

PLANNER'S REPORT

PLAN CHANGE 26 – WANAKA AIRPORT DESIGNATION 64 – AERODROME PURPOSES DESIGNATION 65 – AIRPORT APPROACH AND LAND USE CONTROLS FOR WANAKA AIRPORT

FOR HEARING COMMENCING:13 June 2011REPORT DATED:31 May 2011SUBMITTED BY:Annemarie Robertson, Planner, Lakes Environmental

FOR AND ON BEHALF OF THE QUEENSTOWN LAKES DISTRICT COUNCIL

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INTRODUCTION

This report has been written in accordance with Section 42A of the Resource Management Act 1991 (the Act) to consider all submissions and further submissions received following the public notification of Plan Change 26 and to make recommendations on those submissions.

This report also considers the submissions received to the Notices of Requirement to alter Designation 64 – *Aerodrome Purposes* and Designation 65 – *Airport Approach and Land Use Controls* for Wanaka Airport, and undertakes an assessment of effects in accordance with Section 171 with respect to these applications.

Queenstown Lakes District Council (QLDC) has lodged a Plan Change and two Notices of Requirement relating to Wanaka Airport. The three applications were notified together on 15 December 2010 and submissions closed on 18 February 2011. The summary of decisions requested for Plan Change 26 was re-notified for further submissions on 23 March 2011, with a closing date of 8 April 2011.

Although this report is intended as a stand-alone document, a more detailed understanding of the proposed Plan Change and Notices of Requirement, the processes undertaken, and the issues and options considered may be gained by reading the Section 32 report (Plan Change 26) and the applicant's Assessment of Environmental Effects for each of the Designation applications. These reports are available on the Council's website: <u>www.gldc.govt.nz</u>.

The relevant provisions in the Queenstown Lakes District Council's District Plan affected by the proposed Plan Change are:

- Part 4 (District Wide Issues) by introducing a new objective and associated policies relating to Wanaka Airport to maintain and promote the on-going operation of the airport while managing reverse sensitivity effects on surrounding land uses;
- Part 5 (Rural Areas) by amending existing and introducing new provisions to include a Night-Time Noise Boundary and to manage activities on land affected by aircraft noise;
- Part 12 (Rural Visitor Zones) by amending existing and introducing new provisions to include a Night-Time Noise Boundary and to manage and mitigate the effects of aircraft noise; and
- Part 14 (Transport) by amending existing objectives and policies relating to Air Transport to allow Wanaka Airport to be properly managed as a valuable community asset in the long term, including the establishment of a Night-Time Noise Boundary.

The Plan Change would also include amendments to the District Plan Definitions and would create a new Appendix 14: *Acoustic Insulation and Ventilation Requirements Wanaka Airport*.

The Notices of Requirement to alter the Aerodrome Purposes Designation and Airport Approach and Land Use Controls Designation would include changes to E1 and E2 in Appendix 1 of the District Plan.

Abbreviations

- ANB Air Noise Boundary
- ASAN Activity Sensitive to Aircraft Noise
- CAA New Zealand Civil Aviation Authority
- GA General Aviation
- INM Integrated Noise Model
- MDA Marshall Day Acoustics Limited
- NMP Noise Management Plan
- NNB Night-time Noise Boundary
- NZTA New Zealand Transport Agency
- OCB Outer Control Boundary
- OLS Obstacle Limitation Surfaces
- ORPS Otago Regional Policy Statement
- QAC Queenstown Airport Corporation Limited

QLDCQueenstown Lakes District CouncilRESARunway End Safety AreaSELSound Exposure LevelWAMCWanaka Airport Management CommitteeWAMPWanaka Airport Master Plan

Noise Terminology

dB	Decibel – a measurement of sound level.
dBA	The A-weighted sound level. A-weighting is the process by which noise levels are corrected to account for the non-linear frequency response of the human ear.
$L_{Aeq(15 hours)}$	The equivalent continuous (time-averaged) A-weighted sound level, or 'average noise level', over a 15 hour time period.
L _{AFmax}	The maximum A-weighted and F-weighted sound level recorded in a given measuring period. F-weighting is a means of time-weighting how the sound level meter reacts to changes in sound pressure.
L _{dn}	The day/night noise level calculated from the 24 hour L_{Aeq} with a 10dB penalty applied to the night-time $L_{\text{Aeq}}.$
SEL	Sound Exposure Level – the sound level of one second duration which has the same amount of energy as the actual noise event measured.

BACKGROUND

Description of Proposal

Plan Change 26

A Master Plan for Wanaka Airport was prepared by Peak Projects International Limited in September 2008 for the Wanaka Airport Management Committee (WAMC). The report includes air traffic growth forecasts prepared by AirBiz, an international specialist aviation consultancy. In 2010, AirBiz reviewed and updated the growth forecasts in an addendum to the Master Plan. The suggested air traffic growth scenario includes:

- an increase in scheduled services to and from Christchurch, and possibly the introduction of services to and from Wellington from 2013 onwards, with larger aircraft such as the Dash 8 (50 passengers) and ATR (66 passengers) being used;
- the possible introduction of scheduled flights using jet aircraft such as the Boeing 737-300 to and from Christchurch (and possibly Wellington and Auckland) from about 2020 onwards;
- an increase in flight seeing services based on tourism growth;
- an increase in helicopter operations in accordance with recent and higher than proportional growth;
- the continued growth of warbird and vintage aircraft operations;
- the possibility of aircraft operations at night (between 10pm and 7am).

To provide for this growth, the existing noise boundaries, which are based on modelling undertaken in 1995 using 2010 as a planning horizon, need to be replaced by noise boundaries which reflect the increase in aircraft movements and the larger aircraft that the airport is anticipated to accommodate.

The purpose of the proposed Plan Change is:

- to replace the existing 55 dB L_{dn} Outer Control Boundary (OCB) and 65 dB L_{dn} Air Noise Boundary (ANB) with a new OCB and ANB resulting from remodelling of the noise contours, based on predicted future aircraft movements through to 2036;
- to introduce a new Night-Time Noise Boundary (NNB) based on a Sound Exposure Level (SEL) of 95 dB into the District Plan to enable the effects of any proposed night-time flights to be effectively mitigated;
- to introduce new and amend existing provisions in the District Plan to enable the airport to provide for its future growth through managing activities on land affected by aircraft noise. In the Rural General Zone, new activities sensitive to aircraft noise will be prohibited within the OCB. In the Windermere Rural Visitor Zone, new activities sensitive to aircraft noise will be prohibited within the NNB, and appropriate acoustic insulation will be required for activities sensitive to aircraft noise between the OCB and NNB.

It is proposed to add a definition for Activity Sensitive to Aircraft Noise (ASAN) to the District Plan, as follows:

"Activity Sensitive to Aircraft Noise (ASAN) - means any Residential Activity, Visitor Accommodation activity, Community Activity and Day Care Facility including all outdoor spaces associated with any education facility but excludes police stations, fire stations, courthouses, probation and detention centres, government and local government offices."

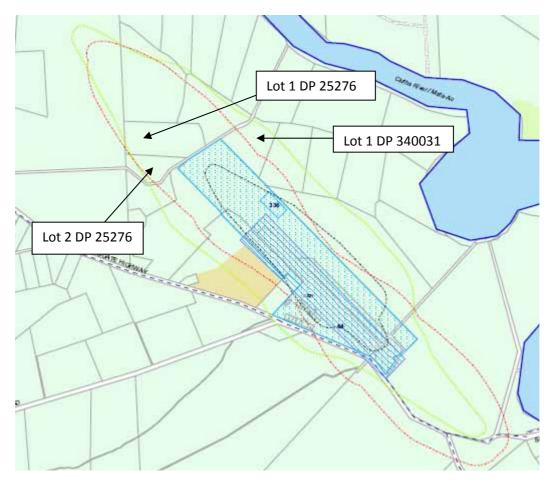
The proposed changes to District Plan rules are summarised in the following table:

Zone	Existing Provisions	Proposed Provisions
Rural General	Buildings within the OCB for residential, visitor accommodation or community activities are a controlled activity in respect of adequate indoor sound insulation from aircraft noise. Any new residential, visitor accommodation or community facilities within the ANB are a prohibited activity.	Any new ASAN within the ANB, OCB or NNB would be a prohibited activity.
	Zone Standard requires buildings for residential, visitor accommodation or community activities within the OCB to be insulated from aircraft noise to meet a specified acoustic standard.	Zone Standard would require buildings within building platforms approved prior to 20 October 2010 within the OCB and/or NNB to meet updated specific sound insulation and mechanical ventilation requirements.
	Aircraft operations are not exempt from Zone Standard regarding noise associated with non-residential activities.	Noise from aircraft operations at Wanaka Airport would be exempt from noise standards for non-residential activities, but subject to new conditions attached to Designation 64.
	Zone Standard restricts any buildings either side of the main runway.	Zone standard regarding building line restriction would be deleted, as the area would be included in the extended Aerodrome Purposes Designation (Designation 64).
Rural Visitor Zone	Buildings in the Windermere Rural Visitor Zone (including outside the OCB) are a controlled activity in	Buildings to be used for ASANs would be prohibited within the NNB.

respect of indoor sound insulation from aircraft noise.	
Visitor Accommodation in the Windermere Rural Visitor Zone (including outside the OCB) is a controlled activity in respect of airport noise.	
Zone Standard requires buildings for residential, visitor accommodation or community activities within the OCB to be insulated from aircraft noise to meet a specified acoustic standard.	Zone Standard requires buildings between the OCB and NNB to meet updated specific sound insulation and mechanical ventilation requirements.

The proposed noise contours have been calculated using the most current version (version 7a) of the Integrated Noise Model (INM) noise modelling program developed by the US Federal Aviation Authority. The INM is recommended in the New Zealand Standard NZS 6805:1992 'Airport Noise Management and Land Use Planning'.

There are currently four dwellings within the Rural General Zone located inside the existing OCB, as shown in Figure 1 of the report by Marshall Day Acoustics (MDA) in Appendix G of the Section 32 report. Two of these dwellings, located to the southeast of the runway, would not be located within either the revised OCB or NNB. The dwellings on Lot 9 DP 325795 and Lot 1 DP 368240 would still be located within the revised OCB but appear to be just outside the proposed NNB. Two other undeveloped but consented residential building platforms which are inside the existing OCB, on Lots 1 and 2 DP 25276, would be located within the proposed OCB and NNB. These properties are shown in the figure below:



The undeveloped building platform on Lot 1 DP 340031 is currently located outside the OCB; it would be located within the proposed OCB but outside the NNB.

There is an area of land of approximately 23 hectares zoned Rural Visitor Zone (the 'Windermere' Rural Visitor Zone) adjoining the airport to the southeast, and which is contained entirely within Lot 1 DP 368240. Approximately one fifth of the Windermere Rural Visitor Zone (the part adjoining the northeast boundary) would lose its development rights as it is located within the proposed NNB. Approximately half the Windermere Zone would be located within the proposed OCB; however development would be permitted between the proposed OCB and NNB provided that specific sound insulation and mechanical ventilation requirements are met.

Alteration to Designation 64

Designation 64 applies in respect of the Wanaka Airport Aerodrome, which currently has an area of approximately 38 hectares. It is proposed to provide for the recommendations of the Wanaka Airport Master Plan (WAMP) in order to ensure the continued growth and increase in operations at the airport, by extending the designation over the land legally described as:

- Lots 4 and 5 DP 340031
- Lot 2 DP 368240
- Lots 1 and 2 DP 26239
- Section 1 SO 24776

A portion of unformed legal road to the southeast of the existing runway is also proposed to be included in the designation. The additional land proposed to be designated has a total area of approximately 96 hectares, and is owned by the QLDC.

The Notice of Requirement also proposes to introduce conditions relating to the management and monitoring of noise and engine testing at the airport.

The Notice of Requirement specifically provides for the following:

- an extension to the northwest end of the existing runway of 550m to increase its sealed length to 1700m;
- increasing the current runway strip width to 150m;
- a Runway End Safety Area (RESA) of 240m at each end of the existing runway;
- an expansion of the main apron area;
- dedicated helicopter aprons and associated touch-down and lift-off areas;
- a new passenger terminal and control tower;
- a future runway of 1700m in length with a strip width of 150m, located 93m to the north of the existing runway.

The proposed extension to the existing runway and construction of a new runway would require earthworks with a total volume of approximately 319,500m³, comprising 121,500m³ of cut and 198,000m³ of fill. It is proposed to include conditions that would require a Construction Management Plan and Construction Traffic Management Plan to be submitted to the Council for review and approval prior to construction of the new runway commencing.

The existing noise boundaries in the District Plan are proposed to be amended by Plan Change 26, lodged concurrently with the Notice of Requirement. A new Night-Time Noise Boundary is also proposed to be included in the District Plan. An existing condition of the designation requires that the airport be managed to comply with the noise boundaries.

The Notice of Requirement proposes to introduce new obligations relating to the management of airport noise as conditions of the designation. Calculation of Aircraft Noise Contours, based on actual aircraft movements using the INM program, would be required annually to determine compliance with the noise boundaries. Once the calculated noise levels at any point on the ANB were 64dB L_{dn} or greater, physical noise monitoring would be undertaken.

There are currently no specific provisions for aircraft engine testing in the District Plan. The aviation industry has strict requirements regarding the need to run an engine after maintenance before it can be used for passengers. Routine maintenance on passenger aircraft is not proposed at Wanaka Airport, however unscheduled repair work may be required at times. The Notice of Requirement proposes specific conditions relating to noise from engine testing, which would be exempt from the noise boundaries. Between the hours of 7am and 10pm, noise generated by engine testing would not be permitted to exceed 55dB $L_{Aeq(15 hours)}$ measured at or within the boundary of any site in the Rural General Zone or Rural Visitor Zone outside the Aerodrome Designation. Only essential unscheduled engine testing would be able to be undertaken between 10pm and 7am, on no more than 18 occasions per year. For those events, the noise level would not be permitted to exceed 80dB L_{AFmax} measured at or within the boundary of any site outside the Aerodrome Designation.

A 20 year lapse period is sought for the designation.

Alteration to Designation 65

Designation 65 applies in respect of the airspace in the vicinity of Wanaka Airport. It defines essential airport protection measures: transitional slopes and surfaces, aircraft take off climb and approach slopes, and airport height and obstacle clearances. Under the current designation, approval is to be obtained from the QLDC for any activity or structure with a height of more than 7m which penetrates any of these surfaces, to ensure that the safe and efficient operation of the airport is not inhibited.

Height restrictions and obstacle limitation surfaces (OLS) are based on the New Zealand Civil Aviation Authority (CAA) Rule Part 139.51 and associated CAA Advisory Circular (AC) 139-6 'Aerodrome Standards and Requirements – All Aeroplanes Conducting Air Transport Operations'. Currently, the largest aircraft regularly using Wanaka Airport is the Beech 1900D, which has a 'Code 2B' classification. The proposed alteration to the existing Aerodrome Designation would allow for increased passenger aircraft movements, and eventually 'Code 4C' jet aircraft including the Airbus A320-200 and Boeing 737-800 or their future equivalents.

Wanaka Airport currently operates as a non-certified airfield, meaning that it does not fall within the jurisdiction of Part 139 of the Civil Aviation Rules relating to the Certification of Aerodromes. A non-certified status precludes the operation of aircraft with seating capacities of 30 persons or more, so certification will be required prior to the commencement of scheduled commerical services using such aircraft.

The proposed OLS would meet the AC139-6 requirements for a non-precision runway able to accommodate Code 4C aircraft for day or night operations, measured in relation to the proposed extension to the existing runway as well as the proposed second future runway. The OLS are described fully in the Notice of Requirement.

Objects which penetrate the proposed take off/approach surfaces would be 'prohibited'. In particular, this would affect an existing but undeveloped building platform on Lot 1 DP 25276, located within an area where the existing ground level penetrates the proposed take-off/approach surface at the north western end of the runway, as potentially development rights would be lost. However, legal advice indicates that the Requiring Authority could still approve the construction of buildings that penetrated the OLS under the provisions of Section 176(1)(b) of the Act, if this were deemed appropriate. The term 'prohibited' when used in the conditions of a Designation has a different meaning to an activity that is prohibited by the District Plan rules.

Prior approval of the WAMC (or designated airport authority) would be required for any object proposed to penetrate the transitional, inner horizontal or conical surfaces. The object would need to be shown to be 'shielded' by an existing immovable object in accordance with recognised

aeronautical practice, or an aeronautical study would be required to be undertaken to determine the effects on aeronautical safety. An area of land to the south of the SH6 at the south western end of the runway would penetrate the transitional side surface. A larger area of land south west of the airport comprising the northern end of the Pisa Range and Mt Barker would penetrate the conical and inner horizontal surfaces. Currently, there are provisions in the Designation which state that objects of less than 7m in height may be erected which penetrate the OLS without the QLDC's approval, and that where the ground rises so that it penetrates or becomes close to the inner horizontal surface or conical surface, then these surfaces may be adjusted in conformity with the ground to provide a vertical clearance of 10.7m above ground level. It is therefore possible under the existing Designation to erect structures that penetrate the OLS without the airport's approval. However, these provisions are proposed to be removed such that affected landowners would be required to obtain the QLDC's approval prior to erecting structures or other objects of any height that would penetrate the OLS.

It is also proposed to include a note advising that, under Part 77 of the Civil Aviation Rules, the CAA must be notified of any proposed structures or other objects which would penetrate the obstacle limitation surfaces. The requiring authority considers that this would provide a mechanism to allow the WAMC to control the notification process.

A 20 year lapse period is sought for the designation.

Relationship Between the Applications

Plan Change 26 and the Notices of Requirement to alter Designations 64 and 65 are being processed concurrently, and as a result were notified together, as individual applications but under the same timeframe. While the three applications all seek to provide for future growth of the airport, they deal with different issues. The proposed Plan Change seeks to amend the existing noise boundaries based on the anticipated growth in air traffic at the airport through to 2036, and to introduce new and amended provisions to control land use activities that may be sensitive to aircraft noise in the vicinity of the airport. The alteration to Designation 64 relates to the expansion of the Aerodrome and the requiring authority's obligations in terms of the management of noise associated with aircraft. The alteration to Designation 65 relates to the protection of the airspace required for safe aircraft movements.

Many of the submitters who have submitted on the Plan Change have actually raised issues that are included under the Designations. As many of the issues between the three applications are interrelated, this report considers these issues together.

Submissions Received and the Issues Raised

A total of 19 submitters made submissions to the Plan Change and Notices of Requirement. A summary of the decisions sought is included in Appendix A.

Submissions were received from:

- Air New Zealand Limited
- Albert Town Community Association (Inc)
- Simon Spencer Bower (Wanaka Helicopters Ltd)
- Kerry Butson
- Nikki & Aaron Heath
- Mark Jacquiery
- J & M Bell and Jeremy Bell Investments Ltd
- JH & TK Bird Holdings Limited
- Indira Neuendorff
- Michael Neuendorff
- NZ Transport Agency
- Pittaway Family Trust
- Paul & Bernadette Raymont
- Ricochet Amusement

- Rising Star Limited
- Anke & Ulrich Staufenberg
- Francis (Meg) Taylor
- Julie Umbers
- Wanaka Chamber of Commerce

A plan showing the location of individual property owners who have made submissions is included in Appendix B.

No further submissions were received following re-notification of the summary of decisions requested on the Plan Change.

With respect to the Plan Change, the Act requires that the local authority give a decision on the provisions and matters raised in submissions. It is noted that under the October 2009 amendments to the Act, the requirement to address each submission individually was deleted. The Act now requires that submissions are addressed by grouping them according to the provisions of the proposed policy statement or plan to which they relate or the matters to which they relate. Consequently, the main points that have been raised by submitters in respect to all the applications (where relevant) have been categorised into the following issues to facilitate discussion and consideration:

- Growth
- Increased Noise
- Night Flights and Night-Time Noise Boundary
- Effects/Restrictions on Land Use Activities
- Traffic
- Rural Amenity Values
- Engine Testing
- Part 2 Matters
- Section 32 Analysis
- Alternatives

Report Format

This report considers the issues raised in the submissions to Plan Change 26 and the Notices of Requirement to alter Designations 64 and 65 together. For each issue the report is structured as follows:

- Submission points summary of the main points raised in the submissions.
- Discussion the reporting planner's consideration of the submission points for this issue.
- Recommendation the recommended approach to responding to the issue, indicating whether to accept, accept in part, or reject the submission.
- Reasons the reasons why the recommended approach is considered appropriate in relation to the Act.

Following the discussion of issues raised by submitters, the report includes an assessment of the effects on the environment of allowing the proposed requirements for Designations 64 and 65, in accordance with Section 171 of the Act.

DISCUSSION OF ISSUES RAISED BY SUBMITTERS

Issue 1 – Growth

Issue

Growth of the airport was one of the main issues raised by submitters. The Plan Change and both Notices of Requirement are intended to provide for future growth and expansion of the airport. Submissions on this issue ranged from views that there is insufficient justification of the need for

future expansion of the airport through to those that consider inadequate provision is being made for future growth.

The specific submission points raised by submitters include the following:

- QLDC has not sufficiently identified a real need for the proposed level of increase in airport infrastructure
- The use and development of the region's two airports has not been considered cohesively
- The anticipated fleet mix of aircraft is unlikely to occur
- 20 year lapse period for Designations is too long
- Future expansion of the airport should be safeguarded
- Expansion of airport is vital to growth of Wanaka and whole district
- Proposed increase in activity may drive out GA and light aircraft
- Proposed 1750m runway length is insufficient for reliable jet operations
- Existing runway should be extended by 1000m to the northwest
- The future runway to the north of the existing runway should be up to 2200m in length with a strip width of 300m to meet international requirements
- Proposed revised Objective 7 *Buffer Land for Airports* is not adequately supported by policies or implemented by rules
- An Airport Mixed Use Zone should be provided for to allow a range of airport-related activities in the vicinity of the airport
- Designation 64 should be expanded to provide for a wider range of airport related uses
- Proposal will allow for activities that complement the airport and thus support its growth and viability
- Growth of airport facilities should occur at existing airport site
- Wording of new provisions suggests airport expansion to a somewhat undefined extent
- Proposed Objective 9 will encourage expansion of the airport to a greater level than that anticipated
- Wanaka Airport could offer an unconstrained alternative to Queenstown Airport if appropriate provisions are made now

The issue of growth relates to all three of the applications. There is also some crossover with the matters discussed with respect to other issues raised.

Discussion

Air New Zealand, which is currently the only airline operating scheduled commercial flights to and from Wanaka Airport, has submitted that the QLDC has not identified a real need for the proposed increase in airport infrastructure.

