IN THE MATTER OF

The Resource Management Act 1991

AND

IN THE MATTER OF

Proposed Plan Change 59 to the Wairau/Awatere Resource Management Plan

SECTION 42A REPORT

INTRODUCTION

1. My name is Paul Whyte and I hold the qualification of Bachelor of Town Planning from Auckland University. I am a full member of the New Zealand Planning Institute. I have practiced in the field of resource management and planning since 1984 primarily working for both local government and planning consultants in Dunedin and Christchurch. Currently I am Senior Planner (Associate) in the Christchurch office of Beca Carter Hollings and Ferner (Beca)

2. This report has been commissioned by Marlborough District Council (MDC) in accordance with Section 42A of the Resource Management Act 1991 (RMA) and relates to Proposed Plan Change 59 to the Wairau/Awatere Resource Management Plan (WARMP). This plan change is a private plan change submitted by Colonial Vineyards Limited.

3. The plan change was notified on 8 September 2011, with submissions closing on 6 October 2011. A copy of the plan change as notified is contained in Appendix A. A summary of submissions was notified on 17 November 2011 and further submissions closed on 8 December 2011. A total of 49 submissions and six further submissions were received. A list of submitters and further submitters and my recommendations on the submissions are attached in Appendix B.

4. This report covers the following matters:

    - The proposal
    - Description of the site and locality.
    - Submissions and further submissions.
    - Southern Marlborough Growth and Development Strategy
    - Statutory considerations.
    - Issues of the proposal
    - WARMP and the Marlborough Regional Policy Statement
    - Part 2 of the Act
    - Conclusion and recommendation.

5. The Section 42A report is supported by the following specialist reports/memorandums

    - Urban Design report-attached as Appendix C
    - Omaka Airfield Preparation of Airnoise and Outer Control boundaries Report-attached as Appendix D
    - Assets Services memorandum-attached as Appendix E
    - River Engineers memorandum-attached as Appendix F
    - Liquefaction issue report-attached as Appendix G
    - Transport report-attached as Appendix H

PLAN CHANGE REQUEST

Proposal

6. Proposed Plan Change 59 (PC59) is a privately requested change to the WARMP made under Part 2 of the First Schedule of the RMA. The applicant is Colonial Vineyards Limited and the request relates to a 21 hectare (ha) site located on New Renwick Road, Blenheim, which is legally described as Lot 2 DP 350626 and Lot 1 DP 11019.

7. PC59 seeks to rezone the site from Rural 3 to Urban Residential 1 and 2 to facilitate residential development of the property. On page 21 the applicant states that the core rationale for the plan change can be summarised as follows:

    - Adoption of the Southern Marlborough Growth and Development Strategy (the Growth Strategy) findings
    - Adherence to urban design principles
    - Adoption of the road design standards contained within New Zealand Standard 4404:2010
    - Adoption of the WARMP existing zoning
    - Mitigation / avoidance of reverse sensitivity noise effects on Omaka Airfield

8. It is apparent that the PC59 documentation relies in large part on the Growth Strategy and the technical information and the consultation that formed part of the strategy.

Proposed Amendments to the WARMP

9. The applicant has proposed a number of amendments to the WARMP which are set out below with my comments. There are no changes proposed in respect of the objectives but there are changes in relation to policies and methods. However PC59 essentially relies on the existing provisions of the Urban Residential 1 and 2 Zones including minimum lot areas, with some additional provisions that are largely peculiar to the site. The minimum lot areas for Urban Residential 1 and 2 as controlled subdivision activities are as follows:

Urban Residential 1	Front	290m^2
	Rear	
Urban Residential 2	Front	400m^2
	Rear	

Chapter 11 Urban Environments

11.2.2 Objectives and policies

Objective 1	**The maintenance and creation of residential environments which provide for the existing and future needs of the community.**
Policy 1.3	Maintain higher density residential use close to open spaces and within the inner residential sector of Blenheim located within easy walking distance to the west and south for the Central Business Zone.

The objectives and policies recognise…

…The north western and south western peripheryies ~~has~~ have been identified as the areas most capable of accommodating future growth of Blenheim, ~~and existing transitional plans have been changed accordingly~~. …

11.2.3 Methods of Implementation

Zoning…

Schedule Sites…

Rules	Plan rules permit residential activity within the Urban Residential 1, Urban Residential 2 and Township Residential Zones subject to performance standards being met. Site specific rules also apply to sites identified in Appendix G.

10. In respect of Policy 1.3 it appears that the amended wording is intended to facilitate higher density development in the form of the Urban Residential 1 Zone on the applicant's site given that the proposed zoning (or at least some of it) is in proximity to proposed open spaces on the site. It appears the provision of the Urban Residential 1 Zone on the site is in at least part response to the Growth Strategy, which advocates higher densities of dwellings and that this type of activity should be located in proximity to open spaces to offset the greater intensity of housing. However the proposed wording could be taken to read that higher density residential use is to be maintained both *"within the inner residential sector of Blenheim…"* and *"close to open spaces"*. It appears that the amended wording should state *"close to open spaces and /or"* to provide for Urban Residential 1 Zone development on the PC59 site. This amended policy will apply to all developments (not just PC 59).

11. It is noted that while the minimum lot size in the Urban Residential 1 Zone is 290m^2 (and 400m^2 for the Urban Residential 2 Zone) there is no requirement in PC59 to subdivide to these minimum areas.

12. The amendment to the explanation reflects the location of the site in the south west of Blenheim and the amendment to the rules reflects changes to Appendix G (see below).

Chapter 19 Land Transport

19.3 Objectives and Policies

Policy 1.7 Require all new roads…and enable safety and efficiency of vehicle movement including:

- Urban…
- Rural…
- Public roads have sufficient width to provide, where appropriate vehicle carriageways capable of carrying two lanes of moving traffic (except for very short local roads where traffic volumes are insufficient to warrant two lanes and except for low speed residential lanes);
- Public facilities including pedestrian footpaths (on one or both sides of the road except for low-speed residential lanes) as appropriate in urban situations;…

These policies recognise…

As a matter of public safety and convenience all new roads, except those which are very short no-exit roads or are low-speed residential lanes, should be capable…

19.7 Objectives and policies

Policy 1.8 require new urban subdivisions…

- Footpaths or access ways…
- Provision for…
- Pedestrian access…
- Pedestrian footpaths in urban areas:
  - Adjacent to be separated from vehicle carriageways and private property (except for low-speed residential lanes) by appropriate safety structures…

4.8 Methods of Implementation

Rules…

Annual Plan…

Code of Practice…

Subdivision Standards Provision will be made for subdivision and development to be designed in accordance with recognised Subdivisions Standards (such as NZS4404:2010) where meeting such standards meets or exceeds the anticipated environmental results.

13. It appears these amendments are intended to enable the provision of "low speed residential lanes" and to exempt them from carriageway and footpath requirements. Presumably this is to implement roading standards in terms of NZS 4404:2010 although it appears the term "low speed residential lanes" is not specifically defined in the standard. I note the standard now incorporates principles of urban design which were absent from its predecessor NZ 4404:2004. The applicant has stated the district plan standards do not provide the same amount of flexibility as NZS 4404:2010 (page 23). These amendments will apply to all developments. It is noted that "4.8 Methods of Implementation" should be "19.8 Methods of Implementation".

Chapter 23 Subdivision and Development

23.5.1 Objectives and Policies

Policy 1.17 Where indicative layouts for roads have been provided, ensure that the roading proposed at the time of subdivision and development is:

(a) Compatible with the Council's roading hierarchy or alternative design standards approved by Council;

(b) Reflects the density of development; and

(c) Connects to the existing roading network and contains internal connections to the extent that is practicable.

(d) Does not result in a subdivision layout that would cause poor amenity outcomes for individual properties, particularly in terms of property orientation (for solar access or relative to any road or other residential property) and shape.

Policy 1.18 Where indicative locations for open space have been provided, ensure that the open space proposed at the time of subdivision and development:

(a) Reflects the density of development;

(b) Is of sufficient area to provide for the amenity needs of those living and/or utilising the development;

(c) Is accessible (with the degree of accessibility increasing with increasing density of development).

(d) Does not result in a subdivision layout that would cause poor amenity outcomes for individual properties, particularly in terms of property orientation (for solar access or relative to any road or other residential property) and shape.

4.9 Methods of Implementation

Rules…

Annual Plan…

Code of Practice…

Subdivision Standards Provision will be made for subdivision and development to be designed in accordance with recognised Subdivisions Standards (such as NZS 4404:2010) where meeting such standards meets or exceeds the anticipated environmental results.

14. The applicant has proposed two additional policies under 23.5.1. However, the numbering of the proposed policies is incorrect as Policy 1.17 already exists. Therefore, the proposed policies should be renumbered as Policy 1.18 and Policy 1.19. The new policies will apply to all developments.

15. The apparent intent of the new policies is to provide Council with greater authority when considering subdivisions in the circumstances described in the policies. In this respect I presume the phrases *"Where indicative layouts for roads have been provided"* and *"Where indicative layouts for open space have been provided"* refers to the provision of these features on the planning maps applicable to PC 59. However I note that in respect of the layout for roads in PC 59 the layout is restricted to five indicative arrows off New Renwick Road, Aerodrome Road and Richardson Road showing road connections rather than, for example, an internal roading layout. It also appears that the symbol for the road connection is not shown in the plan legend on the amended planning maps. The open spaces on the planning maps are also notated as "Indicative Green Space" rather than "Open Space".

16. The applicant has included two detailed concept plans in the plan change but states that they *"do not form part of the plan change"*. However the plans *"are intended to provide the general framework for subsequent subdivision and development"* (page 8) although clearly they would not have statutory force.

17. The effect of the new policies could also be undermined by the Note in Appendix G (see below) which states *"The roading and open spaces shown on the planning maps are indicative only and may be varied at the time of subdivision."*

18. Reference in the Methods is made to applying NZS 4404:2010. It is noted that "4.9 Methods of Implementation" should be "23.6 Methods of Implementation." The effect of the amendment will be the application of NZS 4404:2010 to development (not just roading standards).

> **Chapter 29 Standard Requirements for Subdivision and Development**
>
> **29.2.8.1 Roads and Access**
>
> 29.2.8.1 Compliance with Roading Hierarchy
>
> All proposed new roads shall connect with and be compatible with the Council's roading hierarchy (refer Table 29.2.8.1). The classification, width and pavement structure are included I that Table. An exemption from compliance with table 29.2.8.1 will apply where provided for in Appendix G.

19. The proposed changes to this rule appear to allow for the utilisation of NZS 4404:2010 roading standards (see Appendix G below) and would apply to all developments.

Appendix G Register of Specifically Identified Activities

11.	**Colonial Vineyard, Corner of New Renwick Road and Aerodrome Road, Lot 2 DP 350626**
11.1	On this site, the rules and standards of the underlying zone shall apply except as follows:
11.1.1	Roading
	Roading within the site shall meet either the standards in table 29.2.8.1, or shall be designed in accordance with the roading standards in New Zealand Standard NZS 4404:2010.
11.1.2	Building Acoustic Insulation
	i) All buildings shall be designed and constructed to achieve or exceed the Indoor Design Sound Levels set out in Appendix M.
	ii) Any building which does not achieve the standards in Appendix M is a discretionary activity.
	Note: The roading and open space shown on the planning maps is indicative only and may vary at the time of subdivision.

20. These provisions only apply to the Colonial Vineyards Site and specifically relates to roading and acoustic standards. Rule 11.1 1 enables use to be made of NZS 4404:2010 while Rule 11.1.2 is intended to mitigate reverse sensitivity effects in respect of the Omaka Airfield.

21. The Note above refers to *"open space"* but this matter is not the subject of 11.1.1 or 11.1.2. In addition Lot 1 DP 11019 should be added to the heading as it forms part of the site.

Planning Map

22. The planning map shows the amended zoning (Urban Residential 1 and Urban Residential 2) and the open spaces and the road connections. I have commented above on the absence of the road connections on the map legend and the reference to *"indicative green spaces"* on the legend rather than *"open spaces."*

SITE AND LOCALITY

23. The site is located on New Renwick Road to the southwest of Blenheim. The site is bound by New Renwick Road, Aerodrome Road, and Richardson Avenue. New Renwick Road, from Maxwell Road to Battys Road, is classified as a Secondary (District) Arterial Road in the Marlborough Regional Land Transport Strategy 2007 (MRLTS) which is defined as a road of *"strategic importance… which an appropriate level of user service must be provided"*. The function of these roads is to provide important links between residential, commercial, industrial or recreational land use activities and to provide for the significant movement of goods and produce. From Battys Road to Godfreys Road, New Renwick Road is classified as a Collector Road. Collector Roads are defined in the MRLTS as "*locally preferred roads between or within areas of population or activities.*" All other roads within the

vicinity of the plan change are Local Roads, which are defined in the MRTLS as *"all other roads servicing land use activities with standards appropriate for the traffic use."*

24. The site was the subject of a resource consent in 2000 to subdivide the site into 67 allotments ranging in area from 2120m^2 to 4422m^2. The application was refused with MDC indicating such a proposal should be the subject of a plan change rather than a resource consent application.

25. The site was converted from open farm land to viticulture in 2003 and is currently in grapes. There is a dwelling and accessory buildings on site. A strip of residential dwellings are located to the north on the opposite side of New Renwick Road which is zoned Urban Residential 2. To the east of the site on the opposite side of Richardson Avenue is residential housing also zoned Urban Residential 2, a dwelling and the Taylor River. To the south and west of the site is a mixture of rural residential properties, vineyards and grazing which are zoned Rural 3. Omaka Airfield is located approximately 500 metres to the south west of the site and is zoned Airport. The Omaka Aviation Heritage Centre adjoins the airfield to the east but is zoned Rural 3.

SUBMISSIONS AND FURTHER SUBMISSIONS

26. Council received 49 submissions. 36 submissions were opposed to the plan change while 13 were in support. One submission was neither in support or opposition. The bulk of the submissions in opposition expressed concern about particular adverse effects on the environment of the rezoning and sought that the plan change be rejected in its entirety or amendments be made to particular provisions. The main issues raised by submitters in opposition were as follows:

    - Lack of information regarding services including wastewater and water;
    - Loss of visual amenity and semi-rural character;

- Traffic effects;
- Noise effects, in particular reverse sensitivity for surrounding landuses and the inadequacy of proposed sound insulation measures;
- Reverse sensitivity on Omaka Aerodrome;
- Limited requirement for further residential development.

27. Six further submissions were lodged. As indicated above a list of submitters and further submitters and my recommendations on the submissions are attached in Appendix B.

28. A late submission was received from RFH Harris (No. 49) on 11 October 2011 after the closing date of 6 October 2011. I understand that the submitter had unsuccessfully tried to email the submission prior to this date. The Commissioners will be required to determine if the submission should be accepted.

STATUTORY FRAMEWORK

29. Section 74(1) of the RMA states Council shall change a district plan in accordance with its functions under Section 31 of the Act, Part 2 of the Act, Section 32 of the Act and any regulations (although it is acknowledged MDC is a unitary authority and the WARMP is a combined plan and therefore regional functions may also be relevant). In changing a plan, regard must be had to any strategies prepared under other Acts (section 74(2)(b) of the Act) and effect must be given to a regional policy statement (Section 75(3) of the Act).

30. Section 32 of the RMA requires consideration of alternatives and the costs and benefits of a proposed change to the district plan. Section 32 states, among other matters, that an evaluation of a plan change must examine whether, having regard to efficiency and effectiveness, the policies, rules or other methods are the most appropriate for achieving the objectives.

31. Clauses 21 – 29 of the First Schedule to the RMA set out the process for a private plan change. An assessment of effects is required under Clause 22(2). The Council's decision making powers in relation to plan changes are stipulated in Clause 10 and Clause 29 of Schedule 1 of the RMA. Clause 29(4) provides that after considering a plan change request, Council may "decline, approve, or approve with modification" the request, although my understanding is that changes must generally be in response to submissions.

SOUTHERN MARLBOROUGH URBAN GROWTH AND DEVELOPMENT STRATEGY

32. Given that the plan change is in large part predicated on the Growth Strategy in terms of identified growth areas and sequencing (and technical assessment) it is useful to refer to this document in more detail. Mr Wayne Bredemijer of Urbanism Plus, who was one of the authors of the strategy, sets out details of the Growth Strategy particularly as it relates to the applicant's site in Appendix C, but I note the following.

33. In 2009 MDC initiated the Southern Marlborough Urban Growth and Development Strategy (the Growth Strategy) utilising the provisions of the Local Government Act 2002. The strategy is intended to guide future policy direction so that growth can be accommodated in a sustainable manner. The strategy is intended to inform various

MDC documents including the RPS and resource management plans. The strategy identifies growth options for a number of Southern Marlborough settlements including Blenheim. The Growth Strategy was notified in May 2010 and submissions called for in relation to its provisions.

34. The Colonial Vineyards site is identified as "W2" in the Growth Strategy. W2 along with other three other "growth pockets" are identified as the preferred greenfields growth area for Blenheim in terms of such criteria as community, ecology, open space, soils, loss of productive land, landscape character, activity centres, employment, services, transport and infrastructure. The site also does not have any significant contamination issues and appears suitable for residential development in this respect (refer Marlborough Urban Growth Study-Assessment of Suitability for Residential Development – Pattle Delamore Partners, May 2011). W2 is identified in the Growth Strategy as the first area to accommodate growth in Blenheim terms of sequencing as *"it is a relatively easy area to develop"* (page 120).

35. The Growth Strategy includes an indicative layout for W2 including a green and blue network, transport network, a gross residential density of 14 dwellings per hectare and a mixture of medium and low density housing. The applicant has proposed 2 variations of this layout but as indicated above in paragraph 16 of my evidence they do not form part of the plan change.

36. The Growth Strategy has undergone an extensive consultation process including public meetings, focus groups, design workshops and public submissions. In respect of W2 there were a number of submissions both for and against with a number of opposing submissions concerned about the reverse sensitivity effects of a residential area on the existing Omaka airfield. In this respect the Growth Strategy relied on a report by Hegley Acoustic Consultants who undertook a noise assessment study as part of the District Plan review. This report was completed in May 2008 and is referred to in PC 59. The outer control noise boundary referenced in the report was queried by the Marlborough Aero Club as part of the Growth Strategy submissions. Consequently the report was reviewed and a new report issued which is attached as Appendix D to the Section 42A report. This issue is discussed further in paragraphs 42-49.

37. While a significant number of decisions on submissions to the Growth Strategy were made in April 2011 decisions on W2 have been deferred as a result of the current Plan Change 59 process. Council hopes to adopt the Growth Strategy fully in 2012.

38. The weight that can be placed on the Growth Strategy has been raised in submissions. As indicated above, Section 74(2)(b)(i) of the RMA states that in changing a plan a territorial authority *"shall have regard to"* any management plans and strategies prepared under other Acts. In this case the Growth Strategy is prepared under the Local Government Act but has not been finalised.

39. Nevertheless the document appears to be a comprehensive one that has considered a wide range of factors identified above and certainly assists MDC in undertaking its functions under Sections 31 and 32 of the RMA. In these circumstances I believe reasonable weight can be afforded to the Growth Strategy. In my view the applicant can utilise the contents of the Growth Strategy in the preparation of the PC59 but clearly the plan change still must pass the relevant tests of the RMA.

ASSESSMENT OF ISSUES

40. A number of issues relating to effects are raised in respect of the plan change as follows:

Loss of Productive Rural Land

41. The proposal will result in the loss of approximately 21ha currently in vineyard production to residential purposes. However the area is comparatively small in terms of the total district land resource and clearly cannot compete with the financial returns from the proposed purpose. The site does not contain versatile soils (as indicated on page 105 of the Growth Strategy) and the expansion of Blenheim is inevitably likely to result in the loss of some productive land.

Reverse Sensitivity

42. The greatest potential reverse sensitivity effect is the impact of the residential area on the operation of the Omaka Airfield. The airfield is home of the Marlborough Aero Club and as indicated above, is zoned Airport which in my view is recognition of its importance. It appears most aircraft movements at the airfield are single engine planes with some helicopter movements. Blenheim Airport adjacent to the Woodbourne Airbase caters for larger commercial flights and is also zoned Airport.

43. As indicated above, the MDC commissioned Hegley Acoustic Consultants to undertake a noise assessment report in respect of the airfield as part of the District Plan review and which was subsequently revised (and attached to this report as Appendix D). The report was peer reviewed by Marshall Day Acoustics (MDA) on behalf of the Marlborough Aero Club who are in general agreement with the findings (page 10 of the report).

44. The report uses NZS 6805:1992 to establish an air noise boundary and an outer control boundary. The respective boundaries are shown for the year 2028 and are based on figures supplied by the aero club's consultant, Mr John Sinclair (who I understand is also a submitter-No.11). The figures assume an increase in movements of 70% for fixed wing aircraft and an increase of helicopter movements by 300% for the existing helicopter company with an additional 2 companies having the same number of movements by 2028. By way of comparison the outer control boundary is shown for existing (2008) aircraft movements in Appendix D.

45. Figure 1 from the report shows the outer control boundary for 2028 bisecting the applicant's site in an east west alignment over approximately half the site. NZS 6805:1992 indicates that in these situations *"new residential, schools, hospitals or other noise sensitive uses should be prohibited unless a district plan permits such uses, subject to a requirement to incorporate appropriate acoustic insulation to ensure satisfactory internal noise environment."*

46. As indicated in paragraph 20 the applicant has proposed a condition requiring buildings on the site to be acoustically insulated notwithstanding that only half of the site is affected. This condition is already in the WARMP and is used in relation to buildings in the Airport Zone.

47. Outdoor activities clearly will not benefit from the imposition of such a condition. However generally I am of the view that the proposed condition is sufficient to

mitigate noise effects given that it is in compliance with the relevant New Zealand Standard. I also understand that there have not been any complaints (based on MDC records) in respect of the existing operation from residences in proximity to the airfield and while aircraft movements are expected to increase by the aero club I am not sure of the basis of these figures and note that it is based on the maximum number of movements in 2008. It is also noted the outer noise boundary for 2028 extends over a significant part of south west Blenheim which is comprised in existing housing and residential zoning.

48. Some of the submitters have suggested a no complaints covenant on new titles (and in particular John Sinclair (No.11) who suggests wording). The applicant in a further submission supports such a measure. I understand the covenant is able to be imposed from a resource management point of view and the Commissioners may wish to consider use of this mitigation tool in this particular instance as an added safeguard. Consideration needs to be given as to whether such a covenant would be part of the plan change or is imposed at the time of subdivision.

49. Figure 2 of the Hegley Acoustic Consultants Report identifies an area that is subject to noise from frost fighting helicopters. This source of noise is excluded from the general outer control boundary because of the uncertainty associated with this type of activity. The identified area includes a relatively small area in the south west part of the PC59 site. The report suggests Figure 2 is added to the planning maps as an overlay for information purposes only at the time of the District Plan review. (I understand it is the intention to also add Figure 1 at the time of the District Plan review).

50. I note the suggested approach in respect of the frost fighting helicopters is supported by MDA. The Commissioners of course can consider the effects from this type of activity but generally I believe the effects will be acceptable given the nature of the activity and its uncertainity, the short term nature of the effects, the inevitability of some effects given the location of Blenheim and its proximity to the Wairau Plains vineyards, and the proposed insertion in the District Plan.

51. Other reverse sensitivity effects from rural activities have been raised including noise from frost fans and spray drift. In respect of these matters frost fans are required to comply with Council standards to protect amenity (Rule 30.1.4.2.3) and PC58, which is under appeal, introduced new standards for frost fans and a requirement that new dwellings are required to be acoustically proofed. Spray drift is controlled by provisions in the WARMP (Rule 30.1.8.5). Matters of this nature will inevitably arise at any urban/rural interface notwithstanding where the boundary is.

52. A submitter located on the southern boundary of the site (Carlton Corlett Trust-No.19) has indicated that a 20m wide "isolation strip" should be established on the applicant's site as it is intended to develop the submitter's site for light industry and warehousing. However there does not appear to be any certainty with this proposal particularly as it appears the existing zoning of the site of Rural 3 will require resource consent for this activity. The applicant in a cross submission has indicated a 3-5m wide isolation strip would be acceptable in respect of this submission and also the submission of the Aviation Museum Charitable Trust (No. 9).

53. The Marlborough Car Club (No.27) which is located in proximity to the airfield has also raised reverse sensitivity effects in respect of noise. I am uncertain of the exact activities of the car club (although I understand it is clubrooms only), but

there appears to be a reasonable distance between the submitter's premises and the applicant's site and the car club will be required to comply with WARMP requirements in respect of noise.

Services

54. The attached memorandum from Councils Assets Department (attached as Appendix E) confirms that the site can be adequately serviced in terms of water, wastewater and stormwater although new infrastructure will be required. In particular the development will not cause deterioration in the water supply of existing customers; existing properties at 74-114 Renwick Road (opposite the applicant's site) currently unserviced will be able to be connected to the wastewater system; and stormwater can be disposed of satisfactorily to the Taylor River.

55. Fire fighting requirements will be addressed by Councils Code of Practice when subdivision for the site is made.

56. Costs for implementing infrastructure are dealt with by Development Contributions specified in the LTCCP rather than by provisions in the WARMP.

57. The site appears to be within a reasonable distance of community facilities such as education and retail premises and the development of such facilities is not precluded on the site.

Natural Hazards

58. No natural hazards have been identified in respect of the site. The attached memorandum from Council's River Engineer (attached as Appendix F) confirms there is no flood hazard from the Taylor River largely as a result of river control works. Similarly the risk of liquefiable soils on the site is considered sufficiently low as to be able to be ignored.(refer to Liquefaction Issue report attached as Appendix G).

Traffic

59. The report from Marlborough Roads (attached as Appendix H) indicates the roading network has the capacity to accommodate the increased traffic flows without significant effect.

Loss of Rural Character/Visual Amenity

60. It is inevitable there will be a loss of rural character and a change in the visual amenity as a result of the rezoning. However I note the site is adjoined on 2 sides by residential housing and the existing rural character is therefore affected to some degree. The site is not identified in the WARMP as of any visual significance or containing sites of natural significance. The applicant has submitted greenways and parks and residential landscaping will soften the change over time and this may assist in some degree.

61. It is suggested in submissions that as an alternative the site be utilised for rural residential development (eg M.Wagenvoort –No.45). However this is considered to be outside the scope of the plan change as it has not been sought by the applicant.

Demand for further development

62. A number of the submitters have stated there is no demand for residential housing at present. However MDC has identified a shortage of residential zoned land in a recent report (Residential Land Availability Blenheim and Renwick: Update Report for period 1 July 2007 to 30 June 2011 Environmental Management Service Ltd, January 2011) and the Growth Strategy refers to a need for further growth areas (pages 117-120). While I understand some of the demand may have gone from the market MDC must take account of future generations and that "over zoning" is not inappropriate, particularly if it is an efficient use of resources and in this respect the site can be serviced and adjoins existing urban development. It is also my understanding that there is not a requirement to consider alternative sites for residential development (such as those identified in the Growth Strategy) as part of the plan change process.

Lack of Detail

63. The submissions (and in particular Wither Hills Vineyards Marlborough Limited – No. 31) raise the issue that while PC 59 refers to a concept plan it is not included in the plan change and there is no certainty as to what the final development will look like. I have commented on this matter and while there is reference to roading and open space layouts on the planning maps these are not particularly detailed and may be undermined by other proposed provisions (such as an apparent ability to vary the plans without further approval). As the applicant is relying on the Growth Strategy and is committed to urban design principles (refer to my paragraph 7) it would appear appropriate a more detailed concept plan is included as part of the plan change to provide more certainty. In particular the provision of an internal roading layout will influence urban design considerations in respect of such matters as connectivity and orientation of sites.

WARMP

64. An assessment under Section 32 of RMA whether the policies, rules and methods of PC59 (no new objectives are proposed) are the most appropriate means by which to achieve the objectives and the purpose of the RMA generally involves a comparison of the proposed zoning with the status quo so that it does not create inconsistencies or that PC59 as altered can "live' with the existing plan. The most relevant provisions of the WARMP (which contains both district and regional provisions) are considered below.

Chapter 11 Urban Environments

65. Objective 1 and the accompanying policies relate to the maintenance and creation of residential environments to provide for the existing and future needs of the community. Policy 1.1 relates to the accommodation of growth within the current boundaries of the town. It is not clear what the "current boundaries" are but the plan change site essentially adjoins an existing residential zoned area and so I do not believe there is any significant inconsistency.

66. Policy 1.3 seeks to maintain higher density residential use within the inner residential sector of Blenheim. However, as indicated in paragraph 10, the applicant intends to amend the wording to also facilitate higher residential development in proximity to open space. I have suggested changing to the wording of this policy to make it clear higher residential development is not confined to inner

Blenheim. This change could be made under Clause 16 of the First Schedule as a minor amendment. The amended wording certainly assists in reducing inconsistency of PC59 with Policy 1.3.

67. Policy 1.4 relates to lower density residential use on the urban periphery which will be achieved by the plan change given the location of the Urban Residential 1 Zone adjacent to the rural zoned land.

68. Policy 1.5 provides a number of outcomes which are sought in relation to the expansion of urban areas. The plan change appears to be generally consistent with the desired outcomes as:

    - The location of the plan change, adjoining existing residential areas, will promote a compact urban form;
    - Marlborough Roads has provided comments that the integrity of the road network will be maintained;
    - The plan change will not maintain the rural character of the site. However, this is an inevitable outcome of expansion of the urban area into an adjoining rural area. The rural character of the area will however generally be maintained.
    - Council's Assets Department has confirmed that the development of the site is not constrained by the provision of water, wastewater or stormwater services from existing Council infrastructure.
    - The productive capacity of the site will clearly be reduced although again this is an inevitable result of urban expansion. The site however does not contain 'versatile soils'.

69. Objective 2 and the supporting policies relate to the suitability of locations for residential development. This objective and associated polices will not be compromised by the plan change. Council's River Planning Engineer, Mr Brin Williman has confirmed that the site is not susceptible to flooding from the Taylor River in respect of Policy 2.1 and nor is the site subject to liquefaction.

70. Policy 2.7 seeks that urban growth does not adversely impact on the life supporting capacity of soils or the productive capacity of rural land. However, the Explanation recognises that the expansion of urban areas may inevitably need to be accommodated in rural areas, where it immediately adjoins existing towns/townships, as is the case in this instance.

71. Objective 3 and the supporting policies provide for residential activities and other associated activities. The plan change will not cause any inconsistencies with this objective or the associated policies.

72. Objective 4 and the supporting policies seek to maintain and enhance the amenity and visual character of residential environments. The plan change will not cause any inconsistencies with this objective or the associated policies particulary if a more detailed concept plan is submitted.

73. Objective 5 and the associated policies relate to the provision of services to ensure community health standards are maintained and enhanced. Council's Assets

Department has confirmed that the site can be connected to Council's water supply, wastewater disposal systems and stormwater networks.

74. Objective 6 and associated policies relate to the promotion of the efficient use of energy in the design and construction of residential subdivisions and dwellings. It is stated that PC 59 is predicated on urban design principles and so should be consistent with these provisions.

Chapter 12 Rural Environments

75. Given that it is proposed that there will be a change in zoning from Rural 3 it is likely there will be some conflict with existing provisions in 12.2. However in terms of Objective 1 and Policies the site does not actually contain versatile soils (refer to my paragraph 41) and the provisions relating to water (Objective 3 and Policies) are not particularly affected.

76. As indicated above Omaka Airfield is zoned Airport. Chapter 12.7 refers to Omaka Airfield catering for "*private air traffic, crop spraying, recreational flying, skydiving, and gliding, generating a steady level of takeoff and landing activity.*" The objectives and policies relate to the effective, efficient and safe operation of airport facilities; the establishment of maximum levels of aircraft noise exposure; and to protect airport operations from the effects of noise sensitive activities. The explanation indicates noise "buffers" are considered the most effective means to protect airport operations. The methods of implementation include rules that "*within an area determined in reference to the 55Ldn noise contour…. require activities to be screened through the resource consent process and where permitted to establish noise attenuation will be required*".

77. PC59 has the potential to undermine these airport provisions but as indicated earlier I believe that with the implementation of appropriate noise mitigation measures (which appear to be anticipated) the provisions are not significantly affected.

Chapter 19 Land Transport

78. The objectives and policies of Chapter 19 relate to land transport and generally seek to address potential effects and protect and build a hierarchical roading network. The plan change is generally consistent with these provisions and as indicated previously the surrounding road network is able to accommodate traffic movement generated by residential development of the site.

79. The applicant proposes to amend Policy 1.7 (section 19.3) and Policy 1.8 (section 19.7) and the Methods of Implementation with the intention that pedestrian footpaths or 2 lane carriageways are not required on "low speed residential lanes". This appears to allow for the application of NZS 4404:2010 which do not require 2 lane carriageways or footpaths where an access serves a small number of dwellings.

80. The amendments allow consideration of NZS 4404:2010 in relation to roads. I note that the WARMP generally does not refer to NZ Standards but rather to a Code of Practice for Subdivision of Urban Development. The insertion of a specific date will likely require a plan change if the standard is updated (refer Clause 31 First Schedule). However there are no submissions on this matter and it can be said the standard is appropriate to achieve the objectives and policies given that it reflects current thinking and takes into consideration urban design principles.

Chapter 23 Subdivision and Development

81. Objectives 1 and 2 and associated policies under 23.2.1 and 23.3.2 relate to natural hazards and significant natural features. PC 59 will be consistent with these provisions as the site does not contain these features.

82. Objective 1 and associated policies under 23.4.1 relate to the subdivision design. While the applicant has submitted a limited form of a concept plan as part of the statutory assessment I consider a more detailed plan with more certainty is appropriate given the relevant objective and policies and also the urban design concepts in the Growth Strategy for the site.

83. The applicant is proposing two new policies be inserted into Chapter 23 under section 23.5.1. I have highlighted some difficulties with these policies and associated provisions in paragraphs 14 – 18. As indicated above I consider that a more detailed and certain plan should be put in place.

84. The methods in Section 19.9 are amended to allow consideration of NZS 4404: 2010 and can be said to better achieve the objectives and policies given that they reflect current thinking and take into consideration urban design principles.

Chapter 29 Standard Requirements for Subdivision and Development

85. The amendment to Rule 29.2.8.1 allows consideration of NZS 4404: 2010 which can be said to better achieve the objectives and policies given that they reflect current thinking and take into consideration urban design principles.

Appendix G Register of Specifically Identified Activities

86. Proposed Rule 11.1.1 allows consideration of NZS 4404: 2010 roading standards which can be said to better achieve the objectives and policies given that they reflect current thinking and take into consideration urban design principles.

87. Proposed Rule 11.1.2 implements noise insulation provisions which are appropriate to achieve the provisions of WARMP in terms of the operation of the Omaka airfield.

88. I have highlighted issues with the proposed Note which does not require adherence with the layouts on the planning maps and in my view this provision should be amended to provide more certainty.

REGIONAL POLICY STATEMENT (RPS)

89. As indicated above a plan change must give effect to the operative RPS. The applicant has provided a detailed assessment of the plan change against the provisions of the Marlborough RPS and I agree with the applicant's assessment and that proposed Plan Change 59 generally gives effect to the RPS.

PART 2 OF THE RMA

90. Part 2 (Sections 5-8) of the RMA sets out the purpose and principles of the Act. In terms of Section 5 the plan change will enable people and communities (including possible future generations) to provide for their wellbeing by the provision of residential housing. This wellbeing will be enhanced and adverse effects avoided, remedied and mitigated if the proposal is undertaken in accordance with urban

design principles. While the soil capacity will be compromised this is not considered to be a significant matter.

91. In terms of Section 6 of the RMA none of the matters appear relevant. I note Iwi have not raised any issues. In respect of Section 7 matters the location of the site adjoining existing residential land and the ability to connect with infrastructure including roading without adverse effect is an efficient use of resources (Section 7(b)). While the amenity values and quality of the environment will change (Sections 7(c) and (f)) this does not necessarily imply an adverse effect particularly if urban design principles are implemented. Section 8 does not appear relevant.

CONCLUSION

92. The applicant proposes a private plan change which relies in large part on the Growth Strategy. In my view this is acceptable given that the Growth Strategy is a comprehensive public document that is intended to inform Council on the very issues that arise from urban growth. This needs to be tempered by the draft nature of the document and the requirement to meet the RMA tests.

93. Generally I am of the view that overall the site is suitable for proposal having regard to the statutory requirements. The site effectively adjoins existing urban zoned land and is able to be serviced. The site is not subject to natural hazards and the surrounding road network can accommodate traffic generated from the site. Reverse sensitivity effects are an issue which is likely to arise when urban expansion onto rural land occurs. The effects on the Omaka Aerodrome operation need careful consideration, particularly it appears, in the longer term. However the imposition of an acoustic standard for the plan change site and the possible inclusion of a no complaints covenant should provide adequate mitigation measures.

