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

A.1 Introduction

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 its aerodromes.

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 levels of service required by customers is provided at the lowest long term cost to the community and is delivered in a sustainable manner.

Council has no statutory obligation to provide this service. However given that the service provides public value and the community preference is for Council to retain management of these aerodromes, it is considered necessary and beneficial to the community that the Council undertakes the planning, implementation and maintenance of aerodromes services at Motueka and Takaka.

The front section of this AMP document is produced with the aim of the target audience being Council staff and Councillors. The appendices provide more in depth information for the management of the activity and are therefore targeted at the Activity Managers. The entire document is available within the public domain.

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** – community desire for increased level of service balanced against the affordability
- **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 Acts below are listed by their original title for simplicity however all Amendment Acts shall be considered in conjunction with the original Act, these have not been detailed in this document. For the latest Act information refer to http://www.legislation.govt.nz/.

Acts

- The Local Government Act 2002 – Especially Schedule 10 and the requirement to consider all options and to assess the benefits and costs of each option, and the consultation requirements.
- The Local Government Act 1974 (Retained sections)
- The Civil Aviation Act 1990
- The Land Transport Management Act 2003
- The Land Transport Act 1998
- The Public Works Act 1981
- The Telecommunications Act 1987
- The Electricity Act 1992
- The Biosecurity Act 1993
- The Summary Offences Act 1981

- The Bylaws Act 1910
- The Civil Defence Emergency Management Act 2002 (Lifelines)
- The Resource Management Act 1991
- The Local Government Act (Rating) 2002
- The Health and Safety in Employment Act 1992
- The Building Act 2004
- The Construction Contracts Act 2002
- The Climate Change Response Act 2002.

National Policies, Regulations and Strategies

- The National Energy Efficiency and Conservation Strategy http://www.eeca.govt.nz
- The Building Regulations http://www.legislation.govt.nz/
- The Local Government (Financial Reporting) Regulations 2011 http://www.legislation.govt.nz/
- The New Zealand Transport Strategy http://www.transport.govt.nz
- Ministry of Transport Statement of Intent http://www.transport.govt.nz
- The Government's Sustainable Development Programme of Action http://www.beehive.govt.nz
- NAMS Manuals and Guidelines http://www.nams.org.nz
- Office of the Auditor General's Publications http://www.oag.govt.nz

Standards New Zealand (for all refer to http://www.standards.co.nz)

- AS/NZS ISO 31000:2009 Risk Management Principals and Guidelines
- NZS 4404:2010 Land Development and Subdivision Infrastructure
- AS/NZS ISO 9001:2008 Quality Management Systems
- AS/NZS 4801:2001 Occupational Health and Safety Management Systems.

Local Policies, Regulations, Standards and Strategies

- Council's District Plan – Tasman Resource Management Plan (TRMP) http://www.tasman.govt.nz
- Tasman Regional Policy Statement (TRPS) http://www.tasman.govt.nz
- Tasman District Council Engineering Standards and Policies 2008 http://www.tasman.govt.nz
- Council's Procurement Strategy
- Any existing established policies of the Council (outside those contained in this Activity Management Plan itself) regarding this activity.

The requirements of the Civil Aviation Act 1990 and amendments that the Council must comply with are discussed in more detail as follows.

Under the Authority of the Civil Aviation Act 1990 the Director of the Civil Aviation Authority (CAA) 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 Maximum Certified Take off Weight (MCTOW) on non-air transport operations such as at Motueka and Takaka.

The Council must comply with the CAA 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).

A.3 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 Plan (LTP). 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 activity management plans to other corporate plans and documents.

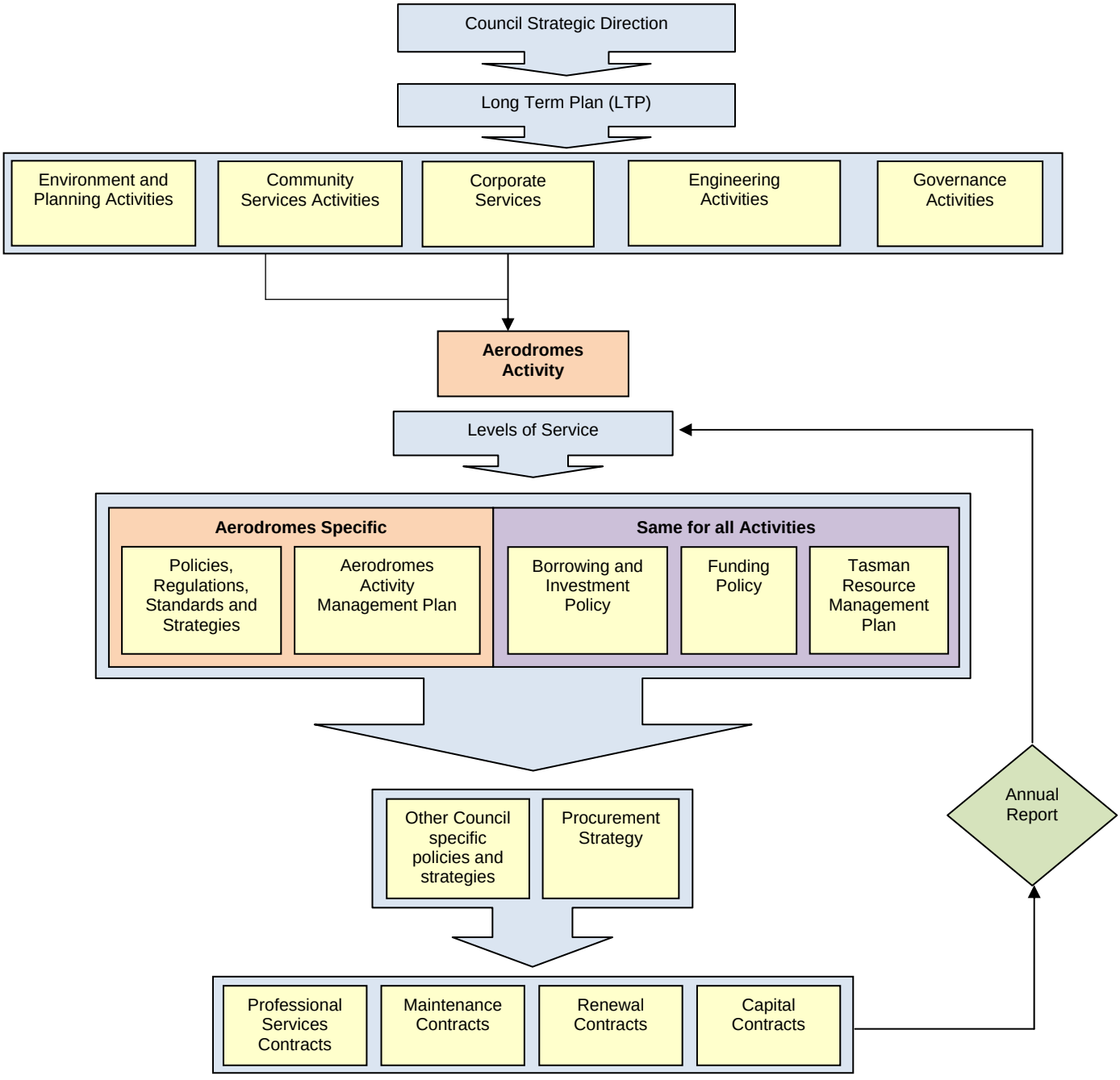

Figure A-1: Hierarchy of Council Policy, Strategy and Planning

A.4 Strategic Direction

Council's strategic direction is outlined in the Vision, Mission and Objectives of the Council.

Vision: 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 outlines the strategic documents utilised by the Council as part of the planning process.

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

Long Term Plan (LTP)	The primary instrument for the Council to report on its intentions on delivering its services to the community. This is the broad strategic direction of Council set in the context of current and future customer requirements. The AMP is the tactical plan with a view to achieving the strategic targets.
Annual Plan	The service level options and associated costs developed in the AMP 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 LTP.
Activity Management Plan (AMP)	The Activity Management Plans provide the framework to recognise and deliver future levels of service, Operation of Spend and Capital Programmes in a way which is consistent, transparent and integrated with Council's day to day business.
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 AMP.
Contracts	The service levels, strategies and information requirements contained in the AMP are the basis for performance standards in the current Maintenance and Professional Service Contracts.
Operational Plans	Operating and maintenance guidelines to ensure that the asset operates reliably and is maintained in a condition that will maximise useful service life of assets within the network.
Corporate Information	Quality asset management is dependent on suitable information and data and the availability of sophisticated asset management systems which are fully integrated with the wider corporate information systems (eg. financial, property, GIS, customer service, etc.). Council's goal is to work towards such a fully integrated system.

A.4.1. Our Goal

The Council aim to provide the level of service that the customer wants and is prepared to pay for and in a manner that minimises conflict with the community.

APPENDIX B. OVERVIEW OF THE AERODROMES IN THE DISTRICT

B.1 General

The 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 surfacing 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 the Council and occupies some 27.52 hectares. It 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 to the layout plan in Appendix Y for further details.

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 was taken up in 1940.

The aerodrome land is now in two 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 (TRMP), the site is designated for aerodrome purposes with an underlying zone of Rural 1.

The designation provides for the 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 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.

In 1991/92 Council formed and sealed a 724m by 8m runway. Subsequent extensions increased the length and the runway was widened and resealed to an average width of 11m in March 2004. The current runway is 729m long by 11m wide and asphalt concrete surfaced. In addition there is adjacent a grass runway 733m long by 30m wide.

There is a 52m long concrete pad at the northern end which was established by the Nelson Drag Racing Association for their events and is not included in the runway threshold for aircraft operations.

A 40m by 12m 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 sealed runway has an ESWL 1020kg, and the grass runway has yet to be determined. The latest AIP (effective 19 November 2009) is attached in Appendix Y.

There is an assortment of 14 buildings throughout the aerodrome (includes one under construction). Skydive Abel Tasman and the Motueka Aero Club, along with other small hangars are along the College Street frontage. An unsealed carpark is between the Skydive Abel Tasman and the Motueka Aero Club. Nelson Aviation College is on Queen Victoria Street. There is an aviation fuel dispenser pumping from a tank adjacent to the Aero Club building, and 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 TRMP.

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.

B.3.1. Land Tenure

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 TRMP the site is designated for aerodrome purposes with an underlying zone of Rural 1.

The designation provides for the 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 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.

B.3.2. Structures and Layout

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.

An improvement plan (Appendix V) item is to clearly identify and document all Council owned assets.

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

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 to south, and the other running south-east to north-west, crossing the north to south runway. The north to south runway is sealed and is the primary runway at 11m wide by 825m long, and was resealed in 2007. The cross runway is 534m long by 12m wide. The allowable ESWL is 3000kg for the sealed runway and 1000kg for the unsealed runway.

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 TRMP.

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 Uses with Special Conditions:

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

- parachuting
- helicopter pilot training
- drag racing (Motueka only)
- 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:

- hours/days of operation
- regulations of flight paths
- restrictions to the use of noisy aircraft.

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

B.5 Compliance with Levels of Service

There are no issues relating to compliance with the levels of service.

B.6 Asset Condition

B.6.1. General

Six-weekly walkover inspections are undertaken either jointly or individually by the Manager, Property Services and the management committees for each aerodrome.

B.6.2. Motueka Aerodrome

The sealed runway is in average condition and is programmed for resurfacing in Year 13.

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

The sealed car park is in poor condition and is programmed for resurfacing in Year 1.

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

B.6.3. Takaka Aerodrome

The sealed runway was resealed in 2007 and is in good condition.

The cross runway is unsealed and is in very poor condition but is very seldom used. Heavy maintenance is programmed for Year 1, or reconstruction in Year 4. These options are mutually exclusive.

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.

B.7 Resource Consents

There are no resource consents relating to the aerodromes activity.

B.8 Strategic Management Approach

B.8.1. Motueka Key Issues

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 four 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.8.2. Motueka Strategic Approach

The strategic approach to these issues is:

- develop an aerodrome Management Plan and Development Plan
- 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 resurfacing and upgrade programmes by loan over the life of the upgrade.

B.8.3. Takaka Key Issues

The key issues for the Takaka Aerodrome are:

- limited demand for the facility
- reliance on the general rate to fund the shortfall in operating income and annual upgrades, particularly runway resurfacing and drainage.

B.8.4. Takaka Strategic Approach

The strategic approach to these issues is.

- develop an aerodrome Management Plan and Development Plan
- encourage the development of hangars, aviation businesses and leasing of other assets to supplement income
- fund the runway resurfacing by loan over the life of the upgrade.

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

APPENDIX D. ASSET VALUATIONS

D.1 Declaration of Valuation

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 Tasman District Council.

Council requires its infrastructure asset register and valuation to be updated in accordance with Financial Reporting Standards and the AMP improvement plan.

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 ending June 2009.

- 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.

(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 were previously valued every three years, but Council has now moved to a two year revaluation cycle. Historic asset valuations reports are held with Council.

Council was due to revalue their assets as at end June 2011, however the small number of changes made to the networks since the 2009 valuations, the decision was made to defer the valuation until the end of June 2012.

D.3 2009 Valuation - Aerodromes

The Aerodromes assets were last re-valued in June 2009 and are reported under separate cover[1]. Key assumptions in assessing the asset valuations are described in detail in the valuation report.

D.3.1. Asset Data

The majority of information for valuing the assets was obtained from Council's Confirm database. This is the first time the database has been used to revalue Council's assets. In the past, asset registers based on excel spreadsheets have been used. The data confidence is detailed in Table D-1 below.

Table D-1: Data Confidence

Asset Description	Confidence	Comments
Aerodromes Assets	B - Reliable	All assets are listed. Runway assets could be split into separable components of sub base and surface type.

Based on NZ Infrastructure Asset Valuation and Depreciation Guidelines – Edition 2, Table 4.3.1: Data confidence grading system.

D.3.2. Asset Lives

The *Base Useful Lives* for each asset type as published in the NZ Infrastructure Asset Valuation and Depreciation Guidelines Manual were used as a guideline for the lives of the assets in the valuation. Generally lives are taken as from the mid-range of the typical lives indicated in the Valuation Manual where no better information is available. Lives used in the valuation are presented in Table D-2 below.

Table D-2: Asset Lives

Item	Life (years)	Minimum Remaining Life (years)
Aerodrome Assets		
Grass runway	25	5
Sealed runway	30	5

[1] Infrastructural Asset Revaluation, June 2009 – MWH New Zealand Ltd report for Tasman District Council

D.3.3. 2009 Valuation

The Optimised Replacement Value, Optimised Depreciated Replacement Value, Total Depreciation to Date and Annual Depreciation and of the aerodrome assets are summarised in Table D-3.

Table D-3: Aerodrome 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
Aerodromes 2009	2,475,379	1,056,516	1,418,862	73,738
% Increase	8.68%	-13.11%	33.63%	13.52%

Optimised Replacement Value of aerodrome assets have increased by 8.68%.

The decrease in Optimised Depreciated Replacement Value (13.11%) is due to additional site specific data being collected. This information has led to changes in design lives assigned to some assets.

The Optimised Replacement Value, Optimised Depreciated Replacement Value, Total Depreciation to Date and Annual Depreciation and of each aerodrome is summarised in Table D-4.

Table D-4: Aerodrome Valuation Summary

	Optimised Replacement Value ($)	Optimised Depreciated Replacement Value ($)	Total Depreciation to Date ($)	Annual Depreciation ($/yr)
Takaka	1,633,170	779,276	44,691	853,894
Motueka	842,209	277,240	29,048	564,968

APPENDIX E. OPERATION AND MAINTENANCE

E.1 Overview

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 Committee. These include but are not restricted to:

- operations and maintenance works
- hours of operation
- types of uses
- occupancy
- landing fees and other charges.

The Manager Property Services, 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 Council may, at its discretion, delegate some of their authority to a 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.

The Motueka Aerodrome Management Plan is currently under review. This document covers the day to day management of the aerodrome, the activities carried out thereon and the relationship between users and aerodrome management. The Motueka Aerodrome Operations and Safety Committee oversee operational and safety requirements as well as best practice on the aerodrome and this committee is represented by aerodrome users and the Manager Property Services.

E.2 Maintenance Strategy

Council's strategy is to maintain the aerodromes with associated runways and aids to navigation, 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. Council expects Motueka Aerodrome to work towards being able to operate without a rates contribution.

At Motueka, all buildings are privately owned. An improvement for this plan is to bring the council owned assets at Takaka into the Aerodromes AMP. 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.2.1. Control and Management of Operations and Maintenance

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

For Motueka, the grass runways, taxiways, inspections and vegetation control of the sealed runways and grass environments are managed through a competitively tendered three year maintenance contract. A new contract was awarded to Sicon commencing 1 September 2011. All other reported minor maintenance on the sealed runway or carpark areas is undertaken as required by selected contractors.

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 within the limits of their delegated authority.

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

E.3 Maintenance Standards

The sealed surfaces, grass runways and taxiways, painted markings and navigational aids are maintained in accordance with best practice. At Takaka this is the responsibility of the Management Committee and at Motueka the day to day overview is undertaken by the Operations and Safety Committee plus staff and consultant involvement as required.

E.3.1. Deferred Maintenance

Deferred maintenance is:

- the shortfall in rehabilitation or refurbishment work required to maintain the service potential of the asset,

  or

- maintenance and renewal work that was not performed when it should have been, or when it was scheduled to be and which has therefore been put off or delayed for a future period.

Heavy maintenance of the crosswind runway at Takaka is deferred maintenance and has been deferred indefinitely. This work has been deferred due to funding restrictions. The Council has decided to reduce general rate funding of the aerodromes with a view to making the aerodromes self-funding.

With exception of the above, the current budget levels are believed to be sufficient to provide the proposed levels of service and therefore no other maintenance work has been deferred. This however is subject to the changes in levels of service and expectations of customers.

E.3.2. Increase in Network Size through Development

Extension of the aerodromes boundaries are unlikely, however some development is likely to occur within the aerodromes such as new car parks and facilities to support additional users and the construction of new hangers. Additional maintenance and operation costs for these assets will need to be included.

E.4 Engineering Studies

There are no engineering studies identified for the aerodromes activity.

E.5 Forecast Operations and Maintenance Expenditure

Figure E-1 and Table E-1 detail the projected operations and maintenance expenditure for the next 20 years.

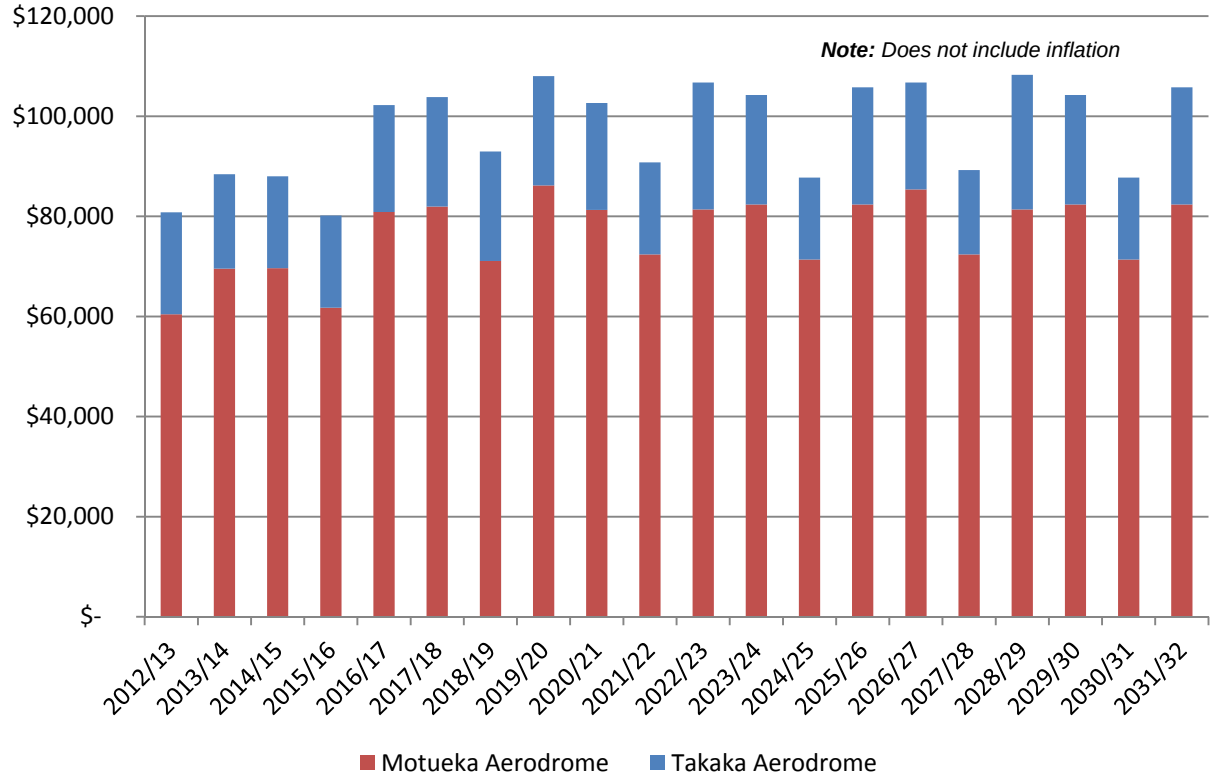

Figure E-1: 2012 – 2032 Aerodromes Operations and Maintenance Expenditure

Table E-1: 2012 – 2032 Aerodromes Operations and Maintenance Expenditure

Item	Scheme	Project Name	GL Code	Total Project Cost	Total O&M	2012/13 Year 1	2013/14 Year 2	2014/15 Year 3	2015/16 Year 4	2016/17 Year 5	2017/18 Year 6	2018/19 Year 7	2019/20 Year 8	2020/21 Year 9	2021/22 Year 10	2022/23 Year 11	2023/24 Year 12	2024/25 Year 13	2025/26 Year 14	2026/27 Year 15	2027/28 Year 16	2028/29 Year 17	2029/30 Year 18	2030/31 Year 19	2031/32 Year 20
1	Takaka Aerodrome	Activity Management Plan Updates	1103220301	59,000	59,000	0	2,000	2,000	0	5,000	5,000	0	5,000	5,000	0	5,000	5,000	0	5,000	5,000	0	5,000	5,000	0	5,000
2	Takaka Aerodrome	Rates	11032508	60,000	60,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000
3	Takaka Aerodrome	Asset Revaluation	11032205	5,000	5,000	-	500	-	500	-	500	-	500	-	500	-	500	-	500	-	500	-	500	-	500
6	Takaka Aerodrome	Crosswind Runway Maintenance	1103240105	100,000	100,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000
31	Takaka Aerodrome	House Expenses	1103240106	19,240	19,240	500	500	500	2,040	500	500	2,040	500	500	2,040	500	500	500	2,040	500	500	2,040	500	500	2,040
7	Takaka Aerodrome	Improvement Plan	1103220302	7,000	7,000	350	350	350	350	350	350	350	350	350	350	350	350	350	350	350	350	350	350	350	350
9	Takaka Aerodrome	Runway and Taxiway Maintenance	1103240103	120,000	120,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000
10	Takaka Aerodrome	Runway Remarks	1103240102	16,000	16,000	4,000	0	0	0	0	0	4,000	0	0	0	4,000	0	0	0	0	0	4,000	0	0	0
12	Motueka Aerodrome	Activity Management Plan Updates	1101220302	118,000	118,000	0	4,000	4,000	0	10,000	10,000	0	10,000	10,000	0	10,000	10,000	0	10,000	10,000	0	10,000	10,000	0	10,000
13	Motueka Aerodrome	Aerodrome Maintenance	11012401	760,000	760,000	30,000	30,000	30,000	30,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000
14	Motueka Aerodrome	Rates	11012508	190,000	190,000	9,500	9,500	9,500	9,500	9,500	9,500	9,500	9,500	9,500	9,500	9,500	9,500	9,500	9,500	9,500	9,500	9,500	9,500	9,500	9,500
15	Motueka Aerodrome	Asset Revaluation	11012205	10,000	10,000	0	1,000	0	1,000	0	1,000	0	1,000	0	1,000	0	1,000	0	1,000	0	1,000	0	1,000	0	1,000
16	Motueka Aerodrome	CAA Requirements	1101240107	10,000	10,000	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500
17	Motueka Aerodrome	Carpark Maintenance	1101240104	20,000	20,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
19	Motueka Aerodrome	Grass Runway and Taxiway Maintenance	1101240105	60,000	60,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000
21	Motueka Aerodrome	Improvement Plan	1101220303	13,000	13,000	650	650	650	650	650	650	650	650	650	650	650	650	650	650	650	650	650	650	650	650
22	Motueka Aerodrome	Inspections, NOTAM Management, Contract Management	1101220301	40,000	40,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000
27	Motueka Aerodrome	Raise Fire Hydrants	1101240108	5,000	5,000	0	0	5,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28	Motueka Aerodrome	Runway Remarks	1101240106	12,000	12,000	0	4,000	0	0	0	0	0	4,000	0	0	0	0	0	0	4,000	0	0	0	0	0
29	Motueka Aerodrome	Sealed Runway Maintenance	1101240103	21,000	21,000	1,050	1,050	1,050	1,050	1,050	1,050	1,050	1,050	1,050	1,050	1,050	1,050	1,050	1,050	1,050	1,050	1,050	1,050	1,050	1,050
33	Takaka Aerodrome	Insurances	11032506	30,000	30,000	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500
34	Motueka Aerodrome	Insurances	11012506	60,000	60,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000
35	Motueka Aerodrome	Professional services	11012203	100,000	100,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000
36	Motueka Aerodrome	Promotions and communications	11012512	24,000	24,000	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200
37	Motueka Aerodrome	Legal fees	11012202	40,000	40,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000
38	Motueka Aerodrome	Mot Aero LAPP Insurance	1101250601	45,005	45,005	1,552	1,655	1,759	1,862	1,966	2,069	2,173	2,276	2,380	2,483	2,483	2,483	2,483	2,483	2,483	2,483	2,483	2,483	2,483	2,483
		TOTALS		1,944,245	1,944,245	80,802	88,405	88,009	80,152	102,216	103,819	92,963	108,026	102,630	90,773	106,733	104,233	87,733	105,773	106,733	89,233	108,273	104,233	87,733	105,773

N.B. Does not include inflation

APPENDIX F. DEMAND AND FUTURE NEW CAPITAL REQUIREMENTS

F.1 Growth Demand and Supply Model (GDSM)

F.1.1. Model Summary

A comprehensive Growth Demand and Supply Model (GDSM or growth model) has been developed to provide predictive information for population growth and business growth, and from that, information about dwelling and building development across the district and demand for infrastructure services. The GDSM underpins the Council's long term planning through the Activity Management Plans, Long Term Plans and supporting policies (eg. Development Contributions Policy).

