in the pursuit of the cultural and social activities, and it is on that basis that they are included as part of the assessment.

There are some cases of themes in one area overlapping into another, but this is simply reflective of the ‘cross-pollination’ of effects that stem from zoning changes of the sort being considered here.

As pointed out in s6.4 almost all of the land that is subject to investigation is currently in rural uses, however approximately 400 hectares of this is covered by the airport designation. The airport designation allows activities that have similar environmental effects to those that could be generated by an urban use of this area. This aspect is not widely understood, but these effects will occur as a result of the planned second runway and permitted development within the airport designation.

## 7.1 Visual Impact

There are several dimensions of visual impacts that need to be considered in an assessment of this nature. These include:

- impacts on the physical structure and character of the landscape;
- impacts on the visual amenity of viewers; and
- impacts of ongoing change on the physical structure and character of the landscape.

Part of the process of assessing the visual impact of proposed changes to the landscape involves determining the zone of visual influence. This usually occurs at macro and micro levels. At a macro-level, features such as hills, mountains, coastlines, rivers, lakes, and any man-made structures come under consideration. At a micro-level, particular small-scale physical features – which may not normally be visible or apparent when viewed from a distance – assume significance. One of the devices used to assess visual impact is the Impact Magnitude and Receptor Sensitivity measure. The following table shows how these impacts can be ranked:

**Definitions of Impact Magnitude and Receptor Sensitivity**

Ranking	Type	Magnitude	Sensitivity
<b>Low</b>	<i>Landscape</i>	Almost imperceptible change in components/ character of the landscape.	A landscape not valued for its scenic quality and tolerant of substantial change.

	<i>Visual</i>	Few viewers affected by minor changes in view.	A viewer with passing or momentary interest in its surroundings, e.g. motorists.
<b>Moderate</b>	<i>Landscape</i>	Moderate change in landscape components and character.	A moderately valued landscape, perhaps a locally important landscape, tolerant of some change.
	<i>Visual</i>	Many viewers affected by moderate changes in views.	A viewer with moderate interest in their environment.
<b>High</b>	<i>Landscape</i>	An obvious change in landscape components over an extensive area.	A landscape of particularly distinctive character or nationally valued for its scenic quality.
	<i>Visual</i>	Many viewers affected by obvious changes in view.	A viewer with proprietary interest and prolonged viewing opportunities.

In relation to the specific landscape and visual features in the area under consideration, the following assessment indicates how certain modification can be ranked according to the impact magnitude scale:

#### Impact Magnitude for Possible Changes in Zoning

Category	Impact Magnitude
<i>Runway extension at Airport</i>	Low
<i>Additional roading</i>	Medium
<i>Warehouses</i>	High
<i>Retail development</i>	Medium to High
<i>Medium industry</i>	Medium to High
<i>Offices</i>	Medium
<i>Landscaping</i>	Low
<i>Increased traffic density</i>	Low to Medium

The following table is a summary of the impact that a change in zoning could cause in terms of adverse visual changes:

Summary
Overall, the visual impact of most of the categories of possible change resulting from an alteration in zoning would be moderately detrimental according to this impact magnitude measurement. This, in turn, would have slightly adverse cultural and social effects for the people of Makaurau Marae, as well as for other members of the community and visitors to the area under consideration.

## 7.2 Noise Impact

In its submission on the proposed Whenuapai Airport in January 2004, Auckland International Airport Limited offered the following comparative data on the effect of airport noise levels on property values. It is suggested that this fact, coupled with increased traffic density on the surrounding roads, and the extension of adjoining commercial activity, will have a compounding effect on current property values.

### Summary of Empirical Damage Estimate for Aircraft Noise and Property Values in Nine Urban Areas<sup>31</sup>

Study Area (Year, mean property value)	Range of Noise Levels (DNL)	Best NDI-NEF Estimate* (Percent)
New York (1960, \$16,656)	55 - 75	1.9%
Los Angeles (1960, \$19,772)	55 - 75	1.8
Dallas (1960, \$18,011)	55 - 75	2.3
All Areas (1960, \$18,074)	55 - 75	2.0
Minneapolis (1967, \$19,683)	55 - 85	0.6
San Francisco (1970, \$27,600)	60 - 80	1.5
San Jose (1970, \$21,000)	60 - 80	0.7
Boston (1970, \$13,000)	60 - 80	0.6
Toronto (1969-1973, \$30,000-35,000)	55 - 70	0.9
Dallas (1970, \$22,000)	55 - 90	0.6
Washington, D.C. (1970, \$32,724)	55 - 70	1.0

\*The NDI-NEF is the percentage decrease in a given property value per unit increase in the DNL.

NDI = Noise Depreciation Index.

DNL = Day Night Average Noise Level

It is worth noting that none of the areas north of the existing Airport Designation are predicted to be affected by levels above Ldn 55 dBA (equivalent to the DNL metric quoted above) even when the proposed second runway is in full operational mode. In fact areas around the existing Papakainga Zone are likely to experience aircraft noise of less than Ldn 45 dBA which is quieter than the noise experienced on many residential roads. In accordance with the table above therefore there should be no or negligible impact on property values arising from aircraft noise. It is acknowledged however that there may be a perception that the area is physically close to the airport and therefore will be subject to elevated levels of aircraft noise even though that is factually incorrect.

Essentially, the pattern is that increased aircraft traffic (with the associated increase in noise levels) has a negative impact on residential property prices in the affected areas. Moreover, the issue of noise and property values is perceptual as much as scientific. If potential property purchases perceive an area to be noisy because of its proximity to an airport, then this can be sufficient to lower property values, despite possible evidence that the noise levels may not be significantly higher.

### 7.2.1 Air Traffic Noise

Although the factor of aircraft noise is already built into property values in the areas surrounding the Auckland International Airport as a result of the airport's long-established presence, the extension of the runway and the projected increase in the frequency of flights and noise this will bring about suggests that there is likely to be further and entrenched detrimental effects on residential property prices in the surrounding areas.

The Auckland International Airport complies with the following guidelines with respect to aircraft noise:

‘Noise outside the HANA (High Aircraft Noise Area) and the designated area during day and night is not allowed to exceed Ldn 65 dBA; and Noise outside the HANA, MANA (Medium Aircraft Noise Area) and the designated area during day and night is not allowed to exceed Ldn 60 dBA.

These are based on a 12 month rolling logarithmic average in accordance with NZ Standard 6805:1992 Airport Noise Management and Land Use Planning.

When the Northern Runway has been constructed there will be restrictions on use of this runway. The most stringent of these require that jet aircraft operating between 10pm-6am and non-jet aircraft operating between 11pm-6am must arrive and depart from the west (over the Manukau Harbour) except in the case of an emergency or if the existing runway is closed for essential maintenance.

The Noise from Engine Testing (Condition 13) requirement applies to engine testing while engines are still on the aircraft (“in-situ”). It requires that noise from aircraft engine testing must not exceed a 7-day rolling average of Ldn (Day/Night level. This is the “time-average sound level in decibels...over a 24 hour period with the addition of 10 dB” between 10pm and 7am) 55 dBA and a Lmax (Maximum Sound Level) 75 dBA between 10pm and 7am at any dwelling which is in the Main Residential Zone or which is both outside the designated area and outside the HANA, MANA (Moderate Aircraft Noise Area), and ANNA (Aircraft Noise Notification Area)<sup>32</sup>.

Details of the aircraft noise areas for the zones under review are contained in Appendices 9.3 and 9.4 of this report.

### **7.2.2 Road Traffic Noise**

Another aspect of the noise impact is the increased quantity of traffic in the roads surrounding the airport, and particularly, the likely increase in heavy vehicles which tend to accompany the presence of commercial and industrial development. As with other forms of noise, this will most likely have a negative effect on residential property values in the area, and will make residential living in the area more unpleasant. A recent report by the National Advisory Committee on Health and Disability noted that:

‘There is growing scientific evidence on the effects of noise on health outcomes, including physical and mental wellbeing. The health effects of noise include impaired communication, disturbed sleep, impaired school and work performance, annoyance, depression and aggression. There is also evidence that noise can aggravate heart disease and hypertension, and cause hearing impairment. The British Medical Association suggests that sleep interference is probably the most important effect of long-term exposure to traffic noise on health and wellbeing. It is estimated that up to 63 percent of households in Britain are exposed to a level of night-time noise high enough to interfere with sleep.

According to the World Health Organization, transport is the main source of noise pollution in Europe. Ambient sound levels have increased due to growing numbers of road trips and kilometres driven, higher speed of cars and increased frequency of flying. Noise is the only environmental factor in Europe for which complaints have increased since 1992.