94. However the proposed provisions in PC 59 relating to subsequent development on the site do not appear particularly detailed or provide certainty. I consider that a more robust regime should be put in place for this matter particularly given that the applicant states the plan change is predicated on the Growth Strategy which provided a concept layout of the site, and also on urban design principles. The applicant has stated their amended concept plan will provide the framework for the development and in my view a separate plan (rather than overlaid on the planning maps) such as this or similar should form part of the plan change and be submitted at the hearing.

95. Overall, I believe that with amendments, the plan change is the most appropriate for achieving the objectives and policies of the WARMP and is in accordance with the purpose of RMA.

RECOMMENDATION

96. I recommend that PC59 be approved subject to the following:

1. A Concept or Structure Plan shall be submitted showing at least the following:

    - Zonings
    - Staging
    - Green spaces and connections

- Road network
- Buffer/Isolation strips

2. The Planning Map is amended to show only the proposed zoning on the site with the following notation *"Refer to Concept Plan for site Appendix G -Rule 11.1.3"*

3. The WARMP is modified in accordance with the following or similar (my changes shown as double underlining and strike through) and any other necessary modifications that arise during the hearing.

Chapter 11 Urban Environments

11.2.2 Objectives and policies

Objective 1 **The maintenance and creation of residential environments which provide for the existing and future needs of the community.**

Policy 1.3 Maintain higher density residential use close to open spaces and /or within the inner residential sector of Blenheim located within easy walking distance to the west and south for the Central Business Zone.

The objectives and policies recognise…

…The north western and south western peripheryies ~~has~~ have been identified as the areas most capable of accommodating future growth of Blenheim, ~~and existing transitional plans have been changed accordingly~~. …

11.2.3 Methods of Implementation

Zoning…

Scheduled Sites…

Rules Plan rules permit residential activity within the Urban Residential 1, Urban Residential 2 and Township Residential Zones subject to performance standards being met. Site specific rules also apply to sites identified in Appendix G.

Chapter 19 Land Transport

19.3 Objectives and Policies

Policy 1.7 Require all new roads…and enable safety and efficiency of vehicle movement including:

- Urban…
- Rural…
- Public roads have sufficient width to provide, where appropriate vehicle carriageways capable of carrying two lanes of moving traffic (except for very short local roads where traffic volumes are insufficient to warrant two lanes and except for low speed residential lanes);
- Public facilities including pedestrian footpaths (on one or both sides of the road except for low-speed residential lanes) as appropriate in urban situations;…

These policies recognise…

As a matter of public safety and convenience all new roads, except those which are very short no-exit roads or are low-speed residential lanes, should be capable…

19.7 Objectives and policies

Policy 1.8 require new urban subdivisions…

- Footpaths or access ways…
- Provision for…
- Pedestrian access…
- Pedestrian footpaths in urban areas:
  - Adjacent to be separated from vehicle carriageways and private property (except for low-speed residential lanes) by appropriate safety structures…

19.8 ~~4.8~~ Methods of Implementation

Rules…

Annual Plan…

Code of Practice…

Subdivision Standards Provision will be made for subdivision and development to be designed in accordance with recognised Subdivisions Standards (such as NZS4404:2010) where meeting such standards meets or exceeds the anticipated environmental results.

Chapter 23 Subdivision and Development

23.5.1 Objectives and Policies

Policy 1.1~~7~~ 8 Where indicative layouts for roads have been provided on Concept Plans in the WARMP, ensure that the roading proposed at the time of subdivision and development is:

(a) Compatible with the Council's roading hierarchy or alternative design standards approved by Council;

(b) Reflects the density of development; and

(c) Connects to the existing roading network and contains internal connections to the extent that is practicable.

(d) Does not result in a subdivision layout that would cause poor amenity outcomes for individual properties, particularly in terms of property orientation (for solar access or relative to any road or other residential property) and shape.

Policy 1.1~~8~~ 9 Where indicative locations for open space have been provided on Concept Plans in the WARMP, ensure that the open space proposed at the time of subdivision and development:

(a) Reflects the density of development;

(b) Is of sufficient area to provide for the amenity needs of those living and/or utilising the development;

(c) Is accessible (with the degree of accessibility increasing with increasing density of development).

(d) Does not result in a subdivision layout that would cause poor amenity outcomes for individual properties, particularly in terms of property orientation (for solar access or relative to any road or other residential property) and shape.

23.6 ~~4.9~~ Methods of Implementation

Rules…

Annual Plan…

Code of Practice…

Subdivision Standards Provision will be made for subdivision and development to be designed in accordance with recognised Subdivisions Standards (such as NZS 4404:2010) where meeting such standards meets or exceeds the anticipated environmental results.

Chapter 29 Standard Requirements for Subdivision and Development

29.2.8.1 Roads and Access

29.2.8.1 Compliance with Roading Hierarchy

All proposed new roads shall connect with and be compatible with the Council's roading hierarchy (refer Table 29.2.8.1). The classification, width and pavement structure are included I that Table. An exemption from compliance with table 29.2.8.1 will apply where provided for in Appendix G.

Appendix G Register of Specifically Identified Activities

11. Colonial Vineyard, Corner of New Renwick Road and Aerodrome Road, Lot 2 DP 350626 and Lot 1 DP 11019

11.1 On this site, the rules and standards of the underlying zone shall apply except as follows:

11.1.1 Roading

Roading within the site shall meet either the standards in table 29.2.8.1, or shall be designed in accordance with the roading standards in New Zealand Standard NZS 4404:2010.

11.1.2 Building Acoustic Insulation

i) All buildings shall be designed and constructed to achieve or exceed the Indoor Design Sound Levels set out in Appendix M.

ii) Any building which does not achieve the standards in Appendix M is a discretionary activity.

~~Note: The roading and open space shown on the planning maps is indicative only and may vary at the time of subdivision.~~

11.1.3 Concept Plan

i) Development of this site shall be in general accordance with the attached Concept Plan

ii) Any development that is not in general accordance with the Concept Plan is a discretionary activity

Appendix A

VIASTRADA

TRAFFIC ENGINEERING AND PLANNING

Colonial Vineyard Ltd

Application for Private Plan Change

Pursuant to Clause 21 of the First Schedule to the Resource Management Act 1991

New Renwick Rd, Blenheim

Status: Final as lodged
Date: 28 April 2011

Contents

APPENDICES

Colonial Vineyard Private Plan Change

Requestors:	Colonial Vineyard Ltd
Address for Service:	ViaStrada PO Box 1593 Nelson 7040 Attn: Tony Quickfall Email: tony@viastrada.co.nz Phone: (03) 546 4256
Site Address:	Corner of New Renwick Rd and Aerodrome Road, Blenheim
Legal Description:	Lot 2 DP 350626

Parcel Details			
Appellation:		**Parcel Area (ha):**	21.4137
Land District:	Marlborough	**Total Area:**	
Statute:		**Graphical Area (ha):**	21.4082
Non Survey Information:		**Parcel Intent:**	Fee Simple Title

Associated Title Details			
Appellation	**Title(s)**	**Estate Type**	**Owner(s)**
		Fee Simple	**Colonial Vineyard Limited**

Site Area:	21.4137ha
Existing Zoning:	Rural 3
Existing Overlays:	None
Proposed Zoning:	Urban Residential 1 Zone – 9.2 ha Urban Residential 2 Zone – 12.2 ha

Signed Dated 28/4/2011

As representative of Colonial Vineyard Ltd

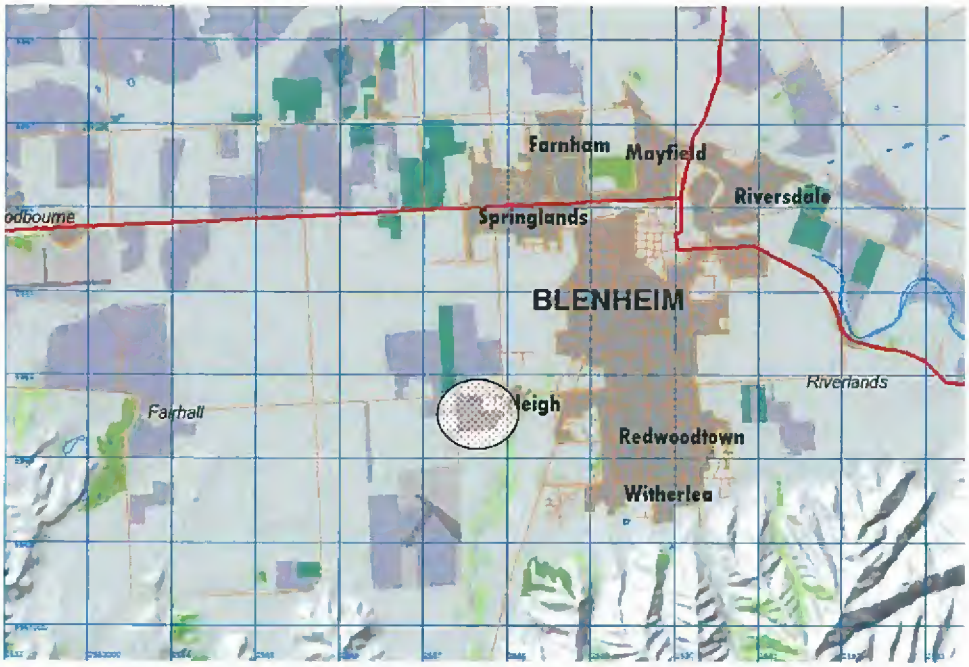
SECTION 1: BACKGROUND

1 INTRODUCTION

Overview

This plan change request is a privately initiated plan change to amend the Wairau Awatere Resource Management Plan (WARMP) in relation to the "Colonial Vineyard" site, show in Figure 1.

Figure 1: Application Site



The plan change seeks to implement the Southern Marlborough Urban Growth and Development Strategy ("the Growth Strategy"). The plan change largely adopts the principles underlying the structure plan identified in the growth strategy, and implements this by proposing the following:

a) Rezoning to Urban Residential 1 and Urban Residential 2 Zones, incorporating a mix of zoning densities

b) Changes to the WARMP which have the following outcomes:
   i) provision for an internal roading hierarchy including primary road, local road, and low speed residential streets;
   ii) a requirement for acoustic insulation within the entire site;

iii) new zoning map, with indicative road connections & open space layout;

iv) various other changes to various plan provisions.

The requested changes adopt the findings of the Growth Strategy, and implement the findings of a recent study on land availability[1]. That study found a significant shortage of zoned residential land, and recommends "urgent action" to provide land for future residential growth.

The proposed zoning map incorporates indicative road connections and open space layout based on a development concept layout. However, there may be more efficient or improved subdivision design, which can only be finalised at the time of subdivision. Some flexibility in design and layout is needed, and for this reason, road connections and open space is shown as indicative only, with provision for the location of roads and open space to vary at the time of subdivision. The proposed changes include new policies to ensure that the development is undertaken in accordance with the applicants' vision and is based on urban design principles.

This request is made in accordance Schedule 1 of the Resource Management Act 1991 ("RMA"). It addresses the reasons for the plan change and contains an evaluation under section 32. The request also includes an assessment of effects on the environment, taking into account the provisions of the Fourth Schedule to the Resource Management Act 1991.

Applicant's Vision

Through direct involvement in the Growth Strategy processes the applicants have a desire to implement the principles of the strategy, and to create a development based on good urban design which reflects its location near a recreational reserve and regional aviation centre.

Noise from Omaka and its potential effects on residents is identified as a matter of concern by the airfield users and owners. The applicants acknowledge the regional and historical significance of Omaka Airfield, and are committed to ensure that development can proceed in a way which does not constrain existing and future operations at the airfield. For this reason, the plan change proposes noise mitigation controls as a matter of caution, even though the site is outside the modelled noise contours. In addition, the applicants are keen on developing an "aviation themed" subdivision which reflects the local context.

The applicants overall vision is to create a development which achieves the following:

- High level of residential amenity with green spaces, network of people-friendly streets and good connections.
- Mixed density development with the opportunity for medium to higher density housing and housing at varying price ranges.

[1] *Residential Land Availability Blenheim and Renwick: Update Report for period 1 July 2007 to 30 June 2010* Environmental Management Service Ltd, January 2011.

- Strong physical, visual and landscape connections with the Taylor River Reserve as a regional recreational area and as a potential off-road commuter network.
- Achieves best practice urban design in accordance with the NZ Urban Design Protocol and which reflects the site location and context.
- Development is well-integrated with Omaka and the Aviation Heritage Centre, as a major regional aviation centre. Examples of how this could be achieved include:
  - themed aviation street naming;
  - aviation-related sculptures and public art;
  - improved physical connections to Omaka along Aerodrome Road and Taylor River Reserve;
  - utilising the Heritage Centre café to service local residents;
  - provision for visitor accommodation for (e.g. "airtels") and residential accommodation which supports and strengthen the range of activities at Omaka (note – any visitor accommodation would be subject to standard planning rules of the Urban Residential Zones).

2 SITE AND SURROUNDS

The land to which this plan change relates comprises an area 21.4ha, located on New Renwick Road. The site is on the urban periphery, and is currently in grapes. The site is flat, and has no history of natural hazards including no flowing or stormwater issues.

The site location offers a number of design opportunities in terms of being bounded by roads on three sides and its proximity to Blenheim urban periphery. These advantages are recognised in the Growth Strategy.

Omaka Airfield is located approximately 450 metres to the south. The Taylor River is approximately 50 metres to the east of the site.

3 REASONS FOR THE PLAN CHANGE

Site history

Resource consent was sought in 2000 for residential development by the previous owners. This was declined on the basis of the proposal being a non-complying activity and not suitable for development under the existing Rural 3 Zone.

The property was developed in 2003 from open farm land into a viticulture block. Colonial Vineyard Ltd purchased the block of land in June 2004 and secured contracts to supply grapes to local wine companies. The land was purchased with the intention of further enhancing the viability of the vineyard. This was met with some resistance with the withdrawal of a resource consent to install 4 wind machines applied for in Feb 2008. This application was notified and then withdrawn on the basis of proximity to residential development, and potential for adverse effects on nearby residences.

In response to reverse sensitivity issues that the company has encountered in the management of the vineyard, the applicants have been in discussions with Council staff regularly to mitigate issues. The Growth Study provided further development opportunities and the site has since been publicly identified as being intended for residential development by the Council. The Growth Strategy was commissioned separately, and it confirms the site as being suitable for development as proposed in this plan change.

Suitability of the Site

The Growth Strategy is currently in draft form. Decisions are anticipated in mid-2011. The current version of the strategy has been through a thorough "design by inquiry" process. Leading practitioners were engaged to identify future growth pockets, and the process in formulating the draft strategy involved public workshops, and expert review.

The draft strategy identifies the application site as "W2", and as the preferred greenfields growth area for Blenheim, not only in terms of criteria, but also in terms of priority. The Growth Strategy recommends the site (W2) as being the first in the sequence of greenfields development.

Key features of the growth strategy as it relates to the application site as are as follows:

- Page 40 – the application site has few or no constraints in all criteria on a regional scale. There are no local scale infrastructure constraints. There are "some constraints" in social, environmental or employment considerations at a local scale.
- Colonial Vineyard is the preferred greenfields growth area under both growth scenarios presented in the strategy.
- Proximity to Taylor River Reserve and opportunity for recreational connections.
- Page 120: "*There is an opportunity for several growth pocket combinations all of which consistent of the pockets that are the most preferred, least constrained, and most affordable from Council's point of view, which are N1, N2, W2 [Colonial Vineyard], and E2 remainder....It is assumed that W2 is relatively easy to develop and therefore the first area to accommodate growth....N-a is more difficult to develop...*Other growth pockets are either less desirable or more constrained
- Page 127 – indicative layout for development on Colonial Vineyard. This has formed the basis for a concept plan proposed as part of this plan change.
- Aim for a gross residential density of 14 dwellings per ha, possible yield around 300 dwellings.
- Medium density housing (terraced) located around public amenities.
- Maximise the number of north-south streets and blocks for solar orientation.
- Connection to the future development area to the south.
- Appendix 1 sets out a detailed evaluation of each growth pocket.

Concept Plan

The Growth Strategy includes a concept plan for development on the site. Consultation with a senior participant in the process that led to this concept plan has confirmed as follows:

> *Please bear in mind that this is just an illustrative sketch. We have assumed 20m for all road reserves, but due to the highly connected nature of the movement network these can possibly be reduced in several positions*[2]

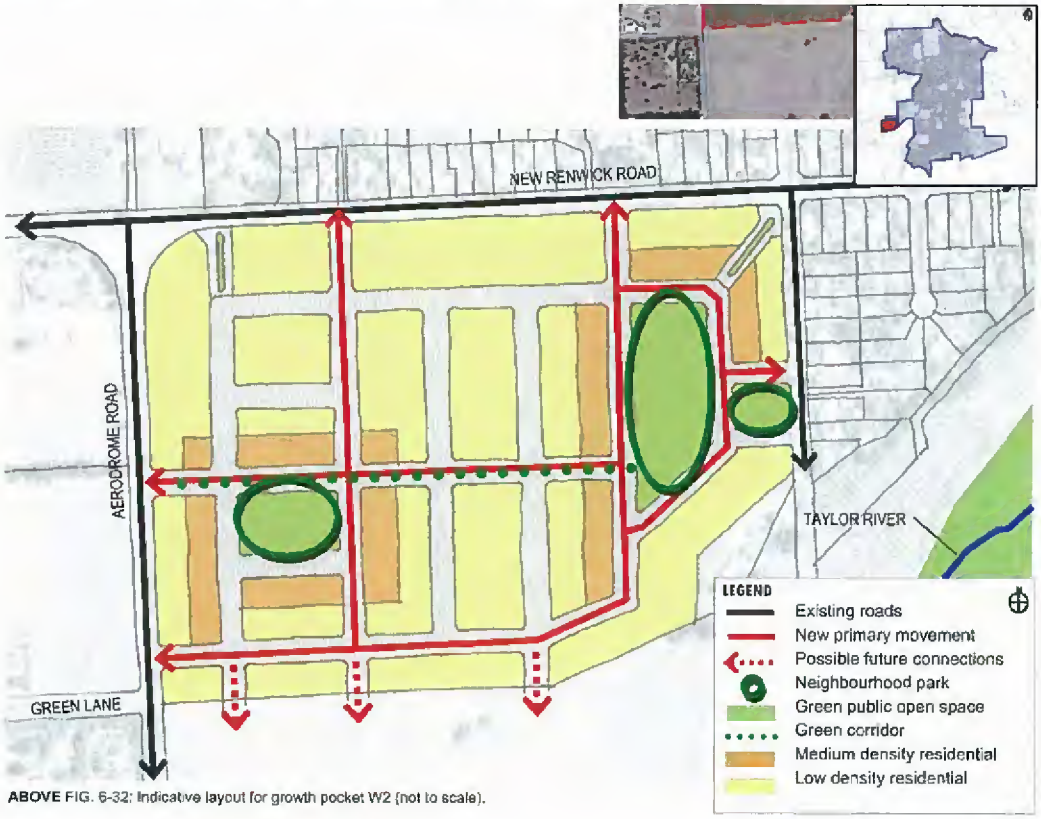
ViaStrada subsequently reviewed the Growth Strategy concept plan and have developed two possible layout options. The following concept plans do not form part of the plan change, but were developed to refine to the zoning and to ensure that development can be practically undertaken. These plans are not proposed as part of the plan change since final boundaries and layout are subject to change. The plans are intended to provide the general framework for subsequent subdivision and development.

[2] Wayne Bredemeijer, Urbanism Plus. Pers Comms 5 April 2011.

The concept plans adopt the urban growth principles in the Growth Strategy as well as those in the NZ Urban Design Protocol. The following changes were made:

Key Change From the Growth Strategy Concept plan	Benefits
New internal roading hierarchy Reduction in road access to existing roads	Minimises hard surfacing Reduces infrastructure costs Clearer road hierarchy Improves land use efficiency Safer roads Higher amenity
Different placement of open spaces / parks	Improved form and function
Introduction of green ways	Improved amenity Improved cycle/pedestrian links
Subdivision densities reconfigured around the open spaces	Retains a mix of densities Improved layout configuration
No road connections to the south	Responds to Growth Strategy submissions about concerns over further residential development to the south (closer to Omaka)

Figure 2a: Growth Strategy Concept Layout *(Produced by Urbanismplus. Reproduced with permission form Urbanismplus and Marlborough District Council)*



ABOVE FIG. 6-32: Indicative layout for growth pocket W2 (not to scale).

Statement of Proposal MARLBOROUGH GROWTH & DEVELOPMENT - MARLBOROUGH DISTRICT COUNCIL PAGE 127

Figure 2b: Growth Strategy Concept Perspective *(Produced by Urbanismplus. Reproduced with permission form Urbanismplus and Marlborough District Council)*

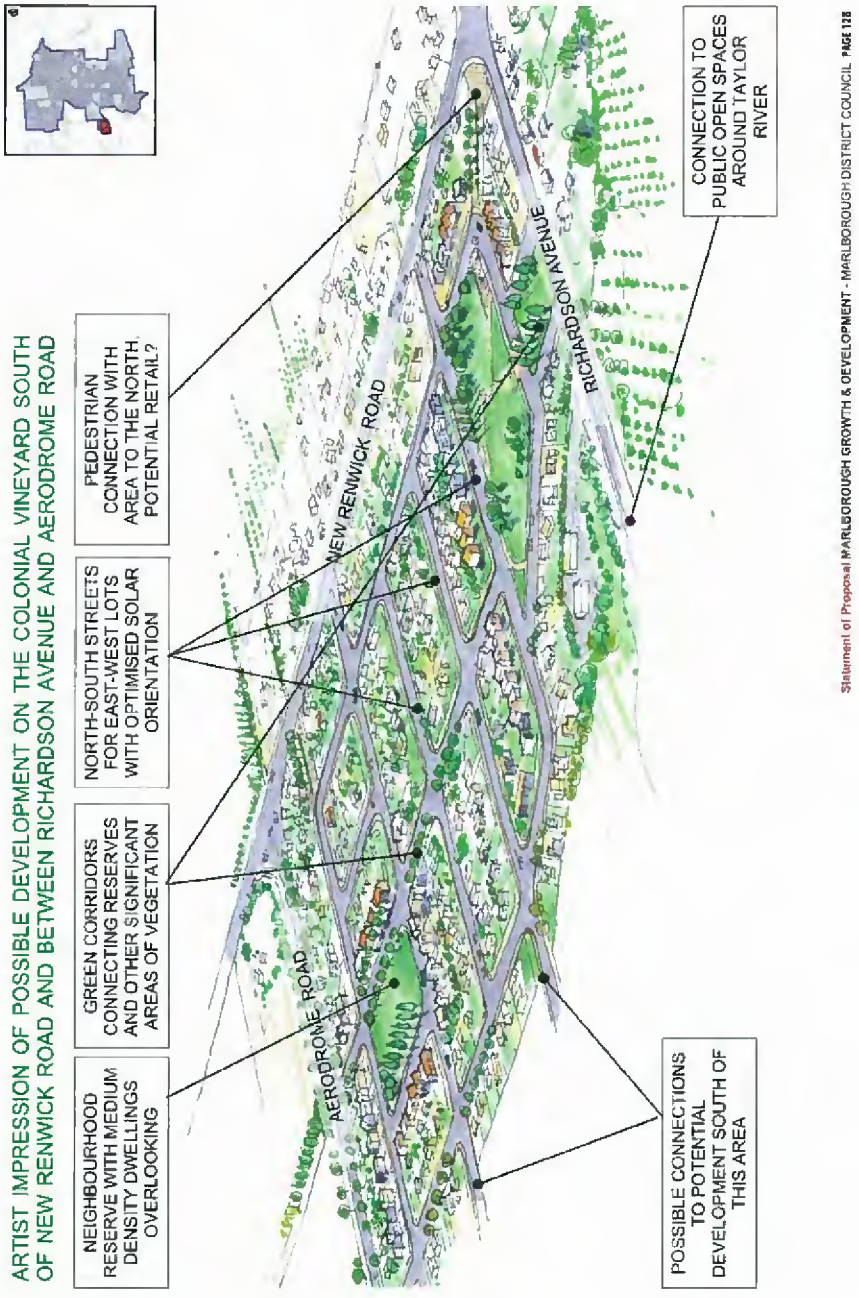


Figure 2c: Revised Development Concept Layout Option 1

Figure 2d: Revised Development Concept Layout Option 2

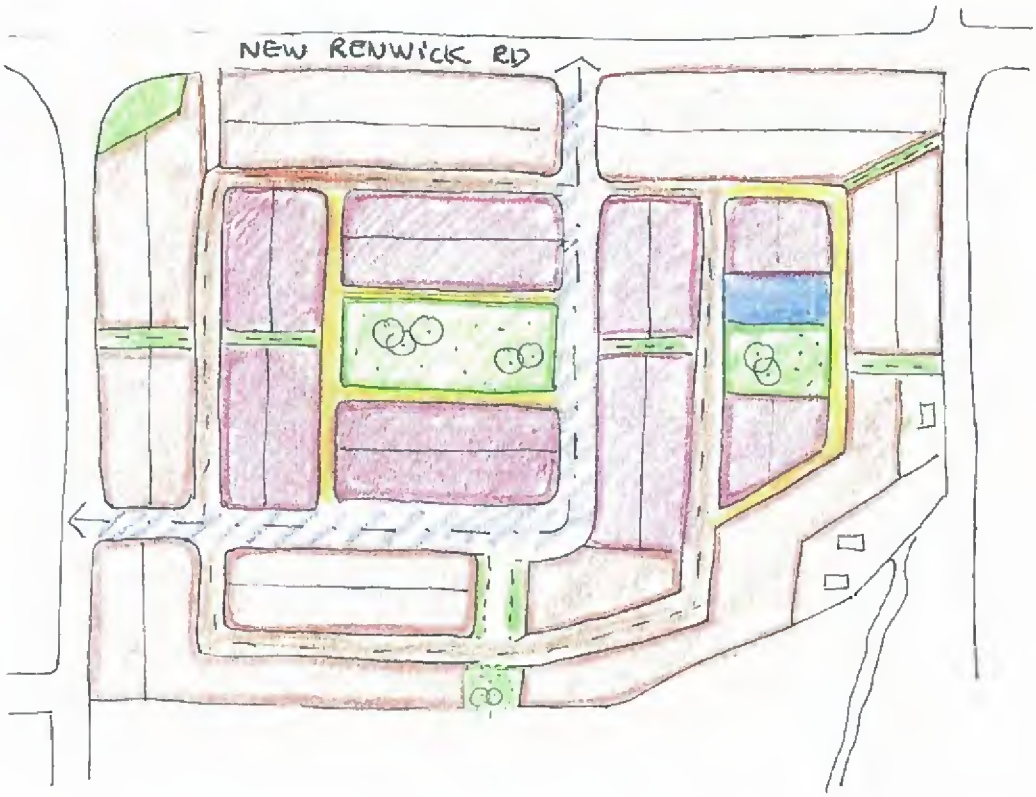


Figure 2e: Revised Development Concept Elevation Option 2 (not to scale, boundaries and layout is indicative only)

Growth Strategy Submissions

Submissions on the Draft Strategy were received in May and June 2010. A total of 306 submissions were received, and around 130 people presented their views to Council at hearings from July to August 2010.

In terms of the application site, there were submissions both for and against. Submissions opposing residential development on the application site were concerned about noise and potential impacts on the operation of aviation activities at Omaka.

Potential noise from Omaka is identified in the Growth Strategy and through submissions. In a submission on the Growth Strategy from the Marlborough Aero Club, a statement of evidence was provided by Marshall Day Acoustics which raises uncertainty over the 55dBA Outer Control Boundary prepared by Hegley Consultants. Figure 3 shows the extent of the modelled 554dBA boundary. It is clear that the application site is outside the noise control boundary, with the contours extending in the neighbouring only. In the event that, following review, the 55dBA noise boundary extends into the Colonial site, the proposed acoustic insulation requirements will more than adequately mitigate any noise effects. This is supported by Council's complaints records which records only one single complaint on file relating to aircraft noise from Omaka Airfield, and which indicates no actual effects arising from existing residences in close proximity to Omaka. To the applicant's knowledge, these houses also do not have acoustic insulation. This complaint related to a 24 hour "aerothon" in October 1999 with the complainant concerned about night-time sleep.

Figure 3: Omaka Airfield Noise Boundaries

OMAKA AIRFIELD NOISE CONTOURS AND AREA W2

Figure 1. Omaka Airfield Air Noise Boundary and Outer Control Boundary

Rhys Hegley
July 2008

The application site is well outside the identified 55dBA Outer Control noise boundary, which affects the neighbouring property to the south. Although the site is outside the noise boundary, the concerns of the submitters have been acknowledged within this plan change. The plan change has been formulated taking into account New Zealand Standard NZS 6805:1992 to ensure that reverse sensitivity noise effects on Omaka are avoided and mitigated, and that that residential development can occur in the vicinity of Omaka in a way which mitigates any potential noise effects on residents. **There is no proposal in this plan change to relocate Omaka nor to reduce or in any way constrain any existing or future operations.** On the contrary, the plan change seeks to avoid any constraints on Omaka Airfield, and provides for on-going present day and future operations. This is achieved by adopting the acoustic insulation requirement of the WARMP for the whole site, as set out in Appendix M.

Growth strategy summary:

- The growth strategy has been through a thorough analysis process as well as a public consultation process.
- Submissions have been received both in support of and opposing development on the application site.
- Submissions in opposition raise concerns around noise.
- The proposed plan change takes into account these submissions and proposes effective noise mitigation.

Land Availability Report – Need to rezone

More recently, Council received an updated report (*ibid*) on land availability, which identified an immediate need to rezone for more residential growth. While the growth strategy identifies the suitability of the Colonial Vineyard site for rezoning, the separate land report identifies the need to rezone.

The applicants also recognise the lack of affordable housing in the Blenheim market, and intend to offer a development which meets this need rather than the higher-end market which is over-represented in Blenheim.

Timing

A decision on the final growth strategy was originally due in October 2010 following the hearing of submissions. However this was deferred to November 2010, then deferred again to early 2011. A decision on the final strategy has since been deferred again to the middle of 2011. A further deferral to the end of 2011 could be possible to consider an alternative growth pocket on Battys Road which did not form part of the strategy, and which would be required to undergo a public consultation process before any decision could be made.

The growth strategy will feed into the review of the Wairau Awatere and Sounds Plans, with a single planning document due for notification late 2011 or 2012. However the timing for the "one plan" is also uncertain. To further complicate this, even though Colonial Vineyard has been identified through a public consultation process as the preferred growth pocket, there is no guarantee that the "one plan" will implement the recommended rezoning.

Taken together, there is still considerable uncertainty over when, and if, Council will rezone the subject site. A proposal for an alternative site at Battys Road has only served to create further uncertainty.

Given the recent land availability report identifying the need to provide for future growth, the applicants have decided to proactively advance rezoning by way of a private plan change.

4 CONSULTATION

The statutory plan change process is set out in the First Schedule of the RMA. Consultation relating to this plan change includes the consultation process associated with the Growth Strategy, and separate consultation undertaken by the applicant's

Consultation undertaken as part of the growth strategy is directly relevant to this plan change process, particularly since this involved expert and stakeholder workshops as well as a public consultation process.

Table 1: Consultation Summary

When consultation was undertaken	Party consulted	Who undertook consultation	Form of consultation	Consultation outcome
2003	New Zealand Aviation Museum (Omaka)	Previous landowners	Meetings and letters	Letter dated 13 January 2003 (Appendix 2) advising the Aviation Museum would support any resource consents to develop Colonial Vineyard
July 2009	Mark Wheeler, MDC	Applicant	Meeting	MDC services manager advised of intention to rezone. No infrastructure issues identified.
July 2009	Jane Orphan and Brian Greenall, Omaka Heritage Centre	Applicant	meeting	Heritage Centre advised of the proposed rezoning
August 2010	Omaka Aero Club	Applicant	Meetings	Both parties willing to work

When consultation was undertaken	Party consulted	Who undertook consultation	Form of consultation	Consultation outcome
and February 2011	representatives			to find a solution. There is a market and demand for residences close to the airfield.
November 2010 and February 2011	Adjoining neighbour to the south (Lot 3 DP 333071)	Applicant and advisors	Meetings	Neighbouring owner is informed and aware of the applicants' intentions.
3 August 2009	Public	Growth Strategy consultants	Public meeting, Renwick	Public feedback
4 August 2009	Public	MDC	Public meeting, Wairau Valley township	Public feedback
5 August 2009	Public	Growth Strategy consultants	Public meeting, Rarangi, Spring Creek, Grovetown and Tuamarina	Public feedback
10 August 2009	Public	Growth Strategy consultants	Public meeting Seddon and Ward	Public feedback
4 August 2009	Developers	Growth Strategy consultants	Design forum	Spatial layout and growth options
4 August 2009	Planning and urban development professionals	Growth Strategy consultants	Design forum	Spatial layout and growth options
5 August 2009	Community organisations	Growth Strategy consultants	Design forum	Spatial layout and growth options
5 August 2009	Council elected members and staff	Growth Strategy consultants	Design forum	Spatial layout and growth options and assessment of constraints
October 2009	Public	MDC	Public feedback sessions	Public feedback
May and June 2010	Public	MDC	Public submissions on draft strategy	Submissions on the draft strategy
July-August 2010	Public	MDC	Public hearings	Presentation of submissions

When consultation was undertaken	Party consulted	Who undertook consultation	Form of consultation	Consultation outcome
2009-2011	Various Council staff and Marlborough Roads	Growth Strategy Consultants	Meetings	Refinement of options and assessment of constraints
2009-2011	Various Council staff and Marlborough Roads	Applicant	Meetings & direct correspondence	Refinement of options and assessment of constraints
March 2011	Urbanism Plus	ViaStrada	Phone call and email correspondence over the Growth Strategy Concept layout plan	Confirmation of the urban design principles and options to modify the Growth Strategy concept plan
May 2011	Minister for the Environment; Tangata Whenua; Omaka Aero Club; adjoining neighbour	Applicant	Letter advising of the plan change and inviting feedback and comment during	Opportunity for further modification as part of the statutory process.

SECTION 2: THE PROPOSED CHANGES (REFER APPENDIX 1)

RATIONALE

The core rationale behind the proposed changes is summarised as follows:

- Adoption of the Growth Strategy findings
- Adherence to urban design principles
- Adoption of the road design standards contained within New Zealand Standard 4404:2010
- Adoption of the WARMP existing zoning
- Mitigation / avoidance of reverse sensitivity noise effects on Omaka Airfield

The changes are set out in Appendix 1.

SECTION 3: PLAN CHANGE ASSESSMENT

URBAN DESIGN ASSESSMENT

The plan change and concept layout has been designed on the basis of the following NZ Urban Design Protocol urban design principles. These principles are also reflected in the Growth Strategy in varying forms and degrees.

Context: The plan change and zoning reflects the local site context, proximity to Omaka Airfield with appropriate management tools, proximity to the Taylor River recreation area, corner road location, and location on the urban periphery.

Character: The plan change and concept layout structure plan is intended to result in a development which contains inherent character, principally achieved through spatial roading layout, greenways and connections. Local character is also reflected in proposed noise controls, which recognise Omaka as an important regional facility of strategic and historical significance.

Choice: Choice is provided by a mix of densities, utilising the existing zoning of the WARMP. The target market also extends the housing choice available in Blenheim and provides additional location choice for people wishing to reside in Blenheim.

Connections: The concept plan and site location allows for incorporates high connectivity. This is not limited to vehicle connectivity, but also includes walking and cycling links, and shared residential roads. An advantage of this site is the ability for connections to Taylor River Reserve.

Creativity: Is provided for through the design parameters of the WARMP.

Custodianship: The applicants have applied "custodianship" primarily through the concept layout, which will create an attractive and functional development for future residents and visitors. The noise controls also recognise the applicant's sense of custodianship in providing for the existing and future operation of Omaka Airfield.

Collaboration: Finally, this plan change has been the result of a collaborative process with a number of key stakeholders, via the applicants' own process and also via the Growth Strategy process: Council staff and elected members; growth strategy technical advisors and consultants; neighbouring landowners; and Omaka Aero Club. While agreement has not been achieved with all parties, the process of collaboration has ensured key stakeholders have remained informed, and feedback has been taken into account in the plan change.

ROADING AND ACCESS

The Growth Strategy does not identify any constraints in terms of roading or access, and concludes that development in this area can be connected to existing networks without upgrades of infrastructure[3].

Particular attention has been given to connections with existing roads, and to the internal roading layout which will ultimately provide the backbone of the development, and which will dictate the underlying form and function of development. It is proposed to utilise the roading standards within NZS 4404:2010 as an alternative to the Council Plan standards, since NZS 4404 provides greater flexibility of design. Provision for an internal roading hierarchy based on NZS 4404 is proposed which has the following benefits:

- Minimises hard surfacing.
- Maximises efficient use of the land resource.
- Provides a network for multi-modal interconnections.
- Creates residential slow roads with improved local safety and amenity.
- Encourages alternatives to cars as primary modes of transport.

