BEFORE THE HEARINGS PANEL
FOR THE PROPOSED QUEENSTOWN LAKES DISTRICT PLAN

IN THE MATTER of the Resource Management Act 1991

AND

IN THE MATTER of Hearing Stream 6 – Residential

STATEMENT OF EVIDENCE OF NICHOLAS KARL GEDDES ON BEHALF OF

Middleton Family Trust (Submitter 336 & 354)

Dated 28th September 2016

QUALIFICATIONS AND EXPERIENCE

1 My name is Nicholas Karl Geddes. I hold a degree of Bachelor of Science majoring in Geography and Graduate Diploma in Environmental Science from Otago University.

2 I have fifteen years' experience as a resource management practitioner, with past positions as a Planner in local Government in Auckland, private practice in Queenstown and contract work in London, England. I currently hold a planning consultant position with Clark Fortune McDonald & Associates Limited.

3 I was employed by a Queenstown consultancy in 1999 before moving to Auckland City Council in 2001 where I held a senior planning position with Auckland City Environments. Leaving Auckland in 2005 I worked in London as a planner for two and a half years before returning to Queenstown where I have been practicing as a planning consultant since.

4 I have been a practicing consultant involved in a wide range of developments, district plan policy development and the preparation and presentation of expert evidence before Councils.

5 I have read the Code of Conduct for Expert Witnesses in the Environment Court consolidated Practice Note (2014). I agree to comply with this Code of Conduct. This evidence is within my area of expertise, except where I state I am relying on what I have been told by another person. I have not omitted to consider material facts known to me that might alter or detract from the opinions that I express.

SCOPE OF EVIDENCE

6 The scope of this evidence relates to Chapter 7 as set out in submissions 336 & 354 (Middleton Family Trust). I have prepared evidence in relation to Chapter 7 where I assess and explain:

a. Clarification of original submission(s);

b. Section 32 Evaluation Report;

c. Section 42A report.

7 In the preparation of this evidence I have reviewed the following:

a. Section 32 Evaluation Report Low Density Residential Zone;

b. The relevant submissions and further submissions of other submitters; and

c. The Council s.42A Reports prepared in relation to Chapter 7 including the associated evidence prepared by Mr Garth Falconer, Mr Philip Osborne, Dr Stephen Chiles and Mr Ulrich Glasner.

Abbreviations:

Low Density Residential Zone – "LDRZ"
Queenstown Heights Overlay Area – "QHOA"
Proposed District Plan – "PDP"
Operative District Plan – "ODP"
Resource Management Act 1991 – "RMA 91"
Air Noise Boundary – "ANB"
Outer Control Boundary – "OCB"

CLARIFICATION OF ORIGINAL SUBMISSION(S)

8 Submissions 336 and 354 are the same. As such, submission 354 has been formally withdrawn.

9 Submission 336 contains consideration of density and minimum lot size within the QHOA as well as requesting amendments to the planning maps.

10 The section 42A report for Chapter 7 provides commentary on the QHOA within paragraphs 9.42 to 9.47 and justifies PDP provisions through a number of site specific characteristics which pertain to the submitters land only.

11 The submitter requests that the Hearings Panel consider paragraphs 9.42 to 9.47 of the section 42A report and the evidence submitted as to whether submission 336 is more appropriately heard as part of the hearings stream which relates to changes to planning maps.

SECTION 32 EVALUATION REPORT

12 Page 7, part 4 of the section 32 Evaluation Report (s32 report) for the Low Density Residential Zone (LDRZ) lists seven key issues of relevance:

> The key issues of relevance to the Low Density Residential Zone are:
>
> - **Issue 1** – Growth
> - **Issue 2** – Visitor accommodation demands are increasing
> - **Issue 3** – Urban Form
> - **Issue 4** – Reducing the environmental impacts of urban development
> - **Issue 5** - Housing supply, affordability and the impacts of restrictive planning controls
> - **Issue 6** – Urban design and amenity values
> - **Issue 7** – Economic diversification

13 Methods to address the issues above are identified throughout the report and include:

- *"Provision for infill housing up to a density of 1 residential unit per 300m2."*
- *"Liberalisation of bulk and location rules where appropriate to better enable low intensity infill."*
- *"Objectives and policies recognise that the zone will recognise some change to enable limited infill development."*
- *"Liberalise rules to enable better realisation of intensification objectives and policies."*
- *"Greater provision for infill development in existing urban settlements, avoiding sprawling urban forms and incentivising sustainable forms of transport."*

- *"Liberalise District Plan bulk and location rules."*
- *"Objectives and policies recognise that the zone will recognise some change to enable limited infill development."*
- *"Liberalising building design controls (such as density, building height, recession planes) as appropriate to better enable limit infill development."*.
- *"Objectives, policies and rules included to enable adequate consideration to the impacts of development on residential amenity."*

14 It is my opinion that the methods listed above offer an accurate indication of the trust of the s32 report which provides a considerable body of reporting towards justifying an increase in densities of housing across the residential zones and the liberalisation of development controls to promote housing development within the boundaries of existing residential zones.

15 I am unable to find any reference to the QHOA.

16 Further, I cannot find any justification for reducing the residential density provision within the QHOA to less than one third of the Operative provision. The PDP seeks to reduce the residential density within this part of the LDRZ from "1 residential unit per 450m^2" as provided for in the ODP Standard 7.5.5.3(iii) to "1 residential unit per 1500m^2" (Rule 7.4.9 & 7.4.10) .

17 The submitters land comprises of 337,103m^2. A basic appreciation of the ODP density calculates 749 residential units over this residential property and the PDP seeks to reduce this total by 525 units anticipating a maximum of 224 residential units.

18 The Certificate of Title for the property is contained in Attachment A to this evidence along with topographical information of the submitters land and Council Hazard Maps.

19 In my opinion the reduction in density across the QHOA is completely "against the grain" of the s32 report and section 32AA analysis attached to the section 42A report. I have been unable to establish any exemption provided within these reports which enables the PDP to reduce the density of an existing residential zone by 70%.

SECTION 42A REPORT

20 The section 42A report for Chapter 7 provides commentary for the QHOA within paragraphs 9.42 to 9.47.

21 Paragraph 9.45 reads:

"With regard to the Middleton Family Trust submission, I note that no mention has been made of the steep topography of the land, nor the site hazards that are applicable to the land within the sub-zone."

Steep Topography

22 A topographical plan of the south side of Queenstown Hill is contained in Attachment A along with cross sections.

23 In my opinion the topography of the land is not steep by comparison to the lower flanks of Queenstown Hill especially land below Frankton Road. This area is almost entirely occupied by a mixture of high density and low density residential development.

24 I believe the submitters land is steep in part but this is not unique or prohibitive to residential development. Irrespective, I do not think that a reduction in density is a well-informed response to any site which is considered to be topographically steep.

Site Hazards

25 Paragraph 9.46 of the section 42A report reads:

"Subdivision consent (RM081212 varied by RM150520) has been granted to create 158 residential lots above Middleton Road, of which six lots are within the westernmost portion of the sub-zone. The geotechnical engineering assessments (by Tonkin & Taylor and Geosolve) that were provided as part of these applications confirm that the approximate location of the landslide boundary is within the sub-zone."

26 The geotechnical reporting which imposed the landslide boundary on Council hazard maps has not informed the section 42A report. Rather, geotechnical reporting provided as part of applications RM081212 and RM150520 is referenced. Both applications relate to land located on the eastern flanks of Queenstown Hill. This reporting is contained in Attachment B to this evidence.

27 I concur with part of the section 42A report which considers that this reporting confirms potential geotechnical constraints at the eastern end of the sub-zone. This landside boundary is also depicted on the hazard map contained in Attachment A.

28 The geotechnical reporting provided in the resource consent applications for RM081212 and RM150520 is intended to satisfy section 106 of the RMA 91:

> **106 Consent authority may refuse subdivision consent in certain circumstances**
>
> (1) A consent authority may refuse to grant a subdivision consent, or may grant a subdivision consent subject to conditions, if it considers that—
>
> (a) the land in respect of which a consent is sought, or any structure on the land, is or is likely to be subject to material damage by erosion, falling debris, subsidence, slippage, or inundation from any source; or
>
> (b) any subsequent use that is likely to be made of the land is likely to accelerate, worsen, or result in material damage to the land, other land, or structure by erosion, falling debris, subsidence, slippage, or inundation from any source; or
>
> (c) sufficient provision has not been made for legal and physical access to each allotment to be created by the subdivision.

29 Any subsequent consent application to subdivide the submitters land will require detailed geotechnical reporting to satisfy section 106 of the RMA 91 and confirm areas where a specific engineering response is required to facilitate residential development as per RM081212 and RM150520.

Potters Hill (The Views)

30 RM052020 (2005) approved the subdivision of land on the lower flanks of Queenstown Hill below the QHOA. A generic geotechnical investigation within this application required the identification of areas of instability and suspected instability. With subsequent site specific geotechnical investigation undertaken in RM160038 (2014) a number of the areas of instability identified in RM052020 were removed and additional residential infill development has been constructed.

31 RM052020 and RM160038 are contained in Attachment C along with respective hazard maps. “Attachment D_Plans” offers a comparison between approved scheme plans where Stability Zones B, C and F applied in 2005 were removed following site specific geotechnical investigation in 2014.

32 With the limited supply of land zoned residential under the ODP and the demand for this land steadily increases it is my opinion that engineering solutions to develop land susceptible to natural hazards becomes more viable.

33 A number of subdivisions on Queenstown Hill (including Potters Hill) have confirmed that the generic geotechnical investigations undertaken at the outset of the development have

proven either incorrect or somewhat inaccurate upon a detailed investigation of the localised conditions on the site.

34 In my opinion generic geotechnical investigations carry a high level of assumption which is often removed upon detailed investigation. Therefore, the reduction in permitted site density upon the submitters land appears speculative and in the absence of the actual geological conditions on the site.

35 Overall, I do not believe that the proposed reduction in permitted density is a well-informed response to a perceived natural hazard on the submitters land.

36 I believe a more appropriate response to the perceived natural hazard is to require a maximum number of units on the property to reflect the anticipated density of the ODP without a minimum lot size.

37 No minimum allotment size introduces flexibility in subdivision design to accommodate the implications of detailed geotechnical investigations by facilitating compact urban development on suitable ground conditions while areas deemed as unbuildable can be restricted accordingly.

38 Consequently, I consider it would be effective for Chapter 7 to be amended to provide a rule which responds to potential geotechnical constraints within the submitters land and recommend that Rule 7.4.9 and 7.4.10 is amended as follows:

Rule 7.4.9

~~Dwelling,~~ Residential Unit, ~~Residential Flat~~

~~7.4.9.1 One (1) per site in Arrowtown.~~

~~7.4.9.2 For all other locations, two (2) or less per site.~~

7.4.9.1 Development of no greater than one residential unit per 450m² net site area, except within the following areas:

(a) The Queenstown Heights Overlay Area where the maximum site density shall be one residential unit per 1500m² net site area with the exception of Lot 2 DP 409336 where there shall be no more than 749 residential units.

Note – Additional rates and development contributions may apply for multiple units located on one site.

Rule 7.4.10

~~Dwelling,~~ Residential Unit, ~~Residential Flat~~

~~7.4.10.1 Two (2) or more per site in Arrowtown.~~

~~7.4.10.2 For all other locations, three (3) or more per site.~~

7.4.10.1 Development of no greater than one residential unit per 300m² net site area, except within the following areas:

(a) Site located within the Queenstown Heights Overlay Area with the exception of Lot 2 DP 409336 where there shall be no more than 749 residential units.

(b) Sites located within the Air Noise Boundary or located between the Air Noise Boundary and Outer Control Boundary of Queenstown Airport.

Control ~~Discretion~~ is ~~restricted~~ reserved to all of the following:

- ~~The location, external appearance, site layout and design of buildings and fences~~
- ~~The extent to which~~ How the design advances housing diversity and promotes sustainability either through construction methods, design or function
- Privacy for the subject site and neighbouring residential units
- In Arrowtown, ~~the extent to which the development responds positively to~~ consistency with Arrowtown's character, utilising the Arrowtown Design Guidelines ~~2006~~ 2016 as a guide
- ~~The extent to which the development positively addresses the s~~Street activation
- Building dominance ~~The extent to which building mass is broken down and articulated in order to reduce impacts~~ on neighbouring properties and the public realm
- Parking and access: safety, and efficiency and impacts to on-street parking and neighbours
- Design and integration of landscaping. ~~The extent to which landscaped areas are well integrated into the design of the development and contribute meaningfully to visual amenity and streetscape, including the use of small trees, shrubs or hedges that will reach at least 1.8m in height upon maturity.~~
- Natural Hazards. ~~Where a site is subject to any natural hazard and the proposal results in an increase in gross floor area: an assessment by a suitably qualified person is provided that addresses the nature and degree of risk the hazard(s) pose to people and property, whether the proposal will alter the risk to any site, and the extent to which such risk can be avoided or sufficiently mitigated.~~

Note – Additional rates and development contributions may apply for multiple units located on one site.

39 Rule 27.4.9 (Standards for Subdivision Activities) of Chapter 27 is amended as follows:

Rule 27.6

27.6.1 No lots to be created by subdivision, including balance lots, shall have a net site area or where specified, average, less than the minimum specified.

Residential	Queenstown Heights Sub Zone	~~1500m²~~ No minimum

40 Section 32AA amendments in relation to PDP Rules 7.4.9, 7.4.10 and 27.6.1 are contained in Attachment D.

QAC Further Submission

41 Paragraph 9.44 of the section 42A report reads:

> *"Queenstown Airport Corporation (**QAC**) in its further submission (FS1340) has opposed submission 336 as they are concerned that it will result in the intensification of Activities Sensitive to Aircraft Noise (**ASAN**) within close proximity to Queenstown Airport. I note that the sub-zone is located outside of both the Air Noise Boundary (**ANB**) and Outer Control Boundary (**OCB**) of Queenstown Airport; consequently, I do not recommend acceptance of this further submission."*

42 The submitters property is located outside the ANB and OCB and I concur with the recommendation not to accept QAC's further submission.

CONCLUSION

43 I do not believe there is section 32 analysis to support a 70% reduction in density in the LDRZ and a reduction in density is not a well-informed planning response to a potential natural hazard.