There is very little New Zealand data on noise levels from transport or the effects on the health and wellbeing of communities. Information is limited to occasional community surveys and some studies carried out by or on behalf of government departments. Transit New

Zealand carried out a study of residential exposure to traffic noise in Christchurch during the early 1990s. This recorded levels of noise exposure similar to those experienced by urban populations in Australia, France, Germany and Switzerland, but greater than those recorded in the Netherlands'.<sup>33</sup>

A major research project into road traffic noise in New Zealand, carried out in 2004, noted that the costs of land transport noise are generally difficult to quantify. However, in recent years, considerable research has set some parameters for quantifying the financial cost of road traffic noise:

These valuation methodologies use a price for noise–reduction which is derived from the difference in house prices. It is supposed that a change in noise load will be reflected in a change in house price'.<sup>34</sup> The results of house price depreciation studies use a noise depreciation index (NDI) based on the percentage depreciation in house price for each decibel (dBA) of noise above a given threshold level.<sup>35</sup>

A 1996 Ministry of Transport discussion paper estimated the dollar costs of mitigating noise levels and corresponding devaluations in house prices in relation to noise rankings.<sup>36</sup> The cost estimates ranged from a low value of \$66.7 million to a high of \$457 million (in 1996 dollars).<sup>37</sup>

An area that has escaped any detailed analysis in New Zealand has been the effects of noise relating to road construction. This has the potential for considerable disruption, and would need to be factored in to any plans for re-zoning the areas under consideration. However, it is possible that because of the short duration of this type of noise, its effects would be negligible in the long term.

The Makaurau people are concerned about the impacts of aircraft noise when the Northern Runway and associated maintenance activities.

However the writers understand that the noise impacts of those activities are already provided for under the designation, other than for those activities in the XX hectares south of the existing Ihumatao and west of Renton Roads which the writers understand are to be brought into the extent of the designation. There is little understanding of that situation amongst the Makaurau people.

The writers understand that noise levels from aircraft operations allowed at the village under the designation are such that the village is subject to less noise than permitted over the ANNA under the Manukau District Plan. The writers understand that the village is thus outside the area where aircraft noise by international standards is considered at all unreasonable. The writers further understand that those international standards were adopted by the Mayoral Mediation Forum.

As regards maintenance activities the writers understand that whilst they could occur in the proposed extension of the designated area (west of Renton) the location of those activities is somewhat irrelevant as control over maintenance noise is at the nearest residential dwelling, irrespective of the location of that activity.

The following table is a summary of the impact that a change in zoning could cause in terms of adverse noise effects:

### Summary

The extension to the Auckland International Airport runway would increase noise levels, but although these changes would not necessarily be significant in terms of overall noise levels, and they would most likely have only a slightly adverse effect on house prices. The noise from increased traffic would have more profound effects, including lower house prices, and negative health and well-being impacts.

## 7.3 Traffic Impact

The Makaurau people are concerned about the impacts of traffic from development in the proposed area of re-zoning. Once again there is little understanding amongst the people of the traffic impacts that is allowed under the designation and the impacts over and above that from the proposed re-zoning.

Never-the-less, the proposed re-zoning of the areas under consideration would necessitate more roading and would result in substantial increases in traffic volume. The proximity to the Makaurau Marae and its members of medium density roading could have a number of adverse effects. These include:

- Higher levels of heart and lung disease;<sup>38</sup>
- Increased child asthma;<sup>39</sup>
- Premature and low birth-weight babies;<sup>40</sup> and
- A variety of respiratory problems.<sup>41</sup>

The Auckland Regional Council has recently completed research on vehicle emissions at twenty-four sites in the region, monitoring a total of 47,934 vehicles. Of the total vehicles measured, 8.5% received a 'poor' rating. The conclusions reached were that:

- The air pollution in many of the region's inner city streets regularly exceeds World Health Organisation standards;
- Carbon Monoxide levels are higher than in London;
- It is estimated that over 250 people in the Auckland region die prematurely each year as a direct result of air pollution;
- Many more adults and children suffer from health effects ranging from triggering or worsening of asthma, eye, throat and lung irritation and respiratory diseases. Young people and the elderly are most at risk; and
- 80% of the pollution is caused from motor vehicle emissions.<sup>42</sup>

Although these effects are serious in themselves, they are not excessive in relative terms, and suggest that the likely increase in traffic volume and density in the re-zoned areas around the Makaurau Marae community would not have effects that are noticeably worse than in other parts of the Auckland region.

It is possible that the Manukau City Council could work with the Marae community to avoid increased traffic through the village by discussing ,designing and installing traffic calming measures (thresholds, chicanes, speed humps, road narrowing, street landscaping, traffic signage) on Oruarangi Road which in combination with major upgrading of routes back to George Bolt Drive would have the effect of severely discouraging through traffic (especially heavy vehicles) on the portion of Oruarangi Road which passes through the Village.

However, there are concerns relating to the positioning of roads near sites of cultural, spiritual or historical significance. These concerns can be sub-divided into two categories: the first is

direct physical harm or damage to such sites as a result of roading construction, placement, or traffic density; the second are the non-visible effects of roading, such as the placement of a road over an urupa, which may not cause any physical signs of damage, but which would certainly give cause for cultural offence.

These concerns need to be weighed up against the need to provide adequate roading for the activities carried out in the re-zoned areas. Failure to do this could contribute substantially to traffic congestion and the associated health and economic costs.

The following table is a summary of the impact that a change in zoning could cause in terms of adverse traffic effects:

<b>Summary</b>
Increased traffic density has potentially detrimental effects for local communities. However, provided that the road locations do not interfere with any cultural sites, the impact would not be noticeably greater than in other parts of the Greater Auckland area. Failure to provide adequate roading in a re-zoned area could contribute to traffic congestion.

Details on the proposed primary road network for the area are contained in Appendix 9.5, although they do not reveal the extent of roading modifications that will be required to accommodate the requirements indicated in the proposed zoning changes.

## 7.4 Housing Impact

There are two main types of impact on residential housing that tend to occur when adjacent or nearby industrial/commercial zones are extended. The first is the effect on the quality of housing, and the second relates to the effect on house prices.

One widespread trend during such a process of commercial/industrial encroachment is that neighbouring suburbs experience a shift away from owner-occupier to tenanted properties. Even though this shift initially may be slight, the impetus for owners to move from being too close to commercial/industrial zones, and the associated drop in residential house prices leads to a growth in lower-cost rental accommodation, and typically, issues such as maintenance are deferred, leading to a gradual spiral of falling real prices.<sup>43</sup>

The impact of the likely change in property values also warrants serious consideration. In this case, the extension of the airport and the subsequent extension of commercially-zoned land will almost certainly have a detrimental effect on local residential property values. This would be entirely consistent with historical trends throughout most of the Greater Auckland region, in which the presence of increased commercial or industrial activity adjacent to housing areas has the effect of lowering house value as well as degrading the quality of housing stock.<sup>44</sup> Any predicted gains in employment as a result of zoning adjustments need to be weighed up against the potentially detrimental impact on housing that would emerge.<sup>45</sup>

For Maori, who are typically overrepresented in poor housing statistics, and per capita as tenants,<sup>46</sup> such trends could be potentially regressive for local Maori communities. The cycle of low-wage employment adjoining housing areas of medium to low quality with above-average tenancy rates has already been experienced in parts of Auckland in previous decades, and is a pattern that, unchecked, would be unfortunate if repeated in this case. In other parts of the world, the trend for urban development has been to re-zone commercial/ industrial land as residential and open space areas.<sup>47</sup>

Further to this, there is the issue of the increase in rates as a result of the rezoning of land from rural to commercial and/or residential. Currently, the average annual rates per house in Ihumatao are approximately \$1,200. Following the rezoning and the surrounding urban development, it is likely that rates will increase, placing more pressure on Makaurau Marae residents. The flow on effect from this could lead to residents turning to alternative housing or renting options outside of the Makaurau Marae area.

Having said that the Business 5 zone which is proposed to be utilised here has a number of “built in” controls (e.g. exclusion of industry which discharges to air, extra landscaping setbacks along boundaries with residential, public open space and rural zones, extra noise controls, design and external appearance control over buildings, height limits on buildings near residential boundaries which are designed to protect the residential interface and the zone has in recent years been successfully used in situations abutting residential zones (e.g. in the Burswood Estate north of Ti Rakau Drive in Pakuranga and in the Dannemora residential estate in the Botany Ward of Manukau City). It is possible the Zone could have further controls built in to reflect the cultural heritage of this area.

The following table is a summary of the impact on housing that a change in zoning could cause:

#### Summary

The main series of factors to be considered are interrelated. They include lowering house prices, a decrease in owner-occupier rates, greater low-value tenanted housing, poorer maintenance, and consequent further lowering of house prices. A key driver of this cycle is the presence in the immediate vicinity of such housing of commercial/ industrial buildings.