LANDSCAPE ASSESSMENT

The growth strategy concept of local parks and greenways has been adopted by the applicants, and improved upon in terms of spatial layout. Green spaces are retained, in addition to a central green-way and green pedestrian and cycle connections. The green space configuration has been adapted from the growth strategy indicative layout.

STORMWATER, WASTEWATER AND WATER

The growth strategy included a regional-scale evaluation of servicing constraints. No constraints were identified on the application site, and the growth strategy concluded that no infrastructure upgrades are required.

The site is not prone to natural hazards and services can be easily engineered in accordance with Council standards.

POWER AND TELECOMMUNICATION ASSESSMENT

Power and telephone services can readily be provided to the site.

NATURAL HAZARDS

The site is not at risk from any known natural hazards, including fault lines, liquefaction, inundation or subsidence.

[3] *Growth Strategy Summary for Public Consultation*: page 14

SECTION 4: SECTION 32 ANALYSIS

Section 32 of the RMA requires a mandatory evaluation of –

(a) The extent to which each objective is the most appropriate way to achieve the purpose of this Act; and

(b) Whether, having regard to their efficiency and effectiveness, the policies, rules, or other methods are the most appropriate for achieving the objectives.

The section 32 analysis must take into account -

(a) The benefits and costs of policies, rules, or other methods; and

(b) The risk of acting or not acting if there is uncertain or insufficient information about the subject matter of the policies, rules, or other methods.

Most Appropriate Means and Methods

An evaluation as to whether the objectives are the most appropriate means of achieving the purpose of the Act, are outlined in Table 2.

The South Marlborough Urban Growth Strategy is also a key part of the Section 32 analysis relating to this plan change in terms of the following:

a) Evaluation of Alternatives.
b) Efficiency and Effectiveness.
c) Benefits and Costs.
d) Risk of Acting or Not Acting.
e) Appropriateness of the methods in terms of achieving the objectives.

Table 2: Appropriateness of Each Objective in Achieving the Purpose of the Act

Objective	Benefits	Costs	Efficiency	Effectiveness
Chapter 11 Urban Environments proposed changes	• Better provision for urban growth. • Implements growth strategy and land availability report.	Change of rural land to residential land.	Proposed changes provide for greater flexibility and more efficient land development.	Proposed changes will be effective in achieving the plan change objectives.
Chapter 19 Land Transport proposed changes	• Implements NZS 4404:2010. • Provides for more flexible road design and more efficient layout. • Reduces hard surfaces. • Increases residential amenity through wider choice of roading types.	None	Increased efficiency in land development and greater land utilization.	Proposed changes will be effective in achieving the plan change objectives.
Chapter 23 Subdivision and development (new policy)	• Implements NZS 4404:2010. • Provides for more flexible subdivision design and more efficient layout. • Aligns development with urban design principles.	None	Provides for increased efficiency in land development, better land utilization, more efficient and functional layout.	Proposed changes will be effective in achieving the plan change objectives.

Changes to chapter 29 and Appendix G do not contain any new objectives or changes to existing objectives.

Table 3: Appropriateness of Policies, Rules and Other Methods for Achieving Objectives (also refer South Marlborough Growth Strategy)

Method	Benefits	Costs	Efficiency	Effectiveness
Proposed changes to explanation; policies, rules and other methods.	• Better provision for urban growth. • Alignment with urban design principles. • Implements growth strategy and land availability report. • Implements NZS 4404:2010. • Provides for more flexible road design and more efficient layout. • Reduces hard surfaces. • Increases residential amenity through wider choice of roading types. • Recognises Omaka airfield as regional facility and avoids reverse sensitivity effects.	Cost of the plan change	Changes will result in more efficient subdivision and consent processes.	Amendments will be effective in achieving the plan change objectives.
Proposed zoning	• Provides for immediate to short term further growth and residential demand. • Wider range of living and location choices. • Implements urban design principles. • Enables continued operation of Omaka and avoids reverse sensitivity effects. • Improved connections to Taylor River Reserve	Replacement of rural land use with residential land use.	More efficient use of land, resources and infrastructure.	Amendments will be effective in achieving the plan change objectives.
Acoustic controls	• Enables continued operation of existing and future Omaka Airfield activities • Provides for residential development at the location identified.	• Estimated 2% increase in building costs to achieve acoustic insulation. • Possible reduction in choice of exterior cladding.	An efficient resource management method (simple, certain, monitorable and enforceable). Commonly adopted in other districts.	Acoustic insulation standards in other centres have proven to be effective. Example: Golf Haven Way, near Nelson Airport.

Alternative Means - Anticipated Outcomes, Costs and Benefits

The following alternative means for implementing the applicant's intentions have been assessed:

Rezoning alternatives

i) Do nothing
ii) Apply for resource consent(s)
iii) Initiate a private plan change
iv) Wait for the final growth strategy
v) Wait for a Council-initiated plan change or the single resource management plan

Noise mitigation alternatives

vi) Apply a noise contour overlay.
vii) Impose acoustic insulation requirements.
viii) Reduce the extent of development.
ix) Limit the type of activity to non-residential.
x) No specific noise controls.

The costs and benefits of the above methods are as follows:

Rezoning Alternatives

i) Do nothing

Implications: Current Rural 3 zoning is retained.

Benefits:
- Retention of productive rural land.

Costs:
- An identified need for residential growth pockets is deferred.
- Risk of insufficient residential land to meet future growth needs for the main market (affordable and middle income).
- Growth strategy recommendations are not implemented.
- Opportunity cost of not developing the site for "higher and better use".

ii) Resource Consent(s) for subdivision

Implications: Applications are made incrementally for subdivision (as non-complying activities).

Benefits: None.

Costs:
- Resource consents costs for the applicant and administration costs for Council.
- Incremental development rather than integrated and structured development.
- Difficulty and unlikelihood of development of the site under non-complying status (previous application was declined).

- Costs to community and submitters in submitting on multiple development proposals.
- Added costs of servicing through incremental developments rather than in a strategically planned way.

iii) Proposed Plan Change (as proposed)

Implications: The zoning changes will allow the development to proceed as a controlled subdivision in most cases, with residential houses built as permitted activities.

Benefits:
- Efficient use of land.
- Integrated, structured and planned development.
- Certainty for future development.
- Mitigation measures to ensure on-going viability of Omaka airfield.
- Opportunity to implement best-practice urban design principles.
- Best achieves the purpose of the RMA and meets the objectives of the NRMP.
- Allows for forward planning of infrastructure and services in the LTCCP.
- Implements the growth strategy and meets immediate to short-term demand for residential growth.

Costs: Cost of the plan change, cost to process and cost to submit on the plan change.

iv) Wait for the final growth strategy decisions

Implications: Private plan change is deferred until the final growth strategy is released.

Benefits: Certainty in terms of the final growth strategy confirmed growth options.

Costs:
- Uncertainty of timing of decisions and timing of Council rezoning (if any).
- May result in less desirable spatial layout.
- Deferral of identified need for residential growth areas.

v) Council Initiated Plan Change

Implications: Existing zoning remains until such time as Council initiates a plan change.

Benefits:
- No plan change costs for the requestors.
- Rural character and productive use is retained in the short term.

Costs:
- Considerable uncertainty of timing.
- Community costs of the plan change process.
- Outcome may be less desirable than what is proposed.
- Deferral of identified need for residential growth areas.

Noise reverse sensitivity (Omaka) mitigation alternatives

vi) Apply a noise contour overlay.

Implications: Control of activities within the noise contour.

Benefits:
- Provides greater certainty.
- Allows controls to avoid / removes reverse sensitivity effects on Omaka Airfield.

Costs:
- Noise modelling to date indicates the noise boundary does not encroach onto the site.
- May result in excessive or unnecessary controls.
- Additional costs to meet any controls.

Note – a noise contour overlay could be readily applied if future noise modelling shows the 55dBA Outer Control area extends into the application site. The effect of the overlay would be to require noise insulation within the overlay i.e. exactly the same as proposed. Effective mitigation is already proposed without the overlay, by way of acoustic insulation required to WARMP standards across the entire site.

vii) Impose acoustic insulation requirements (as proposed).

Implications: Noise sensitive activities required to achieve meet acoustic insulation standards.

Benefits:
- Insulation standards achieve certainty.
- Proven to be effective (reference – Golf Haven Way, Nelson)
- Avoids / mitigates reverse sensitivity effects on Omaka Airfield

Costs:
- Additional cost to achieve insulation standards (estimated around 2% additional building costs).
- Noise modelling to date has not shown the need for acoustic insulation.

viii) Reduce the extent of development.

Implications: Extent of zoning is reduced.

Benefits:
- Avoids perceived reverse sensitivity effects on Omaka Airfield.

Costs:
- Reduced ability to meet Blenheim's growth needs.
- Less efficient use of the site.
- Excessively restrictive based on noise modelling to date and effective noise mitigation available through insulation standards.

ix) Limit the type of activity to non-residential.

Implications:	Activities within the site are limited.	
Benefits:	-	Avoids perceived reverse sensitivity effects on Omaka Airfield.
Costs:	-	Reduced ability to meet Blenheim's growth needs.
	-	Less efficient use of the site.
	-	Unlikely to be economically viable.
	-	Excessively restrictive based on noise modelling to date and effective noise mitigation available through insulation standards.

x) No specific noise controls.

Implications:	No noise controls.	
Benefits:	-	No additional housing development costs.
	-	In accordance with the noise modelling to date.
Costs:	-	Does not address concerns from Omaka airfield owners and users.

Alternative methods – summary:

After assessing the respective merits of the alternative methods, the best alternative for implementing the proposal is by way of a private plan change to the WARMP as proposed.

Risk of Acting of Not Acting

Section 32 requires and evaluation to take into account the risk of acting or not acting, if there is uncertain or insufficient information about the subject matter of the policies, rules, or other methods.

For the Colonial Vineyard site, there is no uncertain or insufficient information. The growth strategy process has very clearly identified Colonial Vineyard as not only suitable for residential growth, but also as the preferred site for first development ahead of other sites.

Noise from Omaka airfield has been investigated, and noise boundaries modelled. Submissions to the Growth Strategy have raised uncertainty over the inputs into the noise modelling. However at the time of preparing this plan change no alternative noise modelling has been put forward or undertaken. Any uncertainty has been avoided by the applicants volunteering acoustic insulation standard over the entire site, despite noise modelling showing the site to be outside the noised effects boundary.

Alternative locations

Section 32 does not expressly require an analysis of alternative locations. Accordingly, any landowner is entitled to apply, as in this case, for a site-specific plan change.

The level of site analysis undertaken as part of the growth strategy included a detailed analysis of various alternative growth pockets. This is set out in Appendix 1 of the growth strategy, which also

applies a "traffic light" analysis for ease of presenting the results. The results of each separate criteria have been collated in table 4. In undertaking this exercise, table 4 also differentiates between the critical disciplines and the desirable disciplines. This level of analysis was not undertaken as part of the growth strategy, but has been undertaken as part of the plan change in order to give appropriate weighting to those disciplines critical to any development occurring on the site at all.

Table 4: Growth Strategy Detailed Evaluation of Alternatives by Discipline

Key:

	Red indicates Negative attributes
	Orange indicates Neutral attributes
	Green indicates Positive attributes

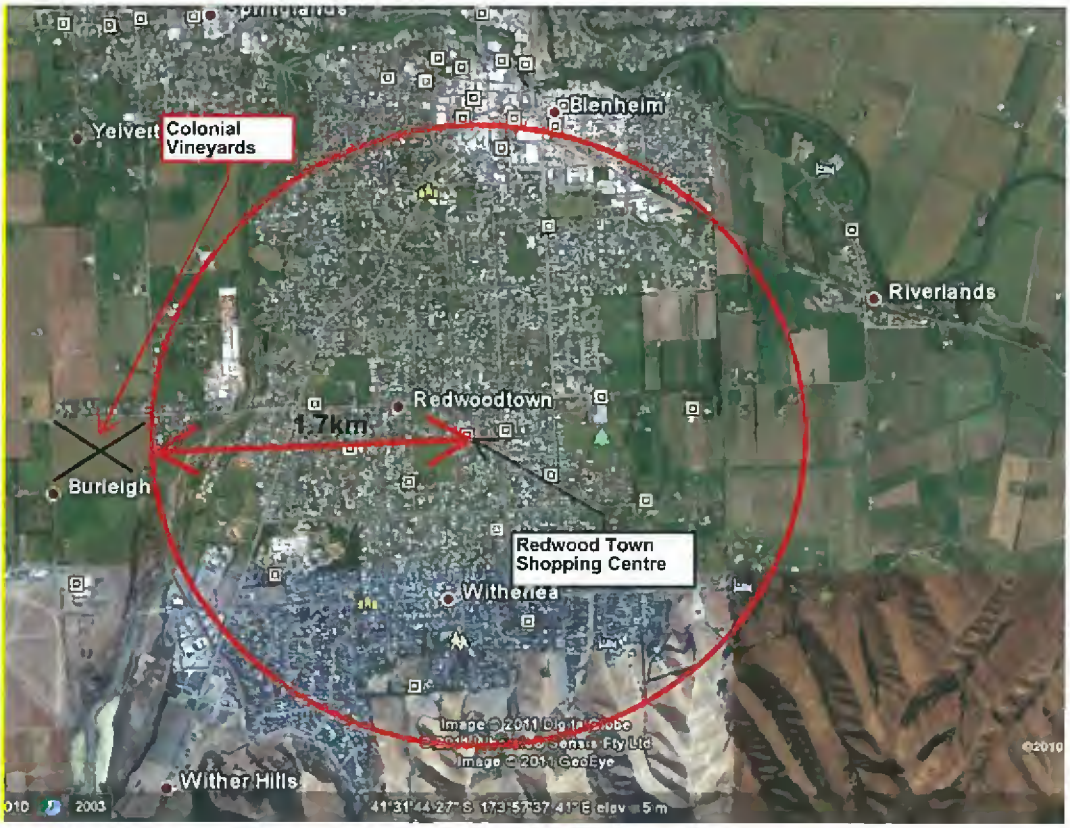
Collated and aggregated from Appendix 1, South Marlborough Draft Strategy May 2010

Discipline	**Growth Pocket**												
	N1	N2	NW	W1	**W2 (colonial)**	E1	E2	SE1	SE2	KV	NE	RC	DS
Critical													
Soils													
Infrastructure													
Stormwater													
Transport													
Desirable													
Community													
Employment													
Recreation													
Activity Centre													
Ecology													
Landscape													

The Colonial Vineyard site scores highest in the critical disciplines.

In the desirable disciplines, there are 2 negative disciplines being "activity centre" and "landscape". Colonial Vineyard scored low in respect of activity centres because of its distance from the nearest shopping area (1.7km to Redwoodtown). While closer proximity might be desirable, the Colonial Vineyard site is not dissimilar in distance from existing residential development. (Refer Figure 4).

Figure 4: Proximity to Redwoodtown Shopping Area



Landscape scored negative because of the absence of any existing natural landscape features on the site. However, current land use does contain landscape values with viticulture production and an olive tree boundary. The plan change presents an opportunity to enhance landscape characteristics of the site, and to also create connections with the Taylor River Reserve.

W2 Alternative Sites to Colonial Vineyard

It is important that no other sites in the Burleigh area have been analysed in the level of detail that the Colonial Vineyard Site has. The applicants are aware of a proposal on Batty's Road in respect of promoting an alternative W2 growth pocket to Colonial Vineyard. A presentation was made to Council in April 2011 for a conceptual rezoning of this alternative site. In terms of statutory process, the following considerations are relevant:

a) The Battys Road proposal was presented to Council in concept form only. It has not been through any analysis in terms of land suitability.
b) The Battys Rd proposal was not part of the Growth Strategy analysis.
c) The proposal has not been through a public consultation process, as Colonial Vineyard has.
d) Supporting documents for the Battys Road proposal were presented to Council. These carry no statutory weight, and appear to have been solicited to support the alternative site.

e) The proposal is not a plan change, rather it is an opportunistic concept of the landowners without any level of detailed analysis.

The alternative proposal for Battys Rd has no statutory weight. The RMA does not require any consideration of alternative sites, and the Colonial Vineyard plan change can be processed without reference to the Battys Rd site. Notwithstanding this, since a concept has been put forward, an analysis has been made of the two sites as follows, for comparative purposes only. This analysis is not required as part of the statutory pan change process:

Table 5: W2A Alternative Site

Battys Rd W2A – Landowners Assessment	**Colonial Vineyard W2 Response**
Utilises land suitable for residential development	Colonial Vineyard has an advantage of being better suited: greater amenity and close proximity to Taylor River reserve; connectivity to proposed reserves and recreational and off-road commuting opportunities; corner location giving more efficient connectivity. Site W2A has the disadvantage of very real reverse sensitivity issues with neighbouring Rural 3 land. Colonial Vineyard is buffered by physical roads.
Does not affect Omaka Airfield	Colonial Vineyard proposal incorporates controls to ensure no effect on Omaka
Opens large tracts of open land	W2A has a disadvantage – it removes a larger area (potentially 70ha) of Rural 3 land than Colonial Vineyard. Significantly, Aerodrome Road also provides a clear physical boundary to Colonial Vineyard against future "residential creep". For site W2A, there is no such boundary, and pressure for further ad-hoc residential expansion ("residential creep") out onto versatile Rural 3 land adjoining W2A is almost certain.
Addresses traffic issues with Battys Road	Traffic issues can be addressed without the need to rezone. No traffic impact assessment undertaken - additional traffic on Battys Road from potentially 70ha may require additional road and intersection upgrades.
Serviced by existing utilities	Assumed, no detailed analysis undertaken. Same as for Colonial Vineyard – W2A has no advantage
Opportunity to underground power along Battys Road	Undergrounding could occur without rezoning
Good Drainage	Assumed, no detailed analysis undertaken. Battys Road is lower than Colonial Vineyard.
Soils geotechnically stable	Assumed, no detailed analysis undertaken. Same as for Colonial Vineyard – W2A has no advantage.

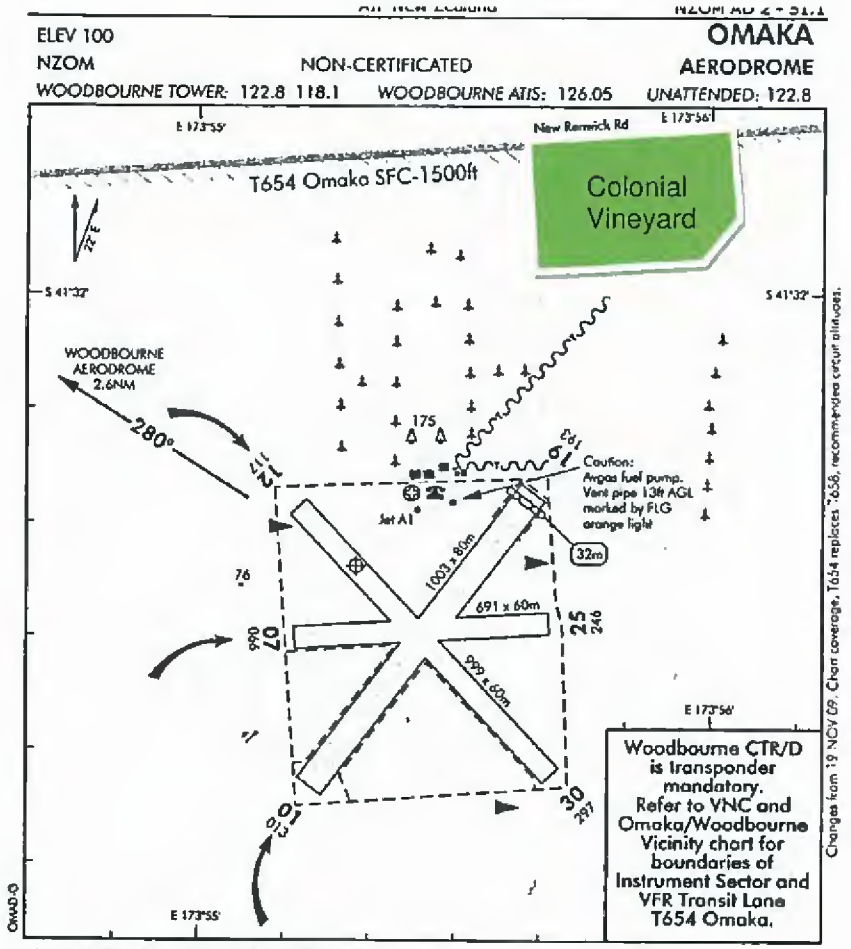
Outside Flood Hazard Area	Assumed, no detailed analysis undertaken. Lower than Colonial Vineyard and within the local drainage catchment area.
Connectivity to main arterial routes	Assumed, no detailed analysis undertaken of impact of additional traffic on Battys road on transport network. Colonial Vineyard has better connectivity due to corner site location.

Table 6: W2A Omaka Airfield Assessment

Battys Rd W2A – Landowners Assessment	**Colonial Vineyard W2 Response**
Further distance from Omaka	Increased distance is negligible (a further 120m at the nearest point). Any difference in noise has not been analysed and is not supported by any noise modeling. Council's modeling shows Colonial Vineyard to be outside the Noise Control Overlay. Plan change also proposes a blanket noise insulation requirement over the whole site.
Not "directly in the flight path as is Colonial Vineyard site"	Misleading and inaccurate: • Extended centre line of runway 01 is shown in Figure 5 and passes near the south east corner of the applicant site. • AIP arrival and departure procedures (figure 6) require VFR fights to remain within the VFR Transit Lane, bounded by the New Renwick Road, unless clearance is obtained from Woodbourne tower. • Remaining within the transit lane requires an early turn (right hand turn departing 01 or left hand turn approaching 19), which avoids flying over Colonial Vineyard. • Runway 01 / 19 is not aligned with the prevailing wind. • Few flights will be directly overhead the Colonial Vineyard site. • Flights arriving or departing from runway 01 / 19 and cleared through the Controlled Airspace are equally likely to be flying directly overhead the Battys Road site. • Under the proposed plan change, there will be no need to alter the current runway configuration in any way. In addition, the circuit pattern (refer Figure 6) takes the majority of aircraft over the Witherlea and Taylor Pass residential areas, and will avoid aircraft overflying Colonial Vineyard all together. There is no evidence of aircraft operations over existing and recent residential developments affecting the ability of Omaka to operate.
Not desirable to relocate operations out of Omaka to Woodbourne *Not suitable to combine recreational and general aviation at Woodbourne*	**Relocation or closure of Omaka is not suggested nor proposed by Colonial Vineyard.** The plan change explicitly recognizes the regional significance of Omaka, and seeks to retain this, through changes which will effectively avoid reverse sensitivity effects on Omaka operations, both now and into the future.

Figure 5: Omaka Runway 01 /19 Extended Centreline

Figure 6A: Omaka Airfield Vectors



1. Circuit: RWY 30, 25, 19 — Left hand
   RWY 01, 07, 12 — Right hand
2. Recommended circuit altitudes: all runways 1000ft AMSL (if joining overhead, join at 1500ft AMSL).
3. **REQUIREMENT:** Aircraft operating within the Omaka circuit are to restrict their operations to within Omaka VFR Transit Lane (T654, refer Omaka/Woodbourne Vicinity chart) unless otherwise cleared by Woodbourne Tower. By night, when Woodbourne Tower is on watch, an ATC clearance is required for all operations.
4. **CAUTION:** Omaka aerodrome is located 1.3NM south of the Woodbourne RWY 06 departure track and RWY 24 final approach track. Pilots should operate the aircraft transponder mode A/C if fitted.
5. Gliding operations may take place particularly during weekends and public holidays.
6. Sheep grazing late evening until early morning.
7. Take-off and landing operations confined to promulgated runways, unless prior arrangements made with aerodrome operator.
8. **CAUTION:** Locally based operators may be using vectors other than published runways.

Effective 18 NOV 10

S 41 32 24 E 173 55 19*

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OMAKA AERODROME

Figure 6B: Omaka Airfield Procedures

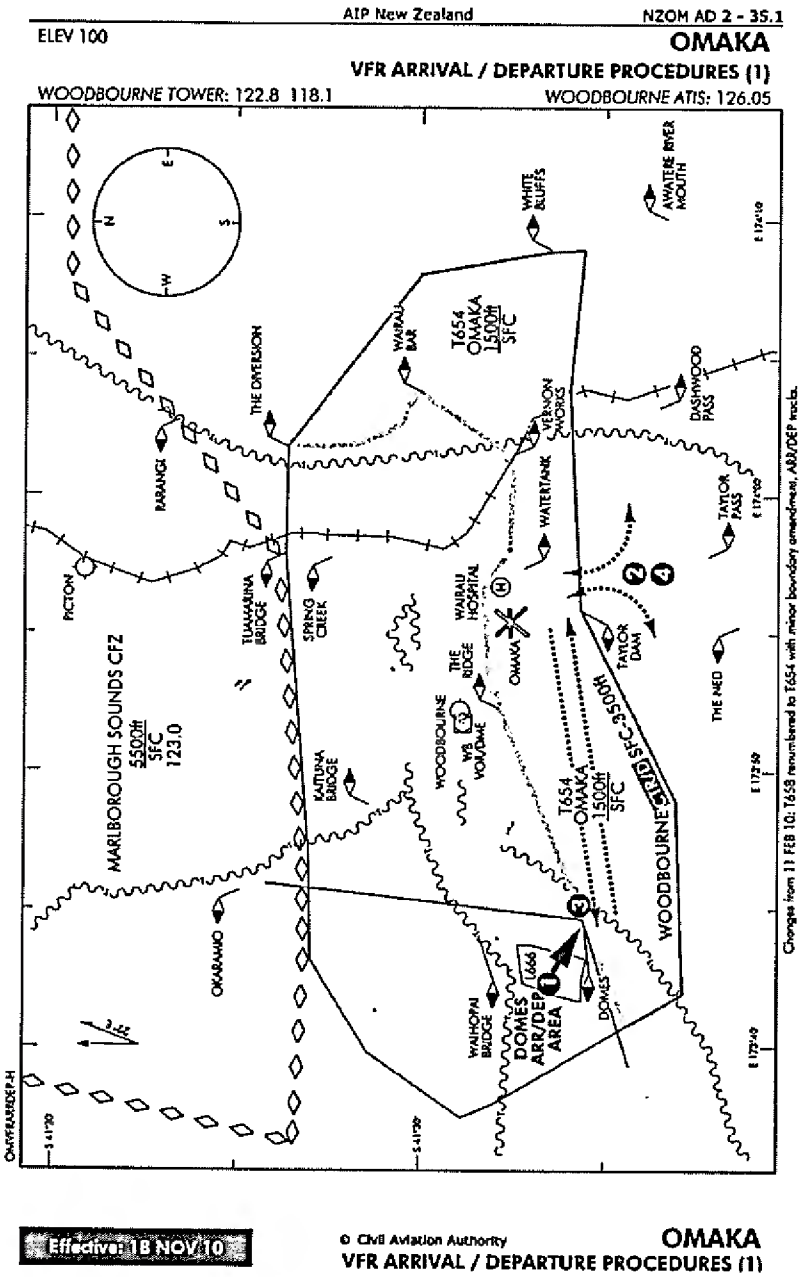

Figure 6C: Omaka Airfield Procedures

ELEV 100 **OMAKA**

NZOM **VFR ARRIVAL/DEPARTURE PROCEDURES (2)**

WOODBOURNE TOWER: 122.8 118.1 WOODBOURNE ATIS: 126.05

REFER TO DIAGRAM ON PREVIOUS PAGE AND VISUAL NAVIGATION CHARTS.

For VFR flights wanting to transit the Woodbourne CTR/D during hours of watch of Woodbourne Tower and landing at Omaka in the Omaka VFR Transit Lane T654; and

For VFR flights wanting to transit the Woodbourne CTR/D and having departed Omaka in the Omaka VFR Transit Lane NZT654.

General

Listen to ATIS for conditions at Woodbourne aerodrome (2.6NM west of Omaka).

More direct plain language clearances may be issued to aircraft transiting the Woodbourne CTR/D during periods of low traffic.

Aircraft entering or leaving the CTR to the north — caution operations at Picton AD and within the Marlborough Sounds Common Frequency Zone (123.0 MHz).

Arrival Procedures

During daylight hours operate in Omaka VFR Transit Lane NZT654, or obtain a clearance from Woodbourne Tower. If a clearance is not available remain outside Woodbourne CTR/D. The following arrival procedures may be issued by Woodbourne Tower for use in the Woodbourne CTR/D:

- Domes Arrival: Enter CTR via Domes ARR/DEP area, track via Domes to Omaka at 2500ft or below.
- Taylor Arrival: Enter CTR via Taylor Dam to Omaka at 2500ft or below.

Communications Failure

Outside Woodbourne CTR/D or in the Omaka VFR Transit Lane NZT654 — during daylight hours remain outside the Woodbourne CTR/D or continue to operate in the Omaka VFR Transit Lane T654.

Within Woodbourne CTR/D — follow assigned clearance, **Squawk 7600.**

Departure Procedures

During daylight hours remain in Omaka VFR transit lane T654, or obtain clearance from Woodbourne Tower prior to entering controlled airspace.

The following departure procedures may be issued by Woodbourne Tower for use in the Woodbourne CTR/D:

- Domes Departure: Track via Domes and the Domes ARR/DEP area until clear of CTR/D at 2500ft or below.
- Taylor Departure: Track via Taylor Dam until clear of CTR/D at 2500ft or below.

Communications Failure

Within the Omaka VFR Transit Lane NZT654 — during daylight hours continue to operate in the Omaka VFR Transit Lane NZT654.

Within Woodbourne CTR/D — follow assigned clearance, **Squawk 7600.**

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To summarise the suggested alternative site W2A:

- Many of the purported advantages of site W2A (Battys Road) are not advantages.
- Some of the purported opportunities could occur without rezoning the site.
- The suggested effect of Colonial Vineyard rezoning resulting in relocation of Omaka to Woodbourne is fanciful and unfounded.
- Purported noise impacts on Omaka from rezoning Colonial Vineyard are exaggerated and not supported by any noise modeling or analysis, and have not taken into account possible (or proposed) mitigation measures.
- The alternative site is not supported by any detailed analysis.
- The alternative site has not been through a public consultation process.
- Section 32 of the RMA does not require a consideration of alternative sites – landowners are entitled to lodge a private plan change to seek to rezone specific sites.

SECTION 5: ASSESSMENT OF ENVIRONMENTAL EFFECTS

Introduction

Clause 22 of the First Schedule to the Resource Management Act 1991 requires that where environmental effects are anticipated, the plan change request shall describe those effects, taking into account the provisions of Schedule 4, *"in such detail as correspondences with the scale and significance of the actual or potential environmental effects anticipated from the implementation of the plan change".*

Assessment of Actual or Potential Effects on the Environment

Neighbourhood and community effects including socio-economic and cultural effects

The surrounding and nearby areas are used for a mix of uses, some rural-residential in nature, as well as residential, rural, aviation and recreation. The growth strategy process has raised a general community expectation of the possibility of future residential development on the site, and the possibility of a change in land use. This plan change should therefore come as no surprise.

Cross boundary effects such as reverse sensitivity to rural activities are able to be mitigated by the natural roading buffer between the application site and other rural sites. Specific conditions of subdivision consent could also further mitigate cross-boundary rural effects if this is of concern at the time of subdivision.

Concerns from Growth Strategy submitters about reverse sensitivity effects on Omaka Airfield are acknowledged, and mitigation is proposed as part of the plan change to address these effects.

An important advantage of Colonial Vineyard over alternative sites in growth pocket W2 is proximity to Taylor River, and the opportunity for connections to this recreational facility. Residents of Colonial Vineyard would have direct access to the Taylor River reserve, which could also double as a commuting corridor for school children and residents. The proposed development will also have a positive effect on socio-economic values and these include;

- A wider range of allotments available to meet the middle market.
- Provision for higher density and mixed-use in accordance with best practice urban design.
- Walking and cycle links that encourage and enable access throughout and beyond the neighbourhood and to the Taylor River reserve.
- High amenity with greenways, parks and shared low-speed residential streets.

- Residential development at similar distance to other developments from shopping centres.
- Employment opportunities created by this development.
- More residential and potential for short term visitor accommodation located nearby Omaka Airfield to service aviation staff as well as airfield visitors.
- More intensive and therefore efficient use of proposed infrastructure.

Physical Effects

i) Landscape and visual effects

The site does not contain high or outstanding landscape or amenity values. There will be a change from the existing rural landscape to a residential environment. However, greenways and parks will soften this change, and over time residential landscaping will result in an acceptable level of visual amenity.

ii) Earthworks

Earthworks will include roading and laying of services. All roads will be constructed to minimise erosion from stormwater runoff. Any effects generated from the earthworks will be temporary and will cease once the development is completed. Furthermore, these effects will be the subject of detailed assessment at the time of subdivision consent. The proposed planting and landscaping will act to soften and mitigate the effects of such works on the landscape over time.

iii) Traffic

At a net total yield estimated around 300 dwellings, traffic movements could be expected in the order of 2400 to 3000 vehicles per day. The growth strategy includes traffic expertise on the consultant panel, as well as a review of all growth pockets by Marlborough Roads staff.

The applicants have consulted with Marlborough Roads over the proposed plan change. No significant traffic effects have been identified arising from the rezoning of the site as proposed.

Effect on ecosystems

The site does not contain any ecosystems or habitats of significance. While rural land will be largely replaced with built infrastructure, new landscaping and greenways will provide new habitat.

Effect on resources of aesthetic, recreational, scientific, historic, spiritual cultural, or other value

There are no resources of special value that have been identified on this site and no archaeological sites or heritage objects are recorded against this property in Council records.

The land has been highly modified through European settlement and farming practices. In the event that any taonga (artefacts etc) or koiwi (human remains) are unearthed during work on site, the

requestors will follow accepted protocols by advising any appropriate authority and complying with any reasonable requirement to allow for recording and retrieving of any artefacts discovered.

There are no landscape trees or heritage trees pertaining to this site.

Discharge of Contaminants

Discharges arising from the proposed plan change are sewage, stormwater, and greywater. The effluent will discharge to a council approved reticulated sewer system and the stormwater will similarly be discharged via approved and designed systems. The discharge from all allotments will be designed at the time of subdivision to meet any Council requirements.

Natural hazards or use of hazardous substances and installations

No significant use of hazardous substances or their installation is anticipated, other than substances normally associated with residential activities.

The site is not at any known or identified specific risk from natural hazards such as seismic activity, flooding or land instability.

Reverse Sensitivity effects on Omaka Airfield

Noise modelling indicates the site is well outside the 55dBA noise contour which is the area potentially affected by aircraft noise. Despite this, a blanket acoustic insulation requirement is proposed for the whole site. This will effectively mitigate any reverse sensitivity effects.

Additionally, existing flight paths take aircraft directly over Witherlea and Taylor Pass residential areas, including recent development. Significantly, the applicants understand that there have been no noise complaints made to Council associated with aircraft noise from Omaka, despite increased residential density.

Environmental Results Anticipated

The environmental outcomes anticipated by the Plan Change are as follows:

i) A change in the visual character of the site, from rural (currently vineyard) to mixed density residential with roads, landscaping, additional trees, reserves, walkways, and cycleway.

ii) An urban form which is functional and reflects best practice urban design, which provides a pleasant and sustainable living environment, and which provides excellent solar orientation for energy efficiency.

iii) Efficient disposal of sewage through existing Council systems.

iv) Provision of functional, efficient, and safe roads which provide enhanced streetscape, are pedestrian friendly and which reduce the extent of hard surfacing through an internal roading hierarchy.

v) Additional residential land being made available to meet an identified shortage of land for residential growth.

SECTION 6: STATUTORY ASSESSMENT

RMA

The RMA contains the following statutory considerations for this plan change:

- Section 5 and Part 2
- Section 72 (purpose of a District Plan)
- Section 74 (matters to be considered by territorial authorities)
- Section 75 (contents of district plans)

PURPOSE OF A PLAN

Section 5 RMA

Section 72 describes the purpose of a plan (or plan change) is to "*assist territorial authorities to carry out their functions in order to achieve the purpose of the Act*". Section 5 describes the purpose of the RMA as follows:

"5. Purpose

(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 well being 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

(a) Safeguarding the life-supporting capacity of air, water, soil and ecosystems; and

(b) Avoiding, remedying, or mitigating any adverse effects of activities on the environment."

In essence, the purpose of this plan change is to promote the sustainable management of natural and physical resources.