The Plan Change and Notices of Requirement provide for expansion of the airport in line with the Wanaka Airport Master Plan (WAMP), prepared by Peak Projects International Limited in September 2008 for the Wanaka Airport Management Committee (WAMC). The WAMP included predictions for future growth in air traffic at Wanaka Airport prepared in 2006 by AirBiz, an international specialist aviation consultancy, based on general growth trends for Wanaka and forecasts for Queenstown Airport. In 2010, AirBiz reviewed and updated the growth forecasts in an addendum to the WAMP. The revised forecasts were significantly reduced from those originally proposed, although there were no subsequent amendments to the overall recommendations of the WAMP. It is still proposed to provide for the eventual use of jet aircraft on domestic routes to and from Wanaka. The WAMP suggested that these would be introduced around 2020. In 2006, the forecasted number of passenger movements through the airport on scheduled services in 2026 was 327,976. This has been revised in the 2010 forecasts to somewhere between 34,900 (low) to 59,400 (high) passengers on scheduled domestic services in 2026. The highest forecasted number of passenger movements, in 2036, has been reduced to 106,550 which is still well below the original forecast for 2026. Based on the updated air traffic forecasts, it is not entirely clear that there will actually be a demand for jet aircraft services as predicted in the WAMP. Further information with regard to this matter could be provided at the hearing to support the proposal.

Other submissions fully support the proposal in that it will provide for the future growth of the airport, which is seen as having strategic importance for the growth of business and tourism in the Wanaka area, before further development of other land use activities occurs in the vicinity of the airport that could potentially restrict airport operations. Currently, the area surrounding the airport is mainly rural and contains limited development. There is an opportunity to put in place measures to ensure the ongoing protection of airport operations while affecting relatively few people compared to those who could potentially be affected if further land use activities incompatible with the airport were able to be established in its vicinity.

The proposed Plan Change and Notices of Requirement would provide certainty to Wanaka residents and landowners in the vicinity of the airport as to the extent of growth at the airport in the foreseeable future. Growth of the airport during the period of the Designations would be limited by the extent of the Designation areas. The proposed noise boundaries would also limit the level of operation at the airport, as the airport would be required to comply with the noise boundaries.

Rising Star Ltd has submitted that the proposed wording of Objective 9 and associated policies to be added to Part 4 – District Wide Issues will encourage expansion of the airport to a greater level than that anticipated. Proposed Objective 9 refers specifically to Wanaka Airport and is to 'maintain and promote the ongoing operation of the Airport while managing reverse sensitivity effects on surrounding land uses.' It is assumed that the wording of Policy 9.1 requiring that appropriate noise boundaries are established and maintained to enable operations to continue and to expand over time is considered by the submitter to be an issue. It is possible that the noise boundaries could be extended in future through another plan change process. However, taking the growth forecasts into consideration, it is unlikely that further expansion of the airport will be necessary beyond that currently proposed. The proposed objectives and policies as currently worded are considered appropriate as they recognise the need to establish noise boundaries to enable predicted growth to occur, while also recognising the potential for reverse sensitivity issues.

Some submitters have suggested that further provision should be made for international services and to ensure that jet aircraft can operate without payload restrictions, by increasing the runway length. The possibility of providing for international flights has been investigated as part of the WAMP. Terrain restrictions mean that additional land would need to be acquired and significant earthworks undertaken at the north western end of the runway to meet operational requirements for international services. Given the proximity to Queenstown Airport, it is accepted that there is not likely to be sufficient demand for an international airport at Wanaka in the foreseeable future to justify these works.

M Jaquiery, who is a Boeing 737 Captain, has made a submission that at least one runway direction should be 1900m to prevent payload restrictions for domestic operations using B737-800 aircraft, as this length could be made available within the airport land. Mr Jaquiery has further submitted that provision should be made for a sealed runway up to 2200m and increase in runway strip width to 300m to meet international requirements, which is also included in the submission from the Wanaka Chamber of Commerce. As discussed above, it is unlikely that Wanaka Airport will require an international runway within the Designation period. The WAMP recommends a runway strip width of 150m to provide for aircraft over 22.7 tonne maximum capacity take-off weight and for night operations. This appears adequate, given that only the main runways at Auckland and Christchurch have a 300m strip width, and runways at most major New Zealand airports, including Wellington, Queenstown, Invercargill, Hamilton and Rotorua have 150m strip widths. Although the proposed alteration to the Aerodrome Designation refers to a specific runway length, this would not preclude the construction of a larger runway if required, as there does appear to be additional land available at the north western end of the airport site to do so. An increase in runway length would however require the obstacle limitation surfaces and noise boundaries to be reassessed, and it is not known how much additional land beyond the airport would be affected. It is assumed that the airport has planned for its anticipated needs into the reasonably foreseeable future, and given that the suggested demand for jet services is somewhat questionable, it is not considered necessary to provide for unrestricted jet operations at this time.

The submission by Air New Zealand notes that an increase in direct travel to Wanaka will result in reductions in travel to Queenstown Airport, where significant investment has been made (and

continues to be made) to upgrade and extend airport infrastructure. Air New Zealand is concerned that it appears that the development of each airport is being treated entirely independently in terms of planning, and that Wanaka Airport should provide an ancillary role to Queenstown Airport. However, it is considered that the scope of the WAMP is primarily to improve the airport's ability to service the Wanaka area, and given that QLDC has promoted plan changes for both airports, it appears that the future use of the airports has been considered together. There is existing demand for scheduled services to and from Wanaka, and it is accepted that this will increase as resident and visitor numbers continue to grow. Wanaka Airport could provide an alternative landing location for aircraft when adverse weather conditions affect Queenstown Airport. The decision on Plan Change 35 (currently under appeal) with regards to Queenstown Airport does not provide for flights beyond 10pm as sought by QAC, and this part of the decision has not been appealed by QAC. Wanaka Airport could provide an option for night-time flights to the district.

Air New Zealand has submitted that a shorter lapse period for the Designations, such as 10 years, would provide more certainty as to what is to occur at the airport given the uncertain nature of some of the activities. As discussed above, it is possible that the forecasted growth and demand for jet services will not eventuate and it seems very unlikely that jet services will be required within the next 10 years. If only a 10 year lapse period were sought, there would be insufficient reasoning to provide for the level of protection currently sought. In this instance, the longer lapse period arguably gives the community more certainty by allowing the Designations to provide for the ultimate level of growth in airport operations that is anticipated in the foreseeable future.

Several submissions raise the issue that a zone similar to the Queenstown Airport Mixed Use Zone should be provided around Wanaka Airport, or that the Aerodrome Purposes Designation should be expanded to allow a greater range of airport related activities. The existing Designation does not allow for ancillary airport related activities such as rental car depots or offices related to airport operations. As the airport grows, there may be a need to establish such activities in the vicinity of the airport, which are not anticipated by the Rural General zoning. Providing for a new zone on land outside the airport site or for ancillary activities to be located within the Aerodrome Purposes Designation are considered to be beyond the scope of the current proposal and would require a separate Plan Change and/or Notice of Requirement process. This issue has therefore not been considered any further.

The submission from N and A Heath notes that the increase in activity being provided for by the proposed Plan Change and Designations may in time drive out the general aviation (GA) and light aircraft operations at the airport. However, the WAMP provides for the retention of GA areas and estimates annual growth rates in GA activities of 5.5% through to 2025 and 1.9% from 2025 – 2036. Therefore, it does not seem that there is any intention to reduce GA activities.

Recommendations

Accept the submission that QLDC has not identified a real need for the proposed growth in operations at Wanaka Airport.

Accept the submissions that the growth and operational requirements of the airport should be provided for before the further development of land use activities occurs that could potentially restrict airport operations.

Reject the submission from Rising Star Ltd that the proposed objectives and policies may encourage continued expansion of the airport to a greater level than that anticipated.

Reject the submissions that further provision should be made for growth including international services.

Reject the submission from Air New Zealand that development of the district's two airports is not being considered cohesively.

Reject the submission from Air New Zealand that a shorter lapse period for the Designations would be more appropriate.

Reject the submissions that a mixed-use zone should be provided around the airport for ancillary airport related activities, or that such activities should be provided for within the Aerodrome Purposes designation.

Reject the submission that the proposed increase in scheduled services will eventually drive out GA and light aircraft operations at the airport.

Make no changes to the Plan Change and Designations as notified.

Reasons for the Recommendations

The revised growth forecasts for the airport do not provide sufficient evidence to confirm that the growth in airport operations being provided for by the Plan Change and Notices of Requirement will actually eventuate. However, it is appropriate to extend noise boundaries and amend Designations at this time to ensure that if and when the airport does grow, reverse sensitivity issues will be, as far as possible, avoided. It is considered appropriate to provide some certainty to the Wanaka community as to the level of growth that may occur at the airport over the next 20 year period, and put in place measures to enable this growth to occur before other land use activities that might restrict airport operations are established. While it is beneficial to amend noise boundaries and introduce new provisions as proposed, it does not seem necessary to make further provision for growth such that the airport could accommodate international services and unrestricted payloads for jet aircraft.

While it is accepted that there may eventually be a functional need for ancillary activities to be established near the airport, the creation of a new zone or other means to provide for such activities to occur is considered to be outside the scope of the current applications.

Issue 2 – Increased Noise

Issue

The proposed Plan Change would revise the existing noise contours around the airport based on the anticipated growth scenario. A newer version of the noise modelling programme that is now available also allows noise contours to be calculated more accurately.

The specific submission points raised by submitters include the following:

- Support proposed extensions to ANB and OCB
- Predicted noise levels are unlikely to actually occur
- Flight paths should avoid Albert Town and Clutha River area
- Larger aircraft will impact on amenity
- Modelling for air noise boundaries appears quite 'random'
- Noise boundaries should be extended to provide for increased runway length of 2200m
- Oppose noise boundary extension
- Noise will adversely affect properties outside the noise boundaries
- Increased noise will affect use of property for farming and possible future residential use
- Proposed OCB and NNB are inadequate in recognising extent of noise effects
- Extent of aircraft activity should be constrained
- Doesn't reflect how the aviation industry is developing worldwide there is a trend for minimising noise effects of airports
- Need to give further consideration to geographical extent to which noise will impact beyond the airport
- There is no need to change the noise boundaries to develop the airport further

The issue of noise relates mainly to the Plan Change which proposes to amend the noise boundaries. There is also some crossover with other issues raised, especially Growth and Amenity Values. Nighttime noise is discussed separately in the next section.

Discussion

Marshall Day Acoustics Limited (MDA) was engaged to prepare revised noise contours for Wanaka Airport, and to undertake an assessment of noise effects as a result of the proposed noise contours, to support the Plan Change and Notice of Requirement applications. MDA's report is based on the New Zealand Standard NZS6805:1992 "*Airport Noise Management and Land Use Planning*", which provides a recommended approach for territorial authorities dealing with airports and land affected by airport noise. The implementation of an ANB and OCB, based on the 65 dB L_{dn} and 55 dB L_{dn} contours respectively, is recommended by the Standard. The District Plan already includes these contours, but the Plan Change proposes to revise these based on the anticipated growth of aircraft movements through to 2036, using an updated version of the Integrated Noise Model (INM) programme and incorporating helicopter noise. Helicopters make up a significant portion of aircraft movements at Wanaka Airport and this is expected to continue. The latest version of the INM has the ability to include terrain effects, and taxi-ing operations have also been taken into consideration. The noise modelling is based on projected aircraft movements calculated by Airbiz through to 2036, using a maximum growth scenario.

Submissions have been received that query whether the forecasted aircraft movements will ever actually eventuate, and therefore whether a change to the current contours is necessary at this time. Issues relating to the growth forecasts and demand for scheduled jet services were discussed in the previous section. It is considered appropriate to provide for a maximum growth scenario when considering issues such as noise which potentially would have significant adverse effects on surrounding activities. The proposed revised noise boundaries are also likely to be far more accurate than the existing ones as they have been calculated using the latest version of the INM programme.

M Jaquiery has submitted that the noise boundaries should be extended to provide for an increased runway length of 2200m. For reasons discussed in the previous section, it is not considered necessary to provide for additional growth in airport operations beyond that recommended in the WAMP.

The four existing dwellings within the current OCB were used by MDA as locations for the purpose of noise assessment. According to MDA, the predicted 2036 noise level is actually less than currently permitted by the District Plan at three of these four dwellings, and the same as that currently permitted at the fourth dwelling (on Lot 1 DP 368240). The increase in noise level between the actual 2009 noise level and the predicted 2036 noise level is between 5 to 7 dB at these locations, which MDA describes as being generally regarded as 'noticeable' if it were to occur overnight, but is likely to be less noticeable if it were to start occurring slowly over the next 30 years. The use of larger jet aircraft at the airport would result in a change in noise from individual aircraft events. Currently, the loudest movement, which occurs during the day, is 77 – 80 dB SEL at the four dwelling locations. This is from the largest type of aircraft which currently uses the airport, being a Beech 1900D. MDA describes this noise level as being the same or less than noise levels from a truck on the State Highway 40m distant. A B737-800 would result in noise levels of 93 - 94 dB SEL at the four dwellings, which MDA considers would be perceived by residents as being more than twice as loud. However, as there are only a small number of jet movements in the future forecasts, these high noise events would occur infrequently. MDA considers that this single event noise level would be reasonable during the day. It is noted that none of the four landowners has made a submission in opposition, and the owner of Lot 1 DP 368240 (Pittaway) supports the proposal.

The change in noise levels at two undeveloped but consented building platforms (on Lots 1 and 2 DP 25276), which are already located within the OCB and will remain inside the revised OCB, was not assessed in the MDA report. Further information was requested with regards to this issue following notification, and MDA has subsequently confirmed that the predicted daily noise levels at the two building platforms would not increase beyond those currently permitted by the District Plan. It is noted that only the owner of Lot 1 DP 25276 (Umbers) has submitted in opposition to the proposal, and this submission does not specifically refer to noise effects.

One undeveloped but consented building platform (on Lot 1 DP 340031) that is located outside the current OCB is located within the OCB proposed by the Plan Change. MDA has not assessed the

actual change in noise levels at this location. It is noted that the affected landowner has not made a submission in opposition to any part of the proposal.

A number of submitters are concerned about the adverse effects of noise outside the proposed noise boundaries, where it would still be audible. This includes the submission from the Albert Town Community Association regarding effects on Albert Town and the Clutha River area. Currently, Albert Town does not lie under the aircraft approach or take off surfaces. It would lie under the proposed combined take off/approach surface for jet aircraft at the north western end of the runway, however it would be well outside the airport noise boundaries. The Clutha River would also not lie within the proposed noise boundaries. It appears that it would not be possible to alter the take off/approach path without relocating the airport runway, as this is fixed based on the runway location and topographical constraints. While the noise from larger aircraft would be more noticeable than current aircraft movements, it is not considered that the effects would be significant. As discussed above in relation to the four dwellings within the existing OCB, the noise from a single jet aircraft movement would be significantly greater than from the largest aircraft currently using the airport, but the proposed OCB would remain similar in extent to the existing. This is because the OCB is based on the average noise level, and the existing OCB permits a much higher noise level than actually currently occurs given the existing level of operations. The MDA report states that overseas studies of the relationship of response to noise have found that for aircraft noise environments of 55 dB Ldn 11% of the population are likely to be highly annoved by the noise. It can be expected that some people will still be highly annoyed by noise levels outside the OCB, which is located at the 55 dB Ldn contour. MDA explains that, outside the OCB, noise levels from aircraft are likely to be no more than could be expected from permitted noise generating activities. While it is accepted that the noise from an infrequent high noise event such as a jet aircraft movement in particular would be noticeable outside the noise boundaries, the adverse effects on amenity values and the potential use of land for rural activities are not considered to be significant compared to the noise levels permitted by the existing noise boundaries.

A and U Staufenberg have submitted that the proposal does not reflect how the aviation industry is developing, and that worldwide there is a trend for minimising the noise effects of airports. Aircraft technology and flight management are important components in reducing noise, but to allow growth of Wanaka airport and the operation of larger aircraft requires control and, where necessary, avoidance of development of noise sensitive activities around the airport. While noise from single aircraft events would increase as a result of the predicted growth in operations if larger aircraft were introduced, the area of land located within the 55 dB L_{dn} contour proposed by the Plan Change would not change significantly from that within the existing 55 dB L_{dn} contour.

Recommendations

Accept the submissions which support the proposed amendments to the ANB and OCB.

Reject the submissions that amendments to the noise boundaries are not required and are not consistent with the worldwide trend to minimise noise effects of airports.

Reject the submission that the noise boundaries should be based on a runway length of 2200m.

Reject the submission that terrain effects have not been taken into consideration in the assessment of noise effects.

Reject the submission that noise levels outside the noise boundaries, including in Albert Town and along the Clutha River, will have significant adverse effects. (This recommendation does not apply to night time noise levels, which are discussed in a later section.)

Make no changes to the Plan Change and Designations as notified.

Reasons for the Recommendations

The proposed amendments to the ANB and OCB are based on a more accurate version of the INM programme, and will ensure that growth of the airport is provided for while avoiding reverse sensitivity

effects. The latest version of the INM programme takes into account terrain effects. The proposed increase in noise at most locations is not significantly greater than that permitted by the current provisions. It is not considered necessary for noise boundaries to provide for jet aircraft movements on a 2200m long runway, for reasons discussed earlier in this report.

Issue 3 – Night Flights and Night Time Noise Boundary

The Plan Change proposes to include a Night Time Noise Boundary (NNB) in the District Plan which would allow night flights to occur if a suitable lighting plan were also produced. A number of submitters are concerned about effects on sleep disturbance and amenity that would result from night time flights.

Issue

The specific submission points raised by submitters include the following:

- NNB at 95 dB SEL has not been determined objectively
- Oppose further aircraft traffic that has potential to adversely affect amenity and sleep
- Oppose any night flights other than for emergency rescue purposes
- Need for night flights needs to be considered against more realistic air traffic forecasts
- Oppose NNB
- Oppose night time operation of the airport
- Adverse effects of lighting
- Night time flights should be a separate plan change
- Effects of night time flights too vague at present

This issue relates mainly to the Plan Change, which seeks to introduce the NNB. There is some crossover with other issues raised, including Noise, Amenity Values and Engine Testing.

Discussion

The existing Aerodrome Purposes Designation allows for night time flights at Wanaka Airport provided that an appropriate lighting plan is implemented and the noise contours are revised. By revising the contours, the Plan Changes proposes to enable night flights, subject to a lighting plan. There are no proposed limits on the number of night time flights anticipated, and nor are there proposed hours. However, MDA has confirmed that the revised ANB and OCB have been calculated based on slightly less than one night time aircraft movement per day. No economic justification has been provided of the need for night flights at Wanaka Airport.

Two existing, undeveloped building platforms (on Lots 1 and 2 DP 25276) would be located within the proposed NNB. It is noted that the owner of one of these properties (Lot 1 DP 25276) has submitted against the proposal, although the submission does not specifically refer to the effects of night time noise. Two existing dwellings are located just outside the proposed NNB. The owner of one of these dwellings (Pittaway Family Trust) has made a submission in support of the proposal, and the other has not made a submission.

Submissions have been received that query the use of the 95 dB SEL to define the NNB. The Sound Exposure Level, SEL, is the noise level of one second duration that has the same total sound energy as the aircraft noise event. MDA has recommended an upper limit of acceptability of 95 dB SEL for night time events, as NZS 6805 does not specify an appropriate night time noise level. The proposed NNB would therefore be located at the 95 dB SEL contour. This is based on the findings of relevant studies of sleep disturbance effects which refer to either the SEL or L_{AFmax} (the maximum noise level occurring during the event) noise level in the bedroom. A 95 dB SEL is considered by MDA to be comparable to the outdoor night time noise level limit of 45 dB L_{Aeq} and 75 dB L_{AFmax} recommended in the New Zealand Standard NZS 6802:2008 '*Acoustics – Environmental Noise*'. The night time control for helicopters as defined in NZS 6807 is less extensive than the 95 dB SEL contour so MDA considers that the proposed NNB would also control the effect of helicopters on sleep disturbance.

MDA strongly recommends that new noise sensitive activities be discouraged or prohibited from developing inside the NNB, due to potential sleep disturbance effects. MDA's report accepts the relationship developed by the Federal Inter-agency Committee on Aviation Noise (FICAN) in 1997 which predicts a maximum of 10% of the population would be awakened by events of 80 dB SEL received in the bedroom. MDA advises that 80 dB SEL indoors is approximately equivalent to 95 dB SEL outdoors when windows are ajar for ventilation. MDA notes that the QLDC could have proposed an NNB based on the 85 or 90 dB SEL to provide a higher level of protection against adverse effects relating to sleep disturbance, however this would significantly increase the area of land subject to planning constraints.

Outside the NNB, while the level of noise exposure would fall within what MDA considers to be acceptable limits, the existing level of night time amenity for these properties would be altered. Landowners in the vicinity of the airport currently enjoy low night time noise levels, which are consistent with the rural environment. The noise report does not attempt to measure or assess the effects on properties located outside of the proposed NNB that would still be adversely affected by noise from night flights. MDA does not consider such measurement or assessment necessary, as in its opinion the 95 dB SEL identifies the limit of 'significant' adverse effects.

The Albert Town Community Association has also made a submission regarding effects of night flights on amenity and sleep disturbance. It is considered that Albert Town is located far enough outside the proposed NNB that residents will not experience significant sleep disturbance. Effects on amenity are discussed in a later section.

It is acknowledged that the implementation of an NNB at this stage would have few relatively adverse effects compared to situations that are likely to exist at many other airports. The only two building platforms within the NNB are currently undeveloped so appropriate sound insulation could be incorporated into the construction of future buildings to mitigate against sleep disturbance. This would include ventilation systems in all bedrooms. These two platforms are already located within the existing OCB, so a level of noise associated with aircraft is anticipated. However, it is considered that night time aircraft noise would be more noticeable than day time noise and would therefore have an effect on amenity in areas where noise insulation would not be required or is not practical, including outdoors. The level of noise from night time aircraft movements would be up to 97 db SEL at these properties, indicating that there could be some sleep disturbance for future residents even with sound insulation.

To determine whether night flights are appropriate at Wanaka, the benefits must also be balanced against the adverse effects on amenity outside the proposed NNB, which are difficult to quantify. There appears to be some uncertainty as to whether the proposed NNB at 95 dB SEL would accurately define a point at which 'significant' adverse effects are likely to occur, especially given the rural environment surrounding the airport.

As mentioned above, no economic justification of the benefits of night time flights at Wanaka Airport has been provided. It appears that Plan Change 35 will not result in night flights being allowed at Queenstown Airport past 10pm. Wanaka could provide an alternative location for night flights. However, it is noted that the need for night time trans-Tasman flights was promoted at Queenstown Airport, and as discussed above, Wanaka Airport would not be able to accommodate international services due to other constraints.