## 7.5 Environmental Impact

Although environmental impacts are sometimes assessed in terms of scientific analyses, there can be distinct cultural and social consequences to environmental changes. The Motunui-Waitara report produced by the Waitangi Tribunal in 1983 provides significant examples of this.<sup>48</sup> Existing reports have covered the probable environmental effects of the proposed rezoning,<sup>49</sup> and so this section considers some of the possible cultural consequences.

Currently, most of the area in the Mangere-Puhinui zone is classified as rural. A broad discussion of the character of the land has been provided by the Auckland Regional Council in a submission it made to a proposal to rezone an area on the Corner of Kirkbride and Creamery Road previously occupied by the Villa Maria winery:

The Mangere-Puhinui area has a generally rural character, and is generally used for farming activities. The effects of urban activities on the rural character could be more than minor. These potential adverse effects relate to the qualities which make up the rural character as discussed below.

The rural character can be attributed in part to the small number of buildings which are scattered, rather than densely grouped, in the area. Building development is generally limited to farm building and household units on farming sites. The rural character is also formed by the activities which take place. These are mainly farming activities with the presence of vegetation associated with farming, such as pasture and crops and shelterbelts.

One exception to this is the former Villa Maria winery complex which contains a number of densely grouped warehouse type buildings and which is located at the northern extremity of the Mangere-Puhinui area adjacent to the MUL.

The predominant absence of large-scale and high density activities in the Mangere-Puhinui rural area contributes to the rural character, including the absence of characteristics such as large sealed areas and lighting which is associated with some urban activities, such as service stations....<sup>50</sup>

As far as the environmental impact is concerned, the Auckland Regional Council noted that there were degrees of sensitivity within the Mangere-Puhinui Zone as far as modifying the landscape was concerned, and that there were already some parts of the area that, although zoned rural, were partly urban in character:

....Some areas which border urban land uses may be less sensitive to landscape modification due to the presence of the adjoining urban activities. Urban land uses in the area include the Auckland International Airport, the Mangere Wastewater Purification Works and the Papatoetoe Cemetery. The rural area adjacent to these urban activities and also to the fringe of the rural areas adjoining the residential and business areas of Mangere and Wiri, may be somewhat less sensitive to landscape modification.

The narrow band of rural lands on Kirkbride and Oruarangi Roads lies outside the Metropolitan limits defined in the Auckland Regional Policy Statement. This area includes the former Villa Maria winery complex on the corner of Kirkbride and Creamery Roads which has more of an urban than rural character.<sup>51</sup>

Auckland Regional Council asserted that any changes to the current zoning could have significant effects of the character of the communities currently located in the area under consideration:

The entire Mangere-Puhinui area is in close proximity to the City's urban area. In the urban area non-farming activities, such as business and social and cultural facilities, meet the needs of the urban and neighbouring rural populace (sic) with only minor adverse environmental affects. The same activities in the Mangere-Puhinui area have the potential to have major adverse affects, particularly on the rural character of the area. Any new non-farming activities, or extensions of existing non-farming activities, will therefore need to be carefully managed.<sup>52</sup>

The report concluded, in respect to proposed changes to zoning the area Business 5, that:

This zoning would allow the existing buildings to be used as of right for a wide range of permitted activities, and also enable the balance parts of the land, which are not currently occupied by the winery, to be developed and potentially subdivided for a range of other business type activities. This alternative is not favoured as it:

- would be inconsistent with those parts of the Auckland Regional Policy Statement that seek to contain all urban zonings within the metropolitan urban limits;
- could result in inappropriate activities being developed in close proximity to the existing nearby residential areas (i.e. result in land use conflicts) and thereby be contrary to objective 14.3.2 of the operative district plan; and
- would be tantamount to a 'spot zoning'.<sup>53</sup>

There is therefore some obvious concern that proposed changes to the Mangere-Puhinui rural zone could have adverse effects not only on the natural and physical environment per se, but also on the character of the communities currently positioned in the area. Specifically in relation to tangata whenua communities, there is a need to consider the impact of changes to the physical environment from a cultural perspective. Physical features, even man-made ones, can have cultural significance in terms of serving as what are sometimes described as ‘intergenerational cultural markers’. These are physical features that tangata whenua groups may use to identify themselves with their surrounds over a period roughly exceeding thirty years. Even if the features are not affected themselves by developments, if they are no longer visible or accessible to the local tangata whenua group, then their value as a cultural marker diminishes.<sup>54</sup>

A case relevant to this report is that of the mountain of Pirongia, considered by some to be one of the ancestors of Tainui. A plan was devised by the Crown to route an electricity transmission line around the mountain. There was substantial Maori and Pakeha opposition to this move, with one kaumatua making the following submission: ‘If the transmission line slices between us and the mountain, our tribe will be severed from our genealogy, our ancestor, our past,’ he explained, ‘If our past is cut off, our people will have no future’. This highlighted the extent to which what might be seen as a slight visual impairment of a physical feature could have profound impacts for the affected tangata whenua groups.<sup>55</sup>

The proposed re-zoning, including the extension of residential areas, will have significant effects in terms of additional stormwater running into the creeks, streams and eventually to the foreshore and seabed. These areas are of significance to the people of Makaurau Marae in terms of being a source of food and irrigation. There is a likelihood that increased stormwater being discharged into this system will increase pollutants deposited in the creeks, streams, foreshore, and seabed.<sup>56</sup> However, even if this discharge is somehow managed in order to reduce the levels of pollution, the fact of increased stormwater discharge in itself can contribute to what can be classified as pollution in a cultural sense. In the Motunui-Waitara Claim to the Waitangi Tribunal, the Tribunal found that irrespective of the quality of discharged materials, what mattered equally was the Treaty right of Tangata Whenua that they have exclusive and undisturbed possession of their fisheries – something which a change in discharge levels could affect.<sup>57</sup> Members of the Makaurau Marae have been anxious about their views being heard in respect to Council policy on local waterways.<sup>58</sup>

The following table is a summary of the impact on the environment that a change in zoning could cause:

#### **Summary**

The consequences of changes to the environment resulting from re-zoning will certainly have some cultural effect. The way in which the people of Makaurau Marae identify with the land is dependent, in part, on the present physical appearance of that land. If that appearance is altered, then this will have the potential to disturb the way in which local people identify with the physical features of their surrounds. Alteration, in this context, even extends to being unable to see physical features as they are currently able to be viewed. Impacts on stormwater discharge, and the extent of land covered by buildings also require consideration.

## 7.6 Land Access Impact

The issue of land access impact needs to be considered primarily in the context of access to sites of cultural, spiritual, or historical significance. Notwithstanding that they are not able to be specifically identified for the reasons set out in section 4.4 of this report, their importance

is discussed in that section and referred to in sections 7.5 and 7.8. Although protecting these sites is obviously a matter of considerable importance, so too is the need for there to be appropriate access to those sites.

There is also an aesthetic dimension which warrants consideration. For sites that are of considerable importance, the access to these sites ought to reflect that importance, and be suitable for the purpose they are being used. This is particularly an issue in cases where access to a site takes place in an industrial or commercial area.

If access to a site is via the roading network, consideration needs to be given to traffic densities, how this might encumber access, and whether more preferable alternatives could be devised.

The following table is a summary of the impact on land access that a change in zoning could cause:

<b>Summary</b>
The placement of industrial, commercial, or even residential buildings through routes currently used to access sites of cultural, spiritual, or historical importance means that a policy on land access to these sites will be required to enable access to be maintained, and in a manner that is appropriate to the sites being visited. Manukau City Council and the people of Makaurau Marae will need to find a way to work together to understand the location of these sites and identify culturally appropriate ways of protecting them.

## 7.7 Cultural Impact

The cultural impacts of some of the proposed changes are among the most fundamental affecting the people of Makaurau Marae, and yet, they are also among the more difficult to articulate and quantify. It is useful to start off with some benchmarks about the position of contemporary Maori culture with respect to situations such as possible re-zonings. These include:

- Maori, as tangata whenua, are the indigenous people of New Zealand;
- Those Maori living on ancestral land, especially with a period of uninterrupted occupation over several centuries, are regarded as having mana whenua status over that land.
- Traditional Maori values and tribal structure still exist today, and are a vital part of Maori identity;
- Part of these values is a need to exercise kaitiakitanga – or guardianship – over the natural, physical and spiritual facets of the area over which mana whenua status is claimed; and
- Many of the facets of Maori cultural rights and obligations have been identified in the Resource Management Act (discussed in 7.9 below). This places a heavy emphasis on both tangata whenua groups and local bodies to consult, in good will, in resource management decision making, policy formulation, and monitoring and implementation, particularly as they affect their taonga.

Section 7.5 above, noted the environmental impact of proposed zoning changes considered a cultural view of physical resources, such as streams, rivers, foreshore, and seabed. In this section, the cultural impact focuses primarily on the relationship between the mana whenua group and that environment.