For reasons set out elsewhere, the plan change does represent sustainable management. The key aspects of the plan change which do this are summarised as follows:

a) creation of a community with a range of different housing choices, through a mix of densities;

b) enhancement of amenity and landscape through additional plantings, new reserves and high amenity roads;

c) promotion of public health and wellbeing, through a good network of connections; walkways and cycle ways;

d) energy efficiency through design to achieve solar orientation;

e) more efficient use of existing infrastructure;

Part 2 RMA

In achieving the purpose of the RMA, Section 6 sets out the matters of national importance that all persons exercising functions and powers under the RMA shall recognise and provide for the following matters of national importance:

(a) The preservation of the natural character of the coastal environment (including the coastal marine area), wetlands, and lakes and rivers and their margins, and the protection of them from inappropriate subdivision, use, and development:

(b) The protection of outstanding natural features and landscapes from inappropriate subdivision, use, and development:

(c) The protection of areas of significant indigenous vegetation and significant habitats of indigenous fauna:

(d) The maintenance and enhancement of public access to and along the coastal marine area, lakes, and rivers:

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

(f) The protection of historic heritage from inappropriate subdivision, use, and development.

(g) The protection of recognised customary activities.

Section 7 of the RMA sets out other matters that all persons exercising functions and powers under the RMA shall have particular regard to:

(a) Kaitiakitanga:

(aa) The ethic of stewardship:

(b) The efficient use and development of natural and physical resources:

(ba) The efficiency of the end use of energy:

(c) The maintenance and enhancement of amenity values:

(d) Intrinsic values of ecosystems:

(e) Repealed.

(f) Maintenance and enhancement of the quality of the environment:

(g) Any finite characteristics of natural and physical resources:

(h) The protection of the habitat of trout and salmon:

(i) The effects of climate change:

(j) The benefits to be derived from the use and development of renewable energy.

This plan change promotes sustainable management under section 5, with due regard to the relevant issues of matters of national importance and other matters of section 6 and 7 of the Act.

Section 8 requires that all persons exercising functions and powers under it, in relation to managing the use, development, and protection of natural and physical resources, shall take into account the principles of the Treaty of Waitangi (Te Tiriti o Waitangi). These principles broadly encompass:

- Participation
- Active protection
- Redress

There are no section 8 matters that the applicants are aware of which are applicable to this site.

SECTION 74 RMA

Section 74 requires the Council to "have regard" to the following matters when assessing this plan change:

a) Proposed regional policy statement (not applicable)
b) Proposed regional plan (not applicable)
c) Any management plans and strategies prepared under other Acts (Growth Strategy prepared under Council's functions under the LGA)
d) Relevant entry in the Historic Places register (not applicable)
e) Fishing regulations (not applicable)
f) Consistency with the plans of adjacent authorities (not applicable)

The council must also "take into account" any Iwi management plans lodged with the Council. There are three Iwi management plans: Eel Management plan; Sounds Iwi Management Plan; and Ngai Tahu Iwi Management Plan. Council staff advise these are very old and out of date. These iwi management plans have no relevant considerations in respect of the Burleigh area.

Council Statutory Plans Prepared Under Other Acts

Plans prepared under other acts are analysed as follows:

Table 7: Relevant Council Plans

Plan	Act	*Issue*/Assessment
Draft Annual Plan 2011/12	Local Government Act	- *Reduced revenue from land development account.* Rezoning the site will provide new development revenue. - *Meeting community expectations on landscaping.* Landscaping and high level of amenity is proposed. - *Urban design strategy will pose issues for Council on prioritising development.* Private plan change implements Growth Strategy priority for W2. - *Urban growth effects.* Effects can be internalised and funded through the development. - *Stormwater strategy.* No identified stormwater issues. - *Processing of private plan changes.* Community cost of processing is recoverable – outsourcing resources are available.
Asset Plans	Local Government Act	Taken into account through the Growth Strategy process – no asset constraints
Land Transport Strategy	Land Transport Act	Taken into account through the Growth Strategy process – no major roading constraints
LTCCP 2009-19	Local Government Act	- *Community outcomes (Volume 1).* Plan change is consistent with and/or gives effect to community outcomes. - *Key challenges (Volume 2): sustainability; climate change; population change; key infrastructure; need to sustain growth and innovation.* Plan does not exacerbate key challenges, or assists in meting key challenges.
Regional Policy Statement	Resource Management Act	Assessed separately in this plan change
South Marlborough Growth Strategy	(non-statutory but directly relevant)	Assessed separately in this plan change
Wairau Awatere resource Management Plan	Resource Management Act	Assessed separately in this plan change

South Marlborough Growth Strategy

The Growth Strategy is currently in draft form. Although not required by any statute, and it has no statutory weight, this Strategy was prepared under the auspices of Council's functions under the Local Government Act. It is of direct and significant relevance to this plan change proposal, since the Strategy identifies the application site as suitable for residential development, with a recommendation that this be first in the sequence of growth pockets. Although the final strategy has not been decided on, the draft strategy reflects a series of workshops, public input, and professional and technical analysis. Given the extent of this analysis, and the extend of professional advisors who have advised on the draft strategy, the strategy forms part of the section 32 documentation and should be given appropriate weight, irrespective of the final decision on the strategy.

SECTION 75 RMA

Section 75 sets out various matters that a district plan must cover. Those relevant to this plan change are as follows:

a) the plan change must "give effect" to the Regional Policy Statement

b) the plan change must not be "inconsistent with" the regional contents of the WARMP, which is an integrated regional plan

Regional Policy Statement (RPS)

The RPS is an operative document. Section 75 of the RMA requires the plan change to "give effect" to the RPS. This is assessed as follows.

Part 2 contains Background Information about sustainable management; this discusses the Resource Management Act and places the Regional Policy Statement in context.

Part 3 contains General Principles. This is not relevant to the plan change.

Part 4 contains Regionally Significant Issues. The plan change will give effect to this section through enabling protection of water ecosystems, protection of land ecosystems, community well being, protection of visual features and control of waste. (These will be dealt with separately and more in depth through Parts 5-9).

Part 5 contains the Protection of Water Ecosystems. The plan change will give effect to this section through appropriate stormwater design and management from urban areas. The relevant objectives to this plan change are *5.1 Wetlands, Lakes and Rivers and 5.2 Groundwater Quality.*

Part 6 contains Protection of Land Ecosystems. The relevant objectives to this plan are 6.1.2 – Indigenous land ecosystems. This is expanded under the objective to maintain and where necessary enhance the land but also enable the community to provide for its wellbeing. The proposed plan gives effect to Part 6 by providing for mixed density use as well as green space.

Part 7 contains Community Wellbeing. The plan change provides for this through providing green space, mixed density use (housing) and encouraging the creation of community and amenity values. The relevant objectives include 7.1 Community but more specifically 7.1.6 methods (a) and (b). This sets standards where appropriate that control environmental noise and provide information on the effects of noise and provide advice on mitigation methods.

The proposed plan change includes controls on reverse sensitivity noise effects to ensure the continued operation and use of Omaka Airfield. This is achieved through the proposed acoustic insulation requirements.

Policy 7.1.14 focuses on Community Infrastructure to provide for the safe and efficient operation of community infrastructure in a sustainable way. The policies of 7.1.15 recognises "*the land transport system is an essential element of the community infrastructure... ...It's continued operation (and expansion where this contributes to the safety and efficiency of the network) should be provided for.* This is achieved in the methods through the adopting of the road hierarchy identified in the Regional Land Transport Strategy, and providing greater flexibility by proposing a new hierarchy in accordance with NZS:4404 2010.

Policy 7.1.21 – Network Utilities and Public Works (water supply, sewerage disposal, energy and communication) enables the operation of utility networks needed by the community to ensure their health, safety and wellbeing. The plan change will give effect to this section and there are no constraints on network utilities.

Policy 7.3.5 (Cultural Values) recognises and accommodates the diversity of cultural values that exist within in the community. Under Policy 7.3.6 provisions will be made for Iwi consultation. The site contains no cultural values.

Objective 7.5 Energy reflects that efficient use of energy is vital to the wellbeing of the community, this includes the use of renewable energy. An environmental outcome anticipated by the Plan Change is an urban form which provides excellent solar orientation for energy efficiency. The plan change will achieve this outcome.

Part 8 contains Protection of Visual Features. The plan change provides for this by identifying a structured layout for the development based on best practice urban design principles.

Part 9 relates to Waste. Council's existing waste management systems will be applied to the application site.

Part 10 contains Monitoring and Review. This is provided for through the monitoring provisions of the WARMP.

<u>WARMP</u>

Section 75 of the RMA requires that the plan change must not be "inconsistent with" any operative regional plans. The WARMP is an operative plan, and is an integrated regional plan.

The proposed plan change is not inconsistent with regional parts of the WARMP. Those parts relate to discharges to water and land, and activities in the coastal environment and these are not proposed to be changed.

RMA SCHEDULE 1

Clause 3 of the First Schedule to the RMA sets out the requirements for statutory consultation. Statutory consultees are identified as:

a) Minister for the Environment.
b) Other ministers of the crown who may be affected (not relevant).
c) Local authorities who may be affected.
d) Tangata Whenua of the area.
e) Board of the any foreshore and seabed reserve in the area (not relevant).

In conjunction with lodging this plan change request, the applicants have undertaken consultation with the Minister for the Environment, Marlborough District Council, Marlborough Roads, and Tangata Whenua, as well as Omaka Aero Club and the adjoining landowner.

In respect of the Council and Marlborough Roads, consultation has involved on-going discussions with policy staff over the applicants' intent to promote a private plan change, and seeking feedback on a draft plan change.

In respect of other parties, consultation was undertaken by writing to these parties, advising them of the proposed plan change, and inviting comment or feedback.

SECTION 7: CONCLUSION

This privately initiated plan change has been prepared to:

a) enable the requestors to realise the potential of their land
b) to alleviate a recognised shortfall in land to accommodate residential growth
c) to implement the recommendations in the South Marlborough Growth Strategy

The plan change will result in sustainable planning outcomes, and addresses noise concerns associated with Omaka Airfield. Zoning is based on the detailed analysis as part of the Growth Strategy processes and on an underlying concept layout which incorporates best practice urban design principles.

As discussed within this request, the plan change addresses the statutory requirements of the RMA, in particular meeting the section 32 requirements. The plan change will achieve the purpose of the RMA, and is in keeping with the strategic planning direction for Blenheim.

APPENDIX 1 PROPOSED AMENDMENTS

This plan change seeks the following amendments to the WARMP.

All proposed changes are shown with deletions shown as a ~~strikethrough~~, and new text additions shown as <u>underlined</u>.

Colonial Vineyard Plan Change – Make the Following Changes to the Wairau Awatere Resource Management Plan

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Volume 1 Objectives and Policies

Chapter 11 Urban Environments

11.2.2 Objectives and policies

Objective 1 The maintenance and creation of residential environments which provide for the existing and future needs of the community.

Policy 1.3 Maintain higher density residential use <u>close to open spaces and</u> within the inner residential sector of Blenheim located within easy walking distance to the west and sought for the Central Business Zone.

The objectives and policies recognise...

...The north western <u>and south western</u> peripher<u>ies</u> ~~has~~ <u>have</u> been identified as the area<u>s</u> most capable of accommodating future growth of Blenheim~~, and existing transitional plans have been changed accordingly.~~ ...

11.2.3 Methods of Implementation

Zoning...

Schedule Sites...

Rules Plan rules permit residential activity within the Urban Residential 1, Urban Residential 2 and Township Residential Zones subject to performance standards being met. <u>Site specific rules also apply to sites identified in Appendix G.</u>

Chapter 19 Land Transport

19.3 Objectives and Policies

Policy 1.7 Require all new roads...and enable safety and efficiency of vehicle movement including:

- Urban...
- Rural...
- Public roads have sufficient width to provide, where appropriate vehicle carriageways capable of carrying two lanes of moving traffic (except for very short local roads where traffic volumes are insufficient to warrant two lanes and except for low speed residential lanes);
- Public facilities including pedestrian footpaths (on one or both sides of the road except for low-speed residential lanes) as appropriate in urban situations;...

These policies recognise...

As a matter of public safety and convenience all new roads, except those which are very short no-exit roads or are low-speed residential lanes, should be capable...

19.7 Objectives and policies

Policy 1.8 require new urban subdivisions...

- Footpaths or access ways...
- Provision for...
- Pedestrian access...
- Pedestrian footpaths in urban areas:
  - Adjacent to be separated from vehicle carriageways and private property (except for low-speed residential lanes) by appropriate safety structures...

4.8 Methods of Implementation

Rules...

Annual Plan...

Code of Practice...

Subdivision Standards Provision will be made for subdivision and development to be designed in accordance with recognised Subdivisions Standards (such as NZS4404:2010) where meeting such standards meets or exceeds the anticipated environmental results.

Chapter 23 Subdivision and Development

23.5.1 Objectives and Policies

Policy 1.17 Where indicative layouts for roads have been provided, ensure that the roading proposed at the time of subdivision and development is:
(a) Compatible with the Council's roading hierarchy or alternative design standards approved by Council;
(b) Reflects the density of development; and
(c) Connects to the existing roading network and contains internal connections to the extent that is practicable.
(d) Does not result in a subdivision layout that would cause poor amenity outcomes for individual properties, particularly in terms of property orientation (for solar access or relative to any road or other residential property) and shape.

Policy 1.18 Where indicative locations for open space have been provided, ensure that the open space proposed at the time of subdivision and development:
(a) Reflects the density of development;
(b) Is of sufficient area to provide for the amenity needs of those living and/or utilising the development;
(c) Is accessible (with the degree of accessibility increasing with increasing density of development).
(d) Does not result in a subdivision layout that would cause poor amenity outcomes for individual properties, particularly in terms of property orientation (for solar access or relative to any road or other residential property) and shape.

4.9 Methods of Implementation

Rules...

Annual Plan...

Code of Practice...

Subdivision Standards Provision will be made for subdivision and development to be designed in accordance with recognised Subdivisions Standards (such as NZS4404:2010) where meeting such standards meets or exceeds the anticipated environmental results.

Chapter 29 Standard requirements for Subdivision and Development

29.2.8.1 Roads and Access

29.2.8.1 Compliance with Roading Hierarchy

All proposed new roads shall connect with and be compatible with the Council's roading hierarchy (refer Table 29.2.8.1). The classification, width and pavement structure are included I that Table. An exemption from compliance with table 29.2.8.1 will apply where provided for in Appendix G.

Appendix G Register of Specifically Identified Activities

11. Colonial Vineyard, Corner of New Renwick Road and Aerodrome Road, Lot 2 DP 350626

11.1 On this site, the rules and standards of the underlying zone shall apply except as follows:

11.1.1 Roading

Roading within the site shall meet either the standards in table 29.2.8.1, or shall be designed in accordance with the roading standards in New Zealand Standard NZS 4404:2010.

11.1.2 Building Acoustic Insulation

i) All buildings shall be designed and constructed to achieve or exceed the Indoor Design Sound Levels set out in Appendix M.

ii) Any building which does not achieve the standards in Appendix M is a discretionary activity.

Note: The roading and open space shown on the planning maps is indicative only and may vary at the time of subdivision.

Volume 3: Planning Maps

Amend Planning Maps 155; 164 as shown overleaf to rezone Colonial Vineyard to:

a. Urban Residential 1

b. Urban Residential 2

Appendix 2: Letter of Support, Aviation Museum

NEW ZEALAND AVIATION MUSEUM

P.O. Box 859, Blenheim — Phone (03) 577 8856 or (03) 578 9509 — Fax (03) 577 8788

13th January 2003
AMT11 BG:kc

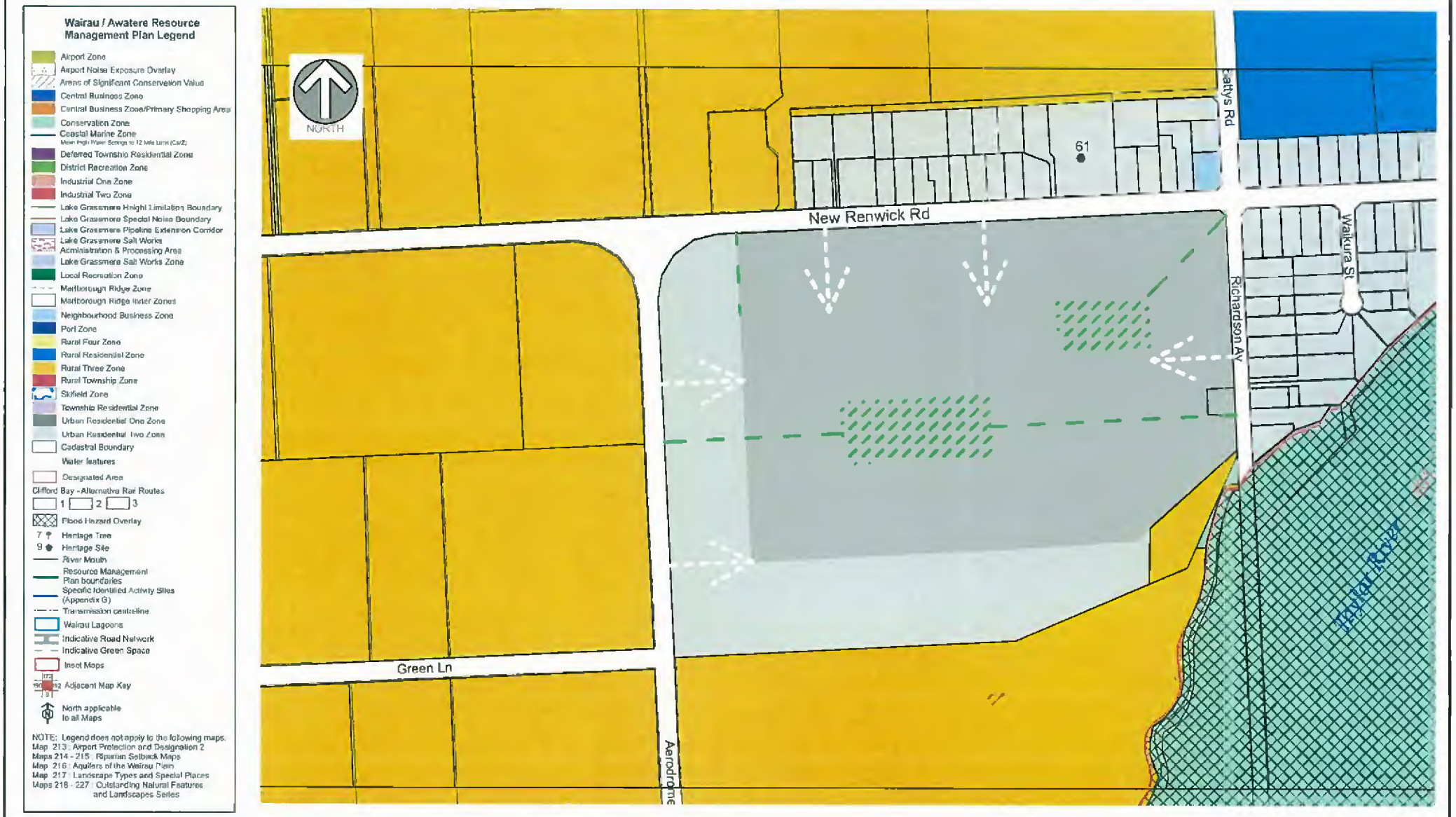
Mr B O'Brien
Blair O'Brien Lawyer
PO Box 36014
NORTH SHORE CITY

REF: CAMPBELL FAMILY TRUST –
PROPERTY ON NEW RENWICK ROAD/
AERODROME ROAD/ RICHARDSON AVENUE, BLENHEIM

Further to my conversation with Mr Peter Campbell, and your letter of 10th December 2003, I would confirm my verbal arrangement with Peter that in return for his consent to the Aviation Museum established on the adjacent Corlett land, we would support any Resource Consent Application made by the Campbell Family Trust in respect of the above block of land.

Yours faithfully

Brian Greenall
Trustee



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COLONIAL VINEYARDS

ZONE PLAN

Sheet No.	SCALE (A4)
02d	1:5000

Job No.	Date	Drawn by
12096	09.2011	R Houghton

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R:\PROJECTS\12000 NELSON PROJECTS\12096 COLONIAL VINEYARDS\12096 COLONIAL VINEYARDS LAYOUT.DWG

Appendix B

Recommendation on Submissions Received to Plan Change 59

Submitter #	Submitter	Address	Support/Oppose/	Recommendation
1	Chippies Vineyard Limited (Chris Wilson)	PO Box 51, Blenheim 7240	Support	Accept
2	St Leonards Limited (Chris Wilson)	PO Box 51, Blenheim 7240	Support	Accept
3	Woodhouse – Trevor and Shirley	50 New Renwick Road, Burleigh, Blenheim 7201	Oppose	Reject
4	Stratford – Jacqueline	2 Ridgetop Rise, RD 2, Blenheim 7272	Support	Accept in part
5	Rodgers – Wendelena	48 New Renwick Road, Burleigh, Blenheim 7201	Oppose	Reject
6	Stratford – Kerry	2 Ridgetop Rise, RD 2, Blenheim 7272	Support	Accept in part
7	Paul – Simon	47 Forest Park Drive, Blenheim 7201	Oppose	Reject
8	Johnson – Edward George	86A New Renwick Road, Blenheim 7201	Oppose	Reject
9	New Zealand Aviation Museum Trust (Brian Greenall) *Further submission: Colonial Vineyard Ltd (support in part)*	PO Box 641, Blenheim	Oppose	Reject
10	Adams – Prudence	32a Boyce Street, Renwick 7201	Support	Accept
11	Sinclair – John *Further submission: Colonial Vineyard Ltd (support in part)*	8a Manor Place, Redwoodtown, Blenheim 7201	Oppose	Accept in part
12	Adye – Angela Wilhelmina	1 Richardson Avenue, Blenheim 7201	Oppose	Reject
13	Macnee – Niki	3 Richardson Avenue, Blenheim 7201	Support	Accept
14	Bushell – Johnathon Bernard	14a Richardson Avenue, Blenheim	Support	Accept
15	Quickfall – Tony	PO Box 1593, Nelson 7040	Support	Accept
16	Ham – Paul	29 Hillside Terrace, Blenheim 7201	Support	Accept
17	Gleeson – Phillip	92 Ben Morven Road, RD 2, Blenheim	Support	Accept
18	Blenheim Indoor Sports Limited –	25 Goodman Street, Blenheim 7201	Support	Accept

	Battys Road (A Brian Fitzpatrick)			
19	Carlton Corlett Trust (PJ Radich) *Further submission: Colonial Vineyard Ltd (support in part)*	Radich Law PO Box 842 Blenheim	Oppose	Reject
20	Fyfe – Ian *Further submission: Colonial Vineyard Ltd (support in part)*	12 Monro Street, Blenheim 7201	Oppose	Reject
21	Verkaaik – Gerard & Joy *Further submission: KR Suleiman – support*	41 New Renwick Road, Blenheim	Oppose	Reject
22	Ayson – Ross Barclay Stewart	9 Pope Crescent, Witherlea, Blenheim 7201	Support	Accept
23	Marlborough Aero Club Incorporated (Quentin AM Davies) *Further submissions:* *(i) Colonial Vineyards Ltd – support in part* *(ii) Patchett HG Air Ltd - support* *(iii) Wanganui Aero Club – support* *(iv) AO Whelan – support* (v) *T Wytenburg – support*	Gascoigne Wicks, PO Box 2, Blenheim 7240	Oppose	Reject
24	Latimer – Icilma Dorothy	PO Box 818, Blenheim 7240	Oppose	Reject
25	O'Connor – Christopher David	10 Covent Gardens, Blenheim 7201	Oppose	Reject
26	Bennett – Debbie Anne	40 Green Lane, RD2 Blenheim 7272	Oppose	Reject
27	Marlborough Car Club Incorporated (Barry Voss)	Box 473, Blenheim 7432	Oppose	Reject
28	New Zealand Fire Service Commission (Alexander Strawbridge)	Beca Carter Hollings & Ferner Ltd, PO Box 3942, Wellington 6140	Neither support or oppose	Accept

29	O'Hagan – Patrick and Carey	22 Green Lane, RD2 Blenheim	Oppose	Reject
30	Sounds Air Travel and Tourism Ltd (Andrew Crawford)	PO Box 116, Picton 7250	Oppose	Reject
31	Wither Hills Vineyards Marlborough (Antoinette Golden)	Russell McVeagh, PO Box 8, Shortland Street, Auckland 1140	Oppose	Reject
32	Antique Aero Engineering Ltd (Wayne Tantrum) *Further submission: Colonial Vineyard Ltd – support in part*	95 Aerodrome Road, Omaka Airfield, Blenheim 7272	Oppose	Reject
33	Sounds Aero Maintenance Ltd (Craig Anderson) *Further submission: Colonial Vineyard Ltd – support in part*	PO Box 650, Blenheim	Oppose	Reject
34	Lowe – Jennifer *Further submission: Colonial Vineyard Ltd – support in part*	C/o Sounds Aero Maintenance Ltd, PO Box 650, Blenheim 7240	Oppose	Reject
35	Cowan – Clifford Charles	36 Green Lane, RD 2, Blenheim 7272	Oppose	Reject
36	May – Veronica	C/- Ayson & Partners Limited, PO Box 256, Blenheim 7240	Support in part	Accept
37	Marlborough Helicopters Limited (Owen Dodson) *Further submission: Colonial Vineyard Ltd – support in part*	PO Box 731, Blenheim 7240	Oppose	Reject
38	Marris – John Ernest & Alison Lillion	114 New Renwick Road, RD2 Blenheim 7272	Oppose	Reject
39	McIntyre - Jay	35a Arthur Baker Place, Redwoodtown, Blenheim 7201	Oppose	Reject
40	Orphan – Graham	43a Murphys Road, Springlands, Blenheim 7201	Oppose	Reject
41	Collins – Trevor	PO Box 28, Spring Creek 7244	Oppose	Reject
42	Jones – David & Bridget	3 Cook Ridge, Waikawa Bay	Oppose	Reject
43	Wilkie – Craig	106A New Renwick Road, Blenheim	Oppose	Reject

44	Simcox Construction Ltd (Antony Clark)	14 Taylor Pass Road, Blenheim 7201	Support in part	Accept
45	Wagenvoort – Marinus	7 Richardson Avenue, Burleigh, Blenheim 7201	Oppose	Reject
46	Jones – Dai *Further submission: Colonial Vineyard Ltd – oppose*	72 New Renwick Road, Blenheim	Oppose	Reject
47	Ridge Air Limited (Paul Williams)	Rmco Ltd, PO Box 820, Blenheim 7240	Oppose	Reject
48	Jones – Grosvenor & Margaret	67 New Renwick Road, Blenheim 7201	Oppose	Reject
49	Harris – Roger Ferris Hedley	210 Oakwood Lane, Witherlea, Blenheim 7201	Oppose	Reject

Appendix C

Urban Design Report

Explaining the Growing Marlborough project process

In relation to:
Proposed Plan Change 59 to the Wairau/Awatere Resource Management Plan

By Wayne Bredemeijer, Senior Urban Designer, Urbanismplus Ltd.

January 2012

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(e) wb@urbanismplus.com
(w) www.urbanismplus.com

1.0 INTRODUCTION

Qualifications and experience

1.1 My name is Carel (Wayne) Bredemeijer and I hold the qualification of Master of Science (Urbanism) from Delft University of Technology (The Netherlands). Mainland Europe Urbanism involves a combination of planning, architecture and engineering. I have practiced in the field of urban design and urban planning between 1999 and 2002 as a student and since 2002 as a full-time professional, working for urban design consultants in Delft, The Netherlands (1999-2005) and Auckland (since 2005). Currently I am Senior Urban Designer with Urbanismplus Ltd in Auckland.

1.2 My professional areas of technical expertise include strategic urban design, urban growth projects, and high-level through to detailed design input in structure plans and master plans. I have also provided input as a member of urban design review panels, undertaken urban design assessments, and have co-authored several urban design guidelines. I have gained experience as a senior participant and project manager for both private and public sector clients. A general CV is attached as Appendix 1.

1.3 I have read the Code of Conduct for Expert Witnesses contained in the Environment Court's Consolidated Practice Note 2006 [2006] NZRMA 357. I have read and agree to comply with that Code.

Brief

1.4 This report has been commissioned by the Marlborough District Council (MDC) to explain the process followed as part of the Growing Marlborough project, a comprehensive urban growth and development strategy for the Marlborough District.

1.5 This strategy is of relevance to the area of land subject to Plan Change 59 (PC59), as it recommends that the land be considered for the residential expansion of Blenheim. I have visited the site repeatedly as part of the project process.

1.6 I understand other Council experts will explain the planning background in more detail.

Contents and structure of this report

1.7 This report:

- First explains in headline terms the project that led to the strategy;
- Then explains the urban design issues dealt with in more detail;
- Followed by a detailed overview of the methodology;
- The project outputs; and
- The outputs specifically pertaining to Colonial Vineyard.

1.8 In preparing this document I have drawn from: *'Marlborough Urban Growth & Development, Wairau-Awatere Settlements, A Strategy for the Future*, final version produced for the Marlborough District Council by Urbanismplus and its sub consultants in February 2010.

1.9 As senior participant in and project manager of the Growing Marlborough project I have been responsible for collating the above report and I agree with the contents of that report.

1.10 This report is supported by the following appendices

- Appendix 1: general CV of Wayne Bredemeijer (January 2012).
- Appendix 2: Consultation details.
- Appendix 3: Images.

2.0 ABOUT GROWING MARLBOROUGH

Introduction

2.1 In early 2009 Urbanismplus was engaged to assist MDC in directing growth and development needs of Blenheim, Picton, and many other Marlborough townships. In response the Growing Marlborough project was formulated.

2.2 The key Urbanismplus personnel involved in this project included:

- Kobus Mentz, BArch; Post Grad Dip Urban Design (JCUD Oxford); ANZIA; ANZPI; Director Urbanismplus Ltd, facilitator and lead urban designer.
- Ian Munro, BPlan(Hons); MPlan(Hons); MArch[Urban Design] (Hons); MNZPI; MRMLA, Certified Planning Commissioner, Senior Associate Urbanismplus Ltd, senior urban planner and designer.
- Wayne Bredemeijer, MSc (Urbanism, TUDelft, NL), senior urban designer, Urbanismplus Ltd.
- Jessica Laing, MPlanprac (Hons); BArch (Hons); GradNZPI, urban designer, Urbanismplus Ltd.

2.3 Urbanismplus engaged the following sub consultants in the project:

- Craig Pocock, landscape architect and sustainability specialist; and Chris Chen, landscape architect, both of Pocock Design:Environment Ltd, Christchurch.
- Derek Kemp, employment specialist, Prosperous Places Pty Ltd, Brisbane.
- Mike Cullen, town centre and retail specialist, Patrick Partners Pty Ltd, Sydney.
- Jim Higgs, transportation engineer, TTM Consulting Pty Ltd, Melbourne.

Along with Urbanismplus these external specialists were involved in the production of the project outputs.

Overview of urban design issues and principles

2.4 The project methodology was developed in response to the urban design issues observed by the project team through analysis of existing studies and extensive consultation and scoping exercises involving a wide range and large number of

stakeholders. Working in a multi-disciplinary team shaped the collective view on these issues.

2.5 In summary it was observed that the current pattern of growth occurring in the Marlborough District could not continue, primarily on financial and environmental grounds but also reflecting the sustainability emphasis that is now in place.

2.6 Best practice urban design principles were used to formulate a framework that set out the key objectives, priorities and goals used to guide the strategy.

2.7 The urban design issues addressed and the principles formulated to deal with these are described in more detail in Section 3 of this document.

Overview of the methodology

2.8 Growing Marlborough consists of four elements:

1 The first part of the project focused on the Blenheim Town Centre, acknowledging its role as the largest and most challenging activity centre in the District and where most activity was likely to occur.
2 It was followed by the Southern Marlborough Urban Growth & Development Strategy, covering Blenheim and the other settlements within the Wairau-Awatere area (Marlborough-South), whereby a significant portion of the project time was spent on Blenheim's urban growth issues.
3 It was then followed by a similar study for Picton and other townships in the Marlborough Sounds area.
4 An exercise to bring the northern and southern half of the District together in one overarching strategy concluded this project and an update of the latter is currently carried out by Urbanismplus, including the documentation of outcomes of public hearings and Council decisions on all proposals.

The second part of the project has most relevance for the site subject to PC59.

2.9 In this part of the project a large focus was placed on Blenheim's urban growth and development needs. It consisted of extensive consultation with stakeholders and the general public and Inquiry-by-Design workshops to work through the technical details with technical MDC staff and the external specialists. Several

rounds of reporting led to the documentation of findings and recommendations. Subsequent to Urbanismplus' involvement MDC conducted a formal consultation and decision making process.

2.10 The methodology is described in more detail in Section 4 of this document.

Overview of the outputs

2.11 The strategy provides a comprehensive, integrated approach to urban growth and development in the Wairau-Awatere to guide strategic investment decisions by Council, individuals, and other groups. The key aims of this project included:

- To take planning steps that will positively impact on the development of the settlements over a 25-year period between the last census in 2006, and 2031.
- To achieve integrated urban design outcomes, where initiatives preferably fulfil more than just one objective or role.
- To align funding priorities and infrastructure upgrades with planning policy.

2.12 The deliverables of this project included:

- Solid proposals to guide decision making.
- Proposals for actions and interventions that are practical and affordable.
- Guidance for future plan changes was given, including direction for the period beyond the project horizon, in the form of 'Deferred Township Residential' or 'Future Urban' zones.

2.13 For Colonial Vineyard the deliverables of the project included an indicative layout plan should residential development occur on this site, accompanied by a description of the key positive attributes that should be achieved through development.

2.14 The project outputs are described in more detail in Section 5 of this document.

3.0 URBAN DESIGN ISSUES AND PRINCIPLES IN DETAIL

Urban design issues

3.1 From observations, analysis of background material, and consultation and technical working sessions it became clear that greater guidance on the District's urban growth and development was required to address the following issues:

- Cumulative environmental impacts from urban development, such as septic tank effluent, and storm water run-off were undermining the ecological balance of environmentally sensitive areas.
- Residential development increasingly occurring in inefficient or technically undesirable areas was leading to hazardous situations and excessively expensive mitigation.
- Urban development was encroaching onto valuable and versatile soils.
- Urban development was negatively impacting on springs and groundwater levels that are crucial for Marlborough's water supply.
- Residential development was negatively impacting on industrial and agricultural activities, including the emergence of more reverse sensitivity issues.
- The scale of population and size of urban areas meant that the design and management of infrastructure improvements were becoming more and more expensive.
- Traffic network failures and congestion were becoming commonplace.

Urban design principles

3.2 In response to these issues a principle-led approach was used to drive the process, based on key urban design concepts that can best embed and deliver sustainability into a built outcome. The urban design principles outlined in the Ministry for the Environment's "People + Places + Spaces" (2002) served as the robust and defendable bottom line. These are:

- Consolidation and dispersal;
- Integration and connectivity;
- Diversity and adaptability;
- Legibility and identity; and
- Environmental responsiveness.

3.3 From these a set of principles were derived specifically relevant to the District's urban growth and development issues. These are:

- Responding to the projected increase in population and activity in a way that is affordable in the long term.
- Making sure that access to goods and services is provided in an affordable and more environmentally friendly way.
- Conserving valuable and productive soils for future generations.
- Restoring, growing and connecting valuable ecosystems.
- Providing good quality and sufficient public open space for people to recreate and children to play in.
- Retaining and reinforcing the unique character and role of the different urban settlements.
- Complementing Marlborough's natural area and viticulture-based tourist attractions with more urban visitor attractions and facilities.
- Providing and protecting the settings and rural resources needed to grow a wider range of employment opportunities.

3.4 The table (Figure 1 in Appendix 3) further explains these, along with their practical implications for the strategy.

An integrated approach

3.5 To ensure the strategy was robust, grounded and deliverable the project integrated the technical specialities that each partially manages spatial planning and the built environment:

- Community infrastructure;
- Residential growth;
- Ecology and landscape;
- Open space and recreation;
- Soils;
- Storm water and flooding;
- Employment and economy;
- Retail and tourism;
- Traffic; and

- Infrastructure.

3.6 Among these disciplines an integrated approach was applied to the project to ensure that the strategy addresses a broad range of issues, and could not be biased or hijacked by one or two main interests, for example storm water management, ecological protection, household density maximisation, or traffic efficiency.

4.0 METHODOLOGY IN DETAIL

Project process steps

4.1 The project concerning the Southern Marlborough Strategy largely consisted of the following steps:

1. Consultation Phase 1 (3-5 & 10 August 2009), during which five meetings were conducted each with a group of stakeholders, as well as four public meetings. The intention of these meetings was to gain an initial understanding of the issues that needed to be addressed through the project along with a general feel for the stakeholders' and public's preferences.
2. Pre-workshop reporting, which entailed the internal compilation of consultation feedback, distributed to the external technical specialists prior to the workshop.
3. Three Inquiry-By-Design workshops (September-October 2009), during which the consultant team worked through the options, in order to define the main directions for solutions. The workshop that addressed Blenheim's growth was held on 1-4 September 2009.
4. Internal reporting, which entailed the initial documentation of workshop outcomes in preparation of the next stage.
5. Consultation Phase 2 (19-21 October 2009), during which three presentations were given, the first addressing the technical Council staff in order to correct any inaccuracies and gain their feedback, the second with the Marlborough Councillors, and the third with stakeholders and the general public. These presentations and subsequent discussions provided the consultant team with valuable feedback on the main findings of the project.
6. Draft reporting, which entailed the extensive documentation of the project findings for internal Council review.
7. Final reporting, which entailed the inclusion of feedback resulting from the internal Council review.
8. Consultation Phase 3, which consisted of public notification, reception of submissions, facilitation of hearings, followed by a Council decision process.
9. The implementation of several elements of the strategy is currently underway.

