# WYUNA STATION PROPOSED RURAL LIFESTYLE ZONE SECTION 32 EVALUATION REPORT 20<sup>++</sup>MARCH 2015

# vivian+espie

resource management and landscape planning

Vivian + Espie Limited Resource Management and Landscape Planning Postal PO Box 2514 Queenstown Physical Address Unit 15 70 Glenda Drive Frankton Queenstown Tel +64 3 441 4189 Fax +64 3 441 4190 Web www.vivianespie.co.nz

# CONTENTS

#### **EXECTUIVE SUMMARY**

#### Part 1 - INTRODUCTION

- 1.1 The Purpose of the Report
- 1.2 Background
- 1.3 The Subject Site
- 1.4 Reasons for the Zone Review
- 1.5 Consultation

#### Part 2 - STRATEGIC CONTEXT

- 2.1 The Resource Management Act
- 2.2 Regional Planning

#### Part 3 – KEY RESOURCE MANAGEMENT ISSUES

- 3.1 Background
- 3.2 Key Resource Management Issues

#### Part 4 – PURPOSE AND OPTIONS

- 4.1 Purpose of Zoning Review
- 4.2 Identification of Reasonably Practical Options

#### Part 5 – ASSESSMENT OF OPTIONS AGAINST THE KEY RESOURCE MANAGEMENT ISSUES

5.1 District Plan Objectives

#### Part 6 – EVALUATION

#### Part 7 - AMENDMENTS TO THE DISTRICT PLAN

#### Part 8 - CONCLUSION

#### LIST OF ATTACHMENTS

ATTACHMENT 1 - Landscape & Visual Effects Assessment Report (Prepared by Vivian + Espie Limited)

ATTACHMENT 2 - Engineering Report (Prepared by Hadley Engineering Consultants Limited)

# **EXECUTIVE SUMMARY**

This section 32 report evaluates zoning options for a terrace riser and terrace to the east of the Glenorchy Township. The subject site is currently Rural General in the Queenstown Lakes District Plan. The subject site, which is part of the wider Wyuna Station property, is 31.6 hectares in area and contains one dwelling and residential flat and is currently used for grazing of livestock. The site is currently vegetated (native and exotic) as can be seen on the attached aerial photographs contained in the Landscape Assessment report within **Attachment 1**.

A number of District Plan Zone options have been assessed as part of this evaluation. This includes Township, Rural Visitor, Residential, Rural-Residential and Rural Lifestyle development. Given the sensitivity of this landscape, all of these options, with the exception of Rural Lifestyle zone, have been dismissed on landscape grounds. This evaluation therefore assesses which zoning, Rural General or Rural Lifestyle, is most appropriate in terms of the District Plans objectives and the purpose of the Resource Management Act.

This evaluation concludes that the most appropriate District Plan zone for the subject site is the Rural Lifestyle Zone subject to some site specific changes as set out in **Part 7** of this report.

### Part 1 - Introduction

#### 1.1 Purpose of Report

This report evaluates zoning options for a terrace riser and terrace to the east of the Glenorchy Township. The subject property is a large high country farm station of several thousand hectares in area. Within this property, a smaller area of 31.6 hectares (herein referred to as the "subject site") has been identified as suitable for alternative uses to farming. The subject site is depicted on the plans attached to the Landscape and Visual Effects Assessment (attached to this report as **Attachment 1**), contains one dwelling and residential flat and the remaining area is currently used for grazing of livestock (deer). The subject site is currently vegetated (native and exotic) as can be seen on the attached aerial photographs.

The Council is currently reviewing the District Plan. This report evaluates the appropriateness of current and other zoning options for the subject site. The balance of the property is intended to remain in Rural zoning.

A number of District Plan Zone options have been assessed as part of this evaluation for the subject site. This includes Township, Rural Visitor, Residential, Rural-Residential and Rural Lifestyle development. Given the sensitivity of this landscape, all of those options, with the exception of the Rural Lifestyle zone, have been dismissed on landscape grounds. The remainder of this evaluation therefore concentrates on the appropriateness of status quo Rural General zoning or the adoption of an alternative Rural Lifestyle zoning.

When proposing to undertake any change or review to the District Plan, Council is required to carry out an evaluation of alternative methods to establish the best and most appropriate course of action. This requirement is prescribed by section 32 of the Resource Management Act 1991 (the Act) and is commonly referred to as a section 32 report, evaluation or analysis. It is effectively an analysis of the costs and benefits of different options.

This report will outline the background to and reasons for the Plan Change, and progress on the issue to date, including a summary of the consultation so far. Section 32 of the Act is also introduced in more detail, before outlining the amendments to the District Plan proposed by the

review, and final conclusions.

#### 1.2 Background

The Queenstown Lakes District Plan, which is currently under review, was made fully operative in 2009. The urban area of Glenorchy is zoned Township Zone, with areas of commercial and visitor accommodation overlaying that zoning. A number of Rural Living zones exist on the terraces above the township to the north and south. The suitability of the subject site for rural living purposes has never been considered before now.

#### 1.3 The Subject Site

The subject site is part of a wider farming station held in several land titles. The land area in which the identified land for rezoning is contained is 788ha. The subject site area proposed for rezoning is 31.6 hectares. The sites legal description is currently within Section 1: SO 369025.

The subject site is defined by the maps attached as contained in the Landscape and Visual Effects Assessment attached to this report as **Attachment 1**. The subject site is 31.6 hectares in area and contains one dwelling and residential flat and the remaining area is currently used for grazing of livestock (deer). The site is currently vegetated (native and exotic) as can be seen on the attached aerial photographs. The subject site is currently zoned Rural General in the Queenstown-Lakes District Plan with an underlying landscape classification of Outstanding Natural Landscape (District Wide).

The subject site can be broadly defined into two areas – the "terrace riser" being the steeper ground leading up to the "terrace" where development is anticipated. The "terrace riser" generally accords with the Building Restriction Area as identified on the plans attached to Landscape and Visual Effects Assessment attached to this report as **Attachment 1**.

As stated above, the principal alternative zoning to the Rural General Zoning contained in the Operative District Plan is the Rural Lifestyle Zone. This Rural Lifestyle zone is intended to provide for low density residential opportunities as an alternative to the more suburban living areas of the district. This zone provides for residential development located within an approved building

platform as a controlled activity. Building platforms are required to be identified at the subdivision stage. The subdivision itself is a controlled activity provided lot sizes have a minimum area of 1 hectare and an average lot size of 2 hectares.

An engineering assessment overview has been conducted by Hadley Consultants attached to this report as **Attachment 2**. That report confirms that the subject site can be adequately serviced for the level of development anticipated in the Rural Lifestyle zone. Opus have been engaged to complete a Preliminary and Detailed Site Investigation Report. Preliminary findings have suggested that despite marginally elevated concentrations of contaminants encountered directly around the old woolshed site, the remainder of the site has been assessed as having low risk to human health with respect to potential contamination. All investigation works and any remediation required will be completed prior to the proposed re-zoning and development of the subject site.

#### 1.4 Reasons for the Zone Review

The current Rural General zoning of the subject site is an anomaly when considering there is Rural Living zoning to both the north and south on the same terrace feature. Reviewing this zoning through the District Plan Review presents an opportunity for greater protection and enhancement of landscape values and vegetation on the site and the consideration of an area of land for a wastewater treatment facility for the Glenorchy community. The site specific policies and rules proposed to be applied to the zone defer development for a set number of years to enable this infrastructure process to conclude.

#### 1.5 Consultation

Limited consultation external to the Council has occurred in the preparation of this section 32 report.

It is anticipated that all necessary consultation will occur as part of the District Plan review process.

# Part 2 - Strategic Context

#### 2.1 The Resource Management Act

Section 32 of the Resource Management Act 1991 requires that a Section 32 evaluation report must examine the extent to which the proposed objectives are the most appropriate way to achieve the purpose of the Act.

The purpose of the Act requires an integrated planning approach and direction:

#### 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(b) safeguarding the life-supporting capacity of air, water, soil, and ecosystems;

and

(c) avoiding, remedying, or mitigating any adverse effects of activities on the environment.

The remaining provisions in Part 2 of the Act provide a framework within which objectives are required to achieve the purpose of the Act and provisions are required to achieve the relevant objectives.

#### 2.2 Regional Planning Documents

The purpose of a regional policy statement is to promote the sustainable management of natural and physical resources. Otago's Regional Policy Statement (RPS) does this by giving an

overview of the resource management issues facing Otago, and by setting policies and methods to manage Otago's natural and physical resources. The Otago Regional Policy Statement is currently under review with notification expected of the draft RPS in May 2015.

The table below states the relevant objectives and policies within the Otago RPS with corresponding comments addressed through the plan change.

Otago Regional Objectives	Comment
4. Mana Whenua	
4.4.3 Wai (Water) To recognise the	At this stage there has been limited
principle of wairua and mauri in the	consultation with Kai Tahu, however this is
management of Otago's water bodies.	intended to occur as a part of the notification
4.4.5 Kaitiakitanga (Guardianship) To	process to which any mana whenua concerns
incorporate the concept and spirit of	may be addressed.
kaitiakitanga in the management of Otago's	
natural and physical resources in a way	
consistent with the values of Kai Tahu.	
54 Land - Objectives	
5.4.1 To promote the sustainable	The subject area is currently used for grazing
management of Otago's land resources in	purposes to a limited capacity due to the lower
order: (a) To maintain and enhance the	area of the slope being densely vegetated in a
primary productive capacity and life-	combination of native, introduced and weed
supporting capacity of land resources; and	species. The proposal seeks to alter the zoning
(b) To meet the present and reasonably	of the site to be for rural lifestyle purposes
foreseeable needs of Otago's people and	which would limit the capacity the land to be
communities.	used as a rural resource due to its intention of
5.4.2 To avoid, remedy or mitigate	low density residential landuse. This would
degradation of Otago's natural and physical	increase the diversity in residential possibilities
resources resulting from activities utilising	on the outskirts of Glenorchy in a similar way to
the land resource.	the existing rural lifestyle zone further south.
5.4.3 To protect Otago's outstanding natural	
features and landscapes from inappropriate	The majority of the subject area is not in
subdivision, use and development.	intensive rural production and used for light

	grazing purposes for a limited stock number.
	Altering the current landuse to Rural Lifestyle
	provisions would have limited effect on the
	degradation of natural and physical resources;
	however there is the plan change proposes
	specific provisions within the proposed Rural
	Lifestyle zone of the proposed District Plan
	which could ensure that the environmental
	qualities of the site and wider area are
	enhanced.
	The site, as well as the wider landscape of
	Glenorchy is highly regarded for being within an
	area of Outstanding Natural Landscape, and
	therefore the proposed re-zoning of the subject
	area to Rural Lifestyle has been assessed in
	terms of its appropriateness against landscape
	values (refer <b>Attachment 1</b> - Landscape and
	Visual Effects Assessment) .
	Appropriateness in this circumstance can be
	measured in terms of the potential effect of
	development against the existing landscape
	character of The Fort hillside and whether the
	positioning of the zone is sufficient in which to
	adequately mitigate the effects of Rural lifestyle
	development.
5.5 Land - Policies	
5.5.4 To promote the diversification and use	The proposal gives the opportunity for an
of Otago's land resource to achieve	
	increased area of land for the purposes of Rural
sustainable landuse and management	Lifestyle activities on a strip of land which is
systems for future generations.	currently utilized for grazing purposes. The
	proposal seeks to address Rural Lifestyle

	opportunities without detrimentally affecting the
	surrounding landuse and can be considered a
	means of land use diversification.
	In terms of scale, the area of land which is
	proposed for Rural Lifestyle opportunities, is not
	large when compared to the quantities of land
	used for Rural General purposes which
	surround Glenorchy. The proposed zone is in
	overall alignment with the Rural lifestyle zone
	further south of the site area, of which it is
	recognized that the terraced area would be the
	maximum height against 'The Fort' for
	development could occur whilst still retaining
	high landscape values, i.e. the ability for
	development to be reasonably inconspicuous
	against the hillside. This is further supported
	through the zone specific objectives, policies
	and rules proposed, which can assist with
	The proposals specific objectives, policies and
	rules seek to ensure that the diversification of
	the land will not deter future generations from
	the benefits that are received currently from the
	surrounding outstanding natural landscape,
	which includes landscape protection and
	enhancement, and controls on the built form.
5.5.6 To recognise and provide for the	The proposal is within a collective area of
protection of Otago's outstanding natural	significant national importance with recognition
features and landscapes which: (a) Are	to unique landscape values of the wider
unique to or characteristic of the region; or	Glenorchy area. The site area is located on a
(b) Are representative of a particular	lower terraced area of 'The Fort'. The upper
landform or land cover occurring in the	banks of the slope above the terraced area

Otago region or of the collective characteristics which give Otago its particular character; or (c) Represent areas of cultural or historic significance in Otago; or (d) Contain visually or scientifically significant geological features; or (e) Have characteristics of cultural, historical and spiritual value that are regionally significant for Tangata Whenua and have been identified in accordance with Tikanga Maori. outlined for rural lifestyle development has particular open landscape qualities of visual amenity importance to Glenorchy. No changes are proposed for this area.