The exercise of kaitiaki is a particularly important aspect of mana whenua rights. It is the nexus of the people and culture on the one hand, and the physical environment on the other. Any changes to zoning in the area could affect the capacity of the people of Makaurau Marae to carry out this function. A definition of the concept has been produced by the tohunga, Hohepa Kereopa:

When one considers kaitiaki, you have to consider for what purpose it is being used. If you have a pipi bed, for example, you cannot talk about kaitiaki until you know about all the concepts and life of the pipi. So you need to know how to keep the pipi safe, but you keep it safe for the pipi's benefit, and not for your's. Because the job of kaitiaki is to keep the things of Creation safe. The return from this is the relationship you get with the thing you are protecting, and the knowledge and learning that comes from that. When the world was created, everything was given full wairua and mana, like trees for example, so that everything is its own master. So if people want to exercise kaitiaki, they will first need to understand the value of all things, and the wairua of all things. That way, they will know the effects and consequences of doing things to trees, or whatever. For us, this does not mean being in charge of things, but to make sure that the sign of the Almighty that is in all things is respected. So, for example, you don't go and tell the pipi how to live, you allow it to have the opportunity to live the way it knows best, and that is what kaitiaki is. So it is about knowing the place of things in this world, including your place in this world. When you get to that point, you realise that the thinking of all things is the same. The pipi needs protection and a place to live just like we do. So why do I love the forest so much? Because it is my kin, the same with my love for animals, and however I treat them, that's how they treat me.<sup>59</sup>

Another aspect of the cultural impact the proposed re-zoning could cause is on the various sites of cultural, historical, spiritual, or social significance, as identified in section 4.4 of this report. The set of recommendations in section 8.8 of this report detail a strategy for ensuring that such an impact is managed through a partnership between the people of Makaurau Marae and the Manukau City Council.

The following table is a summary of the impact on culture that a change in zoning could cause:

#### **Summary**

The relationship between the people of Makaurau Marae and the environment is a cultural one, and any changes to the land's usage will unavoidably affect not only the relationship, but also the capacity of the mana whenua people to exercise their cultural rights, responsibilities and obligations, particularly in the area of kaitiakitanga. Numerous cultural practices flow from this relationship, and so the impact could be widespread and potentially threatening to the continued practice of these aspects of the culture. There is also the requirement that places of cultural significance to local Maori be defined by them, and that the other parties to the re-zoning demonstrate recognition of these sites in a manner appropriate to the people of Makaurau Marae.

## 7.8 Governance Impact

The Manukau City Council has specific legal obligations with respect to tangata whenua groups which reside in the City. This is particularly the case under the Resource Management Act. Section 6 of the Act states that:

In achieving the purpose of this Act, all persons exercising functions and powers under it, in relation to managing the use, development, and protection of natural and physical resources, shall recognise and provide for the following matters of national importance:

...

- (e) The relationship of Maori and their culture and traditions with their ancestral lands, water, sites, waahi tapu, and other taonga.

The principle of this section is supported by section 7, which states that:

In achieving the purpose of this Act, all persons exercising functions and powers under it, in relation to managing the use, development, and protection of natural and physical resources, shall have particular regard to -

- (a) Kaitiakitanga:

...

- (e) recognition and protection of the heritage value of sites, buildings, places, or areas.<sup>60</sup>

The overarching obligation, as expressed in section 8, is to take into account the principles of the Treaty of Waitangi. These principles have been developed by the Waitangi Tribunal and the Court of Appeal, and include:

#### Selected Principles of the Treaty of Waitangi

Principle	Explanation
<b>Government</b>	This is also known as the kawanatanga principle. It states that the Government has the right to govern and make laws.
<b>Self Management</b>	This is also known as the rangatiratanga principle. It states that iwi have a right to organise, as iwi, and to control their own resources.
<b>Equality</b>	All New Zealanders are equal under the law.
<b>Reasonable Cooperation</b>	Both Government and iwi are obliged to co-operate in issues of major common concern.
<b>Redress</b>	The Government is responsible for providing effective processes for the resolution of grievances.
<b>Partnership</b>	The Treaty created a partnership between Maori and the Crown.
<b>Participation</b>	Maori have a right to participate in all aspects of government and society in the country.
<b>Protection</b>	The Crown is obliged to assist in the protection of Maori natural, physical, cultural and spiritual resources.
<b>Development</b>	Developments in technology and so forth since the signing of the Treaty make it necessary for the Treaty to consider situations from a contemporary perspective.

There are also other sections of the Act which have a bearing on the relationship between tangata whenua groups and local and regional authorities. These include:

### Selected Sections of the Resource Management Act<sup>61</sup>

Section	Explanation
42 (1) (a)	This section states that local authorities should avoid making orders which could cause serious offence to tikanga Maori.
58 (b)	This section relates to coastal policy statements, and states that such statements may have policies on the protection of the characteristics of the coastal environment of special value to the tangata whenua, including waahi tapu, tauranga waka, mahinga maataitai, and taonga raranga.
61 (2) (a) (ii)	This section states that regional policy statements should take regard of any planning document issued by an iwi authority which may be affected by the regional policy statement.
62 (1) (b)	This section states that regional policy statements must specify matters of resource management which are relevant or significant to iwi authorities.
199 (2) (c)	This section specifies that a water conservation order may be used for the protection of the characteristics of any water body which is of outstanding significance in accordance with tikanga Maori.

The Manukau City Council has conceded, however, that ‘...it may not always be possible to protect the traditional relationship of tangata whenua with resources as it is clear in the Act that these values must be approached in the overall context of the promotion of sustainable management. In particular, the provisions of sections 6(e), 7(a) and 8 of the Act are not to be approached independently of Section 5 as ends in themselves but are to promote the Acts central purpose of sustainable management.’<sup>62</sup>

The Council has further stated that: ‘Tangata whenua should be enabled to fully participate in resource management processes and actively consulted in a way that:

- Fosters partnerships and relationships with representative tangata whenua authorities (including iwi authorities);
- Avoids models which lead to adversarialism;
- Recognises and respects marae authority and affiliations;
- Respects the role of kaumatua;
- Acknowledges historical circumstances and impacts on resource needs;
- Respects tikanga Maori (Maori customary values and practices); and
- Acknowledges the rights of hapu to speak and act on matters that affect them’.<sup>63</sup>

Furthermore, the Council has made a commitment to avoiding adverse effects of development on a tangata whenua’s taonga or relationship with these taonga, and where the potential for such effects exists, the Council has obliged itself to avoid, remedy, or mitigate these effects. The methods to be employed to achieve this policy outcome include:

- Involvement of tangata whenua authorities in the vetting of resource consent applications;
- Taking into account iwi planning documents in resource consent processes;
- Scheduling of wahi tapu;
- Support, for example through administrative services, signage for rahui (prohibition) or whakatupu (growing time) as appropriate to allow replenishment of traditional kaimoana areas (e.g. Eastern Beach, Bucklands Beach Peninsula);
- Activity Tables (e.g. Quarrying Activities are controlled activities); and

- Purchase of wahi tapu in private non-Maori ownership for Public Open Space.

Finally, the Council acknowledges the need for provision to be made to ‘...enable tangata whenua to live on, develop and use ancestral lands in accordance with tikanga Maori (Maori customary values and practices)’. The methods recommended to achieve this include:

- Papakainga zones;
- Provision for Papakainga housing in Rural Areas; and
- Support to marae and associated customary activities.<sup>64</sup>

Through this process, the Council has identified a series of anticipated results, including:

- Involvement and active participation of tangata whenua in resource management processes;
- Protected wahi tapu and other taonga;
- Tangata whenua access to taonga;
- Establishment of marae, kohanga, kura kaupapa and other Maori cultural institutions;
- Greater public awareness of tangata whenua (customary rights and relationships with taonga); and
- Enhanced environmental quality.

Moreover, the Council has placed importance on what it describes as ‘Enabling Social, Cultural, Economic Well Being’ and stressing the ‘Importance of Ecological Values’.<sup>65</sup> At a City-wide level, ‘...the natural and physical qualities and characteristics that contribute to people’s appreciation of Manukau as a place to live and work include:

- a diverse and extensive coastline;
- large areas of open space that can be used for recreation, that protect heritage or contribute to visual amenity;
- presence of built and natural heritage;
- proximity to a substantial rural land resource;
- presence of a number of marae;
- access to a range of business activity;
- a variety of landforms, including volcanic landforms;
- accessibility to community facilities, beaches, to other cities and districts in the region; and
- accessibility to Auckland International Airport’.

According to the Council, ‘The nature and mix of these qualities and characteristics contribute to the identity of Manukau City and help to distinguish it from other cities. They influence whether people are attracted to live, work or invest in the City’.<sup>66</sup>

The extent of commitment the Manukau City Council has made to protecting the social, cultural, physical and spiritual infrastructure of tangata whenua in the City is considerable, and is the result of substantial research, exploration, and relationship building on the part of all the parties involved.