Urbanismplus was involved up to and including Stage 7, Final Report.

Project consultation phase 1

4.2 The project relied on the involvement from interested members of the public and other stakeholders. Focus group sessions and formal public meetings provided a key opportunity for this. Key community representatives were also involved in three technical Inquiry-by-Design workshops over multiple days. In addition to these formal sessions, several written and / or verbal comments or discussion points from interested parties have contributed to a broad community input into the project.

4.3 The groups consulted helped the consultant team form a picture of Blenheim's key features and urban growth issues. It also provided a broad impression for the general approach to accommodating growth and stimulating development the team was to take according to the parties consulted. Lastly, an initial assessment of the opportunities and constraints associated with the various directions in which Blenheim could expand was formed by the consultant team. This formed valuable input for the technical workshop following consultation.

4.4 A detailed and extensive description of the issues discussed during Consultation Phase 1 is presented in Appendix 2.

Inquiry-By-Design workshops

4.5 The core of the Marlborough Growth and Development project focussed around interactive, multi-disciplinary 'Inquiry by Design' (IBD) technical and community based workshops. Three workshops took place as part of the Southern Marlborough Growth and Development project. During the first, held on 1, 2, 3 and 4 September 2009 at Landsdowne Park in Blenheim, a large proportion of the work relevant to this document was developed. This workshop involved the consultant team in conjunction with Council staff members. Council participants included experts in community planning, open space and recreation, ecology, infrastructure, civil engineering, transport, and town planning and policy.

4.6 Urbanismplus routinely facilitates workshops of this nature. We have found that in this case the IBD approach enabled an extensive understanding of the wide range of issues and complexities facing Blenheim and the townships to be

canvassed over a relatively short timeframe. The workshops pulled together technical specialists within many disciplines to identify and resolve the issues facing many different interests.

4.7 Weaknesses of this approach could be that in an intense multi-disciplinary setting working towards preliminary results within four days there would not be sufficient time to fully consider the selected outcomes. The result is also dependent on those present during the workshop. These two possible disadvantages were addressed by giving technical staff multiple opportunities to reconsider proposals during the consultation and reporting stages after the workshop. This included staff members who could not or only partially attend the workshop.

Defining Blenheim's growth directions

4.8 MDC relied on Statistics New Zealand Census 2006 results for the projection of its population growth. Prior to the project the Assets & Services Department analysed these figures to fit the infrastructure catchments within the District. MDC considered these figures the most appropriate basis for this project.

4.9 At the outset of the project the Council's projection for Blenheim was a total population of 29,410 in 2031. This means an increase of **6300** from 2006. This equates to **2,625** new households at a 2.4 occupancy rate.

4.10 Theoretically residential growth could be accommodated in a number of ways:

- Subdivision of existing lots (infill behind existing houses). There is potential to do this in an affordable way and cater for changing households, e.g. by way of granny flats and sleep-outs. However, in response to undesirable poor quality outcomes, better controls are required. This will make this harder to do, which will impact on the realistic potential.
- Redevelopment of existing sites (infill + replace old house). A maximum of two units max per 'parent' site is still the most likely to be deliverable. Cost issues reduce feasibility unless the existing house is in a very poor condition. Redeveloped units will likely to be sold for a high price, which impacts negatively on the objective to provide for affordable housing.

- 'Brownfield' development / integrated residential development. A minimum site size of 1,600m² can deliver 3 units per 800 m² original site. Densities up to 20-25 units / ha can be delivered.
- Greenfield development, which is the development of land not currently in use for urban activities.

4.11 For reasons of efficiency (use of existing infrastructure, minimising travel distances, increase support for existing commercial and community facilities) the intensification within the existing town (subdivision of existing lots; redevelopment of existing sites; and 'brownfield' development/ integrated residential development) were promoted by the project team.

4.12 Previous estimates for the capacity of intensification ranged from 1,378 to 1,407 household capacity in all existing zones (Source: Residential land availability in Blenheim and Renwick, December 2007, Environmental Management Services for MDC).

4.13 This project however assumed that residential intensification may slow if, in line with the Council's aspiration, stronger amenity standards (rules to achieve higher quality outcomes) are imposed, as this may make it harder for property owners and developers to undertake redevelopment that complies with those standards.

4.14 Based on current trends for consent applications a conservative assumption was made for the intensification rate could be approximately 25 new dwellings net per year. With this rate an additional total of **500 lots** could be assumed by 2031.

4.15 The capacity of currently zoned, but undeveloped land (four significant areas) was calculated at **632 lots**. Along with the estimate for intensification this brings the total capacity for Blenheim to accommodate residential development within its current urban boundaries to **1,132 lots**.

4.16 This leaves **1,493 dwellings** to be accommodated in new zones (referred to as 'greenfield growth'), which equates to between **107** (at 14 dwellings per hectare)

and **149** hectares (at 10 dwellings per hectare). These figures served as the starting point at the outset of the IBD workshop.

4.17 Based on the best practice urban design principles presented before it was posed that new growth areas should be located where they can be leveraged to deliver the most benefit to the existing community. Furthermore, they should be developed to the highest appropriate density from the outset rather than left to ad-hoc infill. It was identified that providing housing choice is important, but when some private choices impose a more than is fair cost on the community it should be questioned. While looking to accommodate greenfield growth in the right locations the following implications for other uses were also considered:

- Employment and industrial implications:
  - Supporting the most efficient employment outcomes and safeguarding them.
  - Providing for new local retail where appropriate.
- Rural zone implications:
  - Scarce and critical soil resource should be safeguarded.
  - Reverse sensitivities with residential activities close to agricultural production.

4.18 To help focus the preferences of different disciplines and to prioritise strategic thinking, a series of conceptual growth options were developed prior to the workshop. These were based on 'growth pockets', areas identified on the basis of where logical urban growth could occur in a manner that complemented existing patterns of development. Consultation feedback played a role in the process to identify this first set of theoretically possible growth pockets. These areas are shown in Figure 3 in Appendix 3.

4.19 Along with the outline of the growth pockets high level concepts were developed illustrating how a possible development of each area might look. This was done based on experience with similar processes elsewhere, where it was found that giving workshop participants (and particularly those not used to spatial design) a realistic proposition helps them with the assessment process.

4.20 The concept plan for growth pocket W2 drawn prior to the workshop is shown in Figure 4 in Appendix 3. It should be noted that the area initially identified as W2, prior to the workshop consisted of Colonial Vineyard as well as the property immediately south of it. During the workshop this was reduced to Colonial Vineyard only, as the property south of it was seen as too close to the then available relevant noise contour related to Omaka airport (source: Omaka Airfield Preparation of Airnoise and Outer Control Boundaries, Hegley Acoustic Consultants, July 2008).

4.21 During the workshop the following relevant technical discipline groups (combining specialists from the consultant team and Council staff) were represented:

- Community infrastructure, concerned with existing and possible community facilities such as halls and schools, as well as accessibility and security issues.
- Ecology, concerned with the sub-regional as well as local biodiversity issues related to urban growth.
- Open Space / Recreation, focussing on the provision of public open space and recreational options for both existing and future residents.
- Soils, concerned with both the usability of the land for urban growth as well as preservation of soils valuable for agricultural production.
- Landscape Character, concerned with the preservation and enhancement of landscape values.
- Activity Centres, focussing on the wellbeing of existing multifunctional centres (the Blenheim Town Centre, Redwoodtown Village, and Springlands centre), and possible new ones.
- Employment, concerned with the wellbeing of current and possible new employment areas and institutions as well as the District's general employment issues and programmes.
- Storm Water, focusing on the management of storm water, both related to existing urban areas as well as possible new areas.
- Transport, concerned with existing and possible new roads and streets, as well as bus routes, and cycling and walking opportunities.
- Infrastructure, focussing on waste water and water supply to existing and possible new urban areas.

4.22 Each of these groups representing one technical discipline undertook an assessment of these growth pockets. Each group used a simple 'traffic light' ranking system of suitable (green), neutral (orange) through to unsuitable (red) for growth from their position, where appropriate conditional on other pre-requisite factors that would need to be available were growth to occur. This analysis led to a comprehensive overview of the individual technical discipline's high-level preferences for the urban growth directions for Blenheim (Figure 5 in Appendix 3). The exercise provided a useful basis to readily compare many different possible growth pockets on a large number of themes or interests.

4.23 More specifically, this analysis identified that:

- No one growth pocket was considered ideal from the perspectives of all relevant technical disciplines.
- Some growth pockets 'scored' better on a larger number of themes than other.
- There were a number of contrasts between groups.

4.24 Although giving a strong indication, this assessment technique was by no means designed to provide a mathematical answer to the question were urban growth should or should not occur by simply adding up the number of green, orange and red grading. 'Red' could in some cases mean 'fatally flawed' and in other cases 'technically solvable at a price'. Neither was it aimed to help the workshop 'pick winners'; one or more technical disciplines that should perhaps be given preference over others. Instead the outcomes of this assessment were subjected to an integrated discussion in order to exchange views among the representatives of the different technical disciplines and come to a common conclusion. Contrasts between groups were, once highlighted, able to be worked through. Discussion also identified possible measures associated with the possible development of growth pockets which would make growth in that particular pocket more acceptable.

4.25 The Assets and Services Group undertook pre-workshop 'desktop' examinations of the infrastructure needs associated with the growth pockets as a 'going in'

position. The associated indicative infrastructure cost per growth direction (translated in the costs per new dwelling) was included in the assessment in the workshop. The outcome of this analysis is shown in Figure 6 in Appendix 3. It should be noted that these figures were rough estimates and were not considered to represent actual costs, or final agreed funding mechanisms.

4.26 The above assessment was carried out with the best practically available expertise for the purpose of defining a high-level strategic vision on Marlborough's urban growth and development. This assumes that a more thorough analysis of several technical aspects relevant to the preferred growth areas has to take place following the strategy.

5. PROJECT OUTPUTS IN DETAIL

Preferred growth areas

5.1 The abovementioned analysis and following discussion identified preference for a number of growth pockets. Growth pockets **N1, N2, W2** and the **E2-remainder** (The majority of the E2 area was identified as a preferred location for employment land development) scored best in the evaluation and / or were seen as the least constrained in their development potential for residential activities. The additionally preferred growth pocket **SE** consists of low-lying flood-prone land. It was stressed that development might be possible only at considerable (ongoing) costs for filling and storm water drainage. This also applies to the southern half of E2 for employment land development. Lastly, development of growth pocket **E1** was only considered favourable if the adjacent areas could leverage off possible new facilities, such as commercial, retail, recreational and possibly educational. Dillons Point Road and two new road linkages were deemed crucial. Both of these involve bridges, across the Taylor and Opawa Rivers respectively. The strategy recommended an early investigation into the feasibility and cost before the decision to allow any growth to occur in this area could be made.

5.2 After identification of the preferred growth pockets each of these was the subject of design testing. It should be stressed that these were not masterplans, but a starting point for future discussion of their structure, integrating all relevant attributes as realistically as possible, based on the expertise then available. The nature of these plans varied, depending on the constraints of the growth pockets. It was envisaged that later Structure Plans would validate the exact structure and extent of the growth pocket.

5.3 Another reason for developing those design tests or concept plans was that this could serve as a feedback loop. In case a concept design for any of the preferred growth pockets would identify a major difficulty relative to their design, it would have forced the process to reconsider the preference for that particular growth pocket. This was however not the case and design tests identified that feasible designs were achievable for each of the pockets.

5.4 Of the preferred growth pockets, W2 (Colonial Vineyard) was seen as the easiest to progress first, as the assessment identified more constraints attached to early development of the respective other growth pockets.

5.5 The preferred growth pockets also represent a geographic spread, which has benefits from a housing choice point of view.

Land area capacity

5.6 The total capacity of all of these growth pockets amounts to **167.6 hectares** in area. This is well in excess of the **107 hectares** (at 14 dwellings per hectare) and **149 hectares** (at 10 dwellings per hectare) required (refer to paragraph 4.16 in this report) to accommodate the greenfields portion of the projected urban growth for Blenheim up to 2031.

5.7 An ample selection of preferred growth areas was made for a number of reasons:

- This provides back-up options in case residential growth will not take place at the required density, which will require more land.
- This allows for provisional growth directions beyond the time-horizon of the strategy.
- This allows for one or more growth pockets to not eventuate following a more detailed assessment and provides options for a number of growth pocket combinations.

Growth pocket combinations

5.8 As part of the Urban Growth and Development Strategy it was recommended that the Council would work through a series of decisions over the next decades in order to define the preferred growth pocket combination. A choice between two 'decision sequences' was recommended. Constant between the two decision sequences is the position of growth pocket W2 (Colonial Vineyard). Since it was assumed that W2 is relatively easy to develop, it is in both decision sequences assumed as the area that is the first to accommodate growth of a group of growth pockets that are the most preferred, least constrained and most affordable from the Council's point of view.

Outputs related to Colonial Vineyard

5.9 During the IBD-workshop each of the discipline groups was asked to provide comments to accompany the green, orange, red ranking. Figure 7 in Appendix 3 (table) contains the original commentary regarding growth pocket W2 (Colonial Vineyard) provided by the individual single-discipline groups during the workshop. It should be noted that due to the intense nature of the workshop not all groups provided written commentary.

5.10 During subsequent discussions it was identified that growth pocket W2 (Colonial Vineyard) provides the following opportunities (listed in no particular order):

- The area provides support for the Redwoodtown centre, located at a distance of about 1,900m via New Renwick and Alabama Roads, and Weld Street. This is in line with the objective to support existing activity centres.
- The area, being in close proximity to the Taylor River corridor, provides good recreational options. The area could also easily be connected to off-road access to the town centre via the river corridor, which could be an attractive option for cycling commuters. Both of these are in line with the objective to build on the unique local character of the development area.
- With a possible greater focus on the river corridor for recreational purposes there may be an opportunity to require the development to contribute to enhance this corridor with Riparian Plantings. This is in line with the objective to use Blenheim's limited urban growth for ecological betterment.
- The development could contain public open space with associated amenities (e.g. children's playgrounds) that would service the existing surrounding community (where recreational space, except for the river corridor, is scarce) as well. This is in line with the objective to use Blenheim's limited urban growth for community and recreational betterment.
- Servicing is straightforward from an engineering perspective. The area is close to existing water and wastewater infrastructure, with available capacity. Although the type of soil may even allow storm water soakage to the ground, storm water could be discharged to the nearby Taylor River. Both of these are in line with the objective for efficient and cost effective growth options.

- The area consists of easy to develop flat land. The area is also in one land ownership, which may make coordinated development, in line with best practice urban design principles such as connectivity and character easier. It would also lead to efficient urban form.
- Although Blenheim is surrounded by high quality, productive soil types and it is not plausible to not use areas with versatile soils, Colonial Vineyard has the poorest soil conditions compared to other possible growth areas on the periphery of the town. This is in line with the objective to as much as possible preserve high quality soils for rural production.
- Unlike many of the other areas on the periphery of Blenheim, the area is not subject to flooding.

5.11 For the decision makers it was also identified that the following potential constraints apply to growth pocket W2 (Colonial Vineyard):

- The area may be subject to noise issues relative to Omaka Airport.
- Although closer to Redwoodtown Village, at a distance of approximately 3000m from the Blenheim Town Centre the area is relatively isolated from community resources located with the town centre. It is however a for Blenheim acceptable driving distance, and arguably not many greenfield options closer to the town centre exist.
- The area is not serviced by bus. Although it should be noted that this is currently a limited service, which may be increased in the future in terms of frequency and duration. It could also be modified to serve newly developed growth areas.
- The area is located on the western side of the Taylor River and is dependent on the New Renwick Road bridge across the Taylor River or Battys Road for access to most community and commercial services.
- Development of the area may cause reverse sensitivity issues for surrounding vineyards and other rural activities. This will likely apply to all or the majority of Blenheim's greenfield growth options.

The project identified that following a required approval of the strategy opportunities to overcome these disadvantages should be further investigated.

Design of growth pocket W2 (Colonial Vineyard)

5.12 Figure 8 in Appendix 3 shows an indicative layout for residential growth on the Colonial Vineyard, and Figure 9 is an artist's impression of possible residential development of Colonial Vineyard. Both are sourced from the Southern Marlborough Urban Growth and Development Strategy. The strategy report described the characteristics of this concept layout and these should be seen as ways of capitalising on the positive attributes and where possible addressing the negative attributes of this growth pocket.

5.13 The Indicative layout complies with best practice urban design principles. The following features could be identified:

- A gross residential density of 14 dwellings per hectare was assumed. With an area of 21 hectares the possible yield would be around 300 dwellings.
- Maximised number of North-South streets and blocks where practically feasible to create East-West lots with optimised solar orientation of private open spaces.
- Attractive pedestrian and cycling connections with Richardson Avenue and through to the Taylor river area for recreational purposes.
- Regular distribution of neighbourhood parks with green corridors (street trees / berm planting) connecting these. Streets on the edges of the reserves would enable passive surveillance from passing traffic and adjacent private dwellings. Medium density housing (semi-detached or terraced) could be located around public amenities such as neighbourhood reserves.
- A connected and calmed network for dispersal of the traffic.
- The number of side streets off New Renwick and Aerodrome Roads was limited. Two additional pedestrian-only connections were illustrated, with a vision that these would be accompanied by safe opportunities to cross New Renwick Road.
- Direct residential access off existing roads was assumed. Alternatively, slip lanes to provide access to dwellings facing New Renwick Road should be considered. This is to avoid a situation were properties back onto New Renwick Road with high solid backyard fences.

- The opportunity to in the distant future extend development south of this area was left open by designating future corridors that are connected to the street network in this growth area.
- Development of commercial and retail activities in the area west of the sawmill, and north of the intersection of New Renwick and Battys Roads should be considered. Direct connections with this intersection should be established within this growth area. This would also allow surrounding residents to walk to the one or more neighbourhood reserves that form part of this concept layout.

6. CONCLUSIONS

Growing Marlborough and Colonial Vineyard

6.1 Growing Marlborough entailed a comprehensive process considering all realistically possible options to accommodate urban growth in and around Blenheim. It was driven by an objective technical team aiming to achieve outcomes that are in line with best practice urban design principles.

6.2 Within the framework of the strategy the suitability of Colonial Vineyard to accommodate residential development was identified through assessment by a multi-disciplinary team, using multiple relevant criteria and the latest technical background studies then available. It was confirmed through conceptual design testing.

Urbanismplus involvement relating to Colonial Vineyard separate from Growing Marlborough

6.3 Following Urbanismplus' involvement the Council has gone through its own consultation and decision process on the strategy.

6.4 The applicant has subsequently prepared the plan change application in consultation with MDC.

6.5 During this process Urbanismplus was asked by MDC to briefly examine the proposed urban structure in an earlier version of the Colonial Vineyard Application for Private Plan Change against the conceptual layout in the Southern Marlborough Growth and Development Strategy. This was not a formal urban design assessment or review, but rather the provision of a high level view on any obvious plan characteristics that may be at odds with the concept plan indicated in the growth strategy. Urbanismplus reported on its findings in a memo to Mark Caldwell (MDC) on 1 July 2011.

Other involvements by Urbanismplus in the Marlborough District

6.6 Urbanismplus is currently involved in finalising the District-wide Strategy, which provides the strategic overview of the comprehensive planning and design work

undertaken for Blenheim Town Centre and the Wairau-Awatere and Marlborough Sounds areas, and also documents the outcomes of the Council's decision making process on the recommendations made in the three strategies that collectively form the Growing Marlborough Strategy.

6.7 Urbanismplus is also currently involved in assisting the Council with two sets of urban design guidelines; the Blenheim Town Centre Guidelines and the Marlborough Residential Guidelines. This project also directly feeds into MDC's Resource Management Plan Review currently underway.

6.8 Another involvement by Urbanismplus is in the design of a Comprehensive Development Plan for Blenheim-North, the area derived from the original growth pockets N1 and N2. This plan seeks to set the framework that coordinates the development of the multiple properties that this possible growth area consists of.

6.9 Related to Growing Marlborough, The Resource Management Plan Review and the anticipated development of the residential growth pockets (including Blenheim-North and Colonial Vineyard) Urbanismplus undertook a desktop study analysing the density and lot sizes of five recent Blenheim-based consent applications. The aim of this study was to define the market feasibility of density requirements, suggested in the Southern Marlborough Growth Strategy. A hypothetical, but realistic, concept plan for Colonial Vineyard was drawn illustrating the findings of this study. Pere Hawes (MDC) invited the PC59 applicant and Wayne Bredemeijer to a meeting on 6 September 2011, during which the density requirements MDC was and is considering for the greenfield growth areas were discussed. The Urbanismplus concept (evolved from the concept plan produced during the Growing Marlborough process) was also presented and may have served as inspiration for the PC59 application.

6.10 Other previous involvements of Urbanismplus have included the Blenheim Town Centre Streetscape Design Brief and conceptual design explorations for three strategic sites within the Blenheim Town Centre, including the 2 High Street site (both following the Blenheim Town Centre Strategy).

Up to date

urbanism +

Wayne Bredemeijer MSc (Urbanism)

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CAREER PROFILE

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Guest critic (occasional) in studio sessions of the Masters of Urban Design programme, University of Auckland, school of Planning and Architecture

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Urban Designer, Urban Initiatives Ltd. (Auckland)

2002-2005

Urban Designer, Rein Geurtsen & Partners (Delft, The Netherlands)

1999-2002

Part-time Urban Design assistant, Rein Geurtsen & Partners (Delft, The Netherlands)

1995-2002

Master of Science (Urbanism), Delft University of Technology (Department of Architecture)

RELEVANT EXPERTISE

Areas of expertise include strategic urban design input in revitalisation and urban growth projects and high-level through to detailed design input in structure plans and master plans. Wayne has also provided input as a member of urban design panels as well as through urban design assessments. He has gained experience as senior participant and project manager for both private and public sector clients or a combination of these.

Wayne is an urban designer with nearly ten years full-time professional experience, of which over six years in New Zealand. Trained in The Netherlands at Delft University of Technology (Department of Architecture), he has worked for several specialised Urban Design consultancies in New Zealand and The Netherlands.

RELEVANT PROJECT EXPERIENCE:

New Zealand, with Urbanismplus ltd:

- → Project manager of and senior participant in *Growing Marlborough*, a District Wide Growth Strategy (which includes town plans for the Blenheim Town Centre, Blenheim's growth, Picton and 15 smaller settlements) 2009-2011. Growing Marlborough received the NZPI 'Highly Commended' award in 2011.
- → Project manager and co-author of several Urban Design guidelines for a number of District and City Councils in New Zealand, including pertaining to Blenheim Town Centre and Marlborough residential development, 2011.
- → Project manager for the Comprehensive Development Plan for Blenheim-North, Marlborough District Council 2011+.
- → Project manager of and senior participant in the Dunedin City Centre Revitalisation project, Dunedin City Council 2011.
- → Project manager of and senior participant in the Invercargill City Centre Outline Action Plan, Invercargill City Council 2011.
- → Project manager of and senior participant in the Wollongong CBD Action Plan project, Wollongong City Council (NSW) 2010.
- → Project manager of and senior participant in the Northcote Centre Plan project, North Shore City Council 2010.
- → Project manager of and senior participant in the Paraparaumu Town Centre civic lands project, Kapiti Coast District Council, 2010.
- → Project manager of the Structure Plan project for the Three Parks area in Wanaka, Queenstown Lakes District Council 2008.
- → Senior participant in Thames Coromandel Local Area Blueprints project (a district wide strategy with plans for three primary towns, five secondary nodes, and numerous settlements) 2010.
- → Participant in the Hutt City Revitalisation project, Hutt City Council 2009.
- → Participant in the Hastings Urban Issues project, Hastings District Council 2009.
- → Participant in the Adelaide Road Area Development Framework project, Wellington City Council 2008.
- → Project manager for the Panmure TOD Masterplan and Property Study, Auckland City Council 2008-2009.
- → Urban Design approach to Papakura's Road Hierarchy Project, Papakura District Council 2008.

- → Co-author for two research studies on the relationship between transport and urban design, NZTA 2008-2009.
- → Several master plans and subdivision layouts for private sector clients in New Zealand, 2008-2011

New Zealand, with Urban Initiatives ltd:

- → Design of several Structure Plans for future business land developments in Paerata, Tuakau and Waiuku, comprising a total of some 600 ha: Franklin District Council, 2006-2008.
- → Developing an urban design vision for the upgrading of the streets in Greenhithe: North Shore City Council, 2005-2007; Implementation and application 2007-2008.
- → Town Centre revitalisation of Te Puke, Western Bay of Plenty District Council, 2005-2008.
- → Town Centre revitalisation of Waihi Beach, Western Bay of Plenty District Council, 2007-2008.
- → Urban Design assistance and assessment of comprehensive accommodation development in Cardrona (Queenstown Lakes District): Brooklynne Properties, 2006.
- → Design (up to and including resource consent stage) of medium density residential development of 23 dwellings around communal open space in Papakura, Legacy Homes ltd, 2007-2008.

The Netherlands, with Rein Geurtsen & Partners:

- → Masterplan design of inner-city redevelopment of 'Apeldoorn Kanaaloevers', Apeldoorn Municipality in cooperation with Loostad Developers, 2002-2005.
- → Masterplan design and detailed design studies for the new urban residential area 'Broekland', 's-Hertogenbosch Municipality in cooperation with several developers, 2002-2004.
- → Design of inner-city redevelopment of 'Haarlem Crompton-location' (feasibility study for 140 dwellings and mixed-use): Crompton Chemical in cooperation with Haarlem Municipality, 2004-2005.
- → Design of the redevelopment of released glass house land adjacent to the town centre of Bleiswijk (commercial space, mixed-use and 35 town houses), integrating the open space related to the adjacent heritage cemetery: Bleiswijk Municipality, 2003-2005.

Appendix 2. Consultation details, supporting evidence by Wayne Bredemeijer, Senior Urban Designer at Urbanismplus Ltd.

Four Focus Group meetings have been held to consult with selected stakeholders on the growth of Blenheim:

1. Interested local Blenheim developers (4 August 2009).
2. Professionals involved in planning and urban development of Blenheim: planning consultants, surveyors, lawyers, architects, transport engineers (4 August 2009).
3. Representatives from community organisations in Blenheim, such as: Sustainable Housing, Primary Health, Health Overview, Grey Power, Age Concern, Maori Health, Access & Mobility, Safer Communities (5 August 2009).
4. Marlborough District mayor, councillors, and executive officers (5 August 2009).

Four public meetings were additionally organised for community consultation on the small settlements (3, 4, 5 and 10 August 2009).

Consultation outcomes

Blenheim's situation

The stakeholder consultation that took place on 4 and 5 August 2009 as well as analysis of background documents helped paint a picture of Blenheim's key features and urban growth issues:

- Blenheim is the acknowledged main centre for the Wairau Plains and Marlborough District (for business, administration, local government, government agencies, health and other services).
- Blenheim has the largest concentration of industrial and business activity and has strong strategic connections (SH1, SH6 and main trunk railway line, airport).
- At the 2006 Census Blenheim had a resident population of 23,110.
- Blenheim is located on a flat river plain drained by a complex system of streams and rivers with spectacular Wither Hills and Richmond Ranges as a backdrop.
- Blenheim has a generally benign climate with hot dry summers.
- Blenheim is the regional centre with regard to health services and hosts the Wairau Base Hospital, district health service, MedLabs, local medical centres, plunket and PHO.

- Schools include: 9 primary schools, 1 intermediate, 2 secondary, pre-school options and kohanga reo.
- Tertiary education includes: NMIT, Community College and Business Management training options.
- Recreation facilities provide for a varied range of activities.
- Other local community facilities include the district library, public halls, places of worship, and social services and facilities.
- Blenheim is located within a highly modified environment with few elements of naturalness (primarily associated with the rivers).
- The town is surrounded by and located on versatile soils. Surrounding rural land has high development pressure and is characterised by a high intensity of small-lot rural-residential subdivision at the urban periphery.
- This area is characterised by low to medium density residential and generally low-rise housing, green private gardens and generous open space.
- There is a range of housing sizes, styles and quality at generally high prices and a tight rental market.
- There is high demand for housing by transient and seasonal workers.
- There are separate water supplies for the Blenheim urban area and for Riverlands (including the Cloudy Bay industrial estate) both sourced from groundwater in the Wairau plain aquifer. The Blenheim source is from two well fields at Middle Renwick Road and Grove Road plus three individual wells. The Riverlands supply is from two well fields.
- The spring-fed streams of northwest Blenheim (Murphy's, Fulton's and Waterlea Creek) have good water quality and clarity.

<u>Comments made during the focus group sessions (4-5 August 2009)</u>

Urban growth in general

- Growth should be planned around existing facilities, e.g. schools and medical facilities.
- An emerging trend is that smaller wineries are taken over by larger ones. Owners of the smaller vineyards, often near retirement age, will sell their properties but want to keep living rural. The need for rural residential should therefore be considered.
- Reverse sensitivity issues affect the productivity of viticulture and agriculture.
- Education is important. NMIT is a crucial facility to keep young adults in Blenheim.

- Making better places is crucial, including housing.
- A large barrier for developing high/ medium density is formed by car parking requirements.
- Flooding problems have often shifted as a result of draining works for vineyards.
- A smaller lot size for rural residential should be considered.
- There is a need to cater for residential uses for the elderly: low maintenance, security, safety, companionship and small units.
- The District Plan does not produce the desired outcomes for housing.
- There is a need for policy guidance as to the desired outcomes and Council investments need to align with planning policies.
- Future connections and routes need to be secured by ingraining them in all statutory documents and other Council policies.
- The need for consistency between planning policy and the assessment of applications was expressed.
- More emphasis should be placed on intensification.
- Adaptable housing for changing lifestyles and an ageing population should be encouraged.
- There is a need to address the potential shortage of land for light industrial.
- The Riverlands area should be better utilised as a location for light industrial uses directly off State Highway 1.
- It should be acknowledged that different industries need different types of locations, e.g. winery service in the smaller townships, trades people on the periphery of Blenheim, and B-trains near the State Highways etc.

Residential growth considerations per sub-area

The following table summarises the feedback received on the broad growth directions (refer to Figure 2 in Appendix 3) during the focus group sessions:

Sub area / growth direction	**Positive**	**Negative**
Wither Hills		• Stability issues • Prone to floods and landslides • Protected natural asset • Visual impact of development

Alabama Road area	• Possibly good connections into the existing urban area • Well-connected with Redwoodtown shops • Offers potential for completion of the recreational ring	• Flooding issues • Redwood Street is difficult to cross
St. Andrews area	• Has good potential in the area between SH and railway • The area is within walking distance to town, but this is limited as one develops further out to the east	
Islington and Dillons Point Road area	Opportunities for living near the river	• No local community facilities • Riverlands school is on the other side of the State Highway/ railway line • Poor connectivity to the rest of Blenheim • Not a good reputation • Little open space
North of the Opawa River/ between Blenheim and Grovetown		• No infrastructure • Difficult to connect to the rest of Blenheim
North of Old Renwick Road	• Close to schools in Farnham and Mayfield • Suitable land to develop • Possibly some potential for a new node at the intersection of Thompsons Ford Road and Old Renwick Road	• Fragmented land ownership • Old Renwick Road is a barrier (70 km/h and used as bypass for trucks)
North of Old Renwick Road	• Close to schools in Farnham and Mayfield • Suitable land to develop • Possibly some potential for a new node at the intersection of Thompsons Ford Road and Old Renwick Road	• Fragmented land ownership • Old Renwick Road is a barrier (70 km/h and used as bypass for trucks)

West of Roselands and Springlands	• Good reputation; • Potential for airport related growth; • Local schools nearby • Springlands shops nearby	• Reverse sensitivities from vineyards • Airport noise, especially with a possible airport expansion with bigger and noisier planes • Versatile soils • Middle Renwick Road/ SH6 forms a barrier and is difficult to connect with
Yelverton/ Burleigh	• Recreational potential around the river • Good sized land holdings in this area • Good connectivity to the rest of Blenheim via Maxwell, Battys, and Alabama Roads • Easy connections to Redwoodtown shopping centre	• Battys Road is busy and could form a barrier • Large wedge of flood-prone land south of David Street and north of the sawmill • Reverse sensitivity issues near the sawmill, vineyards, and Omaka airport

Industrial land considerations

- There is still capacity in Riverlands.
- Heavy industry should be located in Riverlands.
- The area by the airport should be considered for light industrial uses.
- Anecdotal evidence suggests that there is insufficient or unsuitable land for light industrial uses available.
- There should be made more provision for light industrial and service industry within close proximity to Blenheim as opposed to out in Riverlands.

Retail and office considerations

- There is demand for locating Large Format Retail that is not fitting in the town centre (due to traffic capacity, access, size, residential interface, hazardous goods).
- There is potential to locate offices on the periphery of the town centre.

In conclusion, issues to be addressed regarding Blenheim's growth:

- Residential growth direction(s) in relation to the location of social/community infrastructure;
- Residential growth direction(s) in relation to flooding hazards.
- Costs of infrastructure upgrades per growth option.

- Any expansion beyond existing zoned boundary encroaching onto highly versatile soils.
- Housing affordability.
- Ecological restoration and enhancement of natural values in streamside reserves.
- Open space distribution in new residential developments.
- Provision for safe cycling routes especially for children travelling between residential areas and schools.
- Integration between cycling and walking with the system of streamside reserves.
- Maintaining the integrity of the strategic transportation corridors (SH1, SH6, rail).
- Managing airport noise near Omaka aerodrome.
- Infill, compact urban form and higher intensity development.
- The interface between urban and rural.
- Rural residential living.
- Development of any new commercial and industrial areas and appropriate performance standards for these areas.
- Locations and performance standards for Large Format Retail.
- The establishment of an Urban Design panel.

Appendix 3 Images, supporting evidence by Wayne Bredemeijer, Senior Urban Designer at Urbanismplus Ltd.

FIGURE 1: Urban design principles guiding the Growing Marlborough Strategy.