This 2011 GDSM is a third generation growth model with previous versions being completed in 2005 and 2008.

Population growth within the district does not have a direct affect on the aerodromes activity. Therefore the GDSM outputs are not relevant to this activity.

F.2 Projection of Demand for Aerodromes Services

F.2.1. Effect 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 transportation, 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. There are no growth related projects included in the 20 year forecast.

F.2.2. Implications of Changes 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.

F.2.3. Implications of 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.

F.2.4. Implications of Legislative Change

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.

F.3 Assessment of New Capital Works

During May to July 2011, a number of workshops with the project team (including asset managers, consultants and operations and maintenance staff) were 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 system 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 the Capital Forecast spreadsheet/database that enables listing and summarising 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.

F.4 Determination of Project Drivers and Programming

All expenditure must be allocated against at least one of the following project drivers.

Operation and Maintenance:	operational activities which have no effect on asset condition but are necessary to keep the asset utilised appropriately and on-going day-to-day work required to keep assets operating at required service levels2.
Renewals:	significant work that restores or replaces an existing asset towards its original size, condition or capacity[3].
Increase Level of Service:	works to create a new asset to upgrade or improve an existing asset beyond its original capacity or performance to improve the level of service provided to existing customers.
Growth:	works to create a new asset to upgrade or improve an existing asset beyond its original capacity or performance to provide for the anticipated demands of future growth.

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.

[2] Definition from International Infrastructure Management Manual – Version 3.0, 2006, pg 3.114
[3] Definition from International Infrastructure Management Manual – Version 3.0, 2006, pg 3.114

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. A guideline was prepared to ensure a consistent approach to how each project is apportioned between the drivers.

Some projects may be driven fully or partly by needs for renewal. These aspects are covered in Appendix I.

The projects have been scheduled out across the 20 year period, primarily based on their drivers. They were then loaded into Mapinfo along with projects from all other engineering activities to allow programme managers to assess any programme clashes or optimisation opportunities.

F.5 Project Prioritisation

All projects identified as potential solutions to meet future demand, increase levels of service, or as renewal were discussed in workshops during May to July 2011. These workshops were attended by key council staff, key members of the MWH New Zealand Ltd team, and representatives from Council's contractors.

Each project identified was assigned an initial project priority of either non-discretionary or discretionary where:

A non-discretionary investment is one that relates to:

- a critical asset, that without investment is likely or almost certain to fail within the next three years, with a medium, major or extreme impact
- any asset that has a regulatory requirement to make the proposed investment.

A discretionary investment is one that relates to:

- a non-critical asset with no regulatory requirement to make the proposed investment
- a critical asset where asset failure is possible, unlikely or very unlikely to occur within the next three years with no regulatory requirement to make the proposed investment
- a critical asset where asset failure has only a negligible or minor impact with no regulatory requirement to make the proposed investment.

Council is currently reviewing the way that they prioritise their work programmes; the outcome of this review will be further developed over the coming year to be implemented for the next AMP update.

F.6 Forecast New Capital Work Expenditure

The capital programme that has been forecast for this activity where the primary driver is classed as new works (ie. growth or levels of service) is shown in Figure F-1 and Table F-1.

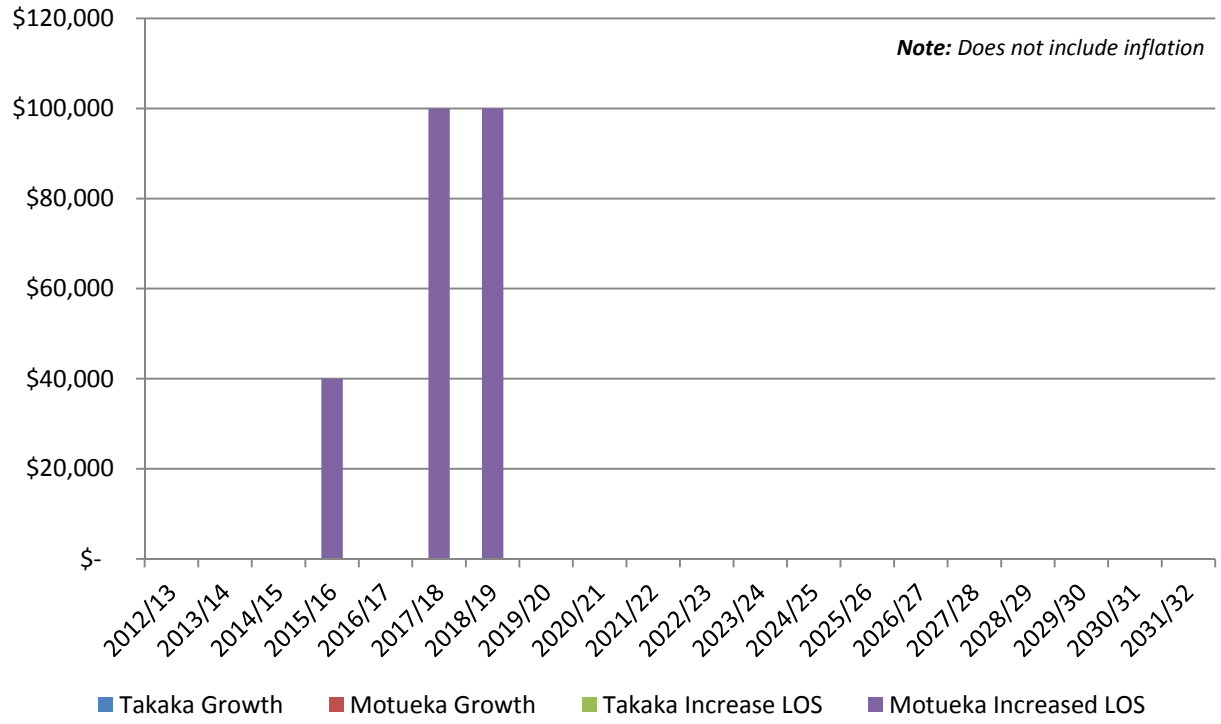

Figure F-1: 2012 – 2032 Aerodromes New Capital Expenditure

Table F-1: 2012 – 2032 Aerodromes New Capital Expenditure

Item	Scheme	Project Name	Description	GL Code	Total Project Cost	Total New Capital	2012/13 Year 1	2013/14 Year 2	2014/15 Year 3	2015/16 Year 4	2016/17 Year 5	2017/18 Year 6	2018/19 Year 7	2019/20 Year 8	2020/21 Year 9	2021/22 Year 10	2022/23 Year 11	2023/24 Year 12	2024/25 Year 13	2025/26 Year 14	2026/27 Year 15	2027/28 Year 16	2028/29 Year 17	2029/30 Year 18	2030/31 Year 19	2031/32 Year 20	Beyond Year 20
24	Motueka Aerodrome	New Carpark Construction	Construction of new carpark off Marchwood Park Road	1101620912	40,000	40,000	0	0	0	40,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	Motueka Aerodrome	Power and Data Reticulation	Installation of new power and data services	1101620913	90,000	90,000	0	0	0	0	0	90,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26	Motueka Aerodrome	Pressure Wastewater System	Design and installation of new wastewater system	1101620914	110,000	110,000	0	0	0	0	0	10,000	100,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0
				TOTALS	240,000	240,000	0	0	0	40,000	0	100,000	100,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0

N.B. Does not include inflation

APPENDIX G. DEVELOPMENT CONTRIBUTIONS AND FINANCIAL CONTRIBUTIONS

Information on Development Contributions Policy can be found in Part 5 of the Council's Long Term Plan (LTP). The Policy is adopted in conjunction with the LTP and will come into effect on 1 July 2012.

The Policy sets out the development contributions payable by developers, how and when they are to be calculated and paid, and a summary of the methodology and rationale used in calculating the level of contributions.

The key purpose of the Development Contribution Policy is to ensure that growth, and the cost of infrastructure to meet that growth, is funded by those who cause the need for and benefit from the new or additional infrastructure, or infrastructure of increased capacity.

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 transportation, 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 consent is the Resource Management Act (RMA) 1991. The RMA deals with:

- the control of the use of land.

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

There are no existing resource consents which relate to the operation or maintenance of the aerodromes as these activities are covered by the designation detailed below.

H.3 Property Designations

Council has various designations for 'Aerodrome' which ensures that:

"*The existing aerodromes, Motueka and Puramahoi are the responsibility of the Tasman District Council. 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*"[4].

All Council designations associated with the Aerodromes activity are summarised in Table H-1 below.

Table H-1: Property Designations Relating to Aerodromes

ID	Location of Site	Area Map No	Site Name/ Function	Purpose of Designation	Legal Description	Area (ha)	Duration of Designation
D209	Motueka	AM 52, 118	Motueka Aerodrome	Aerodrome	Lot 1-4 DP5499, Lot 1 DP7107, See 190 Pt Section 189 District of Motueka.	30.3875	*
D210	Puramahoi	AM 75	Takaka Aerodrome	Aerodrome	Section 20, Block V Waitapu Survey District.	39.6592	*

[4] Tasman Resource Management Plan Appendix 1 to Part II Land section A1.10

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.

I.2 Renewal Strategy

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 the asset age and remaining life predictions from the valuation database, calculating when the remaining life expires, field validation of the current condition, and converting that into a programme of replacements based on current unit rates.
- Reviewing and justifying the renewals forecasts using the accumulated knowledge and experience of asset operations and asset management staff.

The renewal programme is reviewed in detail during each AMP update (ie. three yearly), and every year the annual renewal programme is reviewed and planned with the input of the maintenance contractor and consultant.

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 Delivery of Renewals

Minor renewal projects are typically carried out by the maintenance contractor. Contracts for larger value renewal projects are tendered in accordance with the Procurement Strategy. Prior to the asset being renewed, the maintenance contractor or consultant will inspect these assets to confirm whether renewal is actually necessary. In the event it does not need to be renewed, a recommended date of renewal is then entered back into the Confirm database. This new date will then be included in the next AMP update.

I.4 Renewal Standards

I.4.1. General

The work to be performed and materials to be used shall comply with the current Council's Engineering Standards and Policies.

Resurfacing of carparks and runways will typically be undertaken by Council's resurfacing contractor who is engaged to undertake sealed road resurfacing throughout the district. Packaging the work in this way is an efficient way of engaging an experienced contractor at competitive rates. The resurfacing contractor is required to comply with the various NZ Transport Agency standards for chip sealing, asphaltic concrete and markings. The layout of markings will be in accordance with the CAA requirements.

I.4.2. Carparks

Carpark chip seal surfaces are assumed to have an average life of 10 years before requiring a reseal. This life span can be significantly affected by the level and type of use the carpark receives. Therefore it is essential that the renewal date is validated by the condition of the surface. If the surface is assessed to be in good condition the renewal is likely to be deferred, however if the surface is deteriorating faster than expected the renewal will be advanced.

I.4.3. Sealed Runways

Similar to carparks above, sealed runways are assumed to have an average life. This is 20 years for asphaltic concrete surfaces, and 15 years for chip seal surfaces. The programming of renewals will be in a similar nature to carparks and is expected to vary based on use and condition.

I.4.4. Pavement Markings

Pavement markings are assumed to have a life of six years before requiring a remark. The factors considered in making this assumption are the rubber build up from aircraft wheels and the drag racing at Motueka is removed routinely, and markings do not require a high level of reflectivity as the aerodromes do not operate during hours of darkness.

Resurfacing of the runways will affect the timing of remarking. The initial markings will be undertaken immediately following the resurfacing, following that the first remark will be two years later and then returns to the six year cycle beyond the first remark. The reason being a remark is required earlier for new markings to build up the marking thickness, which effectively increase the resilience of the markings.

I.5 Deferred Renewals

Deferred renewals is the shortfall in renewals required to maintain the service potential of the assets. This can include:

- renewal work that is scheduled but not performed when it should have been and which is has been put off for a later date (this can often be due to cost and affordability reasons)
- an overall lack of investment in renewals that allows the asset to be consumed or run-down, causing increasing maintenance and replacement expenditure for future communities.

I.5.1. Assessment of Deferred Renewals

The extent of deferred renewals can be identified by comparing the accumulated investment in renewals with accumulated annual depreciation. This information then forms the basis of a renewals strategy. Council is yet to complete the process for this activity and hence it has been included in the improvement plan.

Smoothing of the grass runway at Motueka, and reconstruction of the cross-wind runway at Takaka are deferred renewals. This work has been deferred due to funding restrictions. The Council has decided to reduce general rate funding of the aerodromes with a view to making the aerodromes self-funding.

I.5.2. Management and Mitigation of Deferred Renewals

Whilst the full exact extent of deferred renewals is not identified, Council can manage potential effects on levels of service by routinely undertaking condition rating and reviewing the renewals programme.

I.6 Forecast Renewals Expenditure

Figure I-1 and Table I-1 shows the projected renewal costs for the next 20 years.

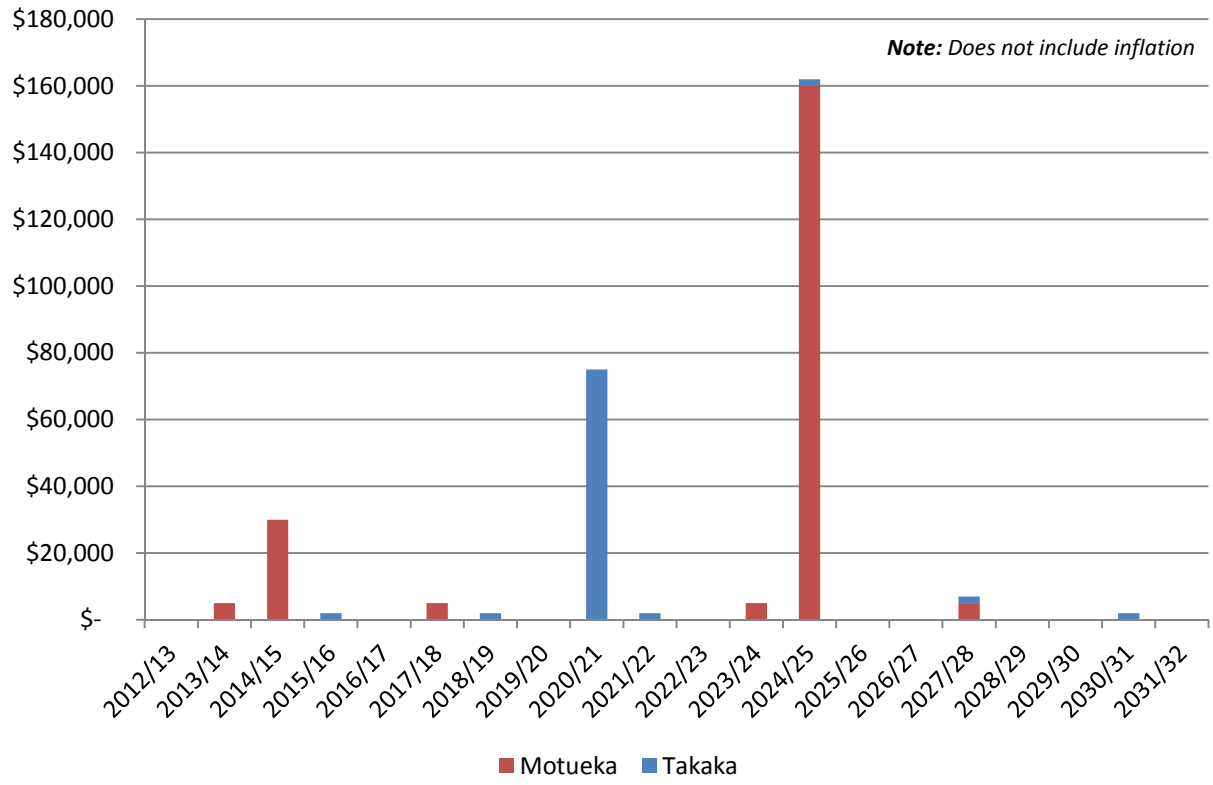

Figure I-1: 2012 – 2032 Aerodromes Renewals Expenditure

Table I-1: 2012 – 2032 Aerodromes Renewals Expenditure

Item	Scheme	Project Name	GL Code	Total Project Cost	Total Renewals	2012/13 Year 1	2013/14 Year 2	2014/15 Year 3	2015/16 Year 4	2016/17 Year 5	2017/18 Year 6	2018/19 Year 7	2019/20 Year 8	2020/21 Year 9	2021/22 Year 10	2022/23 Year 11	2023/24 Year 12	2024/25 Year 13	2025/26 Year 14	2026/27 Year 15	2027/28 Year 16	2028/29 Year 17	2029/30 Year 18	2030/31 Year 19	2031/32 Year 20
11	Takaka Aerodrome	Sealed Runway Reseal	11036209001R	75,000	75,000	0	0	0	0	0	0	0	0	75,000	0	0	0	0	0	0	0	0	0	0	0
18	Motueka Aerodrome	Carpark Reseal	11016209002R	10,000	10,000	0	5,000	0	0	0	0	0	0	0	0	0	5,000	0	0	0	0	0	0	0	0
20	Motueka Aerodrome	Grass Runway Rehab	11016209003R	30,000	30,000	0	0	30,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23	Motueka Aerodrome	Marchwood Carpark Reseal	1101620911R	10,000	10,000	0	0	0	0	0	5,000	0	0	0	0	0	0	0	0	0	5,000	0	0	0	0
30	Motueka Aerodrome	Sealed Runway Reseal	11016209001R	160,000	160,000	0	0	0	0	0	0	0	0	0	0	0	0	160,000	0	0	0	0	0	0	0
39	Takaka Aerodrome	House Expenses	1103240106R	11,760	11,760	0	0	0	1,960	0	0	1,960	0	0	1,960	0	0	1,960	0	0	1,960	0	0	1,960	0
			TOTALS	296,760	296,760	0	5,000	30,000	1,960	0	5,000	1,960	0	75,000	1,960	0	5,000	161,960	0	0	6,960	0	0	1,960	0

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.

The total useful lives for aerodromes infrastructure has been summarised in Appendix D – Asset Valuations.

J.2 Decline in Service Potential

The decline in service potential is a decline in the future economic benefits (service potential) embodied in an asset.

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

Council's borrowing policy is that it only funds capital and renewal expenditure through borrowing, normally for 20 years, but shorter or longer terms are used for some assets depending on how long they are expected to last before they need to be replaced. Council has adopted this approach instead of setting aside funds to replace assets as they wear out, ie. funding depreciation. By the time the asset needs to be replaced Council would normally have repaid the loan for the original asset and can borrow for the replacement asset.

This method of funding capital expenditure provides intergenerational equity, this means that those people that receive the benefit from the asset generally pay for the asset. Notwithstanding this, Council is investigating whether other means of funding assets is more appropriate. Any change is likely to result in an increase in rates and charges in the immediate time period, but might provide longer term benefits.

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 LTP. 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 Borrowing Policy is found in Volume 2 of Council's LTP.

K.2 Loans

Loans to fund Capital works over the next 10 years are projected to add up to the following detailed in Table K-1.

Table K-1: Projected Capital Works Funded by Loan for Next 10 Years

Aerodromes	2012/13 Year 1	2013/14 Year 2	2014/15 Year 3	2015/16 Year 4	2016/17 Year 5	2017/18 Year 6	2018/19 Year 7	2019/20 Year 8	2020/21 Year 9	2021/22 Year 10
Loans Raised **(x 1,000)**	0	0	0	0	0	124	129	0	105	0
Opening Loan Balance**(x 1,000)**	71	64	58	52	47	42	157	272	254	338

Note: Figures do not include for inflation and are in thousands of dollars (i.e. x 1000)

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 10 years as shown in Table K-2.

Table K-2: Projected Annual Loan Repayment Costs for Next 10 Years

Aerodromes	2012/13 Year 1	2013/14 Year 2	2014/15 Year 3	2015/16 Year 4	2016/17 Year 5	2017/18 Year 6	2018/19 Year 7	2019/20 Year 8	2020/21 Year 9	2021/22 Year 10
Loan Interest **(x 1,000)**	4.1	3.7	3.4	3.2	3.0	6.9	15.9	18.7	21.6	23.8
Loan Principal **(x 1,000)**	6.7	6.7	6.1	4.9	4.9	7.9	14.3	17.5	21.0	24.5

Note: Figures do not include for inflation and are in thousands of dollars (ie. x 1000)

APPENDIX L. SUMMARY OF FUTURE OVERALL FINANCIAL REQUIREMENTS

A Funding Impact Statement for the Aerodromes activity is not separately produced. It is report on at the higher level through the Council Enterprises and Property Funding Impact Statement shown below in Table L-1.

