

## Chapter 17.6 — Airport Activities

### 17.6.1 Introduction

The Auckland International Airport (“Airport”) is situated in Mangere on the shores of the Manukau Harbour. The Airport was officially opened in 1965 as a joint venture between the Government and the Auckland territorial local authorities. Since 1988 the Airport has been operated by Auckland International Airport Limited (“AIAL”).

AIAL is a network utility operator in terms of the Resource Management Act, and has the ‘*Auckland International Airport: Land Use*’ and ‘*Auckland International Airport: Specification for Approach and Land Use Controls*’ designations. These designations extend over some 1200 hectares of land. They enable AIAL to carry out activities and developments at the Airport provided these activities come within the terms of the designations. The designations are shown on the Planning Maps and are described in the appendices to the Planning Maps and Chapter 5 — General Procedures and Rules. The provisions of this District Plan apply to the designated land only to the extent that the land is used for a purpose other than the designated purpose.

Current development at the Airport consists of a single runway, taxiways, aircraft manoeuvring areas, freight and passenger terminals, and facilities for aircraft maintenance and support facilities, administration, business and recreation. The designation provides for further development of the Airport, including the development of a Northern Runway to the north of the existing runway. The enlarged area available for further development is shown on the Airport Schematic Plan, which is Appendix 2D to the Planning Maps.

### 17.6.2 Resource Management Issues

#### 17.6.2.1 Introduction

There are significant benefits to the City and the region from AIAL, including a large contribution both directly and indirectly to the economy locally, regionally and nationally. The Airport is also important as a mover of people and goods nationally and internationally. The Airport is a significant employer in the City and region.

The regional significance of the Airport is noted in the Auckland Regional Council’s *Auckland Regional Policy Statement*. The Council recognises the functional significance of the Airport in the City and the region; however, the benefits need to be reconciled with the potential adverse effects of current and future airport operations on the environment. The adverse effects of the Airport need to be managed in the District Plan, while enabling it to operate so that people and the community can provide for their economic and social well being.

There is a need for the adverse effects of the Airport to be avoided, remedied or mitigated. One adverse effect discussed in the following issues section is airport noise. A function of a territorial authority as set out in Section 31(1)(d) of the Act is to control the emission of noise and the mitigation of the effects of noise. The Airport is a land use activity which has existing and potential future adverse noise effects on large areas of the City. This arises from the use of the Airport by aircraft approaching to land and taking off over the City. The area of the City affected by adverse noise effects will depend on the extent of aircraft operations and how they are managed.

[AM89]

The New Zealand Standard NZS 6805:1992 ‘*Airport Noise Management and Land Use Planning*’ sets out a process to manage the adverse effects of aircraft noise arising from the use of airports and to prevent or control noise sensitive activities from locating too close to airports. This Standard has been referred to in

the preparation of methods in this Chapter relating to the Airport. The Standard does not take precedence over the requirements of the Resource Management Act, under which the resource management issues, objectives, policies and methods relating to airport noise have been formulated.

Eight resource management issues relating to the Airport are described below. A summary of each issue precedes each issue statement.

**Issue**

- 17.6.2.2 There are significant positive effects arising from the operation of Auckland International Airport and it is important that the Airport is recognised and provided for so that it can serve the wider community, both now and in the future.**

There are significant positive effects for the country as a whole and for the Region and the City arising from aircraft operations and other activities at the Airport. The Airport is essential to support the wider community and to provide for the needs of future generations. It contributes significantly to the economy and provides major employment opportunities. There is also a need to enable the proposed Northern Runway at the Airport to be established.

While allowance for the expansion of the Airport recognises the contribution the Airport makes to the nation, the Council is still obliged to ensure that Airport operations are undertaken in a way which avoids, remedies or mitigates their adverse effects. AIAL's requirement for the Northern Runway to the north of the existing Airport has been confirmed on the basis there will be a need for a runway with an operational length of 2,150m in the foreseeable future and that this is the appropriate location. At the same time, this has been done on the basis that appropriate noise mitigation measures are put into place.

**Issue**

- 17.6.2.3 Auckland International Airport adjoins the Manukau Harbour and there is the potential for adverse effects from development on the ecological, geological, cultural, spiritual, recreation and landscape values of the coastal environment.**

The coastal environment in the vicinity of the Airport is both natural and modified in character. All of the coastal environment in the Airport vicinity has significant cultural and spiritual values and some parts have significant geological, ecological, recreational and landscape values.

The Auckland Regional Council's '*Regional Plan: Coastal*' identifies the conservation values of the Manukau Harbour maritime area in the vicinity of the Airport. The coast to the south, although modified by past reclamation, has high conservation values. The Pukaki Creek area of the Manukau Harbour is a tangata whenua management area in recognition of the significance of that area to tangata whenua and its spiritual and cultural significance. This area also has important ecological values.

**[AM89]**

Future development at the Airport, including roading development, should take place so as not to compromise the values of the maritime area or the values of the landward side of the coastal environment, above Mean High Water Spring Tide Mark. In particular, location of activities at the Airport so that reclamation is not required would ensure that the major adverse effects on the ecological, geological, recreational, cultural, spiritual and landscape values of the Manukau Harbour are avoided and that these values are protected.

**Issue**

- 17.6.2.4 The operational facilities of Auckland International Airport, may not be able to be managed in a sustainable way if other activities are not appropriately located within the Airport.**

Although the land area available for the development of the Airport has been carefully determined by various planning studies, there is some limitation on expansion as the Airport is bounded on three sides by the coastline of the Manukau Harbour.

AIAL has designated land to provide for future growth of the Airport to the north of the existing runway and other existing facilities. However, development of this land is constrained by the intentions of AIAL to develop a Northern Runway and associated activities.

Operational Facilities present in the established and developing Airport, include a single runway, taxiways and terminal and other support facilities. All activities at the Airport need to be appropriately located to ensure the efficient use of those resources.

Further significant resources are the roading networks to and within the Airport. Access routes to the Airport, George Bolt Memorial Drive (State Highway 20A) and the Eastern Access route are classified as National Routes in the Regional Land Transport Strategy. The completion of the Eastern Access route enhances the access to the Airport, and has been subject to a rigorous environmental impact assessment. This route will also involve additional private roading within the Airport.

George Bolt Memorial Drive is designated by Transit New Zealand. However as the Airport develops and expands it is likely that the length of the State Highway designation will be reduced and replaced by further private roading by AIAL. This can occur because the part of the George Bolt Memorial Drive nearest the Airport is also designated by AIAL for airport purposes. The design and timing of the new roading pattern will be determined by the location of the Northern Runway.

The importance of both access routes to the Airport is reflected in their classification as National Routes. Together they will provide quality links to other major routes and activity centres to enable the Airport to operate efficiently. Development of land adjacent to the access roads to the Airport, including the Airport itself, therefore needs to be managed so that any potential adverse effects on safety and efficiency are avoided, remedied or mitigated.

#### **Issue**

##### **17.6.2.5 There is the potential for degradation of amenity values in areas accessible and visible to the public at Auckland International Airport.**

Amenity values are an important element of the Airport. A high quality visual, pedestrian and vehicle access amenity is present at the Airport. This high level of amenity may be attributed to the foresight of the master-planning of airport layout undertaken by AIAL and the Concept Plan in the Council's previous District Schemes.

The maintenance and enhancement of the amenity values are important both to the community and to the Airport itself. Particular issues such as landscape values associated with access and egress points to the Airport which form a significant entry point for visitors to New Zealand, are important elements of the amenity values of the Airport. The amenity values of the Airport are also affected by the relationship of buildings to spaces accessible to the public, and to adjoining sites.

#### **Issue**

##### **17.6.2.6 Soils of high quality in areas set aside by the Airport designation for Airport development may be under-utilised.**

The lands which are designated for future Airport development are generally of a high quality. Until such time as the land is needed for airport development this land should be kept in productive farming use. The temporary use of the land designated for airport operations, but not yet used for airport activities, in farming activity will not compromise the efficient use of the limited land resource for airport activity.

#### **Issue**

##### **17.6.2.7 Amenity values and quality of the environment in some areas may be adversely affected by aircraft noise arising from use of the existing runway at Auckland International Airport.**

The use of the existing runway at the Airport by aircraft landing and taking off generates levels of aircraft noise which extend for some distance from the Airport over the City. Noise levels from the use of the existing runway are expected to increase in the future as the runway reaches capacity, but moderate to

high levels of noise will be confined largely to the HANA, MANA and ANNA shown on Appendix 2F to the Planning Maps.

Development of a Northern Runway at the Airport, as designated for by AIAL, may, depending on how a two-runway airport is operated, lead to a further increase in the noise levels associated with the existing runway. The future noise effects from the use of the existing runway has a degree of uncertainty given the long time-frames involved in the development of the Airport to its full extent. Aircraft noise may have a significant adverse effect on the amenity values of residential areas, particularly with regard to night-time movements causing sleep disturbance.

Other activities sensitive to aircraft noise, in addition to residential uses, may be adversely affected by aircraft noise. Activities such as hospitals and rest-homes may be particularly affected by sleep disturbance from night-time aircraft movements. Activities such as educational facilities may be adversely affected by aircraft noise, due to speech disturbance and disruption to learning and the learning environment.

Some areas of the City are currently affected by high and moderate cumulative aircraft noise levels. The rural area of Puhinui and some of the residential areas to the south of Puhinui Road are currently affected by high cumulative levels of aircraft noise, exceeding Ldn 65 dBA.

Existing residential areas which may be affected by moderate levels of aircraft noise (between Ldn 60 dBA and Ldn 65 dBA) associated with the use of the existing runway in the future are the residential areas to the immediate north of Puhinui Road, and parts of the, Clover Park, and Chapel Downs areas.

Future urban areas likely to be affected by moderate cumulative noise levels associated with the use of the existing runway in the future are in the Flat Bush vicinity. Schools and other educational facilities in these areas of moderate aircraft noise levels may also be adversely affected.

AIAL's designation for the Airport (Designation 231) has conditions to control noise from aircraft operations and engine testing on aircraft generated at and by the Airport. Rules reflecting these conditions are contained within the Airport Zone provisions of the District Plan. The Airport Zone is shown on Appendix 2A to the Planning Maps.

Further the District Plan recognises the importance of limiting the amount of additional residential development in areas affected or potentially affected by high aircraft noise (ie: aircraft noise levels greater than Ldn 65 dBA). This is because, while it is possible to acoustically insulate dwellings and other activities sensitive to aircraft noise, it is not possible to use such methods to mitigate the effects of aircraft noise on the external environment.

#### **Issue**

**17.6.2.8      Amenity values and quality of the environment for residential and other activities may be adversely affected by aircraft noise arising from use of the proposed Northern Runway at Auckland International Airport.**

AIAL has designated land to the north of the existing runway for a Northern Runway at the Airport. Uncertainties as to timing and details of the development of a Northern Runway, in addition to the uncertainties of aircraft technology and the potential effect of such technology, mean that the noise predictions carried out at this time and methods arising from those predictions may change over time.

