Tasman District Council

Aerodromes
Activity Management Plan

2009 - 2019

August 2009

Quality Assurance Statement		
Tasman District Council 189 Queen Street Private Bag 4 Richmond 7050 Telephone: (03) 543 8400 Fax: (03) 543 9524	**Version:**	5 (August 2009)
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For full Quality Assurance Statement, Refer Appendix Z

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1. INTRODUCTION

1.1 The Aerodromes Activity Management Plan: What is it and why is it produced?

The Aerodromes Activity is one the eight engineering activities addressed in the Tasman District Council Long Term Council Community Plan (LTCCP). This Aerodrome Activity Management Plan (AMP) is, therefore, strongly linked to the overall strategic direction for the district. The LTCCP is the document and process that alerts the community to the key issues and strategies contained in this document.

The purpose of this plan is to outline and to summarise in one place, the Council's strategic and management long-term approach for the provision and maintenance of the aerodrome structures and associated activities.

The AMP demonstrates responsible management of the district's assets on behalf of customers and stakeholders and assists with the achievement of strategic goals and statutory compliance. The AMP combines management, financial, engineering and technical practices to ensure that the level of service required by the customers is provided at the lowest long term cost to the community and is delivered in a sustainable manner.

This AMP is based on existing levels of service, currently available information and the existing knowledge and judgement of Council staff.

A programme of AM improvement (see Appendix V) is planned to improve the quality of decision making (e.g. predictive modelling, risk management, optimised renewal decision making) and improve the knowledge of Council's assets and customer expectations. These future enhancements will enable Council to better optimise life cycle AM activities and provide a greater degree of confidence in financial forecasts.

Figure 1-2 depicts the activity management planning process for infrastructure assets, with fundamental links to customer expectations, legislative requirements and corporate visions and strategies.

This plan has been prepared in line with the requirements of the Local Government Act 2002 and the International Infrastructure Management Manual, Australia/New Zealand Edition, version 3.0, 2006 Edition.

The key drivers, linkages with other plans and legislative requirements that all feed into the development of the plans are discussed in Appendix A.

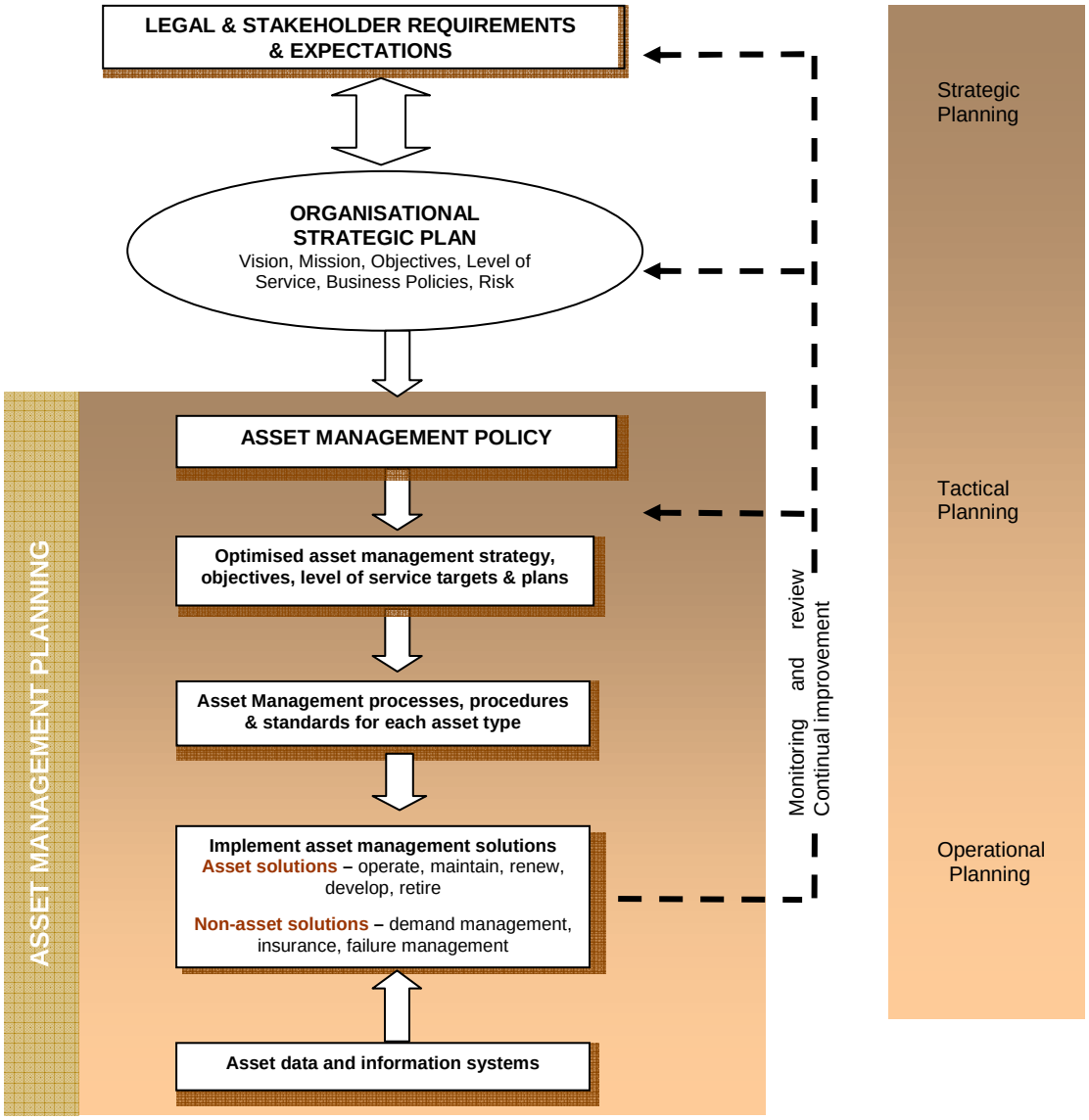


Figure 1-2: The Total Asset Management Process (Source IIMM)

1.2 Rationale For Council's Involvement in Aerodrome Management

Council has no statutory obligation to provide this service. However, Council considers their involvement justified because aerodromes have a public value, and the community preference is for Council to retain management of assets that are important to the community.

Statutory obligations that Council must meet include:

- Local Government Act 2002
- Resource Management Act 1991
- Civil Aviation Act 1990 and amendments
- Occupational Health and Safety Act

Relevant Policy and Management Documents include:

- Tasman Resource Management Plan
- Motueka Aerodrome Management Plan 2002
- Takaka Aerodrome Management Plan 1997
- Tasman District Council Engineering Standards

1.3 Justification of Asset Ownership

Aerodrome services can be charged to the users directly. Therefore there is potential for alternative ownership options to be considered. Council has considered the sale of the Motueka aerodrome in the 1970's and in the late 1990's reviewed the legal issues associated with selling the Takaka land (which is Crown land vested in Council) and the Motueka land (which was purchased by Council for aerodrome purposes). The community preference is for Council to retain ownership of the aerodromes assets which are important to the community.

Council may reconsider ownership options but this is unlikely within the next ten years.

1.4 Overview of the Aerodrome Management Activity

Council is the owner of the aerodrome assets.

The Tasman District Aerodromes Activity comprises the provision and maintenance of the following assets at Motueka and Takaka:

- Ownership or agreed use of land under the runways.
- Runway pavements and surfacings for safe landing, takeoff and taxiing of aircraft.
- Ancillary buildings for administration and housing of associated activities.
- Navigational aids.
- Security fencing and other arrangements for protection of the assets and safety of the users.

The aerodrome activity is described in more detail in Appendix B.

1.5 Key Issues and Strategic Approach

Council has confirmed its position to retain the aerodromes at Motueka and Takaka. Council will also continue to manage the operations of the aerodromes and liaise with the primary users. The key issues for Council are the provision of a service that is affordable to the users, while mitigating any adverse effects from its use.

Some upgrades were requested to the Takaka cross-runway and other aerodrome facilities. Council will undertake discussions with aerodrome users on what improvements are needed and on how the costs of any work can be recovered from user charges and landing fees.

The use of the Motueka aerodrome for drag racing has effects that limit its suitability for this activity. Council has granted an extension to the agreement to use the runway for the drag racing events but the organisers are looking for a more suitable venue in the longer term.

The aerodromes have sealed and grassed runways which have significant periodic costs to maintain. Funding from users will in the foreseeable future need to be supplemented from General Rates to meet the cost of the activity.

2. LEVELS OF SERVICE, PERFORMANCE MEASURES, AND RELATIONSHIP TO COMMUNITY OUTCOMES

2.1 Introduction

A key objective of this AMP is to match the level of service provided by the aerodromes activity with agreed expectations of customers and their willingness to pay for that level of service. The Levels of Service provide the basis for the life cycle management strategies and works programmes identified in the AMP.

The Levels Of Service for Aerodromes have been developed to contribute to the achievement of the stated Community Outcomes that were developed in consultation with the community, but taking into account:

- The Council's statutory and legal obligations
- The Council's policies and objectives
- The Council's understanding of what the community is able to fund

2.2 How Do Our Aerodromes Activities Contribute to the Community Outcomes?

Table 2-1 describes how the aerodromes activities contribute to the Community Outcomes.

Table 2-1: How Aerodromes Activities Contribute to Community Outcomes

Community Outcomes	How Our Aerodromes Activity Contributes to the Community Outcome
Our unique and special natural environment is bountiful, healthy, clean and protected	All aerodromes can be managed so the impact of the discharges does not affect the health and cleanliness of the receiving environment.
Our built urban and rural environments are functional, pleasant, safe and sustainably managed.	The aerodromes activity ensures our built urban environments are functional, pleasant and safe by ensuring the aerodromes are operated without causing public health hazards and by providing attractive recreational and commercial facilities.
Our transport and essential services are sufficient, efficient and sustainably managed.	The aerodromes provide commercial and recreational facilities to meet the community needs at an affordable level and are available to the whole community. The facilities are also sustainably managed.

2.3 What Level Of Service Do We Seek to Achieve?

Table 2-2 sets out the levels of service that Council has adopted. It also shows:

- the Community Outcome from which each level of service has been developed
- how we will know if we are successful in delivering the level of service.

Table 2-2: Levels of Service - Aerodromes

Community Outcomes	Levels Of Service	We will know we are meeting the Level Of Service if…..
Our unique and special natural environment is bountiful, healthy, clean and protected	1. Our Aerodromes do not pollute or degrade the receiving environment	All associated facilities are required to connect to the community sewerage system where it is available
		Activities are controlled so as to minimise noise pollution to an acceptable level
Our built urban and rural environments are functional, pleasant, safe and sustainably managed.	2. Our aerodromes operate with a minimum of disturbance to the public and adjacent landowners	We receive less than 5 complaints per year relating to noise from our aerodromes.
		The height for structures on adjacent properties within the flight paths is not increased beyond that currently required.
Our transport and essential services are sufficient, efficient and sustainably managed.	3. Our aerodromes serve those that should be served	The community and stakeholders are consulted over aerodrome development plans
		Notification (via NOTAMS) to all aviation aerodrome users is provided as required through the Civil Aviation Authority.
	4. Our aerodromes activities are managed at a level that satisfies the community	Our surveys show that 80% of customers are satisfied with the aerodromes service they receive.
	5. Faults in the aerodromes facilities are responded to and fixed promptly	We are able to respond to and fix faults within the timeframes we have specified with our operations and maintenance contracts and in accordance with the Civil Aviation Authority requirements.
	6. Our systems are built so that failures can be prevented. If failures do occur they can be responded to quickly.	We have a facility for receiving and handling emergency calls after office hours.
		We have operative risk management processes in place and planned mitigation measures completed.
		Except for planned maintenance, the facilities comply with Civil Aviation Authority requirements at all times.
		Spare equipment is held for navigational aids

The Levels Of Service that the Council has adopted for this AMP have been developed from the Levels Of Service prepared in the July 2006 AMP, however the after taking into account feedback from various parties including Audit New Zealand, the Council has decided to reduce the number of levels of service so there is more focus and clarity, and to make sure that the link between the levels of service adopted and the Community Outcomes is clear.

2.4 What Performance Are We Achieving and What Do We Plan to Achieve?

The Levels of Service that Council is currently achieving is shown in Table R-1 in Appendix R. Also shown are the levels of service, Performance Measures and Relationship Community Outcomes. Council plans to achieve within the next 3 years and by the end of the next 10 year period.

2.5 What Plans Have Council made to Meet the Levels of Service?

In preparing the future financial forecasts, Council have included the following specific initiatives to meet the current or intended future levels of service:

- Continue to maintain the sealed runways, grassed runways and associated taxiways and facilities at a standard acceptable to Council and to the Civil Aviation Authority for a non certificated airport.
- Encourage the establishment of further owner operated hangars and businesses aviation related within the specified development areas.

3. THE EXISTING SITUATION DESCRIBED

3.1 Motueka Aerodrome

The Motueka Aerodrome is the responsibility of Tasman District Council and occupies some 27.52 hectares and is bounded on the south by College Street, on the east by Queen Victoria Street and to the north-west by Marchwood Park and Marchwood Park Road. (refer plan in Appendix B)

3.1.1. Land Tenure

The aerodrome land is in 2 freehold titles in the name of Tasman District Council. CT 12C/337, being of 5159m2 contains the Aviation College and CT 12C/ 338 being of 27.00ha is the balance of the aerodrome.

Under the Tasman Resource Management Plan the site is designated for aerodrome purposes with an underlying zone of Rural 1.

The designation provides for the Tasman District Council either itself or through its agents to control, manage and approve planning, design, research, construction and maintenance relating to all land within the designation. Designation of the aerodrome is considered the most appropriate mechanism of protecting Tasman District Council's interest with regard to the safe and efficient functioning of the aerodrome.

Under Civil Aviation Authority Rules the aerodrome is a non-certificated aerodrome.

3.1.2. Structures and Layout

The site is near flat grassland and abuts horticultural uses on all frontages except College Street where there is residential development on the south side.

The current runway is 729 metres long by 11 metre wide asphalt surfaced runway. In addition there is adjacent a grass runway 733 metre long by 30 metre wide. The 52 metre long concrete pad, which was established by the Nelson Drag Racing Association for their events, is not included in the runway threshold for aircraft operations. In 2008 a concrete pad, 40 x 12 metres was constructed at the southern end of the aerodrome to facilitate safer entry and exiting of the runway.

Currently the runway length is adequate for a Piper Navajo aircraft.

There is an assortment of buildings along the College Street frontage, and include Skydive Abel Tasman and the Motueka Aero Club, along with two small hangars. An unsealed carpark is between the Skydive Abel Tasman and the Motueka Aero Club. Nelson Aviation College is on Queen Victoria Street, along with three new hangars ranging from small to large. Fuelling facilities are available.

The height of structures around the aerodrome is controlled by "transitional plane surfaces" which are to protect the flight paths of aircraft using the aerodrome.

3.2 Takaka Aerodrome

The Takaka Aerodrome is the responsibility of the Tasman District Council and was established in 1940. The site is 39.7 hectares, bounded by farmland on the northern, eastern and part of the western side. State Highway 60 bounds the southern and south-western boundaries. (refer plan in Appendix S)

Land Tenure and Status

The site is an Aerodrome Reserve vested in the Tasman District Council. Under the Tasman Resource Management Plan the site is designated for aerodrome purposes with an underlying zone of Rural 1.

The designation provides for the Tasman District Council either itself or through its agents to control, manage and approve planning, design, research, construction and maintenance relating to all land within the designation. Designation of the aerodrome is considered the most appropriate mechanism of protecting Tasman District Council's interest with regard to the safe and efficient functioning of the aerodrome.

3.2.1. Structures and Layout

The aerodrome has an extensive concrete tile drainage system.

The aerodrome has been built on pakihi clays which makes the site hard to drain and good to grow vegetation on. Grazing of the balance area of the site is leased out periodically.

Takaka has two runways – one running more or less north/south with the other running south-east to north-west, crossing the north/south runway. The north/south runway is sealed (11 metres wide, 825 metres long).

The main sealed runway has an equivalent single wheel loading of three tonne and the cross runway has a rating of one tonne.

There is an assortment of buildings on the site. These include:

- A house and garage
- Toilets, and hand washing facilities available for public use.
- Aero Club rooms
- Private hangars

The height of structures around the aerodrome is controlled by "transitional plane surfaces" which are to protect the flight paths of aircraft using the aerodrome. Those height restrictions apply irrespective of any greater permitted height stipulated in the Tasman Resource Management Plan.

4. OPERATION AND MAINTENANCE

4.1 Council 'Ownership' of Operations and Maintenance

The aerodromes are managed by Tasman District Council through Council staff and Council agents as required, (with input from user groups).

The Reports and Recommendations to Council are made through the Corporate Services and Enterprises Sub Committees regarding:

- operations and maintenance works
- hours of operation
- types of uses,
- rental and lease agreements and associated charges.

The Councils Manager Property Services is the executive officer for the Motueka aerodrome and is responsible for the day to day administration. For Takaka the administration is managed through the secretary for the local management committee.

The Corporate Services and Enterprises sub committees of Council may at their discretion delegate some of their authority to the management committee.

At Takaka, the local management Committee consists of the local Councillor, one member of the Community Board, and three to four members elected at the public annual meetings.

4.2 Maintenance Strategy

Council's strategy is to maintain the aerodromes with associated runways and aviation facilities, as well as any Council owned buildings suitable for lease income; so that the aerodromes provide an aviation facility suitable for the recreational and commercial users at the least long term cost to Council.

At Motueka all buildings are privately owned. At Takaka all the Council owned buildings, are managed under Council's Property assets. Hangers are privately owned on leased sites. The local management committees manage the day to day issues for the leases. At Takaka this includes the maintenance and income for the house. Landing fees are administered through the Motueka Services Centre for Motueka and the local secretary at Takaka.

4.3 Control and Management of Operations and Maintenance

The large grass areas, grass runway and minor fence, drainage or building repairs are managed through the Manager Property Services for Motueka and by the local committee at Takaka. Significant repairs or upgrades to the sealed/unsealed runways are managed through the Manager Property Services.

4.4 Estimated Operation and Maintenance Costs For Next Twenty Years

The operation and maintenance expenditure over the next 20 years are detailed in Appendix E.

The annual direct Maintenance cost over the 20 years is predicted to remain relatively consistent as is the level of service of each aerodrome.

4.5 Maintenance and Operating Issues

The minimum level of service requires a high standard of maintenance for the runways. Charges and other income (leases) may not always match the required expenditure.

Competitive rates and high standards are able to be maintained through careful selection and management of the maintenance contractors.

4.6 Business Continuity / Emergency Management

The Council has a commitment to ensure the provision of goods and services during natural hazard events. The aerodromes will continue to be invaluable in Civil Defence emergencies. The sites will be available for search and rescue operations.

The use of the airports by recreational users may be restricted or curtailed during hazard events.

The Council has developed various plans that outline the procedures that are to be followed to enable the aerodromes to continue to function to the fullest extent possible.

The plans include:

- Nelson Tasman Engineering Lifeline Report 2008
- Nelson Tasman Emergency Management Plan
- TDC Engineering Procedures Manual June 2005
- TDC/MWH Engineering Procedures Manual June 2005
- Y2K Report.

The CAA Rules set out the procedures for the safe operation of aviation related activities including aerodromes.

A specific emergency plan for the Motueka Aerodrome is being drafted. No formal specific emergency plan currently exists for Takaka. This will be completed as part of the improvement plan. (Appendix V)

Local emergency procedure plans require regular updating as personnel and facilities change.

5. FUTURE DEMAND

5.1 Factors Affecting Demand

Council recognises that future demands for infrastructure services will be influenced by:

- Population growth and demographics
- Changes in community expectations
- Industrial demand
- Technological change
- Changes in legislation

The impact of these influencing factors on the demand for aerodrome activities and the effect on the current asset infrastructure is discussed below.

The demand for the aerodrome activities is very much event dependent on the user demand and their ability to pay.

5.1.1. Effects of Population Growth on Aerodrome Activities

The link between population growth and the demand for aerodrome activities is not as direct as it is for say water supply or roading, however generally population growth leads to intensification of the use of existing facilities for recreation and commercial development on the aerodromes. The potential effects of this on the aerodrome activities are:

- Increased use of aerodrome facilities for recreation
- Possible need for further development of ancillary infrastructure to serve new facilities.

It is anticipated that there is sufficient capacity within the existing aerodrome assets to cater for the population growth.

5.1.2. Trends in Community Expectations

In the 2008 Community surveys there has been no indication by the Community for a change in the Council's role in the aerodrome activity.

Changes to the level of service would normally only occur at the demand of lessees and consequent increases in income allow an improvement in the current facilities provided.

5.1.3. Technological Change

Technology change has the ability to impact on the demand for a service. There is no predicted technological changes that will have a significant effect on the assets in the medium term.

5.1.4. Changes in Legislation and Policies

Changes to aerodrome activity policies may be driven from a number of directions. They could be internally driven – greater emphasis on the objective of self supporting or externally (eg changes driven by national organisations such as the Civil Aviation Authority).

Council will continue to monitor these factors when reviewing and developing forecasts and strategies

Council has to date facilitated and assisted the improvements at the aerodromes, with the upgrade of runways and extension of taxiways. Each proposal has been considered on its merits. Council will continue to meet the reasonable customer needs subject to its management objectives.

5.2 Population Growth

5.2.1. District Wide Projections

The scale of population growth anticipated in the District will not have a significant impact on the aerodrome services and assets.

The Tasman District has undergone a period of rapid growth, as shown by census population shown below.

Year	Census Population For Tasman District	% Increase since last census	Average Compound Growth Rate per Annum	New Zealand Average Growth Rate per Annum
1991	34,026			
1996	37,971	11.6%	2.22%	1.41%
2001	41,352	8.9%	1.72%	0.65%
2006	45,800	10.8%	2.06%	1.51%

This shows that Tasman District has been growing at a faster rate that the national average.

For the purpose of projecting population growth and related property / dwelling growth in the district for the next 20 years and beyond, a comprehensive growth modelling analysis has been undertaken. This is summarised in Appendix F, and reported in more detail in a separate document (Refer to Appendix F for details). The resulting population projection that Council has adopted for the purposes of its infrastructure planning and financial planning is shown in Figure 5-1.

Council have adopted population projections that are consistent with Statistics New Zealand growth projections. Council has assumed medium growth for all areas except Motueka and Richmond where a high growth rate has been adopted.

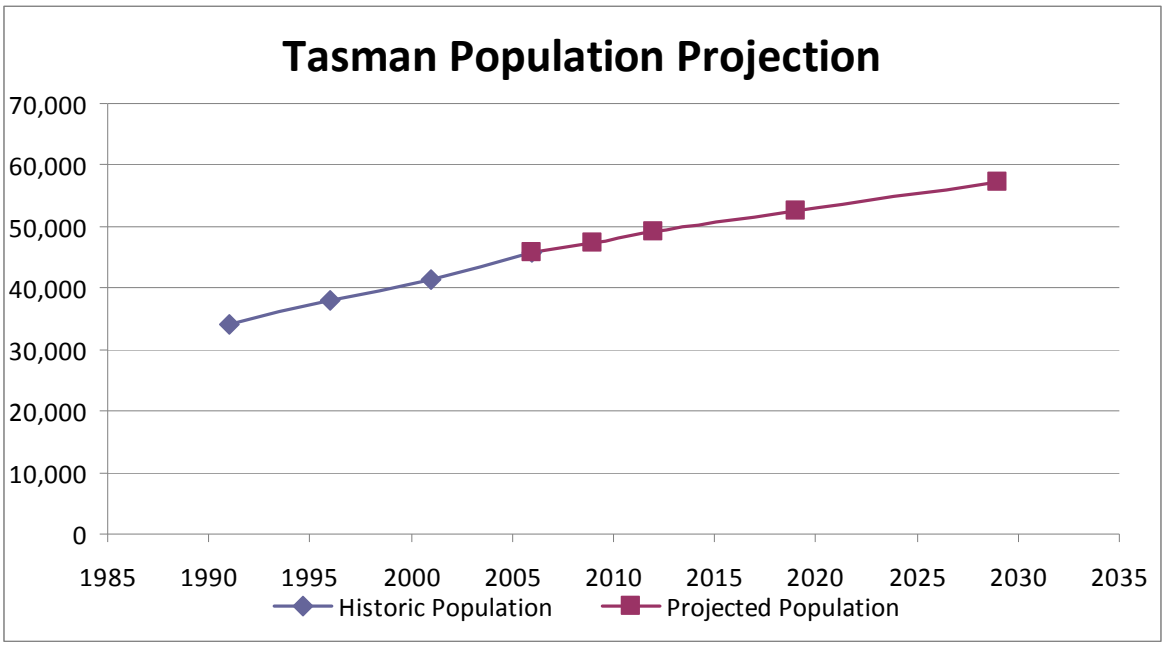


Figure 5-1: Council's Desired Population Growth

The growth analyses have included projecting growth across the district, on a settlement by settlement basis, balancing demand and supply factors to get a distributed growth forecast.

6. NEW CAPITAL EXPENDITURE

6.1 Future Capital Works Programme

Capital projects are those projects that create new assets or increase the capacity of the existing aerodrome asset beyond their service potential. New assets created by lessees such as hangars are not included in the new capital expenditure.