The appropriateness of the area in which development may occur is limited to the terraced area on 'The Fort' hillside. This area is considered to have the potential to be able to absorb the bulk of limited quantities of residential form without detrimentally effecting the landscape values of the 'The Fort' hillside, (as detailed in **Attachment 1**), due to the area below the terrace being largely vegetated. The Rural Lifestyle zone also takes into account landscape and amenity values to which council may control aspects of the development as they relate to the wider environment, including visual amenity.

This area of vegetation visually buffers the Glenorchy Township from below, however as identified within the Landscape Report, there is the potential for improving the quality of the slope below the terrace in terms of vegetation management, weed control and pest control for not only visual and landscape amenity, but also reasons of ecological biodiversity.

It is yet to be determined whether Kai Tahu (Takata Whenua) has an interest in the site that has cultural significance. This is to be determined through the notification process.

6.4 Water - Objectives	
6.4.2 To maintain and enhance the quality	The Glenorchy township currently has a
of Otago's water resources in order to meet	reticulated water supply (bore sourced) which is
the present and reasonably foreseeable	planned to be connected to the site at initial
needs of Otago's communities.	subdivision stage.
	As identified in this report, the Glenorchy
	township currently has no reticulated sewerage
	system and is facing issues in respect of
	wastewater, with some properties disposing of
	wastewater direct to ground in some cases.
	The owner of the subject site owns an area of
	land identified by council as being potentially
	suitable for a new wastewater facility for
	Glenorchy. The ability to develop a new
	wastewater facility is a positive outcome for the
	areas water quality, which has the potential to
	degrade over time should this issue not be
	resolved.
6.5 Water - Policies	
6.5.1 To recognise and provide for the	It is yet to be determined whether Kai Tahu
relationship Kai Tahu have with the water	(Takata Whenua) have an interest in the
resource in Otago through: (a) Working	proposed Rural Lifestyle development site
toward eliminating human waste and other	however it is recognized that in general iwi do
pollutants from entering all water bodies;	have concerns with the contamination of water,
and (b) Consulting with Kai Tahu over any	and as such it is anticipated that they be
application that would result in the mixing of	involved through Council in the siting and
waters from different water bodies and the	development process of the potential for a
setting of water flows and levels.	wastewater treatment plant in Glenorchy. It is
	anticipated that the plan change be deferred
	until the establishment of a wastewater
	treatment plant.

	It is anticipated that Kai Tahu will be consulted
	in the notification process.
9. 4 Built Environment - Objectives	
9.4.1 To promote the sustainable	Uncontrolled Rural Lifestyle development has
management of Otago's built environment	the potential to dramatically alter the natural
in order to: (a) Meet the present and	environment of Glenorchy. The proposal seeks
reasonably foreseeable needs of Otago's	to change the future landuse of the site from
people and communities; and (b) Provide	Rural General to Rural Lifestyle. The site is
for amenity values, and (c) Conserve and	within an Outstanding Natural Landscape and
enhance environmental and landscape	as recommended within the Landscape Report
quality; and (d) Recognise and protect	(refer Attachment 1) specific provisions within
heritage values.	the District Plan will improve the ability of the
9.4.2 To promote the sustainable	future zone to avoid, remedy or mitigate
management of Otago's infrastructure to	potential adverse effects of development.
meet the present and reasonably	
foreseeable needs of Otago's communities.	The proposal does address the foreseeable
9.4.3 To avoid, remedy or mitigate the	needs of the future by addressing the diversity
adverse effects of Otago's built environment	of housing within the area.
on Otago's natural and physical resources.	
	The proposal addresses the sustainable
	management of infrastructure by addressing
	the need to determine the location of a suitable
	wastewater site. Sustainable wastewater
	disposal is the current pressing issue facing
	Glenorchy and is in current planning
	discussions with Council and the Glenorchy
	Community.
9.5 Built Environment - Policies	
9.5.2 To promote and encourage efficiency	The proposal recognizes the need for an
in the development and use of Otago's	upgrade of wastewater infrastructure within the
infrastructure through: (a) Encouraging	Glenorchy, however it is envisaged that the
development that maximises the use of	plan change will not become active until the

existing infrastructure while recognising the	provision of wastewater facility has been
need for more appropriate technology; and	implemented by Council (within a certain
(b) Promoting co-ordination amongst	timeframe).
network utility operators in the provision and	,
maintenance of infrastructure; and (c)	The current issue of securing a suitable location
Encouraging a reduction in the use of	for a wastewater treatment plant with the lowest
nonrenewable resources while promoting	potential for hazardous risk, whilst protecting
the use of renewable resources in the	the environment remains an issue. As stated
construction, development and use of	above, the current land owner of the subject
infrastructure; and (d) Avoiding or mitigating	site area for the proposed Rural Lifestyle zone
the adverse effects of subdivision, use and	has land identified as being suitable for the
development of land on the safety and	location of a wastewater treatment plant, with
efficiency of regional infrastructure.	limited potential for adverse effects unlike those
	previously identified by council.
	The proposal seeks to safeguard against
	inappropriate development by adopting the
	Rural Lifestyle zone, as well as having a
	specific approach to the subject area which
	includes zone standards and rules.
9.5.4 To minimise the adverse effects of	The proposal seeks to reduce the potential
urban development and settlement,	effects of rural lifestyle development on the site
including structures, on Otago's	and surrounding area by adopting the Rural
environment through avoiding, remedying	Lifestyle provisions as having a specific
or mitigating: (a) Discharges of	approach to the subject area which includes
contaminants to Otago's air, water or land;	zone standards and rules which will aide in
and (b) The creation of noise, vibration and	mitigating adverse effects on the landscape.
dust; and (c) Visual intrusion and a	
reduction in landscape qualities; and (d)	The Glenorchy Community Plan has been
Significant irreversible effects on: (i) Otago	reviewed in relation to the establishment of this
community values; or (ii) Kai Tahu cultural	Plan Change Proposal, of which the landscape
and spiritual values; or (iii) The natural	values and retainment of rural character have

character of water bodies and the coastal	been identified as important to the local
environment; or (iv) Habitats of indigenous	community. The proposed objectives and
fauna; or (v) Heritage values; or (vi)	policies seek to ensure that development that
Amenity values; or (vii) Intrinsic values of	occurs within the proposed zone is appropriate
ecosystems;	to the site and wider area.
9.5.5 To maintain and, where practicable,	
enhance the quality of life for people and	Whilst not being in strictly rural character, the
communities within Otago's built	rural lifestyle zone and specific provisions
environment through: (a) Promoting the	proposed will provide for appropriate
identification and provision of a level of	development in anticipation of avoiding,
amenity which is acceptable to the	remedying and mitigating that which may
community; and (b) Avoiding, remedying or	unsuitable.
mitigating the adverse effects on community	
health and safety resulting from the use,	At this stage there has been limited
development and protection of Otago's	consultation with Kai Tahu, however this is
natural and physical resources; and (c)	intended to occur as a part of the notification
Avoiding, remedying or mitigating the	process to which any mana whenua concerns
adverse effects of subdivision, landuse and	may be addressed.
development on landscape values.	
10.4 Biota - Objectives	
10.4.1 To maintain and enhance the life-	The sites landscape is described in detail within
supporting capacity and diversity of Otago's	Attachment 1. The lower slopes of 'The Fort'
biota.	have regenerating native species which form a
10.4.2 To protect Otago's natural	different character of the hillside when
ecosystems and primary production from	compared to the upper slopes above the
significant biological and natural threats.	
	intended area for development. In order to
10.4.3 To maintain and enhance the natural	intended area for development. In order to support biodiversity proposed through the plan
10.4.3 To maintain and enhance the natural character of areas with significant	
	support biodiversity proposed through the plan
character of areas with significant	support biodiversity proposed through the plan change, and to reduce the potential for adverse
character of areas with significant indigenous vegetation and significant	support biodiversity proposed through the plan change, and to reduce the potential for adverse landscape effects the plan change proposes a
character of areas with significant indigenous vegetation and significant	support biodiversity proposed through the plan change, and to reduce the potential for adverse landscape effects the plan change proposes a no build area and proposes to implement a

eliminate the adverse effects of plant and	high environmental quality to the subject area,
animal pests on Otago's communities and	particularly in response to retaining landscape
natural and physical resources through: (a)	quality and improving biodiversity. This is also
Developing strategies to effectively manage	recognized in the Landscape report within
Otago's plant and animal pests; and (b)	Attachment 1. In order to address the specific
Educating about the responsibilities of all	environment it is possible to propose an
parties in the management of Otago's plant	ecological management plan of the shall
and animal pests; and (c) Adopting the	include details of the following:
most practicable method of pest control	$^{\cdot}$ Methods proposed to remove or kill existing
while safeguarding the environment.	wilding exotic trees and weed species from the
	lower banks of the site area and to conduct this
	eradication on a year to year basis.
	· Methods to exclude and/or suitably manage
	pests within the site in order to foster growth of
	native vegetation within the site.
	$\cdot$ A programme or list of maintenance work to
	be carried out on a year to year basis on order
	to bring about the goals set out above.
	to bring about the goals set out above.
11.4 Natural Hazards - Objectives	to bring about the goals set out above.
<b>11.4 Natural Hazards - Objectives</b> 11.4.1 To recognise and understand the	to bring about the goals set out above. The Glenorchy Natural Hazards report
-	
11.4.1 To recognise and understand the	The Glenorchy Natural Hazards report
11.4.1 To recognise and understand the significant natural hazards that threaten	The Glenorchy Natural Hazards report produced by the Otago Regional Council in
11.4.1 To recognise and understand the significant natural hazards that threaten Otago's communities and features.	The Glenorchy Natural Hazards report produced by the Otago Regional Council in 2010 addresses the complex environment in
<ul> <li>11.4.1 To recognise and understand the significant natural hazards that threaten Otago's communities and features.</li> <li>11.4.2 To avoid or mitigate the adverse</li> </ul>	The Glenorchy Natural Hazards report produced by the Otago Regional Council in 2010 addresses the complex environment in which the Glenorchy township has been
<ul> <li>11.4.1 To recognise and understand the significant natural hazards that threaten Otago's communities and features.</li> <li>11.4.2 To avoid or mitigate the adverse effects of natural hazards within Otago to</li> </ul>	The Glenorchy Natural Hazards report produced by the Otago Regional Council in 2010 addresses the complex environment in which the Glenorchy township has been established. These potential hazards include
<ul> <li>11.4.1 To recognise and understand the significant natural hazards that threaten Otago's communities and features.</li> <li>11.4.2 To avoid or mitigate the adverse effects of natural hazards within Otago to acceptable levels.</li> </ul>	The Glenorchy Natural Hazards report produced by the Otago Regional Council in 2010 addresses the complex environment in which the Glenorchy township has been established. These potential hazards include the risk of river and lake flooding, the delta
<ul> <li>11.4.1 To recognise and understand the significant natural hazards that threaten Otago's communities and features.</li> <li>11.4.2 To avoid or mitigate the adverse effects of natural hazards within Otago to acceptable levels.</li> <li>11.5 – Natural Hazards - Policies</li> </ul>	The Glenorchy Natural Hazards report produced by the Otago Regional Council in 2010 addresses the complex environment in which the Glenorchy township has been established. These potential hazards include the risk of river and lake flooding, the delta growth, ground liquefaction, landslide induced
<ul> <li>11.4.1 To recognise and understand the significant natural hazards that threaten Otago's communities and features.</li> <li>11.4.2 To avoid or mitigate the adverse effects of natural hazards within Otago to acceptable levels.</li> <li>11.5 – Natural Hazards - Policies</li> <li>11.5.2 To take action necessary to avoid or</li> </ul>	The Glenorchy Natural Hazards report produced by the Otago Regional Council in 2010 addresses the complex environment in which the Glenorchy township has been established. These potential hazards include the risk of river and lake flooding, the delta growth, ground liquefaction, landslide induced
<ul> <li>11.4.1 To recognise and understand the significant natural hazards that threaten Otago's communities and features.</li> <li>11.4.2 To avoid or mitigate the adverse effects of natural hazards within Otago to acceptable levels.</li> <li>11.5 – Natural Hazards - Policies</li> <li>11.5.2 To take action necessary to avoid or mitigate the unacceptable adverse effect of</li> </ul>	The Glenorchy Natural Hazards report produced by the Otago Regional Council in 2010 addresses the complex environment in which the Glenorchy township has been established. These potential hazards include the risk of river and lake flooding, the delta growth, ground liquefaction, landslide induced waves, and mass ground movement.
<ul> <li>11.4.1 To recognise and understand the significant natural hazards that threaten Otago's communities and features.</li> <li>11.4.2 To avoid or mitigate the adverse effects of natural hazards within Otago to acceptable levels.</li> <li>11.5 - Natural Hazards - Policies</li> <li>11.5.2 To take action necessary to avoid or mitigate the unacceptable adverse effect of natural hazards and the responses to</li> </ul>	The Glenorchy Natural Hazards report produced by the Otago Regional Council in 2010 addresses the complex environment in which the Glenorchy township has been established. These potential hazards include the risk of river and lake flooding, the delta growth, ground liquefaction, landslide induced waves, and mass ground movement. The proposed change from Rural General to

heritage sites.	in respect of natural hazards.
11.5.3 To restrict development on sites or	
areas recognised as being prone to	Opus have been engaged to complete a
significant hazards, unless adequate	Preliminary and Detailed Site Investigation
mitigation can be provided.	Report. Preliminary findings have suggested
	that despite marginally elevated concentrations
	of contaminants encountered directly around
	the old woolshed site, the remainder of the site
	has been assessed as having low risk to
	human health with respect to potential
	contamination. All investigation works and any
	remediation required will be completed prior to
	the proposed re-zoning and development of the
	subject site.
	The Hadley Consultants Engineering Report in
	terms of overview confirms that the site is
	appropriate for rural lifestyle development
	(Attachment 2).
13.4 Wastes & Hazardous Substances -	
Objectives	
13.4.1 To protect Otago's communities,	The use of the site for Rural Lifestyle purposes
environment and natural resources from the	will reduce the opportunity for waste and
adverse effects of the waste stream.	hazardous substances associated with Rural
13.4.2 To encourage a reduction in the	General activity to be dumped on-site.
amount, range and type of waste generated	
in Otago.	It is understood that the site owner has
13.4.4 To minimise the risks to people and	contracted Opus Consultants to undertake a
the wider environment arising from existing	HAIL and Natural Hazards assessment of the
contaminated sites, and the storage, use,	site, and that the site will be fully remediated of
transportation and disposal of hazardous	all contaminants.