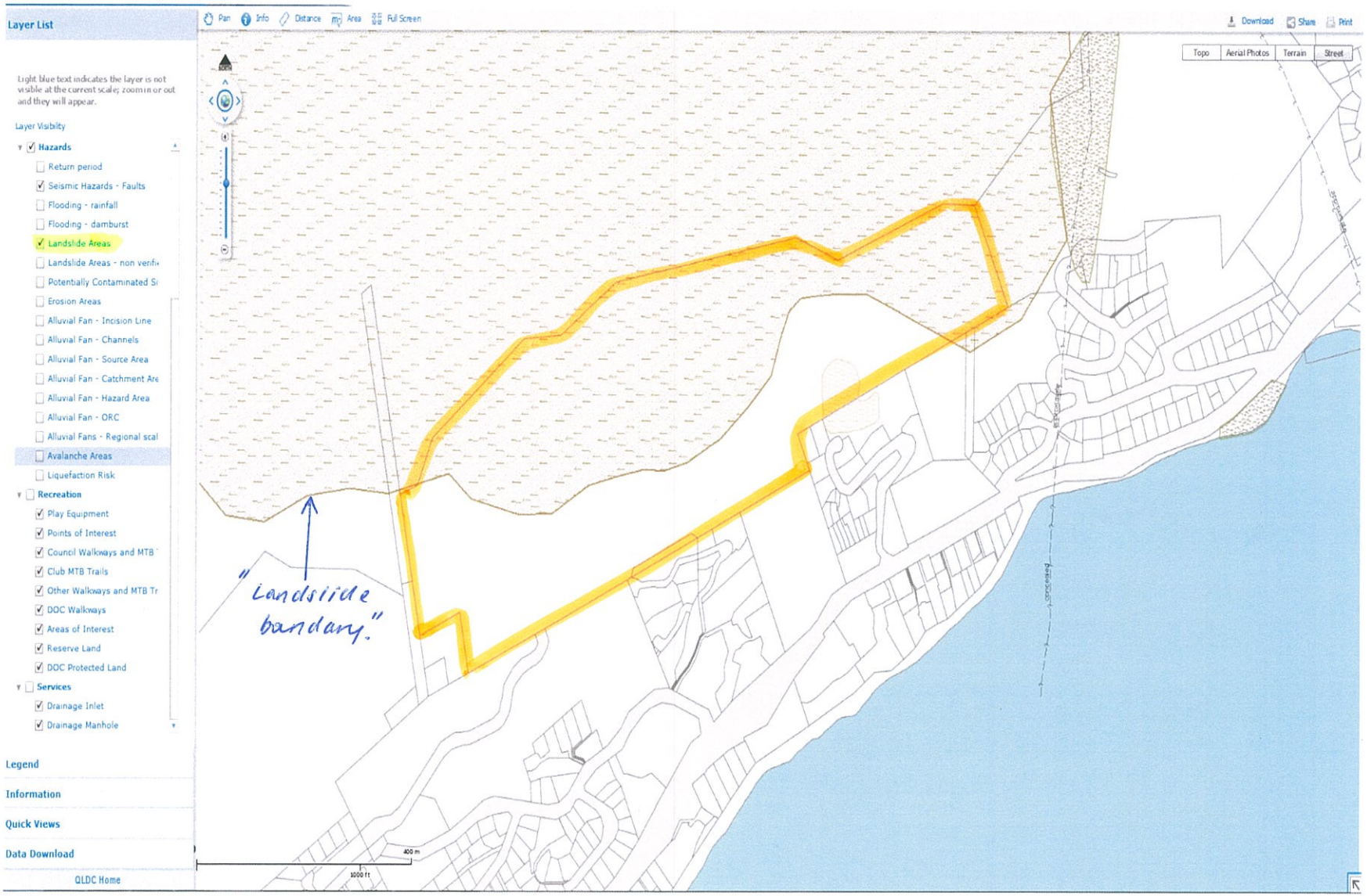
44 There are examples within the LDRZ of Queenstown Hill were generic geotechnical investigations prove inaccurate upon site specific investigation often facilitating further development which was not initially contemplated.

45 Section 106 of the RMA 91 can be relied upon to prevent subdivision upon land containing identified natural hazards.

46 The submitters property is located outside the ANB and OCB and I concur with the recommendation not to accept QAC's further submission.

Nick Geddes
PLANNER
BSc (Geog), GradDip EnvSci

28th September 2016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Layer Visibility
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Return period
Seismic Hazards - Faults
Flooding - rainfall
Flooding - damburst
Landslide Areas
Landslide Areas - non verifi
Potentially Contaminated Si
Erosion Areas
Alluvial Fan - Incision Line
Alluvial Fan - Channels
Alluvial Fan - Source Area
Alluvial Fan - Catchment Are
Alluvial Fan - Hazard Area
Alluvial Fan - ORC
Alluvial Fans - Regional scal
Avalanche Areas
Liquefaction Risk
Recreation
Play Equipment
Points of Interest
Council Walkways and MTB
Club MTB Trails
Other Walkways and MTB Tr
DOC Walkways
Areas of Interest
Reserve Land
DOC Protected Land
Services
Drainage Inlet
Drainage Manhole
Legend
Information
Quick Views
Data Download
QLDC Home
Pan
Info
Distance
Area
Full Screen
Download
Share
Print
Topo
Aerial Photos
Terrain
Street
"Landslide boundary."
400 m
1000 ft

COMPUTER FREEHOLD REGISTER UNDER LAND TRANSFER ACT 1952

Search Copy

R.W. Muir
Registrar-General
of Land

Identifier	**434296**
Land Registration District	**Otago**
Date Issued	29 July 2009

Prior References
302158

Estate	Fee Simple
Area	33.7103 hectares more or less
Legal Description	Lot 2 Deposited Plan 409336

Proprietors
Arnold Andrew Middleton as to a 1/2 share
Isabelle Gladys Middleton as to a 1/2 share

Interests

Subject to Part IV A Conservation Act 1987

Appurtenant hereto is a right to drain foul sewage and storm water created by Transfer 697048 - 25.2.1988 at 1:58 pm

Appurtenant hereto is a right to convey water, electricity, telephone services and drain sewage created by Transfer 796528.8 - 24.1.1992 at 9:28 am

The easements created by Transfer 796528.8 are subject to Section 309 (1) (a) Local Government Act 1974

Subject to a right of way over part marked B on DP 409336 created by Transfer 821048.3 - 22.12.1992 at 10:58 am

The easements created by Transfer 821048.3 are subject to Section 243 (a) Resource Management Act 1991

6404209.1 Forestry Right under the Forestry Rights Registration Act 1983 Term 20 years from and inclusive of 1.4.2005 - 3.5.2005 at 9:00 am

Subject to a right of way over part marked A on DP 409336 created by Easement Instrument 6440227.3 - 31.5.2005 at 9:00 am

The easements created by Easement Instrument 6440227.3 are subject to Section 243 (a) Resource Management Act 1991

6717938.1 Consent Notice pursuant to Section 221 Resource Management Act 1991 - 16.1.2006 at 9:00 am

7195226.1 Consent Notice pursuant to Section 221 Resource Management Act 1991 - 18.1.2007 at 9:00 am

Appurtenant hereto is a right to drain stormwater and sewage created by Easement Instrument 7493651.16 - 7.8.2007 at 9:00 am

The easements created by Easement Instrument 7493651.16 are subject to Section 243 (a) Resource Management Act 1991

7585509.9 Partial Surrender of the right to drain stormwater and sewage over part Lot 102 DP 356913 (CT's 309554, 309555 and 309557) marked A on DP 385737 appurtenant hereto created by Easement Instrument 7493651.16 - 19.10.2007 at 10:22 am

8978641.1 CAVEAT BY AURORA ENERGY LIMITED - 8.2.2012 at 4:43 pm

Subject to a right of way over part marked N on DP 469624 created by Easement Instrument 9568282.9 - 20.12.2013 at 4:51 pm

The easements created by Easement Instrument 9568282.9 are subject to Section 243 (a) Resource Management Act 1991

Identifier **434296**

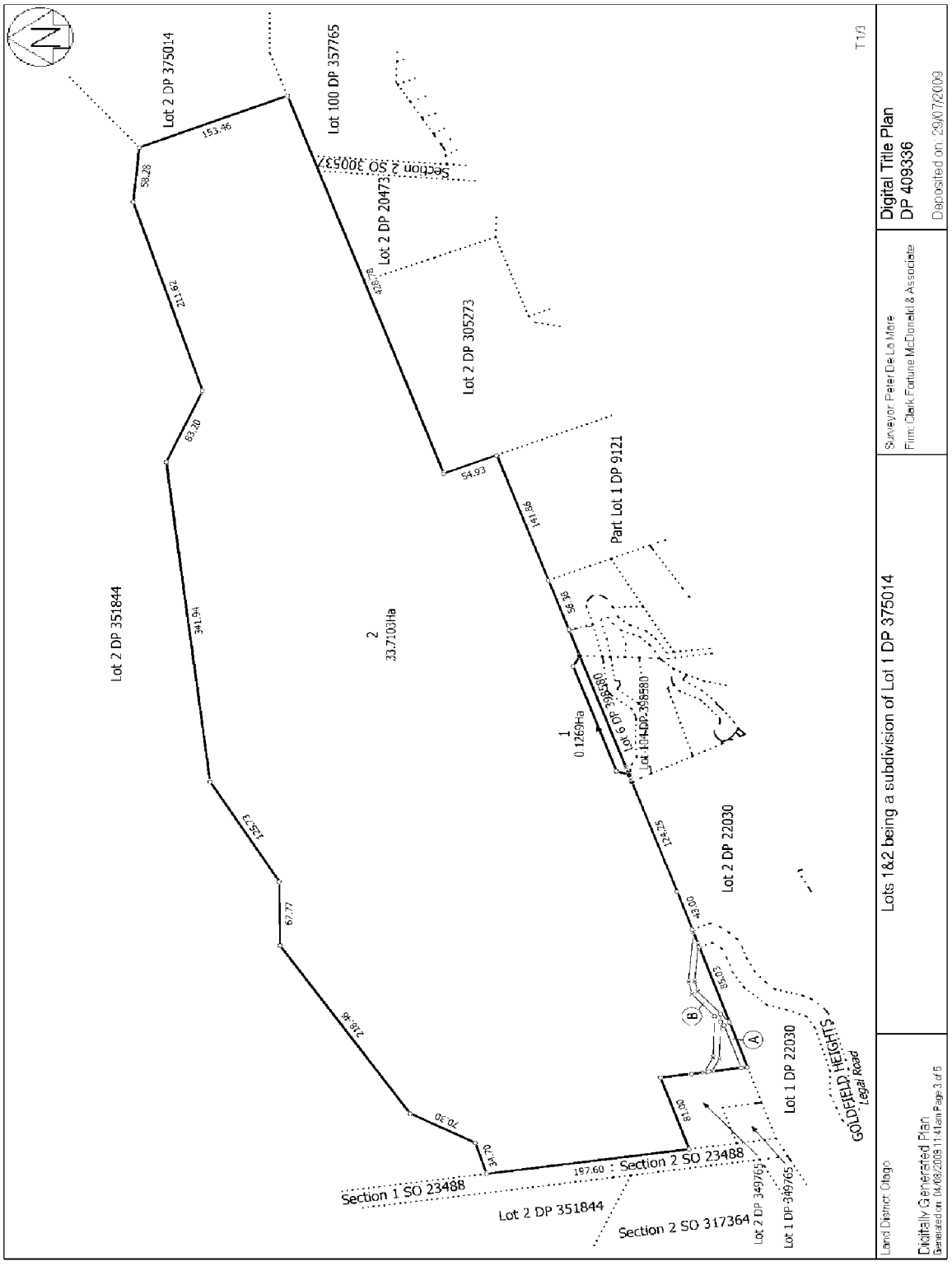
Appurtenant hereto is a right of way and a right to convey water, electricity, telecommunications and computer media created by Easement Instrument 10449745.14 - 2.6.2016 at 1:40 pm

The easements created by Easement Instrument 10449745.14 are subject to Section 243 (a) Resource Management Act 1991

Subject to a right (in gross) to convey water over part marked N on DP 490069 in favour of Queenstown Lakes District Council created by Easement Instrument 10449745.18 - 2.6.2016 at 1:40 pm

The easements created by Easement Instrument 10449745.18 are subject to Section 243 (a) Resource Management Act 1991

Identifier **434296**



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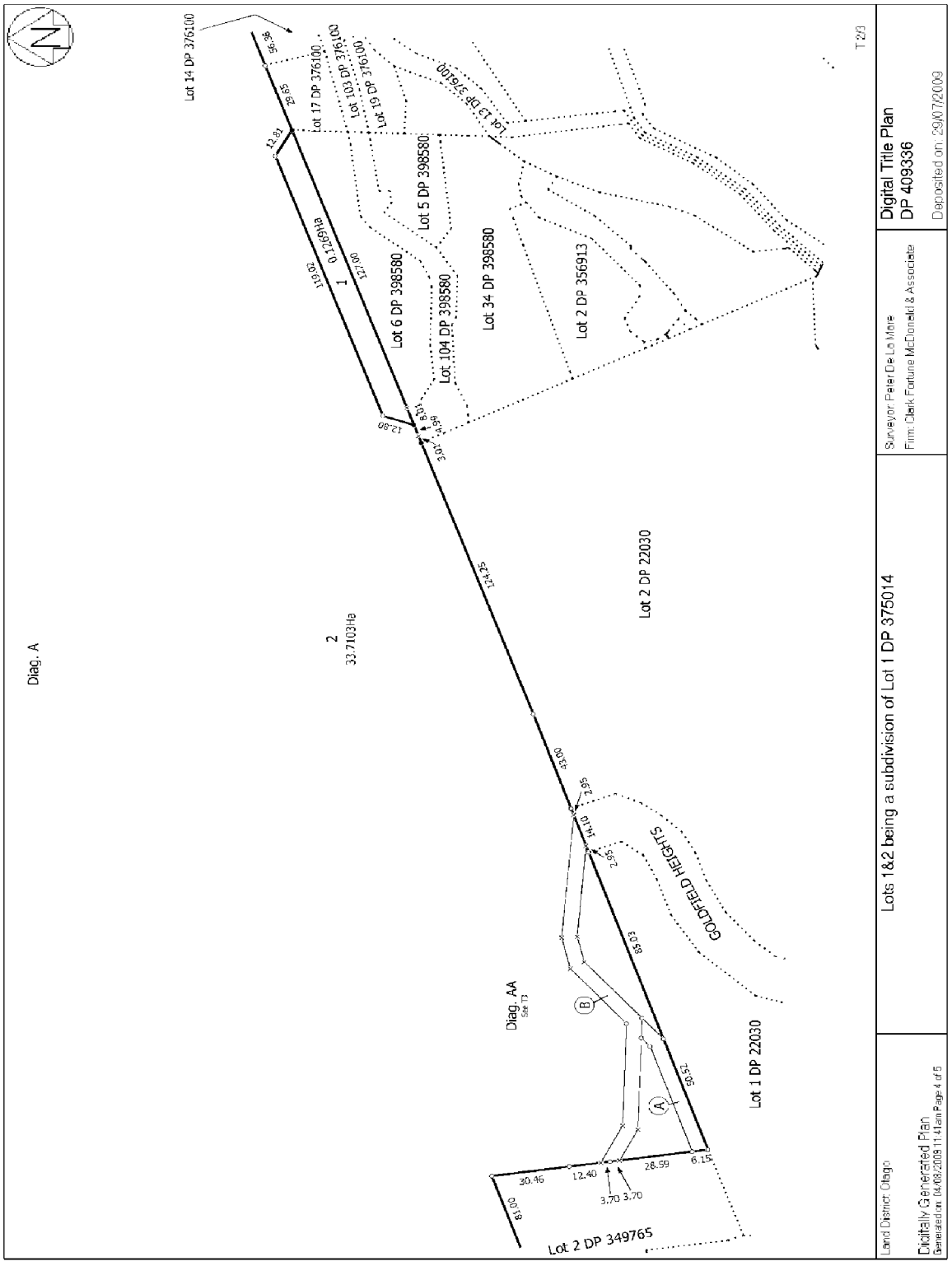