Furthermore, the Council has demonstrated its willingness to be committed to processes that maintain these relationships. This good faith has been fully reciprocated by the people of Makaurau Marae, and represents an important shared asset for the parties.

If the proposed changes to the zoning were to take place without amendments that reflect, in a significant way, the matters which concern the people of Makaurau Marae, it is possible that the quality of this relationship could be jeopardised in some areas. The flow on adverse

effects on the Council's relationships with tangata whenua groups in the City also needs to be given serious consideration in this context.

The following table is a summary of the impact on governance issues that a change in zoning could cause:

<b>Summary</b>
At present, the people of Makaurau Marae consider the proposed zoning changes could adversely affect their cultural, spiritual, and social relationships with their whenua to varying extents. This has the potential to impair the relationship between Makaurau Marae and the Council, and challenge the Council's own commitment to tangata whenua within the city, as well as its compliance with the provisions and the spirit of the Resource Management Act unless amendments are made to the proposal which reflect, in a significant way, the matters which are of concern to the people of Makaurau Marae.

## 7.9 Opportunity Cost Impact

Any decision involving changes in land usage necessarily produces opportunity costs – that is, the cost of not pursuing an alternative.

There are various alternative uses for some of the land in question, and these require consideration as part of any balanced and informed decision-making process.

Overriding the issue of land-use options is the need to protect the cultural and spiritual integrity of the sites being considered. This does not mean that a blanket prohibition ought to apply on any land that tangata whenua groups identify as being of importance to them. There are examples from other parts of the country where seemingly conflicting views on the significance and potential purpose of certain sites have been overcome through consultation, and a willingness to accept the degree of significance that cultural considerations play.

Examples of alternative land usage for the sites in question could cover the following range of options:

### Options for Alternative Land Usage

<b>Alternative Option for Land Usage</b>	<b>Explanation</b>	<b>Social/Cultural Impact</b>
<i>Current zoning to remain in place</i>	This would be the preferred option as far as maintaining the cultural, social, and spiritual integrity of the land is concerned, and for those tangata whenua associated with the land. It would require no change to the status quo.	Low
<i>Small-scale residential development</i>	The emphasis on this option would be on very small-scale, low-density housing developments, carried out with consideration to culturally-consistent aesthetic values, and without the need for a major upgrade of current services required to support such a development.	Medium
<i>Tertiary education campus</i>	Various tertiary institutions throughout the country have become involved in the establishment of satellite campuses as part of a drive to move closer to the communities they wish to become involved in.	Medium

	At present, Manukau City is under-serviced with opportunities for higher-level tertiary education, and some of the land being considered for re-zoning could be utilised for a tertiary campus.	
<i>Tourism development</i>	Many of the sites in the vicinity of the Makaurau Marae could have distinct tourism development possibilities. Cultural tourism – unlike some other forms of tourism – necessarily demands little if any change to the current physical environment. Furthermore, there is a growing demand from domestic and particularly international tourists for locations that have some cultural, historical, or heritage significance. <sup>67</sup>	Low
<i>Horticulture/aquaculture enterprise</i>	Horticulture and aquaculture options are two distinct categories, but both would rely on the physical resources of the area under review. The adverse impacts on social, cultural, and spiritual environments can be minimised if managed appropriately, and can serve as a source of skilled employment in the City.	Medium
<i>Sporting activities</i>	The advantage of certain sporting activities taking place on land that has some cultural significance to local communities is that the visual impact is minimal, and most importantly, temporary. Appropriate management systems can ensure that there is no lasting environmental impact, while at the same time, allowing some of the sites in question to be used by the public.	Low
<i>Conservation corridors</i>	This option involves setting aside multi-use open-space corridors which aim to protect and enhance the natural state of an area, protect its heritage and cultural and spiritual values, and its natural ecosystems. Such corridors are particularly important for bird-life, <sup>68</sup> and can fulfil significant functions in terms of protecting and enhancing biodiversity within a region. <sup>69</sup>	Low
<i>Health-care facility</i>	The advantage of the establishment of health-care facilities (including age-care facilities) at a selected site include the option to pre-determine the scale of such a venture, and the fact that in some cases, such operations are labour-intensive. There are also possibilities for facilities of this sort to be designed in a way that minimises the visual impact on the landscape, and that does not inflict any significant damage on important cultural, heritage, and spiritual sites in the area.	Medium
<i>Commercial/industrial corridors</i>	Commercial/industrial development has the potential for sizeable impacts in terms of pollution, traffic congestion, visual effects, and other areas detailed in this section. However, some of the worst effects of commercial-industrial development might be mitigated through the use of controls on the type, location, design and external appearance, landscaping and height of industrial or commercial activity so that its adverse effects can be mitigated, and where concessions are made to culturally, spiritually, and historically significant sites to local communities.	High

The following table is a summary of the impact on opportunity costs that a change in zoning could cause:

### Summary

Consideration needs to be given to the various options for land usage set out above and not just development for business purposes. If a portion of the study area is to be rezoned for business purposes then it should only be with strict controls on the effects of that activity including controls on controls on the type, location, design and external appearance, landscaping and height of industrial or commercial activity so that its adverse effects can be mitigated. Alternative possibilities could take into account the cultural, social, and spiritual imperatives of tangata whenua groups in general, those of the people of Makaurau Marae in particular, as well as the wider Manukau City community.

## Section Eight

# RECOMMENDATIONS

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This section provides a summary of preliminary recommendations on the potential impacts that could emerge if the re-zoning of the areas under consideration went ahead. These recommendations emerge directly from the analysis provided in the preceding section of this report. In some instances, there are overlaps in recommendations, which is unavoidable where potential impacts are spread over more than one category.

## 8.1 Visual Impact

Some basic principles that could mitigate landscape and visual impacts in the areas under consideration include the following:

- Light colours should be used on elevated structures, such as the chimneys, to reduce their prominence and hence visual impact;
- Darker colours are likely to be more appropriate on ground level buildings to blend them into the surrounding countryside. Greens should be used with care as they can often clash with surrounding greenery and seasonal variation in backdrop colours should be taken into account;
- Dividing large surfaces into smaller units of colour and texture may reduce the apparent size of large building masses;
- Local materials should be used where possible, particularly in rural locations;
- Even industrial buildings may reflect Maori vernacular and cultural forms;
- Reductions in site levels may reduce the apparent height of buildings and allow more successful screening of ground level elements;
- Appropriate landscaping consistent with existing flora present in the area;
- The use of habitat corridors to screen commercial or industrial buildings from the view of the Manukau Marae and its surrounding area; and
- The use of zoning to prevent development in visually sensitive areas.

Provided that the Council demonstrates comprehensive consideration of, and planning for, landscape and visual impacts, the cumulative visual impact need not have any significant social or cultural impact.

## 8.2 Noise Impact

Developments of this nature inevitably heighten noise impact in the area. There are various options the Council could employ to mitigate these, although the emphasis is on minimisation to acceptable levels, rather than complete elimination:

- Monitor road traffic levels at particular sites, and prescribe desirable limits to increased traffic volume. The marae does not want increased traffic, and would prefer a reduction even in the current volumes of traffic;
- Work with the Makaurau Marae community to avoid increased traffic through the village by discussing, designing and installing traffic calming measures (thresholds, chicanes, speed humps, road narrowing, street landscaping, traffic signage) on Oruarangi Road which in combination with major upgrading of routes back to George Bolt Drive would have the effect of severely discouraging through traffic (especially heavy vehicles) on the

portion of Oruarangi Road which passes through the Village Introduce traffic calming measures through the village to discourage and but village traffic using Oruarangi Road through the village;

- Produce accurate estimations of increased traffic volumes and provide assessments of noise impacts from these changes;
- Conduct research on air emissions and air quality effects resulting from greater road traffic density;
- Implement noise standards for business activity at the nearest residential boundary and explore options for noise bunds and noise screening to minimise the adverse social effects;
- Establish restrictions on heavy vehicles using certain routes where alternative access options are available.

### 8.3 Traffic Impact

Some of the recommendations for traffic impact are closely associated with the Noise Impact category above. Notwithstanding the harmful health effects of increased traffic density, the recommendations relating to increased roading and traffic densities in the area under consideration as a result of the proposed zoning changes could be ameliorated by:

- The Council work with the Marae community to avoid new roads in areas where there are sites of historical, cultural, and spiritual importance;
- The avoidance of roading interference with wahi tapu;
- Avoiding the placement of any further roads to the north west of Oruarangi Road between that road and the Stonefields;
- The construction of road corridors to minimise visual, noise and pollution impacts;
- Establish restrictions on heavy vehicles using certain routes where alternative access options are available (Note that Manukau City Council has made a decision on a resource consent application dated June 2005 application 21555 Ihumatao Quarry Limited recommended decision and conditions of consent Traffic 4 connection between George Bolt Memorial Drive and Ihumatao Rd shall be the preferred route of quarry truck ingress and egress. Heavy vehicles shall not use Oruarangi Road);
- The implementation of guidelines for the construction and maintenance of roads near sites of cultural, historical, or spiritual importance; and
- The positioning of high-traffic-density roading away from locations that would affect access to the Makaurau Marae, or which could potentially interrupt cultural or social activities at the Marae.