THEME	PRINCIPLE	IS ABOUT	THE STRATEGY AIMS TO ACHIEVE THIS BY	LEADS TO
1. AFFORDABLE GROWTH	Responding to the projected increase in population and activity in a way that is affordable in the long term	Long term affordability and development efficiency	→ Providing for necessary urban expansion where it makes logical sense, where it is efficient, and where it is most affordable from an infrastructure perspective. → Reconciling the locations where the market wants to develop with the locations where existing services (community, open space and recreation, infrastructure) could be utilised or built upon. → Ensuring that multiplier benefits and opportunities for one activity to stimulate others will occur. This will reinforce the viability of every possible activity, even to the detailed level of trying to encourage just one additional local corner store or speciality, niche retailer in a town. → Minimising long term maintenance costs and debt burdens on infrastructure and services for the community and individuals by maximising connections per kilometre of service and minimising the overall length of service kilometres. → Clustering growth in and around the existing settlements wherever possible, enhancing existing settlements rather than establishing new ones. → Promoting intensification where there are a range of amenities within easy walking distance (open spaces, jobs, schools, shops, and so on).	**Compact settlements with increased density where possible and more rural and natural land kept open**

Continued overleaf >

THEME	PRINCIPLE	IS ABOUT	THE STRATEGY AIMS TO ACHIEVE THIS BY	LEADS TO
2. EFFICIENT ACCESS	Making sure that access to goods and services is provided in an affordable and more environmentally friendly way	Proximity and accessibility to goods and services	→ Encouraging healthier lifestyles which are less-energy intensive and in particular where people have more choice in how they meet their daily needs other than by car. This will also have an equity benefit for the elderly and young who are less able to use vehicles to meet their daily needs. → Clustering growth in and around the existing settlements wherever possible; enhancing existing settlements rather than establishing partial new ones. → Looking for opportunities for intensification in existing settlements wherever appropriate and without undermining existing amenity values. → Promoting an increase in density (particularly in Blenheim and Picton) where there are a range of amenities within easy walking distance (open spaces, jobs, schools, shops, and so on).	Compact settlements with increased density where possible and more rural and natural land kept open
3. VALUABLE SOILS	Conserving valuable and productive soils for future generations	Agricultural productivity	→ Avoiding inappropriate development of valuable agricultural land to protect the ongoing viability of the agricultural industry and retain the greatest possible amount of productive soils (as well as high amenity landscapes) for present and future generations. → Buffering residential and commercial development to avoid reverse sensitivities with agricultural production uses. → Clustering growth in and around the existing settlements wherever possible; enhancing existing settlements rather than establishing partial new ones. → Promoting an increase in density (particularly in Blenheim and Picton) where there are a range of amenities within easy walking distance (open spaces, jobs, schools, shops, and so on).	
4. HEALTHY ECOSYSTEMS	Restoring, growing and connecting valuable ecosystems	Ecological health	→ Encouraging built outcomes that accommodate natural features, ecosystems, water quality issues, reduced energy usage and waste production. → Using new development opportunities to retain or restore valuable ecosystems. → Providing crucial ecological connections between large natural areas in the form of street trees, new open spaces, significantly sized areas of native planting, or along stream corridors.	Significant areas of native planting connecting across urban and cultivated rural areas, wetlands and waterways in their most natural state

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THEME	PRINCIPLE	IS ABOUT	THE STRATEGY AIMS TO ACHIEVE THIS BY	LEADS TO
5. QUALITY OPEN SPACE	Providing good quality and sufficient public open space for people to recreate and children to play in	**Urban recreation opportunities**	→ Emphasising a wide range of experiences for users, not just a total amount of open space area, that corresponds with logical movement patterns and which provide choice and amenity to users including: – a high amenity interface between land uses and open spaces; – ecological, interpretative, recreational, and visual amenity-based open spaces that form a legible network across the District (including privately owned and managed land where appropriate); – urban planting along key roads and wherever possible in Blenheim, Picton and the townships. → Providing a strategic distribution of public open spaces to ensure that residents on sites smaller than 1,000m^2 live no more than 400m walking distance from high quality public open space.	**An effective distribution of public parks and places, which are safe, functional, attractive, and accessible**
6. UNIQUE TOWNS	Retaining and reinforcing the unique character and role of the different urban settlements	**Town and settlement character**	→ Developing existing centres as vibrant economic and social hubs with residences, shops, entertainment and community facilities, and jobs all within convenient walking distance of each other, → Promoting environments that can be easily understood by their users, display a strong local identity, and create unique visual character. This will facilitate enhanced use, enjoyment, and pride within the district's communities. An existing economic and scale hierarchy contributes to maintaining this: 1. Blenheim and Picton are the primary tier, district-wide service centres; 2. Renwick, Havelock and Seddon are the second tier, 'local' settlements; and 3. the remaining settlements are tertiary tier, 'neighbourhood level' nodes. → Enhancing development and/or retention of the character of each of the centres. For example, and although some uniformity - for example signature Marlborough signage - could help communicate an overall 'brand' for the district, the use of generic 'main street' treatments repeated in each settlement would be a negative outcome that undermined a sense of difference between these. → Strengthening the character of the townships by celebrating and protecting heritage structures and buildings, and other elements that display local history and culture.	**A unique look and feel in the local streetscape, architecture, and offer of services and facilities within each settlement**

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THEME	PRINCIPLE	IS ABOUT	THE STRATEGY AIMS TO ACHIEVE THIS BY	LEADS TO
7. THRIVING TOURISM	Complementing Marlborough's natural area and viticulture-based tourist attractions with more urban visitor attractions and facilities	Economic gains from tourism	→ Promoting urban settings that are tourist attractions in their own right, as well as supporting a range of public events and festivals. → Promoting a wide range of attractions that keep visitors including a family unit (children and adults) occupied for an extended period of 2 hours or more. → Creating urban public open space that is prominent, attractive, legible and safe. → Providing transport infrastructure that is attractive, affordable, accessible, and efficient for a wide range of visitors in addition to local residents. → Promoting opportunities for the development or redevelopment of visitor accommodation in a wide range of types and markets.	**Places that are more attractive to tourists, offer events and attractions, and facilitate access to visitor attractions in the Sounds, the hills and on the coast**
8. GROWING EMPLOYMENT	Providing and protecting settings that respond to economic needs and stimulate economic growth	Economic gains from local employment	→ Promoting built outcomes that stimulate local employment and strengthen economic vitality for communities. → Stimulating development in order to create, rather than undermine, opportunities for economic advantage. This means amongst other matters coordinating residential growth and employment opportunities, and providing the movement connections between the two in order to stimulate economic exchange. → Promoting choice through the provision of a diverse mix of compatible activities and uses. These built environments can better adapt over time and provide for a range of market demands. → Encouraging dedicated employment areas to have a mixed character and be as attractive as possible subject to their underlying function.	**Places and high quality settings that meet the operational requirements of industrial and commercial activities and stimulate a wider range of employment opportunities through agglomeration effects**

FIGURE 2: Blenheim landmarks in relation to the focus group findings on the expansion potential of Blenheim.

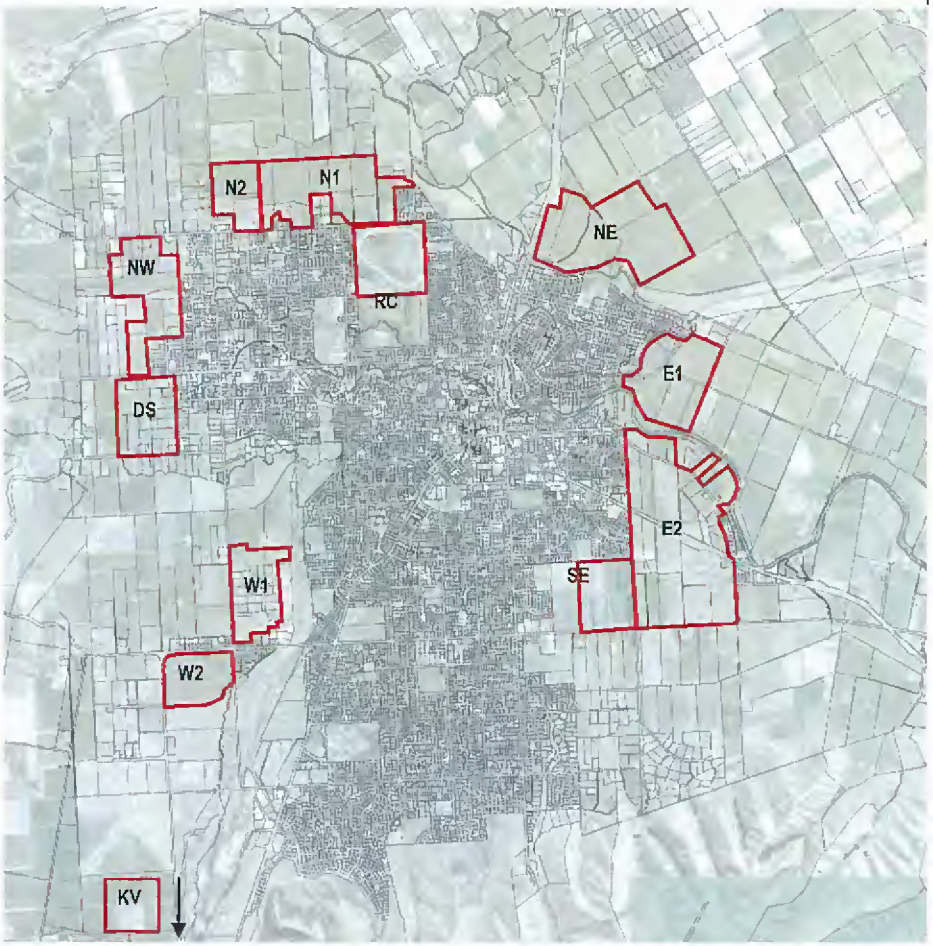


FIGURE 3: Growth pockets and their sizes considered at the Inquiry-by-Design workshop, September 2009.

FIGURE 4: Concept drawing for the Growth Pocket W2, produced prior to the workshop. At the initial stage the growth pocket included both Colonial Vineyard and the property immediately south of it. Concepts for all theoretically possible growth pockets (some of these shown –inset) were drawn prior to the workshop. These drawings formed the starting point for analysis during the workshop.

Growth pocket	Size (ha)
N 1	55.1
N 2	15.8
NW	39.3
W 1	27.8
W 2	21.7
E 1	38.6
E 2	92.5
SE	28.9
KV	
NE	64
RC	31
DS	29

unsuitable
neutral
suitable

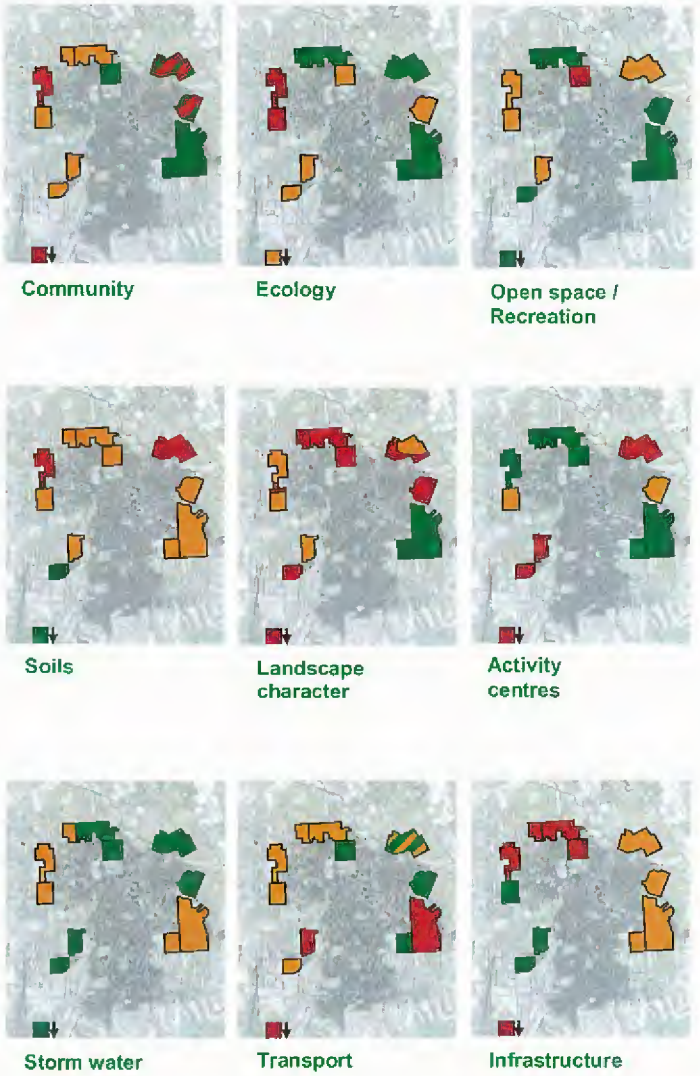
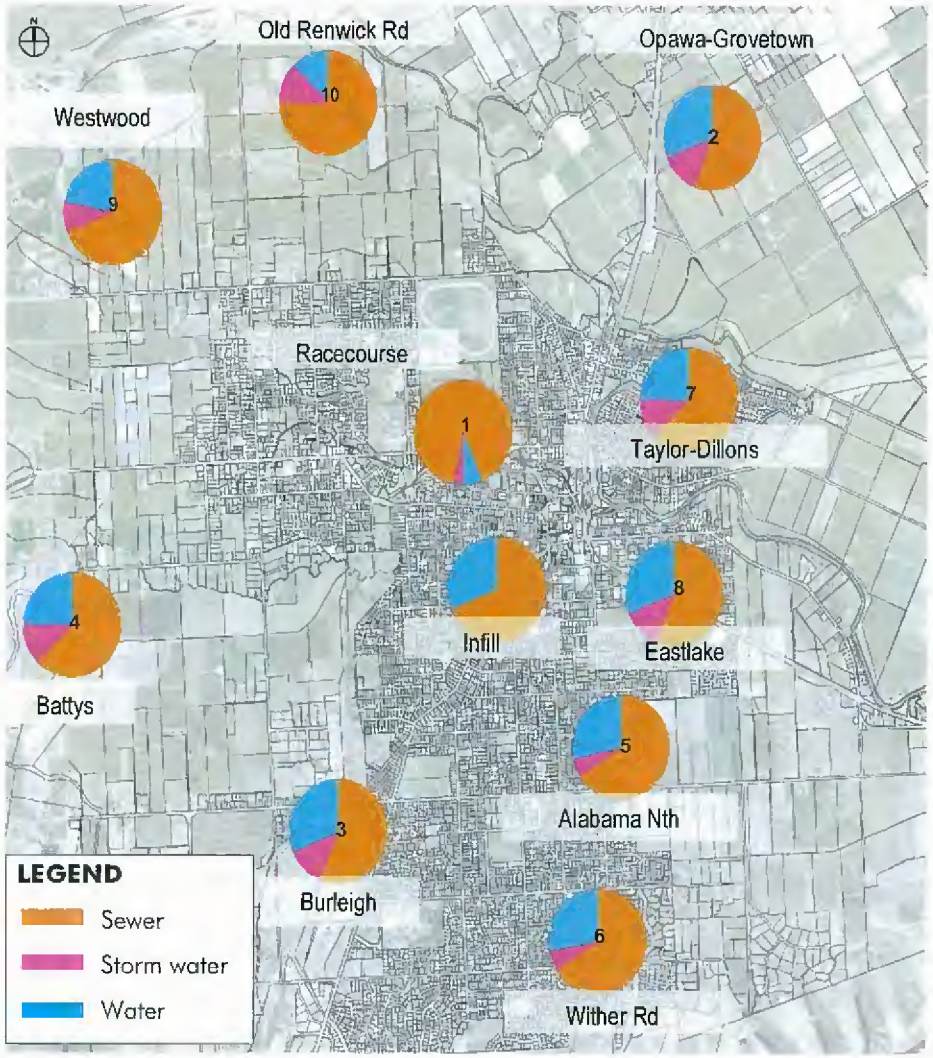


FIGURE 5: Growth pocket suitability assessments by different theme groups, undertaken at the Inquiry by Design workshop, September 2009.



		Water	Sewer	Storm water	Estimated cost per dwelling
1	Racecourse	B	C	A	$27,200
2	Opawa-Grovetown	C	A	B	$27,800
3	Burleigh	A	A	A	$29,500
4	Battys	B	A	C	$30,400
5	Alabama Nth	C	C	C	$31,200
6	Wither Rd	B	B	B	$31,400
7	Taylor-Dillons	C	B	C	$32,200
8	Eastlake	C	B	C	$33,200
9	Westwood	B	C	C	$40,400
10	Old Renwick Rd	B	C	C	$45,000
	Infill	A	A	C	$12,500

Key:

A – Capacity Available

B – Moderate Upgrade

C – Major Upgrade

FIGURE 6: Growth pockets considered and the cost implications calculated by the Assets and Services Group before the Inquiry-by-Design workshop, September 2009.

Discipline	Positive	Neutral	Negative	Comments
Community				→ Support for Redwoodtown village. → Other good recreation options. → Noise issues!
Ecology				Could use opportunity of development to enhance river with Riparian Plantings.
Open Space / Recreation				→ Close to existing infrastructure. → Access to the River. → Servicing some of existing community. → Off-road access to town centre.
Soils				
Landscape Character				
Activity Centres				Isolated from community resources.
Employment				
Storm Water				→ Straightforward from engineering perspective. → Discharge to Taylor River. → Slightly higher cost due to longer pipelines. → Soakage to ground may be feasible.
Transport				→ 3000m distance to town centre. → No bus nearby. → Opportunity to make development pay for necessary fixes. → Repairable design.
Infrastructure				Water and sewer capacity available.

FIGURE 7: Commentary regarding growth pocket W2 (Colonial Vineyard) provided by the technical discipline groups during the Inquiry-by-Design workshop, September 2009.

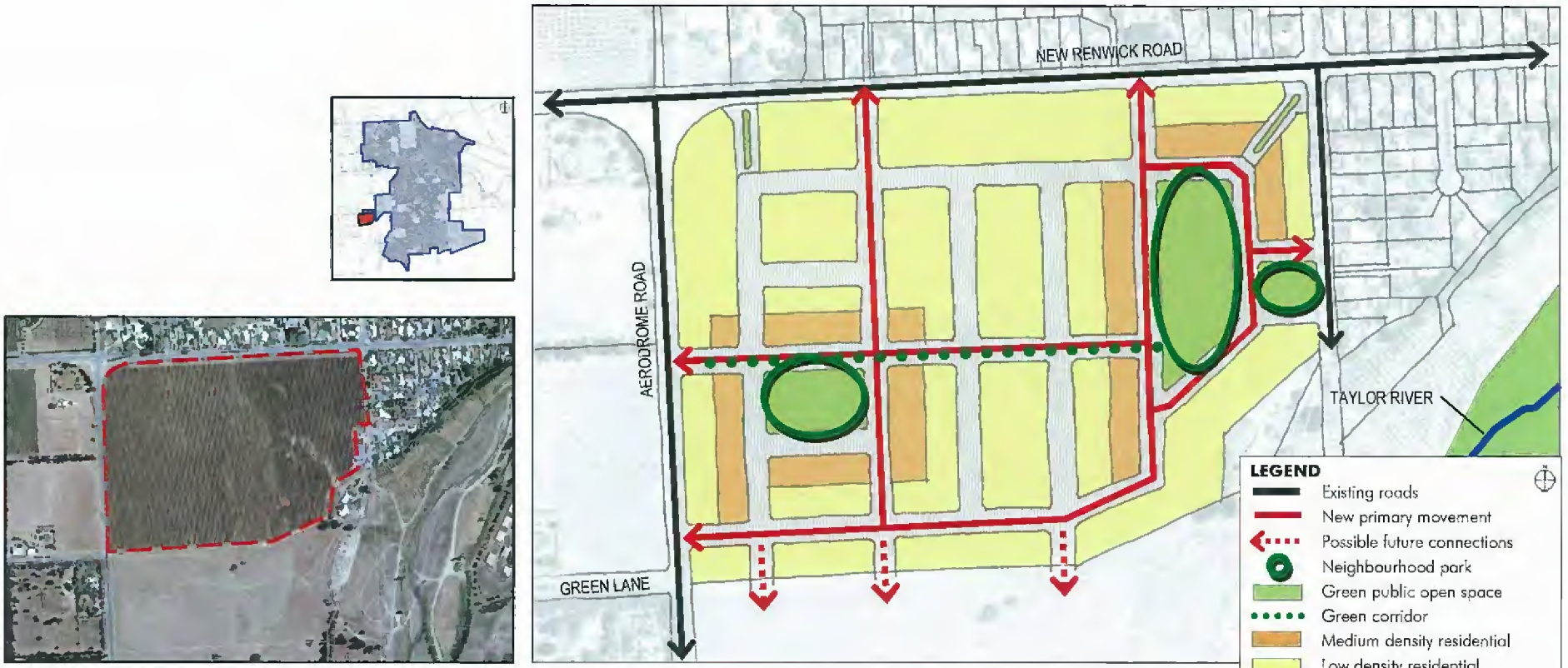


FIGURE 8: Indicative layout for a possible residential development of Colonial Vineyard, as included in the Southern Marlborough Urban Growth and Development Strategy

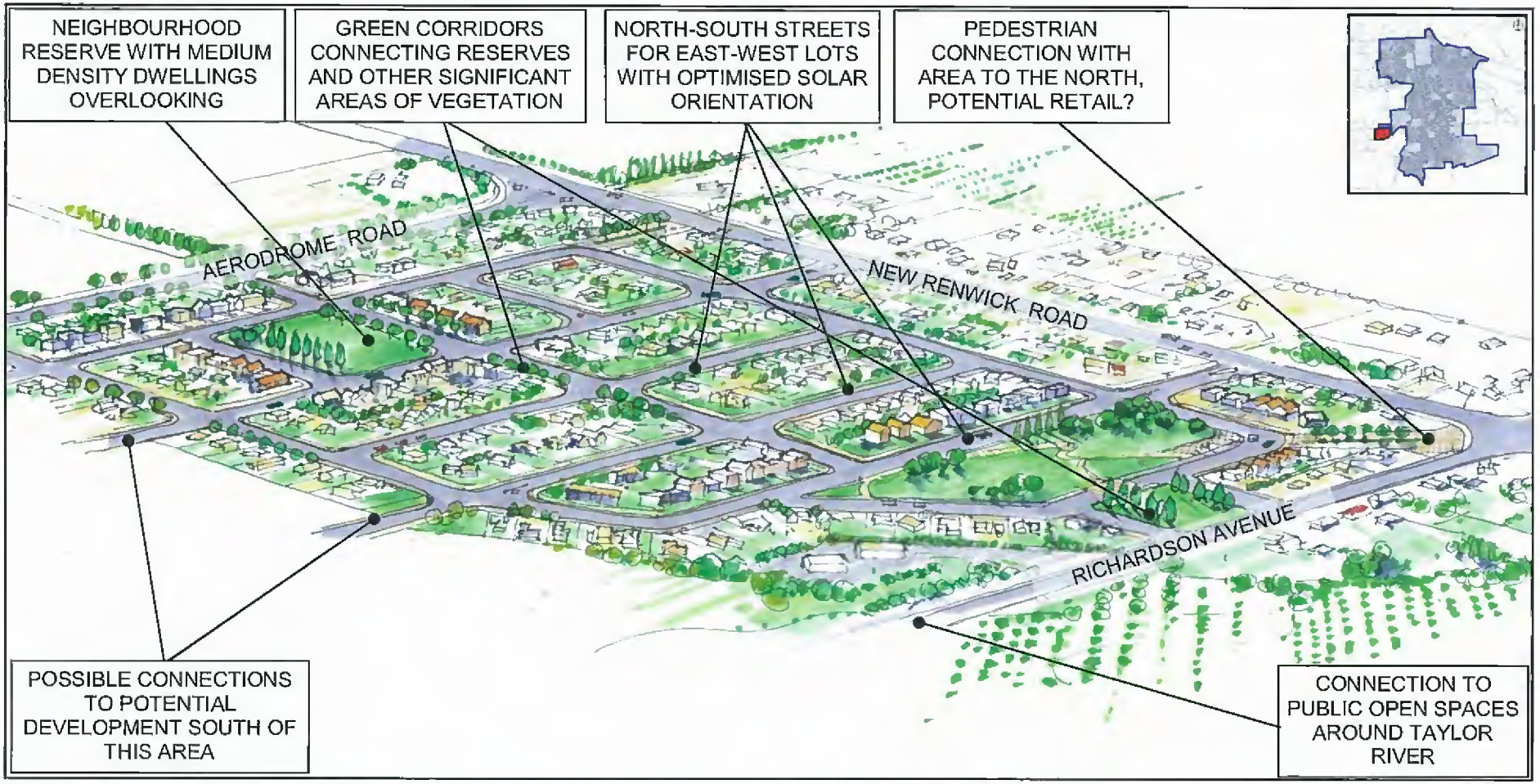


FIGURE 9: Artist's impression of possible residential development of Colonial Vineyard, as included in the Southern Marlborough Urban Growth and Development Strategy

Appendix D

HEGLEY ACOUSTIC
CONSULTANTS

OMAKA AIRFIELD
PREPARATION OF AIRNOISE AND OUTER CONTROL BOUNDARIES

1. INTRODUCTION

Omaka Airfield is a small airfield that is home to the Marlborough Aero Club and which caters for general aviation (GA) and helicopters. As with all airfields, noise from aircraft at Omaka has the potential to affect the surrounding environment which in turn, may result in pressure on the airfield to control the noise levels, particularly from new activities that arrive in the area. Given the practical difficulties in controlling noise from airfield, an appropriate method of integrating airfields into the community is first to accurately describe noise from the airfield and then assign suitable uses to the land surrounding the airflied depending on the noise level. In New Zealand, this procedure is undertaken in accordance with *NZS 6805:1992 Airport Noise Management and Land Use Planning*. This Standard requires that noise contours be predicted for the airflied (air noise boundaries) and that controls be placed on developments proposed within those contours.

This report describes the concept of air noise boundaries, how the air noise boundaries for the Omaka Airfield have been calculated and give the air noise boundary and outer control boundary for the airfield.

Appendix A provides a list of definitions of technical terms used in this report.

2. ASSESSMENT CRITERIA

The assessment of noise from Omaka Airfield has been undertaken in accordance with NZS 6805:1992 Airport Noise Management and Land Use Planning. This Standard recognises the effects of noise from airfields and the limitations on controlling noise from aircraft. The principal approach adopted by the Standard to mitigate the adverse affects on the community is the preparation of Control Boundaries, which are simply noise

contours that describe the aircraft movements. By controlling the activities that can be undertaken within designated boundaries, the adverse effects of noise on the surrounding environment can be controlled.

The two boundaries that are used by the Standard are the aimoise boundary and the outer control boundary. The airnoise boundary is defined by the 65dBA L_{dn} noise contour and within this boundary the Standard recommends that:

> "New residential, schools, hospitals or other noise sensitive uses are prohibited. Steps shall be taken to provide existing residential properties with appropriate acoustic insulation to ensure a satisfactory internal noise environment. Alterations or additions to existing residences or other noise sensitive uses shall be permitted only if fitted with appropriate acoustic insulation."

The outer control boundary is described by the 55dBA L_{dn} noise contour and within this contour the Standard recommends that:

> "New residential, schools, hospitals or other noise sensitive uses should be prohibited unless a district plan permits such uses, subject to a requirement to incorporate appropriate acoustic insulation to ensure a satisfactory internal noise environment.
>
> Alterations or additions to existing residences or other noise sensitive uses should be fitted with appropriate acoustic insulation and encouragement should be given to ensure a satisfactory internal environment throughout the rest of the building."

There are no restrictions on activities in areas outside of the 55dBA L_{dn} contour.

While NZS6805 relates to noise from airfields and is the appropriate Standard with which the assess Omaka, NZS6807:1994 Noise Management and Land Use Planning for Helicopter Landing Areas provides specific criteria for helicopter landing areas and the requirements of this Standard are also considered. NZS6807 describes the helinoise boundary, and its use for land use planning in a similar way to the air noise boundary of NZS6805. The helinoise boundary is defined by the 50dBA L_{dn} contour for rural areas, which NZS6807 describes as providing the minimum acceptable degree of protection for public health and the environment. NZS6807 notes that in terms of land use planning, no action is required outside of the 50dBA L_{dn} contour and in this respect is similar to the 55dBA L_{dn} contour from the entire airfield. For this assessment, the Outer Control

boundary is in fact an envelope of the 55dBA L_{dn} contour from the entire airfield operations (including helicopters) and the 50dBA L_{dn} contour from the helicopters only.

Based on the above descriptions, the assessment of noise from the airfield relies on the prediction of the Air Noise Boundary and the Outer Control Boundary. The prediction has been undertaken with a computer model specifically developed for modelling aircraft noise and is fully described below.

3. NOISE MODELLING

Noise from the airfield has been predicted using the Integrated Noise Model (INM) computer prediction program, which is recommended by NZS6805. This program has been developed solely for the prediction of aircraft noise and is used throughout New Zealand and extensively throughout the world. As with any computer program, the end result relies on the quality of the input data and this is discussed below. The accuracy of the modelling is directly related to accuracy on the input data, such as flight tracks and aircraft movements. In this area, the modelling has relied on information supplied by the airfield through their aviation consultant, Mr John Sinclair.

3.1 Aircraft Movements

The Standard requires assessment over the busiest three month period at some future design year. These future movements have been based on the existing aircraft movements at Omaka and expanding them out over a period of 20 years, which airfield management advises is the furthest period that can reasonably be predicted.

Prior to 2009, aircraft operations at Omaka were controlled, and counted by, the control tower at nearby Woodbourne airport. While Omaka is now uncontrolled, counts show that Omaka traffic began to fall after 2008, which was attributed to the economic recession. For this reason, all analysis has been based on 2008 movements making the design year 2028. The busiest three month period for 2008 was January to March when there was a total of 9436 aircraft movements at Omaka. As the tower does not record the type of aircraft, Omaka Airfield has estimated that 600 of these movements are day

time helicopters. While there are currently three helicopter companies operating from Omaka, it is understood Marlborough Helicopters is by far the largest and for analysis, the airfield has advised that it is reasonable to assume that all 600 movements are from this single company. Further, Woodbourne tower was not operational during the night time and the airfield advises that they expect that there are currently an additional 100 fixed wing and 250 helicopter agricultural flight movements in the early morning (the night time as defined by the Standard) which must be added to the analysis.

The airfield advises that fixed wing aircraft movements (including the agricultural aircraft movements) will increase by 70% by 2028. The movements from the largest helicopter company are expected to increase by 300% while the two smaller companies will grow at a faster rate to be the same size as Marlborough Helicopters by 2028. When the glider movements are removed from the tower data, the future aircraft movements for an average day within the busiest three month period become:

Table 1. 2028 Daily Aircraft Movements

	Day Time Movements	Night Time Movements
Fixed Wing	166.9	1.9
Helicopter	60.0	4.7

The busiest three month period occurs over the summer time and therefore misses the potential night time helicopter movements that would occur in the event of spring frosts. There is the potential that, should enough helicopters be used for frost fighting, noise from their operation would exceed those presented in the report for the summer operations. The difficulty with frosts is that they are unpredictable and cannot therefore be modelled with any degree of accuracy. If the number of frosts in any one spring were to exceed those assumed for the modelling, noise from the airfield would breach the noise contours, which will ultimately become part of the district plan. Alternatively, if modelling was undertaken on the assumption that there were to be a large number of frosts, the resulting contours would be large thereby limiting the use of large areas of land. The answer appears to be contained within the Rural Zone noise rules of the District Plan which state:

36.1.3.4.2 Exception

Notwithstanding the conditions in Rule 36.1.3.4, above, the following exemptions to that rule shall apply.

36.1.3.4.2.4 Rural Activities

Activities in Rural Zones One and Two required by normal rural practice provided that the activity shall be no louder than necessary, and shall comply with the requirements of section 16 of the Act.

While the noise rules of the District Plan do not apply to the airfield, it is reasonable to consider their intent, which is to exclude the assessment of normal rural activities, which frost fighting forms a part of. For this reason, the assessment has been prepared based on the busiest summer months at the airfield and does not specifically consider the spring, frost fighting period.

Notwithstanding the above, it is considered appropriate to identify the potential noise effects from frost fighting helicopters. The purpose of this is to identify to any future residents that they would be moving into an area that will potentially be affected by noise from frost fighting helicopters. It is proposed to achieve this by adding an overlay to the planning maps that would be used for information only.

As the frost fighting helicopters only operate during the night time, noise for a single night of frost fighting (10.00pm to 7.00am) has been calculated. The threshold selected for identifying the land that would be affected by the frost fighting helicopters has been based on the requirement for sleep protection. *NZS 6802:1998 Acoustics – Environmental Noise* provides guidelines for upper residential noise levels for residential activities. The limits are 45dB $L_{Aeq(10pm-7am)}$ and 75dB L_{Amax}. These levels are based on providing a reasonable internal level assuming an open window situation. As the frosts will occur during the night time, it is reasonable to assume that the windows will be

closed, which will typically reduce levels by a further 10dB. This is a similar approach as is typically adopted for frost fans and, based on this, a reasonable internal level can still be achieved with helicopter noise of up to 55dB $L_{Aeq(10pm-7am)}$ and 85dB L_{Amax}.

3.2 Aircraft Types

The types of aircraft, and number of movements for a single day in 2008 were estimated by the airfield for an earlier assessment of noise, and are reported in Appendix B. These figures have been scaled up in proportion to the future movements as described in section 3.1 above.

The airfield has recently advised the following with relation to aircraft types:

- All glider tow movements are with the Cessna 172;
- The fixed wing agricultural aircraft is the Fletcher; and
- In addition to the R22, R44 and Bell 206 helicopters that were previously advised to be based at the airfield, there is also a Hughes 300.

3.3 Runways

The six runways at Omaka Airfield are:

- 01 - 19;
- 07 - 25;
- 12 - 30.

The percentages of aircraft using each runway are given in Table 2 below.

Table 2. Percentage of Fixed Wing Aircraft Using Each Runway

Runway	01	07	12	19	25	30
Cessna 172 (Glider Tow)	30%	25%	6%	0%	9%	30%
Fletcher (Agricultural)	0%	0%	0%	0%	100%	0%
Remainder of Fixed Wing	30%	25%	5%	1%	9%	30%

3.4 Helipads

There are three helicopter operators at Omaka (Precision Helicopters, Ridge Air and Marlborough Helicopters (MHL)), each with their own helipad. The split between the helipads is shown in Table 3.

Frost fighting helicopters typically arrive at the vineyards and park until required. When required, the helicopters visit the airfield during the night time to refuel at one of two pumps that are referred to as the AvGas Pump and the Jet Fuel Pump. The split between the two fuel pumps is shown in Table 3.

Table 3. Percentage Use of Each Helipad

	Precision	Ridge	MHL	AvGas Pump	Jet Fuel Pump
Commercial Use	33.3%	33.3%	33.3%	0%	0%
Frost Fighting	0%	0%	0%	50%	50%

The runways and helipads are shown on Figure 1 below.

3.5 Fixed Wing Aircraft Flight Tracks

Fixed wing aircraft departing from, or arriving at, any of the six runways can use a number of different tracks. The tracks can be described as circuit tracks for the single engine aircraft, a larger circuit for the twin engine aircraft, departures to/arrivals from the north, south, southwest and Wellington and the tracks for the glider tow planes. The exceptions are that there are no approaches on 19 and no twin engine circuits on either 07 or 25. The individual flight tracks are shown graphically in Appendix C.

The departure tracks are simple in that after takeoff, aircraft follow the circuit track until they attain a suitable heading at which point they depart the circuit track. The arrival tracks are more complicated in that aircraft first cross over the 'join point' from where they proceed to fly over the end of the runway they will be landing on before joining the circuit and landing.

While the flight tracks describe the path that the aircraft intend to take, it is usual for aircraft to deviate either side of that track with the amount being proportional to the distance from the end of the runway. INM models this 'dispersion' by distributing aircraft across the flight track with the majority being close to the centreline with reducing numbers towards the extremities of the track. Omaka Airfield advised on these extremities, which are shown as dotted lines on the Figures in Appendix C. In the case of some of the circuit tracks, the aircraft could not be dispersed to their full extent over the inside of the track as the resulting dispersed track length was too short for aircraft to complete the circuit. This has resulted in the asymmetrical dispersions for circuits on 07 and 25.

The tracks that aircraft follow on departing from each runway are given in Table 4 below.

Table 4. Track Usage by Fixed Wing Aircraft

Runway	Circuits	North	South	South West	Wellington	Gliders
Cessna 172 (Glider Tow)	0%	0%	0%	0%	0%	100%
Fletcher (Agricultural)	0%	33.3%	33.3%	33.3%	0%	0%
Remainder of Fixed Wing	70%	3%	7.5%	12%	7.5%	NA

3.6 Helicopter Flight Tracks

Both commercial and the frost fighting helicopters arrive at and depart from the airfield in all directions. This has been modelled by providing tracks to the north, south west and east and then dispersing the tracks over a wide range. Due to the airfield buildings being immediately to the north of the helipads, helicopters heading north must traverse these buildings in either an easterly or westerly direction before turning north and two northern flight tracks were therefore modelled. The helicopter tracks are shown in Appendix C. The aircraft split between tracks is given in Table 5.

Table 5. Helicopter Track Usage

Runway	North 1	North 2	South	West	East
All Helicopters	12.5%	12.5%	25%	25%	25%

4. RESULTS

Figure 1 below shows the predicted 2028 contours overlaid on an aerial photograph of the surrounding area. The controls are available electronically if required.

M – Marlborough Helicopters Helipad
R – Ridge Air Helipad
P – Precision Air Helipad

A - AvGas Pump
J - Jet Fuel Pump

Figure 1. 2028 Air Noise Boundaries for Omaka Airfield

Figure 2 shows the area which it is considered reasonable to identify in the District Plan as being subject to noise from frost fighting helicopters during the night time.