substances.	
13.5.1 To recognise and provide for the	It has been identified that the need to determine
relationship Kai Tahu have with natural and	a suitable site for the location of a wastewater
physical resources when managing Otago's	treatment plant is paramount in order for this
waste stream through: (a) Providing for the	plan change to be implemented. The
management and disposal of Otago's waste	development of this wastewater treatment plant
stream in a manner that takes into account	will reduce the capacity for waste to be
Kai Tahu cultural values; and (b) Working	deposited inappropriately and is a means to
towards eliminating human wastes and	remedying existing inadequate infrastructure.
other pollutants from entering Otago's	
waterways.	At this stage there has been limited
13.5.7 To address the adverse effects of	consultation with Kai Tahu, however this is
past waste disposal practices through: (a)	intended to occur as a part of the notification
Identifying sites of old landfills, hazardous	process to which any mana whenua concerns
substance dumps or contamination within	may be addressed.
Otago; and (b) Determining any adverse	
effects arising from those sites and	
requiring the remedying or mitigation of any	
adverse effects.	

The proposed plan change provisions are consistent with, and give effect to, the relevant operative RPS provisions.

# Part 3 - Key Resource Management Issues

#### 3.1 Background

The following work has been undertaken to better understand the proposed plan change, site visits and site evaluations from planners, landscape architects, engineers and council representatives. Relevantly, this work provides an up-to-date picture of:

- The capacity of the Glenorchy environment to absorb change
- The potential for growth within and around Glenorchy whilst retaining amenity values
- Current infrastructure demands

#### 3.2 Key Resource Management Issues

The key resource management issues, in no particular order, considered in this report are:

1. Whether zoning can help to alleviate the current shortage of land available for rural living development in the Glenorchy.

There is currently a shortage of land available in Glenorchy township zone for growth and there is a need for additional land to meet likely demand/population growth in Glenorchy in the near future. There are two main zones within the area, the Township zone of Glenorchy, and the Rural Lifestyle zone which surrounds it. The Township Zone is near capacity and the Rural Lifestyle zone is steadily developing. It is anticipated as demand increases, the zones will be at capacity before the next District Plan review.

2. Whether zoning can ensure the effects of development on the wider Outstanding Natural Landscape can be protected from inappropriate use and subdivision. The protection of Outstanding Natural Landscapes from inappropriate subdivision, use and development is a matter of National Importance under the Resource Management Act 1991. The subject site forms part of a District-Wide Outstanding Natural Landscape. As such any zoning option needs to recognise and provide for this matter.

#### 3. Whether zoning can give greater landscape protection to the terrace riser.

The Terrace Riser forms the backdrop to the Glenorchy Township and extends around from the Bible Terrace. It is considered of utmost importance that zoning of the subject site protects the integrity of this terrace riser from the effects of development.

#### 4. Whether zoning can give greater protection to the natural vegetation on site.

A large portion of the site is covered in naturally regenerating vegetation. An important issue in the consideration of the most appropriate zoning is the protection and enhancement of such vegetation, particularly with respect to Option 3 above.

5. Whether zoning can provide for a suitable site for waste water disposal for the growing Glenorchy Community.

The need for a new site for a community wastewater plants has long been recognised. This issue explores the possibility of identifying land for such a purpose within the subject site.

#### 6. Recognition of Community Values

The main community values and concerns have been expressed in the Glenorchy Community Plan, 2001. Some aspects of that plan are relevant to the consideration of this zoning review. In particular they include Key Strategies 4.32 which relate to rural land on the outskirts of town. This includes avoiding inappropriate rural subdivision, retaining the natural undeveloped character of the town's backdrop and revegetation of part of the backdrop to enhance the rural wilderness character of the town.

#### 7. Public Health

The National Environmental Standard (NES) for Assessing and Managing Contaminants in Soil to Protect Human Health assesses whether land is actually or potentially contaminated if an activity or industry on the Hazardous Activities or Industries List (HAIL) has been, or is more likely than not to have been undertaken on that land. The land use history is the trigger in determining whether land requires further assessment under the NES. It is important to consider this NES as part of a zoning review.

# Part 4 - Purpose and Options

#### 4.1 Purpose of Zoning Review

This report evaluates zoning options for the subject site. The overall purpose of this report is to consider the appropriateness of alternative zoning to the status quo Rural General Zoning of the Operative District Plan for the subject site. This is being considered as part of the District Plan Review as the current Rural General zoning of the subject site is considered an anomaly when considering there is Rural Living Zoning to both the north and south on the same terrace feature. Reviewing this zoning through the District Plan Review presents an opportunity for greater protection and enhancement of landscape values and vegetation on the site and the consideration of an area of land for a wastewater treatment facility for the Glenorchy community. The site specific policies and rules proposed to be applied to the zone defer development for a set number of years to enable this infrastructure process to conclude.

This zoning review has been undertaken with due regard to the sensitive Glenorchy landscape, the limitations of infrastructure available within the area, with consideration to the current Glenorchy Head of the Lake Community Plan (August 2001), and to the current District Plan Rural Lifestyle provisions.

#### 4.2 Identification of Reasonably Practical Options

A number of zoning options have been explored as part of this review. All zoning options, with the exception of Rural Lifestyle Zone, have been dismissed on the grounds of adverse landscape and visual amenity effects. The remaining reasonably practical options are thus:

**Option 1**: Retain the operative provisions of the Rural General Zone (i.e. status quo);

**Option 2:** Retain and improve the operative provisions of the Rural Lifestyle Zone.

# Part 5 - Assessment of Options against the Key Resource Management Issues

This section of the evaluation assesses the two zoning options against the Key Resource Management Issues identified above.

Option 1: Retain the operative provisions of the Rural General Zone – (Status Quo).	
Key RM Issue	Likely Outcome
1. Whether zoning can help	Zoning land for residential living purposes is the primary
to alleviate the current	method for addressing this issue. Rural living development is
shortage of land available	not anticipated or encouraged in the Rural General Zone.
for rural living development	Retaining Rural General zoning over the subject site
in the Glenorchy.	therefore does little to address this issue.
2. Whether zoning can	Retaining Rural General zoning over the subject site does
ensure the effects of	address this issue at a district wide scale.
development on the wider	
Outstanding Natural	
Landscape can be	
protected from inappropriate	
use and subdivision.	
3. Whether zoning can give	Retaining Rural General zoning over the subject site does
greater landscape	address this issue at a district wide scale.
protection to the terrace	
riser.	
4. Whether zoning can give	Retaining Rural General zoning over the subject site does
greater protection to the	address this issue at a district wide scale. A certain amount
natural vegetation on site.	of vegetation can be removed under the Rural General zone
	provisions. No assessment has been done to ascertain the
	relevance of those provisions to the subject site.

5. Whether zoning can	The Rural General zone does not have any specific
provide for a suitable site for	requirement to provide a suitable site for waste water
waste water disposal for the	disposal.
growing Glenorchy	
community.	
6. Recognition of	The Rural General zoning ensures that inappropriate rural
Community Values	subdivision is careful considered, but not necessarily
	avoided. Rural General zoning does not retain or enhance
	the natural undeveloped character of the towns' backdrop.
	Rural General zoning does not require revegetation of the
	backdrop to enhance the rural wilderness character of the
	town.
7. Public Health	The NES for Assessing and Managing Contaminants in Soil
	to Protect Human Health would be required by and resource
	consent under the Rural General Zone provisions.

Option 2: Change the zone of the subject terraced area to Rural Lifestyle Zone, and include specific provisions related to the site to protect existing landscape and community values.

Key RM Issue	Likely Outcome		
1. Whether zoning can help	Zoning land for residential living purposes is the primary method		
to alleviate the current	for addressing this issue. Rural living development is anticipated		
shortage of land available	and actively encouraged in the Rural Lifestyle Zone to a very low		
for rural living development	density. Rural Lifestyle zoning over the subject site addresses		
in the Glenorchy.	this issue in part.		
2. Whether zoning can	Rural Lifestyle zoning, combined with other methods such as no		
ensure the effects of	build areas, design controls and specific objectives and policies,		
development on the wider	can ensure that development protects the ONL from		
Outstanding Natural	inappropriate use and development. This has been discussed		
Landscape can be	at length on the landscape report attached to the report		

protected from inappropriate	(Attachment 1).
use and subdivision.	
3. Whether zoning can give	As above.
greater landscape protection	
to the terrace riser.	
4. Whether zoning can give	Under the Rural Lifestyle Zone specific rules can be imposed
greater protection to the	giving protection to (and enhancing) the natural vegetation on
natural vegetation on site.	the site.
5. Whether zoning can	The Rural Lifestyle Zone can be deferred for a set period of time
provide for a suitable site for	to enable the identification and development of a suitable site for
waste water disposal for the	wastewater disposal, either on the property or elsewhere.
growing Glenorchy	
community.	
6. Recognition of	Rural Lifestyle zoning is a means that avoids inappropriate rural
Community Values	subdivision by retaining a very low density of development, the
	identification of building platforms, design controls and future
	subdivision when located in the correct position. Appropriately
	design Rural Lifestyle development is also likely to retain the
	natural undeveloped character of the towns' backdrop. Rural
	Lifestyle development also ensures that the backdrop to the
	town is revegetated to enhance the rural wilderness character of
	the town.
7. Public Health	The NES for Assessing and Managing Contaminants in Soil to
	Protect Human Health would be required by and resource
	consent under the Rural Lifestyle Zone provisions.

Overall the costs and benefits in terms of the resource management issues are summarised as follows:

	Ор	tion 1 – Status Quo	Option 2 – Rural Lifestyle	
			Zo	ning
Costs	0	Does not alleviate current	0	Visual effect of some low
		shortage of land available for		density rural lifestyle
		rural living in Glenorchy.		development.
	0	Does not address issue of		
		land for community		
		wastewater disposal scheme.		
	0	Does not retain or enhance		
		the natural undeveloped		
		character of the towns'		
		backdrop.		
	0	Does not require		
		revegetation of the backdrop		
		to enhance the rural		
		wilderness character of the		
		town.		
Benefits	0	Protects the ONL from	0	Alleviates some of the
		inappropriate use and		current shortage of land
		development.		available for rural living in
	0	Gives landscape protection		Glenorchy.
		to the terrace riser.	0	Protects the ONL from
	0	Protect vegetation to a		inappropriate use and
		limited extent.		development.
			0	Greater landscape protection
				can be afforded to the terrace
				riser through the identification
				of the Building Restriction
				Area.
			0	Specific rules can be
				imposed given protection to
				(and enhancement of) the

Ranking	2		1
			backdrop.
			character of the towns'
			natural undeveloped
			development can retain the
		0	Appropriately designed
			and future subdivision.
			platforms, design controls
			identification of building
			very low density,
			development by retaining
		0	Avoids inappropriate
			site for wastewater disposal.
			development of a suitable
			identification and
			deferred to enable the
		0	Development can be
			natural vegetation on the site.

Overall, it is concluded that Option 2 is the most efficient and effective method of addressing the key resource management issues above. However, it is noted that some zone specific improvements to the Rural Lifestyle Zone are required to the objectives, policies and rules. These zone specific improvements include:

- (1) The inclusion of new Part 20 Subdivision objectives and policies specific as follows:
  - 20.4.9 Objective Wyuna Station Rural Lifestyle Zone To provide for a deferred rural lifestyle zone on the terrace to the east of, and immediately adjoining, the Glenorchy Township.