It is not proposed to limit the number of night time flights that could occur. While the OCB and ANB would limit the number of night time flights to some degree as they are based on the average noise level over a 24 hour period, it is possible that more night time flights could be accommodated if less day time flights occurred. The wording of the existing Designation refers to flights that occur 'during the hours of darkness' rather than 'night time' flights. It is considered that flights in the early evening, which could still be within the hours of darkness, would have less adverse effects than those that occurred after midnight. However, the Plan Change has not proposed any limits on the proposed hours of night time flights.

Some submissions consider that the effects of night time flights require further assessment. The submission from Rising Star Limited raises the issue of lighting. However, it is not proposed to alter

the existing requirement that a suitable lighting plan be provided prior to any scheduled passenger services during the hours of darkness. It is considered that the main adverse effects associated with night flights would be related to aircraft noise and lighting. There would also potentially be adverse effects related to increased traffic noise along SH6 between residential areas and the airport, although such effects would unlikely be significant compared to permitted activities such as heavy vehicle traffic on the highway.

In summary, while it is acknowledged that while there could potentially be benefit in planning for night time flights at Wanaka into the future, it is considered that a clear analysis of the costs and benefits of providing for night time flights has not been provided. There is currently limited information as to the benefits to the wider community of night time flights, and limited information as to the effects on amenity inside and outside the proposed NNB.

Recommendations

Reject the submission that the NNB has not been determined objectively.

Accept the submissions that the need for night flights needs to be further assessed.

Accept the submissions that oppose adverse effects on amenity and sleep.

Accept the submissions that the effects of night time flying are too vague at present.

Reject the submission regarding adverse effects of lighting.

Partly accept the submission that night time flights should be a separate plan change.

Amend the Plan Change to remove all reference to the NNB (see recommended changes in Appendix D) unless further information can be provided at the hearing to justify the benefits of night flights and with regards to adverse effects inside and outside the NNB.

Amend the Notice of Requirement to alter Designation 64 so that there shall be no operations during hours of darkness until the noise boundaries are reassessed, unless further information is provided to justify the benefits of night flights and with regards to adverse effects inside and outside the NNB.

Reasons for the Recommendations

Adverse effects associated with night time flights need to be balanced against the potential benefits of allowing night flights to the district. Further information should be provided at the hearing to justify the benefits of night flights, as well as the number of night flights and hours proposed, to ensure that the effects can be properly assessed. While an alternative option would be to remove the NNB from the Plan Change and make night flights a separate Plan Change, this is not considered necessary if further information can be provided.

Lighting must still be addressed prior to the commencement of any night time flights as a condition of the existing Designation, and therefore it is not necessary to include lighting in the current Notice of Requirement.

Issue 4 – Effects/restrictions on Land Use Activities

Issue

It is proposed to introduce new provisions in the District Plan to control or restrict the establishment of activities sensitive to aircraft noise (ASANs) within the air noise boundaries. The proposed alteration to the Airport Approach and Land Use Controls Designation would also restrict structures, planting and other objects from penetrating the obstacle limitation surfaces. These provisions would affect existing development rights on some properties around the airport.

The specific submission points raised by submitters include the following:

- ASANs should be prohibited in the OCB in the Windermere Zone
- Proposed definition of ASAN is appropriate
- Support rule prohibiting new ASANs within OCB in Rural General Zone
- Support rule that alterations or additions to existing buildings within OCB must have acoustic insulation
- Appropriate to safeguard against land use activities that could restrict airport growth
- Concern at potential financial disadvantage due to restrictions on land use
- Proposed restrictions in Designation 65 will restrict land use activities that are otherwise anticipated on the submitters land
- Proposed restrictions in Designation 65 will adversely affect ongoing economic viability of the rural use of submitter's land
- Proposed revised Objective 7 Buffer Land for Airports is not adequately supported by policies or implemented by rules
- An Airport Mixed Use Zone should be provided to allow a range of airport-related activities in the vicinity of the airport
- Support new provisions that allow for land surrounding airport to be used for activities that are not sensitive to aircraft noise
- Airport is sympathetic with other land use activities in the area, and this node should continue to be developed in this way
- Increased noise will adversely affect land use activities on land outside noise boundaries in the vicinity of the airport
- Query whether any compensation is being offered to affected property owners
- Will affect building rights on approved building platform on Lot 1 DP 25276
- An additional 50 dB L_{dn} noise contour and associated provisions should be included to provide a higher level of protection for the airport
- Additional provisions for the Rural General Zone should be introduced restricting development of residential dwellings to a minimum lot size of 4ha
- Composite NNB/OCB should be considered

Discussion

Restrictions on land use activities relate to the proposed noise provisions to be introduced via the Plan Change and/or the alterations to the OLS controlled by Designation 65.

The existing Designation 65 allows for objects less than 7m high to be erected which penetrate any of the OLS. It is also noted that the existing conditions relating to Designation 65 provide that where the ground rises so that it becomes close to the take off climb/approach surface, inner horizontal surface, or conical surface then these surfaces may be adjusted in conformity with the ground to provide a vertical clearance of 10.7m above ground level. (It is not entirely clear whether this would then allow an object with a maximum total height of 17.7m to be erected above existing ground level.) The proposed alteration to Designation 65 will delete these existing provisions. It is proposed to restrict any objects (except a control tower) which would penetrate the take off/approach or transitional surfaces. Objects which penetrate the inner horizontal or conical surfaces would only be permitted if deemed to be shielded by an existing immovable object in accordance with recognised aeronautical practice or the prior approval of the Requiring Authority. The proposed alteration to Designation 65 will therefore restrict activities on land which penetrates, or is close to penetrating, the various OLS.

At this time, the proposed provisions would result in building rights being restricted on at least one building platform (on Lot 1 DP 25276) due to the take-off/approach protection surface. The Notice of Requirement states that 'as the building platform is shielded to some extent by the top of the ridge there may be scope for a building to be constructed on the platform.' Although the Notice of Requirement states that objects that would penetrate the take off/approach surface would be 'prohibited', this has a different meaning to a prohibited activity status in the District Plan rules. Legal advice is that the Requiring Authority would still be able to approve an activity that is expressly 'prohibited' by the Designation, if it deemed this to be appropriate. This landowner has submitted in opposition to the proposal because her building rights will be adversely affected – despite the comments above it is agreed that these adverse effects will be significant and possibly cannot be avoided, remedied or mitigated. The relocation of the existing building platform would require a

separate discretionary resource consent and there may not be a suitable alternative location within the site.

To the south of SH6, land would penetrate the proposed transitional side surface. Most of this land would already penetrate the existing transitional surface, although, as discussed above, under the current provisions this does not preclude the erection of some structures. The majority of the land affected is located within Part Section 6 DP 300466, the owners of which have not made a submission. It is noted that there are existing trees located within the affected area which would be 'prohibited' under the proposed provisions. It is not clear how or if the WAMC intends to manage existing activities that would penetrate the OLS but are permitted under the current provisions of the Designation, and so it is not known if the existing trees on Part Section 6 DP 300466 would need to be removed.

A small area of land located within Lots 2 and 3 DP 300397 may also penetrate the proposed transitional surface. The owners of this land have made a submission that the proposal will adversely affect the ability to undertake activities such as constructing fencing, farm buildings and planting of shelter rows that are anticipated in the Rural General Zone. They submit that Designation 65 will therefore have a significant adverse effect on the ongoing economic viability of the rural use of their land. It is accepted that these rural activities could otherwise be undertaken as permitted or controlled activities and the proposed amendments to the Designation will restrict these activities. It would therefore have an adverse effect on landowners. The plans provided with the Notice of Requirement only show the area of land where the ground surface would penetrate the proposed transitional surface. To determine the level of adverse effect in terms of restrictions on land use activities it would be useful if a plan were provided showing the area of land where structures could currently be erected under the current provisions but would be restricted under those proposed.

A large area of land south west of the airport including the northern end of the Pisa Range would penetrate the proposed conical and inner horizontal surfaces. Under the proposed provisions, structures which penetrate these surfaces would only be permitted with the prior approval of the Requiring Authority. Much of this area would have also penetrated the existing surfaces, however it is unlikely that objects more than 10.7m high would have been required by landowners for rural activities (with the possible exception of tree planting) given that the height limit in the zone is 8m. It is therefore unlikely that the existing Designation has any significant effect in terms of restricting land use activities. The proposed alteration to the Designation would adversely affect landowners who would need to obtain approval from the WAMC for any activities that breach the OLS.

At the south eastern end of the existing runway the landform drops to a lower terrace such that the OLS are much higher than ground level and therefore should not affect building or planting activities on land beneath the OLS.

To avoid reverse sensitivity effects associated with aircraft noise, it is proposed to introduce new provisions into the District Plan which would prohibit the development of any new ASANs within the proposed ANB or NNB, with the exception of dwellings on existing, approved residential building platforms. ASANs would also be prohibited within the OCB in the Rural General Zone but would be permitted in the Rural Visitor Zone between the OCB and NNB provided that specific sound insulation and mechanical ventilation requirements were met.

With the exception of the Windermere Rural Visitor Zone, development of ASANs is not generally anticipated within the area surrounding the airport as it is zoned Rural General. The two building platforms likely to be most affected by noise were created by the resource consent RM050861, approved in May 2006, and are located on Lots 1 and 2 DP 25276. It is noted that the proposed Plan Change would not restrict the development of residential dwellings on these building platforms (although as discussed above, the proposed alteration to Designation 65 would restrict structures on the building platform on Lot 1 DP 25276). The building platforms are already located within the existing OCB and as such are subject to sound insulation requirements under the current District Plan provisions. It is noted that only the owner of Lot 1 DP 25276 submitted in opposition to the Plan Change.

K Butson has submitted in opposition to the proposal if it will result in any further restrictions on land use or financial disadvantage. Most of the Butson property (Pt Lot 7 DP 24216), located to the south west of the existing runway in the Rural General Zone, is currently within the existing OCB. This property would be located outside the proposed OCB however the majority of the site would be located within the proposed NNB. The construction of residential dwellings or establishment of building platforms is a discretionary activity under the current District Plan provisions; this would become a prohibited activity within the NNB. While the NNB does not affect the entire site it is accepted that the proposed Plan Change would potentially have a significant adverse effect in terms of limiting future development. As discussed previously, it is recommended that the NNB be removed from the Plan Change unless further supporting information is provided. If it could be shown that there would be a significant benefit to the District of allowing night time flights then it is likely that these positive effects to the wider community would outweigh possible adverse effects caused by loss of development potential on this submitter's land.

The only other landowners in the Rural General Zone affected by the proposed noise boundaries who have made a submission regarding the Plan Change are N and A Heath. However, it is noted that this submission does not refer to restrictions on land use activities. Although a large portion of the Heath property would be within the proposed OCB and/or NNB, there is an existing building platform on the site located outside the proposed noise boundaries.

The 'Windermere' Rural Visitor Zone, which adjoins the airport to the southeast, has an area of approximately 23 hectares and is contained entirely within Lot 1 DP 368240. Approximately half the Windermere Zone would be located within the proposed OCB; however it is proposed that development would still be permitted between the proposed OCB and NNB provided that specific sound insulation and mechanical ventilation requirements were met. Approximately one fifth of the zone (the part adjoining the northeast boundary) would lose its development rights if the NNB were approved as it is located within the proposed NNB. The owner of Lot 1 DP 368240 has submitted in support of the proposed Plan Change, and so the adverse effects associated with the loss of these development rights have not been further considered.

Air New Zealand has submitted that ASANs should not be permitted within the OCB in the Windermere Zone, and that a composite NNB/OCB should be considered rather than having two separate boundaries if ASANs are prohibited within both anyway. Having a separate OCB and NNB is useful for assessing the effects of the proposal as the OCB and NNB are based on different noise measurements, i.e. the OCB takes into account all aircraft movements in a day whereas the NNB is based on the sound level from a single aircraft movement. Separating the two at this stage allows for the effects of night flights to be better understood. While a composite NNB/OCB would simplify the contours this is not considered necessary.

A composite NNB/OCB would also only be practical if ASANs were not to be permitted within the OCB in the Windermere Zone. MDA has recommended that new ASANs inside the OCB be prohibited where practicable to do so. The Section 32 report does not explain why it is proposed to allow ASANs in the Windermere Zone between the OCB and NNB; however it is assumed that this is to ensure that the landowner's existing development rights are not significantly affected. MDA recommends, where it is not proposed to prohibit ASANs inside the OCB, that sound insulation requirements are implemented. Within the OCB, sound insulation and mechanical ventilation can achieve a suitable noise environment indoors, although it is not possible to reduce noise outside. It is accepted that the Windermere Zone is a limited area with existing development rights, and it is not reasonable to remove these rights when mitigation is available. It is therefore accepted that, if the NNB is approved, it is appropriate to provide a separate OCB and NNB, and that between these two boundaries ASANs should be allowed, subject to noise insulation requirements.

The Pittaway Family Trust's submission 'specifically supports the proposed amendments to Part 5 of the District Plan that relates to new objectives, policies and rules that provide for land surrounding Wanaka Airport to be used for airport related activities and/or activities that are not sensitive to aircraft noise.' The Trust considers that such use of this surrounding land will allow for activities that complement Wanaka Airport and thus support its growth and viability.' However, while proposed Objective 7 in Part 5 refers to the 'retention of a greenfields area or an area for Airport related activities or where appropriate, an area for activities not sensitive to aircraft noise' within the OCB, it is

noted that the associated policies emphasise that new ASANs should not be allowed within the air noise boundaries and do not specifically provide for the establishment of airport related activities. The only part of the proposal which does allow for further land to be used for airport related activities is the extension of the Aerodrome Purposes Designation. The proposed wording of Objective 7 appears to imply that airport related activities are appropriate within the OCB, even if outside the Aerodrome Designation. Rising Star Ltd has submitted that proposed Objective 7 and associated policies give little regard to protecting the amenity values of the Rural General Zone. Other submitters state that further objectives, policies and rules should be included to give effect to proposed Objective 7, to allow for the development of a range of airport related activities in the vicinity of the airport. As discussed earlier under 'Growth', this is outside the scope of the current Plan Change.

Air New Zealand's submission supports the proposed definition of ASANs, as it would provide guidance on the types of activities that are inappropriate within air noise boundaries. Air New Zealand also supports the proposed amendments to the Rural General Zone rules that will prohibit new ASANs within the air noise boundaries, and that any alterations or additions to existing residential buildings within the air noise boundaries must include appropriate acoustic insulation. The proposed amendments will avoid the development of further ASANs that are incompatible with airport activities and could affect airport operations in future. As discussed above, the proposed changes would adversely affect two properties whose owners have submitted in opposition. It is possible that a much greater number of people would be adversely affected if these provisions were to be introduced at a later stage and further development of ASANs were able to continue around the airport in the meantime.

The Wanaka Chamber of Commerce has submitted that an additional 50dB L_{dn} noise contour and associated provisions should be included to provide a higher level of protection for the airport. It is suggested that such provisions, to apply between the 50 and 55 dB L_{dn} contours, should restrict the development of residential dwellings to a minimum lot size of 4 hectares and require dwellings to meet noise insulation requirements. MDA was asked to provide comment on this issue, and has confirmed that it considers that the use of a 50dB L_{dn} contour as the OCB at any airport would be a desirable outcome because there are adverse effects from noise between 50 and 55 dB L_{dn} . MDA also notes that a 50 dB L_{dn} would be consistent with the standard noise limits for general activities in the District Plan. While the adoption of a 50 dB L_{dn} noise contour would further reduce the potential for reverse sensitivity effects resulting from new land use activities around the airport, an OCB or other form of control at this noise level would be more restrictive than the District Plan currently requires and would affect the development rights on a larger area of land. MDA considers that the implementation of an OCB at the 55 dB L_{dn} contour would provide adequate protection for residents and for the airport's ability to operate in the future. The inclusion of another noise boundary is therefore not considered necessary.

Submissions have been made in support of the proposed requirement that alterations and additions to existing buildings within the OCB incorporate sound insulation. No landowners whose properties would be affected by such a requirement have submitted against this proposed provision.

It is not known if any of the affected landowners have been offered any compensation for the loss of building rights on their properties. Adverse effects on these persons must be weighed up against the benefits of protecting the ongoing operation and growth of the airport in making a decision on the proposed Plan Change and Designations. In particular, the possible loss of building rights on Lot 1 DP 25276 is considered to be a significant issue that has not been adequately addressed in the Section 32 report. It is noted that this submission point was made by M Taylor, whose property is located outside both the existing noise boundaries and those proposed in the Plan Change, and therefore would not be subject to any loss of development rights or other land use restrictions as a result of the proposal.

Recommendations

Accept the submission from J & M Bell and Jeremy Bell Investments Ltd (owners of Lots 2 and 3 DP 300397) that the proposed restrictions in Designation 65 would restrict land use activities that are otherwise anticipated on the submitters' land.

Accept the submission that the proposal would affect building rights on the approved building platform on Lot 1 DP 25276.

Reject the submission that an additional 50 dB L_{dn} noise contour and associated provisions should be included to provide a higher level of protection for the airport.

Reject the submission that a composite NNB/OCB should be considered.

Accept the submissions supporting the proposed definition of ASANs.

Accept the submissions supporting the proposed rule to prohibit ASANs in the OCB in the Rural General Zone.

Accept the submissions supporting the proposed rule that alterations and additions to existing buildings in the OCB must meet sound insulation requirements.

Reject the submission that ASANs should be prohibited within the OCB in the Windermere Zone.

Partly accept the submission that the proposal may result in financial disadvantage to Pt Lot 7 DP 24216.

Accept the submission that it is unclear whether any compensation is being offered to affected landowners.

That the Notice of Requirement to alter Designation 65 be amended to allow for an object to penetrate the take off/approach or transitional surfaces provided that the Requiring Authority's approval is obtained, instead of such activities being 'prohibited'.

That the Notice of Requirement to alter Designation 65 be amended to mitigate the adverse effects on landowners of removing the existing provision for objects of a limited height to penetrate the OLS. This should include mitigation or other means to remedy the adverse effects on Lot 1 DP 25276; details of the proposed approval process landowners would use for objects that would penetrate the OLS; and how it is intended to manage existing activities that breach the OLS, such as existing trees.

That no other changes are made to the Plan Change and Designations as notified.

Reasons for the Recommendations

The proposed amendments to the OLS will remove existing rights to erect structures and other objects of a certain height that penetrate the OLS. This includes permitted and controlled activities in the Rural General Zone such as planting of shelter belts, farm buildings and fencing. This may be difficult to enforce, given that there are a number of existing trees and possibly other objects which penetrate the OLS.

The entire building platform on Lot 1 DP 25276 penetrates the proposed take off climb/approach surface, and consequently no building would be able to be erected on the platform unless approved by the Requiring Authority. While the submitter has certainty under the current provisions that a dwelling can be constructed on the building platform, this would be at the discretion of the airport under the amended Designation. Should the airport refuse permission to build on the site, the submitter would be faced with the costs and uncertainty of appealing this decision to try to retain her development rights. The proposal may also result in financial disadvantage to Pt Lot 7 DP 24216, as while this property does not have any existing development rights, the establishment of a building platform is currently a discretionary activity and would become a prohibited activity within the majority of the site that would be located within the OCB proposed by the Plan Change. It is not known if any compensation is being offered to affected landowners.

The proposed definition of ASANs and provisions to prohibit further ASANs within the OCB and NNB in the Rural General Zone would allow growth of the airport to occur while avoiding reverse sensitivity effects. It is not considered reasonable to restrict development of ASANs between the OCB and NNB

in the Windermere Zone when this zone was established for such a purpose, and mitigation is available to achieve a suitable indoor noise environment.

It is not considered necessary to establish an additional noise contour at the 50 dB L_{dn} contour, or to further simplify the contours by having a composite OCB/NNB (if night flights are approved).

It is recommended that the reference to activities being 'prohibited' in the Designation is removed if, as legal advice indicates, the Requiring Authority is still able to approve such activities if it sees fit. This is to avoid confusion as approval cannot be sought for an activity that is prohibited by the District Plan rules.

Issue 5 – Traffic

Issue

Growth in airport operations will result in increased traffic. Submitters are concerned about the effects on the roading network, including State Highway 6 (SH6). Submissions regarding traffic were received from the NZTA and N & A Heath.

The specific submission points raised by submitters include the following:

- Little consideration given to necessary upgrades to the roading network
- Lack of detail regarding effects on transport system, including SH6
- Existing access is not suitable to accommodate proposed growth in airport activities
- Likely to have an adverse effect on the State highway
- Insufficient supporting information to conclude that adverse effects in terms of traffic will be 'less than minor'
- Consolidation of access between other sites in the vicinity needs to be considered
- More comprehensive traffic assessment should be undertaken
- A memorandum of understanding should be entered into between QLDC and the NZTA

While traffic is related to all three applications insofar as they all allow for expansion of the airport, it is considered that the Notice of Requirement to alter the Aerodrome Designation is most relevant, as this will provide for physical works to be undertaken associated with airport infrastructure.

Discussion

Further information with regards to traffic effects was requested in response to the issues raised in submissions. A Transportation Assessment was subsequently prepared by Viastrada.

To assess effects on SH6, Viastrada used the SIDRA model to test the capacity of the existing intersection of Lloyd Dunn Avenue with SH6, which provides access to the airport, based on estimated traffic volumes up until 2036. The results showed a minor increase in delay and queue lengths and a decrease in level of service, mainly due to vehicles turning into Lloyd Dunn Avenue from SH6. Viastrada does not consider that this would warrant an intersection redesign, although it notes that a right turn bay would be desirable.

Viastrada acknowledges that multiple accesses along a short section of road with a high speed limit are not desirable for safety reasons, particularly when visitors will be travelling between the different activities as is potentially the case in the vicinity of Wanaka Airport. The report states that options are being explored that would result in an internal roading network with a single access point onto SH6, but that this is subject to agreement from third parties.

The Viastrada report does not provide a significant amount of further information with regards to traffic effects of the proposal raised in the submissions. The modelling indicates that the proposed growth in operations at the airport would not have a significant effect on the operation of SH6. It is however acknowledged, as discussed by Viastrada, that it is difficult to accurately predict future traffic associated with the airport and there are a number of factors that could affect future traffic volumes along SH6 in addition to expansion of the airport. Overall, it is considered unlikely that potential

adverse effects on the safety and operation of SH6 cannot be suitably avoided, remedied or mitigated, for example through intersection design and reducing the number of access points onto SH6 in the vicinity. Entering into a memorandum of understanding with the NZTA would be a way to ensure the appropriate timing of undertaking necessary roading works and upgrades. Any changes to existing accesses onto SH6 will be subject to the approval of the NZTA.

Recommendations

Partly accept the submission from N & A Heath that little consideration has been given to necessary upgrades to the roading network.

Partly accept the submission that the existing access is not suitable to accommodate proposed growth in airport activities.

Accept the submission from the NZTA that consolidation of access between other sites in the vicinity needs to be considered.

Partly accept the submission from the NZTA that there is insufficient supporting information to conclude that adverse effects in terms of traffic will be 'less than minor'.