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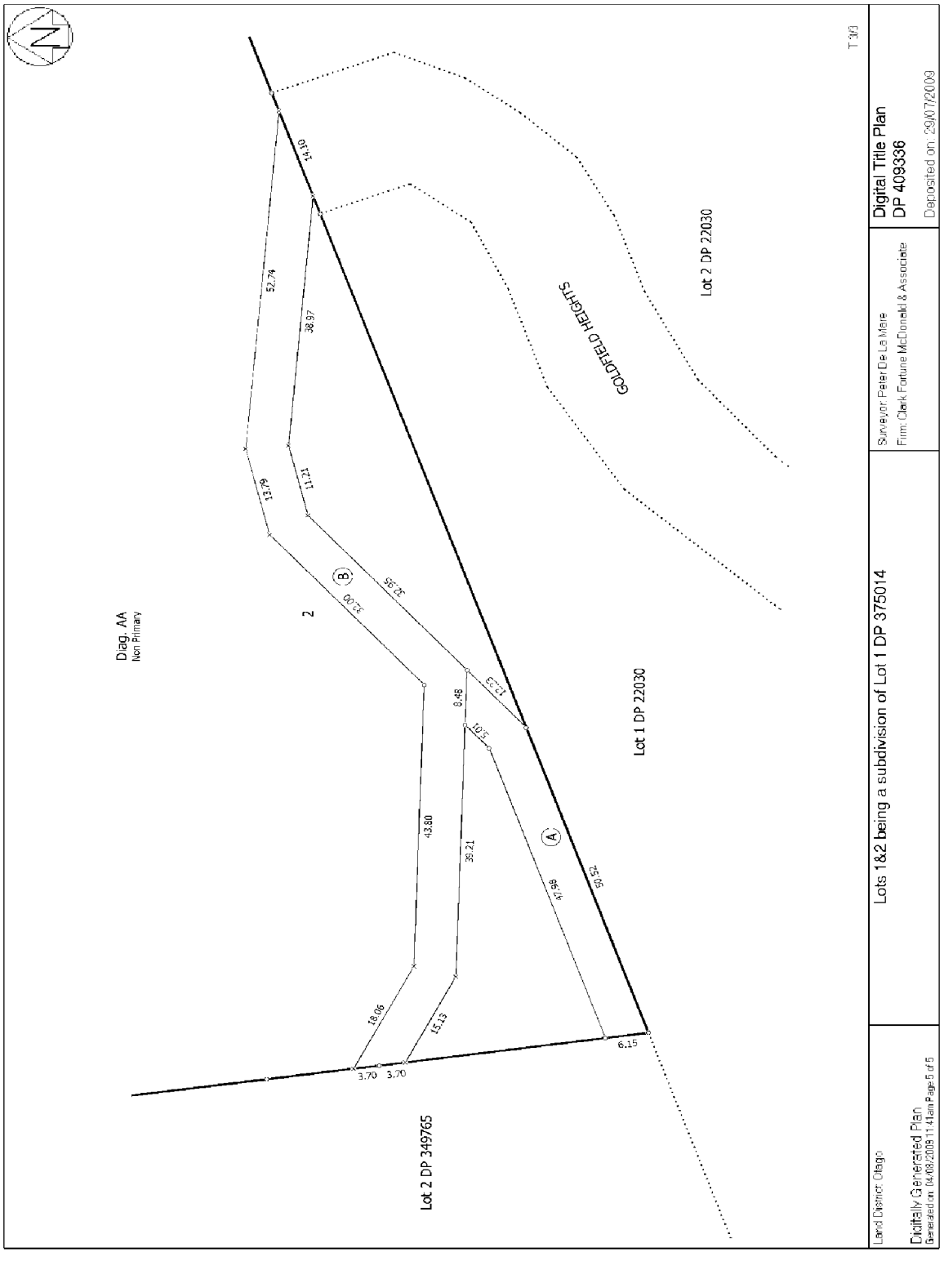

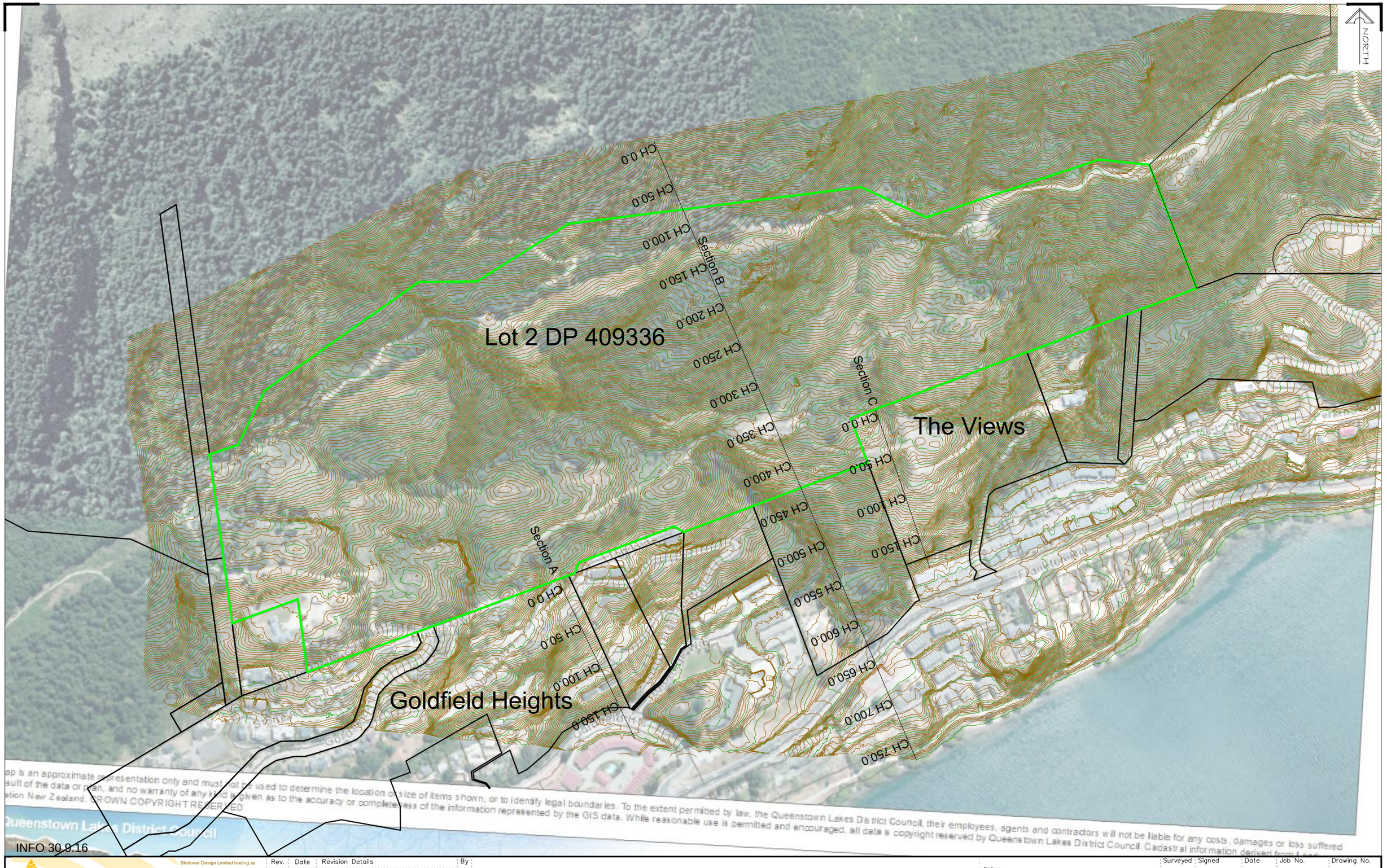

INFO 30.9.16

Shotover Design Limited trading as
Clark Fortune McDonald & Associates
Licensed Cadastral Surveyors - Land Development - Planning Consultants
309 Lower Shotover Road, P.O.Box 553 Queenstown
Tel. (03)441–6044, Fax (03)442–1066, Email admin@cfma.co.nz
Shop 2, Otago House, 475 Moray Place, P.O. Box 5960
Tel. (03)470–1582, Fax (03)470–1583, Email admin@cfma.co.nz

Rev.	Date	Revision Details	By
–	–	–	–

Lot 2 DP 409338
Lidar Contour Plan

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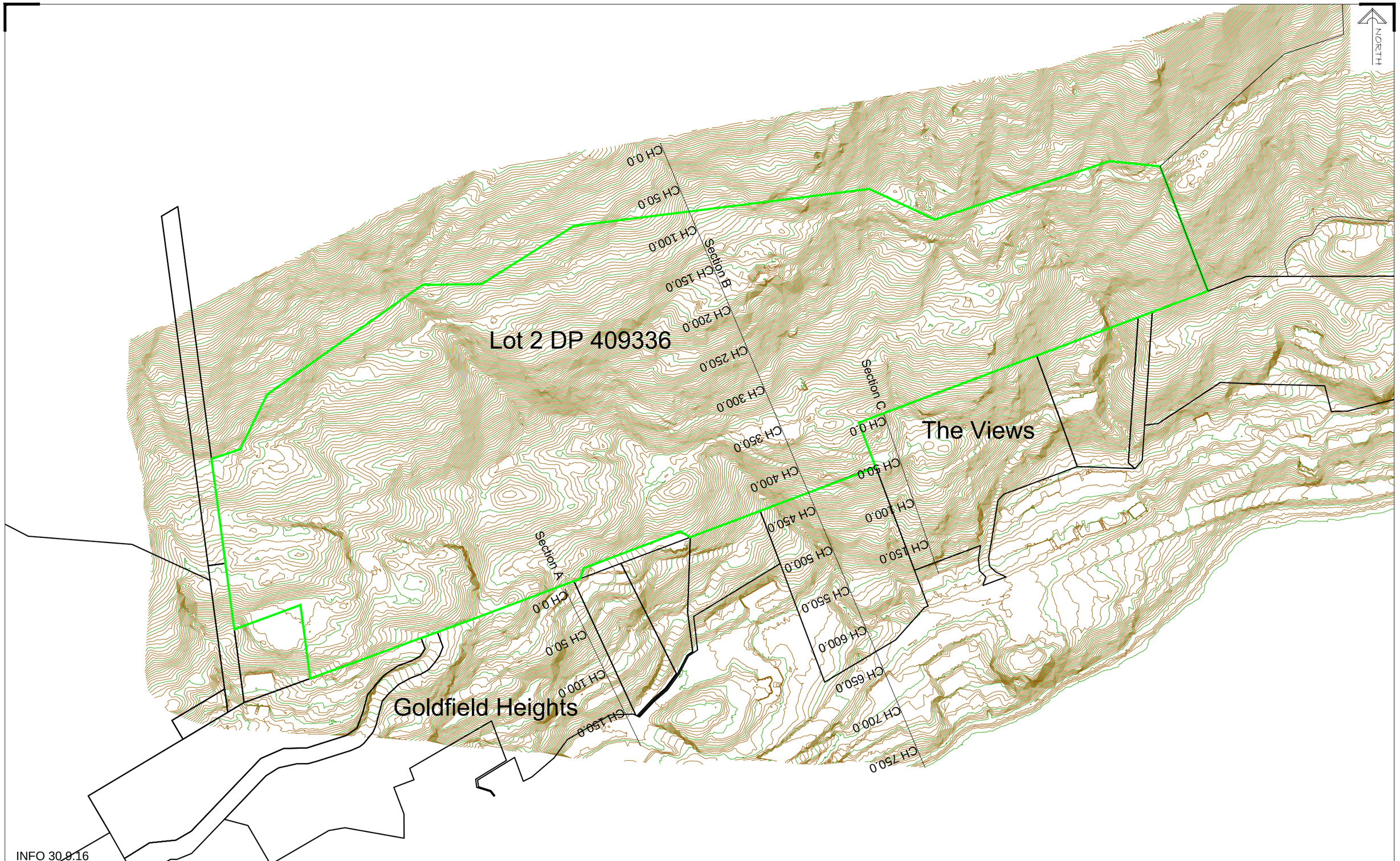

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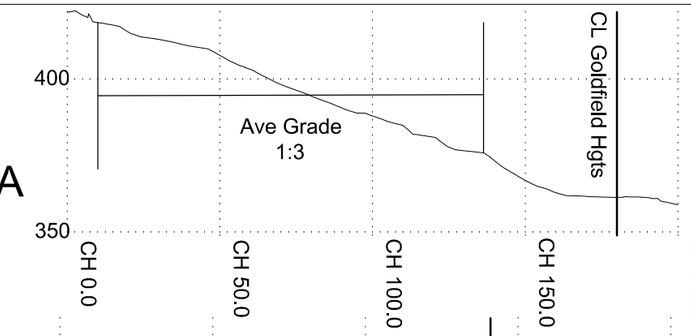