Table L-1: Summary of Project Costs and Income for the Next 10 Years

Council Enterprises and Property	2011/2012 Budget $	2012/2013 Budget $	2013/2014 Budget $	2014/2015 Budget $	2015/2016 Budget $	2016/2017 Budget $	2017/2018 Budget $	2018/2019 Budget $	2019/2020 Budget $	2020/2021 Budget $	2021/2022 Budget $
SOURCES OF OPERATING FUNDING											
General rates, uniform annual general charges, rates penalties	276,491	422,229	502,886	500,981	607,334	302,593	218,565	611,098	734,415	776,857	759,682
Targeted rates (other than a targeted rate for water supply)	-	-	-	-	-	-	-	-	-	-	-
Subsidies and grants for operating purposes	-	-	-	-	-	-	-	-	-	-	-
Fees, charges and targeted rates for water supply	-	-	-	-	-	-	-	-	-	-	-
Internal charges and overheads recovered	492,726	791,769	810,891	823,520	839,022	856,455	873,361	904,683	1,101,819	1,300,550	1,301,206
Local authorities fuel tax, fines, infringement fees, and other receipts	3,586,692	2,861,236	3,117,696	3,074,125	4,154,271	4,259,453	4,635,253	5,389,300	5,694,630	6,049,695	5,957,843
TOTAL OPERATING FUNDING	4,355,909	4,075,234	4,431,473	4,398,626	5,600,627	5,418,501	5,727,179	6,905,081	7,530,864	8,127,102	8,018,731
APPLICATIONS OF OPERATING FUNDING											
Payments to staff and suppliers	2,790,647	2,716,152	2,813,023	2,735,372	3,225,754	3,396,348	3,609,995	5,059,676	4,477,961	4,490,785	4,978,472
Finance costs	511,539	341,650	331,884	322,288	316,594	304,911	296,368	308,011	424,529	551,542	515,820
Internal charges and overheads applied	465,130	501,421	521,382	577,554	573,724	595,513	637,330	622,341	650,992	699,571	696,073
Other operating funding applications	-	-	-	-	-	-	-	-	-	-	-
TOTAL APPLICATIONS OF OPERATING FUNDING	3,767,316	3,559,223	3,666,289	3,635,214	4,116,072	4,296,772	4,543,693	5,990,028	5,553,482	5,741,898	6,190,365
SURPLUS (DEFICIT) OF OPERATING FUNDING	588,593	516,011	765,184	763,412	1,484,555	1,121,729	1,183,486	915,053	1,977,382	2,385,204	1,828,366

Council Enterprises and Property	2011/2012	2012/2013	2013/2014	2014/2015	2015/2016	2016/2017	2017/2018	2018/2019	2019/2020	2020/2021	2021/2022
	Budget $	Budget $	Budget $	Budget $	Budget $	Budget $	Budget $	Budget $	Budget $	Budget $	Budget $
Subsidies and grants for capital expenditure	-	-	-	-	-	-	-	-	-	-	-
Development and financial contributions	-	-	-	-	-	-	-	-	-	-	-
Increase (decrease) in debt	1,658,655	(178,851)	(327,948)	(322,142)	(715,442)	(385,382)	(239,914)	(453,207)	2,937,305	(1,235,175)	(1,543,584)
Gross proceeds from sale of assets	-	500,000	500,000	-	-	-	-	-	-	-	-
Lump sum contributions	-	-	-	-	-	-	-	-	-	-	-
TOTAL SOURCES OF CAPITAL FUNDING	1,658,655	321,149	172,052	(322,142)	(715,442)	(385,382)	(239,914)	(453,207)	2,937,305	(1,235,175)	(1,543,584)
APPLICATIONS OF CAPITAL FUNDING											
Capital expenditure											
- to meet additional demand	2,163,354	25,950	26,910	27,798	28,744	29,778	30,910	32,146	4,056,949	35,037	36,649
- to improve the level of service	45,234	51,900	2,691	-	45,990	-	123,639	128,585	-	-	-
- to replace existing assets	20,600	162,966	55,973	91,178	65,488	129,833	21,019	262,262	79,127	177,990	79,103
Increase (decrease) in reserves	18,060	596,344	851,662	322,294	628,891	576,736	768,004	38,853	778,611	937,002	169,030
Increase (decrease) in investments	-	-	-	-	-	-	-	-	-	-	-
TOTAL APPLICATIONS OF CAPITAL FUNDING	2,247,248	837,160	937,236	441,270	769,113	736,347	943,572	461,846	4,914,687	1,150,029	284,782
SURPLUS (DEFICIT) OF CAPITAL FUNDING	(588,593)	(516,011)	(765,184)	(763,412)	(1,484,555)	(1,121,729)	(1,183,486)	(915,053)	(1,977,382)	(2,385,204)	(1,828,366)
FUNDING BALANCE	-	-	-	-	-	-	-	-	-	-	-

N.B. Figures do 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.

Funding sources available for aerodromes include:

- leases and rents
- fee recovery
- loans raised
- general rate
- sundry income.

The objective is for these facilities to be operated without support from general rates over the medium term.

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.1 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 (incl GST)

Motueka Aerodrome	Charges Proposed from 1 July 2012 (including GST)	
Aircraft Type	**General Aviation Users Charges (through honesty box)**	**Aerodrome Operators Charges (invoiced monthly)**
Single engine	$5.70	$57.00/month/aircraft
Twin engine	$8.00	$80.00/month/aircraft
Helicopter	$2.00	$25.00/month/aircraft
Microlight/Homebuilt	$5.50	$42.00/month/aircraft
Glider	$5.50	$42.00/month/aircraft
Aircraft Parking Charges For Visiting Aircraft		
Single engine		$5.50 per day or $500.00 pa
Twin engine		$8.00 per day or $760.00 pa
Helicopter		$5.50 per day or $500.00 pa
Microlight/Homebuilt		$4.40 per day or $400.00 pa
Glider		$4.40 per day or $400.00 pa

NB: General Aviation User and parking charges not paid through honesty box will incur a $25.00 administration fee.

Takaka Aerodrome	Charges Proposed from 1 July 2012 (including GST)	
Aircraft Type	**General Aviation Users Charges (through honesty box)**	**Aerodrome Operators Charges (invoiced monthly)**
Single Engine / Helicopter / Glider / Microlight		$6.00
Twin Engine		$8.00

NB: *Charges that have to be invoiced by the Aerodrome Management Committee will incur a $25.00 administration fee.

M.1.1. 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.

M.1.2. Leases

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

APPENDIX N. DEMAND MANAGEMENT

N.1 Introduction

The objective of demand management (sometimes called non-asset solutions) is to actively seek to modify customer demands for services in order to:

- optimise utilisation/performance of existing assets
- reduce or defer the need for new assets
- meet the organisation's strategic objectives
- delivery of a more sustainable service
- respond to customer needs.

N.2 Council's Approach to Demand Management

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.

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.

The Council wishes to encourage more use of the existing facilities to move the activity towards a self-supporting activity (ie. 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.2.1. Demand Management Measures

Council will use a number of measures to assist in the management of demand for aerodromes:

- supporting commercial business growth within the aerodromes
- landing fees.

N.2.2. Demand Management Projects

There are no specific demand management projects related to the aerodromes activity.

N.3 Climate Change

N.3.1. Changing Climatic Patterns

The RMA 1991 states, in Section 7, that a local authority shall take account of the effects of climate change when developing and managing its resources. To assist local authorities, the Ministry for the Environment (MfE) prepared a report[5] to support councils' assessing expected effects of climate change, and to help them prepare appropriate responses when necessary.

This section summarises information presented in the MfE report and a report by NIWA on Climate Change and Variability in the Tasman district. This section aims to explore the impacts of expected climate changes for the Tasman-Nelson region and will conclude with anticipated impacts on this activity.

N.3.2. Temperature Changes

Table N-1 shows that the mean annual temperatures in Tasman-Nelson are expected to increase in the future.

Table N-1: Projected Mean Temperature Change (Upper and Lower Limits) in Tasman-Nelson (in °C)

	Summer	Autumn	Winter	Spring	Annual
Projected changes 1990-2040	0.2 - 2.2	0.2 - 2.3	0.2 - 2.0	0.1 - 1.18	0.2 – 2.0
Projected changes 1990-2090	0.9 – 5.6	0.6 – 5.1	0.5 – 4.9	0.3 – 4.6	0.6 – 5.0

Source: Climate Change and Variability – Tasman District (NIWA, June 2008)

It is the opinion of NIWA[6] scientists that the actual temperature increase this century is very likely to be more than the 'low' scenario given here. Under the mid-range scenario for 2090, an increase in mean temperature of 2.0^0C would represent annual average temperature in coastal Tasman in 2090.

N.3.3. Rainfall Patterns

Table N-2 shown an expected increase in mean annual precipitation in Tasman-Nelson from 1990 to 2090.

Table N-2: Projected Mean Precipitation Change (Upper and Lower Limits) in Tasman-Nelson (in %)

	Summer	Autumn	Winter	Spring	Annual
Projected changes 1990-2040	-14, 27	-2, 19	-4, 9	-8, 9	-3, 9
Projected changes 1990-2090	-13, 30	-4, 18	-2, 19	-20, 19	-3, 14

Source: Climate Change and Variability – Tasman District (NIWA, June 2008)

N.3.4. Heavy Rainfall

A warmer atmosphere can hold more moisture (about 8% more for every 10C increase in temperature), so there is an obvious potential for heavier extreme rainfall under climate change.

More recent climate model simulations confirm the likelihood that heavy rainfall events will become more frequent.

N.3.5. Evaporation, Soil Moisture and Drought

From their report, NIWA conclude that there is a risk that the frequency of drought (in terms of low soil moisture conditions) could increase as the century progresses, for the main agriculturally productive parts of Tasman district.

[5] Climate Change Effects and Impacts Assessment A Guidance Manual for Local Government in NZ (MfE, May 2008)
[6] Climate Change and Variability – Tasman District (NIWA, June 2008)

N.3.6. Climate Change and Sea Level

NIWA report that a revised guidance manual for local government on coastal hazards and climate change is currently in preparation. For the interim, NIWA's report suggests:

1. For planning and decision timeframes out to the 2090s (2090-2099) use.

- A base mean sea-level rise of 0.5m relative to the 1980-1999 average.
- An assessment of the sensitivity of the issue under consideration to possible higher mean sea-levels taking account of possible additional contributions. This level is currently under discussion, but is likely to be no less than 0.8m.

2. For planning and decision timeframes beyond 2100 where, as a result of the particular decision, future adaptation options will be limited, an allowance for mean sea-level rise of 10mm/year beyond 2100 is recommended (in addition to the above recommendation).

These projections are for mean sea levels. Less information is available on how extreme storm sea levels will change with climate change.

N.3.7. Potential Impacts on Council's Infrastructures and Services

Table N-3 lists the potential impacts on Council's infrastructure and services.

Table N-3: Local Government Functions and Possible Climate Change Outcomes

Function	Affected Assets or Activities	Key Climate Influences	Possible Effects
Water supply and irrigation	Infrastructure.	Reduced rainfall, extreme rainfall events and increased temperature.	Reduced security of supply (depending on water source). Contamination of water supply.
Wastewater	Infrastructure.	Increased rainfall.	More intense rainfall (extreme events) will cause more inflow and infiltration into the wastewater network. Wet weather overflow events will increase in frequency and volume. Longer dry spells will increase the likelihood of blockages and related dry weather overflows
Stormwater	Reticulation. Stopbanks.	Increased rainfall. Sea-level rise.	Increased frequency and/or volume of system flooding. Increased peak flows in streams and related erosion. Groundwater level changes. Saltwater intrusion in coastal zones. Changing flood plains and greater likelihood of damage to properties and infrastructure.
Roading	Road network and associated infrastructure (power, telecommunications, drainage).	Extreme rainfall events, extreme winds, high temperatures.	Disruption due to flooding, landslides, fallen trees and lines Direct effects of wind exposure on heavy vehicles melting of tar
Planning/policy development	Management of development in the private sector. Expansion of urban areas. Infrastructure and communications planning.	All.	Inappropriate location of urban expansion areas. Inadequate or inappropriate infrastructure, costly retro-fitting of systems.

Function	Affected Assets or Activities	Key Climate Influences	Possible Effects
Land management	Rural land management.	Changes in rainfall, wind and temperature.	Enhanced erosion. Changes in type/distribution of pest species. Increased fire risk. Reduction in water availability for irrigation. Changes in appropriate land use. Changes in evapotranspiration.
Water management	Management of watercourses/ lakes/wetlands.	Changes in rainfall and temperature.	More variation in water volumes possible. Reduced water quality. Sedimentation and weed growth. Changes in type/distribution of pest species.
Coastal Management	Infrastructure. Management of coastal development.	Temperature changes leading to sea-level changes. Extreme storm events.	Coastal erosion and flooding. Disruption in roading, communications. Loss of private property and community assets. Effects on water quality.
Civil defence and emergency management	Emergency planning and response, and recovery operations.	Extreme events.	Greater risks to public safety, and resources needed to manage flood, rural fire, landslip and storm events.
Bio security	Pest management.	Temperature and rainfall changes.	Changes in the range of pest species.
Open space and community facilities management	Planning and management of parks, playing fields and urban open spaces.	Temperature and rainfall changes. Extreme wind and rainfall events.	Changes/reduction in water availability. Changes in biodiversity. Changes in type/distribution of pest species. Groundwater changes. Saltwater intrusion in coastal zones. Need for more shelter in urban spaces.
Transport	Management of public transport Provision of footpaths, cycleways etc.	Changes in temperatures, wind and rainfall.	Changed maintenance needs for public transport infrastructure. Disruption due to extreme events.
Waste management	Transfer stations and landfills.	Changes in rainfall and temperature.	Increased surface flooding risk Biosecurity changes. Changes in ground water level and leaching.
Water supply and irrigation	Infrastructure.	Reduced rainfall, extreme rainfall events and increased temperature.	Reduced security of supply (depending on water source). Contamination of water supply.

Source: Climate Change Effects and Impacts Assessment (MfE, May 2008)

Council have incorporated the potential impacts of climate change in the 2008 update of the Engineering Standards and Policies.

APPENDIX O. NOT RELEVANT TO THIS ACTIVITY

APPENDIX P. SIGNIFICANT EFFECTS

P.1 Significant Negative Effects

Potential significant negative effects and the proposed mitigation measures are listed below in Table P-1.

Table P-1: Potential Significant Negative Effects

Effect	Council's Mitigation Measure
Noise from aircraft within the aerodromes and flying overhead of residential areas. This has social effects with associated frustration caused by excessive noise.	Council restricts the hours of operation to daylight hours only and enforces noise restrictions. The aerodrome has been in its current location for many years.
Noise from drag cars (Motueka only).	Council restricts the hours of operation and the number of events per year.
Building height restrictions to protect flight paths.	This has very low impact, therefore Council accepts this issue.
Increase traffic movements from both the commercial businesses and drag racing events (Motueka only).	Council restricts the hours of operation, and number of events per year for drag racing.
Aerodrome buildings are out of character with the nearby residential area.	Council sets criteria for exterior finishing and maximum heights.

P.2 Significant Positive Effects

The potential significant positive effects are listed below in Table P-2.

Table P-2: Potential Significant Positive Effects

Effect	Description
Economic development	Provision and maintenance of aerodromes allows for the development of commercial businesses, therefore contributing to economic growth and prosperity.
Community value	The provision and maintenance of the aerodromes is of community value as it contributes to tourism, recreation, education and business within the communities.
Environmental sustainability	Council aims to achieve environmental sustainability whilst managing the aerodromes activity.
Economic efficiency	Council's management of the aerodromes activity using best practice and competitive tendering aims to provide the economic efficiency (ie. best value for money) for the ratepayers.

APPENDIX Q. SIGNIFICANT ASSUMPTIONS, UNCERTAINTIES AND 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. Financial Assumptions

The following assumptions have been made:

- all expenditure is stated in dollar values as at 1 July 2011, with no allowance made for inflation over the planning period
- all costs and financial projections are GST exclusive.

Q.1.2. 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 assumption that has been made that is considered significant include:

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

Q.1.3. 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 the 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.1.4. 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.1.5. 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 LTP/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
- securing land purchase and/or entry agreements.

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 forward projections is not considered significant.

Q.1.6. 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 Council will subsidise the development of the projects.

The correctness of these assumptions has major consequences on the affordability especially of new assets or substantial increases in the level of service. The funding strategy will form one part of the consultation process as the projects are advanced toward construction.

Some decisions have been made to remove some projects from the 20 year forecast. These decisions will mean that some problems may continue to exist. No remedial works or other financial provisions have been made to address these consequences.

Q.1.7. Accuracy of Capital Project Cost Estimates

The financial forecasts contain many 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 estimate accuracy. However, it is preferable to have projects in the next three 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 and 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 – ie. 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 in Table Q-1 below, and from this estimate accuracy 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.1.8. 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.

Q.2 Risk Management

Council has adopted an Integrated Risk Management (IRM) framework and process as the means for managing risk within the organisation. The process integrates with the LTP 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.*"

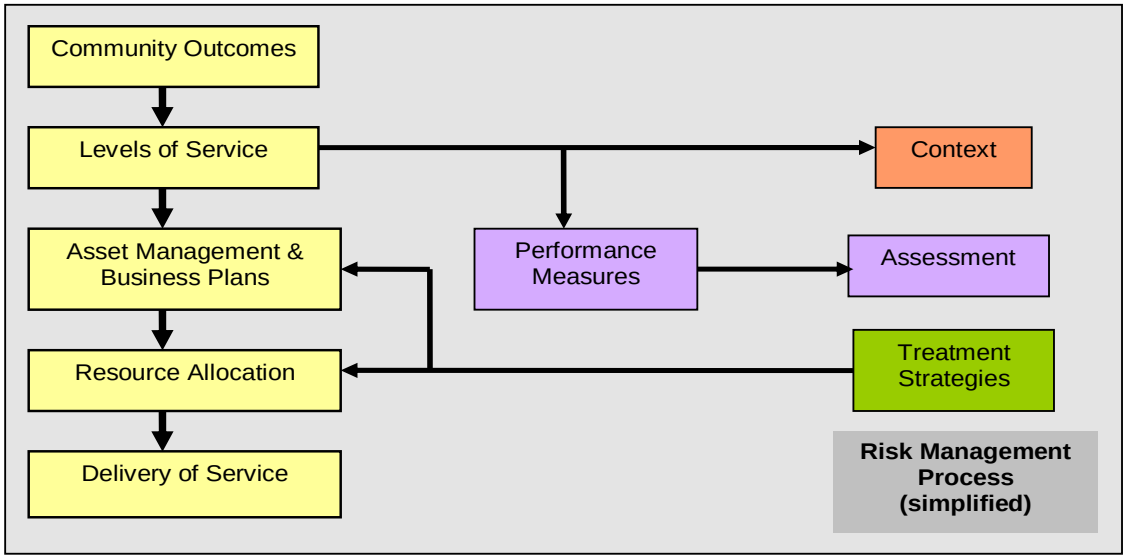

Figure Q-1: Integration of Risk Management Process into LTP Process

The IRM process and framework is intended to:

- to demonstrate responsible stewardship by Council on behalf of its customers and stakeholders
- to act as a vehicle for communication with all parties with an interest in Council's organisational and asset management practices
- provide a focus within Council for on-going 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 Council 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).

Whilst the IRM framework has been adopted within Council, it is primarily used as a process within the individual activities. Council are working towards developing it into a more formally integrated process throughout the whole organisation.

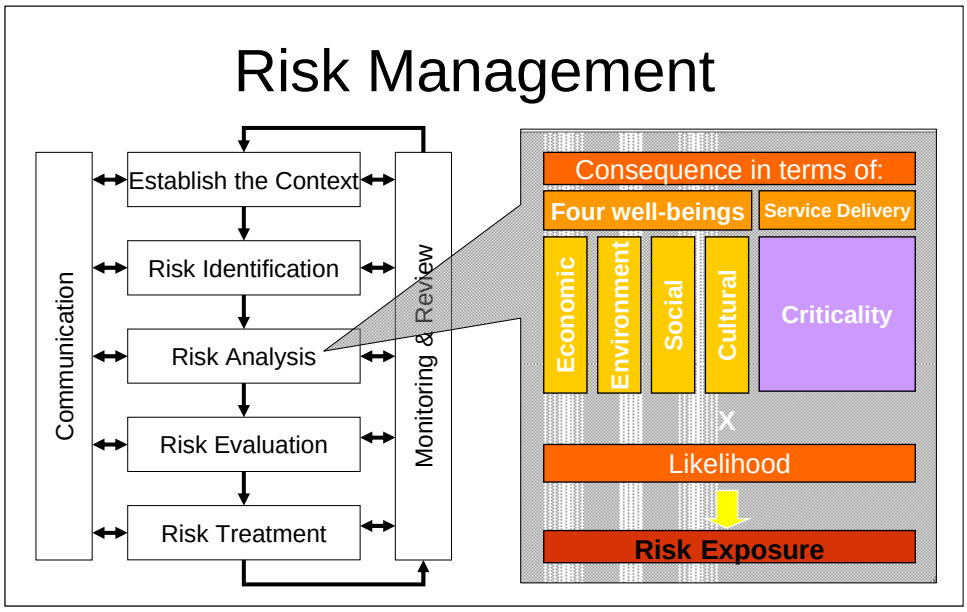

Figure Q-2: Integrated Risk Management Process

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. Descriptions of the consequence categories are detailed in Table Q-2.

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 and Safety	Assessment of impact as it relates to death, injury, illness, life expectancy and health.
	Community Safety and 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. 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 - Activity Management Risk Assessment
- Level 3 - Critical Asset Risk Assessment.

Q.2.1. 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.2.2. Level 2 - Asset Group Risk Assessment

Level 2 risk assessment was carried out at the same time as the Level 1 assessment due to the small number of assets managed within the activity.

In addition to this, the 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.

Q.2.3. Level 3 - Critical Assets Risk Assessment

Critical assets and those assets considered to be significant have been identified. Individual risk assessments have not been carried out for each of the assets, however, they have been assessed against the set if mitigation measures.

Table Q-3 lists the critical and significant assets, where a mitigation measure is felt to be necessary, a capital or operational project has been identified and included in the financial forecasts.

Table Q-3: Significant Asset Level 3 Risk Assessment

		Key		Measure to be considered Measure in place No measure in place - not necessary No measure in place - Project needed			
		Emergency Response Plan	Back up Communications	Critical Spares	Safe Fuel Storage	Maintenance Regime	Re-Direction Capabilities
Motueka	Runways						
	Navigational Aids						
	Taxiways						
	Fuel Storage						
	Car Parking						
Takaka	Runways						
	Navigational Aids						
	Taxiways						
	Fuel Storage						
	Car Parking						
		Emergency Management Plans to be developed in 2011/12					

Q.2.4. Projects to Address Risk Shortfalls

No specific risk management related projects have been included in the 20 year programme. It is intended to complete Emergency Management Plans for both aerodromes in 2011/12.

Q.2.5. Asset Insurance

Tasman District Council has various mechanisms to insure assets against damage. These include:

1. Tasman District Council insures its above ground assets, like buildings, through private insurance which is arranged as a shared service with Nelson City and Marlborough District Councils.
2. Tasman District Council is a member of the Local Authority Protection Programme (LAPP) which is a mutual pool created by local authorities to cater for the replacement of some types of infrastructure assets following catastrophic damage by natural disasters like earthquake, storms, floods, cyclones, tornados, volcanic eruption, tsunami. These infrastructure assets are largely stopbanks along rivers and underground assets like water and wastewater pipes and stormwater drainage.
3. Taman District Council has a Classified Rivers Protection Fund, which is a form of self-insurance. The fund is used to pay the excess on the LAPP insurance, when an event occurs that affects rivers and stopbank assets.
4. Tasman District Council has a General Disaster Fund, which is also a form of self-insurance. Some assets, like roads and bridges, are very difficult to obtain insurance for or it is prohibitively expensive if it can be obtained. For these reasons Council has a fund that it can tap into when events occur which damage Council assets that are not covered by other forms of insurance. Some of the cost of damage to these assets is covered by central government, for example the New Zealand Transport Agency covers around half the cost of damage to local roads and bridges.

Q.2.6. Civil Defence Emergency Management

The Civil Defence Emergency Management Act 2002 was developed to ensure that the community is in the best possible position to prepare for, deal with, and recover from local, regional and national emergencies. The Act requires that a risk management approach be taken when dealing with hazards including natural hazards. In identifying and analysing these risks the Act dictates that consideration is given to both the likelihood of the event occurring and its consequences. The Act sets out the responsibilities for Local Authorities. These are:

- ensure you are able to function to the fullest possible extent, even though this may be at a reduced level, during and after an emergency
- plan and provide for civil defence emergency management within your own district.

Tasman District Council and Nelson City Council deliver civil defence on a joint basis as the Nelson Tasman Civil Defence Emergency Management (CDEM) Group. The vision of the CDEM Group is to build "A resilient Nelson Tasman community".

Civil Defence services are provided by the Nelson Tasman Emergency Management Office. Other council staff are also heavily involved in preparing for and responding to civil defence events. For example, Council monitors river flows and rainfall, and has a major role in alleviating the effects of flooding.

At the time of writing the Nelson Tasman Civil Defence Emergency Management Group released its Draft Regional Plan for community consultation. The Plan sets out how Civil Defence is organised in the region and describes how the region prepares for, responds to and recovers from emergency events.