Current predictions suggest that a 2,150m long Northern Runway in the position designated by AIAL would not expose any of the residential areas of Papatoetoe or Otara to high or even moderate levels of aircraft noise (ie noise greater than Ldn 60 dBA) if certain restrictions on night time flights are observed.

Controls on the Northern Runway will ensure that no existing residential areas will be exposed to aircraft noise levels above Ldn 65 dBA. Restricting the use of the Northern Runway in this manner will, however, result in an increase in noise levels under the current flight paths of the existing runway. Any further restrictions on the operation of the Northern Runway would result in a greater increase in noise levels from the existing runway and significant opportunity costs to the country and region.

The District Plan therefore adopts rules for the purpose of containing aircraft noise levels from aircraft operations at and generated by the Airport at Ldn 65 dBA within the HANA (to the west of Pukaki Creek) and noise levels at Ldn 60 dBA within the MANA as shown on Appendix 2F to the Planning Maps (to the west of State Highway 20). Similar conditions also attach to AIAL's Designation No. 231.

The District Plan rules and the Designation also contain provisions requiring other forms of mitigation such as the Noise Mitigation Programme and the Noise Mitigation Fund. The District Plan also contains land use controls in relation to activities sensitive to aircraft noise ("ASAN's") in the HANA and MANA.

#### Issue

**17.6.2.9 The location of activities sensitive to aircraft noise in areas where high and moderate aircraft noise levels can not be avoided creates incompatibilities between the operation of Auckland International Airport and land use activities.**

The current operation of the existing runway at the Airport gives rise to incompatibilities with some existing activities. These are activities which are sensitive to aircraft noise due to interference with the ability to hear speech, sleep disturbance and the impact on amenity values. Such activities may include some residential activity, hospitals and rest homes, which may be sensitive to night-time aircraft noise due to possible sleep disturbance. Other activities which may be adversely affected by aircraft noise are those where interference with the ability to hear speech could possibly be a nuisance, such as schools and other educational facilities.

Some areas of the City which are currently affected by noise from the Airport have existing residential and educational facility development. Areas that may be affected by future noise from the Airport also contain such development. Other, as yet undeveloped areas of the City, are planned for future residential growth. Both the Council and the Auckland Regional Council intend that growth of the City in these areas will assist in accommodating regional growth. Parts of these areas to be developed for residential activity will be adversely affected by aircraft noise. Although they will still be able to be developed for residential purposes, as they are not within the High Aircraft Noise Area on the Planning Maps, they may require appropriate measures to be taken to mitigate aircraft noise such as the installation of acoustic insulation and ventilation systems. Within the High Aircraft Noise Area, the establishment of new Activities Sensitive to Aircraft Noise should generally be avoided, as people will inevitably be exposed to noise in the external environment.

### 17.6.3 Objectives

#### Objective

**17.6.3.1 To ensure the ecological, geological, recreational, cultural, spiritual and landscape values of the Manukau Harbour coastal environment in the vicinity of Auckland International Airport are protected.**

*(This objective relates to Issue 17.6.2.4)*

#### Objective

**17.6.3.2 To ensure a high level of amenity values is maintained in the development of Auckland International Airport.**

*(This objective relates to Issue 17.6.2.5)*

#### Objective

**17.6.3.3 To promote the efficient use and development of the land and operational facilities at Auckland International Airport .**

*(This objective relates to Issue 17.6.2.4)*

**Objective**

- 17.6.3.4** To ensure that the productive potential of high quality soil resources are not reduced until such time as the area is needed for Airport development.

(This objective relates to Issue 17.6.2.6)

**Objective**

- 17.6.3.5** To avoid, remedy or mitigate the adverse effects of aircraft noise arising from the development and use of the proposed Northern Runway at Auckland International Airport on residential and other activities sensitive to aircraft noise.

(This objective relates to Issue 17.6.2.8)

**Objective**

- 17.6.3.6** To avoid, remedy or mitigate the adverse effects of aircraft noise arising from the use of the existing runway at Auckland International Airport on residential and other activities sensitive to aircraft noise subject to any existing use rights authorised by section 10 of the Resource Management Act 1991.

(This objective relates to Issue 17.6.2.7)

**Objective**

- 17.6.3.7** To minimise conflict between the development and use of Auckland International Airport and activities which are sensitive to aircraft noise.

(This objective relates to Issue 17.6.2.9)

**Objective**

- 17.6.3.8** To recognise and provide for the positive effects arising from the operation of Auckland International Airport and to take these into account when considering any adverse effects of the Airport on the environment.

(This objective relates to Issue 17.6.2.2)

## **17.6.4 Policies**

**Policy**

- 17.6.4.1** Activities within the land designated for Auckland International Airport should avoid compromising the present and future efficiency of the operational facilities of the Airport.

**Explanation/Reasons**

*This policy seeks to achieve Objective 17.6.3.3.*

*Growth and development within the area of the Airport Designation should be managed so as not to compromise the primary use of the Airport for aircraft operations, and so as not to give rise to a need to expand the area that is designated.*

**Methods**

- Zoning
- Rules



- Designation

**Policy**

- 17.6.4.2 Road access to and from Auckland International Airport should promote the efficient use of the Airport, be safe and efficient, and avoid, remedy or mitigate adverse effects on ecological, recreational, cultural and spiritual values in the area.**

**Explanation/Reasons**

*This policy seeks to achieve Objectives 17.6.3.1 and 17.6.3.3.*

*The responsibility for the planning and provision of roads to and from Auckland International Airport is largely that of Transit New Zealand and AIAL. Council has a role to ensure that the Airport is served by a good roading network to enable the Airport to operate efficiently. This may be achieved by non-regulatory methods such as advocating good road design to Transit and AIAL. The values of the coastal environment in particular should be protected in any roading proposals.*

**Methods**

- Rules
- Advocacy

**Policy**

- 17.6.4.3 Adverse effects of activities on the landscape and visual amenity of the routes for motor-vehicle trips entering and egressing Auckland International Airport should be avoided, remedied or mitigated.**

**Explanation/Reasons**

*This policy seeks to achieve Objective 17.6.3.3.*

*The Airport is the principal gateway to New Zealand and it is therefore important that there is a high standard of visual amenity values at entry and exit points to the Airport.*

**Policy**

- 17.6.4.4 Adverse effects on visual and pedestrian amenity values, including the relationship between buildings, roads, carparks and landscape at Auckland International Airport, should be avoided, remedied or mitigated.**

**Explanation/Reasons**

*This policy seeks to achieve Objective 17.6.3.2.*

*In areas which are accessible to the public the development of the Airport should take place in a manner which creates a high standard of amenity in the way that buildings and parking areas are situated.*

**Methods**

- Rules

**Policy**

- 17.6.4.5** Adverse effects of airport development on the ecological values of the coastal environment in the vicinity of Auckland International Airport should be avoided, remedied or mitigated.

**Explanation/Reasons**

*This policy seeks to achieve Objective 17.6.3.3.*

*The Airport is situated adjacent to the Manukau Harbour and further development in the area should seek to maintain the Harbour's ecological, cultural and spiritual values.*

**Methods**

- Rules

**Policy**

- 17.6.4.6** In areas designated but not used for activities necessary or associated with Auckland International Airport, activities should be limited to those usually occurring with farming activity.

**Explanation/Reasons**

*This policy seeks to achieve Objective 17.6.3.4.*

*The lands which are designated for future airport development are generally of a high quality. Until such time as the land is needed for airport development the productive potential of the land should be protected. The temporary use of the land designated for Airport operations and not yet used for Airport activities in farming activity will not compromise the efficient use of the limited land resource for Airport activity.*

**Methods**

- Zoning
- Rules

**Policy**

- 17.6.4.7** The land and soil resource should remain in an ownership pattern that enables the efficient use of the resource until such time as the land is required for Airport development.

**Explanation/Reasons**

*This policy seeks to achieve Objective 17.6.3.4.*

*Land in proximity to the existing extent of airport development is of a high quality and should be used productively until the area is to be developed for planned expansions at the Airport.*

**Methods**

- Zoning



- Rules

**Policy**

- 17.6.4.8** The potential adverse effects of high and moderate levels of aircraft noise arising from the use of a Northern Runway at Auckland International Airport on the amenity values and quality of life in existing and future residential areas of the City and on Activities Sensitive to Aircraft Noise in other areas should be avoided, remedied or mitigated.

**Explanation/Reasons**

*This policy seeks to achieve Objective 17.6.3.5.*

*The reactions of individuals in a community to levels of aircraft noise can vary, but there is recognition that above certain cumulative noise levels, measured in Ldn dBA, aircraft noise can cause a significant nuisance, and detract from the amenity values and quality of the environment in noise-sensitive areas, particularly in residential areas. To avoid and mitigate those effects, there is a need for appropriate controls on the operation of the Northern Runway as well as an appropriate mitigation programme; acoustic insulation and ventilation performance standards; and the operation of an Aircraft Noise Mitigation Fund.*

**Methods**

- Rules
- A Noise Management Plan is to be developed and implemented as set out in Rule 17.6.17

**Policy**

- 17.6.4.9** The adverse effects of high and moderate levels of aircraft noise arising from the use of the existing runway at Auckland International Airport on the amenity values and quality of life in existing and future residential areas of the City and on Activities Sensitive to Aircraft Noise in other areas should be avoided, remedied or mitigated.

**Explanation/Reasons**

*This policy seeks to achieve Objective 17.6.3.6.*

*The adverse effects of use of the existing runway can be avoided by limiting the location of sensitive activities in areas of high cumulative noise. Activities Sensitive to Aircraft Noise are defined in the District Plan to include activities, such as household units, hospitals, educational institutions, and rest homes. Adverse effects may be remedied or mitigated by the installation of acoustic insulation and ventilation systems in the case of buildings containing activities which are sensitive to aircraft noise within areas of high or moderate aircraft noise .*

**Methods**

- Rules

**Policy**

- 17.6.4.10** The location of new activities which are sensitive to aircraft noise in areas subject to high aircraft noise levels, (areas identified as being within the Ldn 65 dBA contour or higher are subject to high aircraft noise levels) should generally be avoided unless the

adverse effects of those activities on Auckland International Airport can be avoided, remedied or mitigated.

#### Policy

**17.6.4.11** The location of new activities which are sensitive to aircraft noise in Business Zones and the Mangere–Puhinui Rural Zone which are subject to moderate aircraft noise levels, (areas identified as being between the Ldn 60 dBA contour and the Ldn 65 dBA contour are subject to moderate aircraft noise levels) should only occur if the adverse effects of those activities on Auckland International Airport can be avoided, remedied or mitigated.