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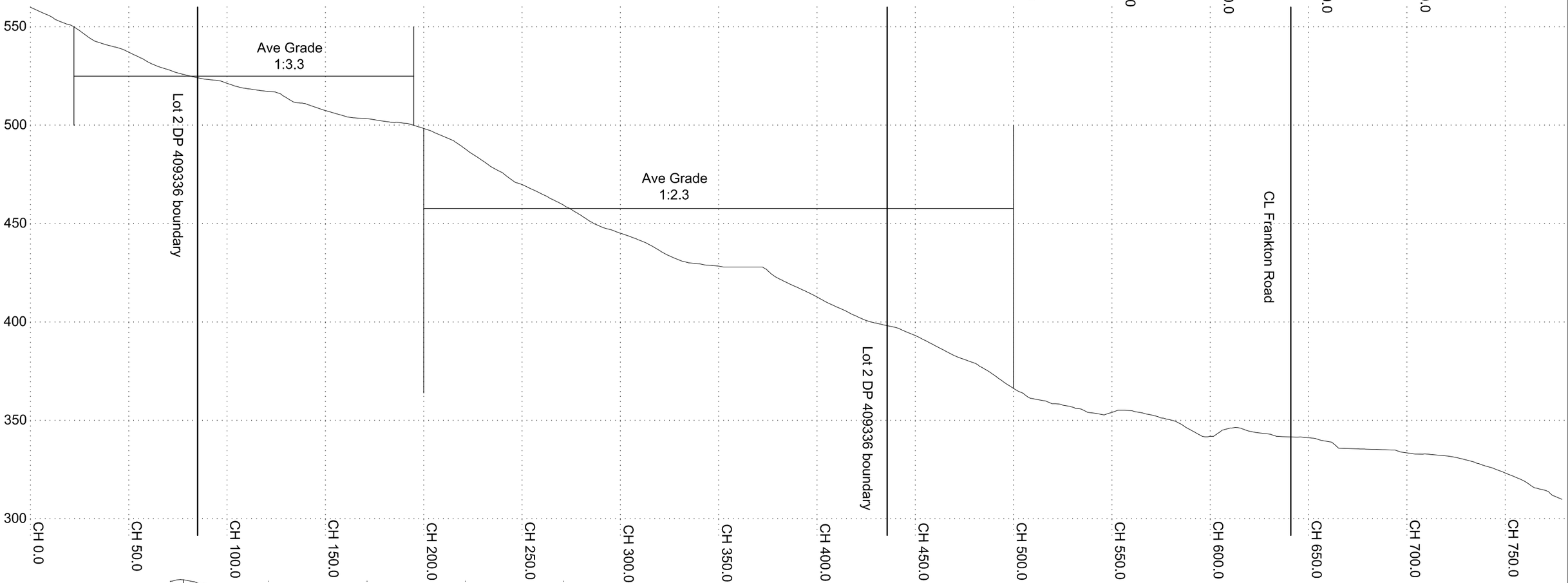

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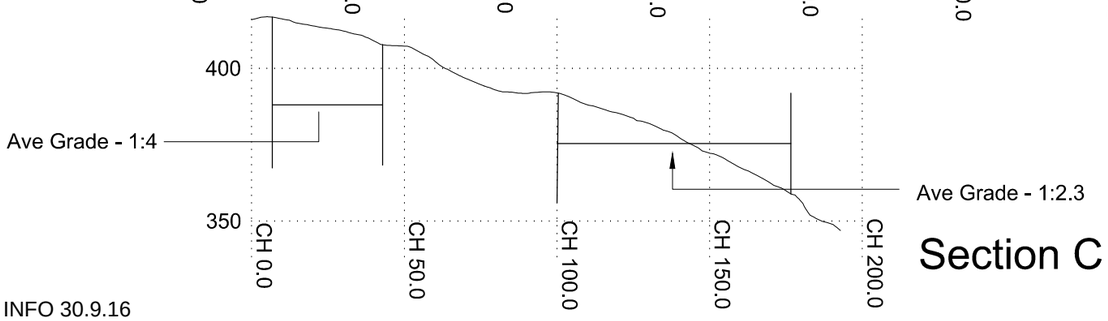

Section C

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Shotover Design Limited trading as
Clark Fortune McDonald & Associates
Licensed Cadastral Surveyors - Land Development - Planning Consultants
309 Lower Shotover Road, P.O.Box 553 Queenstown
Tel. (03)441-6044, Fax (03)442-1066, Email admin@cfma.co.nz
Shop 2, Otago House, 475 Moray Place, P.O. Box 5960
Tel. (03)470-1582, Fax (03)470-1583, Email admin@cfma.co.nz

Rev.	Date	Revision Details	By
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Lot 2 DP 409338
Lidar Contour Plan
Sections

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Tonkin & Taylor

ENVIRONMENTAL AND ENGINEERING CONSULTANTS

REPORT

GRANT HENSMAN

Stage 2 Remarkables View Subdivision, Queenstown Geotechnical Assessment Report

Report prepared for:

GRANT HENSMAN

Report prepared by:

TONKIN & TAYLOR LTD

Distribution:

GRANT HENSMAN	2 copy
TONKIN & TAYLOR LTD (FILE)	1 copy

April 2007

Job no: 880044

Table of contents

1. Introduction

1.1. General

This report presents the results of a geotechnical assessment that has been completed by Tonkin & Taylor Ltd (T&T) to support resource consent application for Stage 2 of the Remarkables View Subdivision in Queenstown. Figure 1a, Appendix A, shows the location of the proposed development.

This geotechnical report was commissioned by Grant Hensman. T&T's proposal dated 13 March 2007, outlines the scope of works and conditions of engagement for this report.

1.2. Development

The proposed development comprises the construction of a new residential subdivision on moderate to steeply sloping ground located to the north of Frankton Road, Queenstown.

Plans of the proposed subdivision have been developed by Clark Fortune McDonald & Associates (CFMA). The drawings show the site to comprise an area of approximately 20 hectares to be divided into 134 separate building lots together with access roads and a recreation reserve. Figure 1b, Appendix A, provides a plan of the proposed subdivision

The proposed development includes a 230 m long extension of the existing Middleton Road in the south west corner of the site. This extension is shown as Road 1, Figure 1b, Appendix A. A second road named "Road 3," is also to be constructed. Road 3 is worthy of particular note from a geotechnical perspective. Road 3 branches westwards from Road 1, is approximately 60m in length and is to be constructed on a buttress of engineered fill. Details of the proposed works in the south western corner of the site are shown on Figure 1c, Appendix A. All other roads are to be formed by minor cut to fill earthworks.

2. Site Description

2.1. General

The site is located approximately 4 km east of Queenstown on the northern side of Frankton Road. The site is present on the south east facing slopes of Queenstown Hill and topographically falls in height from RL 525 m at the northern boundary to RL 400 m along the southern boundary.

Currently the site cover mainly comprises dense woodland with some open grass and shrubland in the northern areas.

2.2. Topography and Surface Drainage

The site topography comprises moderately to steeply sloping ground with steep slopes present on the southern and eastern sides of the site. Within the site boundary the ground undulates with shallow gullies, and poorly defined low ridges present throughout.

The eastern boundary of the site is marked by a deep natural gully and drainage path that runs down to Lake Wakatipu to the south. To the west the wooded slopes of Queenstown Hill continue with the Goldfield Heights residential area approximately 1 km distant. South of the site residential areas are present along Frankton Road and Perkins Road, with Lake Wakatipu located approximately 250 m from the southern boundary. In a northerly direction, areas of shrub and forest continue up to the summit of Queenstown Hill some 1.5 km distant.

Drainage across the site is from the high ground in the north towards Lake Wakatipu to the south. The most notable surface drainage feature within the site boundary is a shallow channel that runs roughly parallel to the western edge of the subdivision. Surface groundwater drainage is notable in this area with shallow soil materials becoming increasingly saturated towards the south west corner of the site and in particular where the current sealed Middleton Road terminates. The Middleton Road extension (Road 1) and Road 3 are planned in this area.

A smaller drainage channel is present on the northern boundary of the site, approximately between Lots 70 and 109. This channel is a notable depression in the northern boundary with persistent seepage and marshy surface materials. Down slope the channel gradually widens out onto the open hillside and a series of week seepages were noted over a wide area below the channel.

A summary of the general site observations are shown on Figure 1d, Appendix A.

3. Geotechnical Investigations

The following geotechnical site investigation works have been completed for the purpose of this geotechnical assessment report:

- Engineering geological/geotechnical site inspection;
- The excavation of 13 test pits to a maximum depth of 3.6 metres and logging of the sub-surface materials and;
- Scala penetrometer testing to quantify the consistency of the subsurface materials.

The locations of the test pits and the Scala penetrometer tests are shown on Figure 1b, Appendix A. The test pits and Scala penetrometer logs are provided in Appendix B.

4. Subsurface Conditions

4.1. Geological Setting

The site is located in the Wakatipu basin, a feature formed predominantly by glacial advances. Published references indicate the last glacial event occurred in the region between 10,000 and 20,000 years ago. The glaciations have left glacial till, glacial outwash and lake sediments over ice –scoured bedrock. Post glacial times have been dominated by the erosion of the bedrock and glacial sediments, with deposition of alluvial gravels by local watercourses and lacustrine sediments during periods of high lake levels.

No active fault traces were observed in the immediate vicinity of the site. However, a significant seismic risk exists in the region from potentially strong ground shaking associated with the rupture of the Alpine Fault which is located along the west coast of the South Island. There is a high probability that an earthquake with a magnitude greater than 7.5 will occur on the Alpine fault within the next 50 years.

4.2. Stratigraphy

The subsurface materials that were encountered during the site investigation works typically comprise:

- 0.0m to 0.3m of Topsoil overlying,
- 0.0m to 1.5m of Colluvium, overlying,
- 0.0m to 0.2m of Alluvial Sediments overlying,
- 0.0m to 0.65m Glacial Outwash Sediments, overlying,
- 0.0m to 3.0m Glacial Till, overlying;
- Schist bedrock.

Colluvium was present over much of the site and in the central and eastern parts directly overlay the Schist bedrock. Colluvium up to 1.5m thick was observed in the shallow cuts present across the site. Colluvium was absent in some parts of the south west corner of the site. It is inferred the colluvium in this area has been eroded by storm water run-off. The colluvium was typically described as a 'soft to firm orange brown sandy gravelly SILT.'

Alluvial sediments were observed in the drainage channel in the south west corner of the site. The alluvial sediments were described as 'soft to firm, grey sandy SILT.' The alluvial sediments were typically associated with areas of poor surface drainage and shallow groundwater.

The glacial outwash sediments typically comprised 'medium dense, orange grey silty SAND.' The glacial outwash deposits were only observed in the south west corner of the site and were found to be discontinuous.

Glacial till deposits were observed in the south west corner of the site and also in the drainage channel on the northern boundary. The composition of the till was found to be variable and comprised medium dense to dense gravels and sands and soft to firm silts. The silty till deposits were observed in the south west corner of the site and had been softened by high ground and surface water flows.

Schist bedrock was observed in all test pits, excavations and shallow cuts across the site. The rock typically comprised 'moderately weathered grey pelitic schist with psammitic and quartz bands.'

Figures 2a, 2b and 2c, provided in Appendix C, show the inferred geological stratigraphy in the south west corner of the site.

4.3. Existing Slope Instability

4.3.1. Introduction

Historic aerial photographs (about 1950) and field mapping show the Queenstown Hill Landslide immediately to the west of the proposed subdivision. The Queenstown Hill Landslide is well documented and is recorded on the QLDC Hazard Register. Historical aerial photography provides an image of the hillside prior to the growth of the dense vegetation cover which currently covers the landslide. A historical aerial photograph of the site is provided as Figure 1e in Appendix A.

The Queenstown Hill Landslide comprises a large schist landslide that is controlled by foliation shears which dip down slope. Such landsides are formed after withdrawal of glacial support, probably coupled with seismic shaking, resulting in a highly fractured, over-steepened slope. Schist landslides typically comprise material varying in size from silt to large schist blocks which can be up to several metres in diameter.

Movement of the Queenstown Hill Landslide is expected to be characterised by slow downward creep probably averaging in the order of 5 mm per year. Episodic periods of accelerated movement can also occur and are generally triggered by sustained heavy rainfall events. For the Queenstown Hill Landslide periods of accelerated movement of the entire slide are considered unlikely to exceed 50 mm/year, although large lobes within it will be capable of an order greater movement rates under extreme sustained rainfall events. The active area of the landslide has been highlighted on Figure 1e.

Figure 1e also shows the Queenstown Hill Landslide overlain with the proposed subdivision plan. From Figure 1e it can be seen several of the proposed lots on the western side of the sub-division are located in an area affected by potential landslide activity. The eastern margin of the landslide is shown to roughly follow the shallow drainage channel present on the

western margin of the site, and passes through the proposed Middleton Road extension and Road 3 fill buttress.

4.3.2. Western Area of the Proposed Subdivision

Evidence for slope instability was observed along the western margin of the subdivision. This instability typically comprised shallow terracing, minor scarp formation and a general down slope creep of the soil materials in the drainage channel area. It is expected the instability observed in the drainage channel is due to localised high ground and surface water flows and not deep seated movement associated with the adjacent Queenstown Hill landslide.

Evidence for schist landslide activity was not observed within the site boundary. Exposures of schist along the western boundary of the site are limited. Exposures are present in the south west corner, where the Middleton Road extension is proposed, and an outcrop is present on the western edge of Lot 13. Measurements of the schist foliation for these exposures show orientations are consistent with those expected for in-situ bedrock. The observed schist exposures along the western boundary are therefore considered to be outside the Queenstown Hill Landslide.

Inspections were undertaken westwards from the site along the existing track that runs roughly along the 480 m contour. Schist landslide deposits were observed along this track approximately 75 m beyond the site boundary.

It should be noted that detailed inspection of much of the western area of the site was hindered by dense vegetation cover. It is therefore recommended further inspections be completed along the western margin of the site as clearance works progress in this area.

4.3.3. Central and Eastern Areas of the Proposed Subdivision

In the central and eastern areas of the site no evidence of major instability was identified during the site walkover. Some down slope creep of soils was apparent around the drainage channel and elsewhere on the steeper slopes, however these movements are localised and considered a minor surface issue. Elsewhere a thick vegetation cover has stabilised the relatively thin veneer of colluvium that is present over the schist bedrock. The drainage channel that runs from the northern part of the site widens out into undulating moderately to steeply sloping ground. Some areas of notable steepness are present, particularly in central southern areas and a considerable depth of cut is expected to accommodate the proposed access roads.

Vertical schist bluffs are present along the eastern and southern boundaries of the site. Perkins Road is present at the foot of the southern boundary bluffs. Inspection of rock exposed by the Perkins Road cut indicates historic large scale block fall and landslide activity has occurred in this area. This area of instability is not expected to extend into the site and appears to end abruptly at the foot of the southern boundary bluffs.