Q.2.7. Engineering Lifelines

Nelson Tasman Engineering Lifelines (NTEL) project commenced in 2002 and concluded in 2009 with a report and risk assessments titled *Limiting the Impact*. The purpose of the report was:

- to help the Nelson Tasman region reduce its infrastructure vulnerability and improve resilience through working collaboratively
- to assist Lifeline Utilities with their risk reduction programmes and in their preparedness for response and recovery
- to provide a mechanism for information flow during and after an emergency event.

The project was supported and funded by the two controlling authorities, Nelson City Council and Tasman District Council. Following the initial start-up forum in 2002, a Project Steering Group was formed and initial project work was completed. In 2008, the NTEL Group was formed. The initial work to investigate risks and assess vulnerabilities from natural hazard disaster events was divided amongst five task groups:

- Hazards Task Group
- Civil Task Group
- Communications Task Group
- Energy Task Group
- Transportation Task Group.

These groups were then tasked with assessing the risk and vulnerability of segments of their own networks against the impacts of major natural hazard disaster events. These natural hazards included:

- earthquake
- landslide
- coastal / flooding.

The Nelson Tasman region is geotechnically complex with high probabilities of earthquake, river flooding and landslides.

By identifying impacts that these hazards may have on the local communities, NTEL aim to have processes in place to allow the community to return to normal functionality as quickly as possible after a major natural disaster event.

To date the project has identified the impacts of natural hazards and the critical lifelines of the regions service networks including communication, transportation, power and fuel supply, water, sewerage, and stormwater networks.

The initial NTEL assessment work is the first stage of an on-going process to gain a more comprehensive understanding of the impacts of natural hazards in the Nelson Tasman region.

The review date of the NTEL assessments is not rigidly set in place, but it is envisaged that a five-yearly on-going review period is appropriate with more frequent reviews and updates necessary and beneficial as new or updated relevant information becomes available.

Q.2.8. Recovery Plans

These plans are designed to come into effect in the aftermath of an event causing widespread damage and guide the restoration of full service.

The Recovery Plan for the Nelson Tasman Civil Defence and Emergency Management Group (June 2008) identifies recovery principles and key tasks, defines recovery organisation, specifies the role of the Recovery Manager, and outlines specific resources and how funds are to be managed.

Information about welfare provision in the Nelson-Tasman region is contained in a Welfare Plan (December 2005), which gives an overview of how welfare will be delivered during the response and recovery phases of an emergency.

Q.2.9. Business Continuance

Council has a number of processes and procedures in place to ensure minimum impact to aerodromes services in the event of a major emergency or natural hazard event.

- Council have limited business continuity plans that were developed around influenza pandemic planning in 2006.
- Council's aerodromes contractors have up to date Health and Safety Plans in place.
- Council's professional services consultant (MWH New Zealand Ltd) have an Emergency Response and Business Continuity Plan as part of their Branch Guide August 2011.

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

R.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.

R.2 How Do Our Aerodromes Activities Contribute to the 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.

Table R-1: Community Well-beings, Outcomes, Council Objectives, Groups and Activities

Community Outcomes	Council Objectives	Council Groups of Activities	Council Activities
Community Wellbeing - Environmental			
Our unique natural environment is healthy and protected Our urban and rural environments are pleasant, safe and sustainably managed.	To ensure sustainable management of natural and physical resources and security of environmental standards.	Environment and Planning.	• Resource Policy • Environmental Information • Resource Consents and Compliance • Environmental Education, Advocacy and Operations • Regulatory services • Rivers and Flood Management
Our infrastructure is safe, efficient and sustainably managed.	To sustainably manage infrastructural assets relating to Tasman district.	Transportation	• Regional Cycling and Walking Strategy • Land Transportation • Coastal Structures • Aerodromes
		Sanitation, drainage and water supply.	• Solid Waste • Wastewater • Stormwater • Water Supply

Community Outcomes	Council Objectives	Council Groups of Activities	Council Activities
Community Wellbeing - Social and Cultural			
Our communities are healthy, resilient and enjoy their quality of life.	To enhance community development and the social, natural, cultural and recreational assets relating to Tasman district.	Cultural services and grants.	• Cultural services and community grants
Our communities respect regional history, heritage and culture.		Recreation and leisure.	• Community recreation • Camping grounds • Libraries • Parks and Reserves
Our communities have access to a range of cultural, social, educational and recreational services.			
Our communities engage with Council's decision-making processes.		Community support services	• Community facilities • Emergency management • Community housing • Governance
Community Wellbeing - Economic			
Our developing 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.

The table below (Table R-2) describes how the aerodromes activities contribute to the Community Outcomes.

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

Community Outcomes	How Our Aerodromes Activity Contributes to the Community Outcome
Our unique natural environment is healthy 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 urban and rural environments are 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 infrastructure is safe, 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.

R.3 Level Of Service

Levels of service are attributes that Tasman District Council expects of its assets to deliver the required services to stakeholders.

A key objective of this plan is to clarify and define the levels of service for the aerodrome assets, and then identify and cost future operations, maintenance, renewal and development works required of these assets to deliver that service level. This requires converting user's needs, expectations and preferences into meaningful levels of service.

Levels of service can be strategic, tactical, operational or implementation and should reflect the current industry standards and be based on.

- ***Customer Research and Expectations:*** Information gained from stakeholders on expected types and quality of service provided.

- ***Statutory Requirements:*** Legislation, regulations, environmental standards and Council By-laws that impact on the way assets are managed (ie. resource consents, building regulations, health and safety legislation). These requirements set the minimum level of service to be provided.

- ***Strategic and Corporate Goals:*** Provide guidelines for the scope of current and future services offered and manner of service delivery, and define specific levels of service, which the organisation wishes to achieve.

- ***Best Practices and Standards***: Specify the design and construction requirements to meet the levels of service and needs of stakeholders.

R.3.1. Industry Standards and Best Practice

The AMP acknowledges Council's responsibility to act in accordance with the legislative requirements that impact on Council's aerodromes activity. A variety of legislation affects the operation of these assets, as detailed in Appendix A.

R.3.2. Prioritisation related to available resources

With aerodromes assets, there are often higher levels of maintenance and renewal requirements proposed (increased levels of service etc.) than the resources allow for. Trade-offs then have to be made as to what impacts on the ability of an asset to provide a service against the nice to have aspects.

R.4 What Level of Service Do We Seek to Achieve?

There are many factors that need to be considered when deciding what level of service the Council will aim to provide. These factors include:

- Council needs to aim to understand and meet the needs and expectations of the community
- the services must be operated within Council policy and objectives and
- the community must be able to fund the level of service provided.

Two tiers of levels of service are outlined, Strategic and Operational.

The operational levels of service and performance measures are used to ensure the service and facilities are able to achieve the strategic levels of service and Councils objectives.

Level of services need to be reviewed and upgraded on a continuous basis in line with legislative and regulatory changes and feedback from customers, consultation, internal assessments, audits and strategic objectives.

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 and July 2009 AMP's. They take in account feedback from various parties including Audit New Zealand, industry best practice and ease of measuring and reporting of performance measures.

Council has decided to reduce the number of levels of service reported in the LTP, showing only those that are considered to be Customer Focussed. The AMP extends the levels of service and performance measures to include the more technical measures associated with the management of the activity.

Table R-3 details the levels of service and associated performance measures for the aerodromes activity. Those shaded are the customer focussed measures which are included in the LTP. The table sets out Councils' current performance and the targets they aim to achieve within the next three years and by the end of the next 10 year period.

The levels of service and performance measures are consulted on and adopted as part of the LTP consultation process.

R.5 What Plans Have Council Made to Meet the Levels of Service?

In preparing the future financial forecasts, Council has included specific initiatives to meet the current or intended future levels of service. A summary of these is included below.

Council is making a capital works investment of $240,000 over the next 20 year period to upgrade existing aerodrome assets and to improve the levels of service. This includes:

- construction of a new carpark off Marchwood Park Road in Motueka
- installation of new power and data services for Motueka
- design and installation of a new wastewater system for Motueka.

Of the above sum, the Council plans to invest $298,000 over the next 20 years to renew aerodromes assets including:

- the sealed runways at both Motueka and Takaka
- carpark resealing at Motueka
- grass runway rehabilitation at Motueka
- house renovations at Takaka.

The Council have allocated a total budget of $2.1 million over the next 20 year period for the Operation and Maintenance (O&M) of its aerodromes assets. O&M costs include:

- house maintenances expenses for Takaka
- runway and taxiways maintenance
- promotions and communications
- rates and insurances.

R.6 Levels of Service Linked to Legislation

Whilst Council are required to comply with various legislation and regulations when managing aerodromes activity, no specific levels of service are included which relate to legislation.

Table R-3: Performance against Current Levels of Service, and Intended Future Performance

ID	Levels of Service (we provide)	Performance Measure (We will know we are meeting the level of service if…)	Current Performance (as at end Year 2 2010/11)	Future Performance			Future Performance (targets) in Years 4 - 10
				Year 1	Year 2	Year 3	
Community Outcome: Our urban and rural environments are pleasant, safe and sustainably managed.							
1	**Our aerodromes are operated in a safe manner.**	*Our aerodromes are managed in accordance with CAA requirements.* *As measured through a CAA audit.*	**Actual =** 100%	*100%*	*100%*	*100%*	*100%*
2		The glide path for planes is free of obstructions, as determined by CAA.	**Actual =** 100%	0 non - compliances	0 non - compliances	0 non - compliances	0 non - compliances
Community Outcome: Our infrastructure is safe, efficient and sustainably managed.							
3	**Faults in the aerodromes system are responded to and fixed promptly.**	We respond to Customer Service Requests on our aerodromes within the timeframes we have agreed with our suppliers and operators, and within the available funding.	**Actual =** 100%	100%	100%	100%	100%

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

S.1 Introduction

This Activity Management Plan has been developed as a tool for Council to describe how they intend to manage their assets, meet the levels of service agreed with the community and to explain the expenditure and funding requirement. It forms part of Council's Asset Management Process which is in general alignment with the International Infrastructure Management Manual (IIMM) as shown below in Figure S-1.

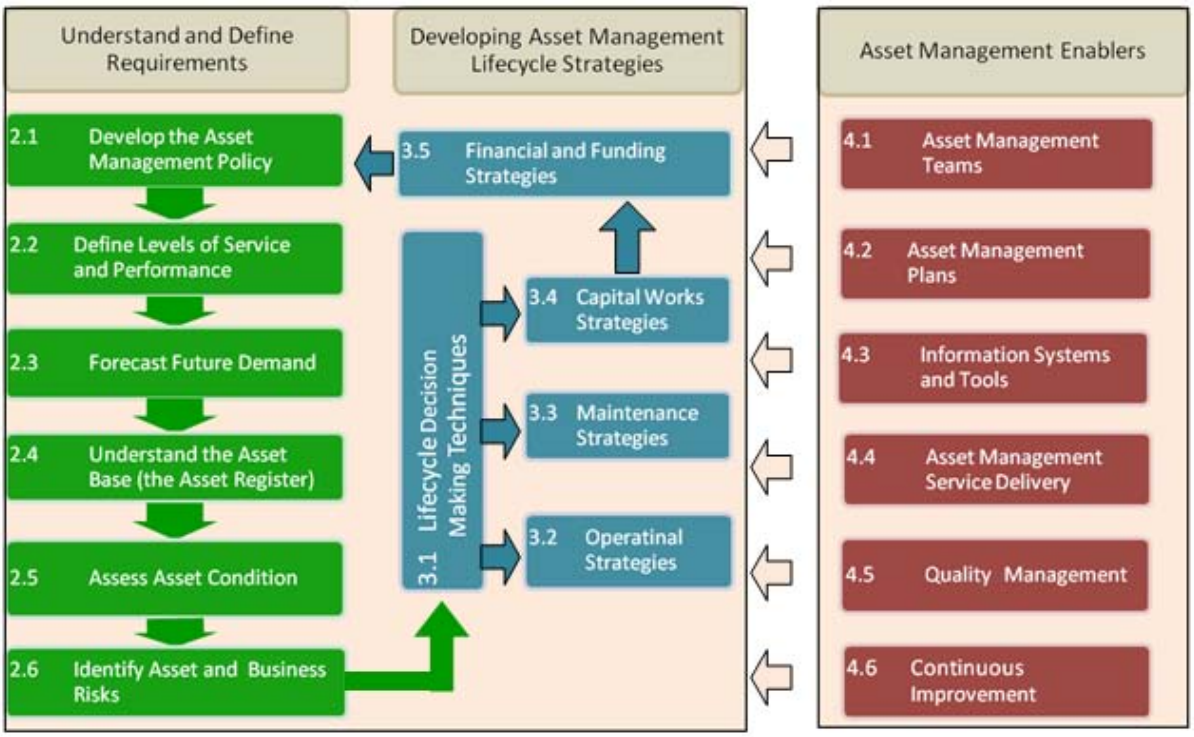

Figure S-1: The Asset Management Process

S.2 Understanding and Defining Requirements

S.2.1. Develop the Asset Management Policy

S.2.1.1 Selecting the Appropriate Level of Asset Management

The Asset Management Policy provides the direction as to the level of Asset Management expected and can differ between activities. Council underwent a process in 2010 with asset management consultants Waugh Infrastructure Management Ltd in which they identified the appropriate level of asset management to target for their engineering activities. During this process, Council and consultant staff assessed a range of parameters to establish the base level of asset management to provide the community for each activity including:

- district and community populations
- issues affecting the district and each activity
- the costs and benefits to the community
- legislative requirements
- the size, condition and complexity of the assets
- the risk associated with failures
- the skills and resources available to the organization
- customer expectation.

IIMM (2006) identified two levels of asset management; Core and Advanced. Waugh Infrastructure Management Ltd classed the transition between the two as being Core Plus, renamed as Intermediate in the 2011 IMM. Core Plus is above Core asset management but below being fully compliant with Advanced asset management and can vary between Core with one or two Advanced categories, through to being substantially or fully compliant with most of the Advanced categories.

Upon completion of the process, Council have set **Core** as the target level at which they want to be managing the Aerodromes Activity**.** The detail of required category compliance is under separate cover (Selecting the Appropriate Asset Management Level, Waugh August 2010).

S.2.1.2 Performance Review of Aerodromes Activity Management Practices

Council underwent a process at the end of the 2009 AMP to undertake a high level review of the AMPs and associated activity management processes against good practice asset management as described in the IIMM and in accordance with the Office of Auditor General. During this process, the AMP and associated practices were scored to give a snap shot of the current status and then set targets as to where Council wished to head. The 2009 AMP Improvement Plan was assessed in its effectiveness to close the gap between actual and target compliance levels and new items added to the Improvement Plan where gaps were identified (Appendix V).

The results of the review are detailed under separate cover (Performance Review of Aerodromes Activity Management Processes, MWH New Zealand Ltd, February 2010).

The two reviews described above were carried out independently of each other however the outputs from both were compared to ensure consistency of recommendations. Whilst both reviews focused on slightly different aspects of asset management practices, there was no conflict between the recommendations made. Table S-1 below shows analysis undertaken to link the two reviews to identify the compliance gaps and actions that should be undertaken to address them.

Table S-1: Analysis of Asset Management Reviews

	Aerodromes		
	CORE	**Compliance Status**	**Compliance Gaps to Address to Meet CORE**
Description of Assets	Advanced (minus the systematic monitoring of performance)	Partially Compliant	**Action:** More detail on the assets need to be incorporated into AMP document.
Levels of Service	Core	Substantially Compliant	**Action:** Include Activity in Communitrak™ surveys.
Managing Growth	Core	Partially Compliant	**Action:** Translate demand analysis into asset and non-asset solutions.
Risk Management	Core	Partially Compliant	Compliance will improve with implementation of IRM.
Lifecycle Decision Making	Core (plus identification of options for asset maintenance)	Does not Comply	**Action:** Develop a renewals and capital programme based on a risk based decision support tool.
Financial Forecasts	Advanced (with the exception of sensitivity testing of forecasts)	Substantially Compliant	**Action:** Improve rationale and robustness of categorisation of expenditure in AMP.
Planning Assumptions and Confidence Levels	Core (plus assumptions listed)	Partially Compliant	**Action:** Address the data gaps.
Outline Improvement Programmes	Advanced	Partially Compliant	**Action:** Identify timeframes, priorities and resources for Improvement Plan actions.
Planning by Qualified Persons	Core	Substantially Compliant	**Action:** Issues around management and operation of activity to be resolved.
Commitment	Advanced	Substantially Compliant	**Action:** More emphasis and commitment needed to Improvement Plan.

S.2.2. Defined Level of Service and Performance

Levels of Service have been reviewed since the 2009 AMP, taking account of Community Outcomes, Legislative Requirements, financial constraints and knowledge of asset performance. Community Outcomes, Levels of Service, Performance Measures and current performance are detailed in Appendix R of this AMP.

S.2.3. Forecast Future Demand

Population and demand forecasting has been updated since the 2009 AMP and is described in Appendix F.

Demand Management has been undertaken as described in Appendix N.

S.2.4. Understand the Asset Base

Council has a wealth of information on their assets which is collected, recorded and stored through a number of different systems. Data is graded for accuracy and completeness as shown in Table S-2.

Table S-2: Asset Data Accuracy and Completeness Grades

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

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 summarises the various data types, data source and how they are managed within Council. It also provides a grading on data accuracy and completeness where appropriate. Council is constantly improving the accuracy and completeness of their data.

Council's corporate Asset Management System (AMS) is Confirm Enterprise. The Engineering Department uses Confirm to record and track customer enquiries, maintain its asset register and for tracking non-routine maintenance of assets. Valuation of assets is also run from Confirm.

The Asset Information team, Asset Managers, Council's consultants and contractors all have access to the system with levels of access appropriate to their needs.

Council's Confirm system is the primary asset management system and data management tool for the engineering activities. Confirm is a modular system and is a powerful tool used for the storage, interrogation and reporting of asset data.

Table S-3: Data Types and Source

Information System	Data Type	Management Strategy	Data Confidence	
			Accuracy	Completeness
Confirm	Asset Location (point data)	Point data is provided in Confirm. All spatial data will be migrating to GIS in 2011/12 so will no longer be held in Confirm.	2	2
	Asset Description	Council's Asset Register is held in Confirm. It contains information on asset extent, age, remaining life, condition etc. Asset hierarchy capability is available in Confirm but Council do not see the need to implement this function at this stage.	2	2
	Customer Service	All customer enquiries and service requests are logged and can be assigned, tracked and analysed. The Customer Service Requests help drive the day to day reactive maintenance programme.	2	2
	Asset Condition data	Condition data is held in Confirm and is collected when first installing assets and then during routine inspections or fault repairs.	2	2
	Historical data	Confirm holds data on jobs and maintenance for approximately five years. This allows the interrogation of the system for historical data on specific assets.	2	2
	Critical Assets	The critical assets have been identified as part of the AMP process and are shown in Appendix Q. These assets have not yet been separately identified within Councils Confirm system. There is an item in the Improvement Plan to ensure that the critical assets are separately identified with Confirm to allow easier assessment and reporting.	n/a	0
	Valuation	Council now undertakes it Asset Valuations through the Confirm system.	2	2
	Maintenance Information	All newly collected maintenance information is recorded in Confirm. The contractor is now able to collect and record all maintenance information in the field through the use of mobile devices which link to Confirm. Historical information sits with CMS and also with the Contractor's SETI system. Council intend to migrate this historical data into a SQL database accessible from Confirm. Tracking repairs and response times is carried out and reported to ensure key performance measures are being achieved.	3	3
NM2	Resource Consents	NM2 is owned and managed by Council's consultants, MWH NZ Ltd. It holds all resource consents for water, wastewater, stormwater, solid waste and roading. NM2 is used to manage the accurate programming of actions required by the consents. There are currently no aerodrome consents in the NM2 database.	2	2

Information System	Data Type	Management Strategy	Data Confidence	
			Accuracy	Completeness
NCS	Financial Information	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 20-year financial plans.	2	2
CMS	Operational Performance	A database containing data information about pump types and operational performance (totalised flow etc) is maintained. It is intended that this will be transferred eventually into Confirm. CMS is being phased out and the process will be replaced by Confirm (anticipated for 2011/12).	2	2
GIS	Asset location	GIS is compiled from as-built information and should be the first port of call for asset location. However, there is a short time delay with importing the data into GIS so it is sometimes necessary to refer to the as-builts.	2	2
SilentOne	As Builts	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 the 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	2
Growth Model Database	Growth and Demand Supply Model (GDSM)	The GDSM underpins Council's long term planning. It is not an isolated tool that calculates a development forecast, it is a number of linked processes that involve assessment of base data, expert interpretation and assessment, calculation and forecasting.	2	2
Tenderlink	Tenders	Council upload all Request for Tender documents onto the Tenderlink system which allows contractors to download for tender. The system also holds key information for tenderers. Tenderlink is a national database.	1	1
Various	Other Data Types	A large amount of information is not yet stored centrally within Council and is held and updated by Council's consultants or contractors. Council are moving towards Confirm being the primary source for all asset information, so these data sources will eventually migrate to Confirm.	3	3
Various	Asset Photos	Councils intention is that a library of asset photos will be stored within Confirm. At present however, electronic asset photographs are held by MWH New Zealand Ltd (with the exception of Streetlight which are stored in SilentOne).	2	2

S.2.5. Assess Asset Condition

Condition rating of aerodromes assets is detailed in Appendix B.

S.2.6. Identify Asset and Business Risks

Council have adopted an Integrated Risk Management framework to manage risks, both at corporate and activity level. This is detailed further in Appendix Q.

S.3 Developing Asset Management Strategies

There are many different types of decision making techniques that have been applied by Council during the development of the management plans. These are better described in relevant appendices, but are summarised here in Table S-4.

Procurement of capital, maintenance or renewal work is undertaken in accordance with Council's procurement strategy.

Table S-4: Asset Management Strategies Summary

Strategy	Processes and Systems
Renewals Management (Appendix I)	• Renewals first identified from the Confirm database – 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. • On an annual basis renewal work is programmed for implementation and managed as a programme through specific tendered contracts.
Asset Creation Management (Appendix F)	• Asset creation forecasts are developed every three 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 (ie. 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, 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, 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.
Operational and Maintenance (Appendix E)	• Operations and maintenance procedures and specifications are detailed in the current maintenance contract documents. • Includes Strategic Studies such as coastal process studies.

S.4 Asset Management Enablers

The Asset Management Enablers are the aspects that underpin the whole asset management decision making at each stage of the Asset Management Process. These are summarised here, but detailed further throughout this AMP.

- Asset Management Teams – consists of Asset Managers and their consultants.
- Asset Management Plans – this AMP is a key part of the asset management process and is updated on a regular basis.
- Information Systems and Tools – these are detailed in Table S-3.
- Asset Management Service Delivery – include the procurement strategies that ensure Council delivers the asset management activities in the most cost-effective way. This is primarily managed through a professional services contract with MWH New Zealand Ltd for consultation services, operation and maintenance contract and through a special procurement and tender process for construction work.
- Quality Management – there are a variety of rigorous quality assurance processes involved in management of the aerodromes activity.
- Continuous Improvement – Covered by Appendix V. The Improvement Programme shown in this document is a snapshot of the programme in its current state. The Improvement Programme is reviewed and updated on a regular basis.

APPENDIX T. BYLAWS

The following bylaws have been adopted by Council:

- Consolidated Bylaws 2006 – Introduction
- Control of Liquor in Public Places 2007
- Dog Control Bylaw 2009
- Freedom Camping Bylaw 2011
- Navigation Safety Bylaw 2006
- Speed Limits Bylaw 2004
- Stock Control and Droving Bylaw 2005
- Trade Waste Bylaw 2005
- Trading in Public Places Bylaw 2010
- Traffic Control Bylaw 2005
- Water Supply Bylaw 2009

In accordance with the Local Government Act 2002, these bylaws will be reviewed no later than 10 years after they was last reviewed.

None of the above bylaws have direct relevance to this activity.

APPENDIX U. STAKEHOLDERS AND CONSULTATION

U.1 Stakeholders

There are many individuals and organisations that have an interest in the management and / or operation of Council's assets. Council underwent a process whereby they identified an extensive list of these stakeholders and what aspects they value in the activity. The outcomes of that process are summarised below in Table U-1.