### 8.4 Housing Impact

There are options available to the Council to reduce any negative impacts on housing value within the Papakainga Zone of Ihumatao Village. These include:

- Work with people of the Village and the Makaurau Marae community to develop a concept plan for the future development of the Village including upgraded streetscape, planting areas and open space recreation areas.
- Implement comprehensive site layout, height, design and appearance and landscaping controls on any business development in the area to protect nearby residential areas.
- Implement a comprehensive design protocol which applies to housing within the Papakainga Zone.

- Consider the sustainability of existing and any planned residential zones. If these cannot sustain further community infrastructure (including local shops, community centres medical facilities, pre-schools and schools) do not rezone for additional residential areas.
- Explore joint ventures with developers to provide high quality parks and recreation areas in a form reflecting the history and culture of the area.
- Utilise aspects of the natural environment to create a distinct identity for the existing and any planned residential zones.
- Apply a diversified housing mix to any planned residential zones focusing on equitable distribution of housing of various value categories.
- Emphasise heritage, historical, and cultural sites as key identifying features of the current and any proposed residential zones.
- Provision of sufficient off-street parking for each dwelling to prevent street congestion.
- Appropriate use of vegetation barriers and green corridors to separate and conceal commercially- and industrially-zoned land from current and any proposed residential zones.
- The preservation of natural features, including foreshore, mountains, streams, stonefields, and other sites of distinct natural heritage value.
- An appropriate mix of low and medium density housing in any proposed residential zones.
- Utilise a measurement system to regularly assess the social and cultural quality of the current and any proposed residential zones.
- Maintain liaison with representatives of Makaurau Marae to ensure that the cultural and social aspirations of the people of the Marae are woven into the planning and monitoring processes of any new residential zones.

## 8.5 Environmental Impact

There are a series of issues that can be considered by Council and other interested parties when assessing the potential environmental impact on tangata whenua of possible zoning changes. These include:

- There is a distinct Maori concept of ecosystems, which incorporate spiritual and cultural mores as well as more overt environmental considerations;
- The spiritual and symbolic significance of an area to tangata whenua needs to be an explicit consideration in any proposed changes;
- The role of areas for traditional food gathering needs to be acknowledged in a manner that takes into account more than just the economic viability of such activities;
- Sustainable usage of certain areas, and the application of the principle of kaitiakitanga need to be reflected in any plans for re-zoning;
- Local plants, seafood, and other environmental products are important sources for cultural materials and medicines;
- Changes to the landscape, or views of the landscape, can be detrimental to important hapu and iwi landmarks; and
- Water is not just a physical resource for Maori, but also an entity with important spiritual and cultural meanings. Any stormwater treatment devices will need to be designed in consultation with tangata whenua.

## 8.6 Land Access Impact

There are various measures that can be undertaken to ensure that the access to sites of cultural, spiritual, or historical significance is maintained. These include:

- An acknowledgement by all affected parties of the permanent importance of these sites;
- An ongoing commitment by the Council to work in partnership with the people of Makaurau Marae for the preservation and protection of these sites;
- Manukau City Council and the people of Makaurau Marae will need to find a way to work together to understand the location of these sites and identify culturally appropriate ways of protecting them;
- An acknowledgement by all affected parties of the permanent importance of these sites;
- An ongoing commitment by the Council to provide for and maintain suitable access ways to these sites;
- Confirmation, at the planning stage, that no commercial, industrial, residential, or other developments will encroach on the sites themselves, or the means provided to access them;
- Active consideration be given to social, economic, environmental and cultural sustainability as required under the Local Government Act. For example, there is a unique opportunity for Manukau City Council and the airport to require standards of sustainability for all new commercial developments. This could include issues of low energy and low resource use fundamental to the design of all buildings. It would also ensure that transport planning took into account the needs of pedestrians and cyclists.
- A commitment by the Council to plan for access routes that take into account the possible volume of people who may need to access a site at any one time, and the character of the site in question. Coastal sites, for example, may need the provision of roading and sufficient car-parking to ensure fair access; and
- Planning to ensure that any new access routes to the relevant sites are created in a way that affords dignity to the sites themselves and to the people using those routes.

## 8.7 Cultural Impact

When assessing cultural issues, and in particular, the likely cultural impact of possible zoning changes, there are a particular set of issues that need to be taken into account to evaluate the possible cultural impacts of such changes. These include the requirements to:

- Recognise and, provide for the concerns and cultural perspective of tangata whenua with respect to the protection of natural and physical resources;
- Acknowledge and provide for the concerns and cultural perspectives of tangata whenua in regard to the disposal of waste and stormwater into the creeks, streams, foreshore and seabed in the area;
- Directly involve tangata whenua in resource management decision-making in areas such as the recognition of Maori culture and traditions, the exercise by mana whenua groups of kaitiakitanga rights, and the use of plants, seafoods, and other resources for foods or medicines;
- Explore and implement options for involving tangata whenua in monitoring the effects of use, development and protection of resources within the areas being re-zoned;
- Make available technical advice, information and, where appropriate, financial resources to assist the people of Makaurau Marae to continue to manage the physical resources in the area according to their cultural imperatives;
- Consult with the mana whenua group over all aspects of proposed developments following on from any zoning changes; and
- Consult with the mana whenua group over the traditional and cultural relationships of Maori with natural and physical resources within the area including the identification of traditional access to sites that are of cultural value to Maori, and the means of their protection.

## 8.8 Governance Impact

The potential impact on the relationship between the Council and the people of Makaurau Marae as a result of the proposed zoning changes requires attention. There are various ways in which the relationship can be maintained to the benefit of both parties. These include:

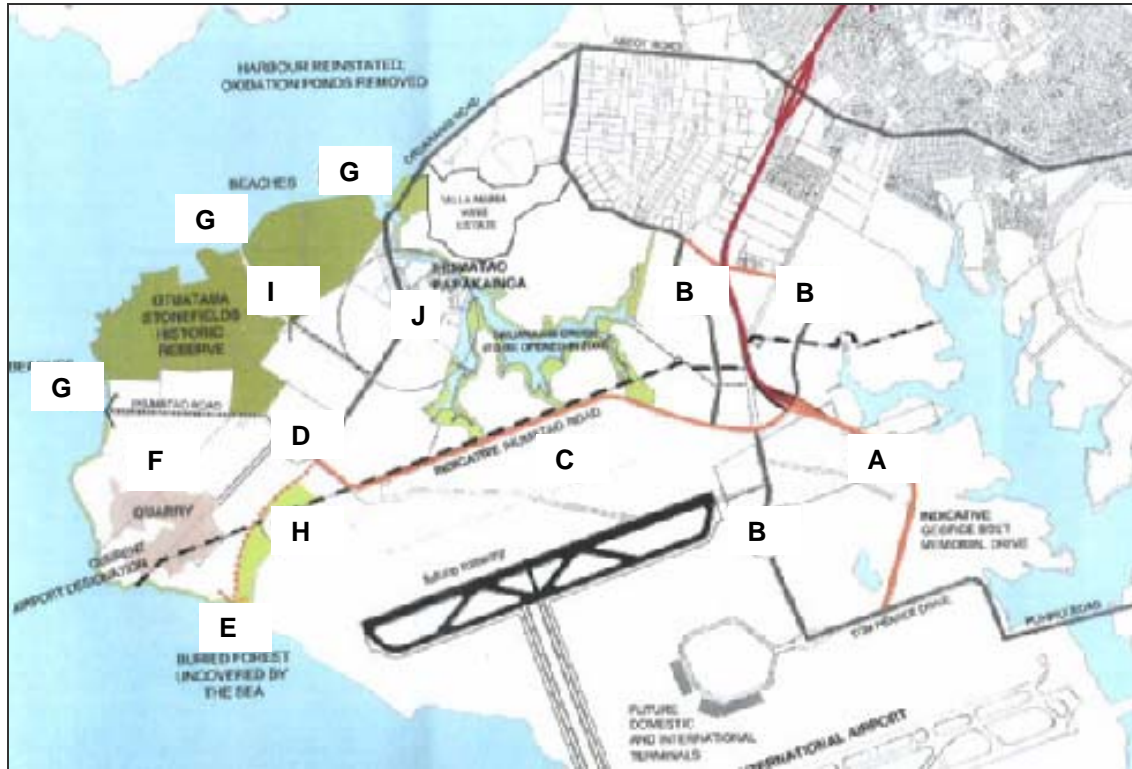
- The maintenance of current structures which allow ongoing communication between the Council, the Marae, and the Airport;
- Distinct recognition of the position of the Marae on issues relating to the proposed re-zoning;
- Sufficient acknowledgement given by the Council to the historical presence of the hapu in the area;
- An explicit acknowledgement of the rights of tangata whenua in the area; and
- If necessary, new systems of consultation can be formed to accommodate the requirements of the parties when considering details of the proposed zoning changes.