The eastern boundary of the site is characterised by a series of steep slopes and schist bluffs that fall towards the adjacent gully present along the north eastern boundary of the site (refer to Figure 1d). Inspection of several rock bluffs in this area indicates the schist foliation is favourably orientated and as such deep seated slope instability is considered unlikely. However, smaller scale instability, associated with unfavourably orientated joints and fractures may occur, particularly during seismic events. From Figure 1b it can be seen the proposed building lots are set back from the steeper sections of the north eastern boundary and the risk of instability affecting building lots is considered to be low.

4.4. Groundwater

Perched groundwater was encountered in several locations during the site investigation works and was typically observed in soil materials present in the gullies and depressions that serve as storm water drainage paths or at the soil Schist rock interface.

The regional groundwater table was not encountered during the site investigation works, and is expected to lie several metres below the existing ground surface.

5. Engineering Considerations

5.1. General

The recommendations and opinions contained in this report are based upon ground investigation data obtained at discrete locations, a geotechnical site inspection and historical information held on the T&T database.

The continuity of subsoil materials and conditions between investigation locations has been inferred and cannot be guaranteed. The actual sub-surface conditions may show some variation from those described and all design recommendations contained in this report are subject to confirmation by inspection during construction.

5.2. Geotechnical Parameters

Table 5.1 provides a summary of the recommended geotechnical design parameters for the materials observed at the site.

Table 5.1 Recommended Geotechnical Design Parameters

Unit	Thickness (m)	Bulk Density γ (kN/m^3)	Effective Cohesion c' (kPa)	Effective Friction ϕ' (deg)	Elastic Modulus E (MPa)	Poisson's Ratio v
Topsoil	0.0 to 0.4	16	-	-	-	-
Colluvium	0.0 to 0.5	17	0	30	10	0.3
Alluvial Sediment	0.0 to 0.2	18	0	28	10	0.35
Glacial Outwash	0.0 to 0.7	18	0	33	10 to 20	0.35
Glacial Till	0.0 to 2.6	20	2	36	15 to 30	0.3
Schist Bedrock (See Notes 1 and 2)	Base not intercepted	27	40 to 300 (160 ave.)	28 to 55 (36 ave.)	>100	0.2
Defect within Schist (See Note 2)	-	-	0	20 to 30	5	0.35

Note 1: Rock strength and stiffness parameters estimated using the software package "RocLab1 Version 1.021"Published by Rocscience Inc., Toronto, Canada.

Note 2: The stability of the schist rock will be governed by the orientation and character of the rock defects. Additional investigation drilling and/or mapping works, and engineering assessment, will be required if cuts are required within the schist rock.

The stability of the schist rock will be governed by the orientation and character of the rock defects. Additional investigation drilling and mapping works, and engineering assessment should be undertaken if cuts are required within the schist rock.

5.3. Site Preparation

Owing to the erodible nature of the soils present across the site, robust, shallow graded sediment control measures should be instigated during construction. Slope gradients in access of 4% are considered likely as part of the works and lining of drainage channels is recommended, e.g. with geotextile and suitably graded rock, or similarly effective armouring.

Exposure to the elements should be limited for all soils. Excavations should be left proud of the finished subgrade level by 200 to 300mm if a delay prior to construction is expected. The final cut to grade should be performed immediately prior to pavement construction. Alternatively, these areas can be undercut and rebuilt to formation level with hardfill should the subgrade deteriorate due to exposure.

Covering the soils with polythene sheeting will reduce degradation due to rain and surface run-off.

Water should not be allowed to pond or collect near or under pavement or other foundation areas. Positive grading of the subgrade should be undertaken to prevent water ingress or ponding.

The soils present at the site are prone to erosion, both by wind and water, and should be protected by hardfill capping or re-topsoiled/mulched and re-vegetated as soon as the finished batter or subgrade levels are achieved.

5.4. Earthworks

All fill should be placed and compacted in accordance with NZS 4431:1989 and certified in accordance with Queenstown Lakes District Council standards.

Prior to the placement of fill all unsuitable material should be removed from the affected areas in accordance with the recommendations provided in NZS 4431: 1989. Particular note of this requirement should be made with respect to the alluvial sediments identified in the south western corner of the site close to the Road 3 fill area. The subgrade should be inspected by a

suitable qualified geotechnical practitioner to ensure all unsuitable materials are removed.

Most of the soil materials observed on site are considered to be marginal in their suitability as fill due to their high silt content. The alluvial sediments are unlikely to be suitable as subgrade material unless specific design and controls are in place.

If the glacial soils are to be used as fill consideration should be given appropriate interlayering or blending with coarser materials. Excavated rock should be broken into fragments less than 100 mm in diameter if it is to be used as fill.

5.5. Excavations

5.5.1. General

The proposed cut slopes for the Middleton Road extension will be up to 8 m deep and are dealt with separately in Section 5.5.5.

Elsewhere on site it is expected cut excavations up to 5 metres deep will be required for the permanent access roads

Recommendations for temporary and permanent batter angles are described in the following sections. Slopes that are required to be steeper than those described should be structurally retained or subject to specific engineering design.

All slopes should be periodically monitored during construction for instability and excessive erosion, and, where necessary, corrective measures should be implemented to the approval of a geotechnical practitioner.

Drainage works, such as horizontal drains, should be provided to control groundwater seeps. The final design and location of all sub-soil drainage works should be confirmed after stripping of overburden, by a geotechnical practitioner.

5.5.2. Temporary Cut Slopes in Soil

Table 5.2 details the recommended batter angles for temporary slopes in the soil materials present at the site.

Table 5.2 Recommended Batters for Temporary Slopes in Soil Materials.

Material Type	Maximum Slope Height (m)	Maximum Temporary Batter Slopes (horizontal to vertical)	
		Dry Ground	Wet Ground
Colluvium	5.0	1.75 : 1	3 : 1
Alluvial Sediment	5.0	1.75 : 1	3 : 1
Glacial Outwash	5.0	1.5 : 1	2: 1
Glacial Till	5.0	1 : 1	2.5:1

5.5.3. Permanent Cut Slopes in Soil

Table 5.3 details the recommended batters for permanent slopes in the soil materials identified at the site.

Table 5.3 Recommended Batters for Permanent Cut Slopes

Material Type	Recommended Maximum Batter Angle in Permanent Cut Slopes Less than 5.0m High (horizontal to vertical)	Recommended Maximum Batter Angle in Permanent Cut Slopes greater than 5.0m High(horizontal to vertical)
Colluvium	2 : 1	Specific design to be completed
Alluvial Sediments	2 : 1	Specific design to be completed
Glacial Outwash	2 : 1	Specific design to be completed
Glacial Till	1.5 : 1	Specific design to be completed

5.5.4. Cut Slopes in Schist Rock

The recommended maximum batter for cuts formed in schist rock is 0.5:1 (horizontal to vertical). However, the stability of cuts within the schist rock is dependent on the orientation of defects in the rock mass and the potential for unstable blocks and/or wedges to form. The installation of rock bolts and/or shotcrete may be necessary to ensure the satisfactory stability of slopes cut in schist rock. Alternatively, if room is available at the crest, rock

slopes can be battered back to a stable angle. This angle will depend on the orientation and nature of the defects within the rock mass.

5.5.5. Cuts for the Middleton Road Extension

Figure 1c presents a plan of the proposed Middleton Road (Road 1) extension. Cuts up to 8 m deep are proposed. Information from the ground investigation indicates the cuts will be in both soil and rock materials. Figures 2a, 2b and 2c provide geotechnical cross-sections through the proposed cut slopes associated with the Middleton Road extension.

The deepest cuts are expected to occur at Chainage 410m, however, the maximum thicknesses of soil materials are expected to be at Chainage 380m. Test Pit 3 was completed on the northern side of the proposed cut at Chainage 380m. This test pit indicates the depth to rock is approximately 3.6m below surface level. Elsewhere the depth to rock was shown to vary from 3.6m to surface level. It is expected, therefore, that most of the proposed cut to form the Middleton Road extension will be made in rock.

Table 5.2 provides recommendations for permanent batters in soil materials. It is recommended the batter angles for wet slopes be adopted for the Middleton Road extension cut slopes due to the high groundwater flows in this area.

For permanent cuts in rock, instability may be an issue if unfavourable defects are present. It is therefore recommended that pilot cuts be completed in advance of the main excavations to allow detailed inspection and examination of the rock defects to be completed. The results of these inspections will enable any additional support requirements to be assessed.

Formation of the proposed Middleton Road cuts using traditional excavator and rock breaking techniques is expected to be time consuming. The use of blasting may provide an economic alternative. A specialist contractor should be consulted for a detailed assessment of the blasting works.

5.6. Engineered Fill Slopes

5.6.1. General

All fill should be placed and compacted in accordance with NZS 4431:1989 and certified in accordance with the Queenstown Lakes District standards.

Table 5.4 provides recommendations for batters formed in engineered fill.

Table 5.4 Recommended Batters for Slopes in Engineered Fill

Material Source	Recommended Maximum Batter for Engineered Fill Slopes Less than 3.0 Metres High (horizontal to vertical)	Recommended Maximum Batter for Engineered Fill Slopes greater than 3.0 Metres High (horizontal to vertical)
Colluvium	2.5 : 1 (landscaping only)	Not Recommended
Alluvial Sediments	2.5:1 (landscaping only)	Specific Design Required
Glacial Till and Glacial Outwash Material	2:1	Specific Design Required
Schist Rock	1.75 : 1	Specific Design Required
Blended Glacial and Schist Rock materials	1.75:1 to 2 : 1	Specific Design Required

5.6.2. Fill Beneath Road 3

5.6.2.1. General

The engineered fill slope that is proposed beneath Road 3 is greater than 3.0m in height and specific design has been completed to ensure the stability of this structure. This stability assessment has been completed using the computer software programme Slope/W. The slope gradient of the fill adopted for the analysis has been taken from drawings completed by CFMA. These drawings indicate a proposed slope gradient of 3:1 (horizontal to vertical). Figure 2d, Appendix A, shows a typical cross-section through the proposed Road 3 fill slope.

The stability assessment has been completed on the assumption the fill material will comprise a blend of glacial till and granular rock material excavated from the adjacent Middleton Road extension cuts. The analysis also assumes drainage will be installed on the up-slope side of Road 3 to prevent groundwater entering the fill material.

Slope displacements associated with seismic events have been estimated using the methods proposed by Ambraseys and Menu (M.N Ambraseys and J.M. Menu, Earthquake Engineering and Structural Dynamics, Vol 16, no7, pp985-1006. 1988).

5.6.2.2. Fill Material Properties

The design parameters that have been adopted for the blended glacial till and schist rock fill material are summarised in Table 5.5 below.

Table 5.5 Design Parameters for Blended Glacial Till Material and Rock Fill

Material	Bulk Density γ (kN/m³)	Effective Cohesion c' (kPa)	Effective Friction ϕ' (degrees)	Elastic Modulus E (MPa)	Poisson's Ratio v
Blended Glacial and Rock Material	19	0	35	20 to 35	0.25

5.6.2.3. Seismic Acceleration

Seismic acceleration has been estimated in accordance with the recommendations of AS/NZS1170.0:2002 assuming Class C subsoil conditions. An importance Level 2 and a 100 year design life have been adopted for design of the engineered fill slope.

Table 5.6 summarises the peak ground acceleration, $C_{(0)}$, that has been adopted during the stability assessment of the Road 3 engineered fill slope.

TABLE 5.6 Summary of Design Peak Ground Acceleration

Design Case	Annual Probability of Exceedance	Estimated Peak Ground Acceleration ($C_{(0)}$)
Serviceability Limit State 1 (SLS1)	1/25 years	0.11g
Ultimate Limit State (ULS)	1/1000 years	0.55g

5.6.3. Design Criteria

Table 5.7 summarises the design criteria for the proposed fill slope.

TABLE 5.7 Summary of the Geotechnical Design Criteria for Unreinforced Earthfill Slopes

Description	Geotechnical Design Criteria
In Service Conditions (Static)	Factor of Safety against Slope Instability >1.50
Serviceability Limit State (SLS1)	Factor of Safety against Slope Instability >1.20
Ultimate Limit State (ULS)	Ground Displacement ≤ 50mm

5.6.4. Analysis Results

Table 5.8 provides the analysis results for the stability of the proposed fill slope beneath Road 3.

Table 5.8 Summary of the Analysis Results

Design Case	Calculated Factor Of Safety	Expected Slope Displacement
In Service Conditions (Static)	2.0	Nil
Serviceability Limit State (SLS1)	1.6	Nil
Ultimate Limit State (ULS)	0.65	20 mm

The analysis results indicate the stability of the proposed engineered fill slope will be satisfactory provided the slope is constructed in accordance with the recommendations in Section 5.4 of this report.

5.7. Groundwater Issues

5.7.1. General

The regional groundwater is expected lie at a level well below the proposed works and is not expected to be encountered during construction.

Perched groundwater levels are expected to be encountered at several locations across the site and drainage measures, such as horizontal, counterfort or cut-off drains, should be installed to the approval of a geotechnical practitioner. Site inspections indicate wet soils will be encountered along the western boundary and in the northern central areas of the site.

5.7.2. Drainage for the Middleton Road Extension

The Middleton Road extension and associated earthworks are to be located within the drainage that runs along the western boundary of the site. High ground and surface water flows are present in this area. To ensure stability of the proposed cut slopes the installation of drainage measures to control water flow is recommended. Plans provided indicate the construction of a subsoil cut-off drain is proposed between Chainages 320m and 390m on the up hill side of the cut. The cut-off drains are shown to connect to the

existing storm water drain system that has been constructed along Middleton Road.

The following recommendations are provided regarding the construction of the proposed cut-off drains:

- The minimum depth of the cut-off drain should be 1.0 m;
- The minimum width of the cut-off drain should be 0.3 m;
- The minimum fall of the cut-off drain should be 1:50 (horizontal to vertical);
- The pipe should comprise a 100 mm diameter class 500 heavy duty drainage pipe that meets the requirements of Transit New Zealand Specification F/2;
- The trench should be lined with a non woven geotextile filter cloth, such as 'Bidim A14' or similar to prevent blockage by silt infilling;
- The trench should be backfilled with a clean free draining material such as washed 20/40 drainage gravel.

In addition to the cut-off drain the construction of horizontal drains to target deeper seepages may be required. It is recommended that the construction of up to10 horizontal drains be budgeted for. The actual number of drains will need to be confirmed on site based on seepages observations on the cut face.