Policy

- 20.4.9.1 To prohibit or defer development of the zone until such a time that:
  - (a) the zone can be serviced by a reticulated wastewater disposal

scheme within the property which services both the township and proposed zone. This may include the provision of land within the zone for such purpose; OR

- (b) the zone can be serviced by a reticulated wastewater disposal scheme located outside of the zone which has capacity to service both the township and proposed zone; OR
- (c) the zone can be serviced by an on-site (individual or communal) wastewater disposal scheme no sooner than two years from the zone becoming operative on the condition that should a reticulated scheme referred to in (a) and (b) above become available and have capacity within the next three years then all lots within the zone shall be required to connect to that reticulated scheme.
- 20.4.10 Objective Wyuna Station Rural Lifestyle Zone Subject to Objective 20.4.9, to enable rural living development in a way that maintains the visual amenity values which are experienced from the Glenorchy Township, Oban Street and the Glenorchy-Paradise Road.

#### Policies

- 20.4.10.1 The subdivision design, identification of building platforms and associated mitigation measures shall ensure that built form and associated activities within the zone are reasonably inconspicuous when viewed from Glenorchy Township, Oban Street or the Glenorchy-Paradise Road. Measures to achieve this include:
  - Prohibiting development over the sensitive areas of the zone via building restriction areas;
  - Appropriately locating buildings within the zone, including restrictions on future building bulk;
  - Using excavation of the eastern part of the terrace to form appropriate building platforms;
  - Using naturalistic mounding of the western part of the terrace to assist visual screening of development;
  - (e) Using native vegetation to assist visual screening of development;
  - (f) The maximum height of buildings shall be 4.5m above ground level prior to any subdivision development.

- 20.4.10.2 To maintain and enhance the indigenous vegetation and ecosystems within the building restriction areas of the zone and to suitably and comprehensively maintain these areas into the future. As a minimum, this shall include:
  - (a) Methods to remove or kill existing wilding exotic trees and weed species from the lower banks of the zone area and to conduct this eradication on a year to year basis.
  - (b) Methods to exclude and/or suitably manage pests within the zone in order to foster growth of native vegetation within the zone.
  - (c) A programme or list of maintenance work to be carried out on a year to year basis on order to bring about the goals set out above.
- (2) Amend the District Plan maps by inclusion of the Rural Lifestyle Zone, with Building Restriction Area overlaid (as attached to this report within Attachment 1).
- (3) The inclusion of the following Rule to 15.4:

#### Wyuna Station Rural Lifestyle Zone

In addition to Tables 1 and 2, the following standards apply within the Wyuna Station Rural Lifestyle Zone, identified on Planning Map x:

#### Table 8

	Rule	Non-compliance:
15.4.4.33	The identification of any building platforms or	PR
	construction of dwellings prior to the granting	
	of subdivision assessed in accordance with	
	policy 20.4.9.1.	

### Part 6 - Evaluation

Section 32(1)(a) states that an evaluation report must examine the extent to which the objectives of the proposal being evaluated are the most appropriate way to achieve the purpose of the Act. The relevant Strategic Directions objectives and policies are assessed as follows:

5.3.1 Objective 1 –The District contains and values Outstanding Natural Features, Outstanding Natural Landscapes, and Rural Landscapes that require protection from inappropriate subdivision and development.

5.3.1.1 Identify the District's Outstanding Natural Landscapes and Outstanding Natural Features on the Planning Maps.

5.3.1.2 Classify the Rural Zoned landscapes in the District as: (a) Outstanding Natural Feature (ONF)(b) Outstanding Natural Landscape (ONL) (c) Rural Landscape Classification (RLC).

5.3.1.3 That subdivision and development proposals located within the Outstanding Natural Landscape, or an Outstanding Natural Feature, be assessed against the assessment matters in provision 13.6 because subdivision and development is inappropriate in almost all locations, meaning successful applications will be exceptional cases.

...

5.3.1.5 Enable rural lifestyle living through applying Rural Lifestyle Zone and Rural Residential Zone density plan changes in areas where the landscape can accommodate change.

...

5.3.1.11 Recognise the importance of protecting the landscape character and visual amenity values, particularly as viewed from public places, including roads and trails.

5.3.1.12 Recognise and provide for the protection of Outstanding Natural Features and Landscapes with particular regard to values relating to cultural and historic elements, geologic features and matters of cultural and spiritual value to Tangata Whenua.

Efficiency &	Benefits <sup>(b)</sup>	Costs <sup>(b)</sup>	Risk Acting/Not Acting <sup>(c)</sup>
Effectiveness <sup>(a)</sup>			
5.3.1.1 - Not of direct		There is no cost to	There is no uncertainty
relevance to the		the community.	or insufficient
proposal.			information regarding
5.3.1.2 - Not of direct			Objective 7 and
relevance to the			policies.
proposal.			

5.3.2 Objective 2 – Avoid incremental adverse changes in landscape character through the cumulative effects of subdivision and development which result in the loss of valued qualities and characteristics.

5.3.2.1 Acknowledge that subdivision and development, specifically rural lifestyle development has a finite capacity if the District's distinctive rural landscape values are to be sustained.

5.3.2.2 Allow residential subdivision and development only in locations where the landscape character and visual amenity would not be degraded.

5.3.2.3 Recognise that proposals for subdivision and development in the Rural Zone which seek support from existing and consented subdivision or development in the vicinity of the relevant site, are likely to result in adverse cumulative effects. Particularly where the subdivision and development would constitute sprawl along roads.

5.3.2.4 Ensure subdivision and development does not after the valued landscape character as a result of					
activities associated with mitigation of the visual effects of proposed development such as screening					
planting, mounding and earthworks.					
Efficiency &	Benefits <sup>(b)</sup>	Costs <sup>(b)</sup>	Risk Acting/Not Acting <sup>(c)</sup>		
Effectiveness <sup>(a)</sup>					
5.3.2.1 – The proposal	The proposal seeks to	There is no cost to	There is no uncertainty		
represents a location	encourage indigenous	the community.	or insufficient		
where rural landscape	biodiversity protection		information regarding		
values are unlikely to	and regeneration of the		Objective 3 and		
be affected.	terrace riser. Such		policies.		
5.3.2.2 – The proposal	protection and				
is a location where	regeneration is outlined				
landscape character	as a key principle of the				
and visual amenity	Glenorchy Community				
would not be	Plan for the backdrop				
degraded.	to the township.				
5.3.2.3 – The proposal					
does not represent					
sprawl along roads.					
5.3.2.4 – The proposal					
enhances the valued					
landscape character of					
the terrace riser as the					
backdrop to the					
township.					

5.3.2.4 Ensure subdivision and development does not alter the valued landscape character as a result of

5.3.4 Objective 4 – Protect, maintain and enhance the District's Outstanding Natural Landscapes (ONL).

5.3.4.1 Avoid subdivision and development that would degrade the important qualities of the landscape character, particularly where there is no or little capacity to absorb change.

5.3.4.2 Recognise that large parts of the District's Outstanding Natural Landscapes include working farms and accept that viable farming involves activities which may modify the landscape, providing the valued character of the Outstanding Natural Landscape is not adversely affected.

5.3.4.3 Have regard to adverse effects on landscape character, and visual amenity values from public places, with emphasis on formed roads and trails.

5.3.4.4 Acknowledge the District relies upon the Outstanding Natural Landscape as a significant

economic and recreation	economic and recreational resource, such that large scale renewable electricity generation or mineral				
extraction development proposals including windfarm or hydro energy generation are not likely to be					
applicable to the Outstar	nding Natural Landscapes o	of the District.			
Efficiency &	Benefits <sup>(b)</sup>	Costs <sup>(b)</sup>	Risk Acting/Not Acting (c)		
Effectiveness <sup>(a)</sup>					
5.3.4.1 – The proposal	The proposal seeks to	There is no cost to	There is no uncertainty		
represents a location	encourage indigenous	the community.	or insufficient		
where there is capacity	biodiversity protection		information regarding		
to absorb change. The	and regeneration of the		Objective 4 and		
proposal is therefore	terrace riser. Such		policies.		
an efficient and	protection and		ponoicoi		
effective method of	regeneration is outlined				
achieving this policy.	as a key principle of the				
5.3.4.2 – Not relevant.	Glenorchy Community				
5.3.4.3 – The proposal	Plan for the backdrop				
can effectively take this	to the township.				
matter into account.					
5.2.4.4 - Not relevant.					

5.3.7 Objective 7 – Recognise and protect indigenous biodiversity where it contributes to the visual quality and distinctiveness of the District's landscapes.

5.3.7.1 Encourage subdivision and development proposals to promote indigenous biodiversity protection and regeneration where the landscape and nature conservation values would be maintained and enhanced, particularly where the subdivision or development constitutes a change in the intensity in the land use or the retirement of productive land.

5.3.7.2 Avoid indigenous vegetation clearance where it would significantly degrade the visual character and qualities of the District's distinctive landscapes.

Efficiency &	Benefits <sup>(b)</sup>	Costs <sup>(b)</sup>	Risk Acting/Not Acting <sup>(c)</sup>
Effectiveness <sup>(a)</sup>			
5.3.7.1 – The proposal	The proposal seeks to	There is no cost to	There is no uncertainty
effectively and	encourage indigenous	the community.	or insufficient
efficiently achieves this	biodiversity protection		information regarding
policy.	and regeneration of the		Objective 7 and
5.3.7.2 – The proposal	terrace riser. Such		policies.
effectively and	protection and		
efficiently achieves this	regeneration is outlined		

policy.	as a key principle of the	
	Glenorchy Community	
	Plan for the backdrop	
	to the township.	

The relevant Rural Living objectives and policies are assessed as follows:

16.3.1 Objective 1 - Maintain and enhance the district's distinctive landscapes while enabling rural living opportunities in areas that can avoid detracting from those landscapes.

16.3.1.1 Ensure the visual prominence of buildings is avoided, particularly development and associated earthworks on prominent slopes, ridges and skylines.

16.3.1.2 Set minimum density and building coverage standards so the living qualities, open space, natural and rural qualities of the District's distinctive landscapes are not reduced.

16.3.1.3 Allow flexibility of the density provisions, where design-led and innovative patterns of subdivision and residential development, roading and planting would enhance the character of the zone and the District's landscapes.

16.3.1.4 Manage anticipated activities that are located near Outstanding Natural Features and Outstanding Natural Landscapes so that they do not diminish the qualities of these landscapes and their importance as part of the District's landscapes.

16.3.1.5 Maintain and enhance landscape values by controlling the colour, scale, location and height of permitted buildings and in certain locations require landscaping and vegetation controls.

16.3.1.6 Have regard to the location and direction of lights so they do not cause significant glare to other properties, roads, and public places and promote lighting design that mitigates adverse effects on the night sky

16.3.1.7 Have regard to the spiritual beliefs, cultural traditions and practices of Tangata Whenua.

16.3.1.8 Have regard to fire risk from vegetation and the potential risk to people and buildings, when assessing subdivision and development.

Efficiency &	Benefits <sup>(b)</sup>	Costs <sup>(b)</sup>	Risk Acting/Not Acting
Effectiveness <sup>(a)</sup>			(c)
Policy 16.3.1.1 - The	Benefits to the	There is no cost to	There is no uncertainty
visual prominence of	community include:	the community.	or insufficient

buildings will be	0	Land available	A small part of the	information regarding
avoided by restricting		for rural lifestyle	ONL will be	Objective 1 and
development to the		opportunities.	developed.	policies.
terrace and	0	Construction		
protecting the terrace		work.		
riser. Such a	0	Possibility of land		
method is both		for a community		
efficient and		reticulated		
effective.		wastewater		
Policy 16.3.1.2 - The		scheme.		
Rural Lifestyle Zone	0	Other		
provisions efficiently		employment		
and effectively		opportunities.		
achieves this.	0	Revegetation of		
Policy 16.3.1.3 -		the backdrop to		
Opportunity exists to		the township.		
employ innovative				
design techniques,				
especially in relation				
to the terrace riser				
and its protection as				
a whole.				
Policy 16.3.1.4 – The				
effects of				
development can be				
efficiently and				
effectively managed				
so they do not				
diminish the				
importance of the				
ONL.				
Policy 16.3.1.5 -				
Landscape values				

will be efficiently and		
effectively		
maintained through		
design controls and		
specific building		
heights.		
Policy 16.3.1.8 –		
Conditions can be		
efficiently and		
effectively imposed		
on subdivision or		
land use consent to		
ensure fire risk is		
had regard to.		

# 16.3.2 Objective 2 - Ensure the predominant land uses are rural, residential and where appropriate, community activities.

16.3.2.1 Provide for residential and farming as permitted activities, and recognise that depending on the location, scale and type, community activities may be compatible with and enhance the Rural Residential and Rural Lifestyle Zones.

16.3.2.2 Any development, including subdivision located on the periphery of residential and township areas shall avoid undermining the integrity of the urban rural edge and where applicable, the urban growth boundaries.

16.3.2.3 Encourage visitor accommodation only within the specified visitor accommodation subzone areas and, control the scale and intensity of these activities.

16.3.2.4 Discourage commercial and non-residential activities, including restaurants, visitor accommodation and industrial activities so that the amenity, quality and character of the Rural Residential and Rural Lifestyle zones are not diminished and the vitality of the District's commercial zones is not undermined.