## 8.9 Opportunity Cost Impact

The opportunity cost impact could imply that the choices foregone are alternatives to the Council's preferred policy relating to rezoning the area under consideration. However, as far as practical recommendations are concerned, the possibility exists for some of the opportunity cost options be incorporated into the Council's plans for re-zoning without affecting the overall conceptual integrity of these plans. Some of the options include elements of the following suggestions being integrated into the Council's plans for the re-zoned land under review:

- Review the viability of additional residential zoning at the preferred low/medium density in terms of whether it (along with the existing Papakainga Zone) would support additional local social infrastructure or simply result in a larger residential population with no additional local social infrastructure;
- If, following review, additional residential development at low/medium density is unlikely to support additional local social infrastructure then the land alongside the existing Papakainga zone to the south east Oruarangi Road should be kept in its current rural category;
- Provide for the use of some of the proposed re-zoned business land for tourism ventures, consistent with the gateway theme that applies in the area;
- The encouragement of specialized, high-value horticulture/ aquaculture enterprises in some of the remaining rural zones;
- Provide for health-care facilities in some of the business zoned areas to broaden their use for adjoining residential zones;
- Provide for tertiary education facilities in some of the business zoned areas to broaden their use for adjoining residential zones;
- Provide for the use of some of the proposed business land for sporting facilities, such as the Trusts Stadium in Waitakere City; and
- Contain areas to be rezoned for business purposes to the east of Oruarangi Road.

## Section Nine

**APPENDICES****9.1 Map of a Proposed Vision for Mangere Puhinui****Explanation:**

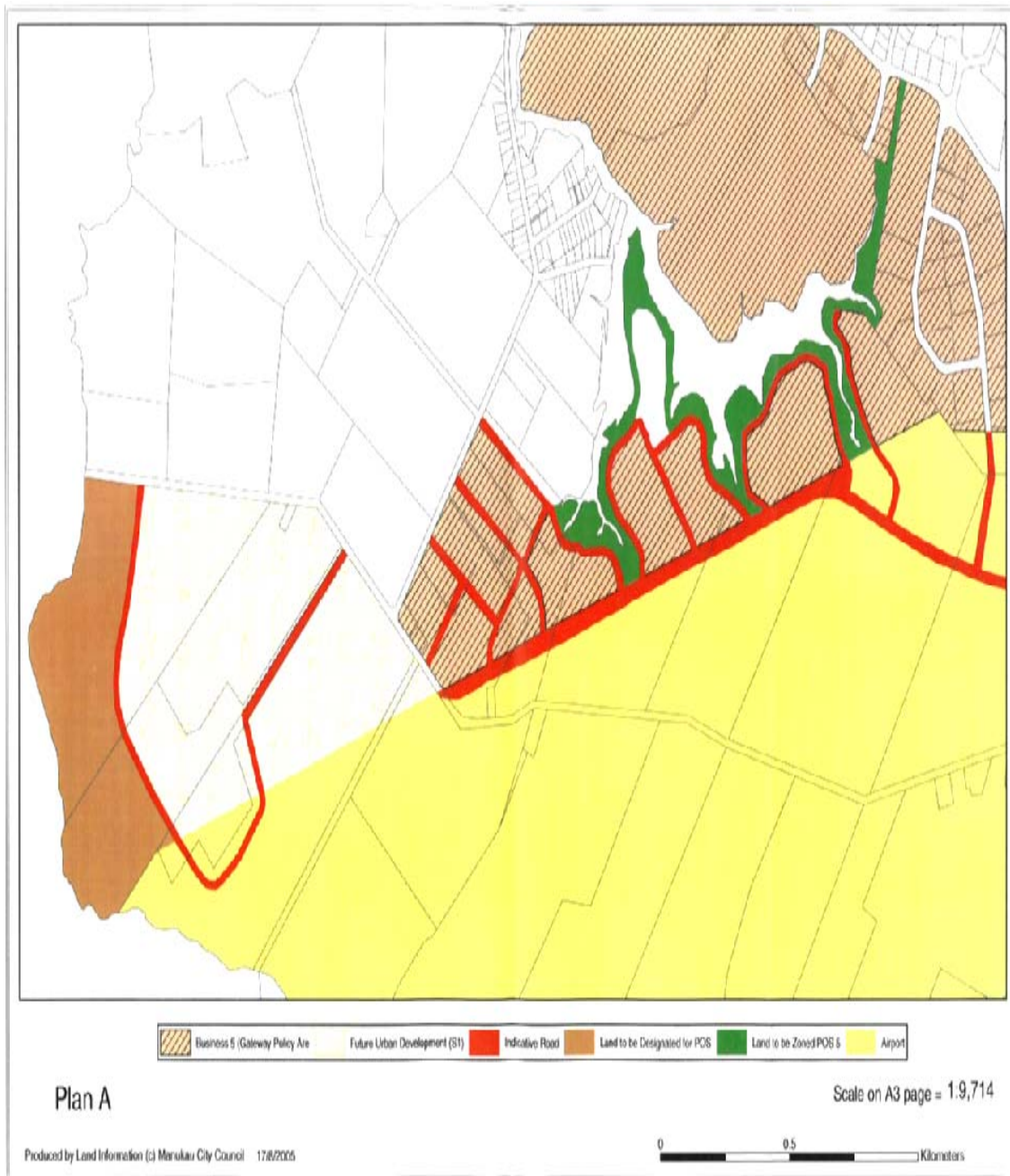
With the George Bolt Memorial Drive moved to the east (A) it becomes possible to build a second network (B) of local roads that connect with the airport. This will allow the free flow of city-to-airport traffic. The indicative Ihumatao Road is positioned as a local arterial. The location will also allow for significant commercial development as a buffer between the future runway and the area to the north of it (C).

It also contributes towards a loop which allows visitors to access key attractions in the area. The circuitous layout of the road will also discourage through traffic. (D) The indicative Renton Road from where the buried forest (E) can be accessed. Renton Road is relocated to allow for airport operational needs. A green buffer area (H) is proposed alongside it for amenity purposes.

Further along Ihumatao Road the site of the mission station (where the Kingitanga Movement was born) (F) and local beaches (G) can be accessed.