The shallow soil materials in this area are wet and unstable and excavation of the cut-off drain should proceed with caution. It is recommended that short lengths (5-10m) of the trench are excavated and backfilled prior to excavation of the next section. It is also recommended that the slopes of the trench are battered back in line with Section 5.4.2. of this report.

5.8. Stability of Existing Slopes

Field inspection and aerial photographs indicate the proposed sub-division does not encroach onto the more active segment of the Queenstown Hill Landslide, but a small proportion does encompass potentially active, peripheral segments of the slide. Areas of shallow surface instability have been identified within the site boundary, however it is expected these areas can be remediated during the subdivision earthworks or isolated from the proposed building lots by a reserve area. The remainder of this section provides a detailed description of all the areas of instability that have been identified to date.

5.8.1. Western Area

The western side of the site is close to the eastern margin of the Queenstown Hill Landslide. Field mapping indicates that active landsliding is present approximately 75 m from the site boundary at the 480 m contour. Elsewhere

dense vegetation prevented a detailed inspection of the western area of the site from being completed, however, evidence of high groundwater flows, surface creep, shallow scarps and terracing was observed.

It is considered likely that some stabilisation measures will be required during the formation of building platforms and access roads in the western area. Temporary and permanent batter gradients should be made in accordance with the recommendations for wet soils in Tables 5.3 and 5.4 of this report. Measures to control the ground and surface water should be constructed in conjunction with site clearance works in this area. Allowance for the construction of cut-off drains, horizontal drains and counterfort drains should be made in this area.

Dense vegetation currently covers much of the western area. This provides protection and stability to the surface materials. It is recommended that widespread removal of the vegetation is avoided and slope re-profiling and drainage installation is completed without delay where vegetation removal is necessary.

It is recommended that further geotechnical inspections be completed along the western margin of the site as clearance and earthworks progress to confirm the extent and design of slope re-profiling, drainage and other stability requirements in this area.

5.8.2. Central and Eastern Areas

In the central and eastern areas of the site little evidence for slope instability was observed within the proposed building lots and the requirement for comprehensive stabilisation measures are considered unlikely.

Some minor instability may be ongoing within the reserve area.

5.9. Subsoil Class for Seismic Design

For detailed design purposes it is recommended the magnitude of seismic acceleration be estimated in accordance with the recommendations of NZS 1170.5:2004.

It is expected for much of the site schist rock will be at depths of less than 3 m and Class B subsoil conditions will be appropriate. In some areas, notably in the drainage channels present along the western margin and in the northern central area, soils are expected to exceed 3m in thickness and Class C subsoil conditions will be present.

5.10. Pavements

The proposed sub-division development requires the construction of several access roads. The expected in-situ design (10-precentile) CBR values for the

materials present on site are provided in Table 5.10. These are preliminary values subject to site inspection.

Table 5.9 Recommended Sub-grade 10 Percentile CBR values for Pavement Design

Sub-grade Material	Preliminary 10 Percentile CBR Value
Alluvial Sediment	Unsuitable as subgrade material – Excavate and replace as appropriate
Colluvium	2%
Glacial outwash and glacial till	4-6%
Schist bedrock	15%

Groundwater is expected to adversely affect pavements in some areas and suitable sub-soil drainage measures should be incorporated into the pavement design.

All unsuitable materials, such as vegetation, topsoil and soft sediments should be excavated from beneath road footprints and replaced with granular subbase or engineered fill prior to commencing pavement construction.

Inspections of the pavement sub-grade should be completed during construction by a geotechnical practitioner to carry out penetration testing and confirm the subsurface conditions are in accordance with this report.

5.11. Existing Structures and Neighbouring Properties

There are no existing structures within or immediately adjacent to the site. Neighbouring properties are not expected to be adversely affected by the proposed works provided the recommendations of this report are completed.

5.12. Natural Hazards

A risk of seismic activity has been identified for the region as a whole and appropriate allowance should be made for seismic loading during detailed design of structures or earthworks.

The western margin of the proposed subdivision is close to the edge of a prominent landslide on Queenstown Hill. Detailed mapping of this area was restricted due to the dense vegetation coverage. It is recommended additional geotechnical inspection and mapping works be completed in this area during the site clearance works.

No other significant natural hazards have been identified within the site boundaries.

It is understood that future development to the west of the site is being considered. Such development will encroach into the area of the Queenstown Hill Landslide, and towards the active area identified approximately 75 m from the site boundary. Due to the potential for ongoing movement this area is not considered appropriate for residential development.

5.13. Aquifers

No aquifer resource is expected to be adversely affected by the proposed development.

5.14. Environmental Issues During Construction

5.14.1. Erosion and Sediment Control

Due to the sloping nature of the site, groundwater and surface water run-off and soil erosion will require controls. Options to control sediment run-off include earth bunds, silt fences, hay bales, vegetation buffer strips and sediment ponds.

Details for the implementation of erosion and sediment control measures can be accessed at the following internet link:

http://www.aucklandcity.govt.nz/council/documents/district/Ann14.pdf

Further detail related to construction sites can be found at:

http://www.itd.idaho.gov/manuals/Online_Manuals/BMP/

5.14.2. Noise

It is expected that conventional earthmoving equipment, such as excavators with rock breaking equipment will be required during construction of the access roads.

The site is not located close to adjacent properties however the construction contractor should ensure the appropriate measures are taken to control the construction noise, in accordance with QLDC requirements.

5.14.3. Dust

The soils present at the site have a relatively low potential to generate dust. However the Contractor should take appropriate measures to control dust in

accordance with QLDC requirements. Regular damping with sprinklers is expected to be an effective measure to control airborne dust during construction.

6. Conclusions

Proposed Development

- From a geotechnical perspective the proposed development is considered technically feasible provided it is properly designed and controlled. A moderate geotechnical risk has been identified with the ground and storm water drainage and potential shallow instability along the western boundary of the subdivision. See 5.8/1
- Both of the risks can be addressed with proper engineering design and construction

Existing Geotechnical Conditions

- The stratigraphy of the site typically comprises the following sequence and thickness of materials:

  0.0 to 0.3m of Topsoil, overlying;

  0.0 to 1.5m of Colluvium, overlying;

  0.0 to 0.2m of Alluvial sediments, overlying;

  0.0 to 0.65m of Glacial Outwash Sediments, overlying;

  0.0 to 3.0m of Glacial Till, overlying;

  Schist bedrock at a depth of 0 to 3.6m below the existing ground surface.

- Shallow instability within the soil materials has been identified along the western boundary of the site.
- The Queenstown Hill Landslide exhibits activity approximately 75 m to the west of the site.
- Shallow ground and surface water flows have been identified along the western boundary of the site and to a lesser extent on the northern boundary.
- The regional groundwater table was not encountered during the site investigation works and is expected to lie well below the proposed finished ground surface.

Geotechnical Design Parameters

- Recommended parameters for the soil materials are presented in Table 5.1 of this report.
- Recommended parameters for the schist rock are provided in Section 5.2 of this report.

Recommended Cut Batters

- Permanent slopes in soil and rock materials will be formed as part of the development. Section 5.5 of this report provides recommendations for temporary and permanent batters in soil materials and slopes excavated in schist rock.

Recommended Fill Batters

- Recommendations for fill batters are provided in Table 5.6 of this report
- Stability analysis indicates proposed fill slopes beneath Road 3 have a satisfactory factor or safety against geotechnical instability providing the slope is formed at 3:1 (horizontal: vertical), or flatter and proper drainage to control ground and surface water flows is constructed.
- Colluvium and alluvial sediment soil materials should not be used in construction of engineered fill unless subject to specific design.

Earthworks

- All earthworks should be certified and constructed in accordance with NZS 4431:1989 and Queenstown Lakes District Standards.
- Earthwork construction should be inspected by a geotechnical practitioner

Groundwater Issues

- The regional groundwater table is expected to lie at depth below the finished ground surface and is not expected to be encountered during construction of the proposed earthworks.
- Perched groundwater is present within the soils and on the surface of the schist rock in several locations.
- If wet soils are encountered during earthworks construction then appropriate drainage measures should be installed.
- Completion of subsoil and surface drainage measures will be required to ensure stability of the soil materials present in the area of the proposed Middleton Road extension. Recommendations for drainage measures are discussed in Section 5.7.2 of this report.

Stability of existing slopes

- The Queenstown Hill Landslide which has experience historic activity has been identified approximately 75 m to the west of the site.
- Shallow instability has been identified in the soils that are present along the western boundary of the site. This instability is inferred to be related to high ground and surface water flows.

- It is recommended that slope re-profiling works and drainage be installed in conjunction with site clearance and earthworks in the western area.
- The existing vegetation cover provides considerable support to the surface materials in the western area and the removal of vegetation in this area should be avoided where possible.
- Further geotechnical inspections should be completed in the western area to confirm the extent of slope re-profiling and drainage works as site clearance and earthworks advance.
- No significant stability issues have been identified in the central and eastern areas of the site.

Seismic Design

- The magnitude of seismic acceleration for structural design should be estimated in accordance with NZ 1170.5:2004. It is expected that Class B subsoil conditions will be present across most of the site where schist rock lies at a depth less than 3 m below the finished ground surface. Class C conditions will be present in the drainage channels where the depth to bedrock is greater than 3 m. The drainage channels are located in the western and northern areas of the site.

Recommendations for Additional Geotechnical Work

- Detailed design of drainage under the fill embankment.
- Inspections during earthwork construction to confirm extent and design of drainage and slope re-profiling along the western boundary.
- Pilot excavations in advance of the main cut to allow mapping of the schist and confirmation of the requirements for support.
- Testing and certification of engineered fill in accordance with the requirements of NZS 4431:1989 and Queenstown Lakes District Standards.

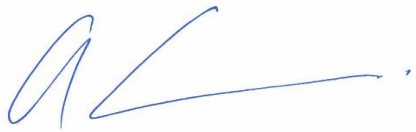
7. Applicability

This report has been prepared for the benefit of Grant Hensman with respect to the particular brief given to us and it may not be relied upon in other contexts or for any other purpose without our prior review and agreement.

TONKIN & TAYLOR LTD

Environmental and Engineering Consultants

Report prepared by: Reviewed for Tonkin & Taylor by:



....

Paul Faulkner Anthony Fairclough

Engineering Geologist Senior Geotechnical Engineer

Authorised by:

.....

Graham Salt

Project Co-ordinator

pgf

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Appendix A: Site Plans and Geological Cross Sections

DRAWN	MABN	1/5/07
DRAFTING CHECKED		
APPROVED		
CADFILE :		
SCALES (AT A4 SIZE)		

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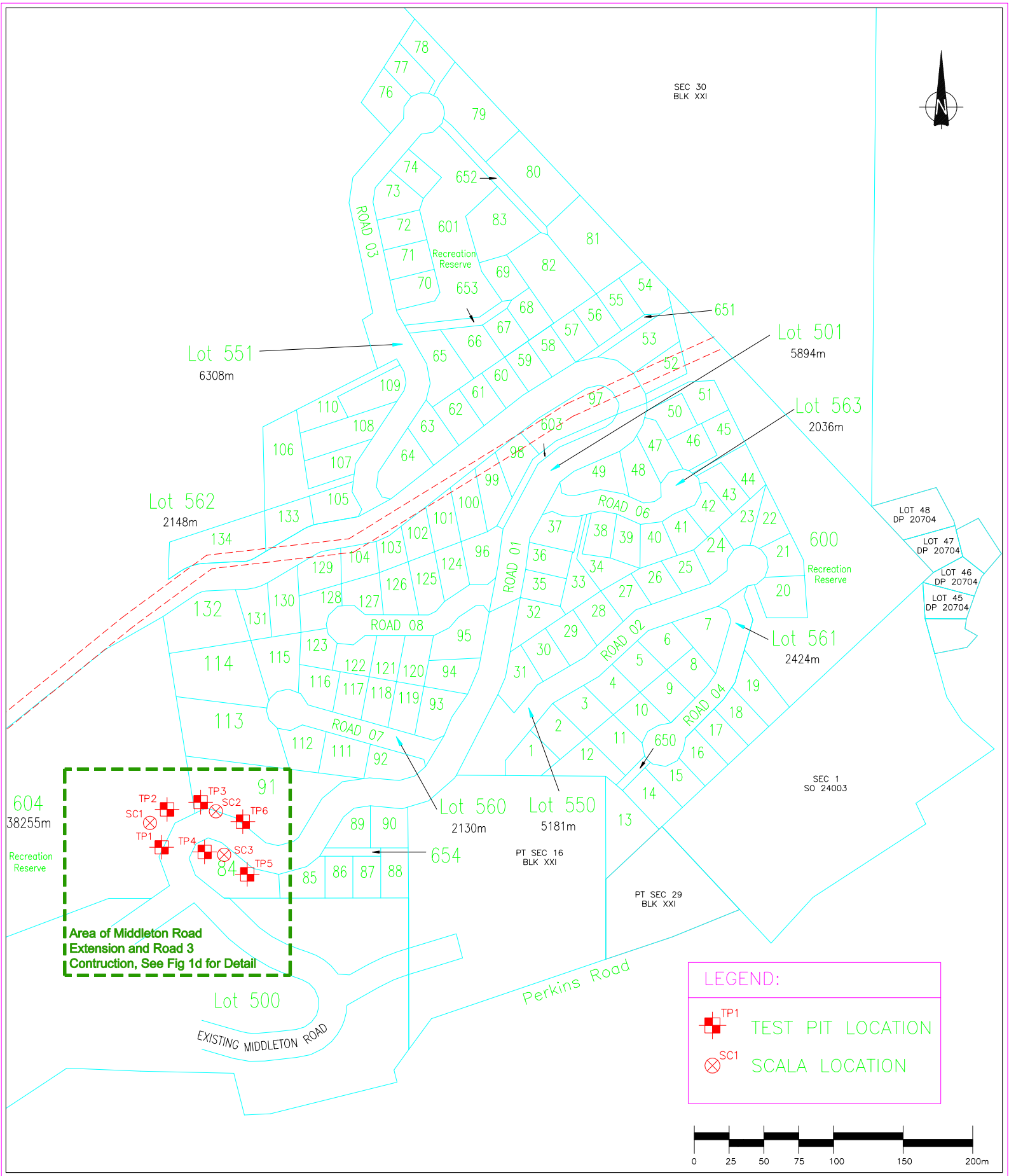
Geotechnical Investigations
Middleton Road, Queenstown
Site Location

PROJECT No. 880044

FIG. No. Fig. 1a

REV. 0



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APPROVED		
CADFILE :		
SCALES (AT A4 SIZE)		
PROJECT No. 880044		