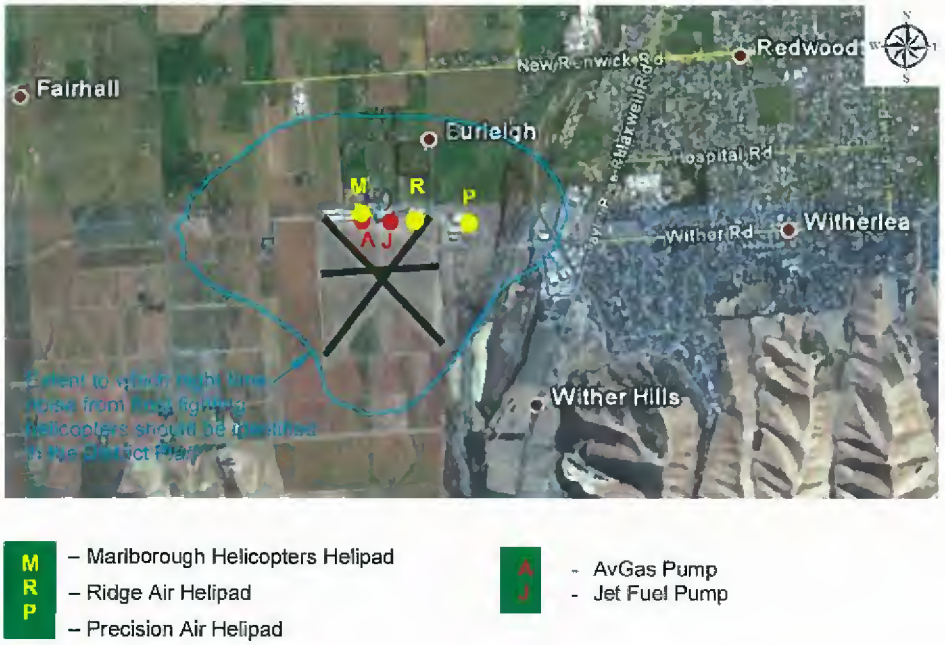
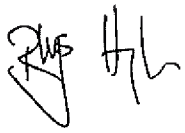


Figure 2. Proposed District Plan Overlay Identifying Extent of Noise from Frost Fighting Events

5. PEER REVIEW

Marshall Day Acoustics (MDA) has undertaken a peer review for the nose modelling of Omaka. MDA raised a number of issues with the interpretation of base data and the way in which it was represented in INM. Each of these issues has been worked though and MDA are in general agreement with the resulting contours. The most appropriate method of including the frost fighting helicopters in the assessment was discussed in detail with the peer reviewer and both parties agree that an overlay for information purposes such as that shown in Figure 2 should be included in the District Plan.



Rhys Hegley

January 2012

APPENDIX A
GUIDE TO NOISE TERMS
AND THEIR APPLICATION TO AIRPORT NOISE

The following sets out an explanation of the acoustic terms that are referred to in this report. The aim is to provide a basic understanding of the terminology when discussing aircraft noise rather than to provide strict technical definitions.

The setting of specific noise levels to control any adverse effects does not necessarily mean that noise will not be heard. Audibility depends on the level of a sound, the loudness of the background sound and any special frequency composition or characteristics that a sound may have.

Research suggests that a small number of people (approximately 10%) will find any noise not of their own making unacceptable. Conversely, approximately 25% of the population are essentially immune to any noise. Neither of these two extremes is normally designed for. In establishing the appropriate noise levels the aim is to try and represent the typical expected community reaction, this will generally be approximately 90% of the people.

In order to reflect community response to noise it is necessary to establish a measure that reflects our attitude to the sounds that we hear. Due to the variability of many sounds (level, tone, duration, intrusiveness above the existing sound, etc) no single descriptor will totally describe the potential community reaction to a sound. For this reason, there are a number of terms that need to be understood.

dBA

The basic unit to quantify a sound is the decibel. The A-weighted sound level, or dBA, is a good environmental noise descriptor because of the similarity between A-weighting and the frequency response of the human ear at moderate sound levels. It can also be measured easily. However, it provides no indication of tonal frequency components or unusual frequency distributions of sound that may be the cause of annoyance. Where appropriate, this must be assessed separately.

We can hear a change in sound pressure that varies from 1 (taken as the threshold of hearing) through to 1,000,000,000,000 (or 10^{12}, and is taken as the threshold of pain). In order to bring these numbers to a more manageable size, a logarithmic scale is normally adopted. This reduces the above values to 0 and 12 respectively. The decibel is then described as 10 times the logarithm of the ratio of the pressure level of interest, to a reference pressure level. Thus the scale becomes 0 to 120dBA.

Some typical subjective changes in noise levels are:

A change of 3dBA is just perceptible
A change of 5dBA is clearly perceptible
A change of 10dBA is twice (or half) as loud

Because we use a logarithmic scale, care must be taken when adding sound levels. Two equal noise sources will sound 3dBA louder than either of the single sources. It takes 10 equal noise sources to raise the level of one source by 10dBA. ie 60dBA + 60dBA = 63dBA and 60dBA x 10 = 70dBA.

Equivalent Sound Level (L_{eq})

The L_{eq} is not specifically referred to in this report, but its description is useful for understanding the L_{dn} noise measurement, which is used throughout the report and which is discussed below.

The L_{eq} may be considered as the continuous steady noise level that would have the same total A-weighted acoustic energy as a fluctuating noise over the same time period. The L_{eq} may be thought of as an average noise level over a specified time period but it is important to understand that it is a logarithmic average rather than an arithmetic average. The importance of this distinction is demonstrated by the example of averaging the values of 0 and 100. While the arithmetic average is 50, the logarithmic average weights the answer towards the higher end and is 97.

Day-Night Sound Level (L_{dn})

The L_{dn} unit is the recommended unit to measure and describe the effects of aircraft noise in NZS6805:1992 Airport Noise Management and Land Use Planning. The Ldn is used extensively overseas for airport noise assessment and it has been found to correlate well with community response to aircraft noise.

The Ldn is the average of the 24, one hour L_{eq} values with a 10dB weighting for noise occurring during the night time period (10:00pm - 7:00am). The scale has been suggested for community noise assessment by the US Environmental Protection Agency as an improvement on the basic L_{eq} to take into account the increased annoyance caused by noise at night. The 10dBA night time penalty in the calculation of L_{dn} values represents the situation where the night time events are taken as being subjectively twice as loud compared to the same event occurring during the daytime.

As an example, if there is a steady sound of 60dBA that lasts for 24 hours the average L_{eq} is 60dBA. However, due to the +10dBA night time weighting, the L_{dn} value for the same steady 60dBA over 24 hours is 66dBA.

A more familiar example is a sound that has 55dBA for the daytime period (7:00am - 10:00pm) and 45dBA for the night time period (10:00pm - 7:00am). This has an Ldn of 55dBA.

NZS6805

NZS6805 is concerned with land use planning and the management of aircraft noise in the vicinity of an airport, or aerodrome, for the protection of community health and amenity values.

The aim of the Standard is to provide a mechanism that may be put in place by managing the potential adverse effects from the airport, such as noise, while recognising the need to operate a major resource with national significance.

The Standard promulgates the use of the 'Noise Boundary' concept as a mechanism for local authorities to:

(i) establish compatible land use planning around an airport

(ii) set limits for the management of aircraft noise at airports

The noise boundary concept involves fixing an outer control boundary and an airnoise boundary (ANB) around the airport. The airnoise boundary is based on the 65dBA L_{dn} noise contour. It defines an area around an airport within which the current or future daily amount of aircraft noise exposure will be sufficiently high as to require appropriate land use controls or other measures to avoid, remedy or mitigate any adverse effect on the environment, including effects on community health and amenity values whilst recognising the need to operate an airport efficiently.

The Standard also recommends an outer control boundary, which is based on the 55dBA L_{dn} contour. It suggests an area outside the airnoise boundary within which there shall be no new incompatible land use unless the district plan permits such a use, subject to a requirement to incorporate appropriate acoustic insulation.

The Standard adopts the use of the Day/Night Sound Level (L_{dn}). As described above, the Ldn may be considered as the noise energy on an average day with the addition of 10dB at night time levels (10:00pm to 7:00am the following day) to take account of the increased annoyance caused by noise at night.

To establish the location of the noise boundaries, NZS6805 (paragraph 1.4.3.1) states that a projection should be made of future aircraft operations to determine the future Ldn contours for the airport. It is recommended in this Standard 'that a minimum of a 10 year period be used as the basis of the projected contours, and their location may be estimated for planning purposes using the FAA (Federal Aviation Authority) Integrated Noise Model (INM) or other appropriate models'.

Noise controls can be used to manage the level of noise impact around airports. These controls can take the form of preferential runway usage, noise abatement flight tracks, curfews and noise emission limits. NZS6805 proposes maximum noise emission limits for the airport. This procedure is consistent with the general approach to noise control in

New Zealand, in that it is left to the operator to best decide how to manage their activities to comply with an agreed level of noise.

The location of the ANB (where the noise limit of 65dBA L_{dn} is monitored) determines the extent to which the airport's future operations are constrained and the extent of the noise emission from the airport. If the ANB is set too close to the airport, aircraft movements may have to be curtailed. If it is set further out, some future expansion may be possible; this would have to be balanced against exposing the population to higher levels of noise.

The location of the ANB and the implementation of appropriate noise and land use rules, clearly become the key issues with the implementation of NZS6805.

Day Time / Night Time

Due to the method calculating the L_{dn}, the definitions of night and day time are important. Daytime is defined in NZS6805:1992 Airport Noise Management and Land Use Planning as being from 7.00am to 10.00pm and night time is from 10.00pm to 7.00am the following day.

Appendix B: 2008 Aircraft Movements

Single Engine, Fixed Pitch Prop

Piper Cherokee	x3	3-4x per day
Piper Tomahawk	x3	4-5x per day
Piper Cub	x6	2-3x per day
Cessna 152	x1	1x per week
Cessna 172	x4	2x per day
Cessna 180	x2	1x per week
Rans Coyote	x1	2x per week
Avia Sportcrusier	x1	2-3x per week
Piper PA-12 Pacer	x2	4-5x per week
Garden Minicab	x1	1-2x per week
RV-3	x1	1-2x per week
RV-7a	x1	1-2x per week
Porterfield 35-70	x1	1-2x per month
Fairchild 24	x2	1-2x per month
Fleet 16b	x1	1-2x per day
Aeronca Champion 7AC	x1	1-2x per week
Citrabria 7EC	x2	1-2x per week
DH-82 Tigermoth	x2	4-5x per week
Boeing Stearman	x2	1-2x per day
Avro 504K	x1	1x per month
Fokker Triplane	x3	1-2x per week
SE-5a	x1	1x per month
DH-5	x1	1x per month
Halberstadt D.IV	x1	1x per month
DH-2	x1	1x per month
Pfalz D.III	x1	1x per month
WACO UOC	x1	4-5x per week
P2002 Seirra	x1	4-5x per day
??? Savanah	x1	1-2x per week
Bolkow Junior	x1	1-2x per month
Alpi Pioneer	x1	1-2x per week
Jodel D9	x1	1-2x per week
Jodel D11	x1	3-4x per month
Andrews A1	x1	2-3x per month

Single Engine, Constant Speed Prop

Piper Cherokee	x1	1-2x per week
Cessna 182	x1	1-2x per week
Cessna 185	x1	1-2x per week
Cessna 206	x1	4-5x per week
AESL Airtourer 150	x1	1-2x per day
Nanchang CJ-6	x5	1-2x per day
GA Fatman	x1	1-2x per day

GA Airvan	x1	1-2x per day
Piper Pawnee	x1	1-2x per week
RV-7a	x1	1-2x per week
RV-8	x1	1-2x per week
Rallye 235	x1	3-4x per month
Maule 235	x1	1-2x per month
Culver V	x1	1-2x per month
Curtiss P-36	x1	1x per month
Yak-3	x1	1-2x per week
Yak-11	x1	1-2x per month
Powered gliders	x3	3-4x per week

Twin Engine

Cessna 402	x1	4-5x per week
Lockheed 12a	x1	1x per month
Piper Aerostar	x1	1-2x per week
Avro Anson	x1	1x per month

Turboprop

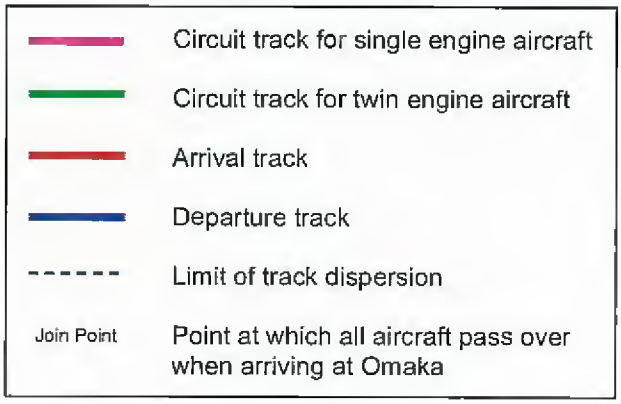
Fletcher	x1	1-2x per day
Cessna Caravan	x1	4-5x per week

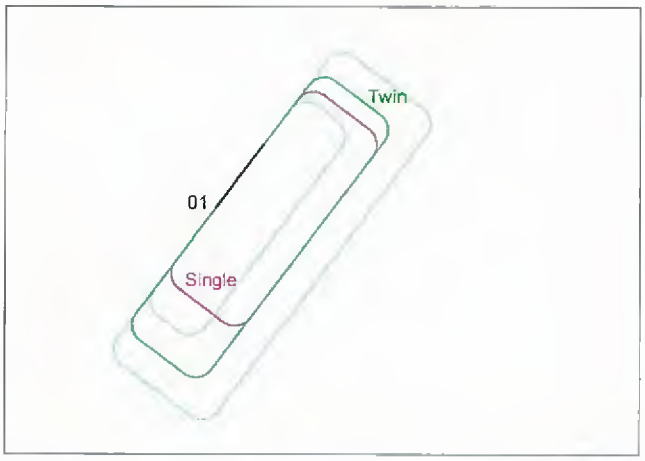
Helicopters

Bell Jet Ranger	x2	3-4x per day
Robinson R22	x2	3-4x per day
Robinson R44	x2	1-2x per day

Appendix C – Flight Tracks

The key below applies to the flight tracks on the following pages.





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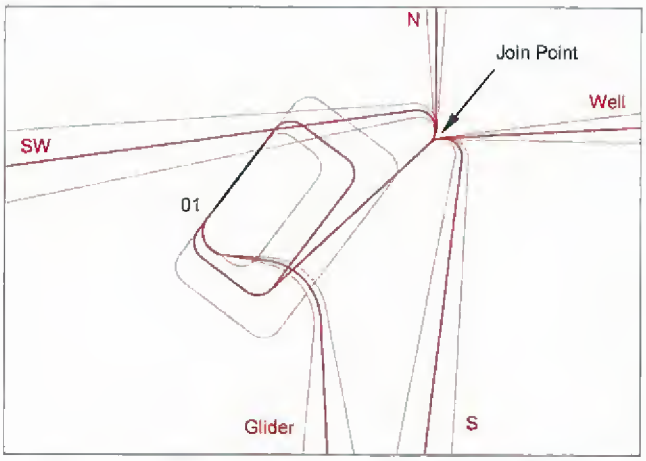

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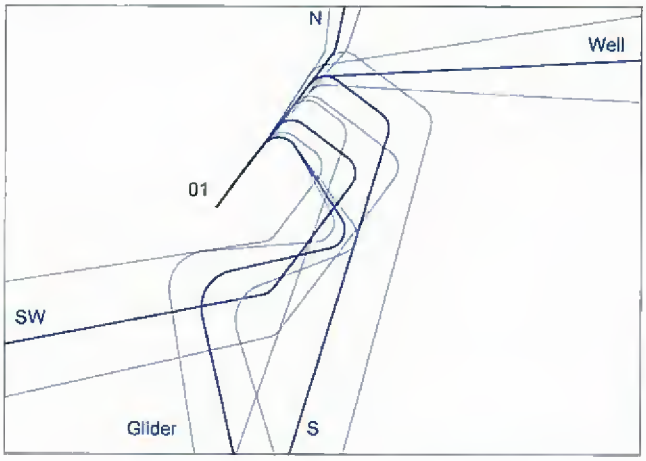

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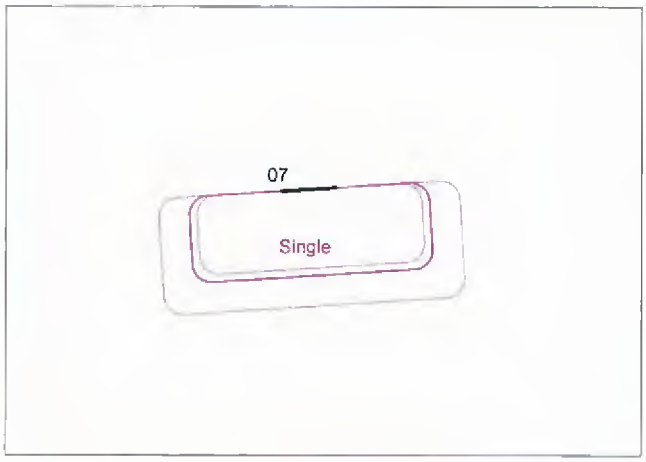

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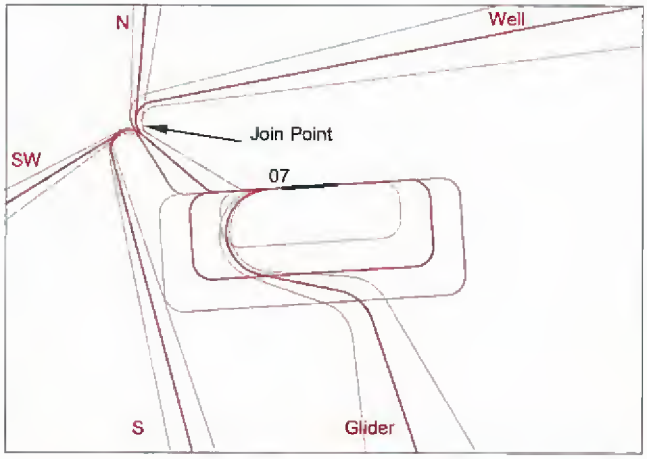

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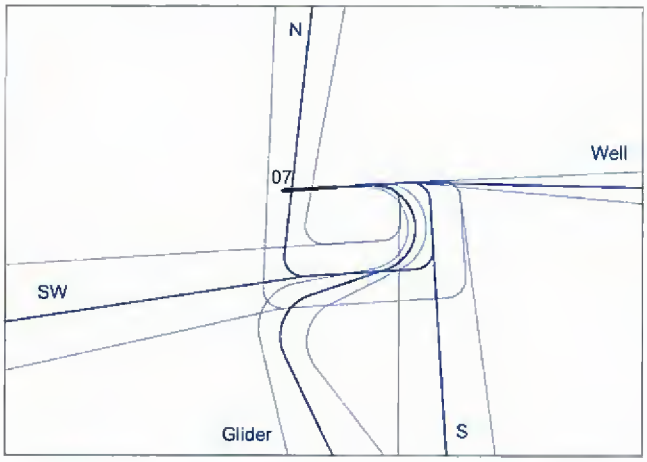

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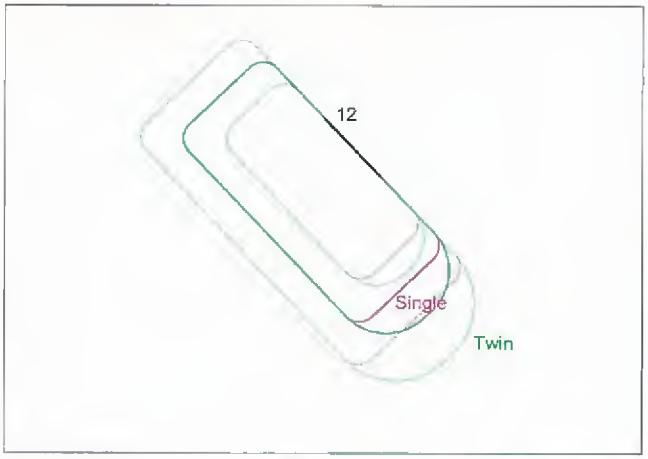

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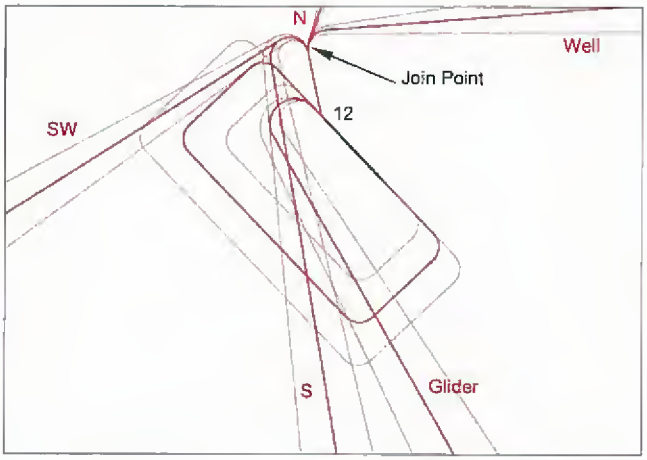

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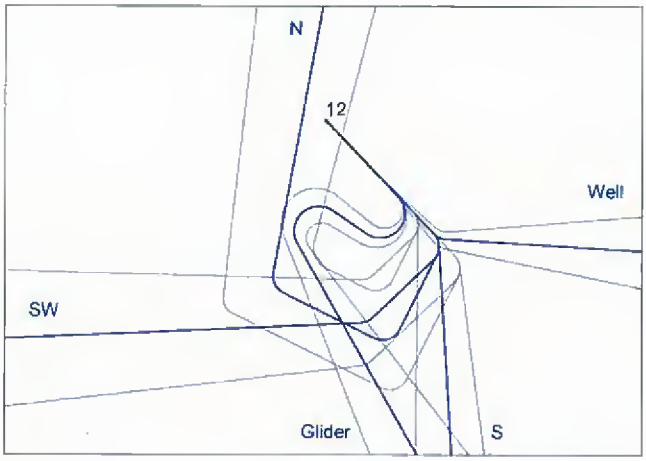

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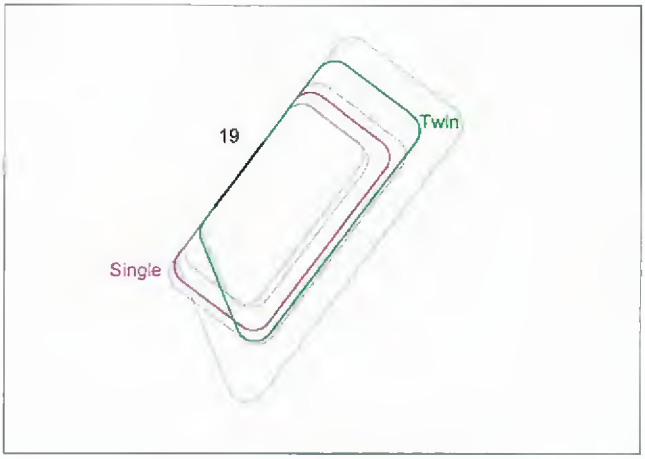

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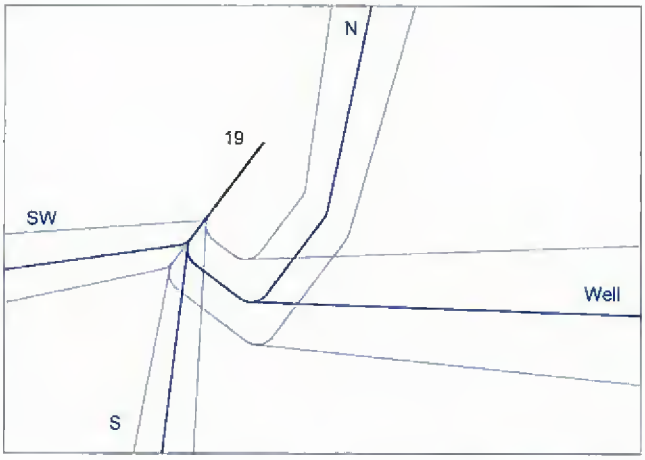

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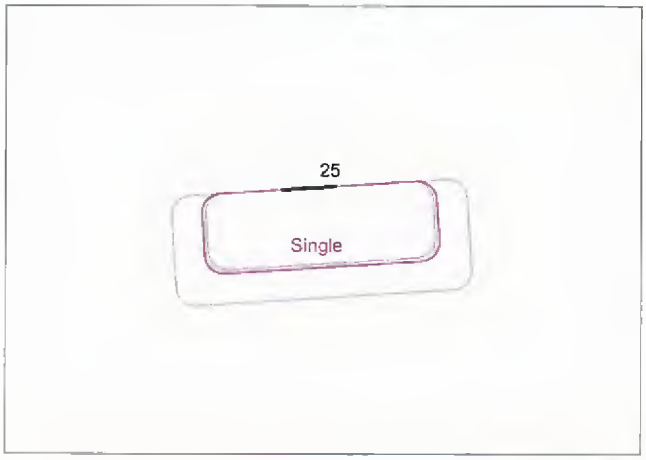

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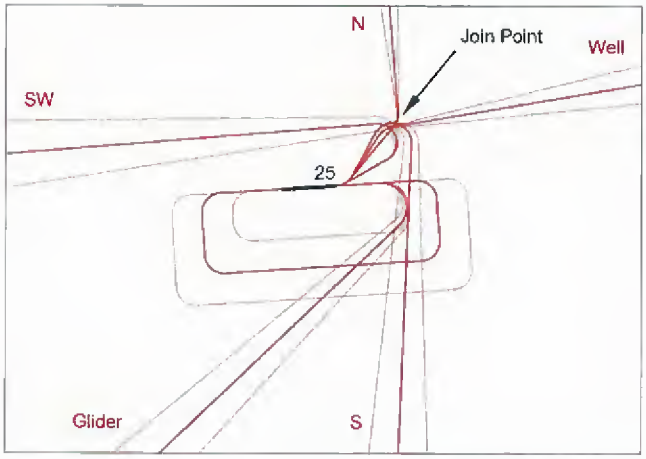

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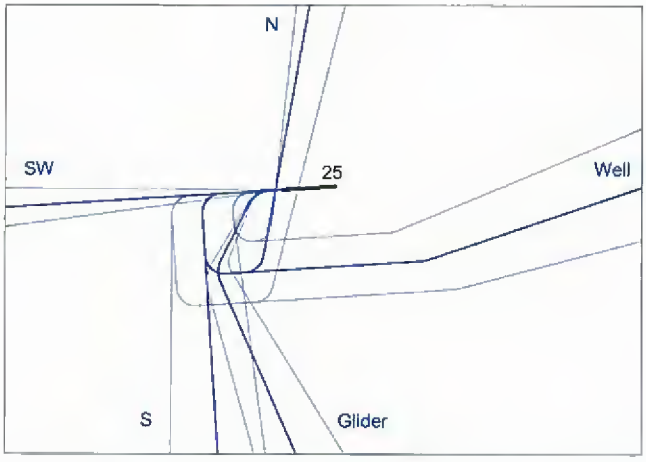

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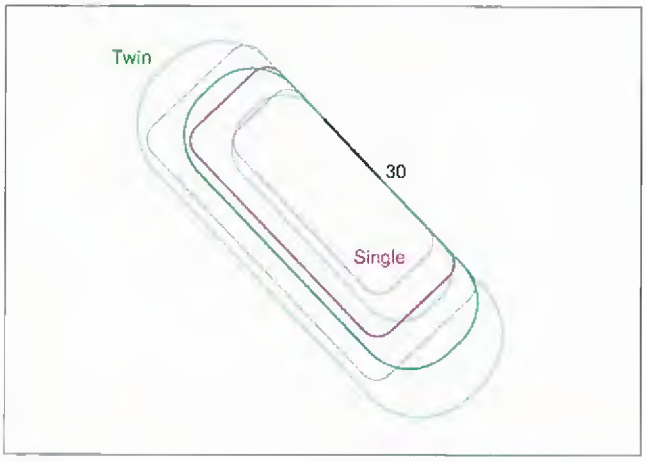

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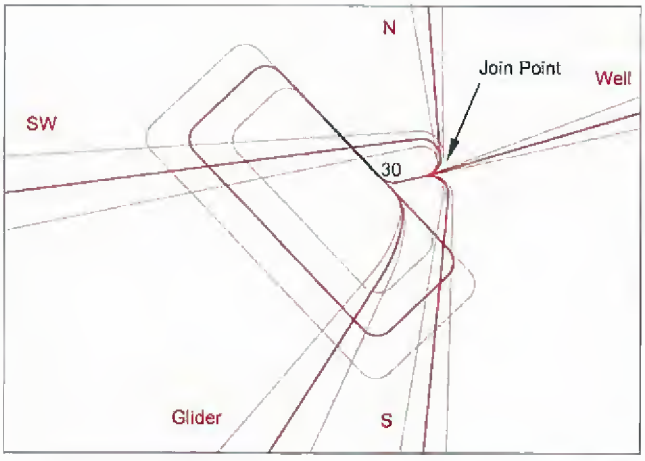
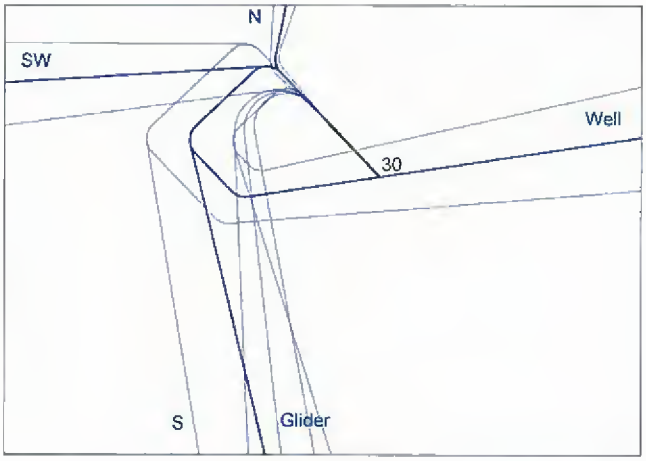
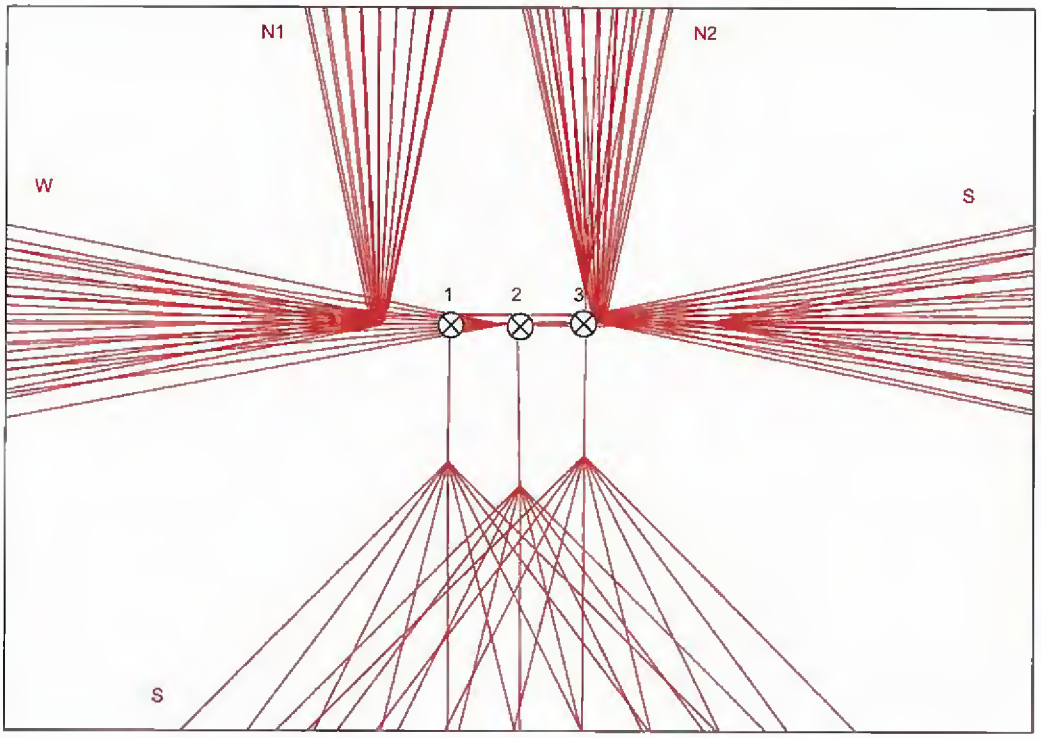


Approaches on 30

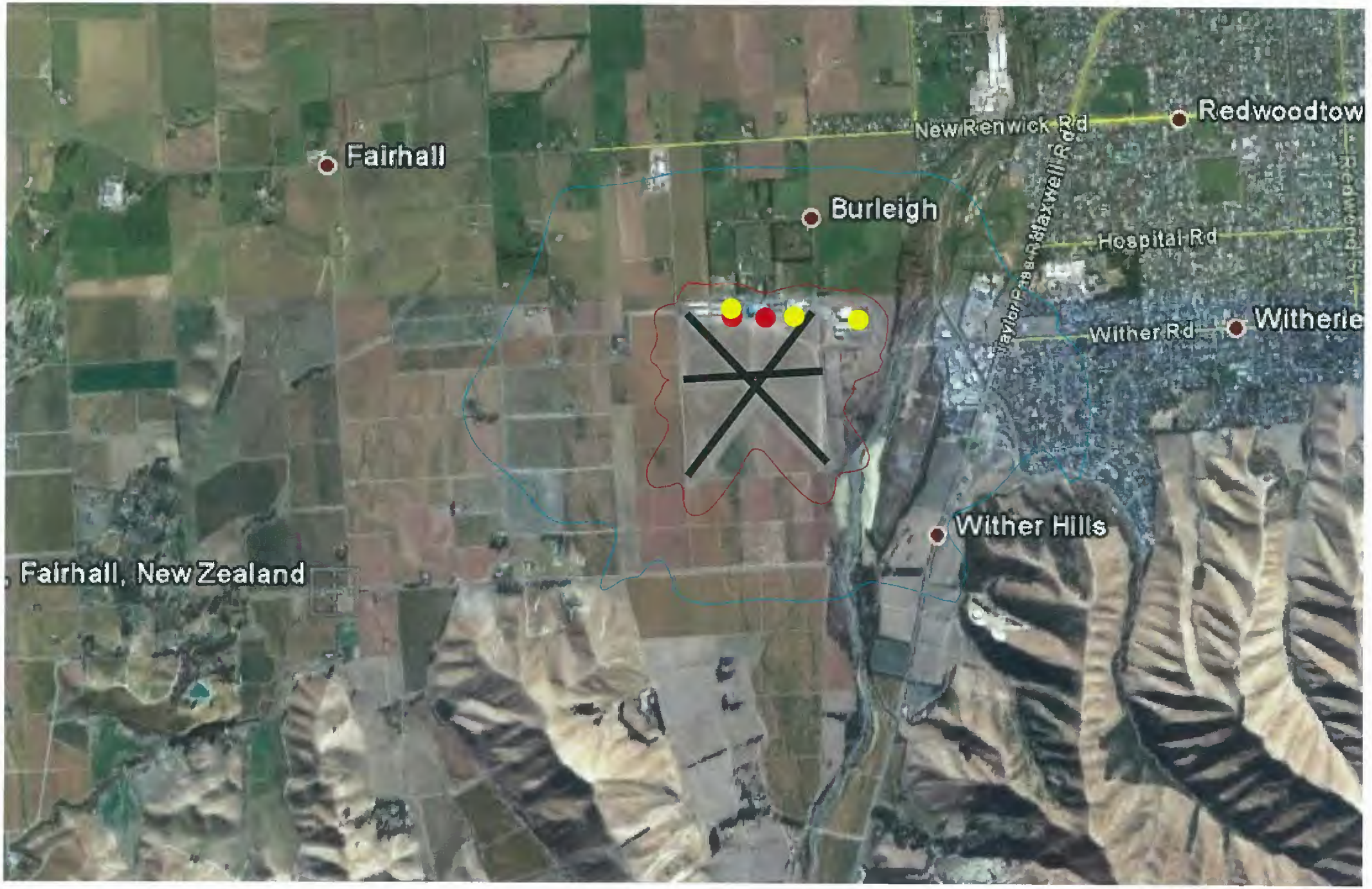


Departures on 30



1. Marlborough
2. Ridge Air
3. Precision Helicopters

Helicopter Arrivals (Departures follow reciprocal tracks)


Fairhall
New Renwick Rd
Redwoodtow
Burleigh
Hospital Rd
Taylor Pass Rd
Maxwell Rd
Redwood St
Wither Rd
Witherle
Wither Hills
Fairhall, New Zealand


Fairhall
New Renwick Rd
Redwoodtown
Burleigh
Hospital Rd
Blakiston Rd
Redwood St
Wither Rd
Witherlea
Wither Hills
Zealand

HEGLEY ACOUSTIC
CONSULTANTS

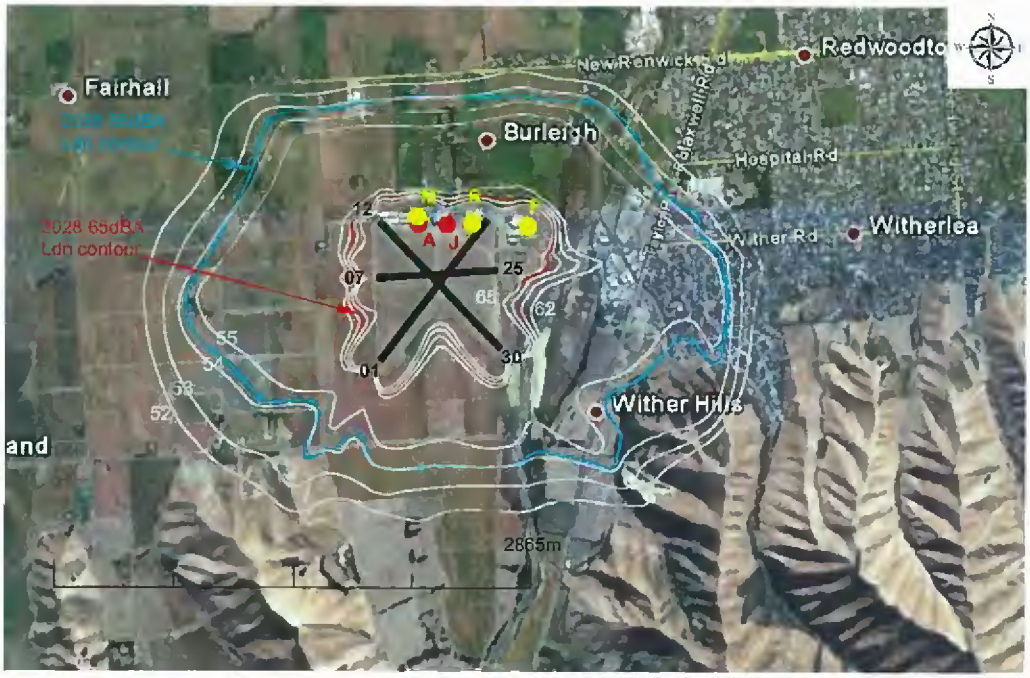
23 January 2012

Pere Hawes
Marlborough District Council
By email : Pere.Hawes@marlborough.govt.nz

Dear Pere

OMAKA AIRFIELD

Further to your recent request, I have prepared the noise contours for Omaka Airfield as per 2008. These contours represent the existing noise level from aircraft movements at the airfield and are shown below.