#### Explanation/Reasons

*These policies seek to achieve Objective 17.6.3.7.*

*The Airport and its flight paths are identified in the Auckland Regional Policy Statement as regionally significant infrastructure. The establishment of Activities Sensitive to Aircraft Noise within the High Aircraft Noise Area or, in the case of the Business Zones within the High or Moderate Aircraft Noise Areas, has the potential to compromise the sustainable management of that infrastructure.*

#### Methods

- Rules

### 17.6.5 Strategy For Aircraft Noise Management And Land Use Planning Of Areas Affected By Aircraft Noise

The development of much of the land designated by AIAL is dependent on the timing for the construction of a Northern Runway, and may be beyond the life of this District Plan. Within the Airport Zone itself the intention is to take a relatively “light handed” approach to the regulation of land use activity (eg business activities) which have few if any significant effects beyond the Airport vicinity itself. [AM109]

Detailed predictions of the future noise impacts of a two runway Airport, as designated by AIAL, have been undertaken. These predictions were carried out with regard to the methodology set out in the New Zealand Standard 6805:1992 “Airport Noise Management and Land Use Planning” and International Civil Aviation Organisation (ICAO) regulations. As a result areas predicted to be subject to high (above Ldn 65 dBA) and moderate (Ldn 60 – 65 dBA) aircraft noise at the year 2030 have been defined. These areas are shown as the “High Aircraft Noise Area” (HANA) and the “Moderate Aircraft Noise Area” (MANA) on the planning maps. Certain land use controls and, in the case of existing Activities Sensitive to Aircraft Noise, noise mitigation packages and measures, apply in these areas. In addition, an “Aircraft Noise Notification Area” has been defined in areas predicted to be subject to between Ldn 55–60 dBA. Land Information Memoranda will be used to advise that sites within the HANA, MANA and ANNA may be subject to aircraft noise.

Managing the two runway operation by controlling the use of the Northern Runway and limiting its length to 2,150 m so that high aircraft noise levels are contained to the west of Pukaki Creek and moderate noise levels are contained to the west of State Highway 20 would reduce its overall effects on residents to an acceptable level.

Areas of the City currently affected by aircraft noise arising from the use of the existing runway will continue to be affected. The degree to which some areas are affected may increase over time. In particular, there is an area within the Main Residential Zone which is bounded by Puhinui Road in the north, the NIMT in the west and the Grayson/Brett Avenue and Liverpool Avenue Business 5 land in the east and south which is and will continue to be within the High Aircraft Noise Area. Long term it is not

desirable that this area remain zoned for residential purposes. It is the Council's intention to initiate a plan change and, subject to the outcome of that change, to set in place a programme to assist the transition of the area from residential to business zoning. It is envisaged that the Council would work with property owners and residents and other stakeholders in the area to ensure that any such transition is as smooth as possible.

Adverse effects can also be expected from the Northern Runway and will be difficult to avoid entirely. However, significant mitigation of noise effects from both the existing runway and the combined operation of the existing and proposed Northern Runways will be achieved in a number of ways. Much of the area immediately around the Airport is either part of the Manukau Harbour or is land zoned for rural or business purposes. Those zonings reflect the value of the land for farming, and the benefits of business activity in proximity to a major transport facility for the movement of goods. Both the Harbour and these zoned areas also provide a significant noise buffer for the Airport. Modern quieter aircraft presently use the Airport and can be expected to continue to do so. This is particularly the case with international passenger aircraft which generate the greatest proportion of the noise. Noise abatement procedures are followed by aircraft in flight and these also mitigate noise impacts. They can be expected to continue to operate in the future. Further mitigation will be achieved by ensuring that the location of any new noise sensitive activities in the High Aircraft Noise Area is generally avoided and that new noise sensitive activities and additions and alterations to existing noise sensitive activities located in the High and Moderate Aircraft Noise Area are acoustically insulated and are designed and constructed to include ventilation systems so that the internal noise and air quality environment will be satisfactory.

Other methods are also included in the District Plan such as requirements for AIAL, in providing a mitigation programme for existing noise sensitive activities and the preparation of a Noise Management Plan, to assist in mitigation of the adverse effects.

The strategy adopted in the District Plan is therefore a combination of the various initiatives:

- containing high noise levels from the Northern Runway to the west of Pukaki Creek and moderate levels to the west of State Highway 20;
- where appropriate, the zoning of land around the Airport as rural or business;
- the use of that zoned land and the Harbour as a noise buffer;
- the control of activities sensitive to aircraft noise within the High Aircraft Noise Area and to a lesser degree within the Moderate Aircraft Noise Area;
- appropriate treatment of noise sensitive activities within the High and Moderate Aircraft Noise Areas;
- establishment of a noise management plan;
- establishment of an aircraft noise mitigation fund;
- requirements for noise sensitive activities to meet acoustic insulation and ventilation performance standards.

The strategy is consistent with NZS 6805 and the provisions of the Resource Management Act 1991.

## 17.6.6 Implementation

### 17.6.6.1 Regulatory Methods

#### 17.6.6.1.1 Airport Zone

Special circumstances relating to the effects of the Airport mean that the area developed, and to be developed in association with the existing runway, will be zoned Airport Zone. The rules applying within this zone will address the avoidance, remediation or mitigation of any potential adverse effects of the Airport. [AM109]

#### 17.6.6.1.2 Conditions on AIAL's Land Use Designation No. 231

AIAL as a requiring authority for Airport activities has designated approximately 1200 hectares of land that is considered necessary for the operation of the Airport now and in the future. To ensure adverse effects of the operation of the Airport are avoided, remedied and mitigated, the designated work is subject to conditions. Reference should be made to Schedule 5A — Chapter 5 for more detail.

#### 17.6.6.1.3 Activity Types

##### 17.6.6.1.3.1 Permitted Activities

Within the Airport Zone a wide range of activities are permitted where they can, subject to development conditions, ensure that any potential effects from the activities that impact outside the Airport Zone are unlikely to arise and would have only minor significance.

##### 17.6.6.1.3.2 Discretionary Activities (including Restricted Discretionary Activities)

A resource consent and assessment of effects on the environment outside the Airport Zone of airport-related activities which have the potential to have adverse effects on the environment is required. In addition, some industrial activities in the Airport Zone have the potential to cause significant adverse effects and it is necessary that these be given proper consideration so that whether or not the activity may locate there is considered, and appropriate conditions may be imposed to avoid or mitigate them.

#### 17.6.6.1.4 Development and Performance Standards

Development standards are the rules which apply to the development of buildings and structures in the Airport Zones. For example, the coastal protection yard restricts the establishment of industrial activities adjoining coastal areas.

Landscape standards are intended to enhance the amenity values of entry and egress points to the Airport.

Performance standards are conditions that apply to airport activities in the Airport Zone to ensure that amenity values and the quality of the natural environment for the neighbouring residential area are maintained and enhanced. Performance standards relate to matters such as noise and hazardous activities.

Conditions attach to Designation 231 specifying maximum noise limits for the existing runway, the area designated for a second runway, and for in situ aircraft engine testing. In addition, there are controls on other noise sources; and a range of other measures for the mitigation of noise (including a Noise

Management Plan and a Noise Mitigation Programme). There is a Noise Mitigation Fund for the purpose of ensuring positive effects to offset the impact of aircraft noise on the community.

These conditions attaching to the designation are reflected in performance standards and discretionary controls in the District Plan rules governing the underlying Airport Zone.

Controls over Activities Sensitive to Aircraft Noise are found in Rule 5.21 of the Plan.

#### **17.6.6.2 Non-Regulatory Methods**

Council will use advocacy to promote a good design and form at the Airport. This may be addressed in part by provisions in the designations relating to airport expansion so as to give the community a degree of certainty as to the growth and development at the Airport.

Council will use advocacy with Transit New Zealand and AIAL to promote at all times the provision of an efficient, safe roading network to and within the Airport which avoids, remedies or mitigates adverse effects on ecological and cultural values.

Council will advocate the implementation of noise abatement procedures on a voluntary basis by airlines, and seek the co-operation of all agencies responsible in investigating mechanisms to impose new regulations which require noise abatement procedures.

The Council will, in co-operation with the Airport Authority (currently AIAL) and the Aircraft Noise Community Consultative Group, undertake education and information programmes and measures (such as producing information sheets and circulars) designed to inform the public of the nature and purpose of the noise controls, landuse controls, noise mitigation programmes and acoustic insulation and ventilation performance standards incorporated in this Plan.

Land Information Memoranda for all sites in the HANA, the MANA and the ANNA will include a statement that the land is or may in the future be subject to aircraft noise and that land use restrictions may apply to ASANs in those areas. Reference should be made to Chapter 5, Rule 5.21 and the planning maps of the District Plan and Designation 231.

#### **Explanation/Reasons**

*While land outside the High and Moderate Aircraft Noise Areas and the Aircraft Noise Notification Area will not be subject to any land information memoranda in relation to aircraft noise, this does not indicate that there will be no such noise in relation to that land or indeed that persons living on such land will not be annoyed by that noise.*

#### **17.6.7 Anticipated Environmental Results**

From the identification of the resource management issues and the objectives, policies and rules for the Airport the expected environmental outcomes are identified as follows:

- A reasonable quality of amenity values in rural, business and public open space zones adjacent to and neighbouring the Airport.
- A high level of amenity values at the Airport.
- A high quality of landscape and visual amenity at entry and egress points to the Airport.
- Avoidance of new Activities Sensitive to Aircraft Noise within the High Aircraft Noise Area.

- Acoustic treatment of Activities Sensitive to Aircraft Noise within the High and Moderate Aircraft Noise Areas.
- Efficient operation of the Airport.
- Continued and enhanced economic and social activity at the Airport including recreational travel, air freight and employment opportunities.
- The protection through Designation 231 of the land required for the second runway at the Airport and the ability of that second runway to be used efficiently and appropriately.

### 17.6.8 Procedures for Monitoring

In order to assess the suitability and effectiveness of the objectives, policies and methods in achieving the anticipated environmental results for the Airport, the Council will develop a monitoring programme (see Chapter 1, section 1.7.3) which may include the following monitoring procedures:

- Cooperating with the Auckland Regional Council in the monitoring of the coastal environment in the vicinity of the Airport.
- Monitoring of aircraft noise.
- Monitoring of complaints regarding aircraft noise.

### 17.6.9 Description and Explanation of Zone and Relationship to Designation 231 for the Airport

#### 17.6.9.1 Airport Zone

The Airport Zone is applied to the Airport. The Airport Zone recognises the continued use and development of the Airport. The zone recognises the substantial structural resources at the Airport and the likely continuation of the functions of the Airport should the designation be uplifted.

Should the designation which provides for the continued development of the Airport be removed the underlying zoning of the land will remain. Until the designation is uplifted, the provisions of the Airport Zone will not apply to those activities which are undertaken in accordance with the designation, except they will only apply to the extent that the land is used for a purpose other than the designated purpose.

In this context the zone permits a range of activities which are appropriate in association with the Airport and which do not give rise to significant adverse effects on the Airport itself or in terms of the resource management strategy for the whole of the City.

### 17.6.10 Rules — Activities

#### Rule

#### 17.6.10.1 Activities in the Airport Zone

- Permitted activities in Rule 17.6.10.2 — Activity Table shall comply with Rule 17.6.11 Development and Performance Standards.
- Restricted Discretionary Activities in Rule 17.6.10.2 — Activity Table shall comply with the Development and Performance Standards applicable to those activities and shall



be assessed against those matters for discretion specified in Rule 17.6.12.1.1, except for aircraft operations, testing of in situ aircraft engines and the development and use of any runways which shall be subject to discretion in respect of the matters in Rule 17.6.12.2.2.