Council have developed 20 year capital works programmes. Only the first 10 years of the capital works programme are reported in Council's LTCCP, however Council have decided that there is benefit in planning over a 20 year horizon to ensure the level of expenditure over the long term is financially sustainable, and that a long term view is taken on the infrastructure planning.

The Council's 20 year capital programme is included in Appendix F.

6.2 Funding of Future Capital Works

Council funds the significant capital works initially from loan.
Loan charges are met from funds generated from:

- General Rate
- Leases and rent
- Fee recovery
- Sundry income

6.3 Other Capital Works Issues

There are no new capital works programmed.

Should this change then a firm funding policy for capital improvements at the aerodromes will be required so existing and future customers can be aware of the likely commitments.

6.4 Deferred Capital Projects

In developing their financial forecasts, Council has prepared a full schedule of capital projects and has programmed them in order to meet the levels of service, or the meet the needs of population growth. Initially Council adopted an optimistic growth forecast which drove significant capital expenditure. When new information became available from Statistics New Zealand on the 2006 census and their population projections, Council reviewed their growth forecast and adopted a more moderate growth in alignment with Statistics New Zealand projections. This has meant that some growth driven projects have been moved back, however these have moved because Council considers the need for them will arise later, rather than because of affordability issues. Thus it is expected that with these movements in the programme, the levels of service can still be met.

The Council has considered the financial affordability of the aerodromes capital forecasts together with forecasts from all other Council activities, and has concluded that the aerodromes capital forecast as provided is affordable, and has thus approved the capital programme without amendment.

7. RENEWALS CAPITAL EXPENDITURE AND DEPRECIATION

7.1 Current Renewals Strategy

The Council proposes to maintain the existing level of service provided to the aerodrome users and the lessees to meet at least the existing needs at the Motueka and Takaka aerodromes.

In evaluating renewal options the life cycle costs will be considered in the interests of minimising the total long-term costs while still meeting the required levels of service.

7.2 Future Renewals Needs

Significant renewal needs are related to the runway upgrades. As the sealed runway at Motueka was resealed in 2004 no further significant renewals are expected for this in the 20 year period.

The Motueka grass runway is programmed for an upgrade in year 3. The taxiways at Motueka were upgraded in 2005 / 2006.

At this stage, the Takaka cross runway has not been programmed for renewal or upgrade. Details of the renewal programme are contained in Appendix I.

7.3 Funding of Renewal Work

Renewal work is funded from fee/lease recovery and general rates. Council will decide on an ongoing basis whether or not any part of the works should be loan funded depending on the scale of work.

7.4 Deferred Renewals

Renewal works identified may be deferred if the cost is beyond the community's ability to fund it. This can occur when higher priority works are required on other infrastructure assets, or there are short term peaks in expenditure or if an inadequate rating base exists.

When renewal work is deferred the impact of the deferral on economic inefficiencies and the system's ability to achieve the required service standards will be assessed. Although the deferral of some renewal works may not impact significantly on the operation of assets, repeated deferral will create a liability in the longer term.

There are no renewal projects that have been deferred in the 20 year period of this plan.

7.5 Depreciation and Decline of Service Potential

As assets age they deteriorate and the efficiency and effectiveness of the service they provide can erode. This "decline of service potential" can be very minor and take a long time, or it can be quick depending on the type of asset. Depreciation is the mechanism by which this is accounted for, and renewals are the means by which assets are restored to providing an acceptable level of service. Key assumptions on the Depreciation and Decline in Service Potential are included in Appendix J. The actual value of depreciation accounted for is included in the future overall financial requirements in Appendix L.

7.6 Asset Disposals

When an asset reaches the end of its useful life and renewal or replacement is decided against, Council may elect to decommission and dispose of an asset. The Council does not have a formal strategy relating to asset disposals. Council's approach to asset disposals is summarised in Appendix W.

There are no plans to decommission and dispose of any assets in the Aerodromes activity in the period of this AM Plan.

8. SUMMARY OF THE OVERALL FINANCIAL POSITION INCLUDING EXPENDITURE, INCOME & EXISTING ASSET VALUES

8.1 Overview

Council has a policy of "user pays' or those that get the benefit should pay for aerodrome services. Council also considers there is a district wide community benefit in providing the aerodrome services.

Under the current funding policy for the maintenance, renewal, and capital development of aerodrome services and assets, any shortfall in income is funded directly from general rates.

Recovery of user charges by occasional aerodrome users relies on an honesty system.

8.2 A Statement of Financial Performance For the Next Ten Years

The statement of financial performance for the aerodromes for the next 10 years is included in Appendix L. Only the first 10 years of the financial performance are reported in Council's LTCCP, however Council have decided that there is benefit in planning over a 20 year horizon to ensure the level of expenditure over the long term is financially sustainable, and that a long term view is taken on the infrastructure planning.

It should be noted that the financial projections in this AMP, Appendix L, do not include inflation and are assessed in current value terms. The financial information presented in the LTCCP however, does include for inflation.

8.3 An Explanation of the Council's Funding Policy for the Activity

The current funding sources available for aerodrome services and assets include:

- general rate
- leases and rents
- fee recovery
- sundry income

8.4 Schedule of Fees and Charges

The fees and charges are reviewed annually. Lease and rentals are reviewed in accordance with the specific agreements. The details of the fees and charges are in appendix M.

9. RESOURCE CONSENTS AND PROPERTY DESIGNATIONS

9.1 An Explanation of All Resource Consent Issues Relating to this Activity

Under the Tasman Resource Management Plan the Motueka and Takaka sites are designated for aerodrome purposes with an underlying zone of Rural 1.

The designation provides for the Tasman District Council, either itself or through its agents, to control, manage and approve planning, design, research, construction and maintenance relating to all land within the designation. Designation of the aerodromes is considered the most appropriate mechanism of protecting Tasman District Council's interest with regard to the safe and efficient functioning of the aerodromes.

In addition to the operation of the aerodromes within the designations any stormwater and wastewater disposal must meet the District Engineering Standards.

Refer to Appendix H for other consents relating to this activity.

10. DEMAND MANAGEMENT

10.1 An Explanation of Council's Demand Management Policies for the Activity

The objective of demand management is to actively seek to modify customer practices and developer practices in order to:

- Optimise utilisation/performance of existing assets
- Reduce or defer the need for new assets
- Meet the organisation's strategic objectives (including social, environmental and political)
- Deliver a more sustainable aerodrome service
- Respond to customer needs

The Asset Managers have few opportunities to influence the demand for aerodrome assets and services.

For the current level of service and that likely required in the foreseeable future there is considered no justification to increase the capacity of the existing aerodromes. Council will continue to encourage the establishment and use of the available land for hangars and associated aerodrome facilities on a lease basis.

Through annual and periodic review Council can manage the level of fees and leases and other recoveries to meet and influence the actual demand of users.

11. SIGNIFICANT NEGATIVE EFFECTS

There are potential significant negative effects with the operation of the aerodromes. These include:

- Noise – affecting residential areas adjacent to the aerodrome and also some effects from aircraft over flying affecting noise sensitive areas.
- Protection of flight paths involving restrictions on building heights.
- Amenity values – buildings out of character with nearby residential development
- Noise and parking associated with other users such as the drag racing events at Motueka.

The effects are more significant for Motueka because of the proximity to the residential housing as opposed to the more rural setting for Takaka aerodrome.

The Council is mindful of the need to recognise these adverse effects on the local communities and therefore imposes on some users appropriate conditions to promote airport users being good neighbours.

12. SIGNIFICANT FORECASTING ASSUMPTIONS, UNCERTAINTIES, AND RISK MANAGEMENT

12.1 Assumptions and Uncertainties

The most significant assumptions and uncertainties that underlie the approach are described in Appendix Q and summarised as follows;

(a) ***Asset data knowledge***: Assumptions have been made on the locations, condition and performance of the assets because the asset data register is not complete.

(b) ***Growth Forecasts***: Assumptions have been made on future population growth. These assumptions influence the financial forecasts.

(c) ***Timing of Capital Projects:*** Many factors influence when projects can be implemented, some of these are beyond the Council's control, and which have the potential to defer expenditure and require carry over of annual allocated budgets.

(d) ***Funding of Capital Projects***: Funding is critical to new aerodrome activity projects and assumptions have been made about how this will be achieved.

(e) ***Accuracy of Capital Project Cost Estimates***: All projects in the capital forecasts have been estimated. A 15% provision has been included to get a "Base Project Estimate" to reflect the uncertainties in the unit rates used. A further provision has been added to reflect the uncertainties in the scope of the project. The amount added depends on the amount of work already done on the project. It is not feasible to have all projects in the next 20 years advanced to a high level of accuracy. However, it is preferable to have projects in the next 3 years advanced to a level that provides reasonable confidence about the accuracy of the estimate.

(f) ***Changes in Legislation and Policy:*** It has been assumed that there will be no changes in legislation and policy, that will significantly impact on this activity.

12.2 Risk Management

Council is adopting an Integrated Risk Management (IRM) framework and processes to manage risk with the organisation. Appendix Q contains a brief description of the IRM framework. The IRM process and framework is intended to:

- Demonstrate responsible stewardship by TDC on behalf of its customers and stakeholders.
- Act as a vehicle for communication with all parties with an interest in TDC's organisational and asset management practices.
- Provide a focus within TDC for ongoing development of good management practices.
- Demonstrate good governance.
- Meet public expectations and compliance obligations.
- Manage risk from an organisational perspective.
- Facilitate the effective and transparent allocation of resources to where they will have most effect on the success of the organisation in delivering its services.

The risk assessment is considered at 3 levels:

Level 1 – Organisational Risk

Level 2 – Asset Group Risk

Level 3 – Critical Asset Risk

At this point, Council has undertaken the Risk Assessments for Level 1 and 2, but have yet to complete the determining the appropriate risk treatment strategies for either. This has been included in the Improvement Plan. The level 3 assessment has not been started but has been planned for in the Improvement Plan. (Appendix V)

13. REGULATIONS AND BYLAWS

The Council must comply with the Civil Aviation Rules as appropriate to these non-certificated aerodromes.

In providing the utility facilities on the sites for the leaseholders Council must ensure that the leaseholders meet the requirements of all Council's bylaws and policies.

14. PLAN REVIEW AND PUBLIC CONSULTATION

14.1 Review Process for This Activity Management Plan

This section details the programme of ongoing monitoring of AMP effectiveness and review. The AMP is a living document that is relevant and integral to daily AM activity. To ensure the plan remains useful and relevant the following ongoing process of AMP monitoring and review activity will be undertaken:

- A comprehensive review at intervals of not less than three years via the Special Consultative Procedure. Each review will be completed to coincide with the next review of the LTCCP.
- Between three yearly reviews, various asset management improvement initiatives will be undertaken as listed in the improvement plan (Appendix V). The AMP will be amended to incorporate the outcomes of these at each review.
- Quality assurance audits (Appendix Z) of AM information to ensure the integrity and cost effectiveness of data collected.

14.2 Public Consultation

The Council consults the public through various mediums as outlined in more detail in Appendix U.

There was no specific reference to the aerodrome activity in the 2008 Communitrak Survey. Future surveys will need to be more directly targeted to aerodromes to enable an assessment of the whole community's satisfaction with this activity.

14.3 Intentions for Future Consultation

The Draft Long Term Council Community Plan outlines the Council's intent for public consultation around the LTCCP and this AMP.

Council plans to review the community outcomes in the latter half of 2010 (refer LTCCP) and subsequently the Levels of Service for all Council activities in 2011 (refer Improvement Plan and LTCCP). The outcome of these will feed into the next revision of the AMPs and LTCCP.

15. SUSTAINABLE DEVELOPMENT

Council's Vision, Mission and Objectives (refer Appendix A) demonstrate the Council's commitment to sustainable development at an organisational level. This is in line with the community wishes and the legislative requirements of the Local Government Act 2002 to promote the social, economic, environmental and cultural well beings of communities in the present and for the future.

At an organisational level, Council has:

- incorporated the 4 well beings into the community outcomes, which flow into the levels of service and performance measures
- incorporated the 4 well beings in the integrated risk management approach
- incorporated environmental, social and cultural considerations in the growth planning and modelling

In the Aerodrome activity specifically, a sustainable development approach is demonstrated in the following aspects:

- When considering new upgrade solutions for the runways, the Council considers lifecycle cost issues. Council does not have a formal process for this, but where lifecycle cost is considered to have an impact on decision making, it used as evaluation criteria.

16. IMPROVEMENT PLAN

The development of this plan is based on existing levels of service, the best available current information and the knowledge and judgement of Council staff. The AMP will be the subject of on-going monitoring, review and updating to improve the quality of AM planning and accuracy of the financial projections. This process will use improved knowledge of customer expectations and enhanced AM systems and data to optimise decision-making, review outputs, develop strategies, and extend the planning horizon.

The AM improvement process involves:

- The cycle of AM plan monitoring, review, revision and audit to improve the effectiveness of AMP outputs and compliance with audit criteria, legal requirements and good practice.
- The definition of service standards reflecting community desires through public consultation (service level review). The AMP is used to identify service standard options and costs, and the delivery of the service standards adopted is a key objective of Asset Management planning.
- The corporate Asset Management co-ordination role by the Asset Management team, which guides and audits the development of the AMP within the framework of Council's strategic direction.

Details of the specific planned improvements to the Aerodromes activity are detailed in Appendix V.

17. SCHEDULE OF KEY PROPOSED NEW CAPITAL AND RENEWALS WORKS

17.1 Schedule for Work for Next 10 Years

Table 17-1 below details the significant renewal work programmed for years 2009 to 2019. There are no new capital projects programmed in the next 10 years. A full list of all capital and renewals projects over the 20 year period is included in Appendix F.

Table 17-1: Schedule of Work for Next 10 Years

Activity	2009/10 to 2011/12 Years 1 to 3	2012/13 to 2018/19 Years 4 to 10	Project Driver
Motueka – Grass Runway Upgrade	$30,000		I/R
Motueka – Carpark Renewal		$18,000	R

N.B. Does not include inflation

Project Drivers: G = Growth, I = Increased Level of Service, R = Renewal

APPENDIX A. THE LEGISLATIVE AND OTHER REQUIREMENTS AND RELATIONSHIPS WITH OTHER PLANNING DOCUMENTS AND ORGANISATIONS

A.1 Introduction

In preparing this AMP the project team has taken account of:

- National Drivers – for example the drivers for improving Asset Management through the Local Government Act 2002
- Local Drivers – for example the Community Outcomes determined through consultation with the public
- Linkages – the need to ensure this AMP is consistent with all other relevant plans and policies.
- Constraints – the legal constraints and obligations Council has to comply with in undertaking this activity.

The main Drivers, Linkages and Constraints are described in the following Sections.

A.2 Key Legislation and Industry Standards, and Statutory Planning Documents

- The Local Government Act 2002.
  Especially:
  - Schedule 10.
  - The requirement to consider all options and to assess the benefits and costs of each option.
  - The consultation requirements.
- The Civil Aviation Act 1990 and Amendments.
- The Land Transport Act 1998.
- The Land Transport Management Act 2003 and 2008 amendment.
- The Public Works Act 1981.
- The Civil Defence Emergency Management Act 2002 (Lifelines).
- The Government's Sustainable Development Action Plan.
- The Resource Management Act 1991.
- The Local Government (Rating) Act 2002.
- The Health and Safety in Employment Act 1999.
- The Building Act 1991.
- Council's Engineering Design Standards – latest version.
- The Regional Land Transport Strategy 2003.
- New Zealand Standard SNZHB 4360:2000 'Risk Management for Local Government'.

Some of the legislative requirements that the Council must act within are discussed in more detail as follows:

1. *The Civil Aviation Act 1990 and Amendments:*
   Under the Authority of the Civil Aviation Act 1990 the Director of the Civil Aviation Authority has provided Advisory Circulars AC139-7 and AC91-15 as Acceptable Means of Compliance (AMC) for the associated Rules 139 and 91.

These circulars provide guidance on standards, practices and procedures for the operation of aerodromes serving aeroplanes at or below 51,700kg MCTOW on non air transport operations such as at Motueka and Takaka.

2. *Tasman Resource Management Plan*
   A Combines regional and district plan with statements of issues, objective, policies methods and rules addressing the use of land, water, coastal marine area and discharges into the environment.

A.3 Key Stakeholders

Stakeholders are those individuals and organisations that have an interest in the management and/or operation of the assets. Stakeholders include, but are not limited to:

National Industry Organisations:

- Civil Aviation Authority
- Nelson/Marlborough District Health Board.
- New Zealand Transport Agency

Local Stakeholders

- The elected representatives (Councillors and Community Boards)
- The TDC Community of owners, residents and ratepayers
- Nelson Airport Authority
- Tangata Whenua
- Regulatory and monitoring bodies
- Environmental and Recreational Interest Groups including Fish and Game New Zealand, Royal Forest and Bird Protection Society and Tasman Environmental Society
- Tasman District Council employees
- Consultants and contractors

A.4 Links With Other Documents

This AMP is a key component in the Council's strategic planning function. Among other things, this plan supports and justifies the financial forecasts and the objectives laid out in the Long Term Council Community Plan (LTCCP). It also provides a guide for the preparation of each Annual Plan and other forward work programmes.

Figure A-1 depicts the links between Council's asset management plans to other corporate plans.

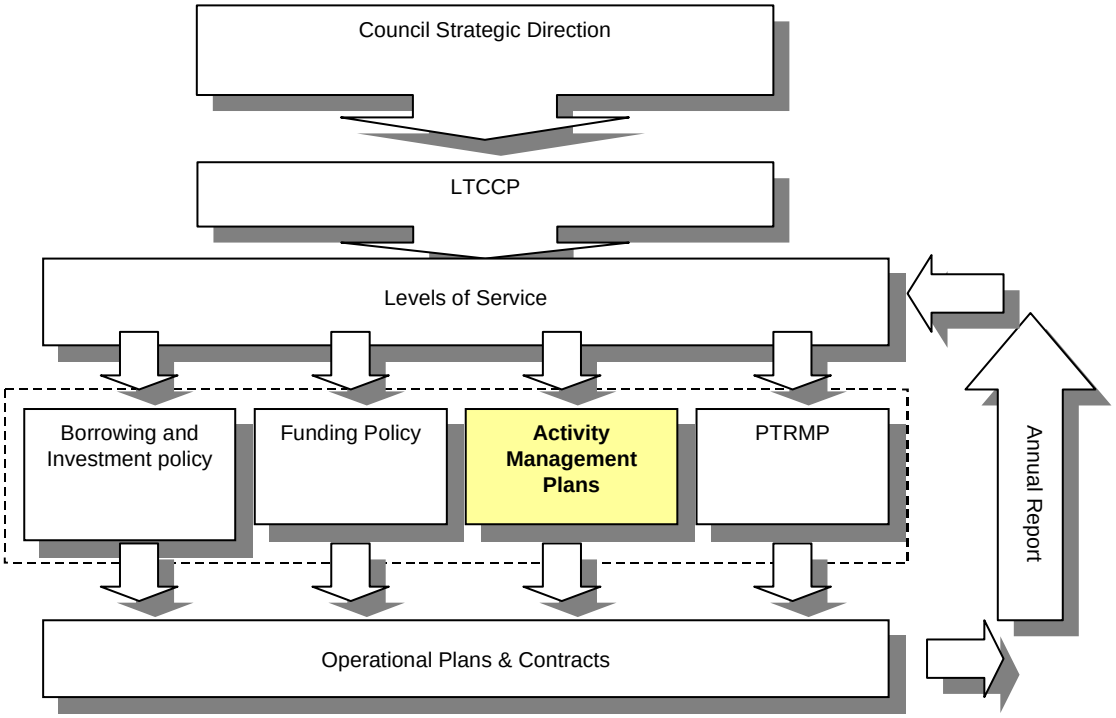


Figure A-1: Hierarchy of TDC Policy, Strategy and Planning

Council Strategic Direction is outlined in the Vision, Mission and Objectives of the Council:

An interactive community living safely in the garden that is Tasman District.

Mission: To enhance community wellbeing and quality of life.

Objectives:

Objective 1:
To implement policies and financial management strategies that advance the Tasman District.

Objective 2:
To ensure sustainable management of natural and physical resources, and security of environmental standards.

Objective 3:
To sustainability manage infrastructural assets relating to Tasman District.

Objective 4:
To enhance community development and the social, natural, cultural and recreational assets relating to Tasman District.

Objective 5:
To promote sustainable economic development in the Tasman District.

Table A-1: Strategic Documents Utilised During the Planning Process

LTCCP	The Long-term Council Community Plan. The primary instrument for the Council to report on its intentions on delivering its services to the community. The LTCCP supersedes the Long Term Financial Strategy (LTFS) and traditional Annual Plan.
Strategic Plan	This is the broad strategic direction of Council set in the context of current and future customer requirements. The AM plan is the tactical plan with a view to achieving the strategic targets.
Annual Plan	The service level options and associated costs developed in the AM plan will be fed into the Annual Plan consultation process. The content of the Annual Plan will feed directly from the short term forecasts in the LTCCP.
Financial and Business Plans	The financial and business plans requirement by the Local Government Amendment Act (3). The expenditure projections will be taken directly from the financial forecasts in the AM plan.
Contracts	The service levels, strategies and information requirements contained in the AM plan are the basis for performance standards in the current Maintenance and Professional Service Contracts.
Operational Plans	Operating and maintenance guidelines to ensure that the schemes operate reliably and equipment and plant is maintained in a condition that will maximise their useful service life.
Corporate Information	Quality AM is dependent on suitable information and data and the availability of sophisticated AM systems which are fully integrated with the wider corporate information systems (e.g. financial, property, GIS, customer service, etc.). Council's goal is to work towards such a fully integrated system.

A.5 Key Activity Drivers

Key drivers in the aerodromes activity include:

- Growth in recreational demand for flying and flying related activities such as sky diving.
- Growth in demand for an aerodrome commercial activities.
- At present there is a reasonable demand for pilot training undertaken at Motueka.
- There is not considered any capacity issues to accommodate any expected increase in this activity use in the next 20 years.

APPENDIX B. OVERVIEW OF THE AERODROMES IN THE DISTRICT

B.1 General

Council is the owner of aerodrome assets with value of approximately $1,215,951 June 2007. The Tasman District Aerodromes Activity comprises the provision and maintenance of the following assets at Motueka and Takaka:

- Ownership or agreed use of land under the runways.
- Runway pavements and surfacings for safe landing, takeoff and taxiing of aircraft.
- Ancillary buildings for administration and housing of associated activities.
- Navigational aids.
- Security fencing and other arrangements for protection of the assets and safety of the users.

B.2 Motueka Aerodrome

The Motueka Aerodrome is the responsibility of Tasman District Council and occupies some 27.52 hectares and is bounded on the south by College Street, on the east by Queen Victoria Street and to the north-west by Marchwood Park and Marchwood Park Road. (refer plan in Appendix Y)

B.2.1. *Land Tenure*

The land in Pt Sections 189 and 190 was first leased for an aerodrome from Mrs B L Knyett in 1934 and the option to purchase from the executors of her will taken up on 1940.

The aerodrome land is now in 2 freehold titles in the name of Tasman District Council. CT 12C/337,being Lot 1 DP 18903, of 5159m^2 and which contains the Aviation College and CT 12C/ 338 being Lot 2 DP 18903, of 27.00ha and being the balance of the aerodrome,
Under the Tasman Resource Management Plan the site is designated for aerodrome purposes with an underlying zone of Rural 1.

The designation provides for the Tasman District Council either itself or through its agents to control, manage and approve planning, design, research, construction and maintenance relating to all land within the designation. Designation of the aerodrome is considered the most appropriate mechanism of protecting Tasman District Council's interest with regard to the safe and efficient functioning of the aerodrome.

The aerodrome is recorded in the Civil Aviation – Aeronautical Information Publication (AIP) as a non-certified aerodrome that is unattended.

B.2.2. *Structures and Layout*

The site is near flat grassland and abuts horticultural uses on all frontages except College Street where there is residential development on the south side. The land is at the upper end of the Thorp catchment and thus receives very little if any stormwater runoff from the above site. The site slopes gradually towards Queen Victoria Street (about 0.2%) and thus gives rise to very little stormwater runoff itself.

Tasman District Council formed and sealed a 724 metre by 8 metre runway in 1991/92. Subsequent extensions increased the length and the runway was widened and resealed to an average width of 11.0 metres in March 2004. The current runway is 729 metres long by 11 metre wide asphalt surfaced runway. In addition there is adjacent a grass runway 733 metre long by 30 metre wide. The 52 metre concrete pad which was established by the Nelson Drag Racing Association for their events, is not included in the runway threshold for aircraft operations.

A 40x12 metre concrete pad was constructed at the southern end of the runway in 2008 to facilitate safer entry and exiting of the runway.

Currently the runway length is adequate for a Piper Navajo aircraft.

The strength of the runway pavements and hence allowable aircraft landing is given in equivalent single wheel loading (ESWL) for the sealed runway. The grass runway has yet to be determined. The latest AIP (effective 16 February 2006) is attached.

There is an assortment of buildings along the College Street frontage, and include Skydive Abel Tasman and the Motueka Aero Club, along with other small hangars. An unsealed carpark is between the Skydive Abel Tasman and the Motueka Aero Club. Nelson Aviation College is on Queen Victoria Street, along with three new hangars ranging from small to large. There is an aviation fuel dispenser pumping from a tank adjacent to the Aero Club building. There is also an underground fuel tank outside the hangar. These provide both Avgas and jet A1 fuels.