A full list is detailed under separate cover in Levels of Service Gap Analysis, MWH New Zealand Ltd, December 2010.

Table U-1: Stakeholders

Stakeholder Group	Core Values
Customers / users	Accessibility Affordability Environmental sustainability Health and safety Quality Reliability / responsiveness Customer service
Regulatory	Compliance Customer service
Service providers / suppliers	Affordability Compliance Reliability / responsiveness
Elected members	Affordability Customer service
Media	Customer service
Approval authority (funding) / funder	Affordability Compliance Customer service
Others (industry bodies, lobby groups, government departments, other affected parties.	Customer service

U.2 Consultation

U.2.1. 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
- consultation via the Annual Plan and LTP process.

Council commissions customer surveys on a regular basis, usually every three years, from the National Research Bureau Ltd[7], but more recently on an annual basis. These Communitrak™ surveys assess the levels of satisfaction with key services, including aerodromes, 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.2.2. Consultation Outcomes

The most recent NRB Communitrak™ survey was undertaken in May/June 2011. There is no specific reference to aerodrome assets in the May/June 2011 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 community's satisfaction with the outcomes of this activity.

[7] Communitrak™: Public Perceptions and Interpretations of Council Services / Facilities and Representation, NRB Ltd May/June 2011.

APPENDIX V. IMPLEMENTATION AND IMPROVEMENT PROGRAMME

V.1 Process Overview

The Activity Management Plans have been developed as a tool to help Council manage their assets, deliver the levels of service and identify the expenditure and funding requirements of the activity. Continuous improvements are necessary to ensure Council continues to achieve the appropriate (and desired) level of activity management practice; delivering services in the most sustainable way while meeting the community's needs.

Establishment of a robust, continuous improvement process ensures Council is making the most effective use of resources to achieve an appropriate level of asset management practice.

The continuous improvement process includes:

- identification of improvements
- prioritisation of improvements
- establishment of an improvement programme
- delivery of improvements
- on-going review and monitoring of the programme.

All improvements identified are included in a single improvement programme encompassing all activities managed by Council's Engineering Services. In this way, opportunities to identify and deliver cross-activity improvements can be managed more efficiently, and overall delivery of improvement can be monitored across this part of Council's business.

V.2 Strategic Improvements

In April 2010 Council identified the key cross activity improvement actions within Engineering Services for implementation prior to development of the AMPs for the 2012 to 2022 long term plan period. These were:

- update the growth strategy for the changed economic climate
- review levels of service to ensure they adequately cover core customer values
- implement Council's integrated risk management approach to activity level.

These actions were all completed and have fed into the development of the current Activity Management Plan.

V.3 Training

Council do not have a formal schedule of required training, however both Council's staff and its consultants participate in training on a regular basis to ensure that best practice is maintained. This also helps to maintain a good asset management culture.

Council and its consultants are structured in a way that encompasses succession planning to prevent the loss of knowledge in the event of staff turnover. This AMP document also prevents loss of knowledge by documenting practices and process associated with this activity.

V.4 Asset Management Practice Reviews

Since the last AMP review, Council has undertaken a performance review of all Engineering Services activity management practices to compare how they align with the requirements of the Local Government Act 2002, Office of Auditor General (OAG) and industry best practices. This review process has been applied to identify improvement actions, and to monitor achievement of improvements against industry practice areas and Council priorities.

The results of reviews in 2009 and 2011 are shown on Figure V-1 below for this activity. Overall the targeted level (hollow bars) of improvement has been achieved or exceeded (results are shown as solid colour bars).

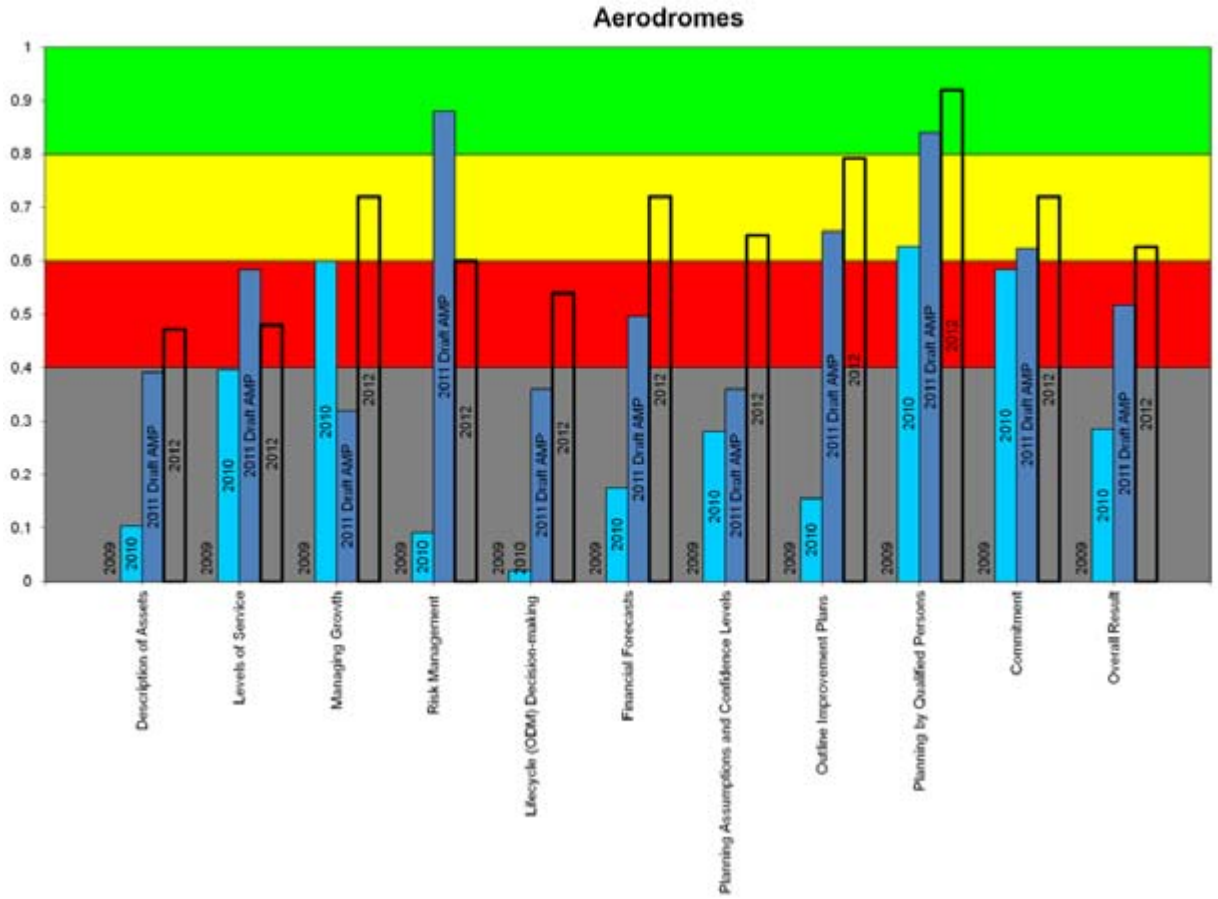

Figure V-1: Results of Benchmarking Review on Draft AMP

The methodology and the findings from the review are detailed in a separate report (*Performance Review of Aerodromes Activity Management Practices*; MWH New Zealand Ltd, February 2010, and separate benchmarking review tables completed September 2011).

Council also sought consultation on selecting the appropriate level of activity management (*Selecting the Appropriate AM Level*; Waugh, August 2010).

Improvement actions identified in both of these review processes were included in the improvement programme.

Council will review the currency of the performance review checklist used to identify improvement actions as a result of the recent update to the International Infrastructure Management Manual (NAMS, 2011), and will update this checklist as appropriate. This is an Engineering Services improvement item encompassing all activities and is therefore not identified on the improvements list for this activity.

V.5 Peer Review

This AMP document was subject to a peer review in its Draft format by Waugh Infrastructure Management Ltd in October 2011. The document was reviewed for compliance with the requirements of the LGA 2002. The findings from the review indicated a need to present further discussion or evidence in the AMP to support the practices and processes in place in the operation, management and administration of the activity.

The findings and suggestions were assessed and prioritised by the asset management team. Those items that proved to be of sufficiently high value and efficiency to address were included in the Draft for Consultation (Version 4) of this document. The remainder were added to the Improvement Plan where necessary.

Version 4 of this document was then reviewed a final time by Waugh Infrastructure Management Ltd in May 2012. The report produced has been included at the end of this Appendix.

V.6 Improvement Programme Status

A summary on the status of all improvement items related to this activity are shown in Table V-1 below, and are split by the year that they were identified.

Table V-1: Status of Improvement Items

Row Labels	Complete	In Progress	Not Started	Grand Total
2009	**3**	**2**	**3**	**8**
2 - Levels of Service			1	1
4 - Risk Management	2			2
5 - Lifecycle (Optimised) Decision-making		1		1
6 - Financial Forecasts			1	1
7 - Planning Assumptions & Confidence Levels			1	1
9 - Planning by Qualified Persons		1		1
10 - Commitment	1			1
2010	**35**	**7**	**7**	**49**
1 - Description of Assets	9		1	10
2 - Levels of Service	2			2
3 - Managing Growth	1			1
4 - Risk Management	7		2	9
5 - Lifecycle (Optimised) Decision-making	2	1	2	5
6 - Financial Forecasts	5	1		6
7 - Planning Assumptions & Confidence Levels	3	2		5
8 - Outline Improvement Programmes	1	3		4
9 - Planning by Qualified Persons	3		2	5
10 - Commitment	2			2
2011			**28**	**28**
1 - Description of Assets			3	3
2 - Levels of Service			1	1
3 - Managing Growth			3	3
4 - Risk Management			4	4
5 - Lifecycle (Optimised) Decision-making			8	8
6 - Financial Forecasts			3	3
7 - Planning Assumptions & Confidence Levels			3	3
8 - Outline Improvement Programmes			2	2
9 - Planning by Qualified Persons			1	1
Grand Total	**38**	**9**	**38**	**85**

The Improvement Programme will be adopted in line with the adoption of the LTP and this AMP. It will be continuously monitored with a full review on an annual basis and the status of the improvement items assessed and reported.

V.7 Improvement Actions Completed

Improvement items completed for the period (or requiring no future action) are shown in the Table V-2 below:

Table V-2: Improvement Actions Completed

Amp Action Reference	Improvement Action	Further Information	Status	Year that Improvement Action was Identified
A.002	Show clear **linkages to Activity Strategies / Programme.**		Complete	2010
A.003	Show clear **linkages to other relevant AMP's.**		Complete	2010
A.004	**Commonality of Approach:** Ensure there is consistency between demand management approach in the AMP to that in any Activity related strategy.		Complete	2010
A.001	**AMP Update:** Review and update AMP on a three year cycle. Next due in 2011.	May no longer be necessary. Will be combined with other AMPs as one Project	Complete	2009
B.001	**AMP Coverage:** Make sure the AMP encompass the full breadth of the network.		Complete	2010
B.002	**AMP Coverage:** Make sure the AMP adequately describe each asset area.		Complete	2010
B.003	**Condition and Performance Monitoring:** Discuss which assets are not performing to standards.		Complete	2010
B.004	**Condition and Performance Monitoring:** Detail how is asset condition data collected.		Complete	2010
D.002	**Valuations:** Show the latest valuations including useful lives, reliability (confidence), depreciation (annual and forecast), replacement costs, and depreciated replacement costs.		Complete	2010
E.002	**Maintenance:** Outline maintenance strategies.		Complete	2010
E.003	**Maintenance:** Outline maintenance standards and specifications.		Complete	2010
F.002	**Expenditure:** Categorise expenditure into maintenance / depreciation / renewals / new capital (growth driven) / new capital (levels of service driven).		Complete	2010
F.003	**Expenditure:** Show expenditure forecasts for at least 10 years.		Complete	2010
I.001	**Asset Renewals:** Indicate basis for renewals.		Complete	2010
I.002	**Deferred Renewals:** Discuss the extent of deferred renewals.		Complete	2010
I.003	**Asset Renewals:** Detail how renewals are delivered.		Complete	2010
L.002	**Funding:** Show funding forecasts for at least 10 years.		Complete	2010
M.001	**Funding:** Detail funding requirements.		Complete	2010

Amp Action Reference	Improvement Action	Further Information	Status	Year that Improvement Action was Identified
N.001	**Decision Making and Prioritisation:** Detail how renewals are prioritised.		Complete	2010
N.002	**Decision Making and Prioritisation:** Outline maintenance decision making processes.		Complete	2010
Q.001	**Risk Management Development:** Discuss the risk management programme.		Complete	2010
Q.002	**Risk Management Development:** Discuss the policy and context.		Complete	2010
Q.003	**Risk Management Development:** Identify and list all risks.		Complete	2010
Q.004	**Risk Management Analysis:** Analyse all risks (include documented criteria for evaluation).		Complete	2010
Q.005	**Risk Management Analysis:** Evaluate all risks.		Complete	2010
Q.006	**Risk Management Analysis:** Identify, cost and prioritise all treatment options.		Complete	2010
Q.007	**Risk Management Implementation:** Programme all treatment projects.		Complete	2010
Q.010	**Assumptions:** State the forecast assumptions (including cost escalation assumptions).		Complete	2010
Q.011	**Assumptions:** Discuss if the forecast assumptions appear reasonable.		Complete	2010
Q.012	**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.	Combined project for Organisational IRM, also need to develop at Ops level per activity.	Complete	2009
Q.013	**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.	Combined project for Organisational IRM, also need to develop at Ops level per activity.	Complete	2009
R.002	**Gap Analysis:** Show the extent of the gap between existing practice and best appropriate practice.		Complete	2010
R.004	**LoS Development:** Discuss how LOS have been developed with stakeholders such as the Local Councils.		Complete	2010
R.005	**Status of LoS:** Make sure the LOS are consistent between LTCCP, AMP and Technical standards.		Complete	2010
S.006	**Asset Data:** Discuss the completeness, accuracy, (reliability) of physical data.		Complete	2010
Z.001	**AMP Development:** Provide evidence of wide input to the plan internally and externally.		Complete	2010
Z.002	**AMP Development:** Provide evidence of a good balance / blend of input internally and externally.		Complete	2010
Z.004	**Guidance and Up Skilling:** Indicate if staff are keeping up to date with modern / innovative practices.		Complete	2010

V.8 Current Improvement Actions

Current improvement actions are detailed in Table V-3 below.

Table V-3: Current Improvement Actions

AMP Action Reference	Improvement Action	Further Information	Priority (High Medium Low)	Status	Year that Improvement Action was Identified	Forecast Completion Date	Procurement / Delivery Strategy	Council Person Responsible for Managing to Close	Cost Estimate for Years 1 - 3
B.005	**Asset Description:** Include information on entire range of assets in next AMP.		H	Not Started	2011	2014	In-house with consultant support	Jim Frater	
D.001	**Asset Valuations:** Review and update the aerodromes Asset Valuation on a three yearly cycle. Next review due in 2010.	Likely to be driven by Jim Frater	H	Not Started	2009	2012	Consultant		
E.001	**Aerodrome Management Plans and Guidelines:** Develop guidelines for the ongoing management of existing aerodrome services that comply with CAA rules.		H	In Progress	2009	30-Jun-13	In-house with consultant support	Jim Frater	
E.002	**Lifecycle Decision Making:** Detail how options have been identified for asset maintenance to achieve optimal costs over life.		M	Not Started	2011	2014	Consultant	Jim Frater	
F.001	**New Capital:** Detail the selection criteria for ranking projects.		H	Not Started	2010				
G.001	**Financial Assessment:** Collate historic and new information on Development Contributions to allow analysis of DCs paid vs. forecasts and trending.		M	Not Started	2011	2014	In-House	Jim Frater	
H.001	**Resource Consent Database:** Expand the database to include all resource consents related aerodromes.	Review current status and develop further	M	Not Started	2009	30-Jun-13	In-house with consultant support	Jim Frater	
K.001	**Financial Assessment:** Explore if Councils policy around debt funding is specific enough.		M	Not Started	2011	2014	In-House	Jim Frater	
L.001	**Funding:** Provide confidence that the local share is reasonable and affordable.		H	In Progress	2010	31-Oct-11	In-house	Jim Frater	
N.003	**Demand Management:** Collate historical information on demand to enable demand trending and analysis.		M	Not Started	2011	2014	Consultant	Jim Frater	
N.004	**Demand Management:** Provide greater detail on the effects of changing demographics rather than population growth.		L	Not Started	2011	2014	Consultant	Jim Frater	
N.005	**Demand Management:** Undertake sensitivity analysis on growth and demand and the effect on activity requirements.		L	Not Started	2011	2014	In-house with consultant support	Jim Frater	
P.001	**Sustainability:** Explore the need to develop a Council-wide sustainability Policy.		M	Not Started	2011	2014	In-House	Jim Frater	
P.002	**Sustainability:** Expand detail on sustainability for the activity. Develop KPIs for environmental, economic and social aspects of sustainable development.		M	Not Started	2011	2014	In-house with consultant support	Jim Frater	
Q.008	**Risk Management Implementation:** Detail the monitoring programme.		M	Not Started	2010	31-Oct-14	In-house with consultant support	Jim Frater	
Q.009	**Risk Management Implementation:** Discuss the communication and consultation plan.		M	Not Started	2010	31-Oct-14	In-house with consultant support	Jim Frater	
Q.014	**Cost/Benefit Analysis:** Detail and demonstrate the level of cost/benefit analysis undertaken for projects within the activity.		L	Not Started	2011	2014	Consultant	Jim Frater	
Q.015	**Risk Management:** Implement IRM across Council. Currently being used within individual activities.		M	Not Started	2011	2014	In-House	Jim Frater	
Q.016	**Risk Management:** Detail and demonstrate how asset criticality and risk analysis is used to develop maintenance strategies.		M	Not Started	2011	2014	In-house with consultant support	Jim Frater	

AMP Action Reference	Improvement Action	Further Information	Priority (High Medium Low)	Status	Year that Improvement Action was Identified	Forecast Completion Date	Procurement / Delivery Strategy	Council Person Responsible for Managing to Close	Cost Estimate for Years 1 - 3
Q.017	**Risk Management:** Detail and demonstrate how asset criticality and risk analysis is used to develop renewals strategies.		M	Not Started	2011	2014	In-house with consultant support	Jim Frater	
Q.018	**Lifecycle Decision Making:** Further develop and detail process for decision making with regards to O&M, renewals, Capex and disposals.		L	Not Started	2011	2014	In-house with consultant support	Jim Frater	
Q.019	**Assumptions and Uncertainties:** Identify the uncertainty level of the more significant assumptions and detail the possible effects.		L	Not Started	2011	2014	In-house with consultant support	Jim Frater	
Q.020	**Asset Data:** Identify and document process for updating/reporting on confidence levels of asset condition and performance.		H	Not Started	2011	2014		Jim Frater	
Q.021	**Assumptions and Uncertainties:** Identify and state the confidence levels for the growth/demand forecasts		L	Not Started	2011	2014	In-house with consultant support	Jim Frater	
R.001	**Gap Analysis:** Record all weaknesses / issues in all aspects of AM.		M	In Progress	2010	31-Oct-14	In-house with consultant support	Jim Frater	
R.003	**Aerodrome Services Assessments:** Identify area 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.	Level of Service project. TDC are reviewing Community Outcomes and LoS across the board	M	Not Started	2009	31-Oct-14	In-house	Jim Frater	
R.006	**Levels of Service:** Develop and incorporate sustainability strategies and operations into Levels of Service and performance measures.		M	Not Started	2011	2014	In-house with consultant support	Jim Frater	
S.001	**ODM Approach:** Provide a transparent and robust rationale for future treatment decisions and forecast expenditure.		M	Not Started	2010	31-Oct-14	In-house	Jim Frater	
S.002	**ODM Tools and Techniques:** Indicate the tools and techniques used and applied for, deciding on treatment options.		M	Not Started	2010	31-Oct-14	In-house	Jim Frater	
S.003	**ODM Application:** Indicate an appropriate balance between ODM tools (as above) and engineering judgement / experienced knowledge.		M	In Progress	2010	31-Oct-11	Consultant	Jim Frater	
S.004	**Asset Systems:** Discuss the strengths and weaknesses of the systems and how they interrelate		M	In Progress	2010	31-Oct-11	Consultant	Jim Frater	
S.005	**Asset Systems:** Discuss the asset categories not captured in a formal system or process.		H	In Progress	2010				
S.007	**Asset Management System Development:** Continue to develop Council's Asset Management System and integration with its related asset information systems, GIS, SilentOne etc.	To be reviewed and progressed by the Asset Information System department	H	In Progress	2009	31-Oct-14	In-house	Jim Frater	
S.008	**Description of Assets:** - consider adding asset hierarchy into the Confirm system. The capabilities are there, but not yet used by Council.		L	Not Started	2011	2014	In-House	Jim Frater	
S.009	**Description of Assets:** Improve information on the level of recording, monitoring and reporting of asset information.		M	Not Started	2011	2014	In-house with consultant support	Jim Frater	
S.010	**Critical Assets:** Create ability to separately identify Critical Assets in Confirm. Be able to report on this information easily.		L	Not Started	2011	2014	In-house	Jim Frater	
S.011	**Asset Information:** Collate and provide information on how asset condition is monitored.		M	Not Started	2011	2014	In-house with consultant support	Jim Frater	
S.012	**Asset Condition Data:** Detail how asset condition is monitored and reported for key asset types.		M	Not Started	2011	2014	In-house with consultant support	Jim Frater	
S.013	**Asset Performance Data:** Detail how asset performance is monitored and reported for key asset types.		M	Not Started	2011	2014	In-house with consultant support	Jim Frater	

AMP Action Reference	Improvement Action	Further Information	Priority (High Medium Low)	Status	Year that Improvement Action was Identified	Forecast Completion Date	Procurement / Delivery Strategy	Council Person Responsible for Managing to Close	Cost Estimate for Years 1 - 3
S.014	**Lifecycle Decision Making:** detail and demonstrate how trade-offs are made between renewals and maintenance expenditure.		M	Not Started	2011	2014	Consultant	Jim Frater	
S.015	**Lifecycle Decision Making:** show alignment with maintenance plan for auditing, supervision and performance measures.		M	Not Started	2011	2014	In-house with consultant support	Jim Frater	
V.001	**Improvement Plan:** Outline details of all improvement options.		M	In Progress	2010	31-Oct-14	Consultant	Jim Frater	
V.002	**Improvement Plan:** Outline timelines, resources required, and give an indication of whether resources have been approved.		H	In Progress	2010	31-Oct-11	In-house with consultant support	Jim Frater	
V.003	**Improvement Plans:** formalise timeframes and budgets for improvement actions.		H	Not Started	2011	2014	In-house with consultant support	Jim Frater	
V.004	**Improvement Plans:** develop and implement process for monitoring and reporting against the Improvement Plan.		H	Not Started	2011	2014	In-house with consultant support	Jim Frater	
Z.003	**Quality Assurance:** Discuss any external QA's.		M	Not Started	2010	31-Oct-14	In-house	Jim Frater	
Z.005	**Guidance and Up Skilling:** Discuss previous technical and procedural audits.		L	Not Started	2010	31/10/2014	In-house	Jim Frater	

V.9 AMP Peer Review

Infrastructure Management

Tasman District Council

Water, Wastewater, Stormwater, Solid Waste, Aerodromes, Transport, Rivers and Coastal Structures AMPs Peer Review

October 2011 & May 2012

WAUGH

ideas | analysis | solutions

WAUGH

Quality Record Sheet

Tasman District Council

Water, Wastewater, Stormwater,

Solid Waste, Transport, Aerodromes, Rivers

and Coastal Structures

AMP Peer Review

October 2011 and May 2012

Issue Information	
Issue Purpose	Final
Issue Date	8th May 2012
Version Number	1.1

Authorisation	
Tasman District Council	Peter Thomson
Prepared by	Andrew Iremonger
Internal Reviewed by	Ross Waugh
Date	8th May 2012
Report Number	64-065-1002

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1.0 EXECUTIVE SUMMARY

1.1 Introduction

The purpose of this report is to:

- Provide a regulatory review of the October 2011 Tasman District Council (TDC) Water, Wastewater, Stormwater, Solid Waste, Aerodromes, Transport, Rivers and Coastal Structures Asset Management Plans for compliance with the primary legislation driving local government, this being the Local Government Act 2002
- Considers associated legislation and standards such as Financial Reporting Standards, Resource Management Act and Health Act as well as industry appropriate practice

1.2 Methodology

Waugh Infrastructure Management Ltd assessed in October 2011 the eight individual draft AMP's content in comparison to; the 12 assessment criteria and a number of elements for each assessment criteria, and to an assessed appropriate asset management level for Tasman District Council. These elements generally follow the Appropriate AM (from IIMM 2006: Section 2.2.4). The assessment criteria are:

- Description of Assets
- Levels of Service
- Managing Growth
- Risk Management
- Lifecycle Decision Making
- Financial Forecasts
- Planning Assumptions and Confidence Levels
- Outline Improvement Programmes
- Councils Commitment
- Planning by Qualified Persons
- Sustainability within the activity by using the Councils sustainability objectives
- The AMP Format (presented in a way that can be readily utilised by the required audience)

Following this review TDC made amendments to the AMP's that encompassed the inclusion of financial details, significant additions to the improvement program along with other items.