- (c) Discretionary activities in Rule 17.6.10.2 — Activity Table will be assessed under section 104 of the Act.
- (d) Any activity not listed in Rule 17.6.10.2 — Activity Table is deemed to be a non-complying activity.
- (e) For notification procedures under the Resource Management Act 1991 see Rules 5.2.2, 5.2.3, 5.2.4 and 5.3.3.1 of Chapter 5 General Procedures and Rules.

### 17.6.10.2 Activity Table

#### Rule

#### 17.6.10.2.1 Airport Zone

**NOTE:** In the table below the terms used have the following meanings:

P = Permitted Activity

C = Controlled Activity

(R)D = Restricted Discretionary Activity

D = Discretionary Activity

Any activity associated with the operation of the Airport (not including aircraft operations, runways and the testing of in situ aircraft engines) including but not limited to taxiways and other aircraft movement areas, aprons, terminals, rescue facilities, navigation and safety aids, maintenance and servicing facilities, catering facilities, freight facilities, quarantine and incineration facilities, fuelling facilities, storm water facilities, roads, monitoring activities, site investigation activities, landscaping, flags and signs	P
Any activity (not including household units) which is associated with the needs of Airport passengers, visitors and employees, and Airport businesses, and not otherwise provided for in Activity Table 17.6.10.2	P
Runways, aircraft operations and the testing of in situ aircraft engines which comply with Rule 17.6.12.2.1(a) and (b)	R(D)
Any activity listed in Table 17.6.10.2 as a permitted activity which complies with the development and performance standards listed in Rule 17.6.12.1 but which does not otherwise comply with Rule 17.6.11 Development and Performance Standards	R(D)
Retail sales, conference facilities, care centres, healthcare services equipment hire premises, any industry except activities involving discharges to air categories listed in Appendix 14B, bus depots, transport centres, vehicle rental and valet activities, vehicle parking and storage	P
Cafes, restaurants and takeaway food premises	P
Farming, except glasshouses	P
Hotels	P
Household units which are ancillary to and situated on an operating independent farm unit and are needed for, and to be used by persons working fulltime on the farm, provided that where more than one household unit is required on a farm unit which is comprised in more than one Certificate of Title the Council may require that the separate titles be held together by legal agreement	P

Household Units for uses other than farming for persons whose employment duties require them to live on the premises	D
Medical Services premises	P
Offices	P
Personal and other services	P
Places of assembly	P
Service Stations	P
Signs	P
Taverns	P
Travellers accommodation	P
Truck stops and motor vehicle service facilities	P
Educational Facilities, entertainment facilities and buildings and land for recreational (indoor and outdoor), cultural, social, educational and welfare purposes	P
Buildings accessory to any farming activity except household units and glasshouses	P
Land modification, development and subdivision	Refer Chapter 9 Land Modification, Development and Subdivision except as provided in Rule 17.6.10.2.2
Network Utility Services	Refer Chapter 7 Network Utility Services
Transportation (not including parking and loading)	Refer Chapter 8 Transportation
Hazardous Facilities and Substances	Refer Chapter 10.1 Hazardous Facilities and Substances
Temporary Activities	Refer Chapter 5 General Procedures and Rules
Street and Subdivision Layout (if applicable) within the Airport Northern Entry Area shown on the Mangere Gateway Heritage Area Figure 17.1 (not including the realigned George Bolt Memorial Drive which shall be a Permitted Activity) <b>[AM 109]</b>	C
The erection of a building (other than a building required for purposes associated with aircraft operations) and /or the construction of a car parking area on a site having frontage to George Bolt Memorial Drive or adjoining the Pukaki Creek (or any reserve that adjoins Pukaki Creek) within the Airport Northern Entry Area shown on the planning maps <b>[AM109]</b>	C
Retail sales the within the Airport Northern Entry Area shown on the Mangere Gateway Heritage Area Figure 17.1 <b>[AM109]</b>	NC
Activities which may have an adverse effect on any scheduled heritage resource in Schedule 6A–6F	Refer Chapter 6 Heritage

**Rule****17.6.10.2.2 Earthworks Exception**

In addition to any earthworks which are permitted activities pursuant to Chapter 9, earthworks in the Airport Zone undertaken by AIAL shall be a permitted activity provided the earthworks:

- are located 20 metres or more from any utility services (including roads) owned by or vested in the Council, (whether or not the earthworks are preparatory to the installation or upgrading of utility services that are to be connected to any utility services owned by or vested in the Council), and

- are preparatory to activities to be undertaken on land which is owned by or under the control of AIAL.

## 17.6.11 Rules — Development and Performance Standards

### Rule

#### 17.6.11.1 Building Height

No structure shall exceed the heights set out in Auckland International Airport: Specification for Approach and Land Use Controls — Specification for Obstacle Limitation Surfaces (refer Appendix 2B.1 and 2B.2 to the Planning Maps).

### Rule

#### 17.6.11.2 Yards

Where the Airport Activities Zone abuts the Mangere-Puhinui Rural Zone, a 20 metre yard is required.

[AM109]

### Rule

#### 17.6.11.3 Coastal Protection Yard

A coastal protection yard having a minimum depth of 20 metres shall be maintained where any part of the zone abuts the Mean High Water Spring Tide Mark. No structure shall be erected in the coastal protection yard except essential Airport operational facilities (for example, security fences, navigational aids, rescue facilities and stormwater facilities) which require location in the area of the coastal protection yard.

Earthworks involving more than a cumulative total of 200m<sup>3</sup> in a coastal protection yard shall be a restricted discretionary activity in terms of Rule 9.8.2

### Rule

#### 17.6.11.4 Auckland International Airport Schematic Plan

There shall be two runways within the Airport Zone which shall be within the areas shown on the Auckland International Airport Schematic Plan – Appendix 2D to the Planning Maps, as “Existing Runway” and Northern Runway. No structure or activity shall be located in the “Existing Runway” or Northern Runway areas or any other area if it would adversely affect the use of the “Existing Runway” or Northern Runway areas for the runway.

### Proviso:

- (a) Nothing in this Rule 17.6.11.4 shall preclude the use of the taxiway of the existing runway for the take-off and landing of aircraft (ie, as a runway) in substitution for the existing runway where the existing runway is under repair or in an emergency.<sup>1</sup>
- (b) The use of the taxiway of the existing runway pursuant to (a) of this proviso shall be a restricted discretionary activity subject to Rule 17.6.12.2.

### Explanation/Reasons

*The Schematic Plan for the Airport illustrates the “building envelope” for the runways in the Airport Zone so that there will be provision for two runways in the area presently incorporated in the zone and so that the*

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1. Use of the taxiway as a runway will be subject to approval under the Civil Aviation Act 1990.

*runways will be located within specifically defined locations. No other structure or activity is allowed in that location that would interfere with their use as runways. [AM109]*

**Rule****17.6.11.5 Landscape Design**

All carparking, roading and building development shall be landscaped with grassed areas and the planting of trees, or shrubs or flower beds.

**Explanation/Reasons**

*In order to ensure a high standard of visual amenity values in the Airport Zone development of buildings, roading and carparking at the Airport are to be landscaped.*

**Rule****17.6.11.6 Storage Areas**

- (a) Those parts of any activity which are or may be visible from any public place shall be maintained in a tidy condition.
- (b) All storage areas and location of by-products, refuse or refuse containers of any kind shall be located and screened from public view by planting or by the construction of a screen wall or fence.

**Rule****17.6.11.7 Hazardous Substances**

Refer to Chapter 10.1 Hazards Facilities and Substances.

**Rule****17.6.11.8 General Noise Controls**

Any use of land in the *Airport Zone* for any purpose other than:

- Runway;
- Aircraft Operations (Rules 17.6.16.1 and 17.6.16.2);
- testing of in situ aircraft engines (Rule 17.6.16.3); or
- the use of audible bird scaring devices for the discouragement of birds,

shall not exceed the following noise limits within the Main Residential Zone or within the notional boundary of any dwelling outside the designated area in the Mangere–Puhinui Rural, Mangere–Puhinui Heritage or Papakainga zones.

AVERAGE MAXIMUM LEVEL			MAXIMUM
L <sub>10</sub> dBA			L <sub>max</sub> dBA
MONDAY TO SATURDAY 7.00AM–6.00PM (0700–1800)	MONDAY TO SATURDAY 6.00–10.00PM (1800–2200) AND SUNDAY AND PUBLIC HOLIDAYS 7.00AM–10.00PM (0700–2200)	AT ALL OTHER TIMES	10.00PM–7.00AM (2200–0700)
55	50	45	70

For the purpose of this rule, noise shall be measured in accordance with NZS 6801:1999 Acoustics: Measurement of Environmental Sound and assessed in accordance with NZS6802:1991 Assessment of Environmental Sound.

#### Rule

##### 17.6.11.9 Business Development Reserve Contributions

Refer Rule 15.15.2.3.5.1.

##### 17.6.11.10 Subdivision

#### Rule

##### 17.6.11.10.1

- (a) Where the land is to be used for any activity other than farming, subdivision shall be subject to the Subdivision rules for the Business 5 Zone in Chapter 14 — Business Areas and Chapter 9 – Land Modification, Development and Subdivision.
- (b) Where the land is to be used for farming, subdivision shall be subject to the Subdivision rules for the Mangere–Puhinui Rural Zone in section 17.3 of Chapter 17 — Special Areas and Chapter 9 – Land Modification, Development and Subdivision.

### 17.6.12 Rules – Conditions and Matters for Discretion: Restricted Discretionary Activities

#### Rule

##### 17.6.12.1 Restricted Discretionary Activities (Except Aircraft Operations, Testing of In Situ Aircraft Engines and Runways)

Any activity listed in Rule 17.6.10.2 Activity Table as a Restricted Discretionary Activity (except aircraft operations, testing of in situ engines, and the development and use of any runway) shall comply with the following development and performance standards:

- Rule 17.6.11.4 Airport Schematic Plan;
- Rule 17.6.11.7 Hazardous Substances;
- Rule 17.6.11.8 General Noise Control;

- Rule 17.6.11.9 Business Development Contribution (except as provided in Rule 17.6.12.1.1(f)),

and shall be subject to assessment in respect to the matters in Rule 17.6.12.1.1.

**Rule****17.6.12.1.2**

Council restricts the exercise of its discretion to the following matters when assessing an application for resource consent for a Restricted Discretionary Activity (except aircraft operations, in situ aircraft engine testing and the development and use of any runway) and may impose conditions in respect of:

- (a) Height.
- (b) Yards.
- (c) Coastal Protection Yards.
- (d) Landscape design.
- (e) Storage areas.
- (f) Business Development Reserve Contribution, but only in respect of any proposed reduction in the amount of the contribution from 0.5% to not less than 0.35% of the assessed value of the development.