Accept the submission that the QLDC should enter into a memorandum of understanding with the NZTA.

That the Notice of Requirement to alter Designation 64 is amended such that QLDC would enter into a memorandum of understanding with the NZTA.

That no other changes are made to the Plan Change and Designations as notified.

Reasons for the Recommendations

While the Notice of Requirement does not consider upgrades to the roading network that may be required as a result of airport growth, the Viastrada report indicates that such upgrades are unlikely to be necessary. There are other factors that could have a more significant effect on traffic levels along SH6 between Luggate and Wanaka.

Intersection modelling has shown that the existing airport access would have sufficient capacity to service the anticipated growth of the airport. Intersection upgrades, including a right turn bay, could be undertaken to mitigate adverse effects on highway traffic. It is considered that entering into a memorandum of understanding with the NZTA would be a way to ensure the appropriate timing of necessary roading works and upgrades, and may assist in reaching the objective of consolidating access between other sites in the vicinity of the airport to improve safety.

Issue 6 – Amenity Values

Increased noise resulting from increased aircraft movements and night flights would affect amenity values.

The specific submission points raised by submitters include the following:

- Larger aircraft will impact on the amenity of Albert Town and Clutha River areas
- Flight paths should avoid Albert Town and the Clutha River
- Proposal is inconsistent with protection of rural amenity values identified in the District Plan
- Council should develop an approach to future management of the airport that is more respectful of rural amenity values

With respect to the Plan Change, effects on amenity are related to noise which has been discussed already in detail under 'Increased Noise' and 'Night Time Flights and Night Time Noise Boundary'. Effects on amenity values are also relevant to the Notice of Requirement to alter the Aerodrome

Designation; these are discussed in more detail in the Assessment of Environmental Effects later in this report.

Discussion

As raised in the submission by Rising Star Ltd, in Part 5 – *Rural Areas* of the District Plan, resource management issues, objectives and policies include the protection of rural amenity values. In Part 7, Objective 7 is to retain a greenfields area within an airport OCB to act as a buffer between the airport and other land use activities, particularly for safety and noise reasons. The proposed amendments to Objective 7 would provide for airport-related activities and activities not sensitive to aircraft noise to be established within the noise boundaries. Rising Star's submission considers that this encourages expansion of the airport with little consideration to rural amenity values. It is agreed that the proposed wording of Objective 7 could be amended slightly to be more consistent with the current zoning provisions as these do not allow for 'airport related activities' to be established in the vicinity of Wanaka Airport outside the Aerodrome Purposes Designation area.

With respect to noise, it is accepted that there will be an adverse effect in terms of rural amenity compared to the existing situation, due to more frequent aircraft movements and the use of larger aircraft. Effects on amenity values, including those related to noise, must be balanced against the potential positive economic and social benefits to the wider area resulting from airport growth, including the introduction of night flights. Effects on the amenity values of the indoor environment can be mitigated to some extent, for example through sound insulation and closing doors and windows, while the effects on the outdoor environment cannot. As explained by MDA, outside the proposed OCB and NNB, it is considered that noise levels will be similar to or less than other noise-generating activities such as traffic, which are permitted. However, as discussed earlier, it is considered that the effects of night time flights have not been fully assessed, and that further information should be provided to justify the need for night flights.

The Albert Town Community Association has submitted that flight paths should avoid Albert Town and the Clutha River completely. However, this would require the runway, and possibly the airport, to be relocated and is not practical. Any expansion of airport operations would have some level of adverse effect in terms of existing amenity values. As Albert Town and the Clutha River are located well outside the air noise boundaries proposed by the Plan Change, the adverse effects are not considered to be significant enough to warrant the relocation of the airport.

Further discussion regarding effects on visual amenity and landscape values relating to the proposed alteration to Designation 64 follows in a later section of this report.

Recommendations

Partly accept the submission that the use of larger aircraft will impact the amenity of the Albert Town and Clutha River areas.

Partly accept the submission that the proposal is inconsistent with the protection of rural amenity values identified in the District Plan.

Partly accept the submission that the approach to future management of the airport should be more respectful of rural amenity values.

Amend the wording of proposed Objective 7 in Part 5 to read (changes are highlighted in yellow where these differ to the Plan Change as notified):

Objective 7 - Buffer Land for Airports

Retention of a greenfields area within an airport Outer Control Boundary to act as a buffer between airports and other land use activities. Retention of a greenfields area or where appropriate at Queenstown Airport an area for Airport related activities or where appropriate, an area for activities not sensitive to aircraft noise, within an airport's Outer Control Boundary to act as a buffer between airports and other land use activities. Amend the Plan Change to remove all reference to the NNB (see recommended changes in Appendix D) unless further information can be provided at the hearing to justify the benefits of night flights and with regards to adverse effects inside and outside the NNB.

That no other changes are made to the Plan Changes and Designations as notified.

Reasons for the Recommendations

While it is accepted that there would be some level of adverse effect on the amenity of surrounding areas due to increased noise, during the day time the effect is not considered to be significant in those areas located outside the proposed OCB. Night time effects would likely be more noticeable, so it is considered that further information should be provided to support the introduction of night flights to ensure that the adverse effects can be properly balanced against the potential benefits to the wider community.

It is considered that the proposed wording of Objective 7 in Part 5 implies that 'airport related activities' would be anticipated within the OCB whereas the current zoning does not allow for such activities around Wanaka Airport. It is recommended that the wording of proposed Objective 7 be amended slightly (see the full list of recommended changes in Appendix D).

The development of buildings and other infrastructure associated with the airport could potentially result in significant adverse effects relating to visual amenity and landscape values.

Issue 7 – Engine Testing

Issue

The issue of noise from unscheduled engine testing was raised by some submitters. It is proposed that conditions relating to engine testing would be included in the Aerodrome Purposes Designation, and that engine testing would not be included in the proposed airport noise contours.

The specific submission points include the following:

- Providing for a specific number of unscheduled engine tests gives an arbitrary number with little practical basis
- Management controls are best addressed in a Noise Management Plan
- Concern at increased noise from more engine testing
- Unclear what, if any, mitigation is proposed

Discussion

The aviation industry has strict requirements regarding the need to run an engine after maintenance before it can be used for passengers. Routine maintenance on passenger aircraft is not proposed at Wanaka Airport, however unscheduled repair work may be required at times. There are currently no specific provisions for engine testing at Wanaka Airport in the District Plan. MDA recommends limiting the number of engine testing events within a 12 month period with a maximum duration and noise limit as a method of control for unscheduled engine testing. It is proposed that essential unscheduled engine testing would only be allowed at night on a maximum of 18 occasions per year, and the maximum noise level associated with engine testing between 10pm and 7am would be restricted to 80 dB L_{AFmax} at the boundary of any site outside the Aerodrome Designation. According to MDA, the L_{AFmax} of an aircraft event is approximately 10 dB less than the SEL. While engine testing would be an additional noisy activity that could occur at night, the proposed noise limit of 80 dB L_{AFmax} represents less noise than the proposed NNB at 95 dB SEL. No explanation is given as to how the proposed maximum number of engine testing events has been determined, or what 'unscheduled' engine testing actually means.

The issue of engine testing was discussed as follows in the Commissioners' decision on Plan Change 35 regarding Queenstown Airport:

'It is accepted that the tests are necessary following essential unplanned maintenance, and that they may be required at night to avoid disruption of flight schedules. We also note that for an unplanned test once a year for up to 25 minutes, it is highly unlikely that any noise prediction or noise monitoring will ever occur, and therefore a noise limit does not serve any purpose. The effect of unplanned testing can however be minimised by careful location of the aircraft. The effect can also be minimised by avoiding testing in the middle of the night if possible.'

The Commissioners considered that management controls for engine testing would be best addressed in a Noise Management Plan (NMP) and monitored by an airport liaison committee, rather than relying on pre-specified noise limits. It was recommended that the Designation conditions should require that the NMP include a procedure for unplanned engine testing of large aircraft.

The Notice of Requirement for Wanaka Airport proposes to include a condition in the Designation requiring that the date, time, noise level reached, duration and reason for the test shall be reported to the Council on each occasion when unscheduled engine testing occurs. It is not clear what this would actually achieve. Reporting would indicate whether or not engine testing being undertaken complied with the maximum noise level specified in the Designation but would not in itself mitigate noise. The proposed wording of the condition is also not clear as to what events it would apply to. There is no proposed condition requiring that engine testing activities be located to minimise adverse noise effects. The measurement and reporting of single engine testing at night is expected to occur infrequently, and as recommended by the Commissioners reporting on Plan Change 35, it is considered that an NMP would be a more effective method for managing the effects of engine testing noise. Mitigation measures, such as locating engine testing in specific areas to minimise noise beyond the airport, could be incorporated into the NMP.

This report has already recommended that the NNB be removed from the Plan Change unless adequate further supporting information is provided at the hearing. Should the NNB not be approved then it is not considered appropriate for the Designation to include provisions relating to night time engine testing, as this would no longer be necessary.

Recommendations

Accept the submission that providing for a specific number of unscheduled engine tests gives an arbitrary number with little practical basis.

Accept the submission that engine testing noise management controls are best addressed in a Noise Management Plan.

Accept in part the submission that engine testing would result in increased noise.

Accept the submission that it is unclear whether mitigation is proposed with regards to engine testing.

Amend the Notice of Requirement to alter Designation 64 such that a Noise Management Plan that includes a procedure for engine testing is prepared and implemented, rather than requiring engine testing meet specific noise limits.

If the NNB part of the Plan Change is not approved, amend the Notice of Requirement to remove the provisions relating to night time engine testing.

That no other changes are made to the Plan Change and Designations as notified. *Reasons for the Recommendations*

No justification has been provided for the need to have up to 18 unscheduled engine tests at night per year. It is considered more practical to manage noise from engine testing by way of an NMP that includes mitigation measures such as locating engine testing to reduce noise, rather than relying on noise measurements being undertaken.

Issue 8 – Part 2 Matters

The specific submission points raised by submitters include the following:

- Does not promote sustainable management of resources and will not achieve purpose of the Act
- Is contrary to Part 2
- Is inconsistent with Section 5
- Is inconsistent with Sections 7(b), (c), (f) and (g)
- Is consistent with the purpose and principles of the Act

Discussion

Part 2 of the Act outlines its purpose and principles. Applying Section 5 involves a broad judgement of whether a proposal will promote the sustainable management of natural and physical resources and allows for the balancing of conflicting considerations. This broad assessment will also consider matters under Sections 6, 7 and 8, which are not considered as separate from the wellbeing of people and communities, but are elements of that wellbeing. The community's relationship with aspects of the natural and physical environment, including specified matters of national importance (Section 6), is integral to social and cultural wellbeing. Proposals that benefit the general public interest but impose an adverse effect on part of the community may still fail to meet the purpose of the Act.

Section 5 identifies the purpose of the Act as follows:

- (1) The purpose of this Act is to promote the sustainable management of natural and physical resources.
- (2) In this Act, sustainable management means managing the use, development, and protection of natural and physical resources in a way, or at a rate, which enables people and communities to provide for their social, economic, and cultural wellbeing and for their health and safety while
 - (a) sustaining the potential of natural and physical resources (excluding minerals) to meet the reasonably foreseeable needs of future generations; and
 - (b) safeguarding the life-supporting capacity of air, water, soil, and ecosystems; and
 - (c) avoiding, remedying, or mitigating any adverse effects of activities on the environment.

Section 5(2) defines sustainable management identifying two key components – one enabling and one regulatory. The definition of sustainable management enables communities to use, develop and protect natural and physical resources to provide for their wellbeing. However, the use of these resources can only be undertaken if the regulatory component is satisfied, requiring the potential of resources to be sustained, the life supporting capacity to be safeguarded, and adverse effects on the environment to be avoided, remedied or mitigated.

Although the district's main airport is located at Queenstown, scheduled domestic services already operate from Wanaka Airport and demand for such services is expected to grow. Wanaka Airport also provides an important base for private and recreational light aircraft, and helicopters. Infrastructural assets, including airports, are considered to be physical resources that should be sustainably managed to enable communities to provide for their social, economic and cultural wellbeing under the Act. As raised in a number of submissions, Wanaka Airport facilitates access directly to Wanaka, encouraging economic activity through tourism and business opportunities. Further expansion of the airport would generate additional airport related business activities. Visitor numbers and the resident population in Wanaka are anticipated to continue to grow and the forecasted aircraft movements through to 2036 in the WAMP indicate a significant increase in activity at the airport. However, future growth in aircraft movements and the type of aircraft used will be constrained by the existing noise boundaries, area of the Aerodrome Designation, and availability of airspace for safe aircraft manoeuvring. Providing for the projected growth of the airport as proposed in the Plan Change and Notices of Requirement would assist future generations to meet their needs.

Section 5(2) also requires that the objectives of health and safety must be promoted. A number of submissions have been received with regard to noise, an issue which is relevant to these objectives, as well as to the requirement to avoid, remedy or mitigate adverse effects.

The approach of providing for noise boundaries based on projected aircraft movements is a relatively common planning practice and one that is recommended by NZS 6805:1992 for airport noise management and land use planning. This approach seeks to provide a degree of certainty for current and future generations regarding the impacts of noise generated by airport activities. However, it is noted that the proposed Plan Change will provide greater certainty for the airport regarding ASANs within the proposed noise boundaries than for the community, as the proposed Plan Change does not include any rules requiring airport operations to be undertaken so as not to exceed the noise boundaries. While it is accepted that such controls are proposed to be included in the amended Designation 64, it is considered that the provisions of the Designation can be more easily altered than District Plan rules, and this therefore provides less certainty for the affected community.

Section 6 sets out matters of national importance that shall be recognised when managing the use, development and protection of natural and physical resources. None of the matters listed are relevant to the proposal.

Section 7 identifies other matters to which particular regard shall be had in relation to managing the use, development and protection of natural and physical resources. Of the matters listed, those considered to be of particular relevance to the proposal, and which have been raised in submissions, include:

- (b) the efficient use and development of natural and physical resources:
- (c) the maintenance and enhancement of amenity values:
- (f) the maintenance and enhancement of the quality of the environment:
- (g) any finite characteristics of natural and physical resources:

The proposal would allow for the efficient use and development of the airport, which is an infrastructure asset that benefits the wider community. There is support for the growth and expansion of the airport in a number of submissions. The proposed revised noise boundaries and associated objectives, policies and rules would provide for future growth of the airport while reducing potential reverse sensitivity issues associated with the presence of ASANs in the vicinity of the airport. The proposed noise boundaries are more accurate than the existing, and would allow for more efficient use of land surrounding the airport by ensuring that the proposed restrictions and other control methods are implemented in the most appropriate locations.

Due to the level of infrastructure already established at the airport it is considered unlikely that relocating the airport would achieve an efficient use of physical resources. However, an alternative to the Plan Change and Designations could be to limit the level of development of the airport.

The efficient use of natural and physical resources also applies to other resources, including the efficient use of existing zoned land such as the Rural General Zone and Windermere Zone, and existing residential building platforms. The majority of the land surrounding the airport is zoned Rural General and the establishment of residential activities and other ASANs is generally not anticipated in this zone. However, the proposed provisions relating to the OLS would potentially affect the ability of the land to be used efficiently for rural activities, by restricting the erection of any objects that would penetrate the OLS. As discussed earlier in this report, a large area of rural land would penetrate the proposed OLS.

The proposed provisions prohibiting ASANs within the NNB would affect part of the Windermere Zone. If ASANs were also to be prohibited within the OCB as is proposed in the Rural General Zone, then approximately half of the Windermere Zone would be unable to be developed. However, ASANs are proposed to be permitted between the OCB and NNB provided that suitable sound insulation is installed. It is considered that this approach would achieve the efficient use of the existing resource while still managing potential reverse sensitivity effects. As the airport grows, there could be a demand for visitor accommodation in the vicinity of the airport, which the Rural Visitor Zone would provide for.

The proposed take off/approach surface could restrict development on the existing approved building platform on Lot 1 DP 25276. This is not considered an efficient use of the existing land resource, as it is unlikely that a property of this size could be used for any alternative use such as productive rural activities without the erection of any structures.

Sections 7(c) and 7(f) require that particular regard be had to the maintenance and enhancement of amenity values and the quality of the environment. The key issue in relation to amenity values and environmental quality with regards to the proposed Plan Change is noise. The proposed Plan Change would revise the noise control boundaries to include areas that are not within the existing noise boundaries. The growth in airport operations would result in noise impacts that would affect the amenity values and environmental quality of the area within and beyond the noise control boundaries to varying degrees. Effects on the amenity values of the indoor environment can be mitigated to some extent, while the effects on the outdoor environment cannot.

For Designation 64, the key issue in terms of Sections 7(c) and 7(f) is the effect on visual amenity and landscape values. This issue is discussed in detail later in this report. The proposed extension to the Aerodrome Purposes Designation could result in built form being established where this would adversely affect the visual amenity of the surrounding Visual Amenity Landscape. However, conditions could be included to control the location of buildings to avoid or mitigate these adverse effects.

Section 7(g) relates to the finite characteristics of any natural and physical resources, including land. The Windermere Rural Visitor Zone is a finite resource that provides land zoned for visitor accommodation and potentially other activities in the vicinity of the airport that may support airport growth. The Plan Change would not result in any development rights being lost in this zone if the NNB were removed.

Section 8 requires that all persons exercising functions and powers under the Act shall take into account the principles of Treaty of Waitangi. No Treaty of Waitangi issues have been raised in submissions on this Plan Change, or are considered relevant to the Designations.

As the matters listed under Sections 6, 7 and 8 are not separate from but elements of the wellbeing of people and communities it is considered appropriate to return to whether the purpose and principles of the Act are best served by the outcomes promoted by the objectives and policies, rules and other methods proposed in the Plan Change, and the Notices of Requirement.

With regard to noise, the establishment of a long term noise control regime to mitigate the effects of aiport activities and avoid reverse sensitivity issues is considered a sound approach that is consistent with NZS 6805:1992. Preventing the establishment of additional noise sensitive activities in non-urban areas such as the Rural General Zone is considered generally appropriate to avoid reverse sensitivity issues for the airport into the future. While it is acknowledged the alternative of acoustic treatment could also be applied in this area, in the Rural General Zone the avoidance of these potential effects is considered more appropriate than remedying or mitigating them. In the Windermere Zone, and on properties with existing approved building platforms in the Rural General Zone, it is not proposed to remove existing development rights, and instead sound insulation will be required within the air noise boundaries. Much of the area affected, including the two building platforms, is already subject to similar requirements under the current District Plan provisions.

While the introduction of night flights could promote the economic wellbeing of the wider community, insufficient information has been provided in this regard to allow the benefits to be properly weighed against the adverse effects in terms of amenity and sleep disturbance that are clearly a concern to parts of the community.

The Notice of Requirement to alter Designation 65 is intended to ensure that suitable airspace is available for safe aircraft manoeuvring to meet CAA requirements and therefore allow the anticipated growth in airport operations, including the use of larger aircraft, to occur. Although it is recognised that enabling growth of the airport will assist the wider community in providing for its social, economic and cultural wellbeing, the failure to address issues relating to restrictions on existing land use and

development rights does not enable affected landowners to provide for their social, economic and cultural wellbeing.

Recommendations

Accept in part the submissions that the proposal does not promote sustainable management of resources and will not achieve the purpose and principles of the Act. That part accepted is in relation to night time flights and the OLS.

Accept in part the submission that the proposal is consistent with the purpose and principles of the Act. That part accepted is in relation to the revised OCB and ANB, and associated provisions to control the development of ASANs within these noise boundaries.

That no other changes are made to the Plan Change and Designations as notified.

Reasons for the Recommendations

For the reasons outlined above, it is considered that the Plan Change relating to the management of ASANs within the air noise boundaries and the establishment of an amended OCB and ANB is consistent with the purpose and principles of the Act.

As discussed above and in previous sections of this report, it is considered that further information should be provided to ensure that there is sufficient benefit to the wider community to justify the adverse effects of night time flights. It is also considered that the Notice of Requirement to alter Designation 65 should be amended to ensure that adverse effects on landowners who would lose existing rights to erect objects of a limited height on their properties are adequately assessed and that these effects would be suitably mitigated.

Issue 9 – Section 32 Analysis

Several submitters stated that the Section 32 evaluation was inadequate. A submission was also received from Eamon Young (Ricochet Amusement) that the proposal is consistent with Section 32.

The specific submission points raised include the following:

- Proposed Plan Change does not satisfy provisions of Section 32 of the Act
- Section 32 analysis fails to adequately assess the costs to submitters
- Night time flying has not been addressed in Section 32 report
- Unclear as to extent of consultation undertaken with neighbours
- Potential impacts on properties outside noise boundaries have not been addressed
- Further consideration should be given to costs and benefits considerations required under Section 32

The Section 32 report relates specifically to the Plan Change.

Discussion

An evaluation undertaken under Section 32 of the Act prior to public notification of a proposed plan change must examine the extent to which each objective is the most appropriate way to achieve the purpose of the Act, and whether, having regarding to their efficiency and effectiveness, the policies, rules or other methods are the most appropriate for achieving the objectives. The Act specifies that such an evaluation must take into account costs and benefits, and the risk of acting or not acting if there is uncertain or insufficient information.

The Section 32 report does not address the cost to landowners surrounding the airport who would be affected by the provisions proposed in the Plan Change to manage land use activities within the air noise boundaries. In particular, the additional cost to the owners of the two building platforms located within the NNB is considered relevant. While these properties are already required to install sound insulation under the current provisions, mechanical ventilation would also be required in bedrooms to

adequately mitigate against night time noise. MDA has advised that this may cost in the order of \$5000 to \$10,000 per dwelling. The Section 32 report also does not take into consideration the cost to the landowner of Lot 1 DP 25276 that would result from the alteration to Designation 65. The Designation would restrict development of buildings on the existing approved residential building platform on this lot.

While the Section 32 report states that consultation has been undertaken with surrounding landowners, it is agreed that it is not clear what level of consultation has occurred. The Plan Change notification process does however allow all persons the opportunity to submit on the proposal whether or not prior consultation has occurred with them. Given the submission in general opposition to the Plan Change from J Umbers (Lot 1 DP 25276) it would appear that, prior to preparation of the Section 32 report, consultation did not achieve resolution of the issues relating to those most affected by the proposal.

Potential adverse effects on properties outside the proposed noise boundaries have been discussed in previous sections. While increased noise from growth in airport operations would be noticeable outside the proposed noise boundaries, these are intended to define a threshold at which the adverse effects of noise are significant. It is not considered that the Section 32 analysis is inadequate in this respect, in terms of day time noise levels. However, to properly assess the effects of night time flights it is considered that further information should be provided to justify the benefits to the community and wider District of providing for night flights.

Recommendations

Accept in part the submissions that costs and benefits are not adequately assessed in the Section 32 report. That part accepted is in relation to day time flights. That part not accepted is in relation to information assessing costs and benefits of night time flights and the OLS.