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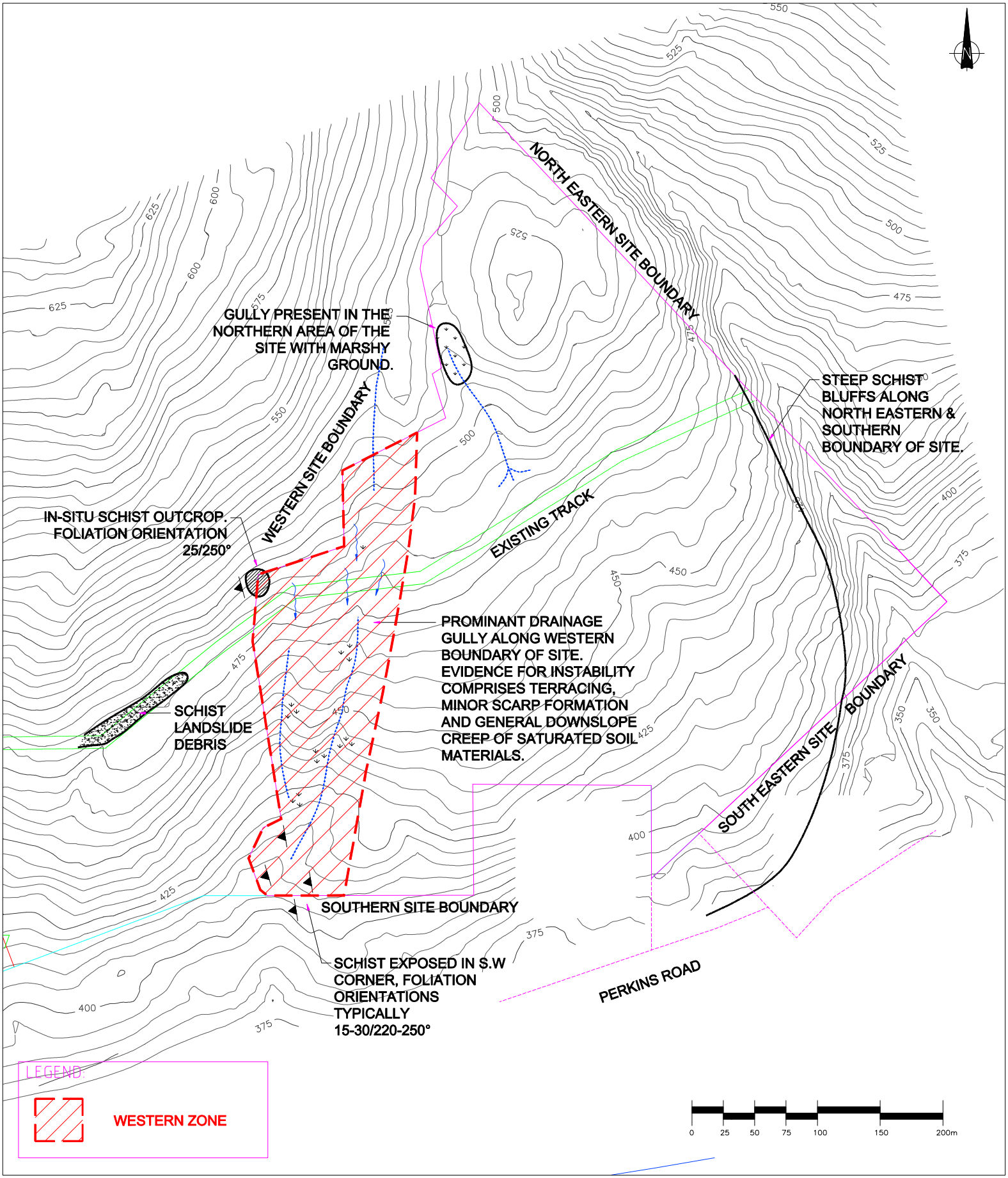
Geotechnical Investigations
Middleton Road, Queenstown
Development & Test Location Plan

FIG. No. Fig. 1b

REV. 0



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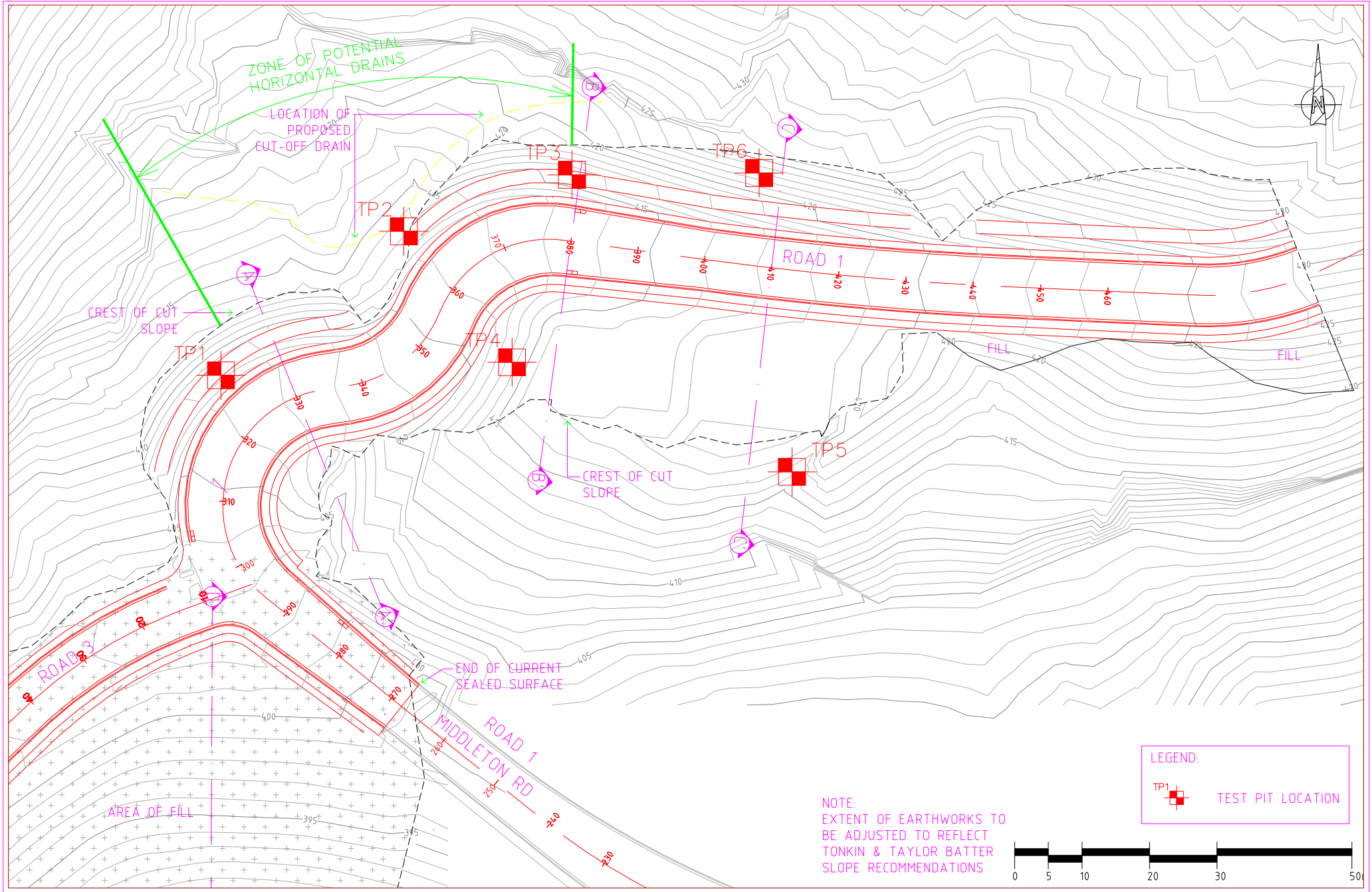
DRAWN	EJD	4/07
DRAFTING CHECKED		
APPROVED		
CADFILE :		
SCALES (AT A4 SIZE)		
PROJECT No. 880044	FIG. No. Fig. 1c	REV. 0

Grant Hensman
Geotechnical Investigations
Middleton Road, Queenstown
Geotechnical Observation Plan



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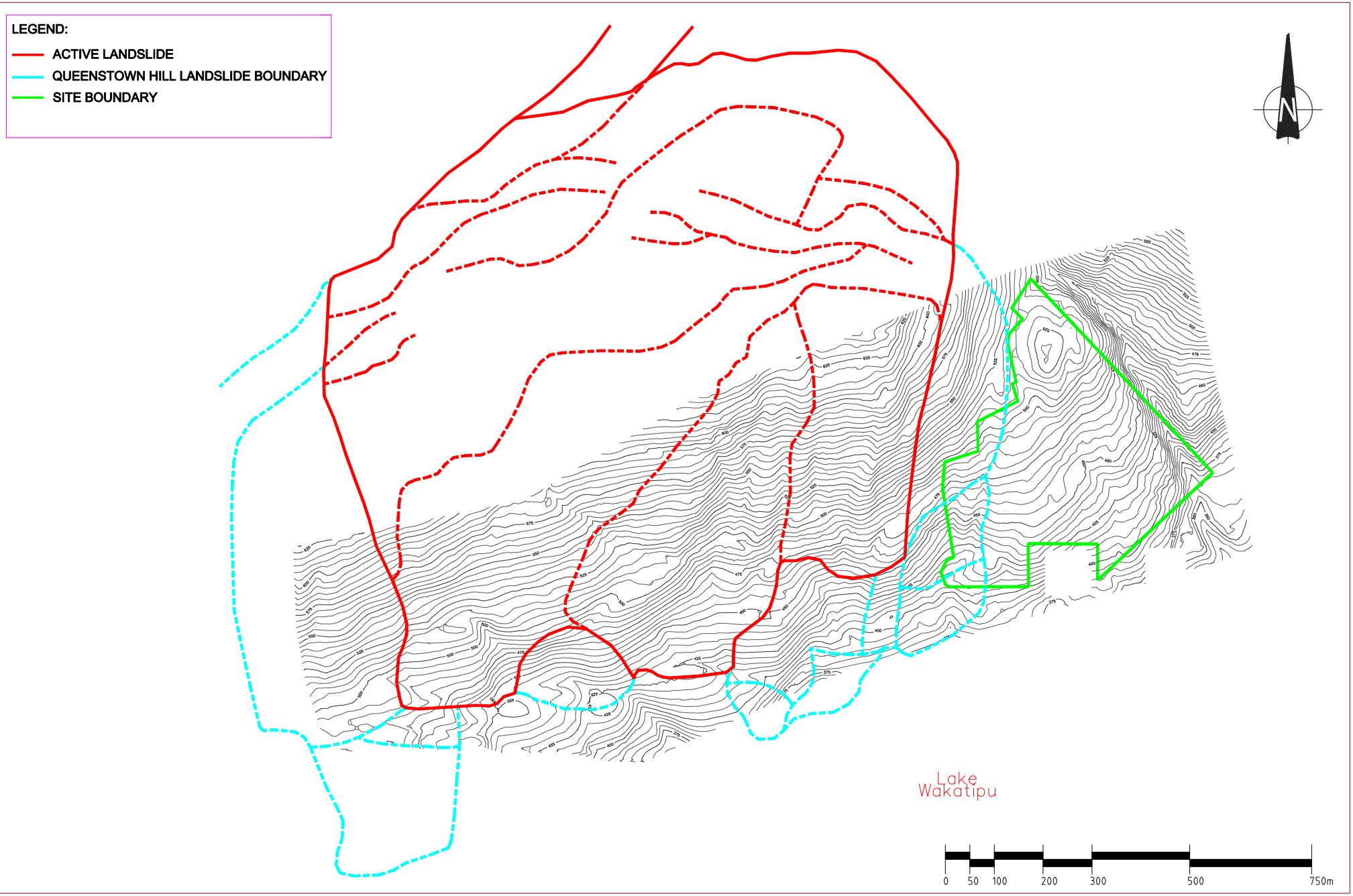
DRAWN	EJD	4/07
DRAFTING CHECKED		
APPROVED		
CADFILE :		
SCALES (AT A4 SIZE)		
PROJECT No. 880044		

Grant Hensman
Geotechnical Investigations
Middleton Road, Queenstown
Site Plan (South West Corner of Site)

FIG. No. Fig. 1d

REV. 0



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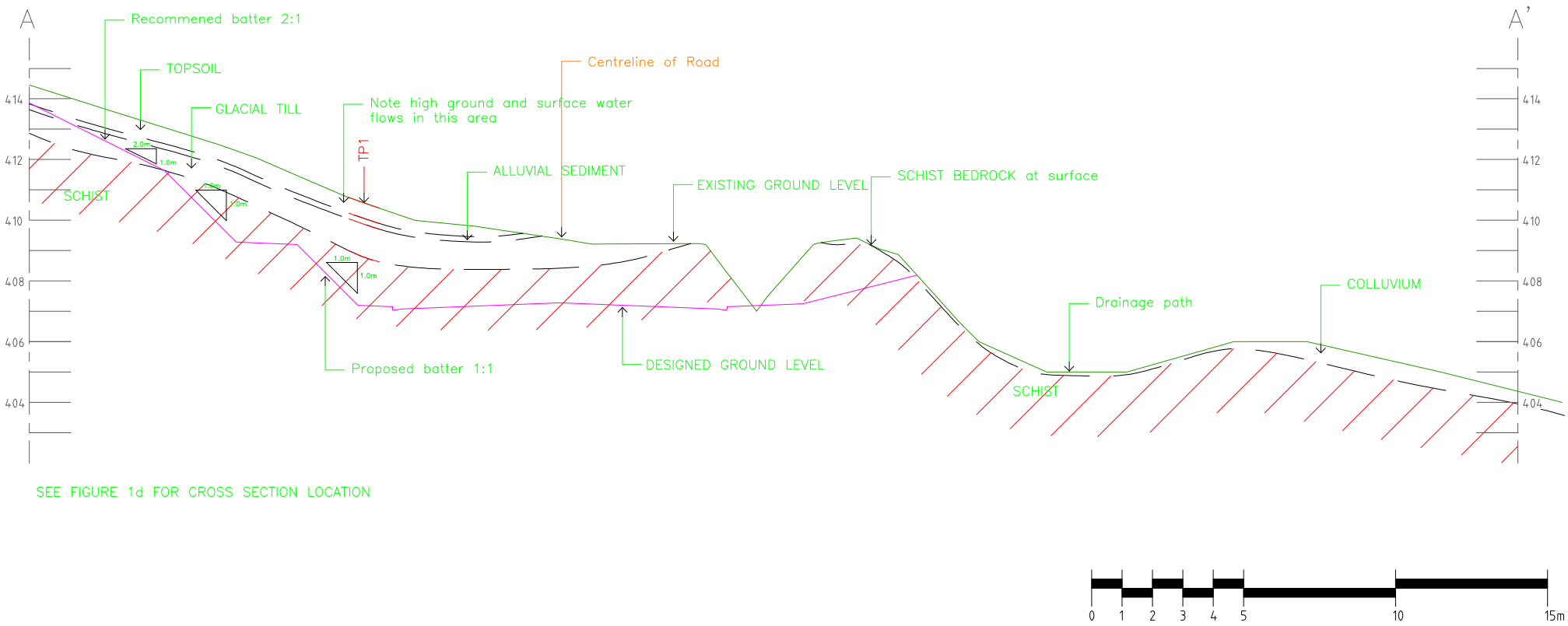
DRAFTING CHECKED		
APPROVED		
CADFILE :		
SCALES (AT A4 SIZE)		
PROJECT No. 880044		