Further development is available on Queen Victoria Street frontage, adjacent to Marchwood Park Road and College Street at the southern end of the aerodrome.

There is a gate located at the north eastern corner of the aerodrome. A fire engine could enter through this gate at times of an emergency.

The aviation operation area is secured by a post and wire perimeter fence.

The height of structures around the aerodrome is controlled by “transitional plane surfaces” which are to protect the flight paths of aircraft using the aerodrome. Those height restrictions apply irrespective of any greater permitted height stipulated in the Tasman Resource Management Plan.

B.3 Takaka Aerodrome

The Takaka Aerodrome is the responsibility of the Tasman District Council and was established in 1940. The site is 39.66 hectares, bounded by farmland on the northern, eastern and part of the western side. State Highway 60 bounds the southern and south-western boundaries.

There is an assortment of buildings on the site. These include:

- A house and garage
- Toilets, and hand washing facilities available for public use.
- Clubrooms and private hangars.

The boundary of the aerodrome is secured by a post and wire fence.

The height of structures around the aerodrome is controlled by “transitional plane surfaces” which are to protect the flight paths of aircraft using the aerodrome. Those height restrictions apply irrespective of any greater permitted height stipulated in the Tasman Resource Management Plan.

B.3.1. *Land Tenure and Status*

The site is an Aerodrome Reserve being Section 20, Block V of the Waitapu Survey District. The land is vested in the Tasman District Council.

Under the Tasman Resource Management Plan the site is designated for aerodrome purposes with an underlying zone of Rural 1.

The designation provides for the Tasman District Council either itself of through its agents to control, manage and approve planning, design, research, construction and maintenance relating to all land within the designation. Designation of the aerodrome is considered the most appropriate mechanism of protecting Tasman District Council’s interest with regard to the safe and efficient functioning of the aerodrome.

The aerodrome is recorded in the Civil Aviation – Aeronautical Information Publication as a non-certified aerodrome that is unattended. The allowable ESWL is 3000kg for the sealed runway and 1000kg for the gravel runway.

B.3.2. *Structures and Layout*

The aerodrome has an extensive concrete tile drainage system, following from the southern end of the property to the northern end. (Average of 1:100 fall).

The aerodrome has been built on pakihi clays which makes the site hard to drain and grow good vegetation on. Grazing of the site is leased out periodically.

Takaka has two runways – one running more or less north/south with the other running south-east to north-west, crossing the north/south runway. The north/south runway is sealed (11 metres wide, 825 metres long) and was resealed in 2007.

The main sealed runway has an equivalent single wheel loading of three tonne and the cross runway has a rating of one tonne.

B.4 Activities at Aerodromes

The following uses are considered appropriate possible activities at the Motueka and Takaka aerodromes.

Ordinary uses:

- Fixed wing aircraft operations
- Helicopter landings and departures except for helicopter pilot training
- Hangars for aircraft storage and maintenance
- Passenger terminals
- Facilities for storage of fertilisers and sprays used by top dressing aircraft using the aerodrome – Takaka only.
- Aero Club clubrooms
- Facilities for pilot training except for helicopter pilot training.
- Emergency service facilities
- Accommodation units accessory to pilot training facilities
- Arable farming
- Meteorological facilities
- Telephone facilities
- Storage facilities for aviation fuels

Discretionary with special conditions:

The following uses may be appropriate subject to special conditions – which may be reviewed annually

- Parachuting
- Helicopter pilot training
- Drag racing
- Gliding
- Model aircraft
- Microlight aircraft
- Gyrocopters and similar aircraft
- Hang-gliding activities
- Commercial and light industry associated with aviation or aerodromes

- Other uses not already listed.

In determining any use each application will be considered on its merits and appropriate conditions will apply including:

(a) Hours/Days of operation

(b) Regulations of flight paths

(c) Restrictions to the use of noisy aircraft

The Takaka management committee recommends appropriate conditions to be included in any lease / agreement.

B.5 Asset Condition

B.5.1. *Motueka Aerodrome*

The sealed runway is in very good condition and scheduled for renewal within the 10-20 year period.

The grass runway requires some smoothing to improve ride quality and is programmed for Year 3.

The car park is in good condition and is due for a reseal in Year 5.

Other assets and landscaping requires regular maintenance to maintain their level of service.

B.5.2. *Takaka Aerodrome*

The sealed runway is in good condition and was resealed in 2007. The next reseal is scheduled within the 10-20 year period. The cross runway is unsealed and in fair condition but is very seldom used. Taxiways require regular maintenance to maintain their level of service.

Drainage to the main runway is adequate but will require regular monitoring and maintenance to ensure its level of service.

There is an assortment of buildings on the site. These include:

- A house and garage
- Toilets, and hand washing facilities available for public use.
- Clubrooms and private hangars.

The boundary of the aerodrome is secured by a post and wire fence.

The height of structures around the aerodrome is controlled by “transitional plane surfaces” which are to protect the flight paths of aircraft using the aerodrome. Those height restrictions apply irrespective of any greater permitted height stipulated in the Tasman Resource Management Plan.

Plans

The attached plans are indicative. As part of the improvement plan a full survey is recommended.

B.6 Strategic Management Approach

B.6.1. *The Key Issues for the Motueka aerodrome are:*

- Provision of a service that is affordable to the users and at a reasonable cost to the community through general rates.
- The current use of the aerodrome for drag racing events (up to 4 per year) that have both a safety and environmental affect and can cause localised damage to the runway.

- The need to continue to increase the income to reduce the dependence on funding from the General rate.
- The high cost of runway reseals at 20 year intervals and grass runway upgrades at 10 year intervals.

B.6.2. *The Strategic Approach to these issues are:*

- Regular negotiation with users on the fees and leases and suitability of the services.
- Limited tenure for the drag racing under strict operating conditions.
- Encouragement of additional hangars, aviation businesses and other development associated with the aerodrome activities in order to supplement the income.
- Fund the runway and upgrade reseal programmes by loan over the life of the upgrade.

B.6.3. *The Key Issues for the Takaka aerodrome are:*

- Limited demand for the facility.
- Reliance on general rate to fund the shortfall in operating income and annual upgrades, particularly runway reseals and drainage.

B.6.4. *The Strategic Approach to these issues are:*

- Encourage the development of hangars, aviation businesses and leasing of other assets to supplement income.
- Fund the runway reseal by loan over the life of the upgrade.

APPENDIX C. PRIVATE AERODROME STRUCTURES - NOT RELEVANT TO THIS ACTIVITY

APPENDIX D. ASSET VALUATIONS

D.1 Background

The Local Government Act 1974 and subsequent amendments contain a general requirement for local authorities to comply with Generally Accepted Accounting Practice ("GAAP").

The Financial reporting Act 1993 sets out a process by which GAAP is established for all reporting entities and groups, the Crown and all departments, Offices of Parliament and Crown entities and all local authorities. Compliance with the New Zealand Equivalent to International Accounting Standard 16; Property, Plant and Equipment (NZ IAS 16) and IAS 36 (Impairment of Assets is the one of the current requirements of meeting GAAP.

The purpose of the valuations is for reporting asset values in the financial statements of TDC.

TDC requires its infrastructure asset register and valuation to be updated in accordance with Financial Reporting Standards and the AMP improvement plan (i.e. three yearly updates)

The valuations summarised below have been completed in accordance with the following standards and are suitable for inclusion in the financial statements for the year ended June 2007.

- NAMS Group Infrastructure Asset Valuation Guidelines – Edition 2.0
- New Zealand Equivalent to International Accounting Standard 16; Property, Plant and Equipment (NZ IAS 16) and IAS 36 (Impairment of Assets

D.1.1. *Depreciation*

Depreciation of assets must be charged over their useful life.

- *Depreciated Replacement Cost* is the current replacement cost less allowance for physical deterioration and optimisation for obsolescence and relevant surplus capacity. The *Depreciated Replacement Cost* has been calculated as:

$$\frac{\text{Remaining useful life}}{\text{Total useful life}} \times \text{replacement cost}$$

- *Depreciation is a measure of the consumption of the economic benefits embodied in an asset. It distributes the cost or value of an asset over its estimated useful life. Straight-line depreciation is used in this valuation.*
- *Total Depreciation to Date is the total amount of the asset's economic benefits consumed since the asset was constructed or installed.*
- *The Annual Depreciation is the amount the asset depreciates in a year. It is defined as the replacement cost minus the residual value divided by the estimated total useful life for the asset.*
- *The Minimum Remaining Useful Life is applied to assets which are older than their useful life. It recognises that although an asset is older than its useful life it may still be in service and therefore have some value. Where an asset is older than its standard useful life, the minimum remaining useful life is added to the standard useful life and used in the calculation of the depreciated replacement value.*

D.1.2. *Revaluation*

The revaluations are based on accurate and substantially complete asset registers and appropriate replacement costs and effective lives. The basis of the data inputs used is described in detail in the attached report.

(a) The lives are generally based upon NZ Infrastructure Asset Valuation and Depreciation Guidelines – Edition 2. In specific cases these have been modified where in our, and Council's opinion a different life is appropriate. The changes are justified in the valuation report.

(b) The component level of the data used for the valuation is sufficient to calculate depreciation separately for those assets that have different useful lives.

D.2 Overview of Asset Valuations

Assets are valued every three years, and historic asset valuations reports are held with Council.

The Aerodrome assets were last re-valued in June 2007 and the data are reported under separate cover[1]. The total replacement value of the aerodrome assets as of 30 June 2007 is given in the Table D-1 below.

Key assumptions in assessing the asset valuations are described in detail in the valuation report.

D.3 2007 Valuation

The optimised replacement value, annual depreciation and optimised depreciated replacement value of the airfields assets are summarised in Table D-1 and attached Figure D-1.

Table D-1: Airfields Asset Valuation Summary

	Optimised Replacement Value ($)	Optimised Depreciated Replacement Value ($)	Total Depreciation to Date ($)	Annual Depreciation ($/yr)
Aerodromes 2007	2,277,763	1,215,951	1,061,811	64,958

[1] Infrastructural Asset Revaluation, June 2007 – MWH report for Tasman District Council

TASMAN DISTRICT COUNCIL
ASSET REVALUATION JULY 2007 UPDATE
VALUATION CUTOFF DATE- 30th June 2007
Aerodromes

Year of Valuation	2007
Valuation Year	**2007**

											2,277,098	66,304	1,090,369	1,186,729
SCHEME	**UTILITY**	**TYPE**	**NAME**	**DESCRIPTION**	**QUANTITY**	**UNITS**	**REPLACEMENT RATE ($/UNIT)**	**YEAR BUILT**	**STD LIFE (YEARS)**	**REMAINING LIFE (YEARS)**	**OPTIMISED REPLACEMENT VALUE ($)**	**ANNUAL DEPRECIATION ($/YEAR)**	**TOTAL DEPRECIATION TO DATE ($)**	**OPTIMISED DEPRECIATED REPLACEMENT VALUE ($)**
Aerodromes	Golden Bay	Airfield	Golden Bay Airfield	Unsealed runway	1	ea	208,970	1985	25	3	208,970	8,359	183,893	25,076
Aerodromes	Golden Bay	Airfield	Golden Bay Airfield	Access strip	1	ea	54,389	1985	25	3	54,389	2,176	47,863	6,527
Aerodromes	Golden Bay	Airfield	Golden Bay Airfield	Drainage	1	ea	623,624	1985	80	58	623,624	7,795	171,497	452,128
Aerodromes	Golden Bay	Airfield	Golden Bay Airfield	Fencing	1	ea	47,418	1990	20	3	47,418	2,371	40,306	7,113
Aerodromes	Golden Bay	Airfield	Golden Bay Airfield	Sealed runway	8400	m2	57	1995	50	18	478,896	15,963	191,559	287,338
Aerodromes	Motueka	Airfield	Motueka Airfield	Grass runway	1	ea	118,321	1985	25	3	118,321	4,733	104,122	14,198
Aerodromes	Motueka	Airfield	Motueka Airfield	Drainage	1	ea	38,472	1985	80	58	38,472	481	10,580	27,892
Aerodromes	Motueka	Airfield	Motueka Airfield	Sealed runway - 724 m long	8688	m2	57	1990	50	13	495,316	16,511	280,679	214,637
Aerodromes	Motueka	Airfield	Motueka Airfield	Fencing	1	ea	51,602	1990	20	3	51,602	2,580	43,862	7,740
Aerodromes	Motueka	Airfield	Motueka Airfield	Runway Widening	2808	m2	57	2004	50	27	160,088	5,336	16,009	144,079

runway unit rates checked with MWH engineer's are are current for 2 coat chip seal. Update with CAF
last work done in 2004

contract price	135,135
meterage	2,808
$/m2	48
Inc with CAF	57

Note: further breakdowns possible
runways complrise of 2 coat chip seal, ashphalt and conc
Also can value basecourse seperately, as this will have a different life.

requrie further information to value other assets more accurately
fencing - what type of fencing
drainage - piped vs open trench etc

Grass runway has always been valued. But what components, assume that this is the basecourse.

Figure D-1: Asset Valuation as at 30 June 2007

APPENDIX E. OPERATION AND MAINTENANCE

E.1 Council 'Ownership' Of Operations and Maintenance

The aerodromes are managed by Tasman District Council through Council staff and Council agents as required, (with input from user groups).

The Reports and Recommendations to Council are made through the Corporate Services and Enterprises Committees regarding:

- operations and maintenance works
- hours of operation
- types of uses,
- occupancy and associated charges.

The Property Services Manager, is the executive officer for the Motueka aerodrome and is delegated the responsibility for its administration. For Takaka the administration is managed through the secretary for the local management committee.

The Corporate Services and Enterprises committees of Council may at their discretion delegate some of their authority to the management committee.

At Takaka, the local management Committee consists of the local Councillor, one member of the Community Board, and three to four members elected at the public annual meetings.

E.2 Maintenance Strategy

Council's strategy is to maintain the aerodromes with associated runways and navigational aids, as well as any Council owned buildings suitable for lease income; so that the aerodromes provide an aviation facility suitable for the recreational and commercial users at the least long term cost to Council.

At Motueka all buildings are privately owned. At Takaka all the Council owned buildings, are managed under Council's Property assets. Hangars are privately owned on leased sites. The local management committees manage the day to day issues for the leases. At Takaka this includes the maintenance and income for the house. Landing fees are administered through the Motueka Service Centre for Motueka and the local secretary at Takaka

E.3 Control and Management of Operations and Maintenance

The large grass areas, grass runway and minor fence, drainage or building repairs are managed through the Property Services Manager for Motueka and by the management committee at Takaka. Significant repairs or upgrades to the sealed/unsealed runways are managed through the Property Services Manager.

For Motueka, the sealed and grass runways, taxiways and grass environments are managed through a competitively tendered three year maintenance contract. The current contract that is due to expire in 2008 was given a one year extension to 30 June 2009.

Mowing is a lump sum per annum to maintain specified standards while other repairs and maintenance are on an as required basis.

For Takaka, the local committee instruct selected Contractors to undertake the work on an as required basis.

E.4 Estimated Operation and Maintenance Costs For Next Twenty Years

The attached Table E-1, details the estimated operating costs for the next twenty years.

The annual cost over the 20 years is predicted to remain relatively consistent for each aerodrome.

E.5 Maintenance and Operating Issues

The minimum level of service requires a high standard of maintenance for the runways. Charges and other income (such as leases) may not always match the required expenditure.

Table E-1: Projected Operations and Maintenance Expenditure for the Next 20 years

Total Forecast for Operation & Maintenance - Aerodromes

Item	Scheme	Project Name	Total Project Cost	Total O&M	2009/10 Year 1	2010/11 Year 2	2011/12 Year 3	2012/13 Year 4	2013/14 Year 5	2014/15 Year 6	2015/16 Year 7	2016/17 Year 8	2017/18 Year 9	2018/19 Year 10
1	Motueka Airfield	MOTUEKA AERODROME MAINTENANCE	$ 720,000	$ 720,000	$ 36,000	$ 36,000	$ 36,000	$ 36,000	$ 36,000	$ 36,000	$ 36,000	$ 36,000	$ 36,000	$ 36,000
2	Motueka Airfield	Sealed runway mntce	$ 20,000	$ 20,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000
4	Motueka Airfield	Carpark Mntce	$ 10,000	$ 10,000	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500
6	Motueka Airfield	Inspections , Notam Mngmt, Contract mngt	$ 80,000	$ 80,000	$ 4,000	$ 4,000	$ 4,000	$ 4,000	$ 4,000	$ 4,000	$ 4,000	$ 4,000	$ 4,000	$ 4,000
8	Motueka Airfield	Grass Runway and acessway mntce	$ 60,000	$ 60,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000
10	Golden Bay Airfield	Marking runway	$ 15,000	$ 15,000	$ -	$ -	$ 2,501	$ -	$ -	$ 2,500	$ -	$ -	$ 2,500	$ -
11	Golden Bay Airfield	General runway , taxiway mntce	$ 300,000	$ 300,000	$ 15,000	$ 15,000	$ 15,000	$ 15,000	$ 15,000	$ 15,000	$ 15,000	$ 15,000	$ 15,000	$ 15,000
12	Motueka Airfield	Runway remarks	$ 25,000	$ 25,000	$ -	$ 2,500	$ -	$ 2,500	$ -	$ 2,500	$ -	$ 2,500	$ -	$ 2,500

Item	Scheme	Project Name	Total Project Cost	Total O&M	2019/20 Year 11	2020/21 Year 12	2021/22 Year 13	2022/23 Year 14	2023/24 Year 15	2024/25 Year 16	2025/26 Year 17	2026/27 Year 18	2027/28 Year 19	2028/29 Year 20
1	Motueka Airfield	MOTUEKA AERODROME MAINTENANCE	$ 720,000	$ 720,000	$ 36,000	$ 36,000	$ 36,000	$ 36,000	$ 36,000	$ 36,000	$ 36,000	$ 36,000	$ 36,000	$ 36,000
2	Motueka Airfield	Sealed runway mntce	$ 20,000	$ 20,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000
4	Motueka Airfield	Carpark Mntce	$ 10,000	$ 10,000	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500
6	Motueka Airfield	Inspections , Notam Mngmt, Contract mngt	$ 80,000	$ 80,000	$ 4,000	$ 4,000	$ 4,000	$ 4,000	$ 4,000	$ 4,000	$ 4,000	$ 4,000	$ 4,000	$ 4,000
8	Motueka Airfield	Grass Runway and acessway mntce	$ 60,000	$ 60,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000
10	Golden Bay Airfield	Marking runway	$ 15,000	$ 15,000	$ -	$ 2,500	$ -	$ -	$ 2,500	$ -	$ -	$ 2,500	$ -	$ -
11	Golden Bay Airfield	General runway , taxiway mntce	$ 300,000	$ 300,000	$ 15,000	$ 15,000	$ 15,000	$ 15,000	$ 15,000	$ 15,000	$ 15,000	$ 15,000	$ 15,000	$ 15,000
12	Motueka Airfield	Runway remarks	$ 25,000	$ 25,000	$ -	$ 2,500	$ -	$ 2,500	$ -	$ 2,500	$ -	$ 2,500	$ -	$ 2,500

N.B. Does not include inflation

APPENDIX F. DEMAND AND FUTURE NEW CAPITAL REQUIREMENTS

F.1 Growth Supply – Demand Model

A comprehensive population growth supply/demand model has been developed in 2008. This replaces the previous "AMPlan/LTCCP Growth Maps – November 2005". There are now two volumes namely:

Volume 1 TDC Growth Supply - Demand Model 2009/10 to 2018/19 to 2029.
Volume 2 Infrastructure Activity Outputs

The model projects development within the time periods:

- Year 1 to 3 - term until the next LTCCP review
- Year 4 to 10 - 10 year timeframe of LTCCP
- Year 11 to 20 - for future infrastructure planning
- Year 20 plus - for future infrastructure planning.

The status of the assessments of the many Development Areas for the model process remains subservient to the TRMP.

The model projections are described in detail in both volumes and are summarised as follows:

F.1.1. *Volume 1*

F.1.1.1 Supply

- Settlement Areas – 17 GIS Maps represent the 'urban' areas in the district which are further divided into some 258 Development Areas aligned to existing and potential new zonings. All known existing Residential dwellings and existing Business buildings are shown. The current supply of lots, dwellings and buildings are established.
- An assessment of every Development Area is then completed considering:
    - Land Use Effects – settlement form, productive land value, hazard risk exposure and environmental/social impacts.
    - Network Services Effects – stormwater, water supply, wastewater, transportation, green space.
    - Each Development Area has a net positive or negative development score assigned to it identifying where growth should be promoted or halted.
    - Using the data from the Settlement/Development Area maps and Assessments plus the Council staff knowledge the model generates the theoretical total future supply of lots.

F.1.1.2 Demand

- Residential: A district population growth projection percentage has been established for the five wards and the Settlement Areas within each ward. The population growth is based on Statistics New Zealand demographic population projections assuming medium growth for all areas except Richmond and Motueka where a high growth projection has been adopted. Initially Council adopted a higher growth projection across the district, however in the light of new information that was released by Statistics New Zealand on the 2006 census, and when the full impact of the higher growth projection was understood, Council reviewed this decision and adopted a projection in line with Statistics New Zealand projections. The population growth is converted into required dwellings assuming 2.4 persons per average household.
- Business: Council Land Management Consultants have produced a 'business land required' sub model. Three types of business are considered namely Industrial, Commercial and Retail, however the model

simplifies the demand to future building sites required over three time periods.

Supply and Demand: The model requires experienced Council staff to then decide on how the demand for future Residential and Business quantities will be satisfied. The demand is met by using either:

- Existing available unbuilt on lots.
- New lots created through subdivision.

The results of this whole process are shown in the first worksheet table in Volume 1 called 'Summary of Volume 1 Outputs'.

F.1.2. *Volume 2*

The Volume 1 summary outputs table is reproduced in Volume 2.

Volume 2 creates worksheets for the entire Engineering infrastructure activities which require a rate to be struck over the 10 year period of the LTCCP.

Volume 2 does not contain any financial figures but rather provides the numerical units required to be determined.

The starting, base data for Volume 2 is derived from Council's rating database.

F.1.2.1 Projections Beyond 20 Years

This model satisfies the requirement to project growth over a 3, 10 and 20 year time period for the LTCCP financial model.

Asset Managers however are also tasked to consider design requirements for assets with life cycles exceeding 20 years.

There is sufficient data available in both volumes to extrapolate figures to a future time requirement acknowledging the limitations of the models accuracy.

F.2 Projection of Aerodromes Demands

Council has encouraged the use of the aerodrome facilities and the opportunity to lease areas suitable for associated aviation activities. It is not considered that the need for the scale of air service facility will significantly change from that presently provided at the Motueka and Takaka aerodromes.

A primary objective is to continue to allow the use of the aerodromes for aviation related activities and other compatible uses in a manner that minimises conflict with the local community, serves the needs of the district and is becoming self supporting. Major issues such as runway realignment should the nature of activities at the aerodromes change dramatically are not considered likely at this stage.

The uses of the aerodromes as detailed in Appendix B are at present considered appropriate possible activities at the Motueka and Takaka aerodromes. All uses are subject to approval and conditions and their inclusion does not imply a current demand.

F.3 Future New Capital Requirements

New works are those works that create a new asset that did not previously exist, or works that upgrade or improve an existing asset beyond its existing capacity. The need for the new work could be from one of the following drivers:

- Growth – to provide infrastructure to accommodate the demand
- Increased Level of Service – to improve assets to provide a better level of service

- Backlog – to upgrade or improve an asset that should have been upgraded previously but for some reason has been deferred or not identified.