In May 2012 the amendments to the October AMPs were assessed by Waugh Infrastructure and the compliance status was reassessed. It should be noted that the May 2012 assessment only considered the items shown in the "Peer review improvement table" provided by MWH in their letter dated 3rd April 2012.

1.3 Overall Conclusion of Asset Management Plans Assessment

The AMP's indicate that TDC has developed good practices and processes in the operation, management and administration of their activities but the discussion or evidence presented within the individual AMP's is often insufficient to substantiate this.

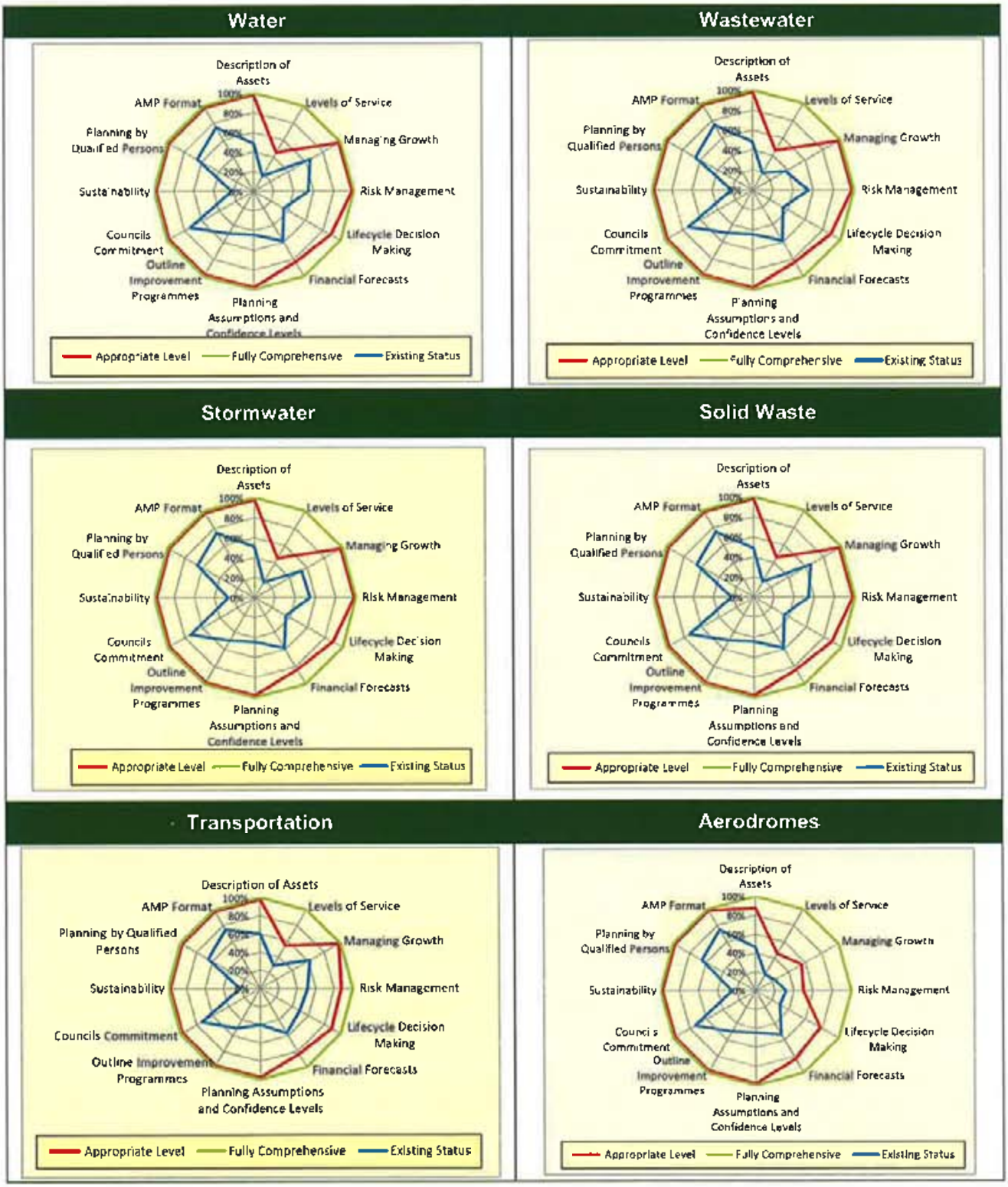
The AMP's provided in May 2012 indicates that many of the issues raised in the October review have been addressed in the subsequent version of the AMPs as amendments or improvement plan items. Competition of these actions would assist to achieve the Councils targeted asset management level.

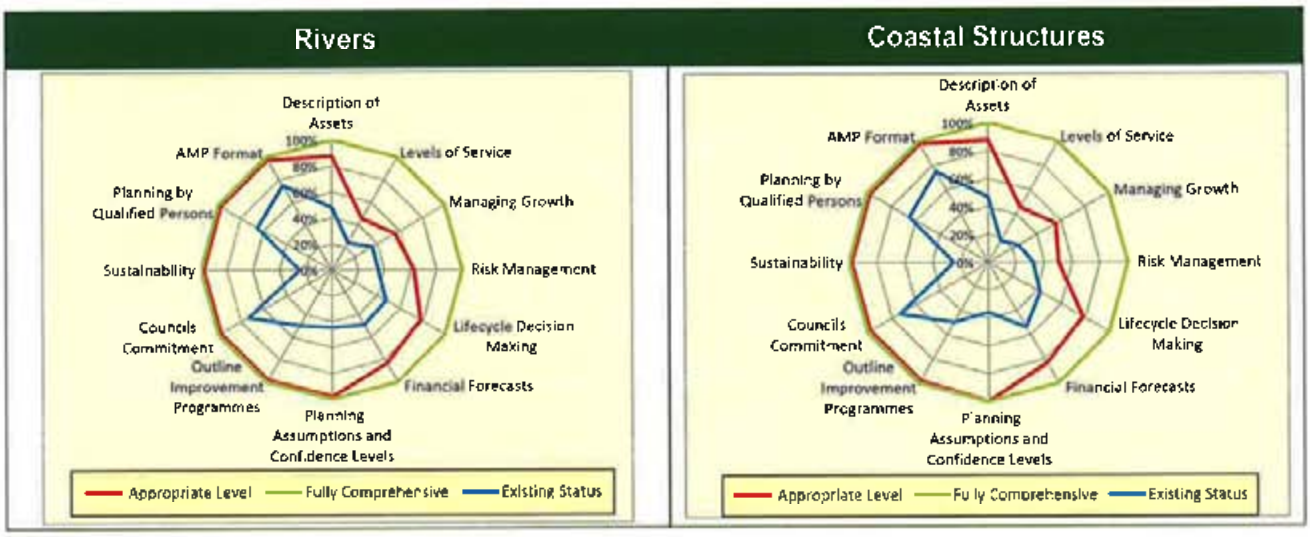
The AMPs assessed in May 2012 do provide Council with an adequate basis on which to make decisions between competing priorities for infrastructure funding and to understand the impact on

service levels in the longer term. On-going commitment is required to complete the actions identified to progress to the high levels of Asset Management practice.

An overview of the AMP Compliance status of the eight AMP's (dated February 2012) is provided in a graphical manner below.

Figure 1-1: AMP Compliance Status Graphs





1.4 Peer Review Limitations and Disclaimer

This Peer Review has been undertaken by Waugh Infrastructure Management Limited, based solely on the information presented in the Tasman District Council Water, Wastewater and Stormwater, Solid Wastes, Transportation, Aerodromes, Rivers and Coastal Structures Asset Management Plans. This report has been prepared solely for the benefit of the Tasman District Council. Waugh Infrastructure Management Limited does not warranty statements made in the eight Asset Management Plans subject to this peer review

This Peer Review represents the experienced opinion of the Reviewers, based on the available information and standards of practice extracted from the information.

This Peer Review makes no representation to reflect the views or standards of Audit NZ, nor does it warrant or certify (in any way) any compliance with possible Audit NZ and/or Office of the Auditor General requirements for Asset Plans.

2.0 RECORD OF PEER REVIEW ENGAGEMENT

Council Name	Tasman District Council
AMP Titles	Water, Wastewater, Stormwater, Solid Wastes, Transportation, Aerodromes, Rivers and Coastal Structures Asset Management Plans
Plan Sponsor	Peter Thomson, Engineering Manager
AMP Prepared By (Plan Writer)	Council Staff - Water: David Light - Wastewater: David Light - Stormwater: Katie Henderson - Solid Waste: Katie Henderson - Transportation: Jenna Viogt - Aerodromes: Jenna Viogt - Rivers: Jenna Viogt - Coastal Structures: Jenna Viogt
AMP Publish Date	October 2011 and February 2012
Peer Reviewer (Waugh Infrastructure Management Ltd)	Ross Waugh Andrew Iremonger Grant Holland
Internal Review (Waugh Infrastructure Management Ltd)	Ross Waugh
Peer Review Dates	26 October 2011 and 4th May 2012 (review of additions from October 2011 to February 2012)

3.0 SCOPE AND USE OF PEER REVIEW

The Scope of the Peer Review is to provide a regulatory review of the Tasman District Council (TDC) Water, Wastewater, Stormwater, Solid Wastes, Transportation, Aerodromes, Rivers and Coastal Structures Asset Plans (dated October 2011 and February 2012) for compliance with the primary legislation driving local government, this being the Local Government Act 2002.

The Peer Review also considers associated legislation and standards such as Financial Reporting Standards, Resource Management Act and Health Act as well as industry appropriate practice as set by the International Infrastructure Management Manual.

The Peer Review is to comment on the Plan in relation to the following aspects in keeping with the following guidelines of the Office of the Auditor General:

- Transparency
- Inclusivity
- Sustainable Development Approach
- Completeness
- Neutrality
- Comparability
- Accuracy

The intended use of this Peer Review is for the Tasman District Council.

4.0 ASSESSMENT METHODOLOGY

Waugh Infrastructure Management Ltd assessed in October 2011 the eight individual draft AMP's content in comparison to; the 12 assessment criteria and a number of elements for each assessment criteria, and to an assessed appropriate asset management level for Tasman District Council. These elements generally follow the Appropriate AM (from IIMM 2006: Section 2.2.4). The assessment criteria are:

- Description of Assets
- Levels of Service
- Managing Growth
- Risk Management
- Lifecycle Decision Making
- Financial Forecasts
- Planning Assumptions and Confidence Levels
- Outline Improvement Programmes
- Councils Commitment
- Planning by Qualified Persons
- Sustainability within the activity by using the Councils sustainability objectives
- The AMP Format (presented in a way that can be readily utilised by the required audience)

Following this review TDC made amendments to the AMP's that encompassed the inclusion of financial details, significant additions to the improvement program along with other items.

In May 2012 the amendments to the October AMPs were assessed by Waugh Infrastructure and the compliance status was reassessed. It should be noted that the May 2012 assessment only considered the items shown in the "Peer review improvement table" provided by MWH in their letter dated 3rd April 2012.

4.1 Scoring Methodology

The marking of each question area ranges from nil (no reference shown) to 5 (fully compliant) as shown in Table 4-1 below. Following the Fulfilment marking the comments field will indicate any issue considered relevant.

Table 4-1: Scoring Methodology

Fulfilment Requirements	AMP Details
Nil (0)	Not shown or no reference to
Minimal and fragmented (1)	20% compliant - Disjointed
Basic alignment (2)	30% compliant -
Partially (3)	50% compliant -
High level of alignment (4)	80% compliant - minor defects or admissions
Fully Compliant (5)	All areas within this section are fully compliant

The sum of each Assessment area score was then compared to the maximum score required using the Appropriate Practice for the component area i.e. description of assets, LoS etc. This data is shown in the overall AMP Compliance Status excel tables and the AMP Compliance Status graphs.

It should be noted that where there is no information or reference for any question area the score assigned is zero; this will result in a low overall score.

4.2 Appropriate Practice for Tasman District Council Asset Management

Objective of the Asset Management Policy

The objective of the Tasman District Council's Asset Management Policy for the eight utility Activities is to ensure that Council's service delivery is optimised to deliver agreed community outcomes and levels of service, manage related risks, and optimise expenditure over the entire life cycle of the service delivery, using appropriate assets as required.

The Asset Management Policy requires that the management of assets be in a systematic process to guide planning, acquisition, operation and maintenance, renewal and disposal of the required assets.

Delivery of service is required to be sustainable in the long term and deliver on Council's economic, environmental, social, and cultural objectives.

The Councils Asset Management Policy sets the appropriate level of asset management practice for Council's Activity as:

- Transportation: Core Plus with demand management and resource availability drivers
- 3 Waters: Core Plus with demand and risk management drivers
- Solid Waste: Core with risk management drivers
- Coastal structures: Core
- Rivers: Core
- Aerodromes: Core

The appropriate practice status analysis for all eight services is shown in the following table as highlighted green.

Table 4-2: Utilities Asset Management Appropriate Practice Assessment

Assessment Criteria (as outlined in IIMM 2006)		Appropriate Practice Status Analysis							
		Water	Wastewater	Stormwater	Solid Waste	Transportation	Aerodromes	Rivers	Coastal Structures
Description of Assets									
Core	Adequate Description of Asset								
	Financial Description of Asset								
	Remaining useful life								
	Aggregate & Disaggregate Information								
Advanced	Reliable Physical inventory								
	- Physical attributes (location, material, age etc.)								
	- Systematic monitoring of condition								
	- Systematic measurement performance- Utilisation/capacity								
Levels of Service									
Core	Define LOS or performance								
	Linkage to strategic/community outcomes								
	Links to other planning documents								
	Levels of consultation identified and agreement								
	Service life of network stated								
Advanced	For Significant Services								
	- Evaluating LOS Options								
	- Consult LOS options with community								
	- Adoption LOS & Standards after consultation								
	- Public communication of service level								
	- Monitoring & public reporting								
	AMP's reflect agreed LOS & how service is delivered								
Managing Growth									
Core	Demand Forecasts (10 year)								
	Demand Management drivers								
	Demand Management strategies								
	Sustainability Strategies								
Advanced	Forecasts include factors that comprise demand								
	Sensitivity of asset development (Capital Works) to demand changes								

Assessment Criteria (as outlined in IIMM 2006)		Appropriate Practice Status Analysis							
		Water	Wastewater	Stormwater	Solid Waste	Transportation	Aerodromes	Rivers	Coastal Structures
	Asset Utilisation/ Demand Modelling								
Risk Management									
Core	Identify critical assets								
	Identify significant negative effects								
	Identify associated risks and RM strategies								
Advanced	Recognition & application of principles of integrated risk management to assets								
	Apply standards & industry good practice (e.g. NZS4360 and Local Government Handbook)								
	RM integrated with Lifelines, disasters recovery, Continuity plans,.								
	Integrate with maintenance and replacement strategies								
Lifecycle Decision Making									
Core	Lifecycle and Asset Management Practices								
	Service capacity gap analysis								
	Evaluation and ranking based on criteria of options for significant capital invest decisions for								
	Maintenance Outcomes, Strategies, Standards and Plan								
Advanced	Identify options for asset maintenance to achieve optimal costs over life of asset								
	· Apply agreed evaluation tools to prioritise work programmes								
	- Predictive modelling to support long-term financial forecasts for maintenance, renewals & new capital								
Financial Forecasts									
Core	10 year Financial plan Maintenance, Renewals, New Capital (LOS and demand).								
	Validate the Depreciation/Decline in Service Potential								
Advanced	Translate operational, planned maintenance, renewal & new work into financial terms over period of strategic plan								
	Provide consistent financial forecasts & Substantiate								
	Sensitivity of forecasts								
Planning Assumptions and Confidence Levels									
Core	List all assumptions and possible effects								
	Confidence level on asset condition, performance								
	Accuracy of asset inventory								

Assessment Criteria (as outlined in IIMM 2006)		Appropriate Practice Status Analysis							
		Water	Wastewater	Stormwater	Solid Waste	Transportation	Aerodromes	Rivers	Coastal Structures
	Confidence level demand/growth forecasts								
	Confidence level on financial forecasts								
Advanced	List all assumptions including organisations strategic plan that support AM – linkages with other planning doc								
	Confidence levels (IIMM 4.3.7)								
	- Inventory Data Critical Assets (Grade 1)Non Critical Assets (Grade 2)								
	- Condition Data Critical Assets (Grades 1 or 2)Non Critical Assets (Grades 1, 2 or 3)								
	- Performance Data Critical Assets (Grades 1 or 2) Non Critical Assets (Grades 1, 2 or 3)								
Outline Improvement Programmes									
Core	Identify improvements to AM processes & techniques								
	Identify weak areas & how they will be addressed								
	Timeframes for improvements								
	Identify resources required (human & financial)								
Advanced	Improvement programmes are monitored against KPI's								
	Previous improvements identified and formally reported against KPI's								
Planning by qualified persons									
	AM Planning should be undertaken by a suitably qualified person								
Core & Advanced	Process should be Peer reviewed								
Commitment									
Core	Plan adopted by Council including improvement programme								
	Plan key tool to support LTCCP								
	AM Plan regularly updated and should reflect progress on improvement plan								
Advanced	AM Plan requirements are being implemented and discrepancies formally reported								
	AM Plans evolving as AM systems provide better information								
	AM Plans updated every 3 years along with organisations strategic planning cycles								
	Council has defined the Appropriate AM Practice it is adopting								

5.0 OUTCOMES AND RESULTS OF REVIEW

5.1 Compliance Status Key Findings

The AMP Compliance Status is summarised in Table 5-1 below with an overview of the AMP Compliance status provided in a graphical manner in Figure 5-1. The individual AMP assessments are shown in an excel spreadsheet to allow an alternative viewing method.

The AMP's indicate that TDC has developed good practices and processes in the operation, management and administration of their activities but the discussion or evidence presented within the individual AMP's is often insufficient to substantiate this.

The AMP's provided in May 2012 indicates that many of the issues raised in the October review have been addressed in the subsequent version of the AMPs as amendments or improvement plan items. Competition of these actions would assist to achieve their targeted asset management level.

The AMPs assessed in May 2012 do provide Council with an adequate basis on which to make decisions between competing priorities for infrastructure funding and to understand the impact on service levels in the longer term. On-going commitment is required to complete the actions identified to progress to the high levels of Asset Management practice.

The areas that we consider will have most impact on the AMPs are those that have lower scores over all AMPs. These are:

- Description of assets – More information on the range of assets within each activity's asset register, the asset groups and the practices and processes that are associated with these along with a greater understanding of the condition and performance of the critical assets
- Levels of Service:
    - Levels of Service changes from 2009 (AMP and LTP) should be shown along with reasons and effects of these changes
    - While the Levels of Service listed in the AMP's may be appropriate for Council, there is little demonstration of how they were developed and the linkage with the community's priorities. Trends for performance to date should be shown along with a discussion on any Levels of Service gaps and link the initiatives proposed to close those gaps
- Lifecycle – Need to demonstrate the practices and processes carried out by TDC and those shown in the AMP are used on an on-going basis for the successful operation and renewal of the assets
- Growth – Additional information on utilisation especially at a higher level to enable a district wide assessment and the effects of the change in growth rates on infrastructure requirements
- Sustainability: All AMP's scored very low in this area
- Improvement Plan:
    - Improvement Program that details the requirements to achieve the appropriate AM level over the long term

5.2 General Comments

Water, Wastewater and Stormwater

These three services with appropriate AM practice set as Core Plus with demand and risk management drivers. AMP strengths in risk management in the 3Waters and growth for water services.

Solid Waste

An important Council asset and activity with appropriate AM practice set as Core. AMP provides good analysis of future growth and regional integration. AMP weakness in asset description, levels of

service, and asset lifecycle decision making are reflective of the entire AMP suite and the template approach.

Transportation

Given the extended of the asset involved in the AMP provided, very limited details are provided to support the narrative of the plan. The maintenance and renewal programmes represent a considerable investment for Council and these are examined or explained in the AMP. There may be issues or challenges such as changes in demand in the rural area, impacts of severe weather, metal availability which are not discussed.

Aerodromes

Asset and activity with appropriate AM practice set as Core. AMP weakness in asset description, levels of service, and asset lifecycle decision making are reflective of the entire AMP suite and the template approach

Rivers

Asset and activity with appropriate AM practice set as Core. AMP weakness in asset description, levels of service, and asset lifecycle decision making are reflective of the entire AMP suite and the template approach.

Coastal Structures

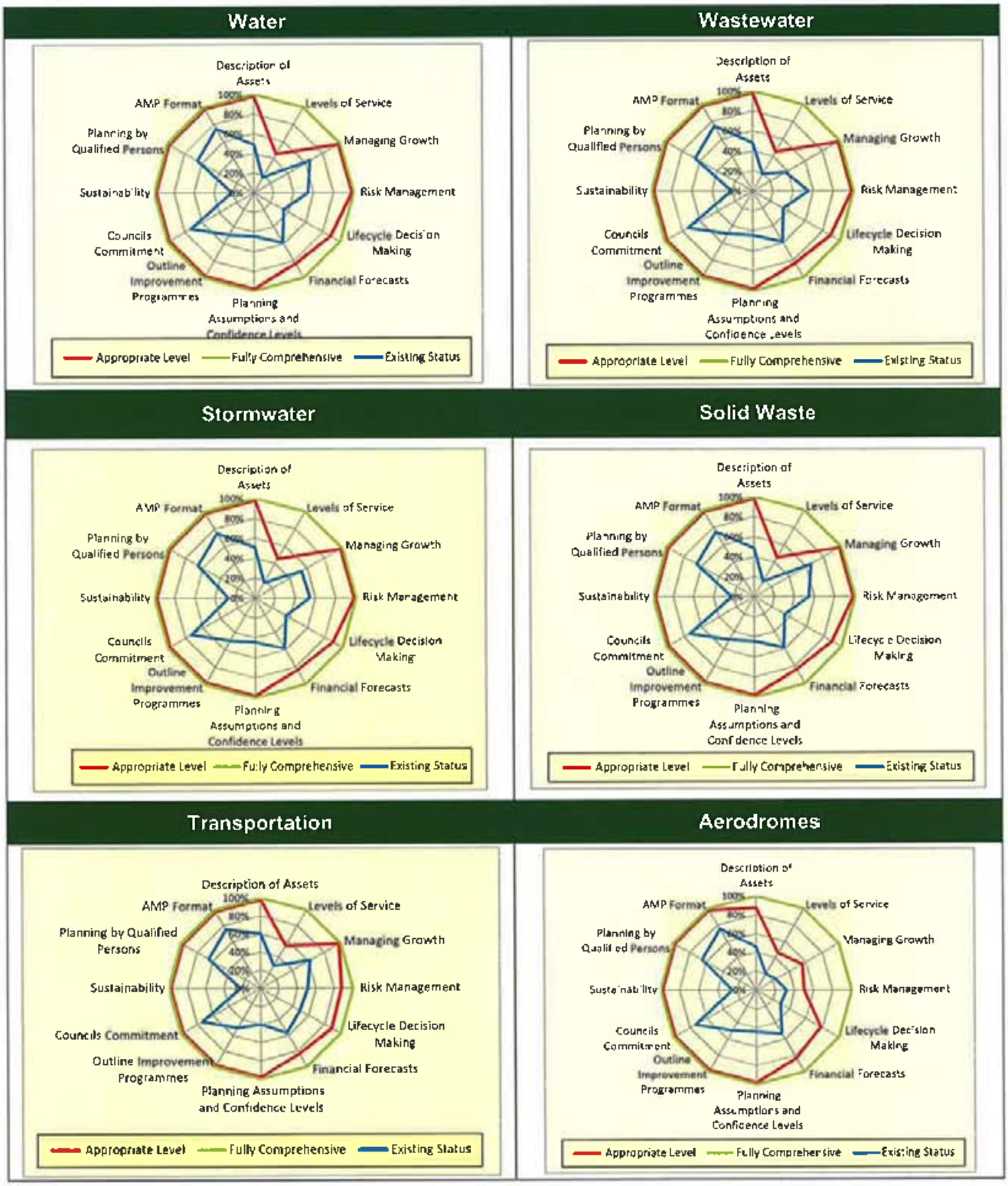
Asset and activity with appropriate AM practice set as Core. An important Council activity with relatively minor expenditure. AMP weakness in asset description, levels of service, managing growth and asset lifecycle decision making are reflective of the entire AMP suite and the template approach.