Partly accept the submission that the potential impacts on properties outside the noise boundaries have not been assessed.

Accept the submission that the extent of consultation undertaken with neighbours is unclear.

Accept in part the submission that the Plan Change does not satisfy the provisions of Section 32 of the Act. That part accepted is in relation to day time flights. That part not accepted is in relation to information assessing costs and benefits of night time flights.

Partly accept the submission that night time flying has not been addressed in the Section 32 report.

That no other changes are made to the Plan Change and Designations as notified.

Reasons for the Recommendations

As discussed above and in other sections of this report, the Section 32 assessment does not adequately address issues such as the costs to affected landowners and the benefits to the community of providing for night time flights. While night time flights have been addressed in the Section 32 report, the level of assessment is not considered adequate. It is therefore considered that the NNB should be removed from the Plan Change unless suitable further information is provided regarding the positive and adverse effects of night time flights at the hearing.

Issue 10 – Alternatives

Issue

J & M Bell and Jeremy Bell Investments Ltd have submitted with regards to the Notice of Requirement that no consideration has been given to alternative methods to achieve the airport's objectives that would have less impact on submitters' land.

Discussion

This submission specifically relates to the restrictions on land use activities that would result from the Notice of Requirement to alter Designation 65, which would remove existing provisions that allow for objects of a limited height to penetrate the OLS. This issue has been discussed in detail under 'Effects/Restrictions on Land Use Activities'. The Notice of Requirement states that it is proposed to remove the existing provision that allows for activity with a maximum height of 10.7m to occur because there is no basis for this in terms of civil aviation law and it has the potential to compromise the safe operation of the airport. The consideration of Alternative Sites, Routes and Methods in the Notice of Requirement does not include any information as to whether it would be possible to include a provision such as the existing one or if this would be contrary to the CAA rules. Further information with regard to this issue should be provided at the hearing. As discussed earlier, the proposal would potentially have a significant effect on landowners who would be required to seek the airport's approval for any objects which penetrate the OLS.

Further discussion of Alternatives is included in the Assessment of Environmental Effects with regard to the Notices of Requirement, which follows in the next section of this report.

Recommendations

Partly accept the submission that inadequate consideration has been given to alternative methods of protecting airspace for aircraft manoeuvring that would have less adverse effects on land use activities.

That the Notice of Requirement to alter Designation 65 be amended to mitigate the adverse effects on landowners of removing the existing provision for objects of a limited height to penetrate the OLS. This should include mitigation or other means to remedy the adverse effects on Lot 1 DP 25276; details of the proposed approval process landowners would use for objects that would penetrate the OLS; and how it is intended to manage existing activities that breach the OLS, such as existing trees.

That no other changes are made to the Plan Change and Designations as notified.

Reasons for the Recommendations

It is acknowledged that the OLS are required for safe aircraft manoeuvring; however it is not clear if CAA rules expressly preclude a provision allowing for objects of a certain height to breach the OLS without requiring specific approval. It is considered that the Notice of Requirement does not adequately assess effects on landowners, or explain how existing trees and other objects that already penetrate the OLS will be managed.

ASSESSMENT OF ENVIRONMENTAL EFFECTS WITH REGARD TO THE NOTICES OF REQUIREMENT

This section of the report provides an assessment of environmental effects with regards to the proposed alterations to Designations 64 and 65. The two Notices of Requirement have been considered together.

Section 171(1) of the Resource Management Act provides for a territorial authority to make a recommendation on a requirement as follows:

When considering a requirement and any submissions received, a territorial authority must, subject to Part 2, consider the effects on the environment of allowing the requirement, having particular regard to –

- (a) any relevant provisions of
 - *(i) a national policy statement:*
 - (ii) a New Zealand coastal policy statement:
 - (iii) a regional policy statement or proposed regional policy statement:
 - (iv) a plan or proposed plan; and

- (b) whether adequate consideration has been given to alternative sites, routes, or methods of undertaking the work if –
 - *(i) the requiring authority does not have an interest in the land sufficient for undertaking the work; or*
 - (ii) it is likely that the work will have a significant adverse effect on the environment; and
- (c) whether the work and designation are reasonably necessary for achieving the objectives of the requiring authority for which the designation is sought; and
- (d) any other matter the territorial authority considers reasonably necessary in order to make a recommendation on the requirement.

Effects on the Environment of Allowing the Requirements

To avoid repetition, only effects additional to those raised in submissions are discussed in this section.

Landscape and Visual Effects

Lakes Environmental's Landscape Architect, Dr Marion Read, notes that the landscape in the vicinity of the airport has been consistently assessed as a Visual Amenity Landscape in terms of the District Plan. After assessing the landscape character of the area and its context, the Landscape Architect considers that the site of the proposed extension to the Aerodrome Designation is located within a Visual Amenity Landscape for the following reasons:

- "Although the site includes a cluster of commercial and (apparently) industrial activity centred on the airport, this cluster is too small to be considered as a separate landscape in its own right. The site is located within a pastoral landscape associated with the river terraces and glacially formed landscape between the base of the Criffel Range and the Clutha River. This landscape displays a distinctly pastoral character.
- Natural science factors are overshadowed by human modification of the landscape. The landscape displays character influenced by human activity in the form of grazed paddocks, stock fences, shelter planting, buildings and access ways.
- The landscape is within close proximity of outstanding natural features or landscapes including: Mount Barker, Criffel Range, Cardrona River, Clutha River, and Mount Iron.
- The landscape has an 'extra quality', in terms of openness, scale, legibility and lack of domestication, which gives it an amenity valued by the community and by visitors to the area."

The proposed earthworks associated with the extension of the existing runway and construction of the parallel runway are of a considerable scale that, as described by the Landscape Architect, has the potential to compromise the natural and pastoral character of the surrounding landscape, essentially levelling the existing slightly rolling to hummocky topography. Most viewers would see the earthworks from SH6 and the Landscape Architect does not consider that they would be visually prominent from this perspective. The earthworks would also be visible in glimpses from Stevenson Road where they would appear as more of an intrusion in the landscape. However, from both SH6 and Stevenson Road, it will be apparent that the earthworks are part of an airport and the Landscape Architect considers that this would assist in containing the effects to some extent.

Earthworks are proposed in close proximity to the edge of the terrace escarpment associated with the Clutha River, which the Landscape Architect considers is arguably a part of the Outstanding Natural Feature that is the Clutha River and its immediate environs. Although the terrace escarpment is widely visible from areas including SH6, Church Road, Shortcut Road and points to the north of the river, the Landscape Architect is of the opinion that the earthworks themselves would not be readily

noticeable and therefore would not compromise the open character of this Outstanding Natural Feature.

The proposed extension to the Aerodrome Designation could result in the construction of large buildings of up to 9m in height and likely of an industrial scale and appearance along the north eastern and north western perimeters of the site. The Landscape Architect is of the opinion that this would have 'very significant effects on the natural and pastoral character of the vicinity' and suggests that conditions should be imposed to prohibit any such buildings along the entire north eastern side of the site and the north western side from the intersection of the boundaries of the Rhodes and Pittaway properties. She recommends that car parking should also be excluded in the northern parts of the designation as this would likely be of a scale and nature that would compromise the landscape character. The Landscape Architect refers to a recent Environment Court appeal (Roberts v QLDC) against a QLDC decision to decline consent for a subdivision and single building platform on a site to the west of the airport on SH6. The Court refused to grant consent on the grounds of its adverse effects on the landscape in the vicinity, including cumulative effects. The Landscape Architect notes that the proposed alteration to the designation could potentially result in two rows of aircraft hangars being constructed within the view shaft that the Court sought to protect in that decision.

The Landscape Architect comments that there is little opportunity for mitigating adverse effects of buildings on the landscape because one of the most significant qualities of the landscape is its expansiveness, and so any planting or other mitigation to screen buildings is likely to further detract from this expansiveness. A requirement to use recessive external colours and materials would assist in reducing the visual prominence of buildings.

The Landscape Architect does not consider that the construction of further buildings, including a new control tower and terminal building, in proximity to or within the node of existing airport buildings and similar buildings on neighbouring sites along SH6 would have any significant adverse landscape effects. The further consolidation of this node of development would avoid sprawl and adverse cumulative effects associated with the construction of buildings in northern parts of the site. A control tower would provide an explanation for the presence of large, industrial style buildings in a rural area and arguably mitigate the adverse effects of existing development.

In summary, the Landscape Architect's assessment of the visual and landscape effects of the proposal is adopted. It is recommended that conditions are included in Designation 64 restricting the development of buildings and car parking areas along the entire north eastern side of the site and the north western side from the intersection of the boundaries of the Rhodes and Pittaway properties.

Ecological Effects

The Assessment of Ecological Effects report prepared for the requiring authority by Natural Solutions for Nature Limited concludes that there are no species, communities or habitats of significance that would be adversely affected by the proposed alteration to the Aerodrome Designation. This assessment is accepted. It is considered that adverse effects on ecological values will not be more than minor.

Construction Effects

The proposed earthworks associated with extending the existing runway and constructing the RESAs and parallel runway could potentially have significant adverse nuisance effects. However, the requiring authority has proposed that a condition be included in the Designation requiring that a Construction Management Plan be submitted for review and approval prior to works commencing, and this will ensure that suitable measures are implemented to mitigate these adverse effects.

Servicing/Infrastructure Effects

Wanaka Airport is not connected to QLDC's water supply, stormwater disposal or wastewater networks.

Currently, buildings at the airport have on-site wastewater treatment and disposal systems. It is proposed to connect the airport to the QLDC's Project Pure wastewater plant, which is located to the north of the airport runway. An *Infrastructure Servicing Feasibility Report* by Hadley Consultants Ltd confirms this is feasible but it is likely that a new pump station will need to be installed due to the flat topography. The new reticulation would also service other land in the vicinity of the airport, and as such, it would be appropriate for it to be vested in Council.

The existing water supply for the airport comes from a water bore located at the western end of the airport land. Hadley Consultants Ltd has estimated a future water demand for the airport of approximately 48m³ per day with a peak hourly flow of 3.57 litres per second (compared to an estimated existing demand of approximately 31m³ per day and peak hourly flow of 2.35 litres per second). The consented allowable take from the bore is 240m³ per day at a maximum rate of 2.8 litres per second. This supply could service future development at the airport if buffer storage tanks were installed to provide peak hourly flow when required. Other options such as connection to the existing Luggate water supply or Corbridge Downs supply which supplies Project Pure could also potentially service other development in the vicinity of the airport.

Fire fighting water supply is currently provided in on-site storage tanks adjoining individual hangars and scattered around the airport. Hadley Consultants Ltd notes that it will be necessary to upgrade this system into the future and that a very high water flow rate will be required due to the large floor areas of the airport buildings.

Hadley Consultants has assessed that the ground conditions are suitable for on-site disposal of stormwater from the increased area of impervious surfaces associated with the proposed expansion of airport infrastructure. It is recommended that pollution and grit interceptors are installed where runoff is collected from car parks and apron areas where aircraft refuelling occurs.

While the report by Hadley Consultants Ltd confirms that future development within the extended Aerodrome Designation could be adequately serviced, no information is provided as to whether and when the recommended infrastructure is likely to be constructed. It is recommended that such provisions are included in the Notice of Requirement. However, it is also acknowledged that the QLDC itself is the Requiring Authority in this instance, and it is therefore assumed that the provision of infrastructure to the airport area will continue to be investigated by the QLDC on an ongoing basis and implemented when sufficient demand exists.

Matters to Have Particular Regard To

National Policy Statements

There is no applicable National Policy Statement.

Regional Policy Statement

The Otago Regional Policy Statement (ORPS) provides an overview of the resource management issues facing Otago at a regional level, and sets policies and methods to manage Otago's natural and physical resources. It is therefore of relevance to these Notices of Requirement.

The Otago Regional Council publicly notified the Regional Policy Statement in October 1993. Following the process of submissions, hearings and appeals, the Council made the Regional Policy Statement operative on 1 October 1998 and therefore the provisions of it can be given full weighting.

Section 5 of the ORPS relates to land and objective 5.4.1 is relevant to this proposal:

5.4.1 To promote the sustainable management of Otago's land resources in order:

- (a) To maintain and enhance the primary productive capacity and life-supporting capacity of land resources; and
- (b) To meet the present and reasonably foreseeable needs of Otago's people and communities.

Objective 5.4.1 supports the need to sustainably manage land resources. This is a broad statement at a regional level that could be applied to both the sustainable management of the airport in its current location and to sustaining the ability of the land surrounding the airport to meet the community's present and future needs.

Section 9 of the OPRS relates to the built environment. Objective 9.4.1 reads:

- 9.4.1 To promote the sustainable management of Otago's built environment in order to:
 - (a) Meet the present and reasonably foreseeable needs of Otago's people and communities; and
 - (b) Provide for amenity values, and
 - (c) Conserve and enhance environmental and landscape quality; and
 - (d) Recognise and protect heritage values.

Objective 9.4.1 requires a balance between providing for the present and future needs of the community through the built environment while also providing for amenity values and conserving environmental quality. The proposal provides for growth in airport activities but does not meet the need for buildings and other structures to be located where they conflict with the obstacle limitation surfaces. The construction of further buildings within the extended Aerodrome Designation area would not provide for amenity values or conserve and enhance landscape quality.

Objective 9.4.2 relates to infrastructure, and reads:

9.4.2 To promote the sustainable management of Otago's infrastructure to meet the present and reasonably foreseeable needs of Otago's communities.

Wanaka Airport is considered to be a part of Otago's regional infrastructure. The proposal allows for the sustainable growth and management of this regional infrastructure asset.

Objective 9.4.3 relates to the built environment:

9.4.3 To avoid, remedy or mitigate the adverse effects of Otago's built environment on Otago's natural and physical resources.

The proposed growth in airport operations would result in adverse noise effects on amenity values in the external environment that cannot be avoided, remedied or mitigated. If growth in airport operations is to occur then there will be an associated environmental effect no matter where the airport is located, and this must be balanced against other policies seeking to provide for this type of infrastructure.

The location of additional airport buildings in the northern part of the proposed Aerodrome Designation would also have adverse effects on the visual amenity values of the landscape that cannot be avoided, remedied or mitigated. Further built form could however be absorbed if located in the vicinity of the existing node of development adjoining the State Highway.

Policy 9.5.2:

To promote and encourage efficiency in the development and use of Otago's infrastructure through:

- (a) Encouraging development that maximises the use of existing infrastructure while recognising the need for more appropriate technology; and
- (d) Avoiding or mitigating the adverse effects of subdivision, use and development of land on the safety and efficiency of regional infrastructure.

Policy 9.5.3

To promote and encourage the sustainable management of Otago's transport network through:

(d) Promoting the protection of transport infrastructure from the adverse effects of landuse activities and natural hazards.

The proposal is consistent with Policies 9.5.2 and 9.5.3 as it seeks to provide for future growth in operations at the existing Wanaka Airport, and the proposed Plan Change and protection of the airspace around the airport would manage land use such that adverse effects of other activities on the safety and efficiency of airport operations could be avoided or mitigated.

Policy 9.5.4

To minimise the adverse effects of urban development and settlement, including structures, on Otago's environment through avoiding, remedying or mitigating:

- (b) The creation of noise, vibration and dust; and
- (c) Visual intrusion and a reduction in landscape qualities; and
- (d) Significant irreversible effects on:
 - (vi) Amenity values; or...

Construction activities associated with expanding airport operations would result in the creation of noise and dust, although these effects would be temporary. The erection of buildings in the northern part of the site would result in a reduction in landscape qualities. Effects on amenity values have already been discussed under Objectives 9.4.1 and 9.4.3 above.

Policy 9.5.5

To maintain and, where practicable, enhance the quality of life for people and communities within Otago's built environment through:

- (a) Promoting the identification and provision of a level of amenity which is acceptable to the community; and
- (b) Avoiding, remedying or mitigating the adverse effects on community health and safety resulting from the use, development and protection of Otago's natural and physical resources; and
- (c) Avoiding, remedying or mitigating the adverse effects of subdivision, landuse and development on landscape values.

The Plan Change associated with the Notices of Requirement proposes noise boundaries that provide a level of amenity considered acceptable for general health and well being, and are based on the New Zealand standard for planning for aircraft noise. However, this standard provides guidance on the mitigation required to achieve a suitable internal noise level only, as noise levels in the external environment cannot be mitigated. Excessive noise would affect the ability of people to enjoy a level of amenity anticipated in a rural area on those properties located inside the OCB and NNB, and also potentially on land outside the noise boundaries. Effects on landscape values have already been discussed above.

In summary, it is acknowledged that the proposal would not maintain amenity levels or protection of landscape values sought by the ORPS. The objectives and policies do however also emphasise the need to provide for regional infrastructure such as airports. The relative importance of Wanaka Airport as a regional asset must be weighed up against the significance of the landscape surrounding the airport. District Plan

The relevant plan is the Queenstown Lakes District Plan (District Plan). The objectives and policies of the District Plan relevant to this proposal are found in the following sections:

- Part 4 District Wide Issues
- Part 5 Rural Areas
- Part 14 Transport

4.2 Landscape and Visual Amenity

4.2.5 Objective:

Subdivision, use and development being undertaken in the District in a manner which avoids, remedies or mitigates adverse effects on landscape and visual amenity values.

Policies:

- 1. Future Development
- (a) To avoid, remedy or mitigate the adverse effects of development and/or subdivision in those areas of the District where the landscape and visual amenity values are vulnerable to degradation.
- (b) To encourage development and/or subdivision to occur in those areas of the District with greater potential to absorb change without detraction from landscape and visual amenity values.
- (c) To ensure subdivision and/or development harmonises with local topography and ecological systems and other nature conservation values as far as possible.
- 4. Visual Amenity Landscapes
- (a) To avoid, remedy or mitigate the adverse effects of subdivision and development on the visual amenity landscapes which are:
 - highly visible from public places and other places which are frequented by members of the public generally (except any trail as defined in this Plan); and
 - visible from public roads.
- (b) To mitigate loss of or enhance natural character by appropriate planting and landscaping.

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The proposed extension to the Aerodrome Designation would potentially result in buildings being constructed where these would detract from landscape and visual amenity values in views from public places including SH6. There is little opportunity for mitigating adverse effects by planting and landscaping because this would further detract from the character of the existing landscape. The Notice of Requirement is not consistent with the above policies, however a condition could be included requiring further development to be located in the vicinity of the existing buildings alongside SH6, where there is a greater potential for it to be absorbed without resulting in significant additional adverse effects.

5. Outstanding Natural Features

To avoid subdivision and/or development on and in the vicinity of distinctive landforms and landscape features, including:

(a) ...

- unless the subdivision and/or development will not result in adverse effects which will be more than minor on:

- *(i)* Landscape values and natural character; and
- (ii) Visual amenity values

- recognising and providing for:

•••

- (v) The importance of protecting the naturalness and enhancing the amenity values of views from public places and public roads;
- (vi) The essential importance in this area of protecting and enhancing the naturalness of the landscape.

Earthworks are proposed in close proximity to the edge of the terrace escarpment associated with the Outstanding Natural Feature that is the Clutha River. However, Lakes Environmental's Landscape Architect is of the opinion that the earthworks would not be readily noticeable and therefore would not compromise this Outstanding Natural Feature. The proposal is therefore consistent with Policy 5.

9. Structures

To preserve the visual coherence of:

- (a) outstanding natural landscapes and features and visual amenity landscapes by:
 - encouraging structures which are in harmony with the line and form of the landscape;
 - avoiding, remedying or mitigating any adverse effects of structures on the skyline, ridges and prominent slopes and hilltops;
 - encouraging the colour of buildings and structures to complement the dominant colours in the landscape;
 - encouraging placement of structures in locations where they are in harmony with the landscape;
 - promoting the use of local, natural materials in construction.
- (b) visual amenity landscapes
 - by screening structures from roads and other public places by vegetation whenever possible to maintain and enhance the naturalness of the environment; and
- (c) all rural landscapes by
 - limiting the size of signs, corporate images and logos
 - providing for greater development setbacks from public roads to maintain and enhance amenity values associated with the views from public roads.

As discussed above with respect to Policies 1 and 4, a condition could be included to ensure that buildings are located within the Designation to minimise adverse effects on the landscape. Conditions could also be included requiring that recessive external colours and materials are used to reduce the dominance of buildings.

12. Transport Infrastructure

To preserve the open nature of the rural landscape by:

 encouraging the location of roads, car parks and tracks along the edges of existing landforms and vegetation patterns.

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• encouraging where appropriate car parks to be screened from view.

• requiring the adverse effects of large expanses of hard surface car parks be avoided by planting and earthworks.

The Landscape Architect considers that car parking in the northern parts of the proposed Designation would likely compromise the landscape character. It is recommended that a condition be included restricting the location of car parking areas. This would ensure that the proposal is consistent with Policy 12.

4.10 Earthworks

Objectives

To avoid, remedy or mitigate the adverse effects from earthworks on:

- (a) Water bodies
- (b) The nature and form of existing landscapes and landforms, particularly in areas of Outstanding Natural Landscapes and Outstanding Natural Features.
- (c) Land stability and flood potential of the site and neighbouring properties
- (d) The amenity values of neighbourhoods
- (e) Cultural heritage sites, including waahi tapu and waahi taoka and archaeological sites
- (f) The water quality of the aquifers.

Policies

- 1. To minimise sediment run-off into water bodies from earthworks activities through the adoption of sediment control techniques.
- •••
- 3. To minimise the area of bare soil exposed and the length of time it remains exposed.
- 4. To avoid or mitigate adverse visual effects of earthworks on outstanding natural landscapes and outstanding natural features.
- •••
- 7. To ensure techniques are adopted to minimise dust and noise effects from earthworks activities.

A large amount of earthworks will be required to construct the proposed second runway and extension to the existing runway. The requiring authority has proposed that a condition be included in the Designation requiring that a Construction Management Plan be submitted for review and approval prior to works commencing, and this will ensure that suitable measures are implemented to mitigate the associated adverse effects. The proposal is therefore consistent with the objectives and policies relating to earthworks above.

5.2 Rural General and Ski Area Sub-Zone – Objectives and Policies

Objective 1 – Character and Landscape Value

To protect the character and landscape value of the rural area by promoting sustainable management of natural and physical resources and the control of adverse effects caused through inappropriate activities.

Policies:

- 1.1 Consider fully the district wide landscape objectives and policies when considering subdivision, use and development in the Rural General Zone.
- 1.2 Allow for the establishment of a range of activities, which utilise the soil resource of the rural area in a sustainable manner.
- 1.3 Ensure land with potential value for rural productive activities is not compromised by the inappropriate location of other developments and buildings
- 1.4 Ensure activities not based on the rural resources of the area occur only where the character of the rural area will not be adversely impacted.
- 1.6 Avoid, remedy or mitigate adverse effects of development on the landscape values of the District.
- 1.7 Preserve the visual coherence of the landscape by ensuring all structures are to be located in areas with the potential to absorb change.