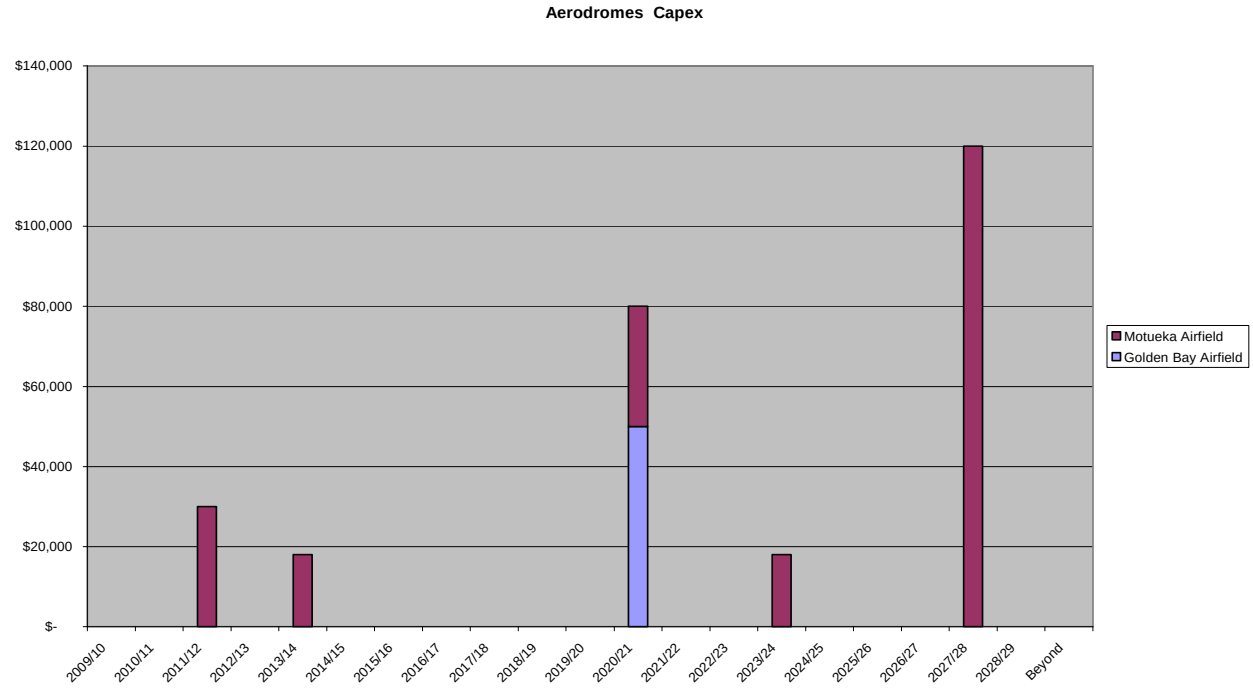
This is necessary for two reasons as follows:

a) Schedule 13(1) (a) of the Local Government Act requires the local authority to identify the total costs it expects to have to meet relating to increased demand resulting from growth when intending to introduce a Development Contributions Policy.

b) Schedule 10(2)(1)(d)(l)-(iv) of the Local Government Act requires the local authority to identify the estimated costs of the provision of additional capacity and the division of these costs between changes to demand for, or consumption of, the service, and changes to service provision levels and standards.

All new works have been assessed against these project drivers. Some projects may be driven by a combination of these factors and an assessment has been made of the proportion attributed to each driver. Some projects may also be driven fully or partly by needs for renewal. These aspects are covered in Appendix I.

The projected capital requirements for the next 20 years (including renewals) is summarised as follows:



F.4 Development of New Capital Requirements Forecasts

During April to September 2008, a workshop with the project team was held to identify new works requirements. New works were identified by:

- Reviewing levels of service and performance deficiencies
- Reviewing risk assessments
- Reviewing previously completed investigation and design reports
- Using the collective knowledge and aerodrome understanding of the project team.

Each project identified was developed with a scope and a project cost estimate. Common project estimating templates were developed to ensure consistent estimating practices and rates were used. This is described in Appendix Q. The project estimate template includes:

- Physical works estimates
- Professional services estimates

- Consenting and land purchase estimates
- Contingencies for unknowns.

All estimates are documented and filed in an Estimates file to be held by Council.

The information from the estimates has then been entered into Capital Forecast spreadsheet/database that enables listing a summing of the Capital Costs per project, per scheme, per project driver and per year. This has been used as the source data for input into council's financial system for financial modelling.

The full spreadsheet of projects is included as follows:

Figure F-1: Total Capital Forecast

Total Capital Forecast

Item	Scheme	Project Name	GL Code	Project Estimate Excluding Inflation	2009/10 Year 1	2010/11 Year 2	2011/12 Year 3	2012/13 Year 4	2013/14 Year 5	2014/15 Year 6	2015/16 Year 7	2016/17 Year 8	2017/18 Year 9	2018/19 Year 10
1	Motueka Airfield	MOTUEKA AERODROME MAINTENANCE	11012401	$ 720,000	$ 36,000	$ 36,000	$ 36,000	$ 36,000	$ 36,000	$ 36,000	$ 36,000	$ 36,000	$ 36,000	$ 36,000
2	Motueka Airfield	Sealed runway mntce	1101240103	$ 20,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000
3	Motueka Airfield	Sealed Runway Reseal	11016209001	$ 120,000	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
4	Motueka Airfield	Carpark Mntce	1101240104	$ 10,000	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500
5	Motueka Airfield	Carpark Reseal	11016209002	$ 36,000	$ -	$ -	$ -	$ -	$ 18,000	$ -	$ -	$ -	$ -	$ -
6	Motueka Airfield	Inspections , Notam Mngmt, Contract mngt	1101220301	$ 80,000	$ 4,000	$ 4,000	$ 4,000	$ 4,000	$ 4,000	$ 4,000	$ 4,000	$ 4,000	$ 4,000	$ 4,000
7	Motueka Airfield	Grass Runway upgrade	11016209003	$ 60,000	$ -	$ -	$ 30,000	$ -	$ -	$ -	$ -	$ -	$ -	$ -
8	Motueka Airfield	Grass Runway and acessway mntce	1101240105	$ 60,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000
9	Golden Bay Airfield	Sealed Runway Reseal	11036209001	$ 50,000	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
10	Golden Bay Airfield	Marking runway	1103240102	$ 15,000	$ -	$ -	$ 2,501	$ -	$ -	$ 2,500	$ -	$ -	$ 2,500	$ -
11	Golden Bay Airfield	General runway , taxiway mntce	1103240103	$ 300,000	$ 15,000	$ 15,000	$ 15,000	$ 15,000	$ 15,000	$ 15,000	$ 15,000	$ 15,000	$ 15,000	$ 15,000
12	Motueka Airfield	Runway remarks	1101240106	$ 25,000	$ -	$ 2,500	$ -	$ 2,500	$ -	$ 2,500	$ -	$ 2,500	$ -	$ 2,500

Item	Scheme	Project Name	GL Code	Project Estimate Excluding Inflation	2019/20 Year 11	2020/21 Year 12	2021/22 Year 13	2022/23 Year 14	2023/24 Year 15	2024/25 Year 16	2025/26 Year 17	2026/27 Year 18	2027/28 Year 19	2028/29 Year 20
1	Motueka Airfield	MOTUEKA AERODROME MAINTENANCE	11012401	$ 720,000	$ 36,000	$ 36,000	$ 36,000	$ 36,000	$ 36,000	$ 36,000	$ 36,000	$ 36,000	$ 36,000	$ 36,000
2	Motueka Airfield	Sealed runway mntce	1101240103	$ 20,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000
3	Motueka Airfield	Sealed Runway Reseal	11016209001	$ 120,000	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 120,000	$ -
4	Motueka Airfield	Carpark Mntce	1101240104	$ 10,000	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500
5	Motueka Airfield	Carpark Reseal	11016209002	$ 36,000	$ -	$ -	$ -	$ -	$ 18,000	$ -	$ -	$ -	$ -	$ -
6	Motueka Airfield	Inspections , Notam Mngmt, Contract mngt	1101220301	$ 80,000	$ 4,000	$ 4,000	$ 4,000	$ 4,000	$ 4,000	$ 4,000	$ 4,000	$ 4,000	$ 4,000	$ 4,000
7	Motueka Airfield	Grass Runway upgrade	11016209003	$ 60,000	$ -	$ 30,000	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
8	Motueka Airfield	Grass Runway and acessway mntce	1101240105	$ 60,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000
9	Golden Bay Airfield	Sealed Runway Reseal	11036209001	$ 50,000	$ -	$ 50,000	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
10	Golden Bay Airfield	Marking runway	1103240102	$ 15,000	$ -	$ 2,500	$ -	$ -	$ 2,500	$ -	$ -	$ 2,500	$ -	$ -
11	Golden Bay Airfield	General runway , taxiway mntce	1103240103	$ 300,000	$ 15,000	$ 15,000	$ 15,000	$ 15,000	$ 15,000	$ 15,000	$ 15,000	$ 15,000	$ 15,000	$ 15,000
12	Motueka Airfield	Runway remarks	1101240106	$ 25,000	$ -	$ 2,500	$ -	$ 2,500	$ -	$ 2,500	$ -	$ 2,500	$ -	$ 2,500

N.B. Does not include inflation

APPENDIX G. DEVELOPMENT CONTRIBUTIONS AND FINANCIAL CONTRIBUTIONS

Information on Development Contributions and Financial Contributions can be found in the Council's Long Term Council Community Plan (LTCCP) document.

There are no specific development contributions applicable to the Aerodrome activity. However, development within the aerodromes may require connections and upgrades of the other infrastructure such as roading, water and wastewater and could then be subject to development contributions.

Aerodrome development is considered on a case by case basis with appropriate consents and consultation which will include the basis of funding requirements.

APPENDIX H. RESOURCE CONSENTS AND PROPERTY DESIGNATIONS

H.1 Introduction

The statutory framework defining what activities require resource consents is the Resource Management Act (RMA) 1991. The RMA deals with:

- The control of the use of land;
- Structures and works in river beds and in the coastal marine area;
- The control of the taking, use, damming and diversion of water and the control of the quantity, level and flow of water in any water body, including:
    - The setting of any maximum or minimum levels or flows of water; and
    - The control of the range, or rate of change, of levels or flows of water

The RMA is administered locally by Tasman District Council, a Unitary Authority, through the Tasman Resource Management Plan (TRMP) which sets out Policies, Objectives and Rules controlling activities to ensure they meet the Purpose and Principles of the RMA.

H.2 Resource Consents

A register of all active resource consents for Council's aviation assets is being developed.

Consents are required for all structures in the aerodrome areas.

H.3 Property Designations

Property Designations are another way provided by the RMA of identifying and protecting land for existing and proposed public works.

Under the Tasman Resource Management Plan the Aerodrome sites are designated for aerodrome purposes with an underlying zone of Rural 1.

The designation provides for the Tasman District Council either itself or through its agents to control, manage and approve planning, design, research, construction and maintenance relating to all land within the designation. Designation of the aerodrome is considered the most appropriate mechanism of protecting Tasman District Council's interest with regard to the safe and efficient functioning of the aerodrome.

APPENDIX I. CAPITAL REQUIREMENTS FOR FUTURE RENEWALS

I.1 Introduction

Renewal expenditure is major work that does not increase the asset's design capacity but restores, rehabilitates, replaces or renews an existing asset to its original capacity. Work over and above restoring an asset to original capacity is new works expenditure.

Assets are considered for renewal as they near the end of their effective working life or where the cost of maintenance becomes uneconomical and when the risk of failure of critical assets is sufficiently high.

The renewal programme has been developed by:

- taking asset age and remaining life predictions from the valuation database, calculating when the remaining life expires and converting that into a programme of replacements based on valuation replacement costs.
- reviewing and justifying the renewals forecasts using the accumulated knowledge and experience of asset operations and asset management staff. This incorporates the knowledge gained from tracking asset failures through the Customer Services System.

The renewal programme is reviewed in detail at each AMP (i.e. 3 yearly), and every year the annual renewal programme is reviewed and planned with the input of the maintenance contractor and consultant.

Section I-6 shows the projected renewals expenditure for each aerodrome. The renewals costs are also included in the tables and charts in Appendix F.

I.2 Current Renewals Strategy

The Council proposes to maintain the existing level of service provided to the aerodrome users and the lessees to meet at least the existing needs.

I.3 Forecast of Renewals Expenditure for Next 20 Years

Tables showing a summary and total breakdown of the expenditure forecast for renewals over the next 20 years are provided at the end of this Appendix. The expenditure is detailed for each aerodrome.

I.4 Renewal Standards

The work to be performed and materials to be used shall comply with the current TDC Engineering Standards.

I.5 Deferred Renewals

Renewal works identified may be deferred if the cost is beyond the community's ability to fund it. This can occur when higher priority works are required on other infrastructure assets, or there are short term peaks in expenditure or if an inadequate rating base exists.

When renewal works is deferred the impact of the deferral on economic inefficiencies and the system's ability to achieve the required service standards will be assessed. Although the deferral of some renewal works may not impact significantly on the operation of assets, repeated deferral will create a liability in the longer term.

I.6 Projected Renewals Expenditure

Total Aerodromes Renewals Forecast

Item	Scheme	Project Name	Total Project Cost	Total Renewals	2009/10 Year 1	2010/11 Year 2	2011/12 Year 3	2012/13 Year 4	2013/14 Year 5	2014/15 Year 6	2015/16 Year 7	2016/17 Year 8	2017/18 Year 9	2018/19 Year 10
3	Motueka Airfield	Sealed Runway Reseal	$ 120,000	$ 120,000	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
5	Motueka Airfield	Carpark Reseal	$ 36,000	$ 36,000	$ -	$ -	$ -	$ -	$ 18,000	$ -	$ -	$ -	$ -	$ -
7	Motueka Airfield	Grass Runway upgrade	$ 60,000	$ 30,000	$ -	$ -	$ 15,000	$ -	$ -	$ -	$ -	$ -	$ -	$ -
9	Golden Bay Airfield	Sealed Runway Reseal	$ 50,000	$ 50,000	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -

Item	Scheme	Project Name	Total Project Cost	Total Renewals	2019/20 Year 11	2020/21 Year 12	2021/22 Year 13	2022/23 Year 14	2023/24 Year 15	2024/25 Year 16	2025/26 Year 17	2026/27 Year 18	2027/28 Year 19	2028/29 Year 20
3	Motueka Airfield	Sealed Runway Reseal	$ 120,000	$ 120,000	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 120,000	$ -
5	Motueka Airfield	Carpark Reseal	$ 36,000	$ 36,000	$ -	$ -	$ -	$ -	$ 18,000	$ -	$ -	$ -	$ -	$ -
7	Motueka Airfield	Grass Runway upgrade	$ 60,000	$ 30,000	$ -	$ 15,000	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
9	Golden Bay Airfield	Sealed Runway Reseal	$ 50,000	$ 50,000	$ -	$ 50,000	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -

N.B. Does not include inflation

APPENDIX J. DEPRECIATION AND DECLINE IN SERVICE POTENTIAL

J.1 Depreciation of Infrastructural Assets

Depreciation is provided on a straight line basis on all infrastructural assets at rates which will write off the cost (or valuation) of the assets to their estimated residual values, over their useful lives.

These remaining useful lives and associated rates of major classes of assets have been estimated as follows:

- Aerodromes 20 – 80 years

J.2 Decline in Service Potential

Depreciation is the decline in service potential (future economic benefits) of the aerodrome asset spread over the useful life of the asset.

It is Council policy to operate the aerodrome activity to meet a desired level of service. Council will monitor and assess the state of the aerodrome infrastructure and upgrade or replace parts over time to counter the decline in service potential at the optimum times.

APPENDIX K. PUBLIC DEBT AND ANNUAL LOAN SERVICING COSTS

K.1 General Policy

The Council borrows as it considers prudent and appropriate and exercises its flexible and diversified funding powers pursuant to the Local Government Act 2002. The Council approves, by resolution, the borrowing requirement for each financial year during the annual planning process. The arrangement of precise terms and conditions of borrowing is delegated to the Corporate Services Manager.

> ***The Council has significant infrastructural assets with long economic lives yielding long term benefits. The Council also has a significant strategic investment holding. The use of debt is seen as an appropriate and efficient mechanism for promoting intergenerational equity between current and future ratepayers in relation to the Council's assets and investments. Debt in the context of this policy refers to the Council's net external public debt, which is derived from the Council's gross external public debt adjusted for reserves as recorded in the Council's general ledger.***

Generally, the Council's capital expenditure projects with their long term benefits are debt funded. The Council's other district responsibilities have policy and social objectives and are generally revenue funded.

The Council raises debt for the following primary purposes:

- Capital to fund development of infrastructural assets
- Short term debt to manage timing differences between cash inflows and outflows and to maintain the Council's liquidity.
- Debt associated with specific projects as approved in the Annual Plan or LTCCP. The specific debt can also result from finance which has been packaged into a particular project.

In approving new debt, the Council considers the impact on its borrowing limits (refer Section 3.2) as well as the size and the economic life of the asset that is being funded and its consistency with Council's long term financial strategy.

The detailed Borrowing Policy is found in Section 3 of Council's Treasury Management Policy that was last reviewed by Council in April 2004.

For the aerodrome activity:

K.2 Loans

Capital works to be funded by loan over the next ten years are projected to add up to the following costs: *(*to be updated once financial reviews are completed).*

Aerodromes	2009/10 Year 1	2010/11 Year 2	2011/12 Year 3	2012/13 Year 4	2013/14 Year 5	2014/15/ Year 6	2015/16 Year 7	2016/17 Year 8	2017/18 Year 9	2018/19 Year 10
Loans Raised	0	0	0	0	0	0	0	0	0	0
Opening Loan Balance	100	93	87	80	73	66	60	55	50	45

Note: Figures do not include for inflation and are in thousands of dollars (i.e. x1000)

K.3 Cost of Loans

Council funds the principal and interest costs of past loans and these are added to the projected loan costs for the next ten years in the following table.

The projected annual loan repayment costs over the next ten years are:
*(*to be updated once financial reviews are completed).*

Aerodromes	2009/10 Year 1	2010/11 Year 2	2011/12 Year 3	2012/13 Year 4	2013/14 Year 5	2014/15/ Year 6	2015/16 Year 7	2016/17 Year 8	2017/18 Year 9	2018/19 Year 10
Loan Interest	6	6	5	5	4	5	4	4	3	3
Loan Principal	7	7	7	7	7	6	5	5	5	5

Note: Figures do not include for inflation and are in thousands of dollars (i.e. x1000)

APPENDIX L. SUMMARY OF FUTURE OVERALL FINANCIAL REQUIREMENTS

Table L-1 presents a summary of the overall future financial requirements for the Aerodromes activity in the Tasman District.

Table L-1: Future Overall Financial Requirements

Aerodromes	2008/2009 Budget $	2009/2010 Budget $	2010/2011 Budget $	2011/2012 Budget $	2012/2013 Budget $	2013/2014 Budget $	2014/2015 Budget $	2015/2016 Budget $	20016/2017 Budget $	2017/2018 Budget $	2018/2019 Budget $
INCOME											
General Rates	65,964	4,706	7,482	30,713	6,957	17,488	2,050	-	-	-	-
Fees & Recoveries	74,652	101,123	101,064	108,355	101,269	105,969	107,628	108,454	108,242	115,575	113,075
Sundry Income	4,416	4,260	4,665	4,766	4,776	4,784	4,788	4,788	4,786	4,782	4,780
TOTAL INCOME	145,032	110,089	113,211	143,834	113,002	128,241	114,466	113,242	113,028	120,357	117,855
OPERATING COSTS											
Takaka	20,371	18,880	19,272	22,013	19,331	19,437	22,085	19,470	19,527	22,128	19,525
Motueka	60,450	77,864	81,088	79,465	81,808	79,436	82,090	79,512	82,036	79,632	82,073
Loan Interest	9,599	6,483	5,989	5,494	5,001	4,506	4,035	3,628	3,268	2,907	2,546
Depreciation	42,055	91,380	96,698	96,347	88,677	88,371	98,276	98,045	107,780	102,916	109,144
TOTAL OPERATING COST	132,475	194,607	203,047	203,319	194,817	191,750	206,486	200,655	212,611	207,583	213,288
NET COST OF SERVICE (SURPLUS)	(12,557)	84,518	89,836	59,485	81,815	63,509	92,020	87,413	99,583	87,226	95,433
TOTAL FUNDS REQUIRED											
NET COST OF SERVICE (SURPLUS)	(12,557)	84,518	89,836	59,485	81,815	63,509	92,020	87,413	99,583	87,226	95,433
Capital	46,498	-	-	30,000	-	18,000	-	-	-	-	-
Transfer to Reserves		-	-	-	-	-	-	5,619	3,184	10,677	8,698
Loan Principal	9,778	6,862	6,862	6,862	6,862	6,862	6,256	5,013	5,013	5,013	5,013
	43,719	91,380	96,698	96,347	88,677	88,371	98,276	98,045	107,780	102,916	109,144
SOURCE OF FUNDS											
Restricted Reserves Applied	1,664	-	-	-	-	-	-	-	-	-	-
Loans Raised	-	-	-	-	-	-	-	-	-	-	-
	1,664	-	-	-	-	-	-	-	-	-	-
NON FUNDED DEPRECIATION											
Depreciation to be funded at income statement level	42,055	91,380	96,698	96,347	88,677	88,371	98,276	98,045	107,780	102,916	109,144
	42,055	91,380	96,698	96,347	88,677	88,371	98,276	98,045	107,780	102,916	109,144
	43,719	91,380	96,698	96,347	88,677	88,371	98,276	98,045	107,780	102,916	109,144

N.B. Figures do not include inflation

APPENDIX M. FUNDING POLICY PLUS FEES AND CHARGES

M.1 Funding Strategy

The focus of the AMPs has been on identifying the optimum (lowest life cycle) cost for operating / maintaining, renewing, developing and disposing of the assets necessary to produce the desired level of service. The Council funding strategy is based on the following:

(a) Aerodrome services have been assessed as having 80% user benefit and are funded by approximately 20% rate appropriation.

Funding sources available for aerodromes include:

- Leases and rents
- Fee recovery
- General rate
- Sundry income

Major capital projects may be loan funded. When loans are made, the loan is taken for a fixed period, usually 20-30 years, with a fixed annual principal repayment as a capital expense on the account, and interest payments as an operating expense. For the purpose of the financial forecasts, all new works and renewal work has been assumed to be loan funded.

M.2 Schedule of Fees and Charges

The fees and charges for the aerodrome activity are shown in Table M-1 below.

Table M-1: General Aviation and Parking Charges

MOTUEKA AERODROME			
Aircraft Type	General Aviation Users Charges (through honesty box) $	Aerodrome Operators Charges (invoiced monthly) $	Aerodrome Operators Charges (Advance Annual Payment Option) $
Single engine	5.00	50.00 per month per aircraft	550.00
Twin Engine	7.50	75.00 per month per aircraft	850.00
Helicopter	5.00	50.00 per month per aircraft	550.00
Microlight/Homebuilt	5.00	37.50 per month per aircraft	400.00
Glider	5.00	37.50 per month per aircraft	400.00

NB: General Aviation Users charges not paid through honesty box will incur a $25.00 administration fee

AIRCRAFT PARKING CHARGES FOR VISITING AIRCRAFT	
Aircraft Type	Charges (payable through honesty box)
Single engine	$5.00 per day or $450.00 pa
Twin Engine	$7.50 per day or $675.00 pa
Helicopter	$5.00 per day or $450.00 pa
Microlight/Homebuilt	$3.75 per day or $350.00 pa
Glider	$3.75 per day or $350.00 pa

NB: Parking charges not paid through honesty box will incur a $25.00 administration Fee

Special Charges
Special charges will be levied on activities such as driver training, drag racing and other activities not related to aircraft movements. These will be at the discretion of the Chief Executive Officer and will be evaluated on their own merit.

Notes:

1 Interest charge of 12% per annum will be applied on a daily basis on any charges which remain unpaid at the end of the month of invoicing.

2 An aerodrome movement is defined as on/in the operational airspace and below 150 feet airport ground level.

3 These charges are to be reviewed on an annual basis.

4 Council is currently reviewing the charging required for the Motueka Aerodrome and will undertake local consultation should this review recommend any changes.

Leases:

Leases and their associated rentals are reviewed in accordance with the specific lease agreements.

APPENDIX N. DEMAND MANAGEMENT

N.1 Introduction to Aerodrome Demand Management

Demand Management, as a comprehensive, integrated and long term approach, seeks to improve the overall productivity of the aerodrome activity and deliver services to match the needs of the end users while being affordable to the community.

The Council has no statutory obligation to maintain an aerodrome activity.

The Council will continue to meet the reasonable expectations of customers in a manner that is moving towards being self supporting and that does not conflict with the amenities of the local community.

Due to the proximity of the Nelson Airport it is unlikely there will be a need for a scale of air service to and from Motueka that is greater than the present; however the present runway facilities may one day be inadequate.

Training, recreation and tourism needs combined with the associated commercial needs of these activities are envisaged to dominate the demand for services at the Motueka aerodrome.

At Takaka, the recreation and tourism needs combined with the associated commercial needs of these activities dominate the demand for services at the Takaka aerodrome. Also the aerodrome has provided access when Takaka has been isolated because State Highway 60 has been temporarily closed due to an emergency.

N.2 Demand Management Strategy

The District wishes to encourage more use of the existing facilities to move the activity towards a self-supporting activity (i.e. without general rates input). Council has therefore been proactive in the encouragement of additional hangars and associated aviation activities at the aerodromes. Landing charges are low but penalties are required to encourage payment.

Through annual and periodic reviews Council can manage the level of fees and leases to meet the actual demand of the users.

N.3 Sustainable Development Issues

Council's Vision, Mission and Objectives (refer Appendix A) demonstrate the Council's commitment to sustainable development at an organisational level. This is in line with the community wishes and the legislative requirements of the Local Government Act 2002 to promote the social, economic, environmental and cultural well beings of communities in the present and for the future.

At an organisational level, Council has:

- incorporated the 4 well beings into the community outcomes, which flow into the levels of service and performance measures
- incorporated the 4 well beings in the integrated risk management approach
- incorporated environmental, social and cultural considerations in the growth planning and modelling

In the Aerodrome activity specifically, a sustainable development approach is demonstrated in the following aspects:

- When considering new upgrade solutions for the runways, the Council considers lifecycle cost issues. Council does not have a formal process for this, but where lifecycle cost is considered to have an impact on decision making, it used as evaluation criteria.

APPENDIX O. NOT RELEVANT TO THIS ACTIVITY

APPENDIX P. SIGNIFICANT NEGATIVE EFFECTS

There are significant negative effects with the operation of the aerodromes. These include:

- Noise – affecting residential areas adjacent to the aerodrome and also some affects from aircraft over-flying affecting noise sensitive areas.
- Protection of flight paths involving restrictions on building heights.
- Amenity values – buildings out of character with nearby residential development
- Noise and parking associated with other users such as the drag racing events at Motueka.