Efficiency &	Benefits <sup>(b)</sup>	Costs <sup>(b)</sup>	Risk Acting/Not Acting
Effectiveness <sup>(a)</sup>			(c)
Policy 16.3.2.1 -	Benefits to the	There is no cost to	There is no uncertainty
Residential	community may	the community.	or insufficient

development can be	include the possibility	information regarding
efficiently and	of land for a	Objective 2 and
effectively enabled	community	policies.
through the	reticulated	
proposed zoning.	wastewater scheme.	
Policy 16.3.2.2 – The		
integrity of the urban		
edge can be		
efficiently and		
effectively		
maintained by the		
building restriction		
area and		
revegetation of the		
terrace riser.		
Policy 16.3.2.3 – not		
relevant.		
Policy 16.3.2.4 – not		
relevant.		

## 16.3.3 Objective 3 - Manage new development and natural hazards.

16.3.3.1 Parts of the Rural Residential and Rural Lifestyle zones have been identified as susceptible to natural hazards and some areas may not be appropriate for residential activity if the natural hazard risk cannot be adequately managed.

Efficiency &	Benefits <sup>(b)</sup>	Costs <sup>(b)</sup>	Risk Acting/Not Acting
Effectiveness <sup>(a)</sup>			(c)
Policy 16.3.3.1 – The	Residential activities	There is no cost to	There is no uncertainty
zone is not	can occur	the community.	or insufficient
susceptible to natural	unimpeded.		information regarding
hazards.			Objective 3 and
			policies.

**16.3.4 Objective 4 -** Ensure new development does not exceed available capacities for servicing and infrastructure.

16.3.4.1 Discourage new development that requires servicing and infrastructure at an adverse cost to the community.

16.3.4.2 Ensure traffic generated by new development does not compromise road safety or efficiency.

Efficiency &	Benefits <sup>(b)</sup>	Costs <sup>(b)</sup>	Risk Acting/Not Acting
Effectiveness <sup>(a)</sup>			(C)
Policy 16.3.4.1 – The	Benefits to the	There is no cost to	There is no uncertainty
costs of servicing the	community may	the community.	or insufficient
development will not	include the possibility		information regarding
be at the expense of	of land for a		Objective 4 and
the community.	community		policies.
Policy 16.3.4.2 – The	reticulated		
level of traffic	wastewater scheme.		
generated by the			
proposal can			
efficiently and			
effectively be			
absorbed into the			
existing roading			
network.			

 16.3.5 Objective 5 - Manage situations where sensitive activities conflict with existing and anticipated rural activities.

 16.3.5.1 Recognise existing and permitted activities, including activities within the surrounding Rural Zone may result in effects such as odour, noise, dust and traffic generation that are reasonably expected to occur and will be noticeable to residents and visitors in rural areas.

 Efficiency & Benefits (b)
 Costs (b)
 Risk Acting/Not Acting (c)

 Policy 16.3.5.1 – The
 Farming activities
 There is no cost to
 There is no uncertainty

the community.

or insufficient

continuing to occur in

revegetation of the

terrace riser is an	surroundings land	information regarding
efficient and effective	with little effect on	Objective 5 and
method in buffering	future residents.	policies.
the development		
area from		
surrounding farming		
activities.		

Overall, it is considered the proposal to rezone the subject site Rural Lifestyle is an effective and efficient means to achieving the relevant objectives of the District Plan and the purpose of the RM Act 1991.

# Part 7 - Amendments to the District Plan

- (1) The inclusion of new Part 20 Subdivision objectives and policies specific as follows:
  - 20.4.9 Objective Wyuna Station Rural Lifestyle Zone To provide for a deferred rural lifestyle zone on the terrace to the east of, and immediately adjoining, the Glenorchy Township.

### Policy

- 20.4.9.1 To prohibit or defer development of the zone until such a time that:
  - (a) the zone can be serviced by a reticulated wastewater disposal scheme within the property which services both the township and proposed zone. This may include the provision of land within the zone for such purpose; OR
  - (b) the zone can be serviced by a reticulated wastewater disposal scheme located outside of the zone which has capacity to service both the township and proposed zone; OR
  - (c) the zone can be serviced by an on-site (individual or communal) wastewater disposal scheme no sooner than two years from the zone becoming operative on the condition that should a reticulated scheme referred to in (a) and (b) above become available and have capacity within the next three years then all lots within the zone shall be required to connect to that reticulated scheme.
- 20.4.10 Objective Wyuna Station Rural Lifestyle Zone Subject to Objective 20.4.9, to enable rural living development in a way that maintains the visual amenity values which are experienced from the Glenorchy Township, Oban Street and the Glenorchy-Paradise Road.

### Policies

20.4.10.1 The subdivision design, identification of building platforms and associated mitigation measures shall ensure that built form and associated activities within the zone are reasonably inconspicuous when viewed from Glenorchy Township, Oban Street or the Glenorchy-Paradise Road. Measures to achieve this include:

- Prohibiting development over the sensitive areas of the zone via building restriction areas;
- (b) Appropriately locating buildings within the zone, including restrictions on future building bulk;
- Using excavation of the eastern part of the terrace to form appropriate building platforms;
- Using naturalistic mounding of the western part of the terrace to assist visual screening of development;
- (e) Using native vegetation to assist visual screening of development;
- (f) The maximum height of buildings shall be 4.5m above ground level prior to any subdivision development.
- 20.4.10.2 To maintain and enhance the indigenous vegetation and ecosystems within the building restriction areas of the zone and to suitably and comprehensively maintain these areas into the future. As a minimum, this shall include:
  - (a) Methods to remove or kill existing wilding exotic trees and weed species from the lower banks of the zone area and to conduct this eradication on a year to year basis.
  - (b) Methods to exclude and/or suitably manage pests within the zone in order to foster growth of native vegetation within the zone.
  - (c) A programme or list of maintenance work to be carried out on a year to year basis on order to bring about the goals set out above.
- (2) Amend the District Plan maps by inclusion of the Rural Lifestyle Zone, with Building Restriction Area overlaid (as attached to this report within Attachment 1).
- (3) The inclusion of the following Rule to 15.4:

### Wyuna Station Rural Lifestyle Zone

In addition to Tables 1 and 2, the following standards apply within the Wyuna Station Rural Lifestyle Zone, identified on Planning Map x:

# Table 8

	Rule	Non-compliance:
15.4.4.33	The identification of any building platforms or	PR
	construction of dwellings prior to the granting	
	of subdivision assessed in accordance with	
	policy 20.4.9.1.	

# Part 8 - Conclusion

This report concludes that pursuant to section 32 of the Resource Management Act 1991, the most appropriate zoning to achieve sustainable management for the subject site is Rural Lifestyle Zone (subject to site specific changes as suggested in Part 7 of this report).

# WYUNA STATION PROPOSED RURAL LIFESTYLE ZONE LANDSCAPE AND VISUAL EFFECTS ASSESSMENT REPORT 26<sup>TH</sup>MARCH 2015



resource management and landscape planning

Vivian + Espie Limited Resource Management and Landscape Planning Postal PO Box 2514 Queenstown Physical Address Unit 15 70 Glenda Drive Frankton Queenstown Tel +64 3 441 4189 Fax +64 3 441 4190 Web www.vivianespie.co.nz

# INTRODUCTION

- 1. This report identifies and quantifies the landscape and visual effects likely to arise from a proposal to rezone an area of the Rural General Zone (RGZ) of the Queenstown Lakes District Plan (the Plan) to Rural Lifestyle Zone (RLZ). The site of the proposed zone is within Wyuna Station, which is a very large farming property immediately east of Glenorchy. The proposed area of RLZ is approximately 31.9ha and is located on a west facing terrace above Glenorchy Town.
- 2. The area of RLZ is proposed to be created by way of the QLDC's District Plan Review. I understand that the purpose of this review is to update and amend the current District Plan such that it provides for the District's resource management needs for the upcoming decade.
- 3. The methodology for this assessment has been guided by the landscape related Objectives and Policies of the Plan, by the Guidelines for Landscape and Visual Impact Assessment produced by the UK's Landscape Institute and Institute of Environmental Management and Assessment<sup>1</sup>, and by the New Zealand Institute of Landscape Architects "Landscape Assessment and Sustainable Management" Practice Note<sup>2</sup>.

# **DESCRIPTION OF THE PROPOSAL**

- 4. The details and layout of the proposed activities are set out in the Section 32 analysis report and its various appendices including a number of plans. I will not repeat that information here, other than to make the following summary points that are relevant to an assessment of landscape issues:
  - It is proposed to create a RLZ within the specific part of Wyuna Station, as shown on Figure 1 of this report. More detailed plans of the proposed area of zoning are attached as Appendix 1 to this report.

Wyuna Station - Proposed Zone Change - Landscape & Visual Effects Assessment Report - Ben Espie - vivian+espie

<sup>&</sup>lt;sup>1</sup> Landscape Institute and Institute of Environmental Management and Assessment; 2013; 'Guidelines for Landscape and Visual Impact Assessment – 3<sup>rd</sup> Edition'; Routledge, Oxford.

<sup>&</sup>lt;sup>2</sup> New Zealand Institute of Landscape Architects Education Foundation; 2010; Best Practice Note 10.1 'Landscape Assessment and Sustainable Management'.

- The proposed RLZ is located on an elevated terrace and hillside that is immediately east of the Glenorchy Township Zone. The proposed area of RLZ is also located immediately south of the existing RLZ east of Glenorchy Paradise Road. In this sense the proposal is an extension of the existing RLZ.
- The proposed RLZ is envisaged to be accessed via an existing access way off Glenorchy Paradise Road. This existing access way currently services a homestead building within Wyuna Station.
- Additional Objectives, Policies and Rules that specifically relate to the proposed area of RLZ are proposed to be inserted into the Plan. These proposed provisions will be read in conjunction with all of the existing RLZ provisions. The proposed Objectives and Policies are:

# 20.4.9 Objective – Wyuna Station Rural Lifestyle Zone - To provide for a deferred rural lifestyle zone on the terrace to the east of, and immediately adjoining, the Glenorchy Township.

Policy

20.4.9.1 To prohibit or defer development of the zone until such a time that:

- (a) the zone can be serviced by a reticulated wastewater disposal scheme within the property which services both the township and proposed zone. This may include the provision of land within the zone for such purpose; OR
- (b) the zone can be serviced by a reticulated wastewater disposal scheme located outside of the zone which has capacity to service both the township and proposed zone; OR
- (c) the zone can be serviced by an on-site (individual or communal) wastewater disposal scheme no sooner than two years from the zone becoming operative on the condition that should a reticulated scheme referred to in (a) and
   (b) above become available and have capacity within the next three years then all lots within the zone shall be required to connect to that reticulated scheme.
- 20.4.10 Objective Wyuna Station Rural Lifestyle Zone Subject to Objective 20.4.9, to enable rural living development in a way that maintains the visual amenity values which are experienced from the Glenorchy Township, Oban Street and the Glenorchy-Paradise Road.

### Policies

- 20.4.10.1 The subdivision design, identification of building platforms and associated mitigation measures shall ensure that built form and associated activities within the zone are reasonably inconspicuous when viewed from Glenorchy Township, Oban Street or the Glenorchy-Paradise Road. Measures to achieve this include:
- (a) Prohibiting development over the sensitive areas of the zone via building restriction areas;
- (b) Appropriately locating buildings within the zone, including restrictions on future building bulk;
- (c) Using excavation of the eastern part of the terrace to form appropriate building platforms;
- (d) Using naturalistic mounding of the western part of the terrace to assist visual screening of development;
- (e) Using native vegetation to assist visual screening of development;

- (f) The maximum height of buildings shall be 4.5m above ground level prior to any subdivision development.
- 20.4.10.2 To maintain and enhance the indigenous vegetation and ecosystems within the building restriction areas of the zone and to suitably and comprehensively maintain these areas into the future. As a minimum, this shall include:
- (a) Methods to remove or kill existing wilding exotic trees and weed species from the lower banks of the zone area and to conduct this eradication on a year to year basis.
- (b) Methods to exclude and/or suitably manage pests within the zone in order to foster growth of native vegetation within the zone.
- (c) A programme or list of maintenance work to be carried out on a year to year basis on order to bring about the goals set out above.

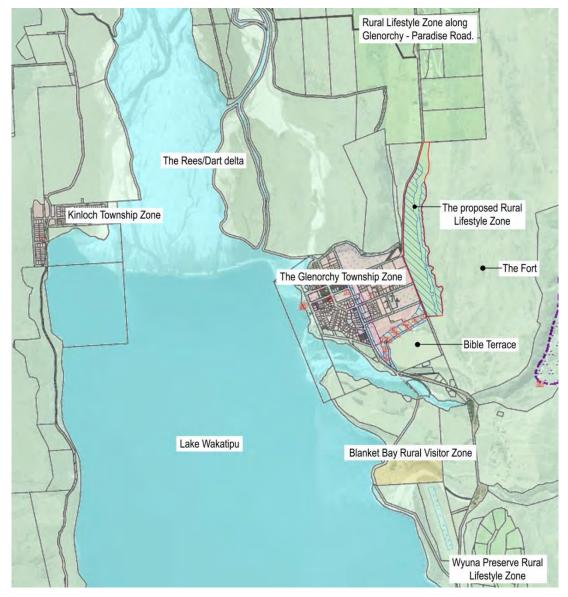


Figure 1: The location of the proposed RLZ within Wyuna Station.