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The expansion of the airport will require the use of land that could otherwise be used for rural productive activities. However, due to the large area of land required for airports and the need to be located away from ASANs, airports do tend to be located in rural areas.

As discussed above with regard to the District Wide objectives and policies, conditions are recommended to mitigate adverse effects on landscape values and to ensure that buildings are located in areas with the potential to absorb change.

The alteration to Designation 65 would potentially restrict the ability for some areas of rural land to be used productively if for example fences, farm buildings or shelter planting were not able to be erected due to the proposed OLS.

Overall, it is considered that the proposal is not entirely consistent with Objective 1 and the associated policies.

Objective 3 – Rural Amenity

Avoiding, remedying or mitigating adverse effects of activities on rural amenity.

Policies:

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3.2 Ensure a wide range of rural land uses and land management practices can be undertaken in the rural areas without increased potential for the loss of rural amenity values.

3.3 To avoid, remedy or mitigate adverse effects of activities located in rural areas.

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The expansion of the airport will result in increased levels of activity that will adversely affect existing rural amenity values. As discussed above, consolidation of existing areas of development will assist in mitigating these adverse effects to some degree.

Objective 7 – Buffer Land for Airports

Retention of a greenfields area within an airport Outer Control Boundary to act as a buffer between airports and other land use activities.

Policy

7.1 To retain a greenfields area within the Outer Control Boundary of airports in order to provide a buffer, particularly for safety and noise measures, between the airport and other activities.

The Notices of Requirement do not affect the retention of an OCB around the airport.

14.1.3 Transport – Objectives and Policies

Objective 8 – Air Transport

Effective and controlled airports for the District, which are able to be properly managed as a valuable community asset in the long term.

Policies:

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- 8.2 To avoid or mitigate any adverse environmental effects from airports on surrounding activities.
- 8.5 To provide for appropriate recreational airport facilities at Wanaka.
- 8.6 To ensure buildings at both airports have regard for and are sympathetic to the surrounding activities, and landscape and amenity values by way of external appearance of buildings and setback from neighbouring boundaries.
- 8.7 To ensure noise monitoring regimes are established for the District's airports by the respective requiring authorities.

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The proposed expansion of the airport will provide for increased recreational aircraft facilities as well as commercial services.

To mitigate adverse effects associated with airport noise, it is proposed to establish new noise boundaries by way of the Plan Change, and to introduce noise monitoring requirements in the conditions of the Aerodrome Designation to ensure that the airport complies with these noise contours. However, it is not proposed to require that a Noise Management Plan (NMP) be prepared. This is not consistent with the implementation methods for Objective 8 and associated policies which include:

- (ii)(b) The operation of a liaison committee between the Queenstown Airport Corporation, the Council and local residents in respect of both airports.
- (ii)(d) Implementation of a noise management strategy by the Queenstown Airport Corporation to ensure management of the noise environment at both Queenstown and Wanaka airports.

It is considered that the establishment of a liaison committee and implementation of an NMP would be more effective in managing noise from the airport and effects on the surrounding community than simply modelling noise levels based on aircraft movements, and would ensure that the proposal is consistent with Objective 8 and associated policies.

Alternative Sites, Routes or Methods

The Notices of Requirement discuss alternatives including the 'do nothing' option which would see no expansion of the airport.

It is accepted that the existing location of the airport is the preferred site, taking into account the investment made in the existing runway and acquiring additional land to increase the Designation area, the relatively few existing ASANs in the vicinity, topography, and the proximity to Wanaka

township. It is appropriate to provide for further growth of airport infrastructure by extending the existing Aerodrome Purposes Designation.

It is also accepted that it is appropriate to include obligations regarding compliance with the noise contours proposed in the Plan Change in the Designation, as District Plan rules are not relevant to Designations. However, as discussed above, it is considered that the establishment of a liaison committee and implementation of an NMP would be more effective in managing noise from the airport and effects on the surrounding community than simply modelling noise levels based on aircraft movements as is proposed in the Notice of Requirement.

The Notice of Requirement to alter Designation 65 is to designate airspace based on the predicted growth of the airport to accommodate jet aircraft, in accordance with CAA requirements. The OLS are based on the location of the runway and aircraft flight paths. It is accepted that there are no alternative flight paths for the existing runway location due to terrain constraints.

Whether the Works and Designations are Reasonably Necessary

While the alterations to Designations 64 and 65 are not necessary given the current level of operations at Wanaka Airport, the QLDC has demonstrated that the alterations to Designations 64 and 65 are reasonably necessary for achieving the objective of providing for the anticipated expansion of the airport over the next 20 years.

Recommendations

The following recommendations with regards to the Notices of Requirement also take into consideration the matters raised by submitters which were discussed in the 'Issues' sections of this report.

It is recommended that the Notice of Requirement to alter Designation 64 (Aerodrome Purposes) is modified to provide for the following:

- No buildings or car parking areas shall be permitted in the areas shown on the map attached as Appendix 1 to the Landscape Architect's assessment, which forms Appendix C to this report.
- Inclusion of a requirement to prepare and implement a Noise Management Plan.
- If the NNB part of the Plan Change is approved, inclusion of a requirement for the Noise Management Plan to include measures to mitigate adverse effects from engine testing, and the removal of the requirement that unscheduled engine testing take place on no more than 18 occasions per year and that it shall not exceed specified noise levels.
- If the NNB part of the Plan Change is not approved, removal of the provisions relating to night time engine testing.
- If the NNB part of the Plan Change is not approved, retention of the existing provision that there shall be no operations during hours of darkness until the noise boundaries are reassessed.
- The need to eventually connect the airport to QLDC's wastewater infrastructure and to provide a suitable water supply, including for fire-fighting purposes.
- Inclusion of a requirement that QLDC enter into a memorandum of understanding with the NZTA.

It is recommended that the Notice of Requirement to alter Designation 65 (Airport Approach and Land Use Controls) is modified to provide for the following:

- To allow for an object to penetrate the take off/approach or transitional surfaces provided that the Requiring Authority's approval is obtained, instead of such activities being 'prohibited'.

- Mitigation of the adverse effects on landowners of removing the existing provision for objects of a limited height to penetrate the OLS. This should include mitigation or other means to remedy the adverse effects on Lot 1 DP 25276; details of the proposed approval process landowners would use for objects that would penetrate the OLS; and how it is intended to manage existing activities that breach the OLS, such as existing trees.

APPENDIX A

Summary of Decisions Requested in Submissions



SUMMARY OF DECISIONS REQUESTED FOR PLAN CHANGE 26 Further submissions due8/04/2011

Name Air New Zealand Limited

Position	Plan Provision	Decision Requested	SubNo.
Oppose	Designation 64 - aerodrome purposes - justification for additional land	Air New Zealand seeks the provision of additional information to justify: the need for additional land and the scope of the Aerodrome NoR an economic cost benefit analysis the timing of the potential works	
Oppose	Plan Change 26 - engine testing provisions	Remove the limit of 18 unscheduled engine testing exemptions per year	
Oppose	Designation 64 - aerodrome purposes - lapse period of designation	Justify the need for a 20 year lapse period and whether a shorter limit would be more appropriate.	26/1/3
Partly Support	Designation 65 - Approach and land use controls	Adopt the designation subject to changes required as a result of amendments to the Plan Change or Aerodrome purposes NoR.	26/1/4
Partly Support	Plan change 26 - Wanaka Airport - air noise boundaries	Approve new air noise boundaries	26/1/5
Partly Support	Plan change 26 - Wanaka Airport - definition of ASAN	Approve inclusion of a definition of Activities Sensitive to Aircraft Noise (ASAN)	26/1/6
Partly Support	Plan change 26 - Wanaka Airport - Prohibition of new ASAN in air noise boundaries within Rural General zone	Approve new rule 5.3.3.5.ii prohibiting all new ASAN or new building platforms located within air noise boundaries in the Rural General zone.	26/1/7
Partly Support	Plan change 26 - Wanaka Airport - Rural Visitor zone rule 12.4.3.5	Amend rule 12.4.3.5.ii should be amended to prohibit all new ASAN from locating within the air noise boundaries.	26/1/8
Partly Support	Plan change 26 - Wanaka Airport - Night Noise Boundary	Justify the need for a night noise boundary	26/1/9
Partly Support	Plan change 26 - Wanaka Airport, Designation 64 - Aerodrome purposes and Designation 65 - Approach and land use controls	Any further or consequential amendments needed to the plan change or NoRs to give effect to this submission and to meet the requirements of Part II of the RMA.	26/1/10

Position	Plan Provision	Decision Requested	SubNo.
Oppose	Se Plan change 26 - Wanaka Airport That the plan change be withdrawn unless it can be ensured that Albert town residents will not be impacted by noise now and into the future which can best be achieved by ensuring fligth paths avoid Albert town and the Clutha river completely. That night flights be prohibited completely. Any other relief that satisfies the matters raised in this submission.		26/2/1
Oppose	Designation 64 - Aerodrome purposes That the NoR be declined unless it can be ensured that Albert town residents will not be impacted by noise now and into the future which can best be achieved by ensuring fligth path avoid Albert town and the Clutha river completely. That night flights be prohibited completely. Any other relief that satisfies the matters raised in this submission.		26/2/2
Oppose	Designation 65 - Approach and land use controls	That the NoR be declined unless it can be ensured that Albert town residents will not be impacted by noise now and into the future which can best be achieved by ensuring fligth paths avoid Albert town and the Clutha river completely.	26/2/3
Name	Butson, Kerry		

Position	Plan Provision	Decision Requested	SubNo.
Oppose	Plan change 26 - Wanaka Airport - Noise and building restrictions	That the plan change will not affect the submitter financially or place any further restriction on future building activity in any way in the future.	26/3/1

Name Heath, Nikki & Aaron

Position	Plan Provision	Decision Requested	SubNo.
Oppose	Plan change 26 - Wanaka Airport	That the plan change be refused, or the plan change be reconsidered and amended in light of the points raised in the submission, or any other relief that satisfies the points raised in submission	26/4/1
Oppose	Designation 64 - Aerodrome purposes - Entire NoR	That the NoR be refused, or the NoR be reconsidered and amended in light of the points raised in the submission, or any other relief that satisfies the points raised in submission	26/4/2
Oppose	Designation 65 - Approach and land use controls - Entire NoR	That the NoR be refused, or the NoR be reconsidered and amended in light of the points raised in the submission, or any other relief that satisfies the points raised in submission	26/4/3

Name Jacquiery, Mark

Position	Plan Provision	Decision Requested	SubNo.
Partly Support	Designation 64 - Aerodrome purposes - Runway dimensions	rodrome1. RESA on the exisiting runway of 240m at both ends.rposes -2. Incresing the current runway strip width to 150m to allow for aircraft over 22.7 tonnenwaymaximum certified take-off weight (MCTOW).	
Partly Support	Plan change 26 - Wanaka Airport - Noise boundaries	Consequential changes to the noise boundary will be needed to reflect the changes proposed in submission on airport purposes designation. Effectively proposes movement of air nose boundaries approximately 1000m west.	26/5/2

Name Jeremy Bell Investments Ltd

Position	Plan Provision	Decision Requested	SubNo.
Oppose	Designation 64 - Aerodrome purposes	Withdraw designation 64 or modify it to better achieve the sustainable management of physical resources as sought by $s5(a)$ -(c) and 7(b), (f) and (g).	26/6/1
Oppose	Designation 65 - Approach and land use controls	Withdraw NOR 65 or modify it	26/6/2
Oppose	Plan change 26 - Wanaka Airport	Withdraw Plan Change, or amend provisions to promote provisions to submitters akin to Queenstown Airport Mixed use zone, or to use the existing Queenstown Airport Mixed Use zone provisions with appropriate modifications to reflect Wanaka location and context.	26/6/3

Position	Plan Provision	Decision Requested	SubNo.
Oppose	Plan change 26 - Wanaka Airport	Withdraw proposed Plan Change to extend noise boundary and proposed night time noise boundary.	26/7/1

Neuendorff, Indira Name

Position	Plan Provision	Decision Requested	SubNo.
Oppose	Plan change 26 - Wanaka Airport	Withdraw plan change	26/8/1
Oppose	Designation 64 - Aerodrome purposes	Withdraw NoR	26/8/2
Name	Neuendorff, Michael		
Position	Plan Provision	Decision Requested	SubNo.
Oppose	Plan change 26 - Wanaka Airport	Withdraw plan change	26/9/1
Oppose	Designation 64 - Aerodrome	Withdraw NoR	26/9/2

Name NZ Transport Agency

purposes

Position	Plan Provision	Decision Requested	SubNo.
Partly Support	Designation 64 - Aerodrome purposes - Entire designation	 Undertake a more comprehensive transport assessment that considers the effects of the Wanaka Airport and how these effects are affected by the proximity of Mt Barker Road and the proposed access to the adjacent Transport and Toy museum and Pittaway Aviation park. Consider and promote options to improve existing Wanaka Airport access or consolidation of a number of accesses and intersection along the adjacent state highway. Options should consider internal connectivity to reduce use of the state highway for travel between the airport, Transport and Toy museum and Pittaway Aviation park. Enter into a memorandum of understanding with NZTA setting parameters for deciding on options for improving access to the aerodrome, and deciding on thresholds requiring improvements to be carried out. 	26/10/1

Name Pittaway Family Trust

Position	Plan Provision	Decision Requested	SubNo.
Support	Plan change 26 - Wanaka Airport - Entire Plan Change	The trust supports the entire plan change, and in particular the amendments to Part 5 objectives, policies and rules that provide for land surrounding wanaka airport to be used for airport related activities that are not sensitive to aircraft noise.	26/11/1
Support	Designation 64 - Aerodrome purposes - Entire designation	Supports amendments to designation.	26/11/2
Support	Designation 65 - Approach and land use controls - Entire designation	Supports amendments to designation.	26/11/3

Name Raymont, Paul & Bernadette

Position	Plan Provision	Decision Requested	SubNo.
Oppose	Plan change 26 - Wanaka Airport - Entire plan change	Withdraw entire plan change and in particular: 1. extended noise boundaries for airport operations 2. provision of night time noise boundaries and proposals that allow night time operation of airport	26/12/1
Name	Ricochet Amusement		

Position	Plan Provision	Decision Requested	SubNo.
Support	Plan change 26 - Wanaka Airport - Entire plan change	That the plan change be accepted.	26/13/1

Name	Rising Star Limited		
Position	Plan Provision	Decision Requested	SubNo.
Oppose	Entire Plan Change	Withdraw of cancel entire plan change, or amend plan change in manner to provide for the expansion of Wanaka Airport in a manner that is more controlled and better reflects the underlying rural values of the surrounding area and the submitters property.	26/14/1
Oppose	Entire NOR for designation 64	Withdraw of cancel NOR for designation 64, or Amend plan change in manner to provide for the expansion of Wanaka Airport in a manner that is more controlled and better reflects the underlying rural values of the surrounding area and the submitters property.	26/14/2
Name	Spencer Bower, Simon		
Position	Plan Provision	Decision Requested	SubNo.
Support	Designation 64 - Aerodrome purposes - Entire designation	Confirm notice of requirement	26/15/1
Support	Designation 65 - Approach and land use controls - Entire designation	Confirm notice of requirement	26/15/2
Support	Plan change 26 - Wanaka Airport - Entire plan change	Accept proposed plan change.	26/15/3
Name	Staufenberg, Anke & U	lrich	
Position	Plan Provision	Decision Requested	SubNo.
Oppose	Plan change 26 - Wanaka Airport - Entire plan change	Withdraw plan change.	26/16/1
Name	Taylor, Francis (Meg)		
Position	Plan Provision	Decision Requested	SubNo.
Other	Plan change 26 - Wanaka Airport - Entire Plan Change	Wants to know what restrictions are being placed on subject property and whether affected property owners are being offered compensation or benefits in exchange for restrictions being placed on their property.	26/17/1
Name	Umbers, Julie		
Position	Plan Provision	Decision Requested	SubNo.
Oppose	Plan change 26 - Wanaka Airport - Entire plan change	Withdraw plan change	26/18/1
Oppose	Designation 65 - Approach and land use controls - Entire NoR	Decline NoR	26/18/2

Position	Plan Provision	Decision Requested	SubNo.
Partly Support	Designation 64 - Aerodrome purposes - Runway length	Designation 64 should be amended to allow for a runway length of at least 2200m	26/19/1
Partly Support	Designation 64 - Aerodrome purposes - Range of activities	That designation 64 be expanded to enable a wider range of airport related uses, including rental car facilities, tourism operations associated with using the airport, small scale commercal facilities (including retail and service station) associated with the use fo the airport, and industrial activities associated with the airport.	26/19/2
Partly Support	Designation 65 - Approach and land use controls - Entire designation	That this designation be amended as required to provide for a runway length of 2200m as sought in the submission on designation 64.	26/19/3
Partly Support	Plan change 26 - Wanaka Airport - New zone	That a zone based on the Queenstown Airport Mixed Use zone be created to allow for a greater range of activities, or alternatively, designation 64 be expanded to incorporate and enable a wider range of airport related uses. Any consequential changes as required to achieve submission, including Objective 9 in the District Wide Section.	26/19/4
Partly Support	Plan change 26 - Wanaka Airport - Additional noise boundary	Create a 50 db Ldn with a restriction on residential development in the Rural General zone within this area below 4 ha as a non-complying activitiy and requiring any dwelling developed to meet noise insulation requirements.	26/19/5
	boundary	Any consequential changes as required to achieve submission, including Objective 9 in the District Wide Section.	

APPENDIX B

Plans Showing Locations of Submitters' Properties



Locations of Submitters' Properties

The information provided on Dekho is intended to be general information only. While considerable effort has been made to ensure that the information provided on this site is accurate, current and otherwise adequate in all respects. Queenstown Lakes District Council does not accept any responsibility for content and shall not be responsible for, and excludes all liability, with relation to any claims whatsoever arising from the use of this site and data held within.

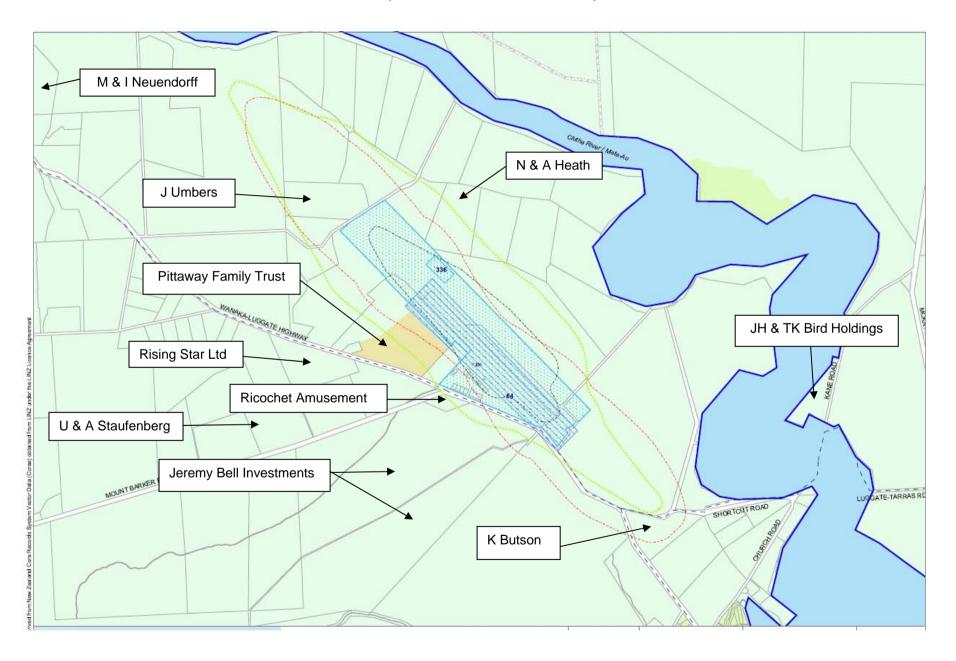




Map produced by Queenstown Lakes District Council's Dekho GIS viewer

Map date: 30/05/2011

4,100 Metres



APPENDIX C

Lakes Environmental's Landscape Architect's Assessment



REPORT TO:	Annemarie Robertson
FROM:	Marion Read (Landscape Architect)
REFERENCE:	RM110003 – Queenstown Lakes District Council
SUBJECT:	Landscape Assessment Proposed changes to Wanaka Aerodrome Designation
DATE:	Friday 6 th May 2011

INTRODUCTION

1. A notice of requirement has been received from Queenstown Lakes District Council in its role as a requiring authority to extend the designation (current Designation 46) for the Wanaka Aerodrome (proposed Designation 64). The site is located on State Highway 6 (SH 6) just west of Luggate. The site is legally described as follows:

> Lot 2 DP 341605 Lots 1, 2, 3, 4, & 5 DP 18824 Lot 2 DP 368240 Lot1 DP 341605 Lots 4 - 5 DP 340031 Lot 6 DP 22636 Lot 7 DP 22637 Lots 2, 3, 4, & 5 DP 23517 Lots 10 - 11 DP24410 Lots 6 DP 24685 Lots 1 - 2 DP 26239 Section 1 Survey Office Plan 24776 Legal Road

- 2. The notice of requirement proposes to extend the designation from an area of 38ha to an area of approximately 134ha.
- 3. The land which is subject to the designation is zoned Rural General.

PROPOSAL

- 4. The notice of requirement intends to extend the conditions of the existing designation over a wider area and to alter some of the permitted and restricted activities which are enabled by the designation. Specifically these include:
 - Extending the main runway 550m to the north west;
 - The formation of RESA (Runway End Safety Areas), at both ends of the runway;
 - The provision of a second runway parallel the existing runway;
 - The construction of a control tower and new terminal building;
 - The extension of the areas in which buildings may be constructed;
 - a reduction in the setback from the centre line of the runway in which buildings may be constructed;
 - The use of the airport for night flights providing appropriate lighting can be provided;

• An alteration to the noise boundaries.

Activities which are currently permitted by the designation which could occur within the new areas to be covered and which might have effects on the landscape of the vicinity include:

- Fuel storage facilities;
- Navigational aids and lighting;
- Buildings up to 9m in height
- Car parking;
- Earthworks.