The effects are more significant for Motueka because of the proximity to the residential housing as opposed to the more rural setting for Takaka aerodrome.

The Council is mindful of the need to recognise these effects on the local communities and therefore imposes on some users appropriate conditions including:

- Hours/days of operation
- Restrictions to the use of noisy aircraft or other uses such as drag racing
- Maximum heights for lease holders buildings, exterior finishes to be in recessive colours and design so as to blend in with the immediate landscape surroundings.

APPENDIX Q. SIGNIFICANT ASSUMPTIONS, UNCERTAINTIES, AND RISK MANAGEMENT

This appendix is in two parts:

- Assumptions and Uncertainties
- Risk Management

Q.1 Assumptions and Uncertainties

This AMP and the financial forecasts within it have been developed from information that has varying degrees of completeness and accuracy. In order to make decisions in the face of these uncertainties, assumptions have to be made. This section documents the uncertainties and assumptions that Council consider could have a significant affect on the financial forecasts, and discusses the potential risks that this creates.

Q.1.1. *Asset Data Knowledge*

While the Council has asset registers and many digital systems, processes and records, Council does not have complete knowledge of the assets it owns. To varying degrees the Council has incomplete knowledge of asset location, asset condition, remaining useful life and asset capacities. This requires assumptions to be made on the total value of the assets owned, the time at which assets will need to be replaced and when new assets will need to be constructed to provide better service.

Council considers these assumptions and uncertainties constitute only a small risk to the financial forecasts because:

- Significant amounts of asset data is known
- Asset performance for the significant structures is well known
- There are plans to upgrade significant extents of poorly performing assets.

The assumptions that have been made that are considered significant include:

- The existing asset condition is such that further deterioration will not require renewal or maintenance beyond that currently allowed for.

Q.1.2. *Growth Forecasts*

Growth forecasts are inherently uncertain and involve many assumptions. The growth forecasts also have a very strong influence on the financial forecasts, especially in Tasman District where population growth is higher than the national average. The growth forecasts underpin and drive:

- The asset creation programme
- Council income forecasts including rates and development contributions
- Funding strategies

For the aerodromes activity the growth forecasts in tourism, recreation and aviation related industry affect the demands on the aerodrome assets.

Thus the financial forecasts are sensitive to the assumptions made in the growth forecasts for aerodromes.

The significant assumptions in the growth forecasts are covered in the explanation on method and assumptions in Appendix F.

Q.1.3. *Aerodrome Capacity*

The aerodromes at Motueka and Takaka are considered to have adequate capacity for the foreseeable future. Both aerodromes were built to originally accommodate larger aircraft than currently permitted. The demand on ancillary facilities and hangar space may (beyond 10 years) affect level of service in this area.

Q.1.4. *Timing of Capital Projects*

The timing of many capital projects can be well defined and accurately forecast because there are few limitations on the implementation other than the community approval through the LTCCP/Annual Plan processes. However, the timing of some projects is highly dependent on some factors which are beyond the Council's ability to fully control. These include factors like:

- obtaining resource consent, especially where community input is necessary
- obtaining the community consent
- obtaining subsidy from central government
- securing land to construct new assets on

Where these issues may become a factor, allowances have been made to complete in a reasonable timeframe, however these plans are not always achieved. The effect of this will be to defer expenditure. The impact of this on the financials is not considered significant.

Q.1.5. *Funding Of Capital Projects*

Funding of capital projects is crucial to a successful project. When forecasting projects that will not occur for a number of years, a number of assumptions have to be made about how the project will be funded.

Funding assumptions are made about:

- whether projects will qualify for subsidies
- whether major beneficiaries of work will contribute to the project
- whether and how much should be funded from development contributions
- whether Council will subsidise the development of the projects.

The correctness of these assumptions has major consequences on the affordability.

Q.1.6. *Accuracy of Capital Project Cost Estimates*

The financial forecasts contain projects, each of which has been estimated from the best available knowledge. The level of uncertainty inherent in each project is different depending on how much work has been done in defining the problem and determining a solution. In many cases, only a rough order cost estimate is possible because little or no preliminary investigation has been carried out. It is not feasible to have all projects in the next 20 years advanced to a high level of accuracy. However, it is preferable to have projects in the next 3 years advanced to a level that provides reasonable confidence about the accuracy of the estimate.

To get consistency and formality in cost estimating, the following practices have been followed:

- A project estimating template has been developed that provides a consistent means of preparing estimates
- Where practical, a common set of rates has been determined
- Specific provisions have been included to deal with non-construction costs like contract preliminary and general costs, engineering costs, Council staff costs, resource consenting costs, land acquisition costs.
- Specific provisions have been included to deal with estimate accuracy. These are described as follows.

A 15% provision has been included to get a "Base Project Estimate" to reflect the uncertainties in the unit rates used. A further provision has been added to reflect the uncertainties in the scope of the project – i.e. is the solution adopted the right solution. Often detailed investigation will reveal the need for additional works over and above that initially expected. The amount added depends on the amount of work already done on the project. Each project has been assessed as being at the project lifecycle stage as detailed below, and from this an estimate accuracy is assessed. The estimate accuracy is added to the Base Project Estimate to get the Total Project Estimate – the figure that is carried forward into the financial forecasts.

Table Q-1: Life Cycle Estimate Accuracies

Stage in Project Lifecycle	Estimate Accuracy
Concept / Feasibility	± 30% (±20% for projects >$1m)
Preliminary Design / Investigation	± 20% (±15% for projects >$1m)
Detailed Design	± 10%
Construction	± 5%
Commissioning	± 0%

Q.1.7. *Changes in Legislation and Policy*

The legal and planning framework under which local government operates is ever changing. This can significantly affect the feasibility of projects, how they are designed and constructed and how they are funded. Risk Management

Q.2 Risk Management

Q.2.1. *Risk Management Framework*

Council is adopting an Integrated Risk Management (IRM) framework and process as the means for managing risk within the organisation. The process integrates with the Long Term Council Community Plan (LTCCP) process as illustrated in Figure Q-1.

The strategic goal of integrated risk management is:

"*To integrate risk management into Council's organisational decision making so that it can achieve its strategic goals cost effectively while optimising opportunities and reducing threats."*

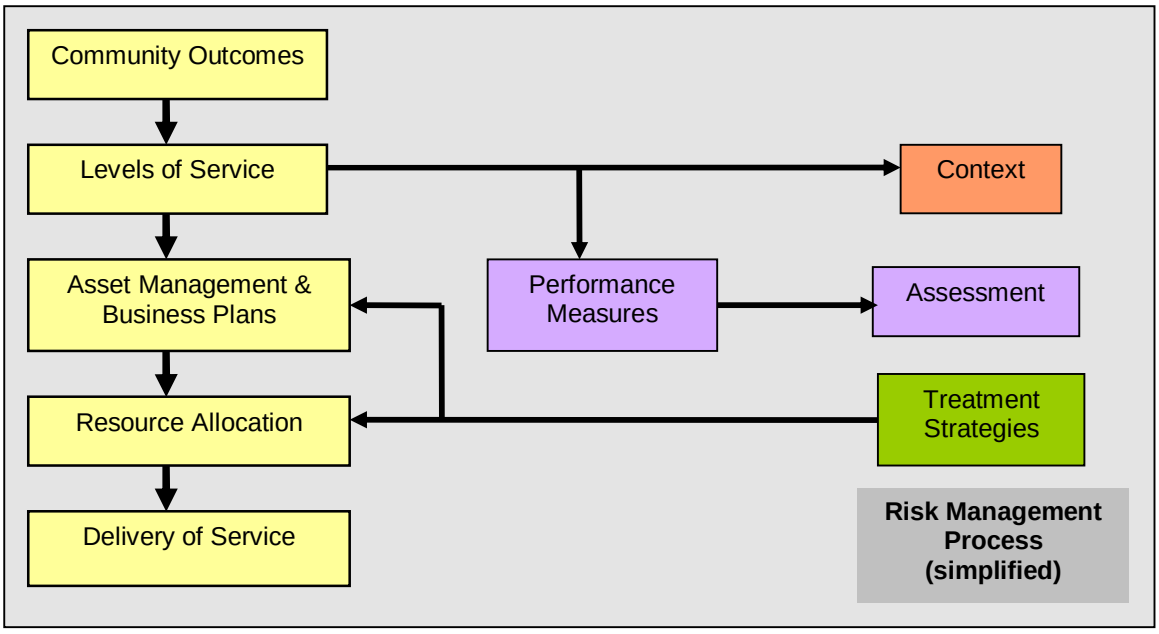


Figure Q-1: Integration of Risk Management Process into LTCCP Process

The IRM process and framework is intended to:

- To demonstrate responsible stewardship by TDC on behalf of its customers and stakeholders.
- To act as a vehicle for communication with all parties with an interest in TDC's organisational and asset management practices.
- Provide a focus within TDC for ongoing development of good management practices.
- Demonstrate good governance.
- Meet public expectations and compliance obligations.
- Manage risk from an organisational perspective.
- Facilitate the effective and transparent allocation of resources to where they will have most effect on the success of the organisation in delivering its services.

The risk management framework adopted by TDC is consistent with AS/NZS 4360:2004 Risk Management and assesses risk exposure by considering the consequence and likelihood of each risk which is identified as having an impact on the achievement of organisational objectives (Figure Q-2).

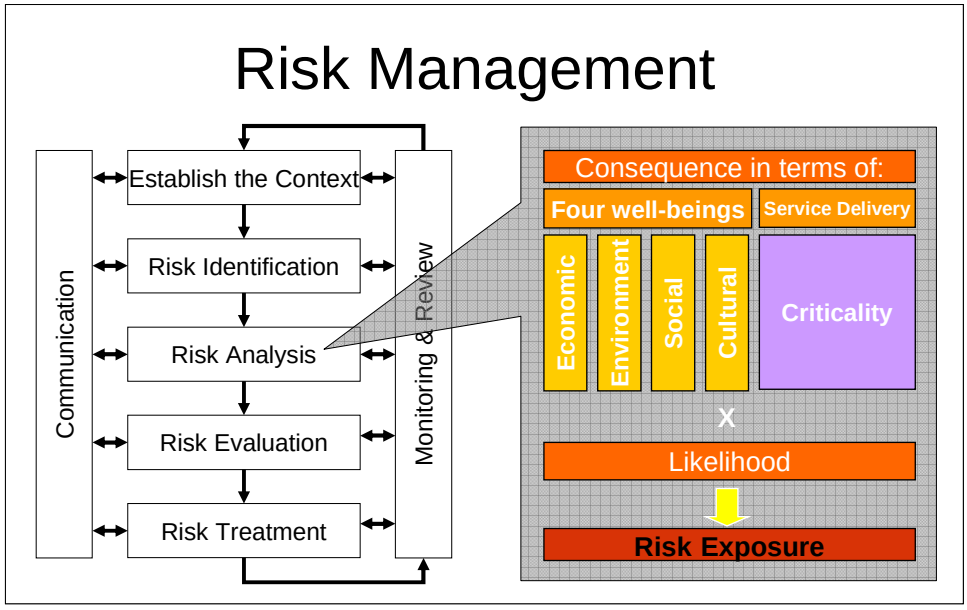


Figure Q-2: Integrated Risk Management Process

Consequence categories have been developed to reflect the impact of risk events on the four well-beings and each consequence category is scored as either "extreme", "major", "medium", "minor", or "negligible". These categories address common consequences across any asset or project, however, they do not specifically account for the differences in assets. Therefore an additional category "Service Delivery" is used to reflect the essential reason for the ownership or management of any asset within the local authority – the delivery of a service. This means that the consequence of failure to deliver the service in question (the criticality of the service) can be used to weight the consequences to reflect the relative importance of the asset to the community and in turn to Council.

Table Q-2: Consequence Categories

Category		Description
Service Delivery		Assessment based on the asset's compliance with Performance Measures and value in relation to outcomes and resource usage
Social/ Cultural	Health & Safety	Assessment of impact as it relates to death, injury, illness, life expectancy and health
	Community Safety & Security	Assessment of impact based on perceptions of safety and reported levels of crime
	Community / Social / Cultural	Assessment of impact based on damage and disruption to community services and structures, and effect on social quality of life and cultural relationships
	Compliance / Governance	Assessment of effect on governance and statutory compliance of Council
	Reputation / Perceptions of Council	Assessment of public perception of Council and media coverage in relation to Council
Environment	Natural Environment	Effect on the physical and ecological environment, open space and productive land
Economic	Direct Cost / Benefit	Direct cost (or benefit) to Council
	Indirect Cost / Benefit	Direct cost (or benefit) to wider community

Similarly, the likelihood of the risk occurring is scored on a scale from "almost certain" to "unlikely" with associated probabilities and frequencies provided for guidance.

The risk exposure is then determined for each identified risk by multiplying the consequence and likelihood, and is presented using semantic descriptions ranging from "extreme" to "negligible"

Treatment strategies, or strategic plans, that mitigate each risk can then be identified, and prioritised based on the risk exposure.

The consequence, likelihood scoring and risk matrix tables are all located in a separate report, TDC Integrated Risk Management - Engineering Activities. This document also contains the outputs from the Level 1 and Level 2 Risk Assessments.

There are essentially three levels of risk assessment that should be considered for each activity within Council;

Level 1 - Organisational Risk Assessment

Level 2 - Asset Group Risk Assessment

Level 3 - Critical Asset Risk Assessment

Q.2.2. *Level 1 - Organisational Risk Assessment*

The Organisational Risk Assessment focuses on identification and management of significant operational risks that will have an impact beyond the activity itself and will affect the organisation as a whole. This approach allows the Integrated Risk Management framework to address risks at the organisational level, as well as at both the management and operational levels within the particular Council activities.

During the process of developing the integrated risk management process, Council identified a number of risk events and issues at organisational level. These are relatively generic across all activities, but have been reviewed against each particular activity to ensure relevance and adjusted to suit. The decision to implement the treatment measures identified will be at an organisational level, not activity level.

Q.2.3. *Level 2 - Asset Group Risk Assessment*

The same principal and consequence tables have been applied, but the focus has been at an Activity Level.

Major asset groups within the activity have been identified. An analysis of risk events was then undertaken to determine the issues arising that may prevent the assets delivering the required service. At this level of risk assessment, the risk events considered are physical events only as management and organisational risk events formed part of the earlier organisational risk assessment. Treatment strategies that mitigate each risk for asset groups have been identified.

The outcome from this process is summarised in Table Q-3 a checklist of mitigation measures that should be considered for each type of asset group.

Mitigation Measures to be considered	**Asset Group**				
	Runways	**Navigational Aids**	**Taxiways**	**Safe Fuel storage**	**Car Parks**
Emergency Response Plan	✓	✓	✓	✓	
Backup Communications	✓	✓	✓	✓	✓
Critical Spares		✓		✓	
Safe Fuel Storage				✓	
Maintenance Regime	✓	✓	✓	✓	✓
Re-Direction Capabilities	✓	✓	✓	✓	✓

Table Q-3: Mitigation Measures Check List

Q.2.4. *Level 3 - Critical Assets Risk Assessment*

The next step in the Integrated Risk Management Approach will be to consider each of the individual critical assets within the asset groups of an activity. Each asset will be reviewed in terms of the consequences initially identified and mitigation measures required. The output from the process will be a recommendation of projects or operational strategies to address shortfalls.

At this time, this level of risk management has not been implemented but has been included in the Improvement Plan.

Q.2.5. *Projects to address Risk shortfalls*

The Risk Assessment Process is not complete at this Stage. It is not planned to start the Level 3 assessments until Levels 1 and 2 are complete.

APPENDIX R. LEVELS OF SERVICE, PERFORMANCE MEASURES, AND RELATIONSHIP TO COMMUNITY OUTCOMES

R.1 Community Outcomes

Through Consultation, the Council identified eight Community Outcomes. These Community Outcomes are linked to the four well beings and Council Objectives as shown in Table R-1.

R.2 Levels Of Service

Levels of service are described in Section 2, Table 2-2.

R.3 Performance Measurement

Table R-2 contains an assessment of current performance against the levels of service, and a forecast of the performance planned for within the next 3 years, and within the next 10 years.

Table R-1: The Four Wellbeings, Interim Community Outcomes, Council Objectives, Groups and Activities

Community Wellbeing	Community Outcomes	Council Objectives	Council Groups and Activities	Council Activities
Environmental wellbeing	1. Our unique and special natural environment is bountiful, healthy, clean and protected. 2. Our built urban and rural environments are functional, pleasant, safe and sustainably managed. 3. Our transport and essential services are sufficient, efficient and sustainably managed.	To ensure sustainable management of natural and physical resources and security of environmental standards. To sustainably manage infrastructural assets relating to Tasman District.	Environment and Planning Transportation Sanitation, drainage and water supply	Resource Policy Resource Information Resource Consents and Compliance Environmental Education, Advocacy and Operations Regulatory services Mapua Rehabilitation Regional Cycling and Walking Strategy. Land Transportation Coastal Structures, Aerodromes Refuse Aerodromes Stormwater management Rivers Water Supply
Social and Cultural Wellbeing	4. Our vibrant community is safe, well, enjoys an excellent quality of life and supports those with special needs. 5. Our community understands regional history, heritage and culture. 6. Our diverse community enjoys access to a range of spiritual, cultural, social, educational and recreational services. 7. Our participatory community contributes to district-decision making and development.	To enhance community development and the social, natural, cultural and recreational assets relating to Tasman District.	Cultural services and grants. Recreation and leisure. Community support services.	Libraries Cultural services and community grants Community recreation Camping grounds Parks and Reserves Development impact levies Community facilities Emergency management Community housing Governance
Economic Wellbeing	8. Our growing and sustainable economy provides opportunities for us all.	To implement policies and financial management strategies that advance. To promote sustainable development in the Tasman District.	Council Enterprises.	Forestry Property Council controlled organisations.

Table R-2: Performance Against Current Levels Of Service, and Intended Future Performance

Levels Of Service	We will know we are meeting the Level Of Service if…..	Current Performance	Forecast Performance by Year 3	Forecast Performance by Year 10
1. Our Aerodromes do not pollute or degrade the receiving environment	All associated facilities are required to connect to the community sewerage system where it is available	All hangars and other buildings with waste facilities are connected to the Council sewerage system where it is available	100%	100%
	Activities are controlled so as to minimise noise pollution to an acceptable level.	Drag racing at Motueka Aerodrome is limited to 4 events per year. All other users meet resource consent conditions	100%	100%
2. Our aerodromes operate with a minimum of disturbance to the public and adjacent landowners	We receive less than 5 complaints per year relating to noise from our aerodromes	There are less than five noise complaints per year from the operation of the facilities (yet to be monitored)	<5	<5
	The height for structures on adjacent properties within the flight paths is not increased beyond that currently required.	Trees on the boundary and adjacent properties are maintained at an acceptable height	100%	100%
3. Our aerodromes serve those that should be served	The community and stakeholders are consulted over aerodrome development plans	All stakeholders and the community are consulted on development plans	100%	100%
	Notification (via NOTAMS) to all aviation aerodrome users is provided as required through the Civil Aviation Authority.	All aviation aerodrome users are given the required notice	100%	100%
4. Our aerodromes activities are managed at a level that satisfies the community.	Our surveys show that 80% of customers are satisfied with the aerodromes service they receive.	At present no specific survey has been undertaken. This will be developed and reported on by Year 3	80% (not measured until Year 3)	80%

Levels Of Service	We will know we are meeting the Level Of Service if…..	Current Performance	Forecast Performance by Year 3	Forecast Performance by Year 10
5. Faults in the aerodromes facilities are responded to and fixed promptly	We are able to respond to and fix faults within the timeframes we have specified with our operations and maintenance contracts and in accordance with the Civil Aviation Authority requirements.	There are no performance requirements in the current contract. The new contract in 2009 will have specific performance targets – 100% for Motueka sealed runway; 90% grass areas.	100%	100%
6. Our systems are built so that failures can be prevented. If failures do occur they can be responded to quickly.	We have a facility for receiving and handling emergency calls after office hours.	Council has an after-hours call centre that receives calls 24/7 and contractors and system managers have duty staff who are contactable to respond to emergencies	continue to do the same	continue to do the same
	We have operative risk management processes in place and planned mitigation measures completed.	Council does not have a Risk Management Plan	In place and operating	In place and operating
	Except for planned maintenance, the facilities comply with Civil Aviation Authority requirements at all times.	Civil Aviation has confirmed the operational level for the Aerodromes.	continue to do the same	continue to do the same
	Spare equipment is held for navigational aids.	Spares are ordered on an 'as required' basis. Appropriate levels of stock to be held.	In place and operating	In place and operating

APPENDIX S. COUNCIL'S DATA MANAGEMENT, ASSET MANAGEMENT PROCESSES AND SYSTEMS

This appendix gives an overview of:

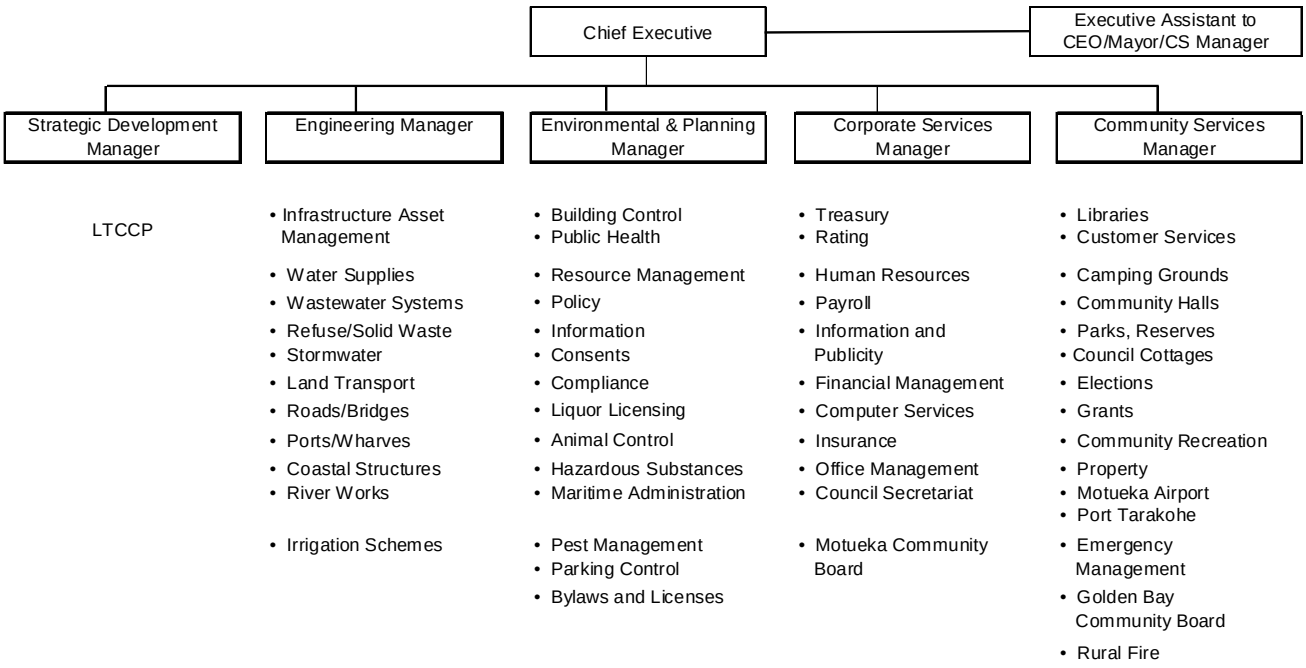
- Council's organisational structure
- How asset data is managed
- What asset management systems and processes are used
- How decisions are made.

S.1 Organisational Structure

The Engineering Manager is principal advisor to the Engineering Services Committee that has delegated powers from the Council. The Engineering Services Committee has responsibility for roads and bridges, footpaths, car parks, water supplies, refuse collection and disposal, wastewater treatment and disposal, stormwater, river works, ports and wharves, and aerodromes.

The Tasman District Council organisational structure is shown in Figure S-1. As the chart shows, the asset management function for the aerodrome asset management plan falls under the Community Services Manager.

Figure S-1: Tasman District Council Organisation Structure



S.2 Asset Data

The Council's corporate Asset Management System (AMS) is Confirm Enterprise. The Engineering Department uses it to record and track customer enquiries, maintain its asset register, and for tracking non-routine maintenance of assets. Valuations of all assets other than Roading will be done from Confirm.

The Asset Information team, Asset Managers, TDC's consultants and contractors all have access to the system with levels of access appropriate to their needs. Asset information is delivered to the Council via Explore Tasman, TDC's web-based GIS browser application. Performance and operational reports are delivered via a web-based reporting system.

Confirm has links to other core Council applications:

- NCS (Napier Computer System) for property data and water meter details
- SilentOne document management system for construction and As-built plans.

A more detailed breakdown of Roading Assets is held in RAMM (Road Asset and Maintenance Management) which is maintained by MWH on behalf of TDC.

Table S-3 summarises the various data sources and how they are managed. It also provides a grading on the data accuracy and completeness where this is appropriate. The accuracy grade is based on the IIMM grading as shown in Table S-1, the completeness grade is based on the grading as shown in Table S-2.