**Rule****17.6.12.1.2**

When assessing an application for a resource consent for the above Restricted Discretionary Activities Council will have regard to the following assessment criteria and any relevant matters set out in section 104 of the Act:

- (a) Whether the proposed height of the structure will have an adverse effect on airport safety and visual amenity values.
- (b) Whether the proposed structure will have an adverse effect on the visual and landscape amenity values of adjoining sites.
- (c) When assessing the matter of coastal protection yards, whether the proposed structure will have an adverse effect on the coastal environment, including visual and landscape amenity, water quality, vegetation and habitats.
- (d) When assessing landscape design, whether the proposal will ensure a high standard of visual amenity values in the Airport Zone where visitors and passengers are likely to be present, such as the exit and egress points to the Airport.
- (e) When assessing storage areas, whether the proposal includes methods of ensuring any parts of an activity visible from any public place will be maintained in a tidy condition and whether location of by products or refuse should be screened from public view in order to maintain a reasonable level of visual amenity.
- (f) When assessing the amount of the reserve contribution required in the case of any development proposed by AIAL:
  - (i) the extent to which any facilities (land or works) provided by AIAL benefit the public and are visible and accessible to the public;



- (ii) the extent of any restrictions on public access to the nominated facilities/areas provided by AIAL;
- (iii) the cost to AIAL of providing the nominated facilities/areas for public amenity and use;
- (iv) the extent to which AIAL makes provision for public open space;
- (v) the extent to which the development adversely affects the environment.

**Proviso:** the amount of reserve contribution shall in each case be not less than 0.35% and not more than 0.5% of the assessed value of the development.

#### **17.6.12.2 Restricted Discretionary Activities in Respect of Aircraft Operations and Testing of In Situ Aircraft Engines and Runways**

##### **Rule**

##### **17.6.12.2.1 Standards and Terms**

Aircraft Operations, testing of in situ aircraft engines and the development and use of any runway shall comply with:

- (a) the following development and performance standards:
  - Rule 17.6.11.3 Coastal Protection yards.
  - Rule 17.6.11.4 Airport Schematic Plan.
  - Rule 17.6.11.7 Hazardous Substances.
  - Rule 17.6.11.9 Business Development Contribution (except as provided in Rule 17.6.12.2.2(e);
- (b) Rule 17.6.14 Noise Mitigation Programme and Funding of Noise Mitigation Measures;
- (c) Rule 17.6.15 Aircraft Noise Mitigation Fund;
- (d) Rule 17.6.16 Noise Controls; and
- (e) Rule 17.6.17 Noise Management Plan,

and shall be subject to discretion in respect of the matters in Rule 17.6.12.2.2.

##### **Rule**

##### **17.6.12.2.2 Matters for Discretion**

The Council restricts the exercise of its discretion to the following matters when assessing an application for a resource consent for aircraft operations, or in situ aircraft engine testing and the development and use of any runway as Restricted Discretionary Activities and may impose conditions in respect of each matter:

- (a) the Dispute Resolution Procedures for inclusion in the Noise Management Plan;
- (b) the Terms of Reference for the Aircraft Noise Community Consultative Group;
- (c) the effects of aircraft noise associated with the use of the Airport on the environment;
- (d) any measures in addition to those referred to in Rules 17.6.14 to 17.6.17 to:

- mitigate or offset the effects of aircraft noise associated with the use of the Airport on the environment; or
  - monitor the level of the noise of such aircraft.
- (e) Business Development Reserve Contribution, but only in respect of any proposed reduction in the amount of the contribution from 0.5% to not less than 0.35% of the assessed value of the development;
- (f) the date of the first and subsequent publications of the Annual Aircraft Noise Contours ("AANCs") under Rule 17.6.14.1(b);
- (ff) the times within which any obligation under Rule 17.6.14.3 or any other Rule is to be undertaken or completed;
- (g) the form and terms of the trust deed to give effect to Rule 17.6.15;
- (h) the exceedance by up to Ldn 1 dBA of the noise limits in Rule 17.6.16.1.1(a)(i) and (a)(ii), provided the Airport Authority demonstrates at the request of and to the satisfaction of the Council that any such exceedance is due to atypical weather patterns (including wind speed and direction) during the measurement period, such as produced by the El Nino/La Nina climatic oscillation.

**Rule****17.6.12.2.3 Assessment Criteria**

When assessing an application for a Restricted Discretionary Activity resource consent for aircraft operations, testing of in situ aircraft engines and the use and development of any runway, the Council will have regard to the following matters and any relevant matters in section 104 of the Act:

- (a) the desirability of maintaining an approach to the control and mitigation of aircraft noise associated with the use of the Airport, that is consistent with the conditions attaching to Designation 231 for the Airport.
- (b) the desirability or need for positive measures including the Noise Mitigation Fund (as provided for in Designation 231) to offset adverse effects of aircraft noise on the external environment.
- (c) when assessing the amount of the reserve contribution required in the case of any development proposed by AIAL:
- (i) the extent to which any facilities (land or works) provided by AIAL benefit the public and are visible and accessible to the public;
  - (ii) the extent of any restrictions on public access to the nominated facilities/areas provided by AIAL;
  - (iii) the cost to AIAL of providing the nominated facilities/areas for public amenity and use;
  - (iv) the extent to which AIAL makes provision for public open space;
  - (v) the extent to which the development adversely affects the environment.

**Proviso:** the amount of reserve contribution shall in each case be not less than 0.35% and not more than 0.5% of the assessed value of the development.

### 17.6.13 Assessment Criteria — Discretionary Activities

#### 17.6.13.1 Any Discretionary Activity in the Airport Zone

In considering any Discretionary Activity in the Airport Zone the Council will have regard to the relevant matters set out in Section 104 of the Act.

### 17.6.14 Rules – Noise Mitigation Programme and Funding of Noise Mitigation Measures

#### Rule

##### 17.6.14.1 Preparation of the AANCs and List of Affected Sites

Aircraft operations, testing of in situ aircraft engines, and the development and use of any runway shall be subject to the following requirement:

The Airport Authority shall:

- (a) Prepare annually the Ldn 60 dBA AANC and Ldn 65 dBA AANC;
- (b) Publish a public notice in:
  - (i) one or more daily newspapers circulating in the Manukau City district; or
  - (ii) one or more other newspapers that have at least an equivalent circulation in the district to the daily newspapers circulating in the district;
 advising the public that:
  - the AANCs have been prepared for the following twelve months;
  - explaining what the AANCs are and who is potentially affected; and that
  - the AANCs are available for public inspection at such Council offices as determined by a designated Council officer approved by the City Manager of the Council.

#### Rule

##### 17.6.14.1.2

The Airport Authority shall:

- (a) complete and supply to the Council at such time as the Council specifies:
  - (i) a list identifying all sites within the HANA and the MANA (“affected sites”);
  - (ii) a list of the legal descriptions and street addresses of all the affected sites; and
  - (iii) details of any Existing Building located on the affected sites.
- (b) for the purpose of clause (a) of this Rule, where a site lies within a mixture of HANA and MANA, or is partly located within one of those areas, then for the purposes of Rules 17.6.14.2 and 17.6.14.3:

- if any Existing Building is located wholly or partly within the HANA, that Existing Building shall be deemed to be in the HANA;
  - if any Existing Building is located wholly outside the HANA, but wholly or partly within the MANA, that Existing Building shall be deemed to be in the MANA;
- (c) for the avoidance of doubt, nothing in Rules 17.6.14.2 and 17.6.14.3 shall be treated as requiring the Airport Authority to fund acoustic treatment and ventilation measures in Existing Building that are located wholly outside the HANA and the MANA.

**Rule****17.6.14.2 Preparation and Implementation of Noise Mitigation Programme****Rule****17.6.14.2.1**

Airport operations, in situ engine testing, and the development and use of any runway shall be subject to compliance with Rules 17.6.14.2.1(a) to (m) ("Noise Mitigation Programme"):

***Existing Buildings located within HANA being subject to Ldn 65 dBA noise***

- (a) Before any part of an affected site falls within the Ldn 65 dBA AANC, the Airport Authority shall, in respect of any Existing Building in the HANA on that site (other than any building used as educational facilities or as a registered pre-school) make an offer to the owner(s) to install, at the Airport Authority's sole cost (and if the offer is accepted, install), acoustic treatment and related ventilation measures to achieve, in the manner provided for in Rule 17.6.14.3, an internal acoustic environment in the existing habitable rooms of the building(s) (with all external doors of the building and all windows of the habitable rooms closed), of Ldn 45 dBA, together with related ventilation requirements. These measures shall include but not be limited to:
- a mechanical ventilation system or mechanical ventilation systems capable of:
    - providing at least 15 air changes of outdoor air per hour in the principal living room of each building and 5 air changes of outdoor air per hour in the other habitable rooms of each building, in each case with all external doors and windows of the building closed with the exception of such windows in non-habitable rooms that need to be ajar to provide air relief paths;
    - enabling the rate of airflow to be controlled across the range, from the maximum airflow capacity down to 0.5 air changes (plus or minus 0.1) of outdoor air per hour in all habitable rooms;
    - limiting internal air pressure to not more than 30 pascals above the ambient air pressure;
    - being individually switched on and off by the building occupants, in the case of each system; and
    - creating no more than Leq 40 dBA in the principal living room, no more than Leq 30 dBA in the other habitable rooms, and no more than Leq 40 dBA in any hallway, in each building. Noise levels from the mechanical system(s) shall be measured at least 1 metre away from any diffuser.
  - thermal grade (minimum R1.8) ceiling insulation to all habitable rooms where equivalent ceiling insulation is not already in place; and

- a mechanical kitchen extractor fan ducted directly to the outside to serve any cooking hob, if such extractor fan is not already installed and in sound working order.

The above mentioned offer shall be made on the basis that any structural or other changes required under the Building Act 1991 ("Building Act") or otherwise to enable the installation of the acoustic treatment and related ventilation measures shall be at the Airport Authority's cost, except that nothing in this clause shall require the Airport Authority to fund any measures required to bring a building up to the standard required in any building bylaws or any provisions of any statute that applied when the building or relevant part thereof was constructed.

- (b) At the same time, the Airport Authority shall offer to install (and if the offer is accepted, install) enhancements in addition to the above acoustic treatment and related ventilation measures to achieve, in the manner provided for in Rule 17.6.14.3, an internal acoustic environment in the existing habitable rooms of the building(s) (with all external doors and windows of the building(s) closed), of Ldn 40 dBA, together with related ventilation requirements. This offer shall be made on the following basis:
  - (i) the Airport Authority shall contribute 75% of the cost;
  - (ii) the owner agreeing to contribute the balance of the cost; and
  - (iii) the enhancements are to be installed at the same time as the acoustic treatment and related ventilation measures referred to in Rule 17.6.14.2.1(a) above.
- (c) Where an owner or previous owner has earlier accepted the offer set out in clause (d) of this rule, below, the Airport Authority need only offer to install works or enhancements not already installed pursuant to Rule 17.6.14.2.1(d).