SITE DESCRIPTION

- 5. The site encompasses the area of the current Wanaka Aerodrome and land to the north east and north west of the existing designation boundaries. The south western portion of the aerodrome site is the location of an agglomeration of large buildings, one group arrayed along the State Highway, one group more or less parallel to the runway and a third group along the north western boundary with the adjacent Rhodes property (Lot 1 DP 23563). Most of the buildings on the aerodrome appear to be hangars, many with associated offices and are large, obtrusive and industrial in appearance. The existing runway is sealed but the majority of the site is maintained in grass which makes the more northern portions of the site generally indistinguishable from the surrounding land.
- 6. Several large buildings including a toy museum are present on the Rhodes property which is immediately adjacent to the aerodrome designation to the north west. Consent exists for this landowner to excavate a 250 000m³ hole on this property and to construct extensions to the toy museum within this hole. To the south west of the aerodrome on the opposite side of SH 6 the 'Have a Shot' shooting range is located. To the north west there is an area of Rural Visitor zoned land on which consent has been granted for eleven aircraft hangars. This development is to be set back some 100m from the State Highway and is to be partially screened from view by trees along the highway margin and surrounding the development itself. An application has been heard by independent commissioners for an amusement park including a bowling alley and café on the site immediately opposite the aerodrome on the corner of the State Highway and Mount Barker Road but no decision has been issued at the time of writing.
- 7. Within the airport property but outside of the current designation, approximately 650m from the northern corner of the property and intended designation boundary, the Project Pure waste water processing plant is located. This operates under its own designation and the conditions of that designation include the requirement that the main components of the system not protrude above ground level; that structures and equipment not exceed 2m in height (above ground level) with an allowance of 10% of the designation's area for structures which cannot comply with this limit; that components that exceed 2m in height and all buildings are to be located in the lowest part of the site; that no building shall exceed 4m in height; that the site is to be screened with bunding no more than 2m high; and that screen planting be undertaken to the north and east of the site. The Project Pure plant is now operational and this combination of conditions has effectively ensured that it does not have an adverse effect on the landscape in the vicinity.
- 8. Some 1.3km to the north west along SH 6 from the airport buildings is a property recently subject to a resource consent application to subdivide and create a new residential building platform (Lot 1 DP 303967, RM080940). This application was declined by Council's commissioners and subsequently the Environment Court appeal was also declined on the grounds of the adverse effects on the landscape, although the final decision has not yet been issued. It was considered that the landscape in the vicinity has reached the threshold of its ability to absorb development. This site is approximately equidistant from the node of development around the airport and a further node of development around the intersection between SH 6 and Ballantyne Road. Currently the intervening distance between these two nodes is broadly open and pastoral in character consisting of open pasture with pine windbreaks forming lines and clusters across the landscape. The landscape is expansive, opening to the north to the Clutha River and across it to the Grandview mountains and Mount Maude. The presence of the existing airport runway does not intrude into these views.

- 9. The site is located on the elevated terrace which extends from the Cardrona River to the north west, the Pisa Range to the east, and the top of the escarpment leading down to the Clutha River to the north east and south. This terrace escarpment curves in an arc from its relatively close association with that river north of the site around to the south west coinciding, more or less, with the south eastern edge of the proposed designation. This area of land has been formed by a combination of glacial and fluvial processes resulting in large flat outwash plains interspersed with more hummocky landforms including a paleo-channel of the Cardrona River which is located to the west of the aerodrome.
- 10. The area surrounding the aerodrome and extending to the Cardrona River and Pisa Range has been subject to reasonably intensive pastoral farming. As a result the predominant vegetation is exotic grasses with exotic shelterbelts crisscrossing the landscape. The area immediately west of SH 6 adjacent to the aerodrome incorporates a significant scattering of remnant indigenous scrub. Towards the Cardrona River; in the vicinity of the intersection of Ballantyne Road and SH 6; and in the vicinity of Halliday Road nodes of relatively intensive rural lifestyle development have developed.

LANDSCAPE CLASSIFICATION

- 12. The C180/99 decision of the Environment Court which made an indicative classification of the landscapes of the District did not extend its analysis to the landscapes of the Upper Clutha Basin.
- 13. A survey of resource consents applied for in the vicinity of the aerodrome show that the vicinity has been consistently assessed as a Visual Amenity Landscape in the terms of the District Plan. I provide a list of these consents here:
 - RM050861, Pittaway. Consent to identify two building platforms.
 - RM071034, Staufenburg. Consent to construct a dwelling.
 - RM080825, Wood. Consent to construct a dwelling.
 - RM080940, Roberts. Consent to subdivide a lot and establish a building platform. (Declined).
 - RM081129, Rhodes. Consent to undertake 250 000m³ of earthworks and build a building.
- 14. I concur with my colleagues in these previous assessments. After assessing the landscape character of the area and its context I consider that the site of the proposed designation is within a visual amenity landscape for the following reasons:
 - Although the site includes a cluster of commercial and (apparently) industrial activity centred on the airport, this cluster is too small to be considered as a separate landscape in its own right. The site is located within a pastoral landscape associated with the river terraces and glacially formed landscape between the base of the Criffel Range and the Clutha River. This landscape displays a distinctly pastoral character.
 - Natural science factors are overshadowed by human modification of the landscape. The landscape displays character influenced by human activity in the form of grazed paddocks, stock fences, shelter planting, buildings and access ways.
 - The landscape is within close proximity of outstanding natural features or landscapes including: Mount Barker, Criffel Range, Cardrona River, Clutha River, and Mount Iron.
 - The landscape has an 'extra quality', in terms of openness, scale, legibility and lack of domestication, which gives it an amenity valued by the community and by visitors to the area.
- 15. The Visual Amenity Objectives and Policies include:

(a) To avoid, remedy or mitigate the adverse effects of subdivision and development on the visual amenity landscapes which are:

- highly visible from public places and other places which are frequented by members of the public generally (except any trail as defined in this Plan); and
- visible from public roads.
- (b) To mitigate loss of or enhance natural character by appropriate planting and landscaping.
- (c) To discourage linear tree planting along roads as a method of achieving (a) or (b) above.

ASSESSMENT

5.4.2.2(3) Visual Amenity Landscapes

(a) Effects on natural and pastoral character

- 16. The site is immediately adjacent to the terrace escarpment associated with the Clutha River. In my opinion this escarpment is, arguably, a part of the Outstanding Natural Feature which is the Clutha River and its immediate environs. Earthworks are proposed in very close proximity to the edge to the terrace escarpment at the south eastern end of the runways. This entails mainly cut but a small area of fill is also proposed in the top of a small gully which bisects the terrace face. The terrace escarpment in this vicinity is widely visible from State Highway 6, Church Road, Shortcut Road and from points to the north of the river. Despite this wide visibility it is my opinion that the earthworks would not be readily noticeable, particularly in the closer views of the escarpment and would consequently not compromise the open character of this Outstanding Natural Feature.
- 17. The activities which could occur within the extended area of the designation which could have an adverse effect on the quality of the landscape in the vicinity are listed above in paragraph 4. The proposed designation would extend the area in which they could occur significantly, some 650m to the north west and some 150m to the north east. This extended area would border Stevenson Road to the north west and the access to Project Pure, which would be incorporated within the new designation area, to the north east.
- 18. Earthworks necessary to construct the second runway; to extend the existing runway; and to construct RESA at either end of both runways would be facilitated by this proposed designation. This would require a total of 131,000m³ of cut and 192,000m³ of fill, total earthworks of 323,000m³. This represents earthworks of a considerable scale which have the potential to compromise the natural and pastoral character of the surrounding landscape essentially levelling the slightly rolling to hummocky topography of the site. However, the main vantage point, in terms of numbers of viewers, from which the earthworks would be visible would be State Highway 6 and from this perspective the earthworks would tend to be below the field of vision, the eye being drawn to the mountains to the north. Also, the function of the earthworks as a part of the airport would be guite apparent in these views and thus the effects would tend to be contained. That is, one would tend to perceive an airport within a landscape rather than a radically modified landscape. The earthworks would be readily visible from Stevenson Road and from this perspective would appear more of an intrusion in the landscape as the road wraps around the end of the site and the RESA would entail a reasonably extensive amount of fill in this location. However, as with the views from SH 6, it would be clearly apparent to the viewer that they were a part of the airport and this would assist in containing the effects to some extent.
- 19. The proposed extension of the designation area, providing it with new proximity to Stevenson Road and the access way to Project Pure, could result in the construction of large buildings of up to 9m in height and likely of an industrial rather than domestic nature and scale along the north eastern and north western perimeters of the site. This would, in my opinion, have very significant adverse effects on the natural and pastoral character of the vicinity and I consider that conditions should be proposed to prohibit any such building within the northern half of the designation and along the north eastern side of the southern half of the designation. The Roberts Environment Court Appeal against a Council decision to decline consent for a subdivision and a single building platform on a site located on SH6 to the west of the subject site was declined on the grounds of its adverse effects on the landscape of the vicinity. Under the proposed terms of this notice of requirement potentially two rows of aircraft hangars could be constructed within exactly the view shaft the Court has sought to protect in this decision.
- 20. The notice of requirement also aims to facilitate the construction of a new control tower and terminal building. These would be located within or close to the node of existing buildings arrayed along SH 6 in the vicinity of the intersection of the highway and Mount Barker Road. The terminal building would be limited by the 9m maximum height limit but the control tower would be higher by an unspecified amount. The addition of further buildings to this node of

development is unlikely to have any significant adverse effects on the surrounding landscape given that this node has a somewhat industrial appearance already. The inclusion of a control tower, a generally easily identifiable building with a characteristic form, would assist in making the airport more readily readable as an airport, possibly reducing the adverse effects on the landscape of the existing buildings.

- 21. Increases in car parking areas would be facilitated by the designation. While increases in parking areas associated with the complex of buildings would not be problematic there is always the possibility of the creation of car parks for out-of-service rental vehicles which could be significantly isolated from the point of hire. Based on my observation of such parks, particularly associated with Christchurch airport, these parks usually include security fencing and lighting; may be extensive in size; and can be highly obtrusive when occupied by vehicles, an effect exacerbated when a rental company has a particular livery which it uses on its vehicles. The location of such parks in the northern reaches of the proposed designation would likely be of a scale and nature which would compromise the character of the landscape in the vicinity.
- 22. The extension of the designation would increase the area within which navigational aids and lighting could be constructed. Based on my observations of Dunedin airport these can entail fairly large structures. Clearly they are more obtrusive at night when the lights are readily visible, but during daylight, to my passing observations, they are either readily associated with the airport runway or relatively indistinguishable from the clutter of structures within the rural landscape of the vicinity. It is the case that the landscape within which the Wanaka aerodrome is located is much more open and much less cluttered than that in which the Dunedin airport is located. However, in my opinion, while these structures would be visible within the landscape it would be closely within the context of the airport and would be of a scale and nature that would have only a small adverse effect on the surrounding landscape.
- 23. The extension of the designation would increase the area within which fuel storage facilities could be constructed. I am not aware precisely what such facilities might entail and thus am unable to comment on any potential effects on the landscape. I do assume that they are most likely to be constructed in close association with aircraft hangars and consequently if the locations of such buildings are restricted, as I consider necessary to protect the quality of the surrounding landscape, then it is unlikely that such facilities would have an adverse effect beyond those associated with the buildings themselves.
- 24. The notice of requirement would not permit the construction of any, strictly, domestic structures. However, the presence of built form and structures within the landscape can have a domesticating effect as they indicate the proximity of human activity. The views across the airport to the north currently have an open and expansive character. The inclusion of large industrial scale buildings within this view, in the north eastern and northern portions of the site would domesticate the landscape in the sense that it would introduce obvious human activities into these views. In my opinion this would have a significant adverse effect on the character of the landscape in the vicinity.
- 25. It is my opinion that conditions should be imposed on the designation prohibiting the construction of buildings along the entire north eastern side of the site, and the north western side of the site from the intersection of the boundaries of the Rhodes and Pittaway properties. The location of car parking within these areas should be similarly precluded. I attach as Appendix 1 a map illustrating these areas.

(b) Visibility of development

26. Buildings along the north western and north eastern sides of the larger site, particularly large buildings such as aircraft hangars, would be readily visible from SH 6 and from Stevenson Road. Car parking would also likely be visible although less so than large buildings. Other structures such as runway lighting might also be visible in these views. The earthworks proposed would be visible from SH 6. From Stevenson Road the earthworks would be readily visible as that road passes within roughly 70m of the earthworks along the western edge of the site, and within approximately 300m of the northern end of the proposed runway.

- 27. The earthworks required to construct the additional runway, extend the existing runway and to build the RESA would not be visually prominent from SH 6 as views from this direction would be oblique, at a distance of between approximately 500m and 900m, and from a slightly elevated position. The northern most portion of the earthworks could be visually prominent from Stevenson Road to the north but they would likely only be visible in glimpses as this portion of that road descends at the north west corner of the subject site and is lower than the runway as it passes the northern end of the site. Buildings located along the periphery of the site adjacent to Stevenson Road at the northern end of the north western side of the site or along any portion of the eastern side of the site would be very visually prominent in views across the site both from SH 6 and from Stevenson Road. They would also be prominent in views from the Roberts property (Lot 1 DP 303967); the Big River Company properties (Lot 6 DP 340031, Lot 3 DP 34003 and Lot 1 DP 340031); the Pittaway property (Lot 1 DP 368240) and the Heath property (Lot 2 DP 340031), although not necessarily from the approved building platforms or dwellings on these sites. The level of potential prominence of these buildings would significantly detract from the pastoral character of the wider landscape. The control tower is likely to be prominent in views from SH 6 but, as discussed above, it is likely that such an identifiable building could actually confirm the identity of the site as an airport instead of, as it is now, an apparently rather random collection of large ugly industrial type buildings.
- 28. There is little opportunity for the screening or other mitigation of the adverse effects of buildings on the landscape in the areas discussed above, in part because of the operations of the airport, but also because one of the most significant qualities of the landscape is its expansiveness and so any planting or other mitigation is likely to detract from this expansiveness also. The addition of further buildings in the vicinity of the existing node of built development along SH 6 adjacent to Mount Barker Road would avoid the need for such mitigation, consolidating and existing node of development and avoiding sprawl. In addition the requirement to use recessive colours and materials in the finish of these building would assist in reducing their prominence.
- 29. The landscape of the vicinity is characterised by its expansiveness and thus it does not offer any enclosing topography or vegetation which could absorb buildings of up to 9m high.
- 30. The proposed new boundaries of the designation would not have any adverse effect on the landscape of the vicinity in and of themselves. However, if they were 'picked out' by the presence of buildings and car parks they would give rise to arbitrary lines which would otherwise not be evident in the landscape.

(c) Form and density of development

- 31. The site is basically flat with shallow undulations and small hummocks and is surrounded by similarly flat land. There is no opportunity to utilise existing natural topography to ensure that development is located in places where it is not highly visible from public places.
- 32. The notice of requirement, if adopted in its current form, would allow the spread of development (in terms of large buildings) around the perimeter of the site. It is my opinion that buildings should be restricted to the area to the south west of the southern half of the proposed designation, requiring future buildings to be constructed in proximity to the existing development on the site and on the adjacent Rhodes and Pittaway properties thus intensifying the existing node of development rather than extending it.
- 33. The existing development at the airport has a density and appearance akin to an industrial zone with an agglomeration of very large prominent buildings. The notice of requirement, if adopted as proposed, would allow for similar agglomerations to be developed along the north eastern boundary of the site with consequent adverse effects on landscape character and quality. It is my opinion built form of this type should be restricted to the south western portion of the site on the basis that the consolidation of existing development would have a lesser effect on the surrounding landscape than allowing development to sprawl around the perimeter of the airport.

(d) Cumulative effects of development on the landscape

- 34. Existing development in the vicinity of the airport designation includes:
 - a cluster of large, prominent industrial style buildings associated with the airport;
 - the Toy and Transport Museum (on the Rhodes property)
 - a collection of 11 aircraft hangars (consented but not yet constructed on the Pittaway property);
 - 'Have a Shot' located on the Bell property (Sec 36 Blk VIII Lower Hawea SD);
 - the Windermere farm homestead;

In addition there are a number of dwellings and consented building platforms along the edge of the terrace escarpment to the east and along SH 6 to the west; scattered farm buildings and Project Pure to the north east of the existing designation. Most of this development over the broader area is domestic in type and scale, the large, industrial type buildings and activities being restricted to the existing airport designation, the Rhodes Property and the south eastern portion of the Pittaway property. In this regard they, and 'Have a Shot', form a node of development along an otherwise rural road.

- 35. Further development in terms of buildings and car parking which was undertaken within and adjacent to the existing node of development would not be likely to lead to further degradation of the landscape in the vicinity. As the notice of requirement proposes to reduce the offset from the centre of the runways up to which buildings can be constructed, it is possible that more space could be found in the vicinity of the existing buildings. However, if development of a similar nature to that already present at the airport is allowed to occur along the northern extent of the proposed designation the cumulative effects would be highly significant and adverse. It is to be noted that the Environment Court, and Council's commissioners, considered that a new dwelling on the Roberts property would have a significant adverse cumulative effect on the landscape of the vicinity. This notice of requirement would allow much larger, more prominent development to occur within the same vicinity.
- 36. There are no discrete landscape units in which development such as that potentially made possible by this notice of requirement could be contained so as to check the spread of development.
- 37. The development of buildings within the airport designation, and of car parks, could require infrastructure consistent with urban landscapes and this would significantly degrade the character and quality of the surrounding landscape.
- 38. The means by which adverse cumulative effects could be avoided is by restricting the areas within the designation in which buildings and car parks could be constructed to those adjacent to and within the existing node of development.

(e) Rural amenities

- 39. Provided the development of future buildings and car parking are restricted to the vicinity of the existing development node the proposed designation could maintain appropriate visual access to open space and views across the landscape.
- 40. As an adjunct to this notice of requirement there is a further notice of requirement altering the building restriction line around the airport and the associated noise contours (proposed Designation 65). As a result of these alterations there are adjacent sites on which consented building platforms must be moved.

CONCLUSION

- 41. A notice of requirement has been made by QLDC in its role as a requiring authority to extend the area of the designation for the Wanaka Aerodrome. This extension would allow for:
 - Extending the main runway 550m to the north west;
 - The formation of RESA at both ends of the runway;
 - The provision of a second runway parallel the existing runway;
 - The construction of a control tower and new terminal building;

- The extension of the areas in which buildings may be constructed;
- a reduction in the setback from the centre line of the runway in which buildings may be constructed;
- The use of the airport for night flights providing appropriate lighting can be provided;
- An alteration to the noise boundaries.
- The construction of fuel storage facilities;
- The construction and operation of navigational aids and lighting;
- The construction of buildings up to 9m in height
- Car parking;
- Earthworks.
- 42. The site is located within a Visual Amenity Landscape. This landscape is close to the threshold of its ability to absorb further development.
- 43. The earthworks proposed would not have a significant adverse effect on the quality of the landscape in the vicinity and would not have a significant adverse effect on the Outstanding Natural Feature of the terrace escarpment. They would not be prominent in views from SH 6 but could be prominent from points on Stevenson Road.
- 44. The construction of a control tower within the designation would not have any adverse effects on the surrounding landscape and may, by making the aerodrome more readily identifiable, have a positive effect providing an explanation for the presence of large, industrial style buildings in a rural area.
- 45. The construction of buildings of up to 9m in height along the north western and eastern sides of the site would have extreme adverse effects on the landscape of the vicinity and should be precluded. The construction of such buildings should be restricted to the southern half of the south western side of the proposed designation area and all buildings should be required to be finished with recessive colours and materials to reduce their impact on the surrounding landscape.
- 46. The development of car parks along the north western and eastern sides of the site would have extreme adverse effects on the landscape of the vicinity and should be precluded. The extension of car parking should be restricted to areas closely associated with the built form.

SUGGESTED CONDITIONS

Should consent be granted I consider the following conditions be included:

- 1. All buildings shall be restricted to the areas within the designation identified on plan *xyz*.
- 2. All buildings within the designation shall be finished with materials and colours which comply with Councils Guide to Reducing Glare and Reflection in the Queenstown Lakes District. That is, they are to be finished with colours in the natural range of greens, greys and browns with a reflectivity of less than 36%. This shall not preclude the use of other colours as detailing on up to 10% of the buildings surfaces.
- 3. All car parking areas shall be restricted to the areas within the designation identified on plan *xyz*.

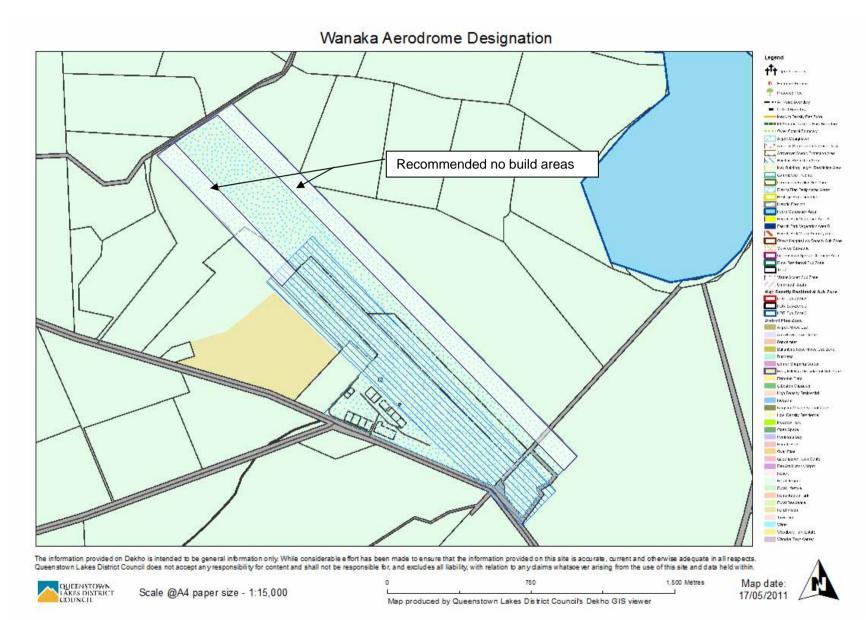
Report reviewed by

Report prepared by

Road

Marion Read
PRINCIPAL : LANDSCAPE ARCHITECTURE

Robin Rawson SENIOR LANDSCAPE ARCHITECT



Appendix 1: Map illustrating recommended no-build areas within the proposed Wanaka Aerodrome designation

APPENDIX D

Proposed Plan Provisions

Plan Change 26 – Wanaka Airport

This Plan Change relates predominantly to the Rural General and Rural Visitor Zones but also includes changes to Chapters 4, 14, Definitions, the creation of a new Appendix and changes to relevant District Plan Maps. Changes in relation to these sections are denoted by <u>underlining</u> for additions and strikethrough for deletions and are highlighted in yellow where these differ to the Plan Change as notified.

1. MAKE THE FOLLOWING CHANGES TO SECTION 4:

4. District Wide Issues

2. ADD THE FOLLOWING OBJECTIVE AND POLICIES TO SECTION 4.9.3:

Objective 9 – Wanaka Airport

<u>Maintain and promote the on-going operation of the airport while</u> <u>managing reverse-sensitivity effects on surrounding land uses.</u>

Policies

9.1: Ensure appropriate noise boundaries are established and maintained to enable operations at Wanaka Airport to continue and to expand over time.