Table S-1: Asset Data Accuracy Grade

Grade	Description	Accuracy
1	Accurate	100%
2	Minor inaccuracies	± 5%
3	50% estimated	± 20%
4	Significant Data estimated	± 30%
5	All data estimated	± 40%

Table S-2: Asset Data Completeness Grade

Grade	Description	Completeness
1	Complete	100%
2	Minor Gaps	90 – 99%
3	Major Gaps	60 – 90%
4	Significant Gaps	20 – 60%
5	Limited Data Available	20% or less

Table S-3: Council Asset Data Types and Confidence

Data Type	Data Storage	Management Strategy	Data Confidence	
			Accuracy	Completeness
Asset location	GIS (line data)	GIS is being compiled from As-built data and is the first port of call for asset location, but not the last word – refer As-builts below.	2	5
	Confirm (point data)	Point data is provided in Confirm	2	5
	As-built Plans	As-builts are the primary source of asset location data. As-built plans of all new assets are scanned and incorporated into SILENTONE. This allows digital retrieval of as-builts from GIS system. Early as-builts are to a lesser quality, however in recent years as-builts quality has been significantly improved and are now prepared to specific standards and reviewed/audited on receipt.	2	3
Asset description (size, age, material)	Confirm	Confirm is the primary source for asset data. The intention is to over time migrate all data into Confirm.	2	5
	Asset Register	The asset register prepared for valuation purposes contains information on asset extent, age, remaining life, condition etc. It has been spreadsheet based but it is being transferred into Confirm in a controlled manner so that future valuations can be done from Confirm.	2	2
Maintenance History	Confirm			
Financial Information	NCS	Council Accounting and Financial systems are based on Napier Computer Systems (NCS) software and GAAP Guidelines. Long term financial decisions are based on the development of 10-year financial plans.	n/a	n/a
Resource Consents	Resource Consent Database	A database containing details and copies of all resource consents associated with the water, wastewater and solid waste assets was developed in 2008. This will be expanded to include the stormwater, roading, aerodrome and river assets in the near future. The database is administered by the Council's professional services provider. Management processes have been developed to ensure all consent conditions are complied and any new or changed consents is updated in the database.	1	1

Data Type	Data Storage	Management Strategy	Data Confidence	
			Accuracy	Completeness
System Operation	Maintenance Compliance	No records of the inspections carried out in accordance with maintenance contract requirements. Consultants MWH currently hold these, on behalf of the Council as part of the administration of the Contracts. A WINZ database system monitors water quality compliance information and assists in identifying trends in data.	5	5
	Notices to Airmen (NOTAMS)	Notices (NOTAMS) are currently held in Council records with a duplicate copy by Council's Consultant's MWH.	2	2
	Maintenance Monitoring	No formal regular maintenance reporting is required under the current contract. These will be included in the 2009 Contract. These will be held by Council's Asset Managers and by Consultants, MWH as appropriate.	5	5
Reports		A variety of investigative and design reports have been prepared and are held by various asset managers as appropriate.		
System Records		Council paper records are kept in files in the Records Room. These are classified by utility type and area. Files are kept for Roads, Bridges, Utilities and Resource Consents.		

S.3 Asset Management Processes and Systems

The way the Council develops its Asset Management Strategies is in general alignment with the IIMM manual as diagrammatically shown in Figure S-2 below:

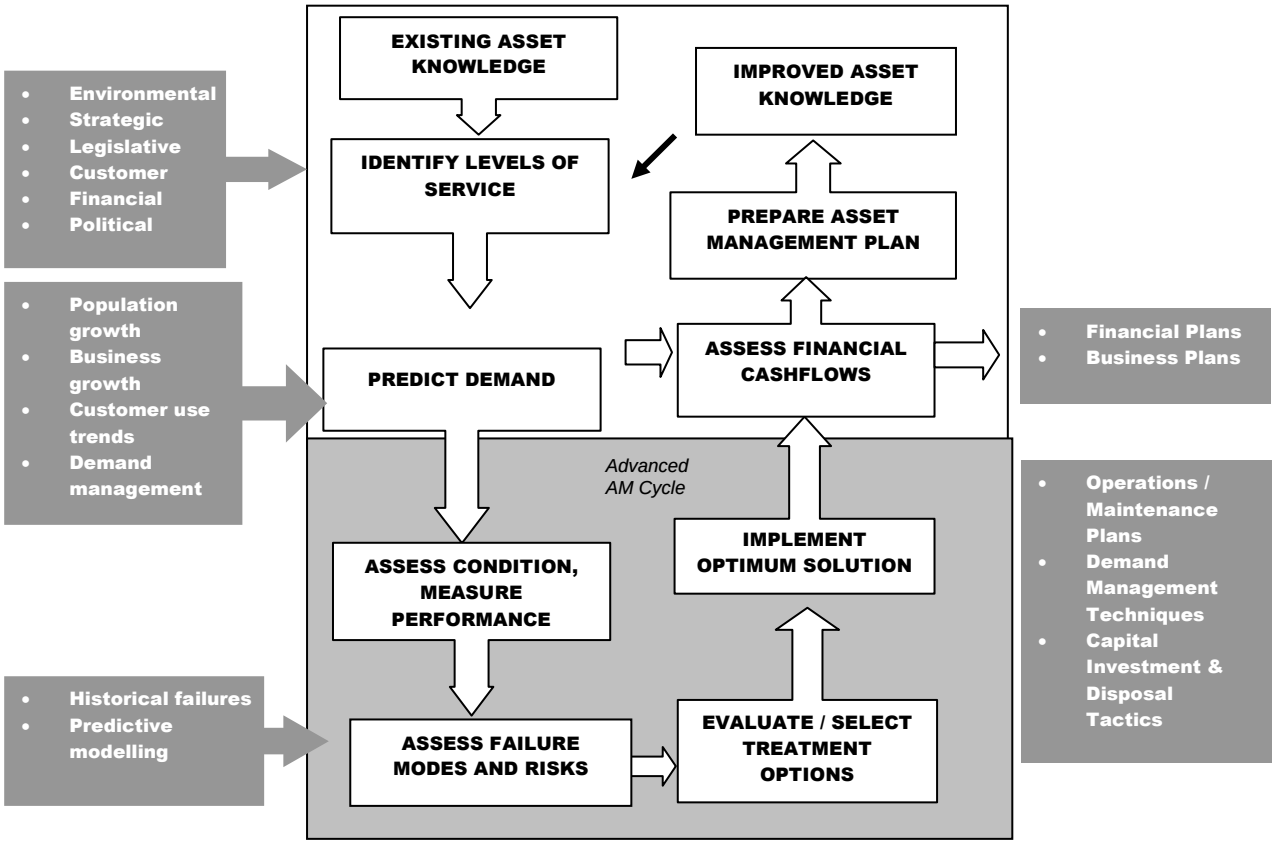


Figure S-2: Asset Management Process and Developing Asset Management Strategies (Source IIMM)

The specific processes and systems used are summarised as follows:

Process Step	Processes and Systems
Identify Levels Of Service	• Levels of Service identified taking account of Community Outcomes, Legislative Requirements, Financial constraints (affordability) and knowledge of asset performance. • Reviewed and confirmed on a 3 year basis – when AMP and LTCCP updated
Predict Demand	• Population Forecasting undertaken as described in Section 5 and Appendix F • Demand Forecasting undertaken as described in Section 5 and Appendix F • Demand Management undertaken as described in Section 11 and Appendix N
Assess Condition, Measure Performance	• Council undertook a comprehensive condition assessment of its aerodrome assets in a valuation exercise in 2007. Subsequent valuations have used the pre-existing condition assessment, but reviewing and amending with the asset management knowledge and experience gained through operation of the assets. This draws from knowledge based on: o Performance against levels of service measured through a combination of operational activities, specific technical investigations and customer surveys o NRB Communitrak customer survey run every 3 years (does not at this stage include aerodromes).

Process Step	Processes and Systems
Renewals Management	• Renewals first identified from valuation data base – when remaining life expires • Forecast renewals then field justified by reviewing with operations staff and asset management staff to confirm renewal requirements from valuation information and add to where there is specific knowledge of additional renewal requirements • Optimising review undertaken to identify opportunities for: o "bundling" with other projects – across assets and services – e.g. roading, wastewater, power, telecom o Optimized replacement – i.e. whether the replacement asset should be the same size, capacity or manufacture, or are there justifications to replace with something different o Smoothing of expenditure • On an annual basis renewal work is programmed for implementation and managed as a programme – either through the Operations and Maintenance contract, or through specific tendered construction projects.
Asset Creation Management	• Asset creation forecasts are developed every 3 years when updating this AMP. • The 10 year forecast from the last update of the AMP is taken as a starting point, and then the outcomes of growth and demand forecasts, level of service and performance review, the risk management and a workshop with asset managers are used to identify upgrade projects needed. • All capital projects identified are listed and a cost estimate developed. For consistency, a cost estimating spreadsheet has been developed and a series of base rates developed after consultation with suppliers and recent contract prices for the more common work elements. The cost estimating spreadsheets require: o Assessment of construction and non-construction costs (i.e. Engineering, consenting costs, land costs) o An assessment of contingency needed – on a consistent basis between estimates o An evaluation of the project drivers – increased level of service, backlog, growth or renewal. o An evaluation of a programme of implementation – spanning years to ensure appropriate time allowed for developing the project o A statement of the scope of the upgrade and a statement of risks and assumptions made in preparing the estimate • Once estimated the forecasts are combined in a capital expenditure forecast database that records the outcomes of the estimate in a manner that allows summation of the work value against various criteria – scheme, project driver (growth, backlog, increased LOS or renewal), year or project. It is also used as an input into Council's financial system. • The funding of the capital forecast is modelled in Council's financial system NCS, and the implications for the forecast review at Council officer level and Councillor level. Any changes made to the projection in terms of deferring, adding or deleting projects is recorded and the implications on risk, growth or level of service stated. • The records of the individual project estimate sheets and the overall capital forecast spreadsheet are filed and retained.
Risk Assessment and Management	• Council have developed an Integrated Risk Management framework to manage risks – refer to section 13.2 and Appendix Q for description.
Optimised Decision Making	• For the sealed runway the known best practise criteria for the treatment relation of pavement renewals is used to optimise the life cycle cost and timing of the runway renewals.

APPENDIX T. BYLAWS

The Council must comply with the Civil Aviation Authority Rules as appropriate to these non-certified aerodromes. Specifically CAA Rules 139.307 Use of Aerodromes – non air transport aircraft other than helicopters and Rule Part 91 (in particular rule 91.127 Use of Aerodromes).

APPENDIX U. STAKEHOLDERS AND CONSULTATION

U.1 Consultation

U.1.1. *Purpose of Consultation and Types of Consultation*

Council consults with the public to gain an understanding of customer expectations and preferences. This enables Council to provide a level of service that better meets the community's needs.

The Council's knowledge of customer expectations and preferences is based on:

- feedback from surveys
- public meetings
- feedback from elected members, advisory groups and working parties,
- analysis of customer service requests and complaints and
- consultation via the Annual Plan and LTCCP process.

Council commissions customer surveys on a regular basis, usually every 3 years, from the National Research Bureau Ltd[2]. These Communitrak™ surveys assess the levels of satisfaction with key services, including water supply services, and the willingness across the community to pay to improve services.

Council at times will undertake focussed surveys to get information on specific subjects or projects.

U.1.2. *Consultation Outcomes*

The most recent NRB Communitrak™ survey was undertaken in June/July 2008. There is no specific reference to aerodrome assets in the July/July 2008 survey.

From an aerodromes perspective, there were no key outcomes of the survey and future surveys will need to be more targeted to the aerodrome assets to enable a specific assessment of the communities satisfaction with the outcomes of this activity.

U.2 Stakeholders

A list of stakeholders is included in Appendix A, Section A.3.

[2] Communitrak™: Public Perceptions and Interpretations of Council Services / Facilities and Representation, NRB Ltd October 2008.

APPENDIX V. IMPLEMENTATION AND IMPROVEMENT PROGRAMME

Activity management improvements are necessary to achieve the appropriate (and desired) level of activity management planning sophistication. Since the last AMP review, improvements to service delivery have been made in a number of areas. Table V-1 details the improvements that have been achieved since the last AMP Improvement Plan. Other improvements that have been achieved are:

- Review of Levels of Service
- Review of Engineering Standards and Policies
- Development plan for Motueka Aerodrome

Table V-1: Improvements to Activity Management Systems Since the 2005 AMP

Improvement	Comments
Implement the Information Management Strategy and Improve implementation of computerised AM System.	Council has developed its Asset Management System (Confirm) and use it to track and record customer enquiries, maintain its asset register and track non-routine maintenance of assets. Confirm has been integrated with other asset management tools such as SilentOne and Council's GIS (Explore Tasman)
Determine appropriate Risk Management Approach	Council has adopted a risk management approach, refer to Appendix Q.
Asset Revaluation	Review and update of the asset register and valuation was completed in June 2007
Review routine reporting practice	The development of a new approach to Levels of Service means that some reporting practices have to be changed so that performance can be measured.
Review affordability of projects	Projects that were deferred in the 2005 AMP due to affordability have been reviewed.

Table V-2 details the proposed short to medium term improvements, discusses why these improvements are needed and when they are planned to be achieved. For each improvement:

- Options have been considered and the listed improvement has been concluded as the best practicable option.
- Costs to implement each improvement have been estimated and included in the 10 year financial forecasts
- An indication on the level of priority to complete each initiative/improvement has been made.

Table V-2: Planned Activity Management Improvement Programme

Item	Improvement	Benefits	Estimated Cost in 10 yr Financial Forecast	Priority
AMP Update	Review and update the AMP on a 3 year cycle. Next revision due in 2011.	Needed to comply with the LGA:2002 requirements.	$15,000 every 3 years	High
Asset Valuations	Review and update the Asset Valuation on a 3 yearly cycle. Next review due in 2010.	Needed to comply with the LGA:2002 requirements.	$3,000 every 3 years	High
Risk Management	Council intends to apply a consistent approach to risk management across all asset groups. Three levels of risk assessment will carried out; Organisation, Asset Group and Critical Assets.	Will identify actions/improvements required to be made to the organisation or operation or provision of Councils assets in order that: ▪ Council's ability to maintain levels of service as a result of organisational change and external physical events is maximised. ▪ Council's operational systems are robust.	$3,000 2010/2011	High
Asset Management System Development	Continue to develop Council's Asset Management System and integration with its related asset information systems, GIS, SilentOne etc.	Confirm enables a 'one stop shop' for Asset Management. It increases the knowledge and understanding of the Council's asset and asset performance and assists with efficient operation and maintenance of the assets.	Ongoing, no separate budget provided. Included within general Improvement Plan Activities budget.	High
Aerodrome Management Plans and Guidelines	Develop guidelines for the ongoing management of existing Aerodrome services that comply with CAA rules.	Ensures the management plans are kept up to date.	$3,000	High

Item	Improvement	Benefits	Estimated Cost in 10 yr Financial Forecast	Priority
Aerodrome Services Assessments	Identify areas where the community and users would benefit from a higher level of service. Include Aerodromes in next District wide survey, and conduct specific survey with users and stakeholders	Clarify need to change any management strategies. Feed into next AMP review.	$1500 every 3 years	Medium
Resource Consent Database	Expand the database to include all resource consents / designations related to the aerodromes	This will identify any monitoring needs and ensure consents do not expire without renewal applications being lodged.	Included in the general allowance for Improvement Plan Activities	Medium

APPENDIX W. ASSET DISPOSAL

The Council does not have formal strategy documents relating to asset disposals.

There are no current, or planned areas of operation that TDC wishes to divest itself of. Asset disposal therefore is a by-product of renewal or upgrade decisions that involve the replacement of assets.

Depending on the nature and value of the aerodrome assets they are either:

- Made safe and left in place
- Removed and disposed to landfill
- Removed and sold
- Transferred by agreement to other stakeholders

In all cases asset disposal processes must comply with Council's legal obligations under the Local Government Act 1974, which covers:

- public notification procedures required prior to sale
- restrictions on the minimum value recovered
- use of revenue received from asset disposal

With respect to the aerodromes, there are also legal requirements under the existing agreements of transfer to Council which limit alternative uses of the land should the activity cease.

APPENDIX X. GLOSSARY OF ASSET MANAGEMENT TERMS

Acronyms and Abbreviations

AM Plan	Activity Management Plan
LGA	Local Government Act
LTCCP	Long Term Council Community Plan
LTSA	Land Transport Safety Association
TRMP	Tasman Regional Management Plan
CAA	Civil Aviation Authority
RMA	Resource Management Act

Activity	An activity is the work undertaken on an asset or group of assets to achieve a desired outcome.
Activity Management Plan	Activity Management Plans are key strategic documents that describe all aspects of the management of assets and services for an activity. The documents feed information directly in the Council's LTCCP, and place an emphasis on long term financial planning, community consultation, and a clear definition of service levels and performance standards.
Advanced Asset Management	Asset management that employs predictive modelling, risk management and optimised renewal decision-making techniques to establish asset lifecycle treatment options and related long term cash flow predictions. (See Basic Asset Management).
AM Plan	See Activity Management Plan.
Annual plan	The Annual Plan provides a statement of the direction of Council and ensures consistency and co-ordination in both making policies and decisions concerning the use of Council resources. It is a reference document for monitoring and measuring performance for the community as well as the Council itself.
Asset	A physical component of a facility that has value enables services to be provided and has an economic life of greater than 12 months.
Asset Management (AM)	The combination of management, financial, economic, engineering and other practices applied to physical assets with the objective of providing the required level of service in the most cost-effective manner.
Asset Management System (AMS)	A system (usually computerised) for collecting analysing and reporting data on the utilisation, performance, lifecycle management and funding of existing assets.
Asset Management Plan	A plan developed for the management of one or more infrastructure assets that combines multi-disciplinary management techniques (including technical and financial) over the lifecycle of the asset in the most cost-effective manner to provide a specified level of service. A significant component of the plan is a long-term cash flow projection for the activities.

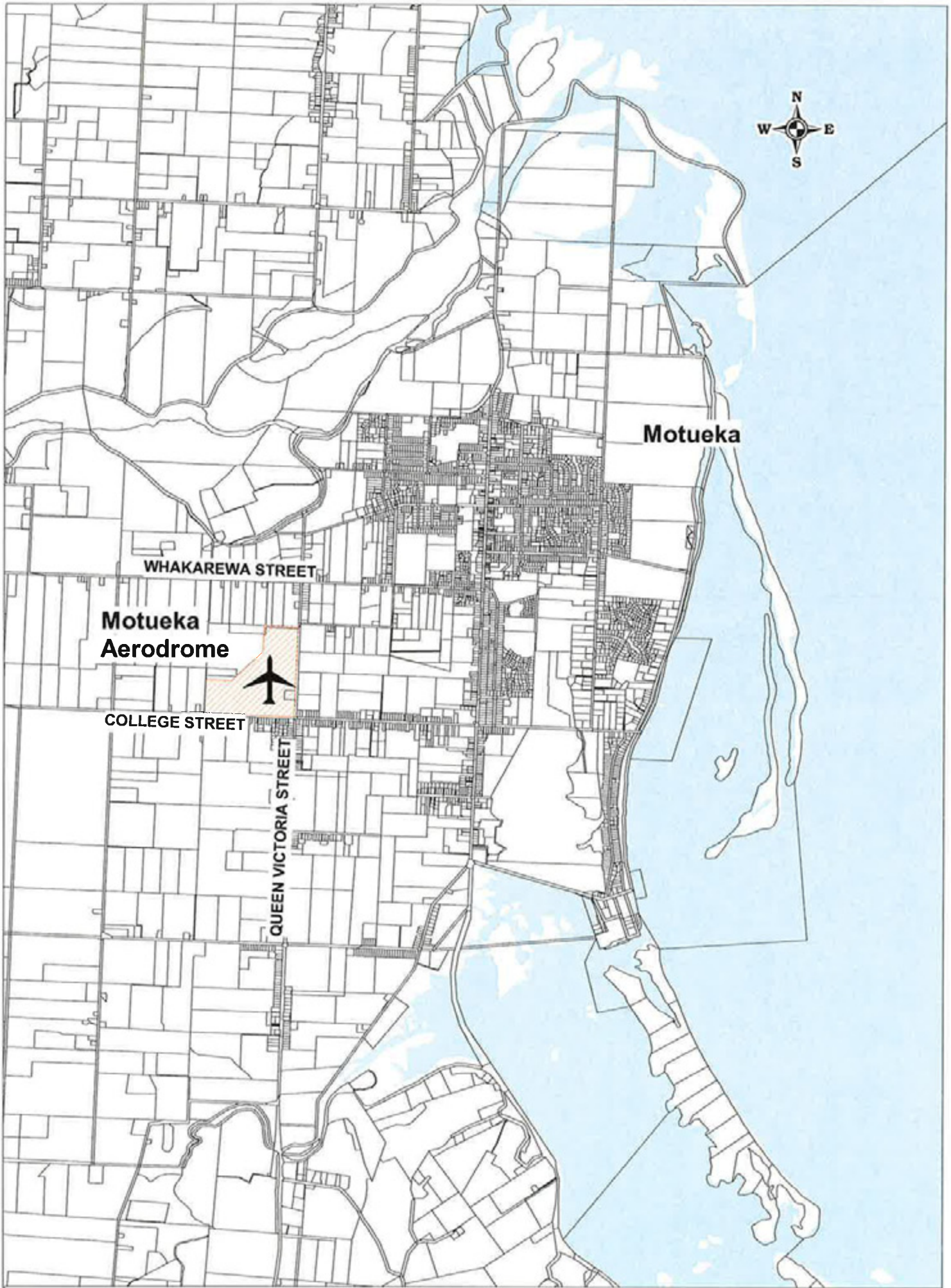
Asset Management Strategy	A strategy for asset management covering, the development and implementation of plans and programmes for asset creation, operation, maintenance, renewal, disposal and performance monitoring to ensure that the desired levels of service and other operational objectives are achieved at optimum cost.
Asset Register	A record of asset information considered worthy of separate identification including inventory, historical, financial, condition, construction, technical and financial information about each.
Basic Asset Management	Asset management which relies primarily on the use of an asset register, maintenance management systems, job/resource management, inventory control, condition assessment and defined levels of service, in order to establish alternative treatment options and long term cashflow predictions. Priorities are usually established on the basis of financial return gained by carrying out the work (rather than risk analysis and optimised renewal decision making).
Benefit Cost Ratio (B/C)	The sum of the present values of all benefits (including residual value, if any) over a specified period, or the life cycle of the asset or facility, divided by the sum of the present value of all costs.
Business Plan	A plan produced by an organisation (or business units within it) which translate the objectives contained in an Annual Plan into detailed work plans for a particular, or range of, business activities. Activities may include marketing, development, operations, management, personnel, technology and financial planning
Capital Expenditure (CAPEX)	Expenditure used to create new assets or to increase the capacity of existing assets beyond their original design capacity or service potential. CAPEX increases the value of an asset.
Condition Monitoring	Continuous or periodic inspection, assessment, measurement and interpretation of resulting data, to indicate the condition of a specific component so as to determine the need for some preventive or remedial action
Critical Assets	Assets for which the financial, business or service level consequences of failure are sufficiently severe to justify proactive inspection and rehabilitation. Critical assets have a lower threshold for action than non-critical assets.
Current Replacement Cost	The cost of replacing the service potential of an existing asset, by reference to some measure of capacity, with an appropriate modern equivalent asset.
Deferred Maintenance	The shortfall in rehabilitation work required to maintain the service potential of an asset.
Demand Management	The active intervention in the market to influence demand for services and assets with forecast consequences, usually to avoid or defer CAPEX expenditure. Demand management is based on the notion that as needs are satisfied expectations rise automatically and almost every action taken to satisfy demand will stimulate further demand.
Depreciated Replacement Cost (DRC)	The replacement cost of an existing asset after deducting an allowance for wear or consumption to reflect the remaining economic life of the existing asset.

Depreciation	The wearing out, consumption or other loss of value of an asset whether arising from use, passing of time or obsolescence through technological and market changes. It is accounted for by the allocation of the historical cost (or revalued amount) of the asset less its residual value over its useful life.
Disposal	Activities necessary to dispose of decommissioned assets.
Economic life	The period from the acquisition of the asset to the time when the asset, while physically able to provide a service, ceases to be the lowest cost alternative to satisfy a particular level of service. The economic life is at the maximum when equal to the physical life however obsolescence will often ensure that the economic life is less than the physical life.
Facility	A complex comprising many assets (e.g. swimming pool complex, etc.) which represents a single management unit for financial, operational, maintenance or other purposes.
Geographic Information System (GIS)	Software which provides a means of spatially viewing, searching, manipulating, and analysing an electronic data-base.
Infrastructure Assets	Stationary systems forming a network and serving whole communities, where the system as a whole is intended to be maintained indefinitely at a particular level of service potential by the continuing replacement and refurbishment of its components. The network may include normally recognised 'ordinary' assets as components.
I.M.S.	Infrastructure Management System - Computer Database
Level of service	The defined service quality for a particular activity (i.e. water) or service area (i.e. Water quality) against which service performance may be measured. Service levels usually relate to quality, quantity, reliability, responsiveness, environmental acceptability and cost.
Life	A measure of the anticipated life of an asset or component; such as time, number of cycles, distance intervals etc.
Life Cycle	Life cycle has two meanings: The cycle of activities that an asset (or facility) goes through while it retains an identity as a particular asset i.e. from planning and design to decommissioning or disposal. The period of time between a selected date and the last year over which the criteria (e.g. costs) relating to a decision or alternative under study will be assessed.
Life Cycle Cost	The total cost of an asset throughout its life including planning, design, construction, acquisition, operation, maintenance, rehabilitation and disposal costs.
Life Cycle Maintenance	All actions necessary for retaining an asset as near as practicable to its original condition, but excluding rehabilitation or renewal.
Long Term Council Community Plan	The Long Term Council Community Plan (LTCCP) is the primary strategic document through which Council communicates its intentions over the next 10 years for meeting community service expectations and how it intends to fund this work. The LTCCP is a key output required of Local Authorities under the Local Government Act 2002.