Table 5-1: AMP Compliance Status

Service		Description of Assets	Levels of Service	Managing Growth	Risk Management	Lifecycle Decision making	Financial Forecasts	Planning Assumptions & Confidence Levels	Outline Improvement Programmes	Councils Commitment	Sustainability	Planning by Qualified Persons	AMP Format
Water	Existing Status	49%	18%	65%	54%	35%	58%	44%	49%	74%	22%	65%	75%
	Appropriate AM Level	100%	45%	100%	100%	89%	83%	100%	100%	100%	100%	100%	100%
Wastewater	Existing Status	48%	20%	38%	55%	35%	58%	44%	49%	74%	21%	65%	75%
	Appropriate AM Level	100%	45%	100%	100%	89%	83%	100%	100%	100%	100%	100%	100%
Stormwater	Existing Status	51%	18%	54%	54%	35%	58%	44%	49%	74%	26%	65%	75%
	Appropriate AM Level	100%	45%	100%	100%	89%	83%	100%	100%	100%	100%	100%	100%
Solid Waste	Existing Status	51%	20%	53%	55%	20%	53%	51%	49%	74%	57%	65%	75%
	Appropriate AM Level	100%	45%	67%	75%	44%	83%	100%	100%	100%	100%	100%	100%
Transportation	Existing Status	60%	29%	62%	51%	49%	57%	40%	50%	74%	23%	65%	75%
	Appropriate AM Level	100%	55%	100%	88%	89%	83%	100%	100%	100%	100%	100%	100%
Aerodromes	Existing Status	46%	20%	24%	32%	29%	53%	44%	49%	74%	25%	65%	75%
	Appropriate AM Level	88%	45%	56%	50%	78%	83%	100%	100%	100%	100%	100%	100%
Rivers	Existing Status	48%	24%	36%	36%	48%	49%	44%	49%	74%	25%	65%	75%
	Appropriate AM Level	88%	45%	56%	63%	78%	83%	100%	100%	100%	100%	100%	100%
Coastal Structures	Existing Status	47%	18%	25%	32%	43%	53%	36%	49%	74%	25%	65%	75%
	Appropriate AM Level	88%	45%	56%	50%	78%	83%	100%	100%	100%	100%	100%	100%

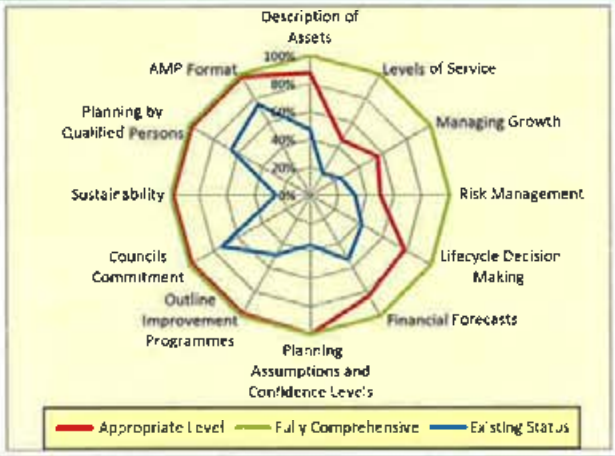
Note: The Existing Status and Estimated Appropriate AM level are expressed as a % of compliance

Figure 5-1: AMP Compliance Status Graphs



Rivers

Coastal Structures



6.0 ASSESSMENT OF LINKAGES AND IMPLEMENTATION OF PLAN

This Peer Review has been undertaken in terms of, and limited to the instructions provided to Waugh Infrastructure Management Limited.

In the course of the review the documents considered in or excluded from the review are as follows:

Documents considered in the review	Context/Comment
Tasman Water, Wastewater, Stormwater, Solid wastes, Transportation, Aerodromes, Rivers and Coastal structures Asset Management Plans (October 2011 and February 2012). Peer review improvement table provided by MWH in their letter dated 3rd April 2012	Document for Peer Review
INGENIUM Code of Ethics	Reference and guidance
IPENZ Code of Ethics	
NAMs Infrastructure Asset Management Manual 2006	
Local Government Act 2002	Reference
Resource Management Act 1991	
Health Act 1956 and Health (Drinking water) Amendment Act 2007	
Financial Reporting Standards (FRS 3)	

Documents Referred to within this AP and Excluded from the Review	Comment
Tasman District Council Long Term Council Community Plan 2009-2019	Reference to, or abbreviated versions of these documents are included within the Asset Management Plan. Consistency between the Asset Management Plan and the documents listed was not examined as part of this review. It is assumed that the core consistencies exist between the Management Plan and the Long Term Council Community Plan; Water and Sanitary Assessments; and the current Infrastructure Valuation. Linkages between these documents beyond those described within the Asset Management Plan were not examined.
Tasman District Council Assessment of Water and Sanitary Services	
Valuation of Infrastructure of Assets Report 2010	
Tasman District Council General and Strategic Policies not included within the Management Plan	
Tasman District Council Asset Registers	
Tasman District Council Operating Manuals	

The implementation of the Asset Management Plan was not evaluated as part of the Peer Review. An evaluation of the implementation would require interviews with a number of Tasman District Council staff to ascertain the integration of the Asset Management Plan throughout the organisation.

7.0 RECORD OF METHODOLOGY OF PEER REVIEW

Following is the methodology followed by Waugh Infrastructure Management Ltd to carry out the Peer Reviews of the Asset Management Plans:

1. Agree scope and Plans to be reviewed
2. Check for any Peer Reviewer conflicts of interest
3. Arrange for Plan and any other significant documents to be provided to the Peer Reviewer
4. Complete Peer Review of Plan as per Standard Questions/Criteria
5. Carry out Waugh Infrastructure Management internal review of Peer Review Report
6. Provide Draft Peer Review Report to Client
7. Discuss feedback from Client
8. Prepare and issue final Peer Review Report

8.0 STATEMENT OF CODE OF ETHICS

In undertaking this Peer Review, Waugh Infrastructure Management Limited Management, Staff and Associates recognise the professional responsibilities integral to undertaking a review of another professional's work.

The review has been undertaken with particular regard to the following:

INGENIUM Code of Ethics

Clause 2 PROFESSIONALISM AND INTEGRITY

INGENIUM members shall undertake their duties with professionalism and integrity, and shall work within their levels of competence.

Guidelines - Members need to:

- Exercise initiative, skill and judgement to the best of their ability at all times for the benefit of their employer and/or client
- Give decisions, recommendations or opinions that are honest, objective and factual. If these are ignored or rejected they should ensure that those affected are made aware of the possible consequences
- Accept personal responsibility for their work and work done under their supervision or direction
- Ensure that they do not misrepresent their areas or levels of experience or competence
- Take care not to disclose confidential information relating to their work or knowledge of their employer or client without the agreement of those parties
- Disclose any financial or other interest that may, or may be seen to, impair their professional judgment
- Ensure that they do not promise to, give to, or accept from any third party anything of substantial value by way of inducement
- First inform another member before reviewing their work and refrain from criticising the work of other professionals without due cause
- Uphold the reputation of INGENIUM and its members, and support other members as they seek to comply with the Code of Ethics

IPENZ Code of Ethics

Obligations owed to other engineers:

Clause 11: Not review other Engineers' work without taking reasonable steps to inform them and investigate

Waugh Infrastructure Management Limited acknowledges the cooperation of the Plan Sponsor and the Plan Writers in undertaking this Peer Review.

9.0 APPENDICES

9.1 Appendix A – Statement of Experience of Reviewers

Andrew Iremonger

Andrew is a utilities engineer and asset management specialist with 30 years experience in Local Government Asset Management and Engineering. Andrew specialises in strategic Asset Management, specifically the development and updating of Activity and Asset Management Plans, Water and Sanitary Assessments and also Lifeline Utility Plans.

Ross Waugh

Ross is a strategic asset management and systems integration specialist with over 25 years experience in Local Government Asset Management and Engineering. Major consulting strengths include Strategic Asset Management Analysis, Asset Management Planning and the integration of asset management principles into Council processes and operations.

Grant Holland

Grant is an Asset Management specialist with a wide variety of experience in local government asset management and engineering. Grant's interest in supporting communities shows through his development of models for developing Levels of Service and long term planning through to the preparation of Strategic Plans, Activity Management Plans and Maintenance Contracts.

Grant has a broad background in surveying & land development, asset management system development, and community infrastructure and amenities management.

10.0 GLOSSARY OF TERMS

Term	Definition
Peer Review	A Peer Review is an impartial and professional review of another practitioner's work. The review is undertaken in a rigorous and systematic manner with due regard to ethics and confidentiality
Peer Reviewer	A suitably qualified person who may be a staff member of a local authority, or a consultant engaged by a local authority who undertakes or coordinates the review of another organisation or consultant's plan
Plan Sponsor	The staff member of a local authority or utility provider responsible for ensuring a plan is produced. The Plan Sponsor may also fulfil a role in coordinating contributions of staff and consultants towards the development of the plan. This person may be described as the Asset Management Coordinator in the Infrastructure Asset Management Manual
Plan Writer	The author of the plan who may be a staff member of a local authority or utility provider, or a consultant engaged by a local authority. Where a plan is prepared by a number of contributors the editor who compiles the contributions may be identified as the Plan Writer

APPENDIX W. ASSET DISPOSAL

Asset disposal generally is a by-product of renewal or upgrade decisions that involve the replacement of assets.

The Council does not have formal strategy documents relating to asset disposals; however they generally follow the following practices.

- Strategy for sale and disposal of Infrastructural Assets:
- Council's policy is to obtain best available return from the disposal or sale of assets within an infrastructural activity and any net income is credited to that activity.
- Sale and Disposal Process:
- Council follows sale and disposal practices that comply with the relevant legislative requirements for local government with respect to the sale and disposal of infrastructural 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.

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.

There are no current, or planned areas of operation that Council wishes to divest itself of.

APPENDIX X. GLOSSARY OF ASSET MANAGEMENT TERMS

Acronyms and Abbreviations

AMP	Activity Management Plan
LGA	Local Government Act
LTP	Long Term Plan
LTSA	Land Transport Safety Association
TRMP	Tasman Regional Management Plan
CAA	Civil Aviation Authority
RMA	Resource Management Act
AIP	Aeronautical Information Publication

Activity	An activity is the work undertaken on an asset or group of assets to achieve a desired outcome.
Activity Management Plan (AMP)	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 LTP, 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 which employs predictive modelling, risk management and optimised renewal decision making techniques to establish asset lifecycle treatment options and related long term cashflow predictions. (See Basic Asset Management).
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 which 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 cashflow 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 (eg. 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 database.
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 (ie. water) or service area (ie. 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 ie. from planning and design to decommissioning or disposal. • The period of time between a selected date and the last year over which the criteria (eg. 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 Plan (LTP)	The Long Term Plan (LTP) 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 LTP is a key output required of Local Authorities under the Local Government Act 2002. The LTP replaces the Long Term Council Community Plan (LTCCP).

Maintenance Plan	Collated information, policies and procedures for the optimum maintenance of an asset, or group of assets.
Net Present Value (NPV)	Net Present Value – Standard method for evaluating long-term projects in capital budgeting.
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 Measure (PM)	A qualitative or quantitative measure of a service or activity used to compare actual performance against a standard or other target. Performance measures 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 (eg. 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 AMP. 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, ie. replacement value for determining maintenance levels or market value for life cycle costing.

APPENDIX Y. EXISTING AERODROME PLANS

This appendix includes the following plans.

Motueka Aerodrome

- Location Map
- Aerial Plan
- Site Layout Drawings
- CAA AIP Document

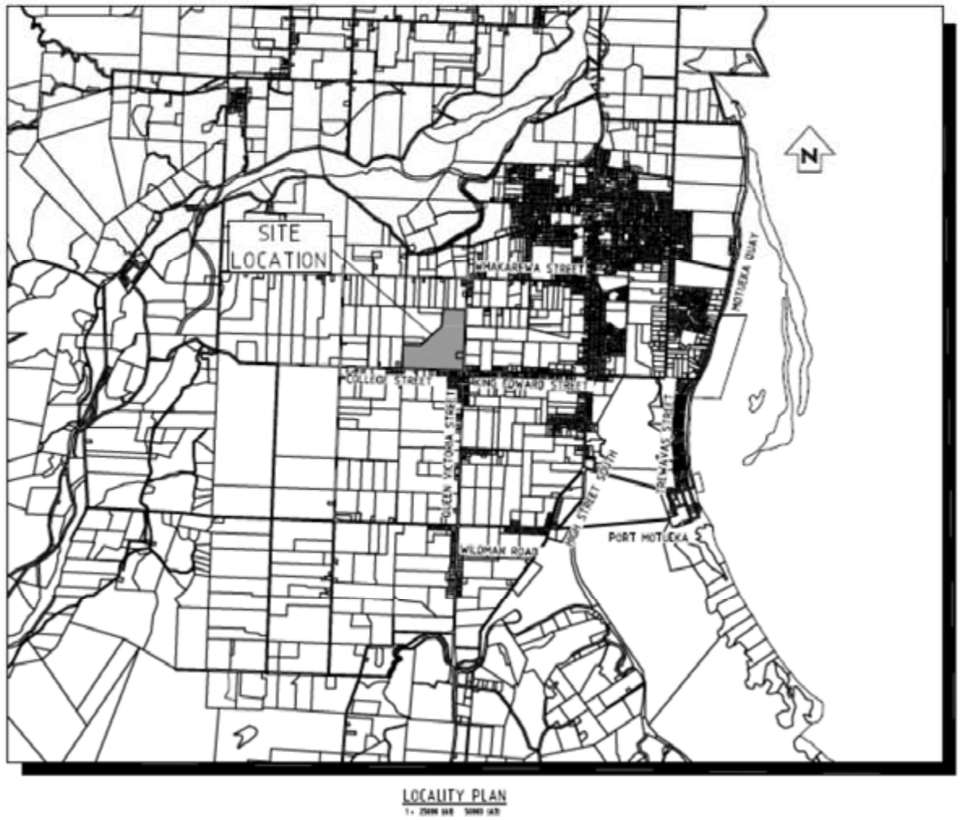
Takaka Aerodrome

- Location Map
- Aerial Plan
- Site Layout Drawings
- CAA AIP Document


N
W
E
S
Motueka
WHAKAREWA STREET
Motueka
Aerodrome
COLLEGE STREET
QUEEN VICTORIA STREET
Motueka Aerodrome Location Map
Scale 1:35000
Cadastre sourced from Land Information New Zealand data. Crown Copyright reserved.


MOTUEKA AERODROME
SCALE 1:4000

MOTUEKA AERODROME



tasman district council

MWH

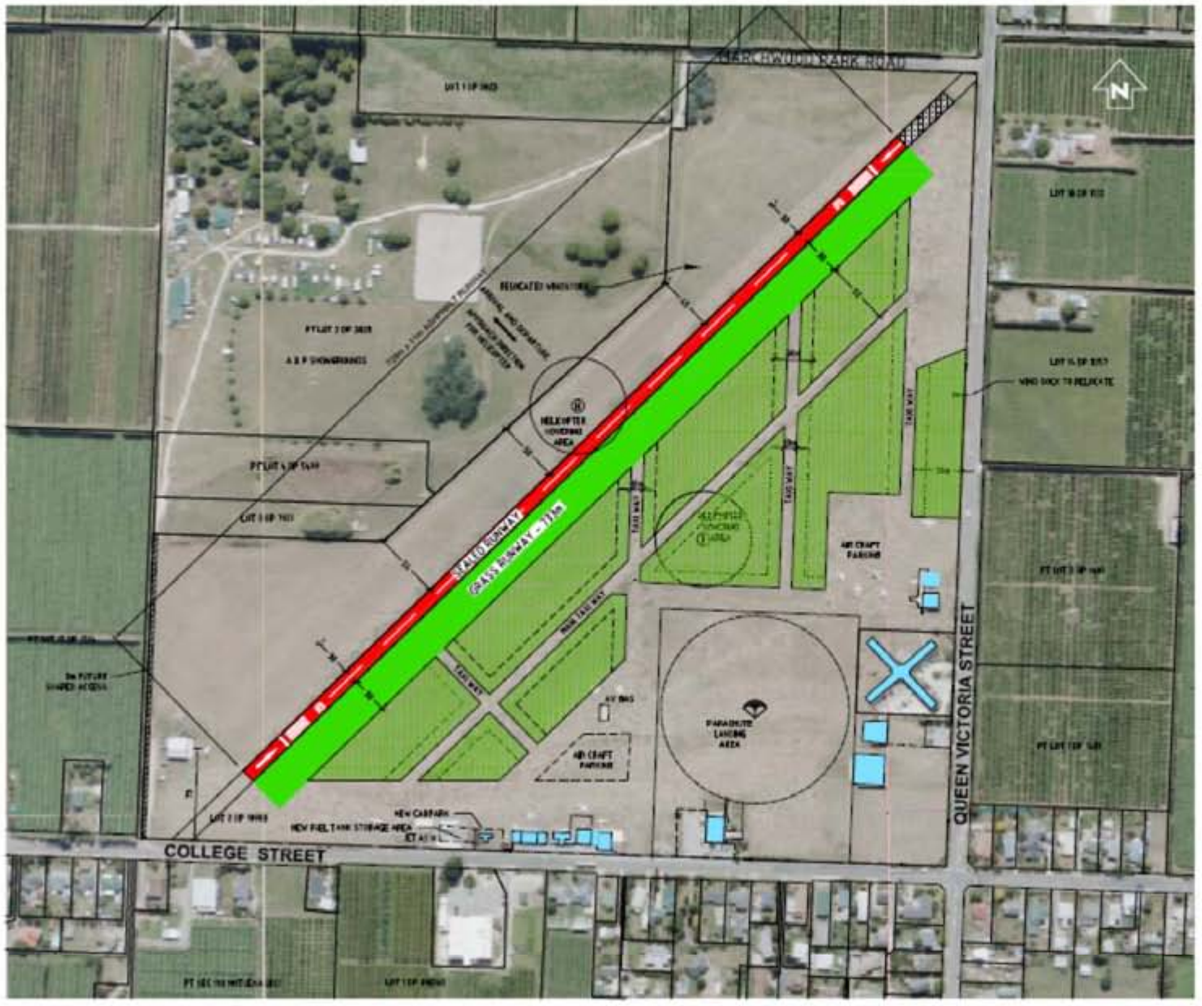
DRAWING INDEX

SHEET No.	DESCRIPTION
00	COVER, DRAWING INDEX AND LOCALITY PLAN
01	OVERALL SITE PLAN

Status Stamp
FOR CONSTRUCTION

Date Stamp
25 AUGUST 2011

JOB No. Z1448656



LEGEND

- HELICOPTER PAD
- PARACHUTE AREA
- EXISTING BUILDINGS
- CONCRETE PAD NOT FOR LANDING ON
- GRASS AREAS
- SEALED RUNWAY
- GRASS RUNWAY
- NEW AIR CRAFT PARKING AREA
- NEW CAR PARKING AREA

REV	AMENDMENTS	ORIGINAL	DATE	CHECKED	DATE	APPROVED	DATE	FIELDBOOK		
									Name	Date
								SURVEYED		
								DESIGNED		
								DRAWN	LF	08-08-11
								CHECKED		
								APPROVED		08-08-11

MWH

tasman district council

MOTUEKA AIRPORT

OVERALL SITE PLAN

FOR CONSTRUCTION

25 AUGUST 2011

SCALES (A1) 1:2000 (A3) 1:4000

TASPlan No.	Sheet No.	Rev.
	01	1

ELEV 38

NZMK

MOTUEKA

ARRIVAL/DEPARTURE

UNATTENDED: 127.3 *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

Caution: Climb gradient higher than 3.3% required to reach published set heading altitude over NS VOR, adjust as required.

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, DUMOT, FOXTN, TR, SIMZI	5600ft
To HK, WS, KAKET	5800ft
To ALADA	6100ft
To WB	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

Caution: Climb gradient higher than 3.3% required to reach published set heading altitude over NS VOR, adjust as required.

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, DUMOT, FOXTN, TR, SIMZI	5600ft
To HK, WS, KAKET	5800ft
To ALADA	6100ft
To WB	6500ft
To SANDY	6600ft

20 NOVEMBER DEPARTURE

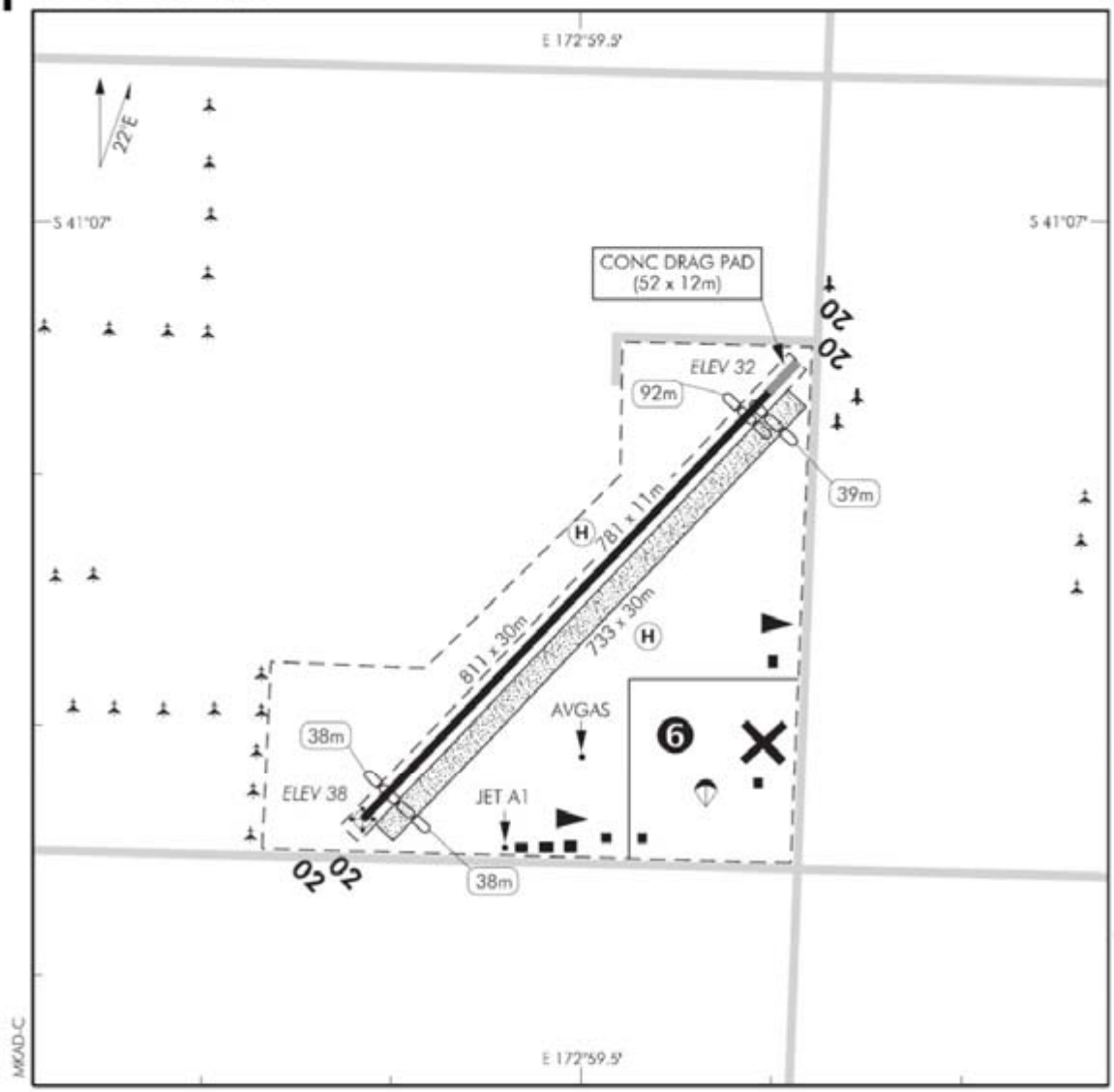
As soon as practicable after take-off turn LEFT to track 020°M overhead Moutere River mouth (Port Motueka) at MNM 600ft. Maintain track 020°M to intercept R330 from NS VOR. Continue climb on R330 to MNM 5000ft and then turn to intercept required track.