<u>9.2:</u> To prohibit all new activity sensitive to aircraft noise within the Outer Control Boundary and/or the Night-time Noise Boundary in the Rural Zone around Wanaka Airport,

9.3: To discourage plan changes or land use proposals which are promoted or initiated on land within the Outer Control Boundary and/or the Night-time Noise Boundary at Wanaka Airport where these incorporate provisions for activity sensitive to aircraft noise on the basis that such

activities have the potential to compromise the ongoing operational efficiency of the airport.

Implementation Methods

District Plan

The provision of rules to prohibit or otherwise control activity sensitive to aircraft noise within the Outer Control Boundary, Night-time Noise Boundary or Air Noise Boundary in the Rural Zone around Wanaka Airport.

ii Other Methods

Consultation with Wanaka Airport on any Plan Change or other land use proposal affecting land within the Outer Control Boundary, Night-time Noise Boundary or Air Noise Boundary.

Explanation and Principal Reasons for Adoption

Some types of activity on land adjacent to the airport may give rise to issues of reverse sensitivity. It is essential for the current and future operation of Wanaka Airport that appropriate measures are taken in regard to noise sensitive activity in the vicinity of the Airport to ensure reverse sensitivity issues are avoided. Such land use management will also avoid the potential adverse effects on residential amenity (in particular indoor amenity) and community well-being by avoiding unnecessary exposure to higher than desirable levels of aircraft noise.

3. MAKE THE FOLLOWING CHANGES TO SECTION 5:

5 Rural Areas

4. AMEND POLICY 3.6 AS FOLLOWS:



Plan Change 26 – Wanaka Airport

- 3.6 <u>To require acoustic insulation of buildings located within the airport</u> <u>Outer Control Boundary, that contain critical listening environments To</u> <u>prohibit all new activity sensitive to aircraft noise on any Rural zoned</u> <u>land within the Outer Control Boundary, Night time Noise Boundary and <u>Air Noise Boundary at Wanaka Airport to avoid adverse effects arising</u> <u>from aircraft operations on future activities sensitive to aircraft noise.</u></u>
- 5. ADD TWO NEW IMPLEMENTATION METHODS TO OBJECTIVE 3 AS FOLLOWS:
 - The provision of rules to prohibit new activity sensitive to aircraft noise within the Outer Control Boundary, Night-time Noise Boundary and Air Noise Boundary of Wanaka Airport. The New Zealand Standard 6805:1992 – "Airport Noise Management and Land Use Planning" will be used as the basis for establishing noise boundaries and associated rules in the District Plan in relation to controlling noise from airports in the District while also protecting those airports from the reverse sensitivity effects associated with activities which are sensitive to aircraft noise.
- 6. AMEND OBJECTIVE 7 AS FOLLOWS:

Objective 7 - Buffer Land for Airports

Retention of a greenfields area within an airport Outer Control Boundary to act as a buffer between airports and other land use activities._Retention of a greenfields area or where appropriate at Queenstown Airport an area for Airport related activities or where appropriate, an area for activities not sensitive to aircraft noise, within an airport's Outer Control Boundary to act as a buffer between airports and other land use activities.

7. ADD TWO NEW POLICIES TO OBJECTIVE 7 AS FOLLOWS:

Policy

- 7.4 To prohibit the location of any new activity sensitive to aircraft noise on land within the Outer Control Boundary, <u>Night-time Noise</u> Boundary and Air Noise Boundary around Wanaka Airport.
- 7.5 To discourage plan changes or land use proposals which are promoted or initiated on land within the Outer Control Boundary, Night-time Noise Boundary or Air Noise Boundary at Wanaka Airport where these incorporate provision for activity sensitive to aircraft noise on the basis that such activities have the potential to compromise the ongoing operational efficiency of the Airport.
- 8. ADD A NEW IMPLEMENTATION METHOD TO OBJECTIVE 7 AS FOLLOWS:
- i District Plan

...

- (f) Provision of zone rules prohibiting activities sensitive to aircraft noise within the Air Noise Boundary and Night-time Noise Boundary and Outer Control Boundary shown on the planning maps around the Wanaka Airport.
- 5.3 Rural General and Ski Area Sub-Zone - Rules
- 9. AMEND 5.3.1.1 BY ADDING THE BULLET POINT AS FOLLOWS:

5.3.1.1 Rural General Zone

The purpose of the Rural General Zone is to manage activities so they can be carried out in a way that:

Queenstown-Lakes District Council – District Plan Changes (December 2010)



- protects the on-going operations of Wanaka Airport.
- ...
- 10. DELETE CONTROLLED ACTIVITY RULE vii AS FOLLOWS:

5.3.3.2 Controlled Activities

vii Buildings within the Outer Control Boundary - Wanaka Airport

Buildings or part of a building to be used for residential activities, visitor accommodation or community activities on any land within the Outer Control Boundary as indicated on the District Plan Maps, in respect of the design, construction, orientation and location of the building to achieve adequate indoor sound insulation from aircraft noise.

- 11. AMEND PROHIBITED ACTIVITY RULE 5.3.3.5.ii AS FOLLOWS:
- 5.3.3.5 Prohibited Activities
- ii <u>New Building Platforms and</u> Activities within the Air Noise Boundary, <u>or Outer Control Boundary</u> or the Night-time Noise <u>Boundary</u> - Wanaka Airport

On any site located within the Air Noise Boundary, or <u>Outer Control</u> <u>Boundary or Night-time Noise Boundary</u>, any new <u>activity sensitive to</u> <u>aircraft noise or new building platform to be used for an activity</u> <u>sensitive to aircraft noise</u> shall be a Prohibited ActivityProhibited Activities.

12. AMEND ZONE STANDARDS AS FOLLOWS:

5.3.5.2 Zone Standards

13. INSERT NEW EXCEPTION TO ZONE STANDARD 5.3.5.2.v AS FOLLOWS:

v Noise

Non-residential activities shall be conducted such that the following noise levels are not exceeded, neither at, nor within, the notional boundary of any residential unit, other than residential units on the same site as the activity:

- (a) during daytime (0800 to 2000 hrs) L10 50dBA.
- (b) during night time (2000 to 0800 hrs) L10 40dBA and Lmax 70dBA. **except:**
 - (i) When associated with farming and forestry activities, this standard shall only apply to noise from stationary motors and stationary equipment.
 - (ii) Noise from aircraft operations at Queenstown Airport is exempt from the above standards.
 - (iii) Noise from aircraft operations at Wanaka Airport are exempt from the above noise standards, but are subject to the conditions attached to the designation.
 - ...

14. DELETE ZONE STANDARD 5.3.5.2.viii:

viii Wanaka Airport Building Line

No building shall be erected, constructed or relocated within the area defined by a line 150m on the western side of the centre line of the Wanaka Airport main runway, the Airport Purposes Designation boundary at either end of the main runway, and a line 200m on the eastern side of the centre line of the Wanaka Airport main runway.



15. AMEND ZONE STANDARD 5.3.5.2.x AS FOLLOWS:

- x Airport Noise Building with the Outer Control Boundary -Wanaka Airport Alterations or additions to existing buildings or construction of a building on a building platform approved before 20 October 2010 within the Outer Control Boundary and/or Night-time Noise Boundary at Wanaka Airport
 - (a) Within the Night-time Noise Boundary (NNB) The construction of, alteration, or addition to any building containing an activity sensitive to aircraft noise shall meet the acceptable construction requirements for sound insulation (Table 1) and mechanical ventilation (Table 2) set out in Appendix 14 of the District Plan. On any site within the Outer Control Boundary as indicated on the District Plan Maps, any buildings or part of a building to be used for residential activities, visitor accommodation or community activities shall be insulated from aircraft noise so as to meet an indoor design sound level of 40 dBA Ldn, except for non-critical listening environments where no special insulation is required.
 - Within the Outer Control Boundary (OCB) The construction of, alteration, or addition to any building containing an activity sensitive to aircraft noise shall meet the acceptable construction requirements for sound insulation (Table 1) and mechanical ventilation (Table 2) set out in Appendix 14 of the District Plan. This control shall be met in either of the following two ways:

EITHER:

. . .

(i) By providing a certificate from a recognised acoustic engineer stating that the proposed construction will achieve the internal design noise level.

OR

...

- (ii) The building shall be constructed and finished in accordance with the provisions of Table 1 in part 5.3.5.2.
- (c) Where construction alternatives to those listed in Tables 1 and 2 of Appendix 14 are proposed to be used, a certificate from a person suitably qualified in acoustics stating that the proposed construction will achieve a similar standard of acoustic insulation or ventilation to critical listening environments shall be provided to <u>Council.</u>
- (d) Where a ventilation system (or systems) is required by this rule noise from such a system shall not exceed the levels set out in Table 3 of Appendix 14.
- 16. DELETE TABLE 1 ACOUSTIC INSULATION OF BUILDINGS CONTAINING NOISE SENSITIVE ACTIVITIES (EXCEPT NON-CRITICAL LISTENING AREAS)



Building Element	Required Construction
External	Exterior: 20 mm timber or 6mm fibre cement
Walls	Frame: 100mm gap containing 100mm acoustic blanket (R2.2 Batts or
	similar)
	————————————————————————————————————
	(Or an equivalent combination of exterior and interior wall mass)
Windows	Up to 40% of wall area: Minimum thickness 6mmglazing**
	Up to 60% of wall area: Minimum thickness 8mm glazing**
	Up to 80% of wall area: Minimum thickness 8mm laminated
	glass or minimum 10mm double glazing**
	Aluminium framing with compression seals (or equivalent)
Pitched Roof	Cladding: 0.5mm profiled steel or tiles or 6mm corrugated
	fibre cement
	Frame: Timber truss with 100mm acoustic blanket (R 2.2
	Batts or similar)
	Ceiling: 12.5mm gypsum plaster board*
Skillion Roof	Cladding: 0.5mm profiled steel or 6mm fibre cement
	Sarking: 20mm particle board or plywood
	Frame: 100mm gap containing 100mm acoustic blanket
	(R2.2 Batts or similar)
	Ceiling: 2 layers of 9.5mm gypsum plasterboard*
External Door	Solid core door (min. 24kg/m ²) with weather seals

Table 1 – Acoustic Insulation of Buildings Containing Noise

- Sensitive Activities (except non-critical listening areas)

- * Where exterior walls are of brick veneer or stucco plaster the internal linings need be no thicker than 9.5mm gypsum plasterboard.
- ** Typical acoustic glazing usually involves thick single panes or laminated glass. Where two or more layers of glass are employed with an air gap between, total thickness of window glass may be calculated as the total of all glass layers (excluding air gap) provided that at least one lass layer shall be of a different thickness to the other layer(s).

17. DELETE ASSESSMENT MATTER 5.4.2.3.ix

5.4.2.3 Assessment Matters General

- ix Controlled Activity Addition or alteration to Buildings within the Outer Control Boundary - Queenstown Airport and Buildings within the Outer Control Boundary - Wanaka Airport
 - Conditions may be imposed to ensure the design, construction, orientation and location of buildings for residential activities, visitor accommodation or community activities within Wanaka Airport's Outer Control Boundary, or the alteration or addition to an existing building or part of a building used for residential activities, visitor accommodation or community activities within Queenstown Airport's Outer Control Boundary is such to ensure the indoor design sound levels specified in Zone Standards 5.3.5.2(viii) and (x) are met.

18. MAKE THE FOLLOWING CHANGES TO SECTION 12:

Section 12.3 Rural Visitor Zones

19. AMEND POLICY 12.3.4 (6) AS FOLLOWS:

Policies:

. . .

- 6 Within the Windermere Rural Visitor Zone minimise the potential for reverse sensitivity <u>effects on</u> Wanaka Airport by:
 - <u>Prohibiting all new activity sensitive to aircraft noise (this</u> <u>includes visitor accommodation) within the Night-time Noise</u> <u>Boundary;</u>
 - <u>Requiring compliance with an acoustic treatment performance</u> <u>standard for any new, altered or extended visitor</u> <u>accommodation or permanent residential accommodation</u>



Plan Change 26 – Wanaka Airport

approved between within the Outer Control Boundary and Night-time Noise Boundary shown on the planning maps.

- Noise insulating buildings
- Designing and orientating buildings to minimise exposure to noise
- Encouraging noise sensitive activities to be located with maximum separation from the airport
- Avoiding landscaping and development that may be hazardous to aircraft
- Limited permanent residential accommodation

12.4 Rural Visitor Zone - Rules

12.4.3.2 Controlled Activities

20. DELETE CONTROLLED ACTIVITY RULE 12.4.3.2.iii

- iii Windermere the design, construction, orientation and location of the building to achieve adequate indoor sound insulation from aircraft noise.
- 21. DELETE CONTROLLED ACTIVITY RULE 12.4.3.2.vi.(g)
- vi Visitor Accommodation

...

Activities (v) and (vi) above are controlled in respect of the following matters:

(g) Windermere - airport noise

12.4.3.5 Prohibited Activities

22. ADD PROHIBITED ACTIVITIES RULE 12.4.3.5.(ii)

- (ii) Buildings to be used for an activity sensitive to aircraft noise on any land within the Wanaka Airport Night-time Noise Boundary.
- •••

. . .

12.4.5.2 Zone Standard

23. AMEND ZONE STANDARD 12.4.5.2.vii AS FOLLOWS:

- vii Airport Noise <u>New buildings or alterations or additions to existing</u> buildings within the Outer Control Boundary - Wanaka Airport
- (a) Within the Outer Control Boundary (OCB) The construction of, alteration, or addition to any building containing an activity sensitive to aircraft noise shall meet the acceptable construction requirements for sound insulation (Table 1) and mechanical ventilation (Table 2) set out in Appendix 14 of the District Plan.
- (b) Where construction alternatives to those listed in Tables 1 and 2 of Appendix 14 are proposed to be used, a certificate from a person suitably qualified in acoustics stating that the proposed construction will achieve a similar standard of acoustic insulation or ventilation to critical listening environments shall be provided to Council.
- (c) Where a ventilation system (or systems) is required by this rule noise from such a system shall not exceed the levels set out in Table 3 of Appendix 14.



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Wanaka Airport. On any site within the outer control boundary as indicated on the District Plan Maps, any building or part of a building to be used for Residential Activities, Visitor Accommodation Activities, Commercial Activities or Community Activities shall be insulated from aircraft noise so as to meet an indoor design sound level of 40dBA Ldn, except for non-critical listening environments where no special insulation is required.

12.5.2 Assessment Matters

...

24. DELETE ASSESSMENT MATTER 12.5.2.X AS FOLLOWS:

- x Windermere the following assessment matters should be taken into account in addition to those listed for specific activities.
 - (a) The design, constructions, orientation and location of buildings and whether an indoor design sound level of 40 dBA Ldn, except for non-critical listening environments can be achieved.
 - (b) Whether noise sensitive activities are located with maximum separation from Wanaka Airport.
 - (c) Whether the location of activities is consistent with providing buffer from Airport activities, taking into account the air noise boundary and outer control boundary.
 - (d) Whether buildings, structures or activities are a hazard to aircraft.
 - (e) Provision of landscaping that mitigates the visual effects while ensuring that species that may be a hazard to aircraft are avoided.
 - (f) Whether the residential activity is for on-site custodial management purposes and the potential for adverse cumulative effects of residential development.

25. MAKE THE FOLLOWING CHANGES TO SECTION 14

14. Transport

- 14.1.3 Objectives and Policies
- 26. AMEND POLICIES ASSOCIATED WITH OBJECTIVE 8 AS FOLLOWS:

Objective 8 - Air Transport

Effective and controlled airports for the District, which are able to be properly managed as a valuable community asset in the long term.

Policies:

. . .

...

- 8.1 To provide for appropriate growth and demand for air services for Queenstown <u>and Wanaka</u>.
- 8.3 To establish an Air Noise Boundary and Outer Control Boundary for Queenstown and Wanaka airports and a Night-time Noise Boundary at Wanaka Airport.
- 8.4 To advocate a noise management regime at Queenstown airport <u>and</u> <u>Wanaka Airport</u> to help manage the environmental effects of aircraft noise through means available to the Queenstown Airport Corporation <u>and the Wanaka Airport Operator</u> but not available through the District Plan.



27. AMEND IMPLEMENTATION METHODS FOR OBJECTIVE 8 AND ITS ASSOCIATED POLICIES AS FOLLOWS:

Implementation Methods

Objective 8 and associated policies will be implemented through a number of methods including:

(i) District Plan

Identification of the Air Noise Boundary (65 L_{dn}) and Outer Control Boundary (55 L_{dn}) and the Night-time Noise Boundary (Wanaka Airport) locations and implementation of controls relating to these in order to manage aircraft activity at the airports.

•••

...

28. AMEND EXPLANATION AND PRINCIPAL REASONS FOR ADOPTION FOR OBJECTIVE 8 AND ITS ASSOCIATED POLICIES AS FOLLOWS:

Explanation and Principal Reasons for Adoption

The Queenstown and Wanaka airports are important physical resources, important to the social and economic well being of the community. Queenstown Airport's main function is for domestic, and international, passenger movements and freight and tourist operations. The Queenstown Airport is an important factor in the rate of growth in the District. In comparison, Wanaka Airport's main function is has been to provideing recreational and tourist air services, including aviation museums but increasingly it is providing for scheduled air services and may in the future provide a complementary alternative to Queenstown Airport.

In relation to Wanaka Airport, activities <u>sensitive to aircraft noise</u> within the Outer Control Boundary <u>and Night-time Noise Boundary</u> will be prohibited. will require a resource consent for a controlled activity. The <u>Any alterations or additions to existing buildings consent</u> will be subject to adequate acoustic <u>treatment insulation</u>. The <u>insulation treatment</u> requirements will be in accordance with the <u>NZ Building Code</u> Standards and the rules of this Plan.

The Council is also of the view that rezoning land as a Residential Zone, or classifying new noise sensitive activities as permitted, controlled, discretionary or non-complying adjacent to an airport, gives a false impression that the land is suitable for noise sensitive activities.

•••

The controls are intended to either prohibit, or require acoustic <u>treatment</u> insulation (as appropriate), for the full range of <u>activities sensitive to aircraft</u> noise <u>sensitive activities</u>. Reference is made to "community activities" in each of the relevant rules is defined in the district plan. The rules are intended to be inclusive; and to cover all activities which fall within the broad definition of community activity, whether or not such activities are separately defined.

29. Make the following changes to District Plan Definitions

Amend the following definitions

Air Noise Boundary <u>Wanaka</u>	Means a boundary, the location of which is based on predicted day/night sound levels of Ldn 65 dBA from future airport operations. The location of the boundary is shown in Figure <u>District Plan Map</u> 31a <u>18a</u> .
Outer Control Boundary <u>Wanaka</u>	Means a boundary, the location of which is based on predicted day/night sound levels of Ldn 55 dBA from future airport operations. The location of the boundary is shown in Figure <u>District Plan Map</u> 31a <u>18a</u>



B

Add the following definitions

Activity	Means any Residential Activity, Visitor
Sensitive to	Accommodation, Community Activity and Day Care
Aircraft Noise	Facility including all outdoor spaces associated with
<u>(ASAN)</u>	any education facility but excludes police stations,
	fire stations, courthouses, probation and detention
	centres, government and local government offices.
Airport	Means the person or body that has the necessary
Operator	statutory authority for the establishment.
	maintenance, operation or management of the
	airport.
Critical	Means any space that is regularly used for high
Listening	quality listening or communication for example
Environment	principle living areas, bedrooms and classrooms but
	excludes non critical living environments.
Night-time	Means a boundary, as shown in District Plan Map
Noise	18a the location of which is based on predicted
Boundary	sound levels of SEL 95 dBA.
Wanaka	

30. CREATE A NEW APPENDIX 14 AS FOLLOWS

Appendix 14

Appendix 14 - Acoustic Insulation and Ventilation Requirements Wanaka Airport

for Critical Listening Environments			
Building	Minimum Construction		
Element			
External	Exterior	terior Brick or concrete block or concrete, or	
<u>Walls</u>	Lining: 20mm timber or 6mm fibre cement		
	Insulation:	Not required for acoustical purposes	
	Frame:	One layer of 9mm gypsum or	
		plasterboard (or an equivalent	
		combination of exterior and interior wall	
		<u>mass)</u>	
Windows/		m glazing with effective compression seals	
		or double glazing 6mm-6mm airgap-6mm	
<u>Doors</u>			
Pitched Cladding: 0.5mm profiled steel or masor		0.5mm profiled steel or masonry tiles or	
Roof	<u>oladanığı</u>	6mm corrugated fibre cement	
<u></u>	Insulation:	100mm thermal insulation blanket/batts	
	Ceiling:	1 layer 9mm gypsum or plaster board	
Skillion Roof	Cladding:	0.5mm profiled steel or 6mm fibre cement	
	Sarking:	None Required	
	Insulation:	100mm thermal insulation blanket/batts	
	Ceiling:	1 layer 9mm gypsum or plasterboard	
External	Solid core door (min 24kg/m ²) with weather		
Door	seals		
Note: The specified constructions in this table are the minimum require		ons in this table are the minimum required	
to meet the acoustic standards. Alternatives with greater mass or			
larger thicknesses of insulation will be acceptable. Any additiona			
construction requirements to meet other applicable standards no			
covered by this rule (eg fire, Building Code etc) would also need to			

<u>Table 1: Sound Insulation Requirements – Acceptable Constructions</u> for Critical Listening Environments

be implemented.



Table 2:	Ventilation	Requirements	for	Critical	Listening
	<u>Environmen</u>	ts			

Room Type		Outdoor Air Ventilation Rate (Air Changes		
		per Hour)		
	_	Low Setting *	High Setting *	
Bedrooms		1 2 ac/hr	Min. 5 ac/hr	
Other	critical	<u>1-2 ac/hr</u>	Min. 15 ac/hr	
listening				

environments

* Each system must be able to be individually switched on and off and when on, be controlled across the range of ventilation rates by the occupant with a minimum of 3 stages.

Each system providing the low setting flow rates is to be provided with a heating system which, at any time required by the occupant, is able to provide the incoming air with an 18 degC heat rise when the airflow is set to the low setting. Each heating system is to have a minimum of 3 equal heating stages.

If air conditioning is provided to any space then the high setting ventilation requirement for that space is not required.

Room Type	Noise Level Measure	Noise Level Measured at a distance of 1m-		
	2m from the Diffuser			
	<u>(Lee</u>	(Leg dB))		
	Low Setting	High Setting		
Bedrooms	<u>30</u>	<u>35</u>		
Other critical	<u>35</u>	40		
<u>listening</u> environments				
environments				

31. MAKE THE FOLLOWING CHANGES TO VOLUME 3 – DISTRICT PLAN MAPS:

Volume 3 District Plan Maps

32. AMEND DISTRICT PLAN MAP 18A TO UPDATE OUTER CONTROL AND AIR NOISE BOUNDARIES AND TO INCLUDE NIGHT NOISE BOUNDARY.