- 5. The proposed RLZ is the result of an iterative and consultative design process over a period of months. I have provided input into this design process from a landscape effects point of view. This report describes and quantifies the landscape and amenity related effects that will result from the proposed zone change and focusses on effects as experienced from outside the proposed RLZ. This report does not directly discuss matters that relate to internal design, internal amenity and internal functionality.
- 6. The proposed RLZ will enable controlled activity subdivision into lot sizes that have a minimum size of 1ha with an overall average size of 2ha. At the time of a subdivision being applied for, the Council will have control over the design of the subdivision with regard to the applicable existing RLZ Objectives and Policies of the Plan and the proposed Objectives and Policies for this specific area. With regard to the proposed Objectives and Policies and the matters over which Council has control at the subdivision and house building stages, the Council will be able to control the following aspects of the development of the zone to ensure that the relevant Objectives and Policies are met:
  - The overall design and layout of subdivision including access, servicing and structural landscaping.
  - The location of building platforms.
  - The height, bulk and external appearance of buildings.
  - The appropriate use of earthworks to excavate ground level where buildings are to be located.
  - The appropriate use of earthworks to create naturalistic mounding for visual screening purposes.
  - The enhancement and ongoing management of native vegetation for visual screening purposes for natural character purposes.
  - The appropriate use of external building materials and colours so as to be visually recessive.
- 7. It is my understanding that the ultimate result of the proposed area of RLZ will be development that includes the following aspects:
  - Up to 15 dwellings on the flat of the terrace landform. Two of these dwellings may be north of the existing access way into the site.

- Vehicle access to all dwellings is likely to take the form of an alignment that runs along the terrace landform from north to south (most likely on the uphill side of dwelling locations).
- Future dwellings would be restricted in height and external appearance to assist in achieving the requirement of being reasonably inconspicuous when seen from the west.
- Earthworks are likely to be used to bench dwellings into the rear of the terrace and to create naturalistic mounding at the front of the terrace. This will assist in visually screening dwellings from Glenorchy and also will mean that views from the dwellings include lake and mountain views but do not include Glenorchy Township.
- The slope below the developable area of the zone will be maintained so as to bolster the existing native vegetative community and manage it into the future. Native vegetation will likely extend slightly further east so as to cover naturalistic earth mounding created on the western lip of the terrace area, which will assist in reducing visibility of future dwellings.
- Vegetation is likely to be used in the vicinity of the zone's road boundary north of the existing vehicle entrance to ensure development in the northern part of the zone is inconspicuous from Glenorchy Paradise Road.

# STATUTORY CONSIDERATIONS

8. The parts of the Resource Management Act that are relevant to the consideration of the landscape and amenity related effects of the proposed zone change include:

### 6 Matters of national importance

In achieving the purpose of this Act, all persons exercising functions and powers under it, in relation to managing the use, development, and protection of natural and physical resources, shall recognise and provide for the following matters of national importance:

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

### 7 Other Matters

In achieving the purpose of this Act, all persons exercising functions and powers under it, in relation to managing the use, development, and protection of natural and physical resources, shall have particular regard to-

- (c) The maintenance and enhancement of amenity values
- (f) Maintenance and enhancement of the quality of the environment

9. Section 4 of the Plan deals with matters that are relevant to the district as a whole. Section 4.2 of the Plan provides district wide guidance regarding landscape and amenity issues. Logically, all other sections of the Plan shall be compatible with Section 4. The most relevant provisions in relation to the assessment of the potential landscape and amenity effects of the proposed zone change include:

### 4.2.5 Objectives and Policies

#### Objective:

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

#### Policies: 1

#### Future Development

- (a) To avoid, remedy or mitigate the adverse effects of development and/or subdivision in those areas of the District where the landscape and visual amenity values are vulnerable to degradation.
- (b) To encourage development and/or subdivision to occur in those areas of the District with greater potential to absorb change without detraction from landscape and visual amenity values.
- (c) To ensure subdivision and/or development harmonises with local topography and ecological systems and other nature conservation values as far as possible.

#### 2 Outstanding Natural Landscapes (District-Wide/Greater Wakatipu)

- (a) To maintain the openness of those outstanding natural landscapes and features which have an open character at present.
- (b) To avoid subdivision and development in those parts of the outstanding natural landscapes with little or no capacity to absorb change.
- (c) To allow limited subdivision and development in those areas with higher potential to absorb change.
- (d) To recognise and provide for the importance of protecting the naturalness and enhancing amenity values of views from public roads.

#### 8. Avoiding Cumulative Degradation

In applying the policies above the Council's policy is:

- (a) to ensure that the density of subdivision and development does not increase to a point where the benefits of further planting and building are outweighed by the adverse effect on landscape values of over domestication of the landscape.
- (b) to encourage comprehensive and sympathetic development of rural areas.

#### 9. Structures

To preserve the visual coherence of:

- (a) outstanding natural landscapes and features and visual amenity landscapes by:
  - encouraging structures which are in harmony with the line and form of the landscape;
  - avoiding, remedying or mitigating any adverse effects of structures on the skyline, ridges and prominent slopes and hilltops;
  - encouraging the colour of buildings and structures to complement the dominant colours in the landscape;

Wyuna Station - Proposed Zone Change - Landscape & Visual Effects Assessment Report - Ben Espie - vivian+espie

- encouraging placement of structures in locations where they are in harmony with the landscape;
- promoting the use of local, natural materials in construction.
- (c) All rural landscapes by
  - limiting the size of signs, corporate images and logos
  - providing for greater development setbacks from public roads to maintain and enhance amenity values associated with the views from public roads.

### 15. Retention of Existing Vegetation

To maintain the visual coherence of the landscape and to protect the existing levels of natural character by:

- (a) Encouraging the retention of existing indigenous vegetation in gullies and along watercourses;
- (b) Encouraging maintenance of tussock grass-lands and other nature ecosystems<sup>3</sup> in outstanding natural landscapes.

<sup>3</sup> refer to Section 4.1 on nature conservation values.

### 17. Land Use

To encourage land use in a manner which minimises adverse effects on the open character and visual coherence of the landscape.

- 10. Although not a statutory document, The Glenorchy Community Plan<sup>3</sup> is a document created through extensive consultation with the Glenorchy Community. I therefore consider it is useful in providing information on community aspirations. I recognise that the community plan is more than ten years old and that a review of it has begun. Notwithstanding this, I consider that it has relevance.
- 11. The Community Plan outlines a number of outcomes needed to achieve a desired overall vision for Glenorchy. Outcome 3 sets out broad goals that relate to rural subdivision in relation to landscape and wilderness qualities. These include:
  - Visual landscape, vistas and wilderness atmosphere retained/unspoilt.
  - Rural subdivision and other rural developments to be inconspicuous in the visual landscape.
  - Rural subdivision to be limited and to not impact on the special characteristics and qualities of the area.<sup>4</sup>
- 12. With more specific relevance to the proposed RLZ, Section 4.32 of the Community Plan deals with "Rural Land on the Outskirts of the Town". The most relevant key strategies are to:
  - Avoid inappropriate urbanisation and domestication i.e. inappropriate rural subdivision.
  - Retain the natural undeveloped character of the town backdrop.

<sup>&</sup>lt;sup>3</sup> Blakely Wallace Associates; August 2001; "Glenorchy – Head of the Lake, Community Plan".
<sup>4</sup> Ibid, page 16.

- Revegetation of parts of this backdrop would enhance the rural wilderness character of the town.<sup>5</sup>
- The Community Plan then identifies the town backdrop on Sheet 2 of its appended plans. I attach Sheet 2 to this report as Appendix 2.

# THE EXISTING LANDSCAPE CONTEXT

## The landscape baseline

- 14. The proposed RLZ is located in a part of Wyuna Station immediately east of, and up slope from, the Glenorchy Township Zone. Immediately east of the proposed RLZ are the steep slopes of The Fort, which is a small north-south running spur of mountainous topography that separate Chinaman's Flat from the Rees/Dart delta. The western part of the RLZ (which is to be a building restriction area) takes the form of a steep, vegetated slope that descends down to Glenorchy Township. The proposed location of the RLZ is shown on Figure 1 of this report and the zone area is shown in detail on Appendix 1.
- 15. The landscape in the area to the north of Lake Wakatipu is dominated by the vast, steep mountain slopes of the Richardson, Humboldt and Forbes mountain ranges (as can be seen in all of the photographs of Appendix 3 to this report). These mountain ranges are comprised of weathering up-thrust schistose bedrock and generally have been farmed much more minimally than the flatter land and are frequently covered in remnant native ecology. The river valleys of the Dart to the west and the Rees to the east converge in a Y-shape around the lone peak of Mount Alfred as they enter the lake. The flat floors of these valleys are comprised of deposited post glacial materials and have generally been the location of intensive agriculture, grazing and ecological modification since the colonial period.
- 16. The rugged forms of the mountains that rise up from the more tamed and verdant pastoral valley floors are striking to visitors to the area and are romantic and sublime in terms of aesthetics. Changing light, weather (including frequent snow cover) and atmospheric conditions can create dramatic effects and I believe that it would be generally shared and recognised by observers that these mountain ranges are majestic, natural and memorable.

<sup>5</sup> Ibid, page 43.

Wyuna Station - Proposed Zone Change - Landscape & Visual Effects Assessment Report - Ben Espie - vivian+espie

- 17. The farmed valley floors are not as natural or dramatic in appearance. I believe that it would generally be obvious to observers that these valley floors have been much more modified than the mountain slopes, are less striking and have more in common with many parts of rural agricultural New Zealand. The expansive gravel beds of the braided rivers themselves however are remarkable and obviously natural features.
- 18. Wyuna Station is contained within the Rural General Zone and therefore is subject to the Plan's landscape categorisation process in accordance with Part 5.4.2.1 of the Plan. Part 4.2.4(2) of the Plan states that *"the outstanding natural landscapes of the district are romantic landscapes – the mountains and lakes."*
- 19. Categorising the landscapes of a district into outstanding natural landscapes and landscapes that are not both outstanding and natural is an exercise that must obviously be done at a very large scale. A number of Environment Court decisions relating to the district have emphasised the point that the categorisation process must be done at the scale of entire landscapes, not landscape units or bits of landscapes.
- 20. I am aware of maps and reports made public by the Council setting out their position regarding landscape categorisation of the relevant area that is proposed to be formalised by the District Plan Review. The Council's information shows all the land outside of the Glenorchy Township Zone as being part of the outstanding natural landscape. Given the scale at which landscape categorisation is appropriately done, I agree with this categorisation.
- 21. The proposed RLZ area takes in flat paddock areas at its northern end. These are immediately south of the existing RLZ and have been improved and grazed for many decades (and can be seen on Appendix 3, Viewpoint Location 1). Moving south, these flat areas become a terrace that stretches south to the southern end of the zone. This terrace landform is the part of the proposed zone on which development is anticipated (and can be seen on Appendix 3, Viewpoint Location 2). The remainder of the zone area is to be covered by a building restriction area. This terrace is flattish, verdant and grazed; while the building restriction areas within the proposed zone are steeper, rougher country. The slope between the developable part of the zone and Glenorchy Township is relatively densely covered in remnant native vegetation.

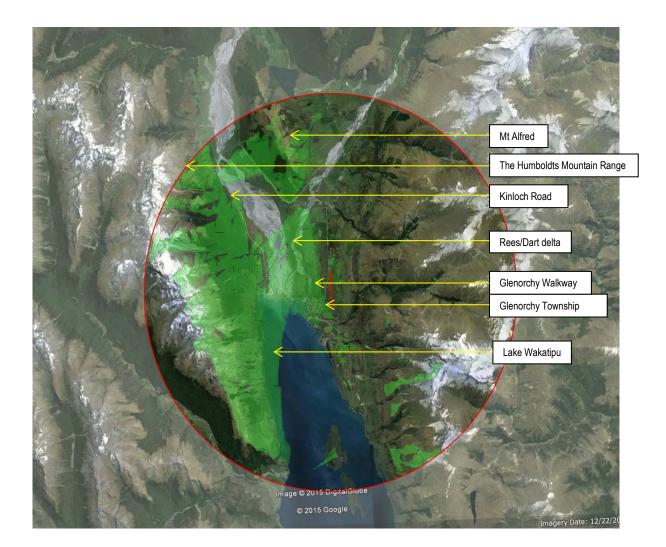
10

- 22. More closely in the vicinity of the proposed activities, the flattish terrace land that accommodates dilapidated shearing shed structures and the existing farm dwelling has deeper soils than the mountain slopes and has been used as improved pasture. The steeper slopes of The Fort hillside have been farmed much less intensively. The terrace is approximately 40m wide and the steep, rocky escarpment upslope of this terrace contains sporadic vegetation. This escarpment is approximately 7 metres high and will be the backdrop to the developable part of the proposed RLZ. The hillside downslope of the terrace is significantly covered in native shrub vegetation dominated by kanuka, matagouri and coprosma grey shrub species. Stock are not currently excluded from this area.
- 23. The northern boundary of the proposed RLZ is to abut the existing RLZ that is located directly north of the site, immediately east of the Glenorchy Paradise Road. This northern portion of proposed RLZ contains a dilapidated shearing shed and a farm dwelling. The terrace that runs to the south of the farm dwelling currently accommodates a farm track that extends south to Bible Terrace.
- 24. Regarding aspects of the landscape resource that are potentially affected by the proposal (landscape receptors), the landscape character of the backdrop of Glenorchy Township is potentially affected, as is the landscape character of the broader outstanding natural landscape.