***Existing Buildings located within HANA or MANA being subject to Ldn 60 dBA noise***

- (d) Before any part of an affected site falls within the Ldn 60 dBA AANC, the Airport Authority shall, in respect of any Existing Building in the HANA or MANA on that site (other than any building used as educational facilities or as a registered pre-school) make an offer to the owner(s) to install (and if the offer is accepted, install):
  - a mechanical ventilation system or mechanical ventilation systems capable of:
    - providing at least 15 air changes of outdoor air per hour in the principal living room of each building and 5 air changes of outdoor air per hour in the other habitable rooms of each building, in each case with all external doors and windows of the building closed with the exception of such windows in non-habitable rooms that need to be ajar to provide air relief paths;
    - enabling the rate of airflow to be controlled across the range, from the maximum airflow capacity down to 0.5 air changes (plus or minus 0.1) of outdoor air per hour in all habitable rooms;
    - limiting internal air pressure to not more than 30 pascals above the ambient air pressure;
    - being individually switched on and off by the building occupants, in the case of each system; and

- creating no more than Leq 40 dBA in the principal living room, no more than Leq 30 dBA in the other habitable rooms and no more than Leq 40 dBA in any hallway, in each building. Noise levels from the mechanical system(s) shall be measured at least 1 metre away from any diffuser.
- thermal grade (minimum R1.8) ceiling insulation to all habitable rooms where equivalent ceiling insulation is not already in place; and
- a mechanical kitchen extractor fan ducted directly to the outside to serve any cooking hob, if such extractor fan is not already installed and in sound working order.

The above mentioned offer shall be made on the following basis:

- (i) any structural or other changes required under the Building Act or otherwise to enable the installation of the acoustic treatment and related ventilation measures shall be at the Airport Authority's cost, except that nothing in this clause shall require the Airport Authority to fund any measures required to bring a building up to the standard required in any building bylaws or any provisions of any statute that applied when the building or relevant part thereof was constructed; and
- (ii) the Airport Authority shall contribute 75% of the cost of the above works; and
- (iii) the owner agrees to contribute the balance of the cost.

***Existing Registered Pre-schools Located Within the HANA Being Subject to Ldn 65 dBA Noise***

- (e) Before any part of an affected site falls within the Ldn 65 dBA AANC, the Airport Authority shall, in respect of any Existing Building in the HANA on that site used as a registered pre-school, make an offer to the owner(s) to install at the Airport Authority's sole cost (and if the offer is accepted, install) in all learning areas:
  - acoustic treatment measures to achieve, in the manner provided for in Rule 17.6.14.3, an internal acoustic environment in each learning area (with all external doors and windows of the learning area closed) of Ldn 40 dBA; and
  - a mechanical ventilation system or mechanical ventilation systems for each learning area:
    - designed to achieve indoor air temperatures not less than 16 degrees celsius in winter at 5% ambient design conditions as published by the National Institute of Water & Atmospheric Research ("NIWA") (NIWA, Design Temperatures for Air Conditioning (degrees celsius), Data Period 1991 – 2000);
    - capable of providing (when all external doors and windows of the learning area are closed) outdoor air ventilation at the rate of 15 litres of air per second per square metre for the first 50 square metres and 7.5 litres of air per second per square metre of remaining area;
    - capable of enabling the rate of air flow to be controlled across the range, from the maximum air flow capacity down to 8 litres of air per second per person for the maximum number of people able to be accommodated in the learning area at one time;
    - otherwise complying with the New Zealand Standard NZS 4303:1990 *Ventilation for Acceptable Indoor Air Quality*;



- each ventilation system shall be capable of being individually switched on and off by the building occupants; and
- capable of creating no more than Leq 35 dBA in each learning area and no more than Leq 40 dBA in any hallway or corridor. Noise levels from the mechanical system(s) shall be measured at least 1 metre away from any diffuser.

The abovementioned offer shall be made on the basis that any structural or other changes required under the Building Act or otherwise required to enable the installation of the acoustic treatment and related ventilation measures shall be at Airport Authority's cost, except that nothing in this clause shall require Airport Authority to fund any measures required to bring a building up to the standard required in any building bylaws or any provisions of any statute that applied when the building or relevant part thereof was constructed.

- (f) Where an owner or previous owner has earlier accepted the offer set out in Rule 17.6.14.2.1(g), below, the Airport Authority need only offer the works not already installed pursuant to Rule 17.6.14.2.1(g).

***Existing Registered Pre-schools Located Within the HANA or the MANA being Subject to Ldn 60 dBA noise***

- (g) Before any part of an affected site falls within the Ldn 60 dBA AANC, the Airport Authority shall in respect of any Existing Building) in the HANA and/or MANA on that site used as a registered pre-school, make an offer to the owner(s) to install (and if the offer is accepted, install) at the Airport Authority's sole cost:
- a mechanical ventilation or mechanical ventilation systems for each learning area:
    - designed to achieve indoor air temperatures not less than 16 degrees celsius in winter at 5% ambient design conditions as published by the National Institute of Water & Atmospheric Research ("NIWA") (NIWA, Design Temperatures for Air Conditioning (degrees celsius), Data Period 1991 – 2000),
    - capable of providing (when all external doors and windows of the learning area are closed) outdoor air ventilation at the rate of 15 litres of air per second per square metre for the first 50 square metres and 7.5 litres of air per second per square metre of remaining area;
    - capable of enabling the rate of air flow to be controlled across the range, from the maximum air flow capacity down to 8 litres of air per second per person for the maximum number of people able to be accommodated in the learning area at one time;
    - otherwise complying with the New Zealand Standard NZS 4303:1990 *Ventilation for Acceptable Indoor Air Quality*;
    - each ventilation system shall be capable of being individually switched on and off by the building occupants; and
    - capable of creating no more than Leq 35 dBA in each learning area and no more than Leq 40 dBA in any hallway or corridor. Noise levels from the mechanical system(s) shall be measured at least 1 metre away from any diffuser.

- thermal grade (minimum R1.8) ceiling insulation in all learning areas where equivalent ceiling insulation is not already in place.

**Proviso:** if the owner wishes to install a ventilation system at greater cost, (eg an air conditioning system), then the Airport Authority shall contribute the equivalent cost of the ventilation system prescribed in Rule 17.6.14.2.1(g).

The abovementioned offer shall be made on the basis that any structural or other changes required under the Building Act or otherwise required to enable the installation of the acoustic treatment and related ventilation measures shall be at Airport Authority's cost, except that nothing in this clause shall require Airport Authority to fund any measures required to bring a building up to the standard required in any building bylaws or any provisions of any statute that applied when the building or relevant part thereof was constructed.

#### ***Existing Educational Facilities within HANA or MANA being Subject to Ldn 60 dBA Noise***

- (h) Before any part of an affected site falls within the Ldn 60 dBA AANC, the Airport Authority shall, in respect of any Existing Building in the HANA or MANA on that site used as an educational facility or facilities, make an offer to the owner(s) to install (and if the offer is accepted, install) acoustic treatment and related ventilation measures to achieve, in the manner provided for in Rule 17.6.14.3, an internal acoustic environment in all existing classrooms, libraries and halls (with all external doors and windows of the classrooms, libraries and halls closed) of Ldn 40 dBA, together with related ventilation measures. These measures shall include but not be limited to:
  - (i) in the case of classrooms and libraries, air conditioning and/or a mechanical ventilation system or mechanical ventilation systems for each classroom and library, that are:
    - designed to achieve indoor air temperatures not less than 16 degrees celsius in winter and not greater than 27 degrees celsius in summer at 5% ambient design conditions as published by the National Institute of Water & Atmospheric Research ("NIWA") (NIWA, Design Temperatures for Air Conditioning (degrees celsius), Data Period 1991 – 2000);
    - capable of providing outdoor air ventilation at the rate of 8 litres of air per second per person for the maximum number of people able to be accommodated in any such room at one time ("the required airflow");
    - capable of enabling, (in the case of classrooms or libraries in which only mechanical ventilation systems are used to satisfy the above temperature and outdoor air requirements), the outdoor airflow to be controlled across the range, from the maximum airflow capacity down to the required airflow when all external doors and windows of the classroom or library are closed;
    - otherwise complying with the New Zealand Standard NZS 4303:1990 Ventilation for Acceptable Indoor Air; and
    - capable of creating no more than Leq 35 dBA in each classroom, no more than Leq 40 dBA in each library and no more than Leq 40dBA in any hallway or corridor. Noise levels from the mechanical system(s) shall be measured at least 1 metre away from any diffuser.
  - (ii) in the case of halls, a mechanical ventilation system or mechanical ventilation systems for each hall capable of:

- providing at least 12 litres of outdoor air per second per square metre with all external doors and windows of the hall closed;
  - enabling the outdoor airflow to be controlled across the range, from the maximum airflow down to the rate of 8 litres of outdoor air per second per person for the maximum number of occupants able to be accommodated in the hall at one time;
  - otherwise complying with the New Zealand Standard NZS 4303:1990 Ventilation for Acceptable Indoor Air Quality; and
  - creating no more than Leq 35 dBA in each hall, and no more than Leq 40dBA in any hallway or corridor. Noise levels from the mechanical system(s) shall be measured at least 1 metre away from any diffuser.
- (iii) thermal grade (minimum R1.8) ceiling insulation shall be provided in the case of school halls where equivalent ceiling insulation is not already in place.

The abovementioned offer shall be made on the basis that any structural or other changes required under the Building Act or otherwise to enable the installation of the acoustic treatment and related ventilation measures shall be at the Airport Authority's cost, except that nothing in this clause shall require the Airport Authority to fund any measures required to bring a building up to the standard required in any building bylaws or any provisions of any statute that applied when the building or relevant part thereof was constructed.

**Proviso:** For existing educational facilities within the HANA or MANA being subject to Ldn 60 dBA noise, the Airport Authority's obligations shall be capped at:

- \$137,000 for any classroom;
- \$109,000 for any library; and
- \$57,000 for any hall.

For the avoidance of doubt, these figures are the maximum costs for which the Airport Authority shall be responsible, and, in addition, the Airport Authority is not required to expend the maximum costs where the acoustic treatment and related ventilation measures can be installed more cost effectively to achieve the specified internal acoustic environment and related ventilation requirements. The figures are exclusive of GST and are in year 2000 dollars, and they will therefore be adjusted to compensate for inflation and increased annually from the date the Plan becomes operative, by the percentage increase in the Consumer Price Index (All Groups) or any substitute national measure of inflation adopted in lieu of the Consumer Price Index (All Groups).