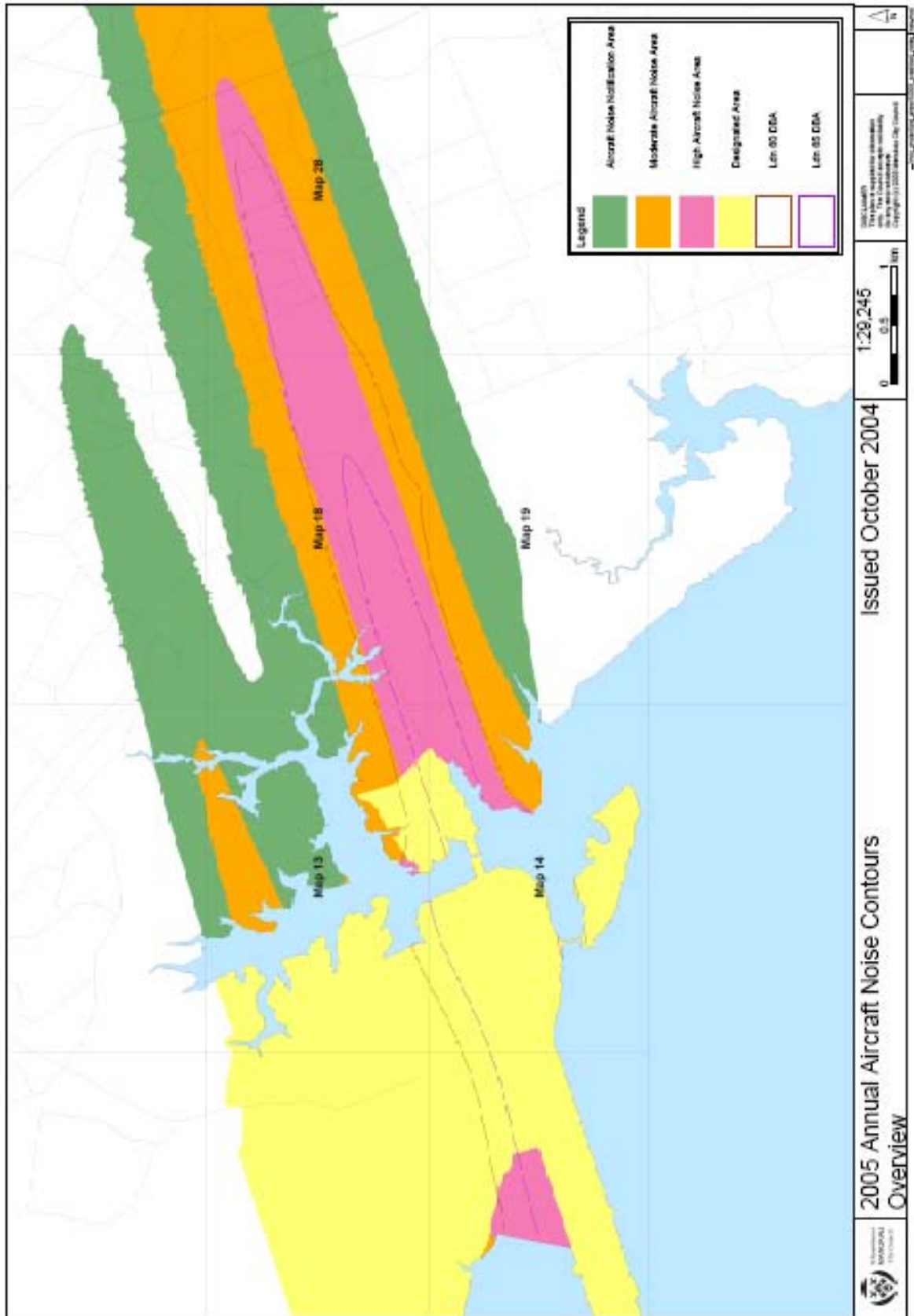
The Otuataua Stonefields Historic Reserve (I) can be accessed off Ihumatao Quarry Road. A new Oruarangi Creek Bridge is proposed to ensure that the Creek becomes navigable once again when it is opened to the sea around October 2006. Ihumatao Papakainga (J) is also located on Oruarangi Road.

## 9.2 Detail of Proposed Zoning

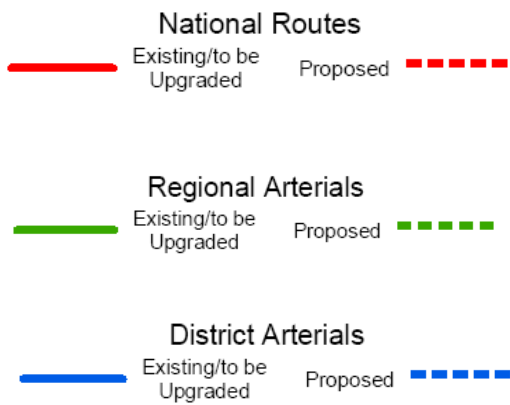
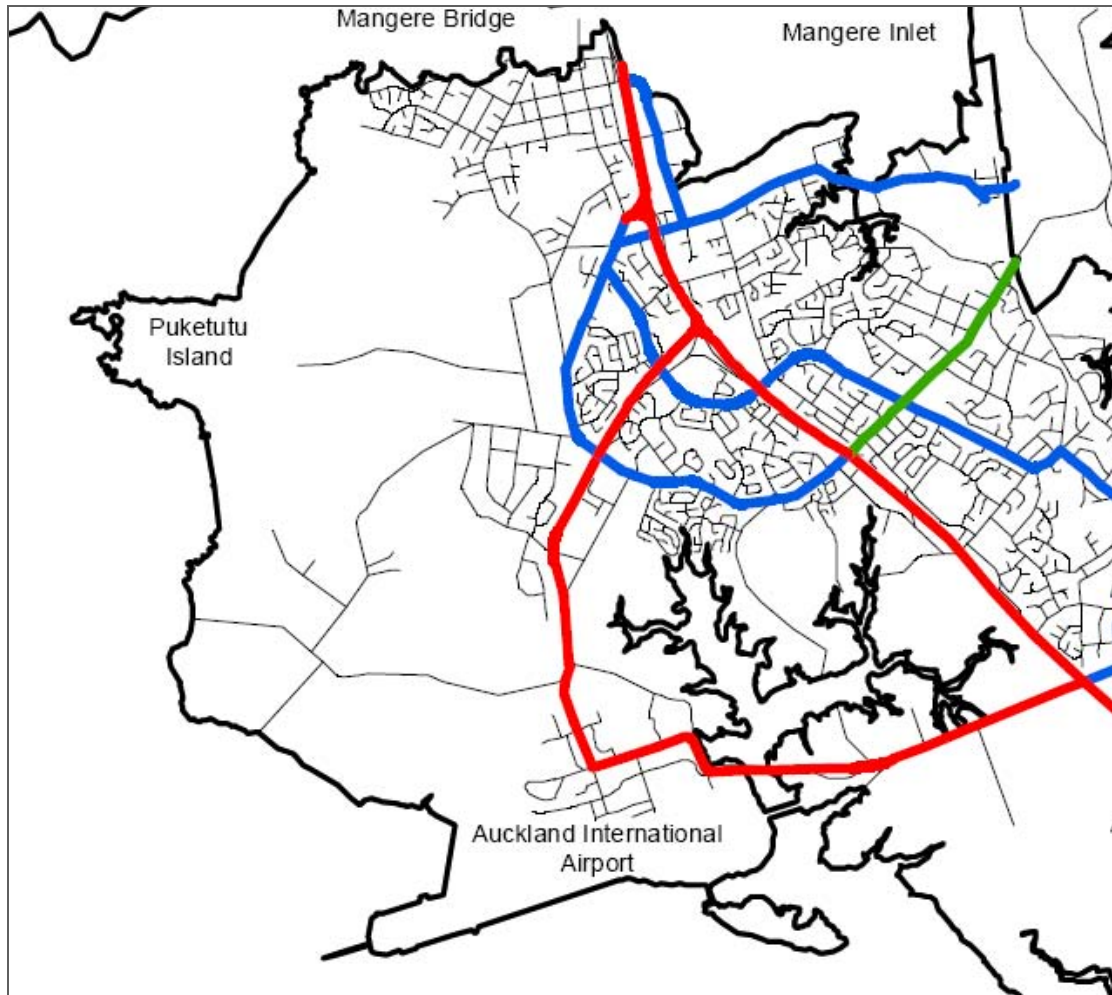




### 9.4 Aircraft Noise Contours for the Area



## 9.5 Future Primary Road Network



## 9.6 Ethics Policy

One of the important aspects of the methodology is that of respondent confidentiality. Various guarantees were provided as part of this research to ensure individual whanau members, and others who provided evidence, were protected. In practice, this produced more candid feedback than had each respondent known they might have been identified. The following rules were applied:

- **Access**

Access to all the raw data collected was limited directly to the researcher. This way, there was no opportunity for the confidentially expressed views of individual whanau members to be seen by anyone apart from the researcher

- **Respondent Confidentiality**

As an additional safety measure, all data contained in this report was scrutinised to ensure no respondents could be identified by the details or circumstances of their replies.

- **Altering or Withdrawing Data**

Individual respondents had the right to alter or withdraw their responses for a period of up to one week after they had been interviewed. Through a confidential coding system, individual responses could be identified and removed at the respondent's request. Although this option was made available, no-one involved chose to alter or withdraw the material they submitted to the researcher.

- **Consent**

For some of the more detailed material provided by certain respondents, a consent form was offered to formally confirm their preparedness for any or all of the material they provided to be used in this report. Although this option was not taken up by any of the respondents, all of them acknowledged the offer being made, and saw it as a gesture of trust on behalf of the researcher. The same offer was potentially available to respondents under the age of 18 years, but the general feeling in the whanau was that such formal statements of consent were more appropriate for research in a pakeha organisation, and in the case of under-18-year-olds, there were no respondents in this category anyway.

- **Data Storage**

All raw data, such as completed survey forms, interview sheets, and any form of electronic recording, will be stored securely for a period of six weeks following completion of the final report. This will allow independent verification any of the material contained in this report. Following this six-week period, all the raw data will be destroyed to protect the confidentiality of all of the respondents.

- **Respondent Liaison**

All the respondents were given the full contact details of the researcher. This enabled them to enquire afterwards about the processing of the data they submitted, and also allowed for a respondent to withdraw their contribution if they subsequently decided to do so.

- **Demonstrable Harm**

All the research carried out for this report was guided, above all else, by the need for the complete avoidance of demonstrable harm to any of the parties involved. Avoiding any harm to an organisation or an individual's mana was the overriding consideration for the methodology.

The overall approach by the researcher was to marry suitable ethical considerations with the requirement to elicit as much relevant information as was possible.

## Section Ten

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