ELEV 38

NZMK

UNATTENDED: 127.3

MOTUEKA AERODROME



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.

❻ Parachute landing area. Parachute operations daily.

7. **CAUTION:** Significant undulations in grass RWY 02/20.

Effective: 19 NOV 09

S 41 07 24 E 172 59 19

MOTUEKA AERODROME

Non-Certificated Aerodrome 1NM SW of Motueka

MOTUEKA
OPERATIONAL DATA

NZMK

RWY

RWY	SFC	Strength	Gp	Slope	ASDA	Take-off distance 1:20	Take-off distance 1:30	Take-off distance 1:40	LDG DIST
02 20	B	ESWL 1020	5	0.22D 0.22U	781	689 743			743 689
02 20	Gr	TBA	5	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, Jet A1, Swipecard — opposite Aero Club — Shell only

Permanent tie-downs available.

SUPPLEMENTARY

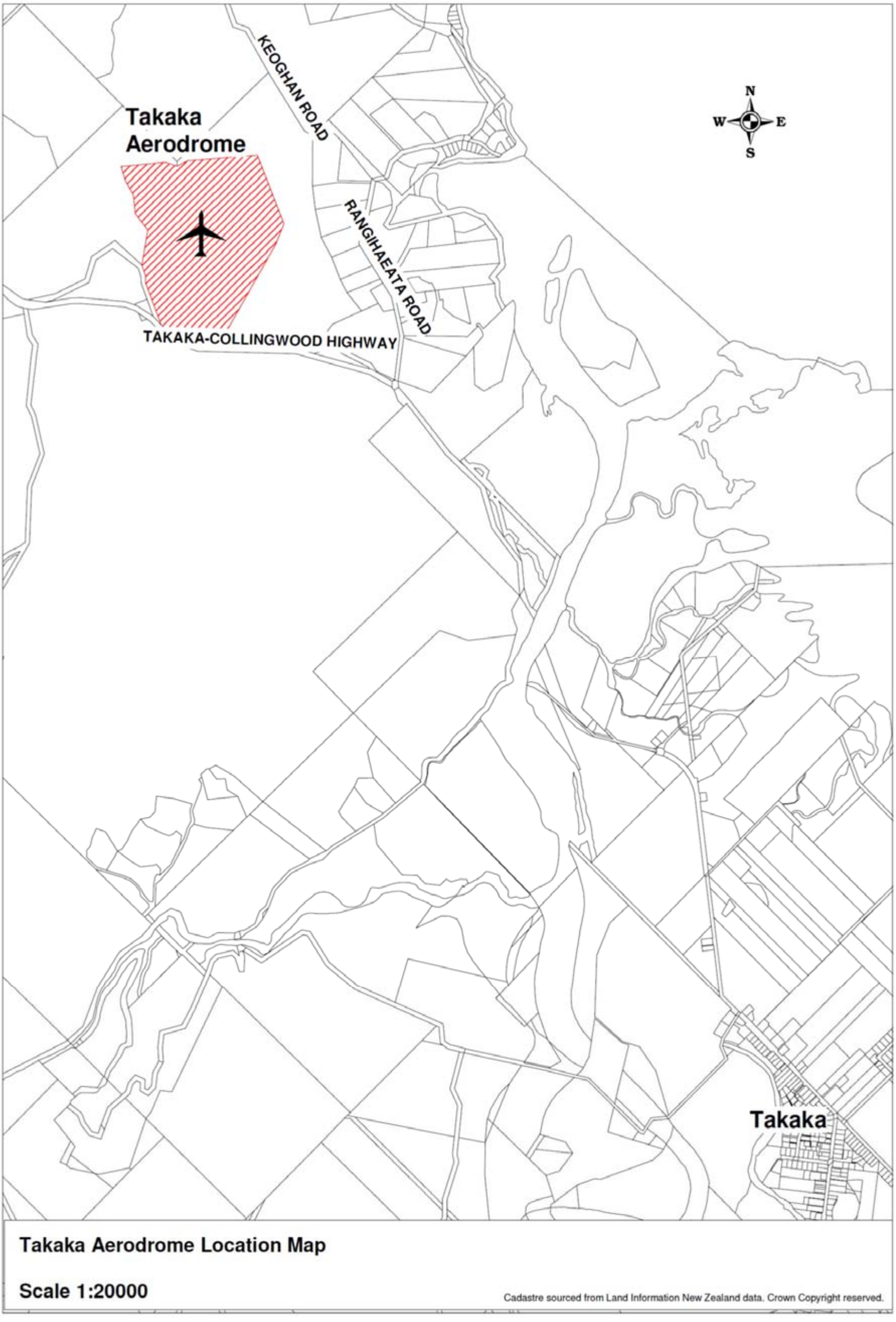
Operator: Tasman District Council, PO Box 123, Motueka
Tel (03) 528 2022 or (03) 543 8400 Fax (03) 528 9751

Available for general use.

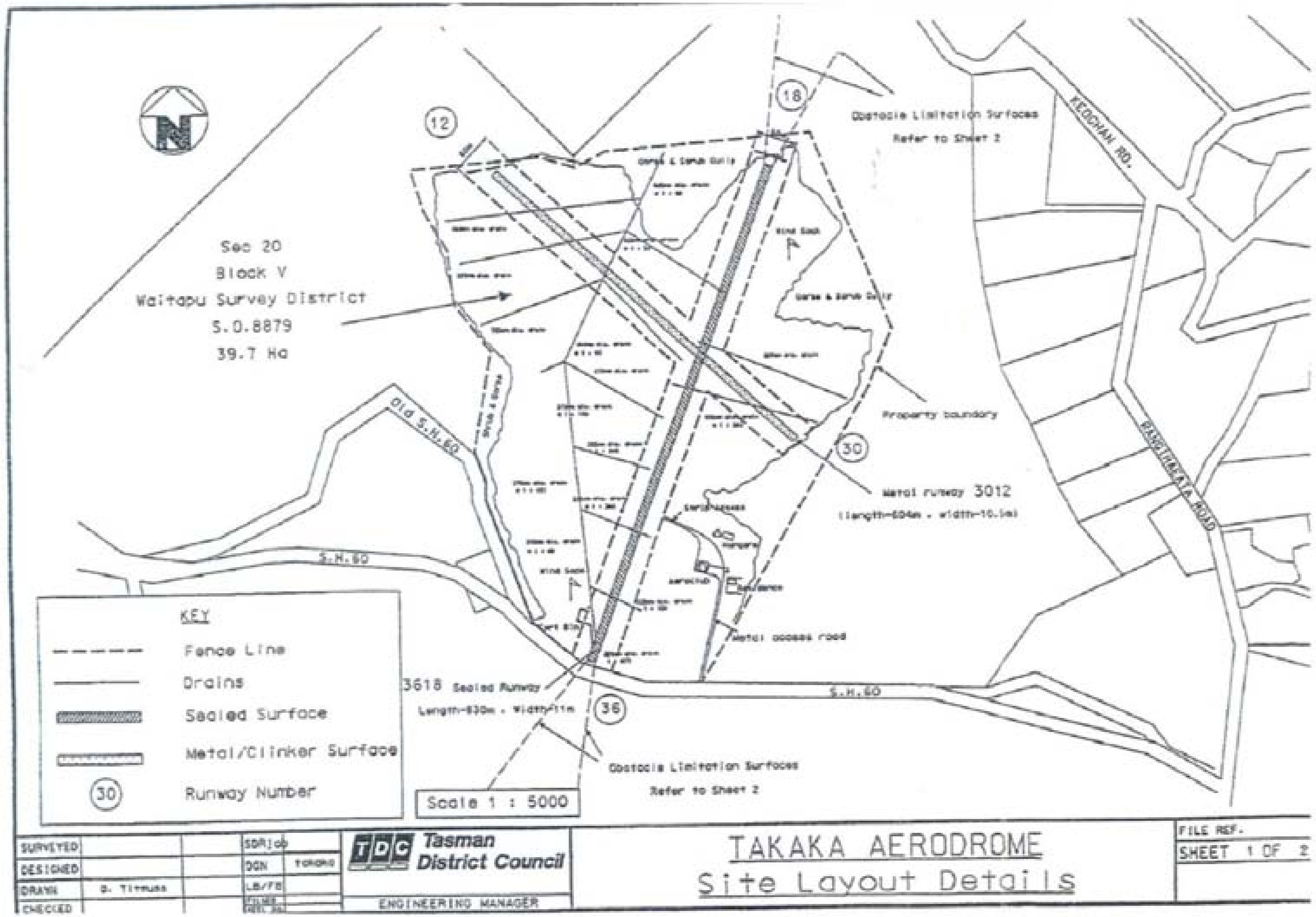
Landing fees payable in honesty box located on hangar next to Motueka aero club.

Effective: 6 JUL 06

MOTUEKA
OPERATIONAL DATA


KEOGHAN ROAD
Takaka
Aerodrome
RANGIHAEATA ROAD
TAKAKA-COLLINGWOOD HIGHWAY
N
W
E
S
Takaka
Takaka Aerodrome Location Map
Scale 1:20000
Cadastre sourced from Land Information New Zealand data. Crown Copyright reserved.


TAKAKA AERODROME
SCALE 1:4000



Sec 20
Block V
Waitapu Survey District
S.O.8879
39.7 Ha
Obstacle Limitation Surfaces
Refer to Sheet 2
KEOGHAN RD.
Property boundary
Metal runway 3012
Old S.H.60
S.H.60
3618 Sealed Runway
Metal access road
KEY
Fence Line
Drains
Sealed Surface
Metal/Clinker Surface
Runway Number
Scale 1 : 5000
TAKAKA AERODROME
Site Layout Details
Tasman District Council
ENGINEERING MANAGER
FILE REF.
SHEET 1 OF 2
SURVEYED
DESIGNED
DRAWN
CHECKED

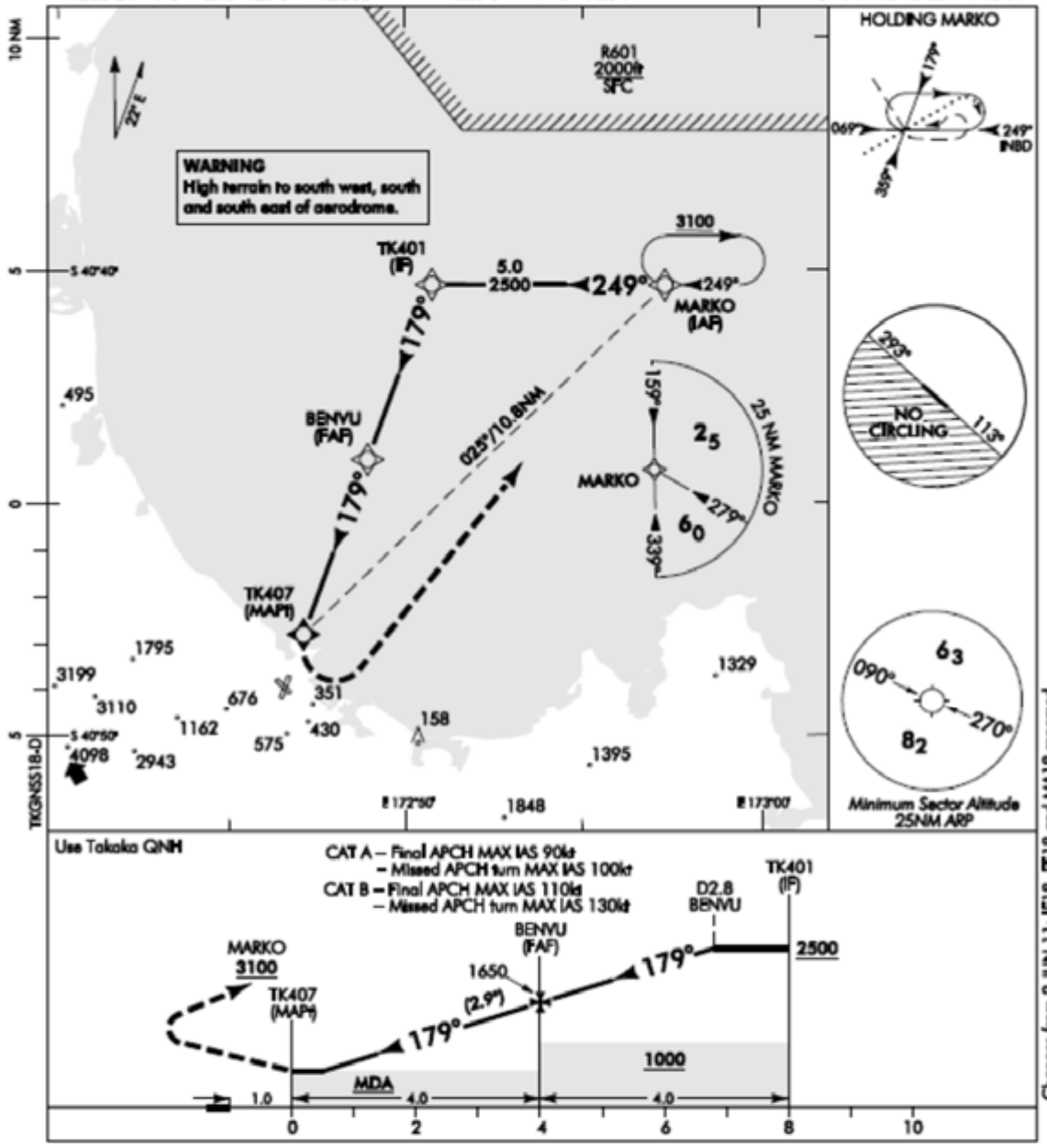
ELEV 100
RWY 18 THR ELEV 75
NELSON TOWER: 127.4 123.3

CAT A,B

NELSON ATIS: 129.1

TAKAKA
RNAV (GNSS) RWY 18

UNATTENDED: 119.1



MISSED APCH: Turn LEFT direct to MARKO 3100

DISTANCE to WPT	TK407	0.5	1	2	3	BENVU	1	2	3	TK401
Advisory Altitude 5%	MDA	MDA	750	1050	1350	1650	1950	2250	2550	2850
Category	A		B			C		D		
LNAV	D580(505) – 2000		D800(725) – 2500			NA				
Circling *	D770(670) – 2000		D900(800) – 2800							

* Circling NA south west of RWY 11/29

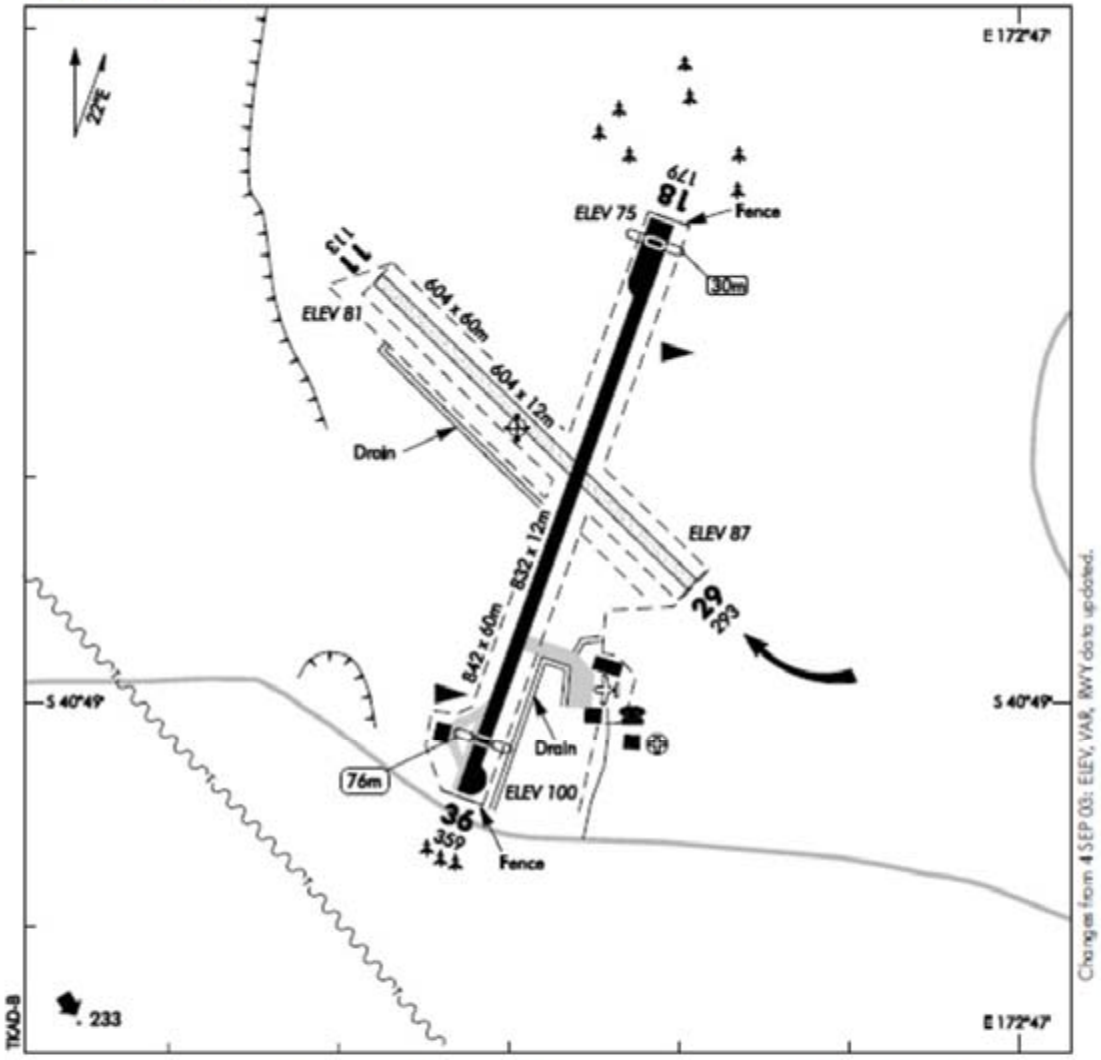
Effective: 28 JUL 11

TAKAKA
RNAV (GNSS) RWY 18

ELEV 100
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.
3. **CAUTION:** Trees just south of road on short final to RWY 36.

Effective: 23 SEP 10

*S 40 48 48 E 172 46 31**

TAKAKA AERODROME

Non-Certificated Aerodrome 3NM N of Takaka

NZTK

TAKAKA
OPERATIONAL DATA

RWY

RWY	SFC	Strength	Gp	Slope	ASDA	Take-off distance 1:20	1:30	1:40	LDG DIST
11 29	GRVL	ESWL 1000	4	0.33U 0.33D	604	604			604
18 18	B	ESWL 3000	5 7	0.94U	832	756			802
36 36	B	ESWL 3000	7 5	0.94D	832	802			756

LIGHTING

Nil

FACILITIES

Nil

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.

Effective: 23 SEP 10

TAKAKA
OPERATIONAL DATA

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: Becky Marsay Authority: Project Technical Lead		16 Feb 2012
3	Draft for Council Review	Name: Jim Frater Authority: Asset Manager		
4	Draft for Public Consultation through LTP	Name: Lloyd Kennedy Authority: Community Services Manager		
5	Final Plan Adopted by Council Council Resolution	Name: Richard Kempthorne Authority: Mayor Reference: _____		

Z.2 AMP Development Process

Project Sponsor:	Lloyd Kennedy
Asset Manager:	Jim Frater
Project Manager:	Stephen Sinclair
Project Technical Lead:	Becky Marsay
AMP Author:	Jenna Voigt
Project Team:	Jim Frater, Selwyn Steedman, Ray Firth, Andrew Maughan, Jenna Voigt

Z.3 Quality Plan

This quality plan comprises three 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 – ie. 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	Council 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 the 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 the financial model, the implications of the decisions must be reflected in the financial information and other relevant places in the AMP – eg. 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 upgrade the plans to specific requirements: 1. Scoping of AMP Upgrade Project 2. Review of Levels of Service 3. Review of Document Upgrade Needs.	Becky Marsay
		Conduct a Peer Review.	Lloyd Kennedy
2	AMP Document Consistency	Review documents in advance and prepare instructions to authors on how to upgrade.	Becky Marsay
3	AMP Document Format	Central review of AMP document deliverables.	Becky Marsay
4	AMP Readability		
5	AMP Text Accuracy and Currentness	Authors to review each AMP in detail.	Jenna Voigt
6	Completeness of Required Upgrades/Expenditure Elements	AMP authors to workshop with relevant project team members to ensure all projects/cost elements covered.	Jenna Voigt
		Central list of issues (called a "Parking Lot") that need to be considered in each AMP.	Jenna Voigt
7	Accuracy of Cost Estimates	Independent review of all cost estimates.	Jenna Voigt
8	Correctness of Spreadsheet Templates	Independent review of all templates.	Becky Marsay
9	Assumptions and Uncertainties and Risk Assessments	Independent review of all cost estimates.	Jenna Voigt
10	Changes Made After Submission to Financial Model	Protocol prepared to ensure Teamsite 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.	Becky Marsay
		AMP authors to manage a change log for changes after submission.	Jenna Voigt
11	Improvement Plan Adequate	Prepare template in advance to ensure consistent approach.	Becky Marsay
		Central review of Improvement Plans.	Becky Marsay

Z.6 Quality Control

Quality control checks and reviews are scheduled on the attached table. 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	Lloyd Kennedy	Community Services Manager		
Levels of Service prepared to instructions	Becky Marsay	Project Technical Lead		16 Feb 2012
Levels of Service Asset Manager acceptance	Jim Frater	Asset Manager		
AMP document prepared to instructions	Becky Marsay	Project Technical Lead		16 Feb 2012
AMP text accuracy and currentness	Jenna Voigt	AMP Author		
Capital Upgrade List complete	Jim Frater	Asset Manager		
Capital Upgrade List complete - Asset Manager acceptance	Jim Frater	Asset Manager		
All issues on “Parking Lot” addressed	Jenna Voigt	AMP Author		
Capex Expenditure spreadsheet template reviewed	Becky Marsay	Project Technical Lead		16 Feb 2012
Project Estimate spreadsheet template reviewed	Becky Marsay	Project Technical Lead		16 Feb 2012
All Capex Estimates reviewed and including assessment of Programme, Project Drivers, Levels of Accuracy and assumptions/uncertainty	Jenna Voigt	AMP Author		
Opex Costs spreadsheet arithmetic review	Jenna Voigt	AMP Author		
Opex Cost forecast – fitness for purpose	Lloyd Kennedy	Community Services Manager		
Improvement Plan prepared to instructions	Becky Marsay	Project Technical Lead		16 Feb 2012
Improvement Plan Asset Manager acceptance	Jim Frater	Asset Manager		
Capital Forecast accepted for input to NCS	Jim Frater	Asset Manager		
Change log complete and changes appropriately dealt with – after Council review	Jenna Voigt	AMP Author		
Change log complete and changes appropriately dealt with – after Public consultation	Jim Frater	Asset Manager		
Peer Review completed	Lloyd Kennedy	Community Services Manager		