#### ***New buildings at existing educational facilities within MANA***

- (i) Where, in the case of educational facilities established within the MANA before 10 December 2001:
- (i) a new classroom, library, or hall is to be established; or
  - (ii) an addition or alteration is to be made to any existing classroom, library or hall,

and the new classroom, library or hall, or the addition or alteration, is not by definition, an Existing Building, then the Airport Authority upon receiving advice of the proposed works, shall make an offer to the owner(s) of the relevant educational facilities to provide funding (and if the offer is accepted, provide funding) for acoustic treatment

and related ventilation measures to achieve an internal acoustic environment (with all external doors and windows of the classrooms, libraries or halls closed) of Ldn 40 dBA for all such new facilities along with ventilation to a standard consistent with Rule 17.6.14.2.1(h), above, provided that this offer shall be conditional on the owner agreeing to contribute 25% of the costs of the acoustic treatment and ventilation measures; and further provided that the Airport Authority's obligations under rule 17.6.14.2.1(i) shall only extend, in the case of additional classrooms, libraries or halls, to those which the Regional Network Manager – Auckland, of the Ministry of Education, or the successor of that office, certifies are required as a result of roll growth caused by underlying increases in population in the catchment in the immediate vicinity of the educational facility.

- (j) The offer referred to in Rule 17.6.14.2.1(i) may be made on the basis that if the new or additional facilities are removed from the affected site before the Ldn 60 dBA AANC reaches the affected site, any cost incurred by the Airport Authority in respect of that building shall be returned to the Airport Authority.

#### ***New educational facilities within MANA***

- (k) The Airport Authority shall offer the owner(s) of any new public (ie non-private or integrated) educational facility to be established on affected sites located within the MANA, funding (and if the offer is accepted, provide funding) for acoustic treatment and related ventilation measures to meet the requirements in, and to a standard consistent with Rule 17.6.14.2.1(i), above, provided that this offer shall be conditional on:
  - (i) the owner agreeing to contribute 50% of the costs of the acoustic treatment and ventilation measures;
  - (ii) the Regional Network Manager – Auckland, of the Ministry of Education certifying, following consultation on the issue of location with the Airport Authority, that the proposed new educational facility could not reasonably be located outside the MANA.

#### ***Existing Buildings within or nearly within noise contours on operative date***

- (l) Where any affected site containing an Existing Building is within or will fall within any of the AANC contours referred to in any part of Rule 17.6.14.2.1 within 3 years of the date the Plan becomes operative, the Airport Authority's obligations to make an offer under Rule 17.6.14.2.1 in respect of any such building shall be deemed to be satisfied provided that the relevant offer has been made within 18 months of that event occurring.

#### ***New dwellings or additions to dwellings, proposed prior to 1 March 2002***

- (m) Where the Airport Authority is advised in writing that any dwelling or part of a dwelling is proposed to be constructed prior to 1 March 2002 within the HANA or MANA; and that dwelling or part thereof must be insulated pursuant to any proposed or operative rule, to achieve an internal noise environment of Ldn 40 dBA, the Airport Authority shall forthwith offer the owner funding (and if the offer is accepted, provide funding) for acoustic treatment and ventilation measures to meet the requirements in, and to a standard consistent with, the proposed or operative rule.

**Proviso:** Clause (m) of this rule shall not apply to more than two dwellings on any site, or to any dwelling proposed to be erected on a site in which the owner had no financial interest as at 30 September 2000.

**Rule****17.6.14.2.2**

In this rule the word “New” when used in the context of a new building refers to any building or facility that is not an “Existing Building” as defined in Chapter 18.

**Rule****17.6.14.2.3**

Nothing in Rule 17.6.14.2 shall require the Airport Authority to fund any measures required to bring a building up to the standard required in any building bylaws or any provisions of the Building Act that applied when the building or relevant part thereof was constructed.

**Rule****17.6.14.3 Certified Standard Packages and Individual Packages**

- (a) Where the Airport Authority is required to provide acoustic treatment and ventilation measures, the Airport Authority shall:
  - (i) develop standard acoustic treatment and ventilation treatment packages for as many types of building for each Future Aircraft Noise Contour (“FANC”), shown on Appendix 2G of the Planning Maps, as is practicable (“standard packages”). These standard packages may be updated or further developed at any time thereafter.

Each standard package shall be:

- sufficient to achieve the internal acoustic environment and ventilation standards and terms specified in Rule 17.6.14.2 (“the specified requirements”) for the type of building within the FANC for which the package has been developed;
- certified to that effect by a suitably qualified independent person (or persons) nominated by the Airport Authority and approved by the Council (“an approved person”) (“certified standard package”); and
- developed in consultation with the Building Research Association of New Zealand.

For the avoidance of doubt the standard packages are intended to mitigate against aircraft noise, not against other sources which may have different characteristics and hence require different attenuation in respect to the treatment measures on offer;

- (ii) offer to install (and if the offer is accepted, install) the relevant certified standard package, which has been certified by an approved person as being suitable to fulfil the requirements of Rule 17.6.14.2 for the building and FANC within which the building is located, and in all other cases, shall offer a package certified by an approved person as suitable, at the time of the offer, to achieve the internal acoustic environment and ventilation requirements specified in Rule 17.6.14.2 for the FANC within which the building is located (“certified individual package”) and if that offer is accepted, shall install the certified individual package;
- (b) Where the Airport Authority installs any acoustic treatment and/or ventilation or air conditioning measures, the Airport Authority:
  - (i) shall provide the Council with a certificate from a suitably qualified independent person (or persons) nominated by the Airport Authority and approved by the

Council, that the installation of any relevant certified standard package, or relevant certified individual package, has been properly undertaken in accordance with sound practice; and

- (ii) shall not be in breach of the resource consent or Rule 17.6.14.2 where the internal noise standards and related ventilation requirements, are not met in each instance provided the relevant certificates required in subclause (b)(i) above have been provided to the Council.

**Explanatory Note:**

*It is noted that all building work required to give effect to Rule 17.6.14 must comply with the Building Act and the associated New Zealand Building Code and nothing in these rules is to be taken as limiting the need to comply with that Act.*

## **17.6.15 Rules — Aircraft Noise Mitigation Fund**

**Rule**

**17.6.15.1 The Airport Authority shall, within 12 months of any resource consent being granted (at its cost):**

- establish a Trust with two trustees to be appointed by the Airport Authority, two trustees to be appointed from the community by the Council, and one trustee to be appointed by the ANCCG;
- upon establishment of the Trust, contribute \$250,000 per annum plus GST if any (adjusted thereafter to compensate for inflation and increased annually from the date of the establishment of the Trust by the percentage increase in the Consumer Price Index (All Groups) as provided for in the third bullet point below), to a Noise Mitigation Fund, to be administered by the trustees for the benefit of the local community affected by aircraft noise and located or residing within the HANA, MANA and ANNA, for the purpose of:
  - (a) the mitigation of adverse effects associated with noise from Aircraft Operations which are not provided for under Rule 17.6.14 ("other adverse effects"); or
  - (b) ensuring positive effects on the external environment to offset those other adverse effects; or
  - (c) in cases of significant financial hardship, assisting an owner or owners to meet their share of the costs of acoustic treatment and ventilation measures or enhancements as set out in Rule 17.6.14.2;
    - on each anniversary following establishment of the Trust, make a payment to the Trust of an amount sufficient to compensate for inflation over the immediately preceding annual period calculated in accordance with the following formula:

$\$250,000 \times A\%$ , where A is the percentage increase in the Consumer Price Index (All Groups) (or any substitute national measure of inflation) for that 12 month period.

**Explanation/Reasons**

*While there are various physical measures proposed by way of acoustic insulation and ventilation of buildings containing Activities Sensitive to Aircraft Noise, the aircraft Noise Mitigation Fund is designed to ensure that adverse effects of aircraft noise on the external environment which cannot be mitigated by*



*physical means can be at least partially offset by providing positive effects in the form of enhanced cultural, recreational and other opportunities and facilities to affected residents. Those opportunities and facilities may be provided outside the affected area but should be readily available to affected residents.*

## 17.6.16 Rules — Noise Controls

### 17.6.16.1 Aircraft Operations

#### Rule

##### 17.6.16.1.1

- (a) Noise from Aircraft Operations shall not exceed a noise limit of:
- (i) a Day/Night Level (Ldn) of 65 dBA anywhere within the Manukau City district which is outside that area included within the HANA and the area designated under Designation 231 as at the date the Plan becomes operative. For the purpose of this control, aircraft noise shall be measured in accordance with NZS 6805:1992 and calculated as a 12 month rolling logarithmic average; and
  - (ii) a Day/Night Level (Ldn) of 60 dBA anywhere within the Manukau City district which is outside that area included within the HANA and the MANA and the area designated under Designation 231 as at the date the Plan becomes operative. For the purpose of this control, aircraft noise shall be calculated as a 12 month rolling logarithmic average using the INM and records of actual Aircraft Operations.

For the avoidance of doubt, in circumstances where the Day/Night Level (Ldn) in clauses (a)(i) and (a)(ii) of this rule both apply, the Day/Night Level (Ldn) in (a)(ii) shall prevail.

- (b) In addition, the Airport Authority shall:
- (i) monitor noise from Aircraft Operations at a minimum of three locations associated with the Existing Runway which are as near as practicable to the boundary of the HANA to obtain an accurate reading so as to demonstrate compliance with (a)(i) above;
  - (ii) use the INM and noise monitoring data to calculate whether noise from Aircraft Operations complies with (a)(ii) above;
  - (iii) calculate noise levels at every other location necessary to ensure compliance with this requirement and with any other noise monitoring requirements imposed by the Council;

and shall provide a detailed written report to the Council every 12 months describing and interpreting the results of the monitoring and describing and explaining the calculations and findings.

#### Proviso:

- Exceedance by up to Ldn 1 dBA of the noise limits in (a)(i) and (a)(ii) above will be authorised pursuant to the Matters for Discretion in Rule 17.6.12.2.2 provided the Airport Authority demonstrates at the request of and to the satisfaction of the Council that any such exceedance is due to atypical weather patterns (including wind speed and direction) during the measurement period, such as produced by the El Nino/La Nina climatic oscillation.

- Aircraft operations described in clauses (i) to (v) below are excluded from the calculation of the rolling logarithmic average in (a)(i) and (a)(ii) above:
  - (i) aircraft landing or taking off in an emergency;
  - (ii) emergency flights required to rescue persons from life-threatening situations or to transport patients, human vital organs or medical personnel in a medical emergency;
  - (iii) the operation of unscheduled flights required to meet the needs of a national or civil defence emergency declared under the Civil Defence Act 1983;
  - (iv) aircraft using the Airport as a planned alternative to landing at a scheduled airport elsewhere;
  - (v) air shows.

**Rule****17.6.16.2 Testing of In Situ Aircraft Engines**

- (a) Any use of the Airport Zone for the testing of engines which are in situ on an aircraft ("in situ aircraft engines") shall not exceed the following noise limits within the Main Residential Zone or within the notional boundary of any dwelling outside the zone and outside the HANA, MANA and ANNA in the Mangere–Puhinui Rural or Mangere–Puhinui Heritage zones:

- 7 day rolling average      Ldn 55 dBA
- 10.00pm to 7.00am      Lmax 75 dBA

For the purpose of this control, testing of in situ aircraft engines shall be measured in accordance with NZS 6801:1999 Acoustics: Measurement of Environmental Sound.