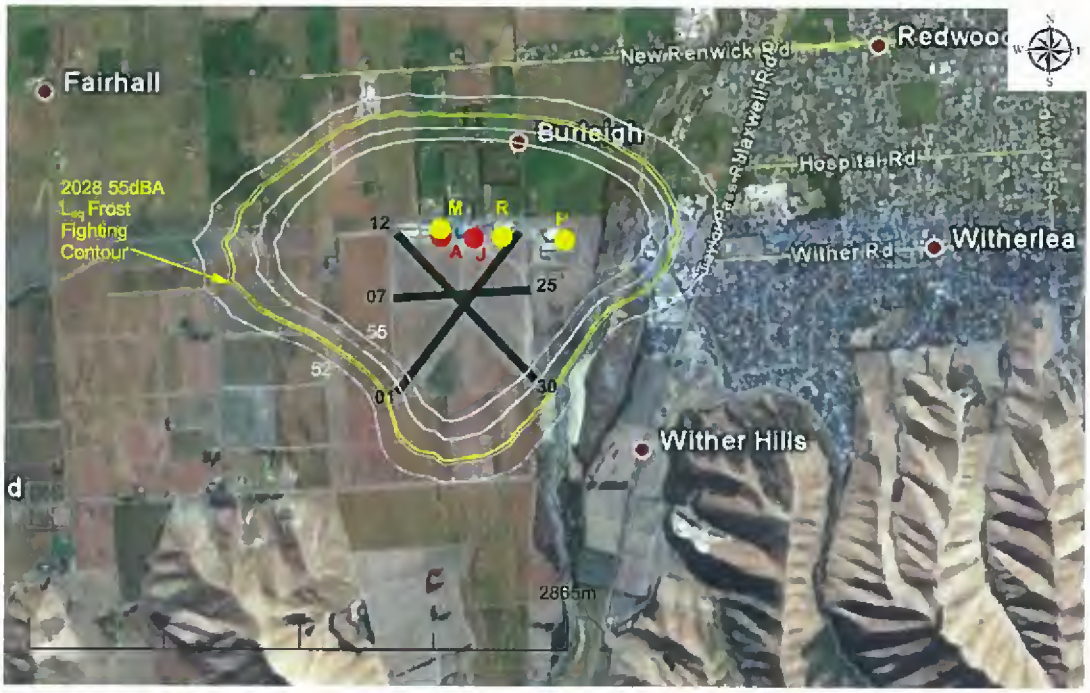


M R P – Marlborough Helicopters Helipad
– Ridge Air Helipad
– Precision Air Helipad

A J - AvGas Pump
- Jet Fuel Pump
- 2008 contour

Figure 1. Comparison Between 2008 and 2028 Air Noise Contours

Figure 1 shows that when compared to the existing (2008) noise contours, the 2028 Outer Control Boundary (55dBA L_{dn}) typically varies between the 53 and 54dBA contours and is wholly contained within the 52dBA contour. This indicates that the by 2028, noise from the aircraft will have increased by typically 1 – 2dBA and at most, less than 3dBA at any point.



M – Marlborough Helicopters Helipad
R – Ridge Air Helipad
P – Precision Air Helipad

A - AvGas Pump
J - Jet Fuel Pump

- 2008 contour

Figure 2. Comparison Between 2008 and 2028 Frost Fighting Noise Contours

Figure 2 shows that the noise from the night time frost fighting helicopters will increase by approximately 2dBA in all directions from 2008 to 2028.

Should you have any questions regarding the above please do not hesitate to contact me.

Yours faithfully

Hegley Acoustic Consultants
Rhys Hegley

Appendix E

Colonial Vineyard Private Plan Change Application. Water Services Comments

Water, Wastewater and Stormwater

Comments with regard to the Application for Private Plan Change, Colonial Vineyard, New Renwick Rd, Blenheim dated 28th April 2010 by ViaStrada and subsequent public submissions.

In addition to, and confirmation of, B Walkers comments 10th June 2011.

The development of the site is not constrained by the provision of water, wastewater and stormwater services from existing infrastructure. However new infrastructure will need to be installed to connect the site to the existing reticulation/watercourse.

Water

A new water main will need to be installed to connect the site to the existing water mains. The connection point is likely to be around the Battys Rd/New Renwick Rd junction. Minimum pressure at the site boundary is likely to be around 350kPa. Water reticulation on the site will have to be designed with minimal headloss to achieve the service standard of 300kPa at the point of delivery/road boundary.

In the medium to long term additional infrastructure maybe required to improve pressures to this area. The benefits will NOT be exclusive to this development and costs will be recovered from the general Development Contribution levy.

The development will be not cause a deterioration to the water supply for existing customers

Wastewater

Network modelling has concluded there is sufficient capacity in the existing trunk mains to accommodate the proposed Colonial Development and the existing properties 74-114 New Renwick Rd. The cost of this capacity is included in the Development Contributions levy

A new sewer main serving the site is likely to be connected to the existing reticulation in New Renwick Road. The point of connection is yet to be decided but maybe at the head of the gravity trunk sewer to the east of the Burleigh Bridge. Reticulation on the site is likely to be gravity mains from the properties to a sewer pump station that will pump wastewater from the site. The number of pump stations has yet to be determined. All costs will be borne by the developer.

Efficiencies are likely to be achieved by fund sharing part of the infrastructure for the Colonial Vineyard site to provide service for the existing sections on New Renwick Road. The design will reflect this and costs will be apportioned appropriately

Stormwater

Rivers and Drainage have confirmed there is sufficient capacity to accept the estimated stormwater run-off from the site into the Taylor River. The access corridor from the site and the size of the pipeline has not been determined. Ground levels and existing services may prevent the pipeline taking the most direct route between the site and the river. All costs will be borne by the developer.

Appendix F

Mark Caldwell-8225

From: Brin Williman-8467
Sent: Friday, 2 December 2011 4:47 p.m.
To: Mark Caldwell-8225
Cc: Geoff Dick-7559; Brett Walker-5194
Subject: Plan change 59 Colonial Vineyards

Mark

To answer the requested questions of your w045-15-59 memo of 30 November.

There is no flood hazard from the Taylor river to Lot 2 DP 350626, the Colonial Vineyard site.

River control works over the last 50 years have addressed the previous Taylor river flood hazard here. In particular this has included gravel extraction from the Taylor river in the general vicinity in the 1960s and 70s; the construction of the Taylor flood detention dam in 1965 and furhter modiifcation of it's outlet culvert in 1981; and furhter channel enlargement work in the Taylor river upstream of this site and up to Meadowbank bridge in the late 2000s. Council also maintains bank protection works to keep the Taylor river channel in its recognised channel within Counciil flood control reserve land.

The flooding that John Sinclair has observed is likely to be local stormwater runoff primarily from the vineyard itself, and some other upstream land

Development of the vineyard into residential lots will greatly increase local stormwater runoff, and this will need to be addressed as part of any residential development. The adjacent Taylor river has plenty of capacity to take this stormwater runoff.

I presume that you will pass on this information with other A & S information to Paul Whyte.

Brin Williman
Rivers Planning Engineer
Marlborough District Council
03 520 7442
021 917 947

Appendix G

Marlborough District Council

Colonial Vineyards Ltd

Private Plan Change

Liquefaction Issue

Document Control

Project	Liquefaction Issue at Colonial Vineyards Site
File Reference	**W045-15-59**
Author	Neil Morris
Document Status	**Working**
Distribution	General

Version	Date	Description	Pages
1.0	20/01/2012	First Copy for discussion	11 pages

Contents

Figures

Colonial Vineyards - Liquefaction Issue

Introduction

The geological history of the Wairau Valley has several characteristics similar to that of Christchurch environs and it is reasonable to question whether those similarities are relevant to the locality of the Colonial Vineyard proposal and in particular the possible liquefaction of sub-soils.

The relevant features are the marine sediments laid down nominally eastward of Bells Road and which are overlain by alluvial sediments derived from the adjacent hill slopes and the Wairau River.

The subject area (Colonial Vineyards) is shown in Figure 1.

Investigations

Desktop

At a district level a desk top study has been carried out and has identified localities having the potential for liquefaction, this has not been verified by field investigation; the extent of the evaluation is shown in Figure 2.[a]

The Study has indicated areas of interest and the basis of the study leads to a considerable degree of uncertainty as to the actual bounds of the potentially susceptible soils.

Field

A geotechnical field assessment has been carried out for the rezoning of land for industrial purposes at the Riverlands Industrial Estate which identified (in the locality of the rezoning proposal) that there are soils with the necessary characteristics for liquefaction to occur under sufficient ground vibration conditions.[b]

There has been some investigation along State Highway 1 in the same vicinity at Riverlands that indicates the same susceptibility. There are indications from work carried out for Marlborough Lines in the lower Wairau Valley that support the conclusions of the desktop study.

Seismic Hazard

The seismic hazard for the district is well known[c] to be such as to provide for events of a magnitude sufficient to create the necessary conditions to initiate liquefaction. It accepted that liquefaction occurred for both the 1848 and 1855 events (Awatere and Wairarapa) and there is anecdotal claim that the 1966 Seddon earthquake gave rise to incipient lateral spreading.

Liquefaction

In the geological context liquefaction will only occur in the presence of free water. In most instances such events occur in comparatively looser deposited sediments having a constrained size range, predominantly between 0.01 and 1.0 millimetre, see Figure 3. [1]

---

[1] Dr M Pender, Auckland University, Christchurch 22/02/2011 (Source web site NZSEE Clearing House)

An important configuration affecting liquefaction behaviour is the presence of a confining layer; if confinement exists it can delay (thus minimise) the volume of ejecta or completely inhibit sediment transport. The inhibiting effect of confinement is shown in Figure 4 although this example does not necessarily show what might be the relationship for Marlborough. The important point to note is the relatively quick effect that confinement has relative to a given thickness of liquefiable soil.

A soils unit having the potential for liquefaction is identified as the "Dillons Point Formation" and a casual observation shows similar appearance in terms of texture and colour between Marlborough and Christchurch and its approximate extent is shown in Figure 5. This appears to indicate that this formation does not extend to the subject site.

Colonial Vineyards Site

A specific project to look at the soil formation on the north and east periphery of the Blenheim urban area is due to start in February 2012, it was not deemed necessary to include the south-west corner in that investigation.

Without actual field investigation it can not be categorically asserted that liquefiable soils are not present. There is sufficient information available to assume it is either unlikely or if actually present it is sufficiently confined as to inhibit any surface expression (i.e. ejecta).

As part of research of the hydrogeology of the locality[d] (Harvey 2000), the depth to the water table has been established as shown in Figure 6. Nominally, at the centre of the property the difference between the ground contour and the water table contour is 8 metres.

The work of Harvey (2000) in the Appendix at page A10 gives a log for a bore of 18 metres depth; the bore (P28w/3390) is located on the southern bend of aerodrome Road and not on the subject property. Of relevance is a layer blue clay and silt approximately 0.2 metres thick at 8.4 metres depth. The confining layer is an inter-mix of fine and coarse sands fine and medium gravels with silts and clays.

On New Renwick Road in the vicinity of the bridge, a bore of 32 metres depth has been logged (P28w/3391). It identifies a layer of 0.2 metres thickness, 16 metres below ground,comprising blue clay and silt and otherwise the log is of similar makeup to P28w/3390.

Three shallow bores, nominally in the south east corner of the property (1293, 1294 and 1295), approximately 8 metres deep comprise gravels inter-mixed with some clays.

The information that the above bores provide does not indicate there is liquefiable soils present. There is a layer of 0.2 metres thickness present at depth and comprising "blue clay and silt". In other circumstances the presence of silts, especially of some thickness, would signal a need for closer examination. In this instance, given - the depth, the composition of the confining layer and the thickness of the silt layer it is considered reasonable to conclude that –

> There are no liquefiable soils above the water table, based on the log noted above.
>
> There is no evidence there are liquefiable soils below the water table, based on a general understanding of the local geology and that the clay bound silts are unlikely to liquefy, **but** –
>
> In the event there is liquefiable soils the degree of confinement is sufficiently significant to preclude surface expression, **unless** –
>
> The liquefiable layer is of thickness commensurate with the confining layer; **however**, there is no geological evidence for such a formation at such a depth and in the particular location.

Conclusion

The risk of there being liquefiable soils within the bounds of the Colonial Vineyards Ltd property is considered sufficiently low as to be able to be ignored.

Figure 1 – Colonial Vineyard Ltd Property

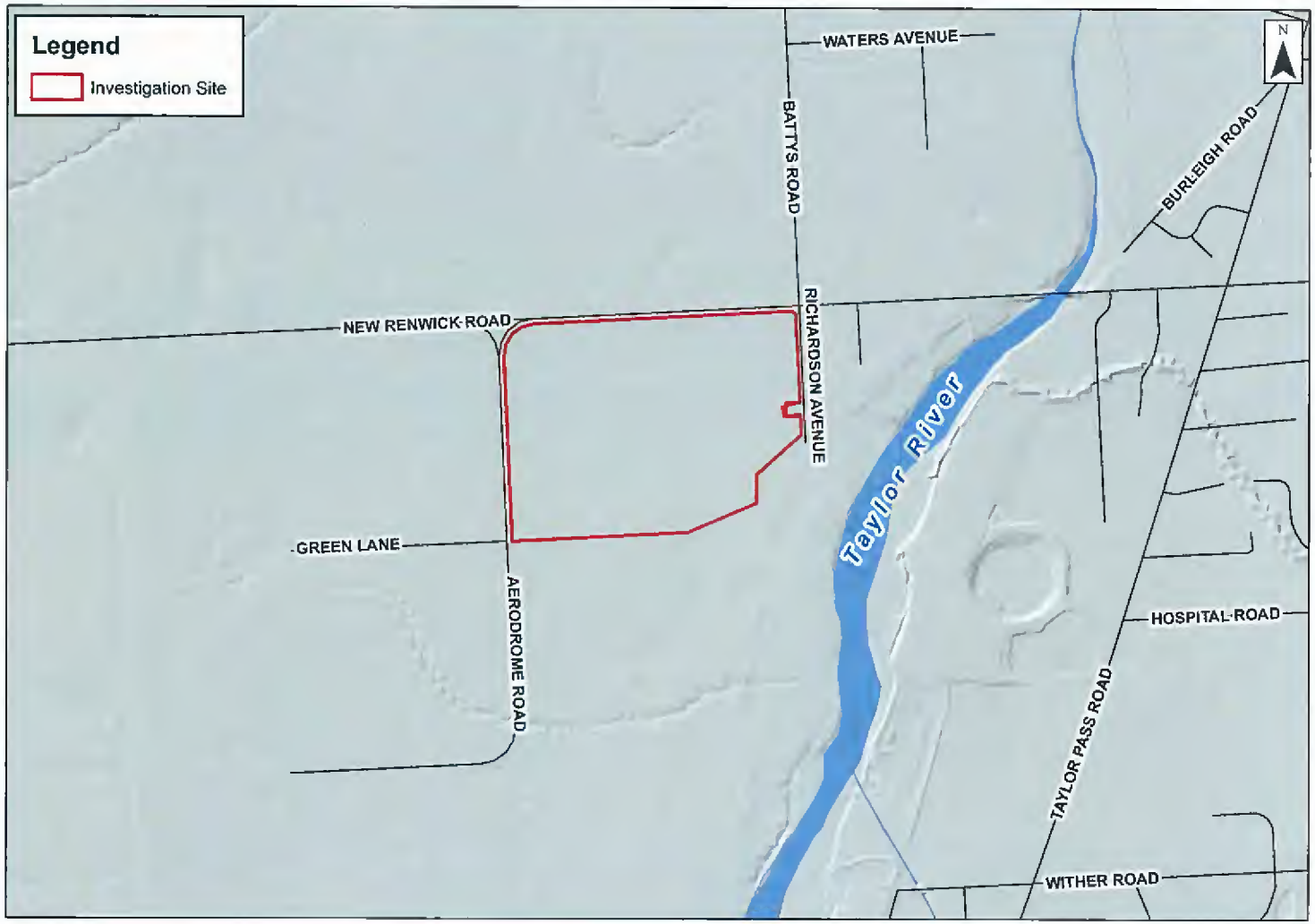


Figure 2 – Potential areas for liquefaction (from Hartstein and Barrow)

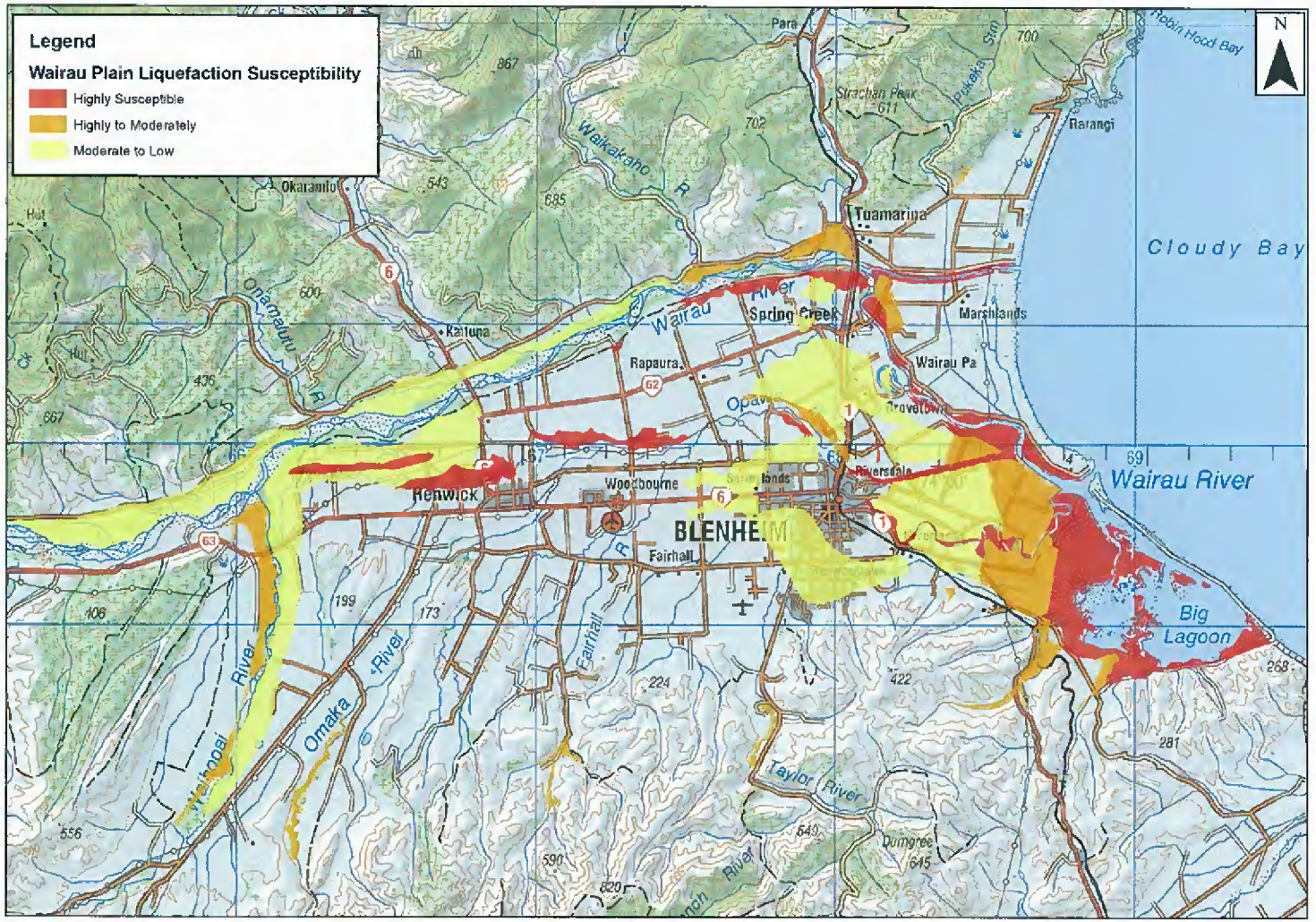


Figure 3 – Samples of ejecta from Christchurch

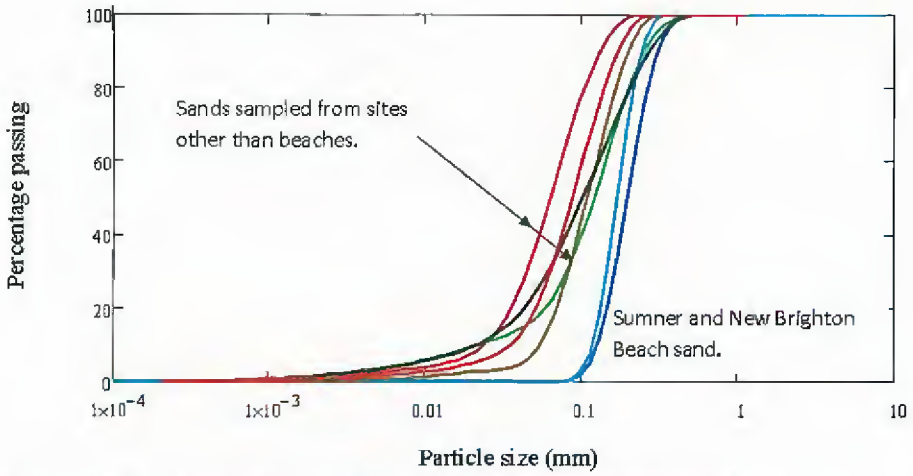


Figure 1. Particle size distributions of samples of ejected sand collected from various locations.

Figure 4 – Effect of confining liquefiable soils

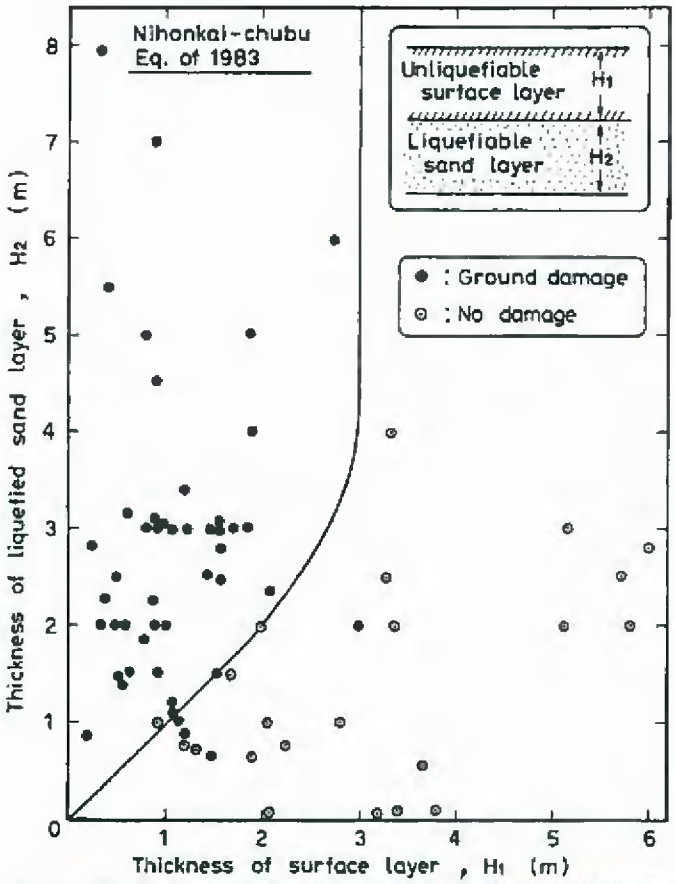


FIGURE 4-15 Conditions of subsurface soil stratification discriminating between occurrence and nonoccurrence of ground rupturing from liquefaction. Source: Ishihara (1985).

Figure 5 – Formation having liquefiable potential

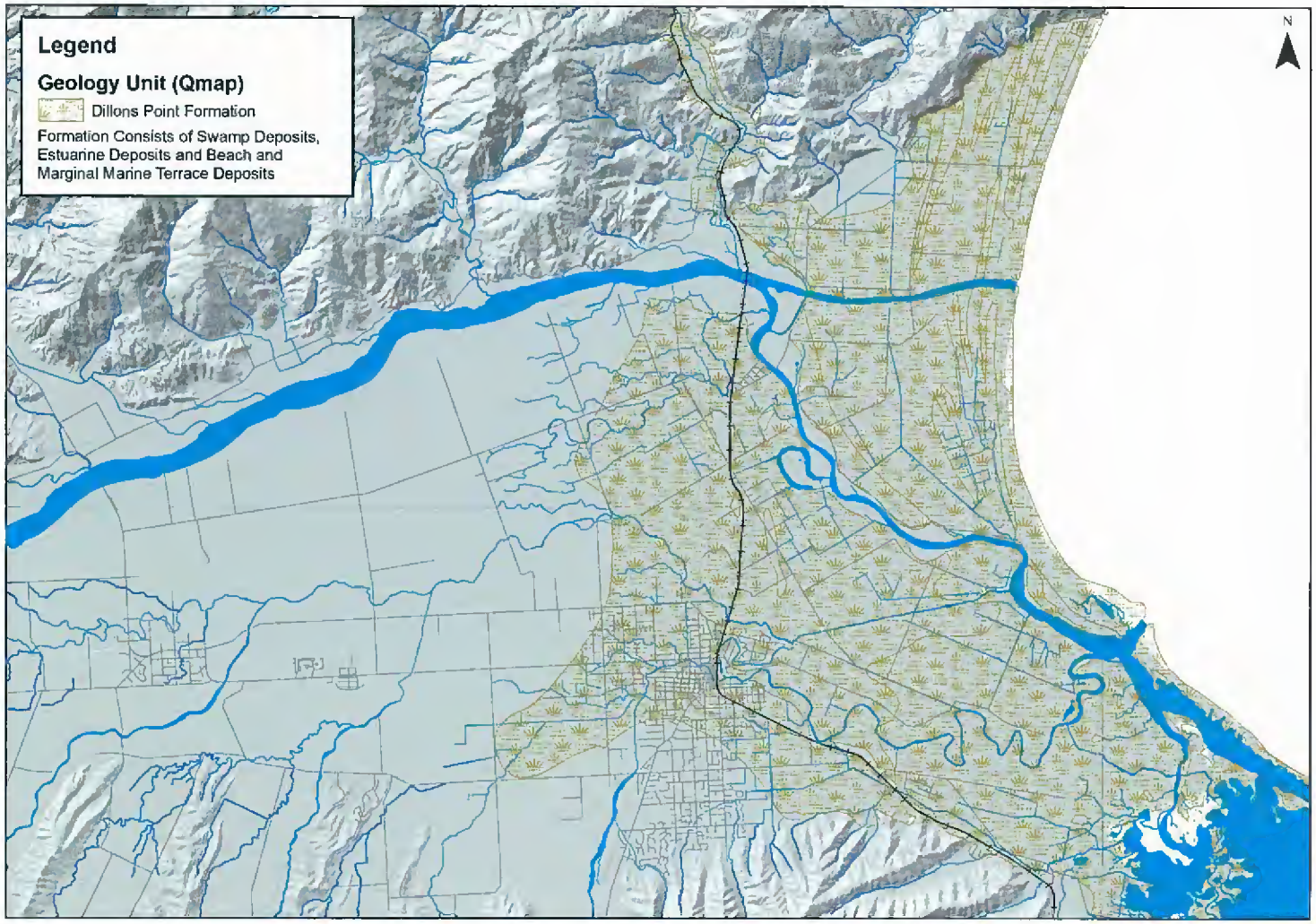
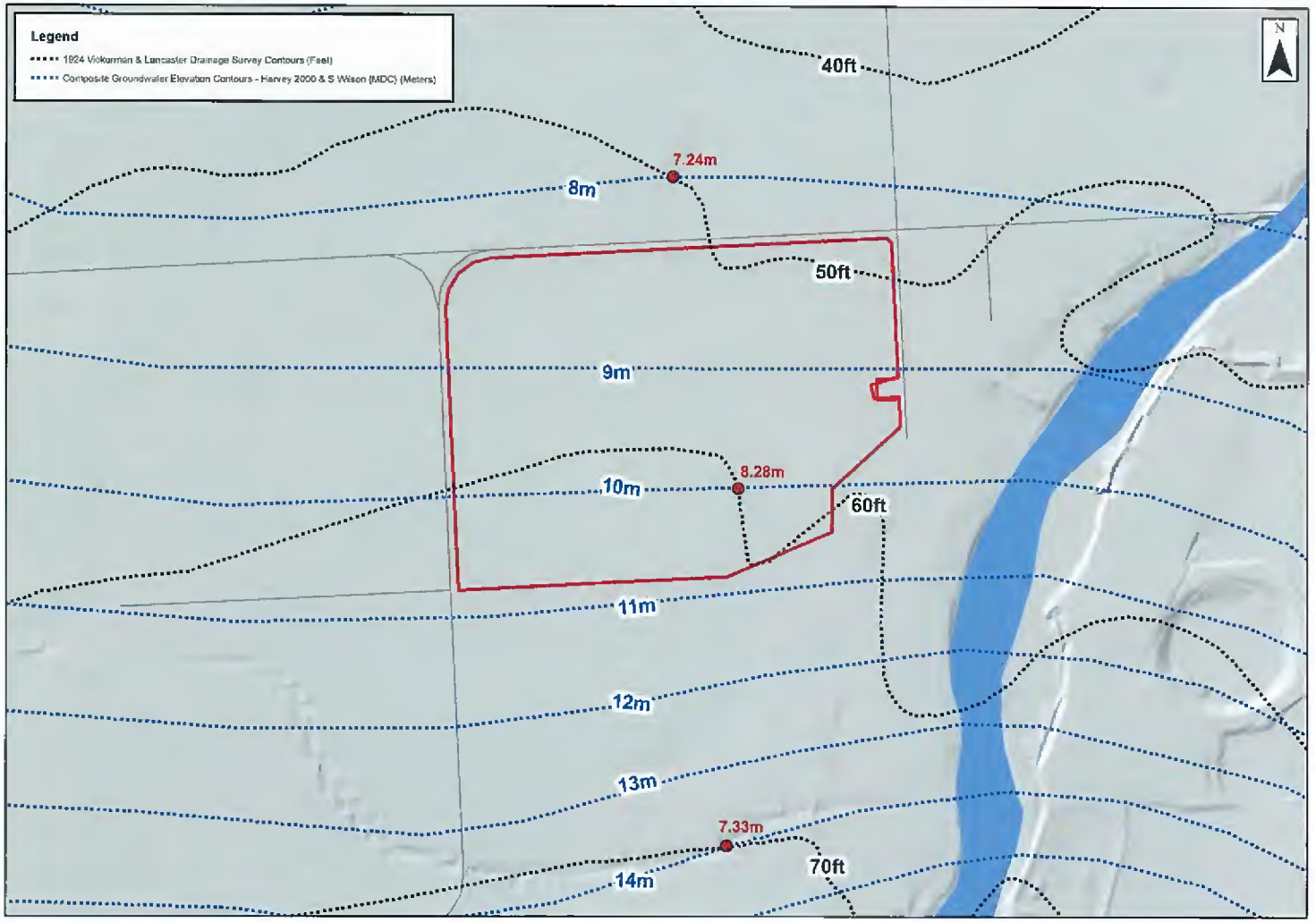


Figure 6 – Depth of confinement at subject site



References

[a] Hartstein and Barrow, Jul 2000, *Liquefaction Hazard for the Marlborough District*. Victoria University of Wellington. Study for MDC. Library Reference L013878

[b] Nelson Consulting Engineers Ltd, July 2007, *Geotechnical Assessment*, Riverlands. Report for Plan Change. File Ref W045-15-49

[c] Opus International Consultants Ltd, 2011. *Blenheim Urban Growth Study, Geotechnical Evaluation, Preliminary Geotechnical Appraisal*. Report to MDC

[d] Harvey K D, 2000. *Hydrogeologic Investigations of the Taylor Pass Landfill, Blenheim, New Zealand*. M.Sc thesis University of Canterbury

Appendix H

Colonial Vineyards Ltd Plan Change
Transportation Review

Prepared by Frank Porter, Marlborough Roads for MDC

I have reviewed the Transportation Brief prepared for Colonial Vineyards Ltd by Opus International Consultants. I am also aware of previous reviews by Via Strada and Urbanism+.

I note this report is quite short on specific detail, however it is appropriate as a pre-cursor to a plan change and does not highlight any serious concerns that may arise as a result through a Plan Change. The Opus report appropriately proposes that adjacent roads and intersections will need to be designed to current best practice and specifically makes reference to the Austroads Engineering Guide and MDC's Code of Practice for Subdivision and Land Use Development.

I now provide some more specific information to show the context of the net work in relation to the proposed residential development:

- The traffic volume recorded on New Renwick Road (NRR) adjacent to Colonial Vineyards Ltd is 4,500 vehicles per day (vpd)
- The traffic volume recorded on New Renwick Road west of Battys Road is approximately 7,200 vpd
- The traffic volume recorded on Battys Road is estimated at 2,700 vpd
- I expect up to 3000 vpd to be generated from the development
- I estimate some 10% of this traffic will travel westward, 40% south and 50% east thereby generating daily flows of 8,500 vpd on NRR to the east and likely up to 7,000 adjacent
- The adjacent section of NRR is currently a 70km/h environment. This can be expected to become a 50km/h speed zone once the development becomes established
- The increase in traffic at subsequent intersections, e.g. at Maxwell Rd, will be able to be managed by the existing intersection designs.
- The main access from the development onto NRR is likely to carry some 1,500 to 2,000

In terms of traffic distribution, I have assumed a worst case scenario of the majority of traffic to and from the development travelling to the Blenheim CBD east along NRR/Alabama Road then to Maxwell Rd. A more likely scenario may be a more even distribution as traffic will have the option of travelling to the Blenheim CBD via Battys Road/Lakings Rd. Also, shopping centres are available in Springlands and soon at Westwood likely to further reduce the predominance of travel to and from the east.

To then place the information referred above in a comparative context, within Blenheim there are a number of urban secondary arterial and collector routes with traffic volumes similar to or greater than those anticipated on ORR. For example, the subdivision intersection with NRR may be compared to the intersection of Dillon St (2,000 vpd) and Maxwell Rd (7,000 vpd).

NRR to the east will become busier but with no significantly busy intersections (Brookfield and Arthur Baker Place) along the route the level of service of these unlikely to be affected.

As indicated, I expect no urgent problems with the Alabama Rd/Maxwell Rd roundabout. Growth scenarios in the traffic modelling analysis undertaken as part of the Blenheim Wairau Plains Strategic Study (2008) show that at peak travel times the level of service at this intersection will drop to LOS "E" by 2016 (this level is equivalent to that currently experienced at SH1/Alfred St). This roundabout is a single circulating roundabout and currently operates at a high level of service (LOS "B"). Future interventions can increase the capacity and level of service.

Essentially predicted growth has been recognised in traffic modelling which anticipated the proposed residential expansion on the current land to be zoned. This land may be closer to Blenheim than anticipated, however the overall result will be the same in terms of urban traffic growth as demand for some of the predictions of satellite development will lessen (including lesser demand for growth in Renwick) following the urban growth work done by Urbanism+.

In terms of a more compact Blenheim, there are obvious wider benefits through reduction in travel, economies of scale, social development and such like.

In summary, there are no transportation reasons to preclude the proposed Plan Change. The development has been well planned and consulted in an overall Blenheim transportation context. The traffic effects are consistent with those developed in the 2008 Study.