### The visual baseline

- 25. The proposed RLZ is potentially visible from an identifiable visual catchment or zone of theoretical visibility (ZTV). This ZTV includes parts of the Glenorchy Township, the Glenorchy Walkway, part of the surface of Lake Wakatipu, part of the Rees/Dart delta, some private land to the immediate north of the site and larger areas of more distant elevated land such as parts of Mount Alfred, the eastern face of the Humboldt Mountains and part of the Kinloch Road. The ZTV is shown on Figure 2 and in more detail on Appendix 3 to this report. The developable area of the proposed zone is visually screened from the east and south.
- 26. Observers within the ZTV that are potentially visually affected by the proposal (visual receptors) include:
  - Users and occupiers of Glenorchy Township.

- Users of the Glenorchy Walkway.
- Users of Lake Wakatipu and the Rees/Dart delta.
- Users of Glenorchy Paradise Road.
- Users and occupiers of distant areas such as Mount Alfred, parts of the Humboldts and the Kinloch Road.
- 27. The views that these observers currently experienced and how these are likely to be affected are discussed subsequently.



*Figure 2:* Zone of theoretical visibility diagram. The area highlighted in green illustrates land from which development within the proposed RLZ will potentially be visible. See Appendix 3 of this report for more information.

# THE LANDSCAPE EFFECTS OF THE PROPOSAL

- 28. When describing effects, I will use the following hierarchy of adjectives:
  - Nil or negligible;
  - Slight;
  - Moderate;
  - Substantial;
  - Severe.
- 29. Landscape effects are the effects that an activity may have on the landscape as a resource in its own right. Landscape effects relate to landscape character and the elements and patterns that make up that character, rather than to visual issues. I have considered these effects with reference to the relevant statutory considerations.
- 30. The character of the site and the landscape in which it sites has been discussed above. The site of the RLZ itself takes in land used as pasture, a vegetated slope and a rocky escarpment. At a broader scale the site sits within a dramatic landscape of high natural character (as can been seen on Appendix 3, Viewpoint Locations 4-10). The proposed RLZ will bring about a rural living area and the protection and enhancement of indigenous vegetation and ecosystems within the slope and escarpment areas of the site. These proposed activities will be surrounded by the existing farm activities within Wyuna Station.
- 31. The subsequent subdivision and development that will occur within the proposed RLZ has been described in paragraph 7 above. The terrace will contain up to 15 dwellings of limited height and recessive appearance that will be benched into the terrace landform. Vehicle access will be via an existing entrance point. Management of the slope and escarpment areas will maintain and enhance indigenous vegetation cover.
- 32. At the northern end of the proposed zone, the developable area of the zone takes the form of roadside paddocks that abut the existing RLZ. These paddocks continue to the north within the existing RLZ. They have not been developed in accordance with their zoning but they could potentially accommodate many dwellings. This northern part of the proposed zone does not contain any significant indigenous vegetation. It is contained to the east by the immediate backdrop of the toe of The Fort that separates it from the main farming area

13

of Wyuna Station. I consider that in terms of landscape character, this area of the proposed zone will appear as an extension of the pattern of the existing RLZ. However, being much thinner in an east-west direction than the existing area of RLZ and being contained to the flat pasture land, it will bring about much less density and less prominent development than the immediately adjacent existing zone. In terms of landscape character, it will create a feathered southern edge to the existing RLZ. When we consider the scale and nature of development enabled by the existing RLZ, I consider that the northern part of the proposed zone (approximately north of the woolshed) will be appropriate in terms of character; it will continue and round out the pattern of the existing zone.

- 33. An increase in rural residential development will be brought about by the proposal. It will extend the rural living pattern of the existing RLZ north of the site across the terrace land that runs through the site. This thin terrace area of land is grazed but is primarily used for access through the farm and is illustrated in Appendix 3, Viewpoint Locations 1, 2 and 3. The area of the proposed RLZ is not of significant importance to the overall farming operation of Wyuna Station. Future dwellings and their associated activities located on the terrace will alter the current character within the developable area of the proposed zone. At a localised level this terrace area will change in character entirely; from a grassed terrace to accommodating perhaps 10-15 dwellings.
- 34. While this terrace will change substantially in terms of character, at a broader scale the proposed zone will create a thin strip of rural living type development in close proximity to Glenorchy Township (future RLZ dwellings will be within 200-300 meters of the Township Zone). In terms of landscape character broadly, this is not an unexpected or unusual situation. Most of the district's townships have Rural Living Zones very close to them. Examples include Makarora, Hawea, Luggate and Albert Town. This is a common pattern throughout small townships of New Zealand; that outside the township itself (but close to it) there are enclaves of rural living land use. Indeed, the RLZ on Glenorchy Paradise Road, The Wyuna Preserve RLZ and the Blanket Bay Rural Visitor Zone all exist within 2 kilometres of Glenorchy Township.
- 35. Therefore, in terms of overall landscape character, I do not see it as unexpected, unusual or adverse to change the relevant strip of land from a rural pattern to a rural living pattern (provided that visual effects are appropriate). A well designed rural development in this location that creates a feathered edge to the existing RLZ and that protects and enhances

14

an important hillslope can potentially sit very well in relation to landscape character patterns. The terrace landform and existing vegetation base provide an increased capacity for absorption and allow retention of openness and natural character.

- 36. A large portion of the proposed RLZ takes in the lower slope and escarpment face of the toe of The Fort hillside. This area is to be protected from any future built form and a proposed policy will ensure that the indigenous vegetation and ecosystems that currently exist will be maintained and enhanced. With diligent use of Council's control at subdivision and dwelling consent stage, I consider that this policy will be able to be used to significantly enhance natural character in and around the rural living development that will occur. At subdivision stage, I would envisage conditions that require a comprehensive vegetation management plan is prepared and approved for the building restriction areas of the proposed zone.
- 37. In summary, the rural residential activities will change the truly rural, agricultural landscape character of the terrace and paddocks that contain the developable area of the proposed zone. This area will become more modified and less rural. However in terms of broad scale landscape planning. I do not consider that a rural living area in this location adjacent to Glenorchy is unusual or adverse in terms of overall landscape character patterns, provided visual effects can be appropriately managed. In addition, I consider that the configuration of the zoning will provide for significant localised maintenance and enhancement of natural vegetative character.

# THE VISUAL EFFECTS OF THE PROPOSAL

- 38. Visual effects are the effects that an activity may have on specific views and on the general visual amenity experienced by people. Again, I have considered these effects with reference to the relevant statutory consideration.
- 39. Paragraph 26 sets out the observers that gain potential views of the proposed RLZ that may be affected by the proposal. The proposed Objectives and Policies will enable Council control at both subdivision and building consent stages. The outcomes of the proposed zone are discussed in my paragraph 7. It is relevant that dwelling sites within the developable area of the proposed RLZ gain dramatic views to the north, northwest and west. Earth mounding and/or vegetation that is designed to reduce visibility of dwellings

from Glenorchy will not reduce the quality of views available from these dwelling sites. Even if Glenorchy Township is screened, these dwelling sites will still gain spectacular views that include the surface of the lake, the river delta and the vast surrounding mountains. I discuss the potential visual effects brought about by the proposal in relation to potential observers below:

## Users and occupiers of Glenorchy Township

- 40. Glenorchy Township is immediately west of the proposed RLZ. The township zone has largely been developed although some capacity still exists. Due to its proximity to the site and the site's topography, visibility of future built form will not be gained from the easternmost part of the township. This area primarily contains private land and locally used roads (as can be seen on the inset on Appendix 3, Viewpoint Location Map). The vegetated slope of the lower building restriction area is visually prominent from this part of the township.
- 41. As one moves away from the site to the west into Glenorchy Township, viewing angles are such that the developable part of the proposed zone becomes more able to be seen. From Oban Street and further west, visibility of the horizontal line of the terrace would be easily available if not for the blocking effect of foreground elements (as can be seen on Appendix 3, Viewpoint Locations 4-10).
- 42. From any given viewpoint within the Glenorchy Township, visibility of the entire length of the terrace is not available. Built form and vegetation within the township create intermittent visibility of the terrace. From many parts of the township, the terrace is entirely screened. When travelling around the township, visibility differs from each location to the next. Ultimately, any given point on the terrace is visible from some point within Glenorchy Township.
- 43. As described previously, I understand that the proposed Objectives, Policies and Council controls will mean that future dwellings will be appropriately located, be restricted in height, be benched into the terrace landform, be of visually recessive colours and be partially screened by naturalistic mounding and native vegetation. It is likely that the upper portions of future dwellings will be visible from numerous points within the western two thirds of Glenorchy Township. These parts of built form will be seen directly behind and in front of

# vivian+espie

the vegetation on the hillside and the escarpment face. This vegetation will be bolstered over time and consists of kanuka-dominated shrub species. Dark recessive external materials will also reduce the visual prominence of future dwellings when experienced from the township. I consider the dark colours of future built form visually blend in well with the vegetation that will be enhanced.

- 44. Visible parts of buildings will interrupt the open character that is currently evident. However, in relation to the line and form of the landscape, the horizontal terrace on which the developable area is to be located currently reads as a break or obvious horizontal line on the slopes to the east of Glenorchy (as can be seen on Appendix 3, Viewpoints 5 to 11). This currently visible line, created by the terrace and the rocky escarpment behind it, is a visual interruption to the simplicity of the slopes of The Fort. It is on this horizontal line that parts of future buildings will be seen. In this sense, future development will be located such that it harmonises with the line and form of the landscape. Visually, it will be associated with an existing break point or interruption to landform; it will not create some entirely new visual interruption.
- 45. In an overall consideration, it is my opinion that the Council will have good ability to use its controls at subdivision and dwelling construction stages to bring about built development that is relatively inconspicuous. Curtilage activities and vehicle access are likely to be completely hidden. While there will be some visibility, I do not consider that development will be dominant or prominent and it will be in the location of an existing landform break line in terms of geomorphology and legibility. Visibility will range up to a moderate degree at most.
- 46. In relation to how adverse this visual effect is, the district-wide community's aspirations are set out in the District Plan provisions cited in paragraph 8. These provisions generally seek that any development in an outstanding natural landscape setting is located in areas that have a higher capacity to absorb change. Due to the various factors discussed in this report, I consider that the developable area of the proposed zone certainly has a higher capacity to absorb change than most locations within the outstanding natural landscape surrounding Glenorchy. In this regard, I consider that the limited visibility of development that will eventually result from the proposed zone will not be significantly at odds with the district-wide community's aspirations.

17

47. Regarding the more specific Glenorchy community's aspirations, the parts of the Glenorchy Community Plan cited in paragraphs 11 and 12 of this report make it clear that retaining the undeveloped character of the town backdrop is an important community goal, as is revegetating parts of this backdrop. The proposed zoning will assist with the revegetation goal but will place development (albeit relatively inconspicuously) within this backdrop. In this regard, I consider that the visual effect of built form as seen from Glenorchy Township that has been described must be considered to be adverse.

### Users of the Glenorchy Walkway including the boardwalk area

- 48. The development area within the proposed RLZ is visible from roughly the western two thirds of the Glenorchy Walkway. The walkway meanders through a river delta area that is considerably covered in willows (as is illustrated by Appendix 3. Viewpoint Location 8). Views out to the developable area within the proposed RLZ and the surrounding landscape are intermittent and very often completely screened.
- 49. Visibility of future dwellings from this walkway will be gained in a similar manner to views from Glenorchy Township that are discussed above. The proposed Objectives and Policies ensure that the Council has an appropriate level of control to require that mitigation measures are used to limit the visibility of future development and reduce the visual prominence of built form. I consider that the upper portions of future built form will be visible, however when experienced from the Glenorchy Walkway they will not appear visually prominent. Parts of the vegetated building restriction area will be easily seen and will read as the toe of the surrounding, containing mountain slopes. As discussed in relation to the township, the visibility of built form in this setting will reduce perceived natural character and must be considered to be adverse, however, this effect has been mitigated as much as possible and useful Council control will be retained.

### Users of Lake Wakatipu and the Rees/Dart delta

50. Visibility of the entire length of the developable area can be gained from the surface of Lake Wakatipu and the Rees/Dart delta. The upper portions of future dwellings will be visible and as an observer gets further away from the site, viewing distances will mean that the site is seen more horizontally.