- (b) The Airport Authority shall monitor and record all Engine Testing of in situ aircraft engines and provide a summary report of the tests undertaken and the calculated noise levels whenever requested in writing by the ANCCG.
- (c) The testing of in situ aircraft engines is excluded from the calculation of the 7 day rolling average in Rule 17.6.16.2(a) above where such testing is associated with work necessary to satisfy an airworthiness directive or other like safety requirement issued by the Minister of Transport, Director of Civil Aviation or the Civil Aviation Authority, which requires within 7 days of the directive or requirement being issued, the ground running of the engines on:
  - all aircraft with a specific engine type, or
  - aircraft of a specific make or model.

Prior to any testing excluded by this clause commencing, the Airport Authority shall give written notice to the ANCCG and the Council explaining:

- the nature of and the reason for the testing;
- its expected duration and noise effects; and
- details of the directive or requirement received.

**Rule****17.6.16.3 Cumulative Engine Testing Noise**

Where any Existing Building is located in the Ldn 57 dBA Area shown on Appendix 2E to the Planning Maps, the Airport Authority shall make an offer to the owner(s) to install (and if the offer is accepted, install) the treatment measures described in Rule 17.6.14.2.1(d) on the basis set out in that rule and Rule 17.6.14.3. This offer shall be made within 18 months of the commencement of the resource consent.

**Explanatory Note**

*This rule recognises that there are some houses in the MANA and ANNA which may be potentially subject to Engine Testing noise that would put their cumulative total noise level (Aircraft Operations plus Engine Testing) over Ldn 60 dBA before they are offered sound insulation. It would be appropriate to mitigate this noise by offering sound insulation at the outset. The trigger level is Ldn 57 dBA because Ldn 57 dBA from Engine Testing and Ldn 57 dBA from Aircraft Operations, add to give Ldn 60 dBA cumulative.*

*This rule avoids the difficulty of mathematically adding Aircraft Operation noise contours with Engine Testing noise contours, because insulation will only be required to be offered to existing property owners as the Ldn 60 contour reaches those properties. The Engine Testing contours are a hypothetical worst case combination of testing options that the Airport Authority can operate and still comply with Rule 17.6.16.2(a). This avoids the difficulty of monitoring and offering insulation when noise reaches a certain level.*

**17.6.17 Rules — Noise Management Plan****Rule****17.6.17.1 Consultative Group**

The Airport Authority shall maintain at its cost, the existing Airport Noise Community Consultative Group ("ANCCG"), and shall comply with Rules 17.6.17.2–17.6.17.5.

**Rule****17.6.17.2 Noise Management Plan**

Within 12 months of the commencement of the resource consent and without in any way limiting its obligations to fully comply with the noise conditions in any resource consent and relevant rules, the Airport Authority shall complete a Noise Management Plan ("NMP") to describe in detail how it proposes to manage the Airport in order to comply with those conditions and rules. The NMP shall also describe, in detail, the following:

- (a) procedures for the ongoing maintenance and operation of the ANCCG;
- (b) the mechanisms for giving effect to a Noise Monitoring Programme to assess compliance with Rule 17.6.16 and the conditions relating to the control of noise. In particular, the following issues shall be addressed:
  - location of any noise monitors;
  - monitoring, recording and calculation of engine testing noise levels under Rule 17.6.16;
  - management of the programme by a suitably qualified person;
  - presentation of information;

- (c) the relationship between the Trust which is to be established under Rule 17.6.15 and the ANCCG, including reporting procedures;
- (d) the ongoing investigations, methods, processes and resources that the Airport Authority proposes to put in place to provide for:
  - the reduction of noise levels from all aspects of Aircraft Operations and engine testing; and
  - alternative methods of noise management to achieve the reduction of these noise levels;
- (e) the Noise Minimisation Procedures;
- (f) the procedures for modifying and enhancing the Noise Minimisation Procedures to take into account:
  - any findings made pursuant to any investigations undertaken in accordance with Rule 17.6.17.2(d) above;
  - the need to ensure compliance with all of the requirements attaching to the resource consent;
- (g) the procedures for reporting to the ANCCG any Aircraft Operations and engine testing activities which:
  - contravene a condition of the resource consent;
- (h) the procedure for the annual preparation and publication of the Ldn 60 dBA AANC and the Ldn 65 dBA AANC by the Airport Authority, as required by Rule 17.6.14;
- (i) the procedure for the recording, responding and reporting of complaints received in respect of noise from Airport Operations, engine testing activities and any other activities generating noise at the Airport;
- (j) the dispute resolution procedures, to resolve disputes between Airport Authority and ANCCG about the contents and implementation of the NMP.

**Rule****17.6.17.3 Changes to NMP**

If the Airport Authority makes any changes to the procedures or other matters recorded in the NMP, it shall forthwith forward an amended copy of the NMP to the Council and the ANCCG.

**Rule****17.6.17.4 Reporting of Exceptions**

The Airport Authority shall maintain a register (electronic and hard copy) which is available for public inspection of all exceptions to the Noise Minimisation Procedures. The register shall list:

- the date and time of the exception;
- an explanation for the exception;
- any actions undertaken to prevent a recurrence of the exception.

For the avoidance of doubt an exception includes:

- a breach of noise limits attaching to the resource consent;
- a breach of the CAA noise rules applicable to the Airport which has been the subject of an investigation by the Airport Authority into a related complaint;
- any lapse in Airport Authority's voluntary or self imposed procedures for the reduction of aircraft noise.

**Rule****17.6.17.5**

Any ASAN in the Airport Zone that is a Permitted Activity in the Airport Zone shall comply with Rule 5.21.4, but failing compliance shall be a Controlled Activity subject to Rule 5.21.4A Matters for Control and any other rules applicable to Permitted Activities in the Airport Zone.

**RULES MATTERS FOR CONTROL: CONTROLLED ACTIVITIES****Rule****17.6.18 Controlled Activities within Airport Northern Entry Area**

The following matters of control and assessment criteria apply to all land use activities in the portion of the Airport Zone shown on the Mangere Gateway Heritage Area Figure 17.1 as Airport Northern Entry Area that are controlled activities.

Reference shall also be made to Rule 5.19 Chapter 5 General Procedures and

**Rule****17.6.18.1 Standards for Controlled Activities**

- (a) A street and subdivision layout plan (if applicable) shall be submitted to and approved by the Council prior to the establishment of any new road located within the Airport Northern Entry Area (not including the realigned George Bolt Memorial Drive which shall be a Permitted Activity). The street and site layout plan shall show the street alignment and proposed site boundaries (if applicable).
- (b) A subdivision layout (where applicable) and building design plan shall be submitted to and approved by the Council as part of each land use consent for any building and/or a carparking area on sites adjoining the realigned portion of George Bolt Memorial Drive or adjoining the Pukaki Creek within the Airport Northern Entry Area. The subdivision layout (where applicable) and building design plan shall show:
  - (i) full details of building siting and design, including building materials and colours;
  - (ii) through a contextual plan, how consideration has been given to complementing development on adjoining sites, and the streetscape.
- (c) A landscape plan shall be submitted to and approved by the Council as part of each land use consent for any building and/or carparking area on sites adjoining the realigned portion of George Bolt Memorial Drive or adjoining the Pukaki Creek within the Northern Entry Area. The landscape plan shall show and explain:
  - (i) those trees and groups of trees that are proposed to be retained;
  - (ii) the form (including density, species, depth and height) of planting that is proposed to be undertaken within any Coastal Protection Yard;

- (iii) the form (including density, species, depth and height) of proposed landscape planting that is intended to be undertaken within the area between the building or car parking area and the road;
- (iv) details of all proposed fencing including fencing required for aviation safety and security purposes;
- (v) The manner by which all landscaping is to be maintained.

[AM109]

**Rule****17.6.18.2 Controlled Activities in the Airport Northern Entry Area - Matters of Control**

Council reserves control over and may impose conditions in respect of the following matters under this Rule:-

- (a) Street Alignment (not including the realigned George Bolt Memorial Drive);
- (b) Subdivision layout (where applicable);
- (c) Landscape treatment;
- (d) Design, location and external appearance of buildings

**Rule****17.6.18.3 Assessment Criteria Relating to Street and Subdivision Layout (where applicable)**

When assessing an application for street and subdivision layout (where applicable) the Council will have regard to the following assessment criteria where relevant:

- (a) Whether straight rather than curved streets are utilised, in order to provide for a regular site layout pattern.
- (b) Whether the street and subdivision layout (where applicable) allows for future buildings to be laid out so that they relate to each other in a regular pattern (being an orthogonal pattern where appropriate).

**Rule****17.6.18.4 Assessment Criteria Relating to Buildings and / or Car Parking areas – Sites Adjoining Realigned Portion of George Bolt Memorial Drive and adjoining the Pukaki Creek within the Airport Northern Entry Area**

When assessing an application for the erection of any building and / or carparking area the Council will have regard to the following assessment criteria where relevant:

- (a) Site Layout and Landscape Treatment
  - (i) Whether buildings are aligned with each other, including in an orthogonal pattern (where appropriate), to create a clear spatial system along the street. This may include stepping buildings on sites or between sites in relation to the street frontage and parallel to each other along side boundaries;
  - (ii) Whether the site layout and landscape treatment considers the potential for adverse effects of large buildings on the visual amenity of the Pukaki Creek edge when viewed from public open space areas and the eastern side of the Creek;
  - (iii) Whether the landscaping follows the building alignment rather than the street alignment.

- (iv) Whether the site layout and landscape treatment ensures the maintenance of aviation safety and security in relation to the Northern Runway.
- (v) Whether carparking areas incorporate appropriate landscaping to address the potential for adverse effects of large areas of sealed parking, particularly as viewed from the realigned portion of George Bolt Memorial Drive or areas of public open space adjoining the eastern side of the Pukaki Creek;
- (b) Design and External Appearance of Buildings
  - (i) Whether the scale, form, design, height, and colour of the proposed building (including fencing) achieves an appropriate standard of visual amenity when viewed from the realigned portion of George Bolt Memorial Drive, while recognising the paramount importance of aviation safety and security;
  - (ii) Whether 'Front' activities (i.e. the more active office, showroom or similar activities) are located fronting the realigned portion of George Bolt Memorial Drive; and conversely 'back' activities (i.e. warehouse, distribution, industrial, storage) are in less visible locations;
  - (iii) Whether the combination of building location, site levels and building form will result in a well proportioned appearance when viewed from areas of public open space and the eastern side of the Pukaki Creek;
  - (iv) Whether buildings are designed in such a way as to maximise, where practicable, the benefits of solar access and to avoid adverse effects of wind on people;
  - (v) Whether the main pedestrian entry to buildings is clearly recognisable from the street;
  - (vi) Whether rooftop mechanical equipment is integrated into roof forms or otherwise largely concealed from adjacent streets and reserves;
  - (vii) Whether there will be a design consistency between buildings (including buildings on adjoining sites);
  - (viii) Whether service areas and loading docks are separated from and not facing the front yard;
  - (ix) Whether, subject to aviation safety requirements, low glare, high cut-off exterior lighting is used, and integrated with the architectural and landscape design;
  - (x) Whether building signage is integrated with the architectural and landscape design. [AM109]