Long Term Financial Strategy	The Long Term Financial Strategy has been superseded by the Long Term Council Community Plan.
LTCCP	See Long Term Council Community Plan.
Maintenance Plan	Collated information, policies and procedures for the optimum maintenance of an asset, or group of assets.
Objective	An objective is a general statement of intention relating to a specific output or activity. They are generally longer-term aims and are not necessarily outcomes that managers can control.
Operation	The active process of utilising an asset which will consume resources such as manpower, energy, chemicals and materials. Operation costs are part of the life cycle costs of an asset.
Optimised Renewal Decision Making (ORDM)	An optimisation process for considering and prioritising all options to rectify performance failures of assets. The process encompasses NPV analysis and risk assessment.
Performance Indicator (PI)	A qualitative or quantitative measure of a service or activity used to compare actual performance against a standard or other target. Performance indicators commonly relate to statutory limits, safety, responsiveness, cost, comfort, asset performance, reliability, efficiency, environmental protection and customer satisfaction.
Performance Monitoring	Continuous or periodic quantitative and qualitative assessments of the actual performance compared with specific objectives, targets or standards.
Planned Maintenance	Planned maintenance activities fall into 3 categories : Periodic – necessary to ensure the reliability or sustain the design life of an asset. Predictive – condition monitoring activities used to predict failure. Preventive – maintenance that can be initiated without routine or continuous checking (e.g. using information contained in maintenance manuals or manufacturers' recommendations) and is not condition-based.
Recreation	Means voluntary non-work activities for the attainment of personal and social benefits, including restoration (recreation) and social cohesion.
Rehabilitation	Works to rebuild or replace parts or components of an asset, to restore it to a required functional condition and extend its life, which may incorporate some modification. Generally involves repairing the asset using available techniques and standards to deliver its original level of service without resorting to significant upgrading or replacement.
Renewal	Works to upgrade, refurbish, rehabilitate or replace existing facilities with facilities of equivalent capacity or performance capability.

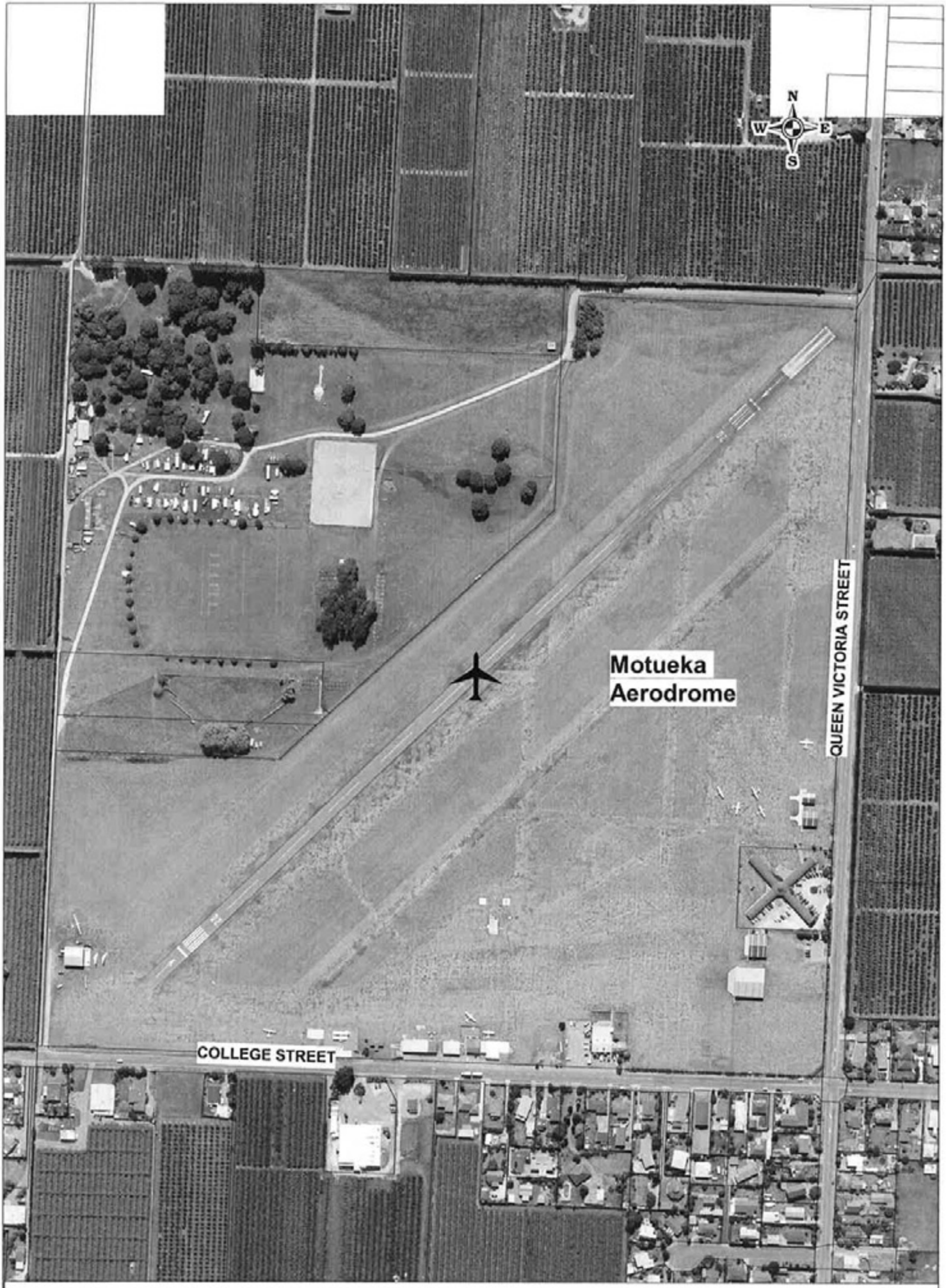
Renewal Accounting	A method of infrastructure asset accounting which recognises that infrastructure assets are maintained at an agreed service level through regular planned maintenance, rehabilitation and renewal programmes contained in an asset management plan. The system as a whole is maintained in perpetuity and therefore does not need to be depreciated. The relevant rehabilitation and renewal costs are treated as operational rather than capital expenditure and any loss in service potential is recognised as deferred maintenance.
Repair	Action to restore an item to its previous condition after failure or damage.
Replacement	The complete replacement of an asset that has reached the end of its life, so as to provide a similar or agreed alternative, level of service.
Remaining Economic Life	The time remaining until an asset ceases to provide service level or economic usefulness.
Risk Cost	The assessed annual cost or benefit relating to the consequence of an event. Risk cost equals the costs relating to the event multiplied by the probability of the event occurring.
Risk Management	The application of a formal process to the range of possible values relating to key factors associated with a risk in order to determine the resultant ranges of outcomes and their probability of occurrence.
Routine Maintenance	Day to day operational activities to keep the asset operating (replacement of light bulbs, cleaning of drains, repairing leaks, etc.) and which form part of the annual operating budget, including preventative maintenance.
Service Potential	The total future service capacity of an asset. It is normally determined by reference to the operating capacity and economic life of an asset.
Strategic Plan	Strategic planning involves making decisions about the long term goals and strategies of an organisation. Strategic plans have a strong external focus, cover major portions of the organisation and identify major targets, actions and resource allocations relating to the long term survival, value and growth of the organisation.
Unplanned Maintenance	Corrective work required in the short term to restore an asset to working condition so it can continue to deliver the required service or to maintain its level of security and integrity.
Upgrading	The replacement of an asset or addition/ replacement of an asset component which materially improves the original service potential of the asset.
Valuation	Estimated asset value that may depend on the purpose for which the valuation is required, i.e. replacement value for determining maintenance levels or market value for life cycle costing.

APPENDIX Y. EXISTING AERODROME PLANS



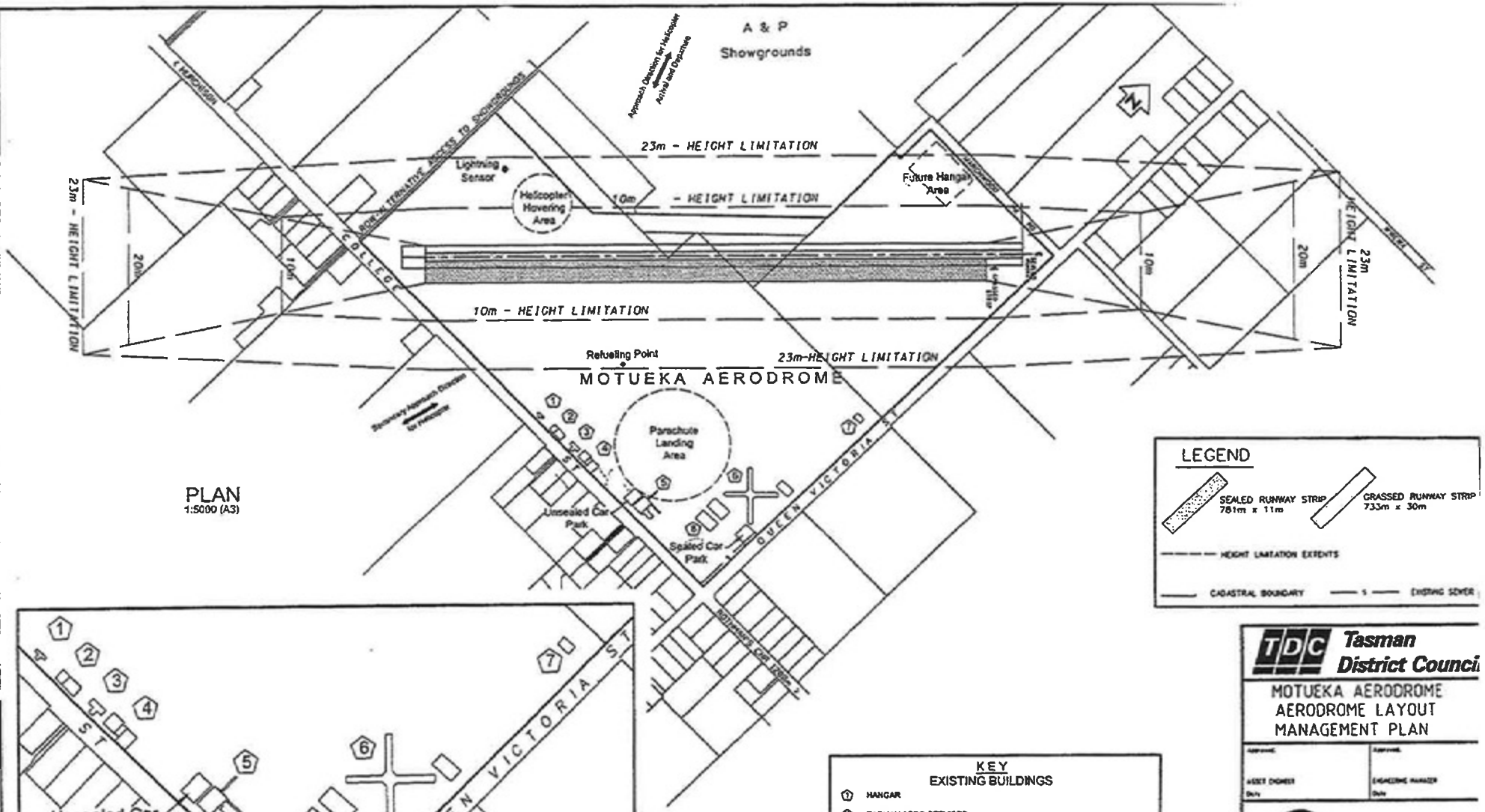
Motueka Aerodrome Location Map

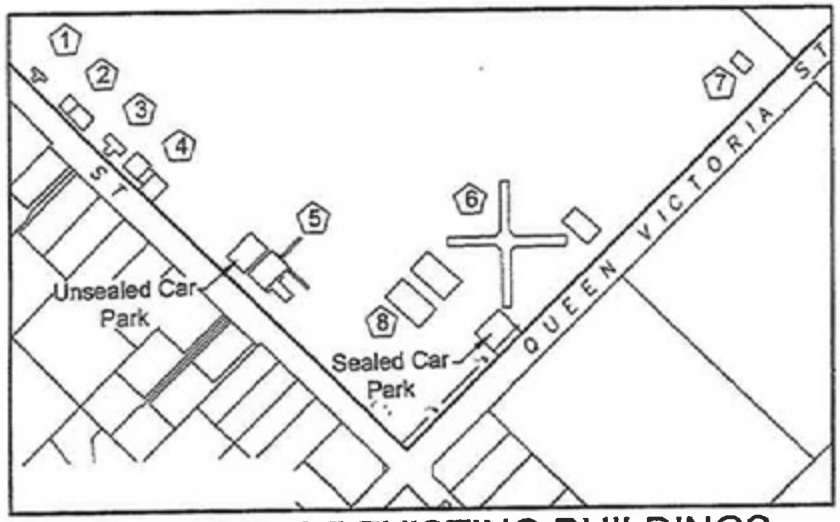
Scale 1:35000



Motueka Aerodrome

Scale 1:4000





PLAN OF EXISTING BUILDINGS
1:3000 (A3)

KEY
EXISTING BUILDINGS

1. HANGAR
2. TASMAN AERO SERVICES
3. HANGAR
4. AERO CLUB - HANGAR / CLUB ROOMS
5. SKYDIVE NELSON LTD
6. NELSON AVIATION COLLEGE
7. LUCAS (Hangar to be erected)
8. HANGARS

NOTES:-
For further details of height limitations, refer to:
- DWG. No. 27 - CURRENT MOTUEKA PLANNING SCHEME - SECTION 1
- TDC DWG. No. 19567/2 Rev. C - MOTUEKA AERODROME RUNWAY DIMENSIONS

Tasman District Council

MOTUEKA AERODROME
AERODROME LAYOUT
MANAGEMENT PLAN

Approved: ASSET ENGINEER Date:
Approved: ENGINEERING MANAGER Date:

MWH

JOB NO : 2225-180-01
CAD Ref : P:\180\022225\180\01\Cad\airport XRefs

	BY	DATE
DRAWN	EVL	09-01
APPROVED		07-02
2 RUNWAY AMENDED		07-02

REV	AMENDMENTS	DATE	INIT

SCALES (A3) : 1: 5000

TDC Plan No. | Sheet No. 1 | Rev. 2

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24 December 2006 - 11:17am
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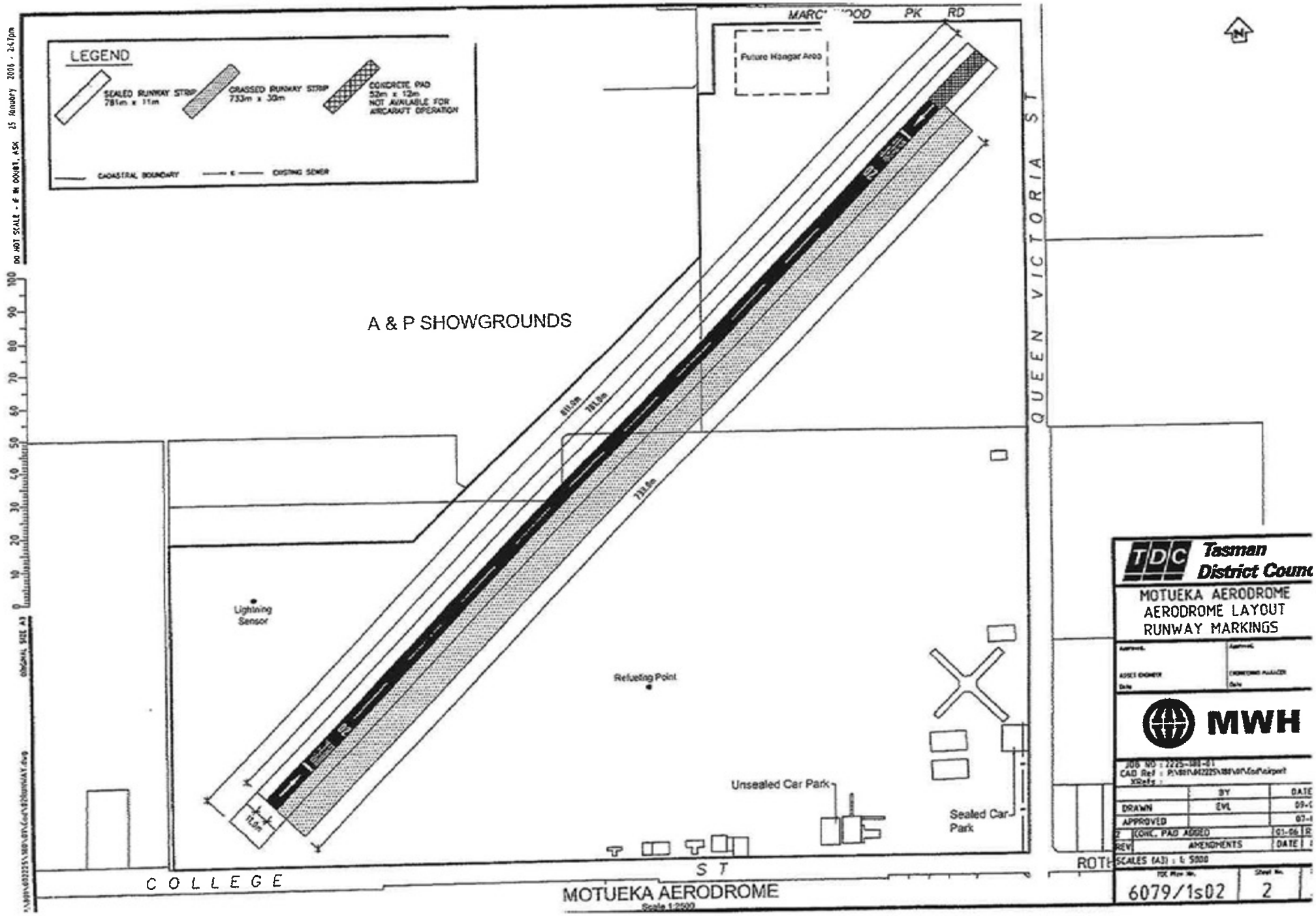

LEGEND
SEALED RUNWAY STRIP
781m x 11m
GRASSED RUNWAY STRIP
733m x 30m
CONCRETE PAD
52m x 12m
NOT AVAILABLE FOR AIRCRAFT OPERATION
CADASTRAL BOUNDARY
EXISTING SEWER
Future Hangar Area
A & P SHOWGROUNDS
QUEEN VICTORIA ST
Lightning Sensor
Refueling Point
Unsealed Car Park
Sealed Car Park
COLLEGE ST
ROTH
MOTUEKA AERODROME
Scale 1:2500
TDC Tasman District Council
MOTUEKA AERODROME
AERODROME LAYOUT
RUNWAY MARKINGS
MWH
DRAWN EWL
APPROVED
CONC. PAD ADDED
AMENDMENTS
SCALES (A3) : 1: 5000
6079/1s02
2

MOTUEKA AERODROME

LOCALITY PLAN

Tasman District Council

MWH

DRAWING INDEX

SHEET No.	DESCRIPTION
00	COVER, DRAWING INDEX AND LOCALITY PLAN
01	OVERALL SITE PLAN
02	DETAILED PLAN OF HANGAR BLOCK 1
03	DETAILED PLAN OF HANGAR BLOCK 2
04	DETAILED PLAN OF HANGAR BLOCK 3
05	DETAILED PLAN OF SOUTH EAST CORNER DEVELOPMENT

Status Stamp
PRELIMINARY

Date Stamp
31 OCTOBER 2006

JOB No. Z0888007

LEDGEND

- HELICOPTER PAD
- PARACHUTE AREA
- EXISTING BUILDINGS
- CONCRETE PAD NOT FOR LANDING ON
- PROPOSED HANGAR UNITS
- SEALED RUNWAY
- GRASS RUNWAY
- NEW AIR CRAFT PARKING AREA
- NEW CAR PARKING AREA
- AIRPORT BOUNDRY