- 51. Visibility will be gained at distances of between 2 and 4 kilometres. When viewed from such distances a vast panorama of the landscape including the surrounding surface of Lake Wakatipu, the Rees/Dart delta, Glenorchy Township and the surrounding mountains is visible. A viewer will look horizontally across Glenorchy Township to the proposed zone. The parts of visible development within the zone will begin to visually blend with the development of the township. In these more distant views, I consider that it will become difficult to distinguish the new development area from the existing town and both will be dwarfed by the surrounding mountains.
- 52. From the Rees/Dart delta the northern portion of the proposed RLZ is visible. Development within this part of the proposed zone will be similarly visible to development provided for by the existing RLZ to the immediate north but will be kept to the foot of the slope. Future built form will have an immediate backdrop of the hillside to its east. When experienced from the Rees/Dart delta, I consider future development will appear in keeping with the development provided for by the existing RLZ but will be significantly lower and less conspicuous.
- 53. Overall, I consider that development that results from the proposed zone will equate to a minor addition to the existing scene that is available from the lake surface and the Rees/Dart delta. Visual effects will be slight.

### Users of Glenorchy Paradise Road

54. The northernmost portion of the proposed zone abuts the existing RLZ that is adjacent to Glenorchy Paradise Road. The existing RLZ provides for rural living properties with an average size of 2ha. The existing RLZ takes in topography that rises steeply from Glenorchy Paradise Road towards the east, up to an altitude of approximately 640masl (practically to the top of The Fort). Only small pockets of development have been done to date within this zone; the provision for many more dwellings remains. The Council will have control at subdivision and dwelling building stages to ensure that appropriate screening and mitigation measures are incorporated, enabling development to be inconspicuous when experienced from Glenorchy Paradise Road. When experienced alongside the existing RLZ I consider the proposed zone will have a slight degree of visual effect at most. It will read as a feathered or soft southern edge to the Rural Lifestyle area.

# Users/occupiers of more distant areas such as Mount Alfred, parts of the Humboldts and the Kinloch Road

- 55. The propose zone area will be visible from public and private places within the broader landscape. Visibility of future built form will be gained from Mount Alfred, parts of the Humboldts and the Kinloch Road at distances of 3.5km and upwards. When viewed from such distances, Lake Wakatipu, the Rees/Dart delta, Glenorchy Township and the surrounding mountains are visible. The area of the proposed zone amounts to a small element in a very broad scene.
- 56. Apart from Kinloch Road and the flat river delta lands, these distant views of the proposed RLZ are gained from elevated locations. These elevated locations will gain visual access to the developable part of the proposed zone and also to the existing RLZ and Glenorchy Township. When experienced from these distant locations, the developable area will appear immediately adjacent to the built form of the Township and adjoined to the existing RLZ. Its close proximity to these two exiting areas of development means that, given viewing distances involved, these development areas will visually blend together. Future built form will be difficult to pick out or distinguish from the Township Zone. In any event, viewing distances will mean that new development will amount to a very minor visual addition to the existing scene. Effects will be of a slight degree.

# CONCLUSIONS

- 57. An area of RLZ is proposed immediately adjacent to Glenorchy Township Zone. I understand that the details of the proposed zone mean that the development that ultimately results from the zone will:
  - Consist of up to 15 dwellings that will be situated on the existing terrace landform. Dwellings will be restricted in height and appearance so as to be relatively inconspicuous when viewed from Glenorchy Township.
  - Use earthworks to bed dwellings into the terrace landform and to create naturalistic earth mounding in order to assist in achieving inconspicuousness.
  - Include native vegetation enhancement and protection over the slope and escarpment parts of the proposed zone (the building restriction areas) in order

20

to bolster indigenous ecosystems and natural character and to assist in reducing visibility of built form.

- 58. All of the Rural General Zone land outside of Glenorchy Township forms part of a vast outstanding natural landscape. Within this landscape, the developable area of the proposed zone takes the form of paddock land that has been used for farming purposes for many decades.
- 59. In relation to landscape character, the proposal will change the character of the terrace itself from paddock land to an area of rural residential use. This will increase modification of the landscape and reduce natural character. Notwithstanding this, it is common for small townships to have a rural living area adjacent to them. I do not consider that locating an enclave of rural living development in close proximity to Glenorchy Township as proposed will lead to significantly unexpected, unusual or adverse effects in terms of landscape character patterns, provided that visual effects are appropriate and that the natural character of the slope and escarpment landforms within the zone (the most important areas in relation to the backdrop of Glenorchy) is enhanced.
- 60. In relation to visual effects:
  - The visual effects of the proposed zone as experienced from Glenorchy have been mitigated as much as is practicable. Future development will not be invisible but will not be visually dominant or prominent. The most displayed parts of the relevant area (the escarpment and slope areas) will be visually enhanced in terms of their visible natural character. Visual effects of built form can be described as being of a moderate degree at worst. I consider that, given the Glenorchy community's goals as expressed in the Community Plan, this effect must be considered to be adverse.
  - Visual effects as experienced from the Glenorchy Walkway are similar to those described in relation to the township, however views are more intermittent and less direct.
  - Visual effects as experienced from Lake Wakatipu, the Rees/Dart Delta, Glenorchy Paradise Road and distant areas such as the Humboldts and Mount Alfred will be of a slight degree at worst.

61. Overall, I consider that the landscape and visual effects of the proposed zone have been well mitigated and there is considerable logic to the proposal in terms of landscape planning. There are some positive visual and landscape character effects associated with the maintenance and enhancement of the natural character of some slopes that are prominent parts of the backdrop to Glenorchy. There are, however, some residual visual effects as experienced from parts of Glenorchy Township.

### **Ben Espie**

vivian+espie Ltd

26<sup>th</sup> March 2015

ATTACHMENT 2 – ENGINEERING REPORT HADLEY CONSULTANTS



19 March 2015

Our Ref: 152785

Cabo Limited C/- Triple Star Management Limited Attn: Amy Kirk

via email: <u>amy@triplestar.net.nz</u>

Dear Amy,

### PROPOSED GLENORCHY RURAL LIFESTYLE REZONING PRELIMINARY WATER, WASTEWATER & NATURAL HAZARDS ASSESSMENT

### 1.0 Introduction

Hadley Consultants Limited (HCL) have been engaged by Cabo Limited to undertake a general, preliminary assessment of infrastructure servicing feasibility and natural hazard issues that may affect the potential future development of an area of land located to the east and northeast of the Glenorchy Township.

It is proposed to rezone the area of rural land (the Zone Area) located to the east and northeast of the Glenorchy Township as Rural Lifestyle. The Zone Area is as shown on the plans that have been prepared by Aurum Survey Consultants (ASCL).

The Zone Area is located on the lower, west facing flanks of the hill country located directly east of the Glenorchy Township. This area generally consists of moderate to moderately steep slopes and contains a minor gently sloping intermediate bench running north-south at an approximate elevation of 360 – 365 metres above sea level. It is anticipated that any future residential development will be located on the less steep minor bench in the central portion of the Zone Area. Several minor ephemeral watercourses bisect the Zone Area from the upslope catchments although no water flow was observed in any of these at the time of our site walkover.

As a part of this assessment we have undertaken a desktop review of readily available aerial photography, published geological and hazard data and relevant historic project files along with a site walkover to confirm key features of the site.

In general terms it is expected that if rezoned the Zone Area will be subject to future subdivision development to create a number of lots in the order of 1 hectare in size that will include a residential

building platform. While potential building platform locations have been considered this remains indicative only and for the purposes of our assessment no specific platform locations have been considered or assessed. It is expected that if the rezoning is approved a higher level of investigation, assessment, design and reporting will be required in due course prior to development of the Zone Area.

#### 2.0 Water Source & Supply Options

Several potential water source options exist for the future development of a water supply to serve a possible rural lifestyle type development within the Zone Area.

An existing production bore has been recently constructed and is located in the northern portion of the Zone Area close to the old woolshed. At this stage we understand that this bore has not been pump tested and the capacity remains unknown but it is currently used for local farm supply purposes. It is possible that this bore alone may have sufficient capacity to serve future development within the Zone Area although this is not able to be categorically confirmed at this stage. Irrespective of the existing bore capacity the presence and current usage of this bore confirms that groundwater is available beneath the site and is a feasible on-site water source for possible future development.

Alternatively, given the proximity and location of the Zone Area adjacent to the Glenorchy Township it would also be possible, subject to approval by Council at the time of development and payment of Development Contributions to connect to the Glenorchy township water reticulation. However, it is noted that due to the likely elevation of any future building platforms it is anticipated that pressure boosting pumps would be required to supply the Zone Area.

Based on our preliminary assessment we do not foresee any issues that are likely to preclude the future development of a small water supply that would be necessary to serve the possible future rural lifestyle development within the Zone Area.

#### 3.0 Wastewater Servicing Options

Similar to water source and supply several potential options exist for the provision of the likely wastewater servicing that may be required due to a future rural lifestyle type development within the Zone Area.

Given the likely size of any future allotments within the Zone Area the typical method of wastewater servicing would be through individual on-site wastewater treatment and disposal. Based on our knowledge of the site and soils in this area we can confirm that this would in general be feasible although it is noted that not all areas of the Zone Area will be suitable for land disposal of treated effluent. Localised constraints such as limited depth of soil, shallow rock, areas of seepage and/or shallow groundwater will exist in some areas across the site. Given the likely size of future allotments these potential constraints are considered highly unlikely to preclude on-site wastewater



disposal provided that sufficient investigation and assessment is undertaken at the time of planning any future development.

Given the location of the Zone Area proximate to the Glenorchy Township if a community wastewater scheme, as is currently under consideration, was developed prior to development occurring within the Zone Area then it would also be feasible to install reticulation to connect the Zone Area to such a community scheme. Similar to water supply above this would require the approval of Council at the time of development and payment of Development Contributions but when compared to the community water supply would have the advantage of being able to connect via gravity or small bore Pressure Sewer System (PSS) and is considered technically feasible.

### 4.0 Natural Hazards

We have reviewed the QLDC Hazard Maps and readily available aerial photography as a part of this preliminary assessment. A copy of the relevant Hazard Map is included with this report as Attachment A.

No specific hazards are identified for the Zone Area although it is noted that the lower reaches of the Zone Area are noted as being liquefaction category LIC1(P) while the main portion of the Zone Area is listed as LIC1. Both of these categories are considered to have nil to low risk of liquefaction with the primary difference being the degree of certainty regarding the ground conditions and risk categorisation. The intermediate bench where it is anticipated that any residential development will be situated is located in the LIC1 area and this matches our own preliminary assessment. As such we do not consider that liquefaction hazard for the Zone Area requires further assessment.

As noted previously the Zone Area generally consists of moderate to moderately steep slopes with the gently sloping intermediate bench. Several minor ephemeral watercourses bisect the zone area and convey rain runoff from the upslope catchment to the flat lands below. In addition to the watercourses several areas of seepage and overland sheet flow also exist in the zone area. These features will require further assessment and control measures in areas to be developed at the time of future development to ensure that any possible issues are adequately addressed.

Several steep, near vertical rock exposures/escarpments are also located within the Zone Area, particularly adjacent to the upper eastern edge of the intermediate bench. While these appear to be generally stable if development is proposed directly adjacent to them these will require specific assessment to assess the risk of any potential localised instabilities and any necessary mitigation measures.

### 5.0 Conclusions & Recommendations

Based on our preliminary assessment as detailed above we do not consider there to be any major issues with regards to water source/supply, wastewater servicing and natural hazards that would preclude possible future Rural Lifestyle type development of the Zone Area.



Notwithstanding the above a number of relatively minor issues will need to be addressed as a part of the development process to ensure that any future development is undertake in a manner suitable for the site. These issues are considered to be typical of development within the Wakatipu Basin and items that are anticipated to require further investigation, assessment and design at the time of future development of this area include:

- > Treatment of existing watercourses and drainage paths including the upslope catchment;
- > Presence of wet area/seepage and the possible need for subsurface drainage in some areas;
- Presence of shallow or exposed rock including the stability of existing near vertical escarpments if development is proposed in close proximity to these features;
- Subsurface ground conditions that may affect earthworks, foundations and identification of suitable on-site wastewater disposal locations within future allotments;
- > Capacity of the existing bore.

### 6.0 Limitations

This report has been written for the particular brief to HCL and no responsibility is accepted for the use of the report for any other purpose, or in any other context or by any third party without prior review and agreement.

Should you have any questions please contact the undersigned in the first instance.

Yours faithfully, Hadley Consultants Ltd

N. Hoyst

Nigel Lloyd SENIOR CIVIL/ENVIRONMENTAL ENGINEER Attachment A – QLDC Hazard Map





The map is an approximate representation only and must not be used to determine the location or size of items shown, or to identify legal boundaries. To the extent permitted by law, the Queenstown Lakes District Council, their employees, agents and contractors will not be liable for any costs, damages or loss suffered as a result of the data or plan, and no warranty of any kind is given as to the accuracy or completeness of the information represented by the GIS data. While reasonable use is permitted and encouraged, all data is copyright reserved by Queenstown Lakes District Council. Cadastral information derived from Land Information New Zealand. CROWN COPYRIGHT RESERVED

Cueenstown Lakes District Council	Glenorchy Rural Lifestyle Zone Area				N
The second se	0	75	150 225	300	
Webmaps your view of your information	19 March 2015			<u> </u>	