NOT FOR CONSTRUCTION

MWH

Tasman District Council

MOTUEKA AIRPORT UPGRADE

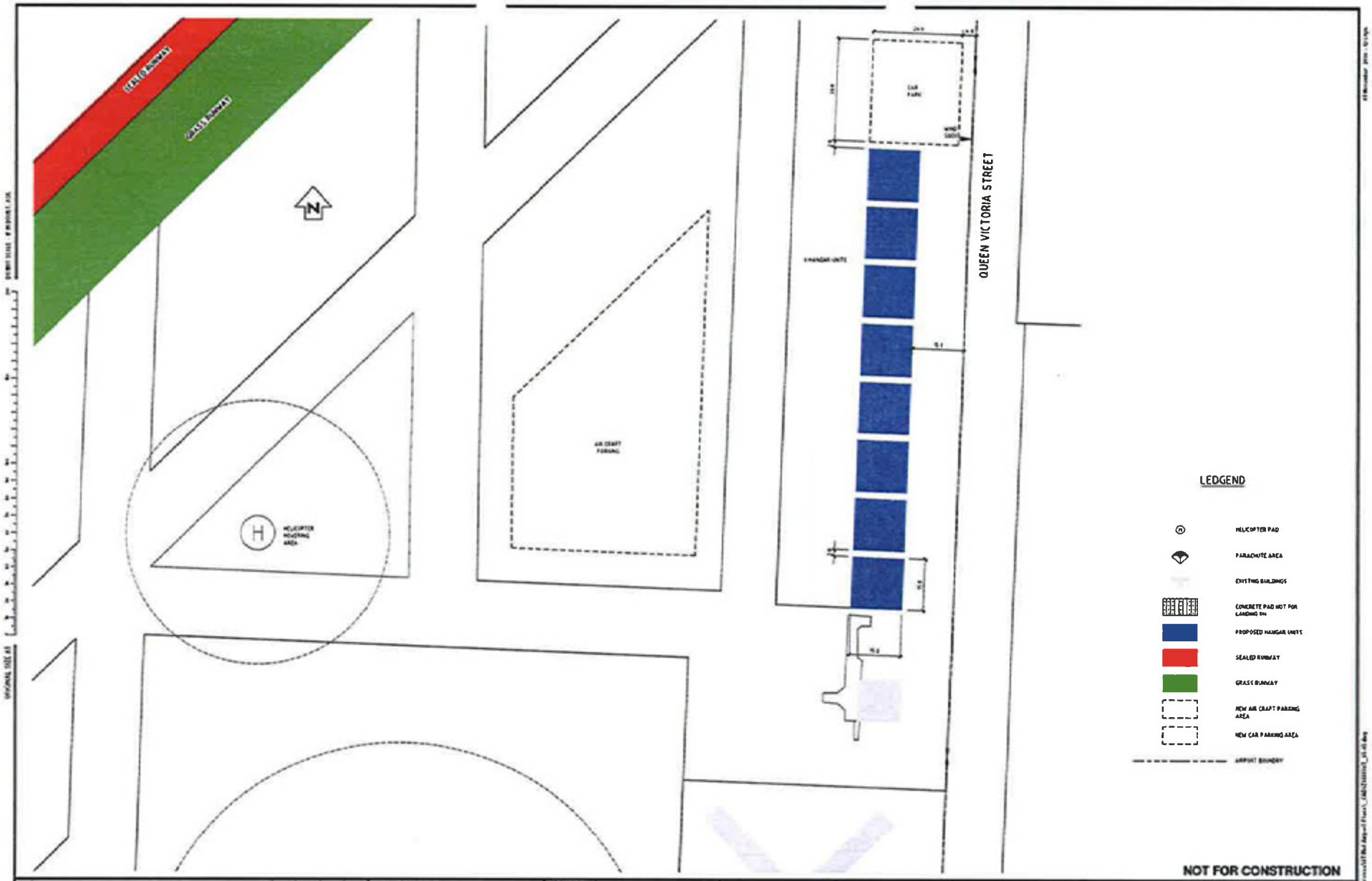
OVERALL SITE PLAN

PRELIMINARY

31 OCTOBER 2006

01

A



NOT FOR CONSTRUCTION

MWH

Tasman District Council

MOTUEKA AIRPORT UPGRADE

DETAILED PLAN OF HANGAR BLOCK 1

PRELIMINARY

31 OCTOBER 2006

02 A

NOT FOR CONSTRUCTION

FIELDWORK	
SURVEYED	
DESIGNED	
DRAWN	
CHECKED	
APPROVED	

MWH

Tasman District Council

MOTUEKA AIRPORT UPGRADE

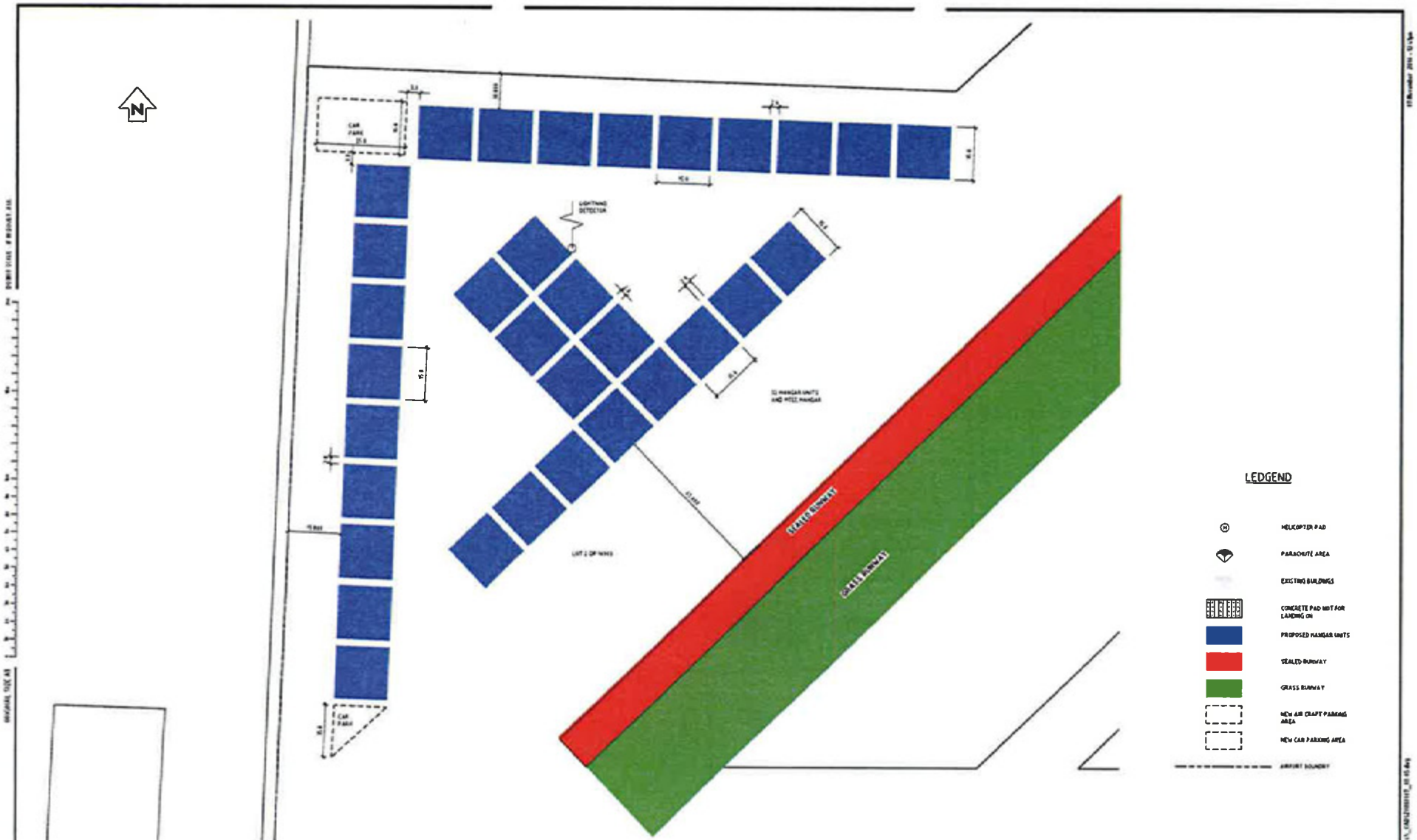
DETAILED PLAN OF HANGAR BLOCK 2

PRELIMINARY

31 OCTOBER 2006

03

A



NOT FOR CONSTRUCTION

MWH

Tasman District Council

MOTUEKA AIRPORT UPGRADE

DETAILED PLAN OF HANGAR BLOCK 3

PRELIMINARY

31 OCTOBER 2006

04

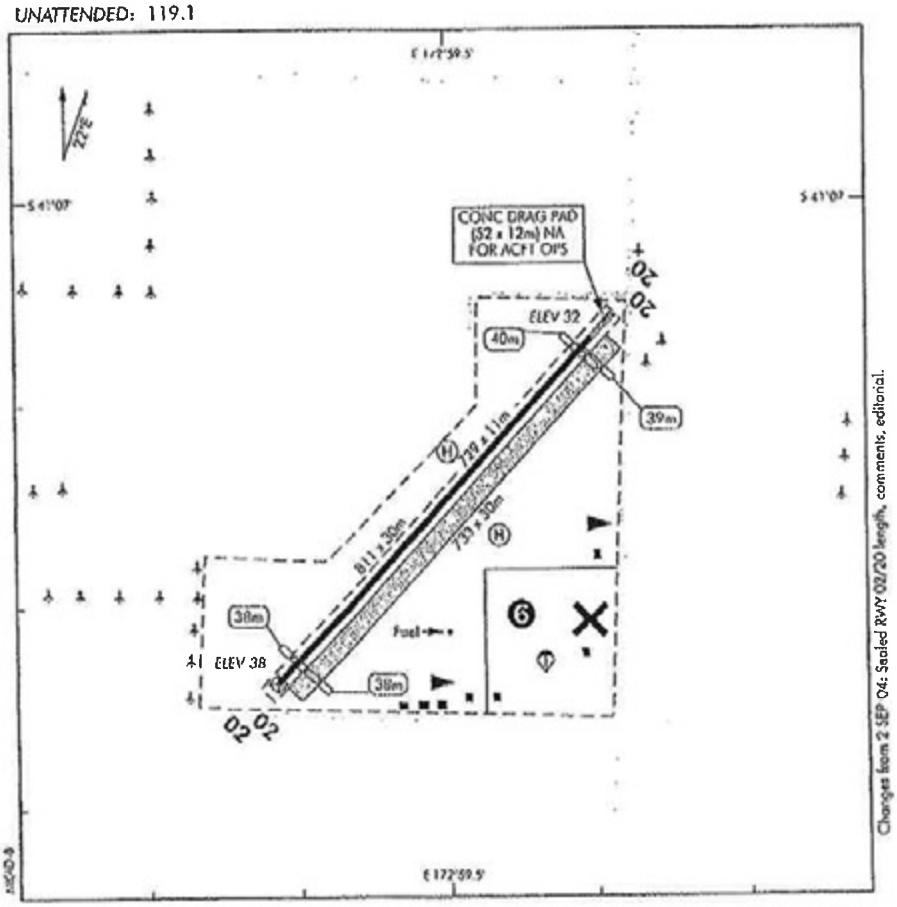
A

NOT FOR CONSTRUCTION

MWH	Tasman District Council	MOTUEKA AIRPORT UPGRADE	PRELIMINARY
		DETAILED PLAN OF SOUTH EAST CORNER PROPOSED DEVELOPMENT	31 OCTOBER 2006
			05 A

MOTUEKA AERODROME

ELEV 38
NZMK
UNATTENDED: 119.1



1. Extensive aircraft training occurs in surrounding airspace.
2. Extensive helicopter training may take place from any point on the aerodrome, particularly from the helipads marked by painted tyres.
3. Simultaneous operations on parallel paved and grass runways prohibited.
4. **CAUTION:** High trees on northern end of RWY on approach to RWY 20.
5. Aerodrome closed periodically to all aircraft, other than approved operators, for drag racing — Refer NOTAM.

Ⓟ Parachute landing area. Parachute operations daily.

7. **CAUTION:** Significant undulations in grass RWY 02/20.
8. Concrete drag pad (52 x 12m) on THR sealed RWY 20 not available for aircraft operations.

S 41 07 24 E 172 59 19

Effective: 16 FEB 06

ELEV 38
NZMK

MOTUEKA
ARRIVAL/DEPARTURE

UNATTENDED: 119.1 *NELSON TOWER:* 127.4 123.3 *NELSON ATIS:* 129.1

Arrival procedures

VFR only.

Departure procedures

Pre-flight clearance required from Nelson Tower. Outside Nelson hours contact Christchurch Control 123.7 MHz for clearance and traffic information prior to entering IMC or controlled airspace.

Minimum net climb gradient 3.3% (200ft/NM) all departures.

Take-off RWY 02

Maintain own terrain clearance by visual reference until clear of the coast.

02 MIKE DEPARTURE

Maintain runway centreline to MNM 500ft then turn RIGHT and intercept R293 to NS VOR. Set heading overhead NS VOR at appropriate MNM ALT:

To SELTA, MEVAX, DMT, FXT, TR, WN	5600ft
To HK, WS, KAKET	5800ft
To ALADA	6100ft
To WB, BM	6500ft
To SANDY	6600ft

02 NOVEMBER DEPARTURE

Track 020°M to intercept R330 from NS VOR. Continue climb on R330 to MNM 5000ft and then turn to intercept required track.

Take-off RWY 20

Maintain own terrain clearance by visual reference until clear of the coast.

Caution: Terrain rises rapidly on extended centreline.

20 MIKE DEPARTURE

As soon as practicable after take-off turn LEFT to intercept R293 to NS VOR. Set heading overhead NS VOR at appropriate MNM ALT:

To SELTA, MEVAX, DMT, FXT, TR, WN	5600ft
To HK, WS, KAKET	5800ft
To ALADA	6100ft
To WB, BM	6500ft
To SANDY	6600ft

20 NOVEMBER DEPARTURE

As soon as practicable after take-off turn LEFT to track 020°M overhead Moutere River mouth (Port Motueka) at MNM 600ft. Maintain track 020°M to intercept R330 from NS VOR. Continue climb on R330 to MNM 5000ft and then turn to intercept required track.

Non-Certificated Aerodrome 1NM SW of Motueka

NZMK

MOTUEKA
OPERATIONAL DATA

RWY

RWY	SFC	Strength	Gp	Slope	ASDA	Take-off distance 1:20	1:30	1:40	LDG DIST
02 20	B	ESWL 1020	S	0.22D 0.22U	729	689 691			691 689
02 20	Gr	TBA	S	0.22D 0.22U	733	694 695			695 694

MINIMA

IFR Take-off		
RWY	Day	Night
02/20	600 – 3000	NA

LIGHTING

Nil

FACILITIES

Fuel: Avgas, Swipecard — opposite Aero Club — Shell only

Permanent tie-downs available.

SUPPLEMENTARY

Operator: Tasman District Council, PO Box 123, Motueka
Tel (03) 528 2022 or (03) 544 8400 Fax (03) 528 9751

Available for general use.

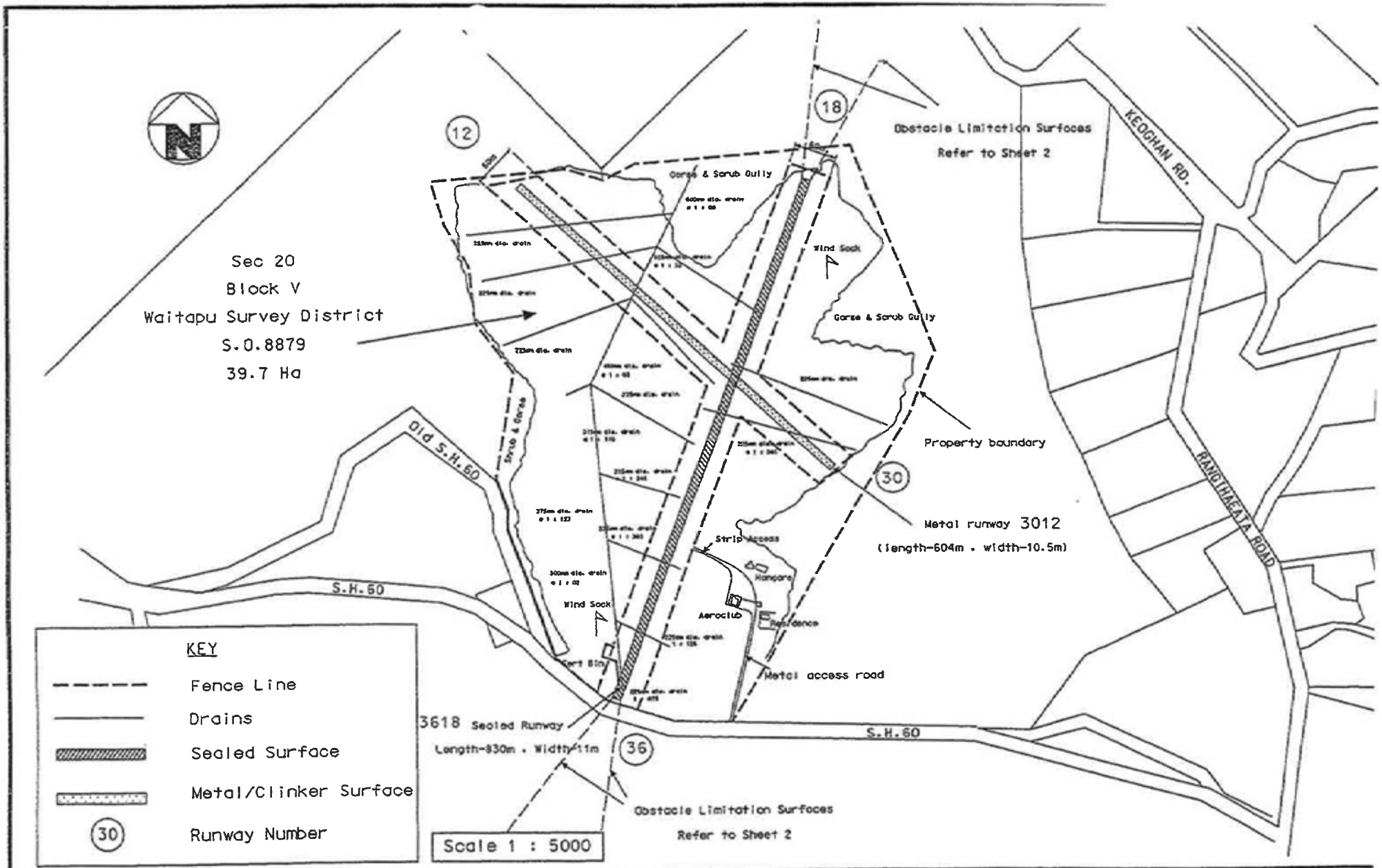
Landing fees payable in honesty box located on hangar next to Motueka aero club.

Takaka Aerodrome Location Map

Scale 1:20000

Takaka Aerodrome

Scale 1:4000



SURVEYED			SDRjob		
DESIGNED			DGN	takaka	
DRAWN	D. Titmuss		LB/FB		
CHECKED			FILMED		

Tasman District Council

ENGINEERING MANAGER

TAKAKA AERODROME
Site Layout Details

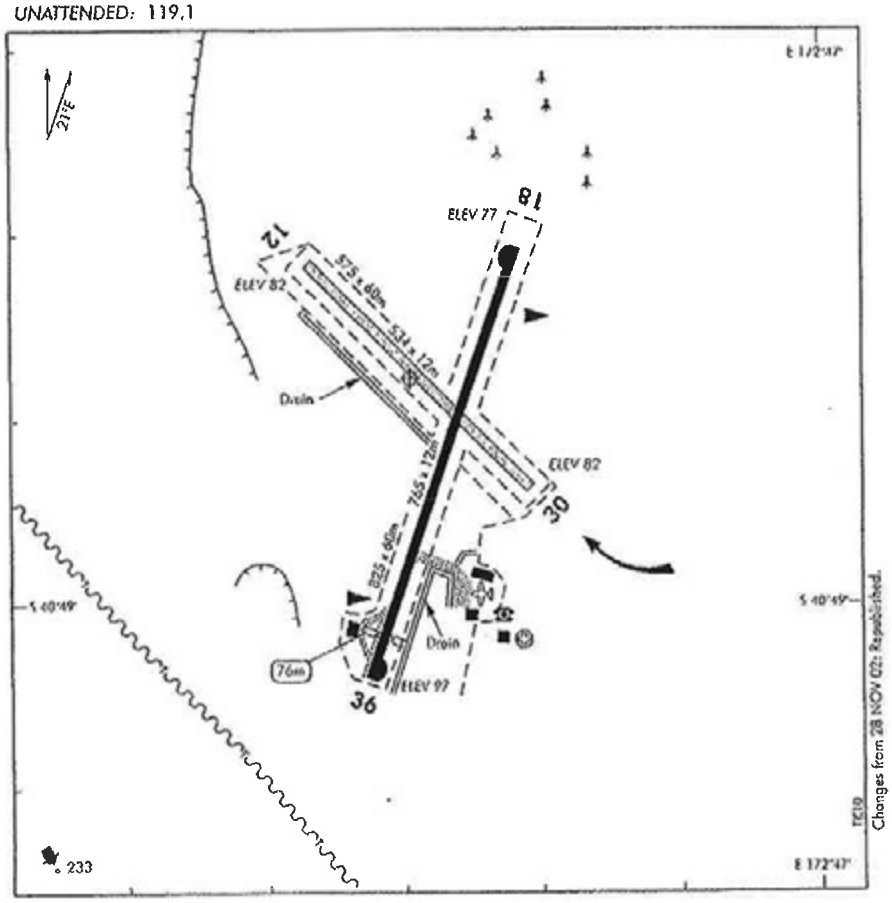
FILE REF.

SHEET 1 OF 2

ELEV 97
NZTK
UNATTENDED: 119.1

NON-CERTIFICATED

TAKAKA AERODROME



1. Grass areas unusable, movements restricted to paved or gravel runway and taxiway only.
2. **CAUTION:** Runways slippery in frosty conditions. Outer edges of strips unusable. Severe turbulence can be experienced on take-off RWY 18 in S and SW wind conditions.

Non-Certificated Aerodrome 3NM N of Takaka

TAKAKA
OPERATIONAL DATA

NZTK

RWY

RWY	SFC	Strength	Gp	Slope	ASDA	Take-off distance 1:20	1:30	1:40	LDG DIST
12 30	GRVL	ESWL 1000	3	Nil	534	534			534
18 18	B	ESWL 3000	5 6	0.89U	765	689			765
36 36	B	ESWL 3000	6 5	0.89D	765	765			689

LIGHTING

Nil

FACILITIES

Fuel available by prior arrangement with the Flying Club.

SUPPLEMENTARY

Operator: Takaka Aerodrome Management Committee, PO Box 151, Takaka.
Tel (03) 525 9187

Available for general use without the permission of the operator.

Fees payable.

APPENDIX Z. AMP STATUS AND DEVELOPMENT PROCESS- AERODROMES

Z.1 AMP Status

Version	Status	Document Approval	Signature	Date
1	Working Draft			
2	Draft for Council Officer Review	Name: Richard Lester Authority: Project Manager		
3	Draft for Council Review	Name: Jim Frater Authority: Asset Manager		3/2/09
4	Draft for Public Consultation Council Resolution	Name: Peter Thomson Authority: Engineering Manager		3/2/09
5	Final Plan Adopted by Council Council Resolution	Name: Richard Kempthorne Authority: Mayor Reference: _____		7/10/09

Z.2 AMP Development Process

Project Sponsor: Peter Thomson
Asset Manager: Jim Frater
Project Manager: Richard Lester
AMP Author: Ray Firth
Project Team: Jim Frater, Ray Firth, Eric Newport

Z.3 Quality Plan

This quality plan comprises 3 parts:

1. Quality Requirements and Issues – identification of the quality standards required and the quality issues that might arise.
2. Quality Assurance – the planned approach to ensure quality requirements are pro-actively met – i.e. get it right first time
3. Quality Control – the monitoring of the project implementation to ensure quality outcomes are met.

Z.4 Quality Requirements and Issues

	Issues and Requirements	Description
1	Fitness For Purpose	The AMP has to be "fit for purpose". It has to comply with Audit NZ expectations of what an AMP should be to provide them the confidence that the Council is adequately managing the Council activities.
2	AMP Document Consistency	TDC want a high level of consistency between AMPs so that a reader can comfortably switch between plans.
3	AMP Document Format	The documents need to be prepared to a consistent and robust format so that the electronic documents are not corrupted (as happens to large documents that have been put together with a lot of cutting and pasting) and can be made available digitally over internet.
4	AMP Text Accuracy and Currentness	The AMPs are large and include a lot of detail. Errors or outdated statements reduce confidence in the document. The AMPs need to be updated to current information and statistics.
5	AMP readability	The AMPs in their current form have duplication – where text is repeated in the "front" section and the Appendices. This needs to be rationalised so that the front section is slim and readable and the Appendix contains the detail without unnecessary duplication.
6	Completeness of Required Upgrades/Expenditure elements	The capital expenditure forecasts and the operations and maintenance forecasts need to be complete. All projects and cost elements need to be included.
7	Accuracy of Cost Estimates	Cost estimates need to be as accurate as the data and present knowledge allows, consistently prepared and decisions made about timing of implementation, drivers for the project and level of accuracy the estimate is prepared to.
8	Correctness Of Spreadsheet Templates	The templates prepared for use need to be correct and fit for purpose.
9	Assumptions and Uncertainties	Assumptions and uncertainties need to be explicitly stated on the estimates.
10	Changes made after submission to Financial Model	If Council makes decisions on expenditure after they have been submitted into financial model, the implications of the decisions must be reflected in the financial information and other relevant places in the AMP – e.g. Levels of service and performance measures, improvement plans etc.
11	Improvement Plan Adequate	Improvements identified, costed, planned and financially provided for in financial forecasts

Z.5 Quality Assurance

	Issues and Requirements	Quality Assurance Approach	Responsible Person
1	Fitness For Purpose	Conduct various reviews of critical elements up front and plan to up upgrade the plans to specific requirements: 1. Scoping of AMP Upgrade Project 2. Review Of Levels Of Service 3. Review of Document Upgrade Needs	Richard Lester
		Conduct a Peer Review	Peter Thomson
2 3 4	AMP Document Consistency AMP Document Format AMP readability	Review documents in advance and prepare instructions to authors on how to upgrade	Becky Marsay
		Central Review Of AMP document deliverables	Becky Marsay
5	AMP Text Accuracy and Currentness	Authors to review each AMP in detail	AMP authors
6	Completeness of Required Upgrades/Expenditure elements	AMP Authors to workshop with relevant project team members to ensure all projects/cost elements covered	AMP authors
		Central list of issues (called a "Parking Lot") that need to be considered in each AMP	Becky Marsay
7	Accuracy of Cost Estimates	Independent Review of all cost estimates	AMP authors
8	Correctness Of Spreadsheet Templates	Independent Review of all templates	Richard Lester
9	Assumptions and Uncertainties and Risk Assessments	Independent Review of all cost estimates	AMP authors
10	Changes made after submission to Financial Model	Protocol prepared to ensure Quickplace is used and all parties follow instructions on how changes are made	Becky Marsay
		Ensure there is a place in the AMP documents to record any changes made and the implications of changes	Richard Lester
		AMP Authors to manage a change log for changes after submission	AMP Authors
11	Improvement Plan Adequate	Prepare template in advance to ensure consistent approach	Richard Lester
		Central Review Of Improvement Plans	Richard Lester

Z.6 Quality Control

Quality Control Checks and Reviews are scheduled on the attached Tables. These shall be progressively completed as the AMP is developed and incorporated in the final AMP Plan in Appendix Z.

Check or Review	Person Responsible	Authority	Signature	Date
Scope Of AMP Upgrade Project Complete	Peter Thomson	Engineering Manager		9/12/08.
Levels Of Service prepared to Instructions	Richard Lester	Project Manager		16/12/08
Levels Of Service Asset Manager Acceptance	Jim Frater	Asset Manager		4/2/09
AMP Document prepared to instructions	Becky Marsay	Assistant PM		16/12/08
AMP Text Accuracy and Currentness	Ray Firth	AMP Author		16-12-08
Capital Upgrade List Complete	Denis O'Brien	Programme Manager		16.12.08
Capital Upgrade List Complete - Asset Manager Acceptance	Jim Frater	Asset Manager		4/2/09
All Issues on "Parking Lot" addressed	Ray Firth	AMP Author		16-12-08
Capex Expenditure Spreadsheet Template Reviewed	Richard Lester	Project Manager		16/12/08
Project Estimate Spreadsheet Template Reviewed	Denis O'Brien	Programme Manager		16.12.08
All Capex Estimates Reviewed and including assessment of Programme, Project Drivers, Levels of Accuracy and assumptions/uncertainty	Ray Firth	AMP Author		16-12-08
Opex Costs Spreadsheet Arithmetic Review	Ray Firth	AMP Author		16-12-08
Opex Cost forecast – fitness for purpose	Jim Frater	Asset Manager		18.03.09.
Improvement Plan Prepared to instructions	Richard Lester	Project Manager		16/12/08
Improvement Plan Asset Manager Acceptance	Jim Frater	Asset Manager		4/2/09
Capital Forecast Accepted for Input to NCS	Jim Frater	Asset Manager		4/2/09
Change log complete and changes appropriately dealt with – after Council review	Ray Firth	AMP Author		30/07/09
Change log complete and changes appropriately dealt with – after Public consultation	Jim Frater	Asset Manager		3/2/09
Peer Review Completed	Peter Thomson	Engineering Manager		3/2/09.