Grant Hensman
Geotechnical Investigations
Middleton Road, Queenstown
Queenstown Hill Landslide Location Plan

FIG. No. Fig. 1e

REV. 0



SEE FIGURE 1d FOR CROSS SECTION LOCATION

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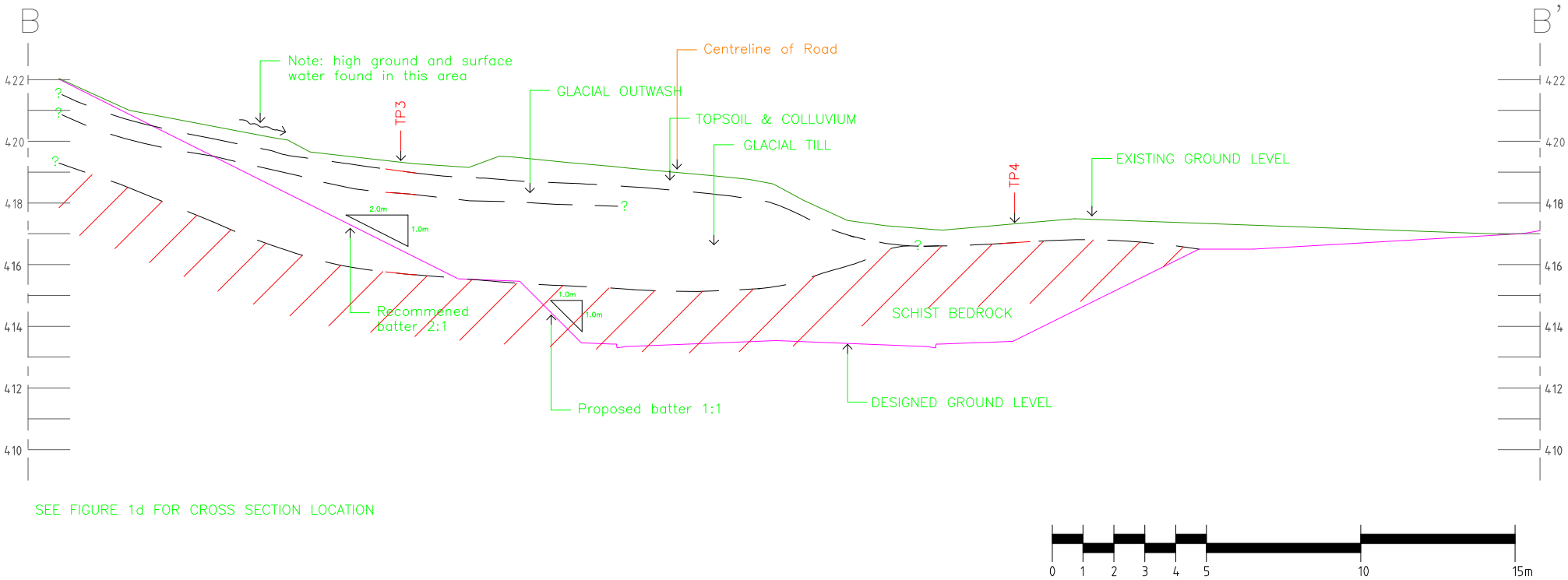
DRAFTING CHECKED		
APPROVED		
CADFILE :		
SCALES (AT A4 SIZE)		
PROJECT No. 880044		

Grant Hensman
Geotechnical Investigations
Middleton Road, Queenstown
Section A – A' (Chainage 330m)

FIG. No. Fig. 2a

REV. 0



SEE FIGURE 1d FOR CROSS SECTION LOCATION

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CADFILE :		
SCALES (AT A4 SIZE)		
PROJECT No. 880044		

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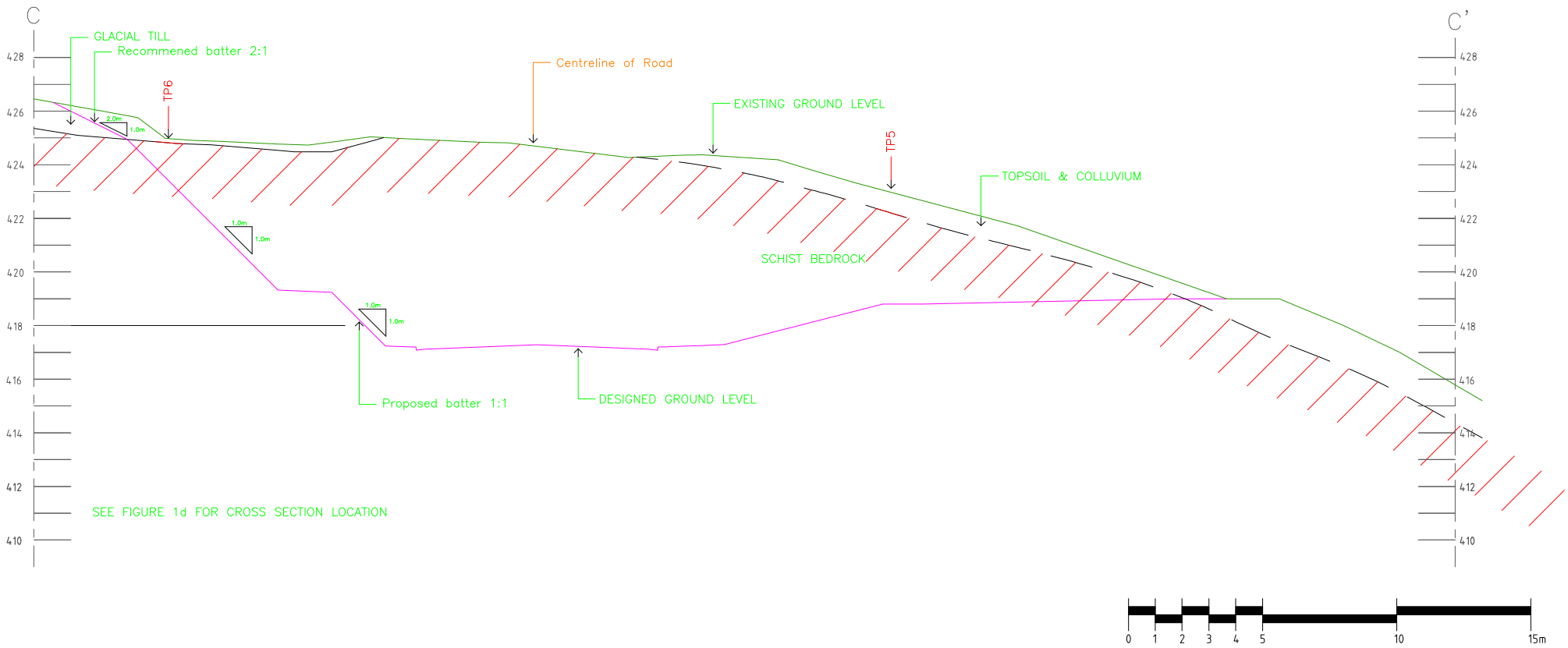
Middleton Road, Queenstown
Section B – B' (Chainage 380m)

FIG. No. Fig. 2b

REV. 0



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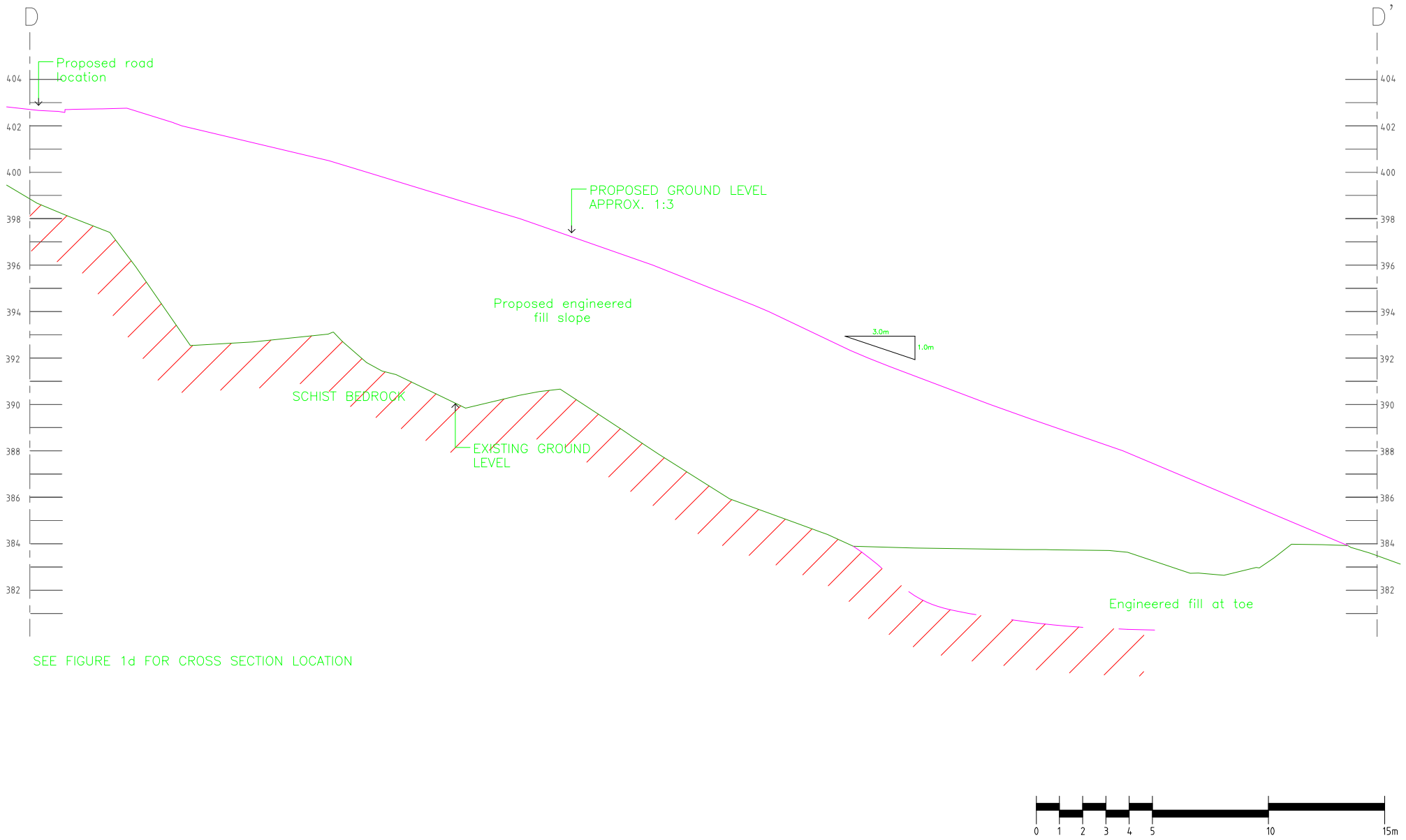
DRAWN	EJD	4/07
DRAFTING CHECKED		
APPROVED		
CADFILE :		
SCALES (AT A4 SIZE)		
PROJECT No. 880044		

Grant Hensman
Geotechnical Investigations
Middleton Road, Queenstown
Section C – C' (Chainage 410m)

FIG. No. Fig. 2c

REV. 0



SEE FIGURE 1d FOR CROSS SECTION LOCATION

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DRAFTING CHECKED		
APPROVED		
CADFILE :		
SCALES (AT A4 SIZE)		
PROJECT No. 880044		

Grant Hensman
Geotechnical Investigations
Middleton Road, Queenstown
Section D – D' (Proposed Fill beneath Road 3)

FIG. No. Fig. 2d

REV. 0

Appendix B: Test Pit and Scala Penetrometer Logs

TONKIN & TAYLOR

SCALA PENETROMETER LOG

Job No: *880044*
Project: *Middleton Road Qtn*

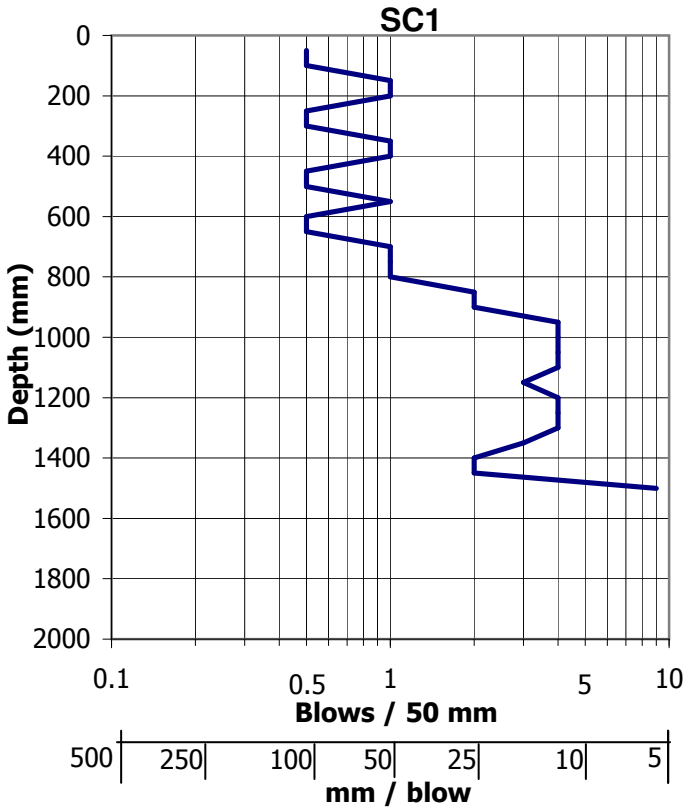
Date: *3/05/2007*
Operated by: *PGF*
Logged by: *MABN*

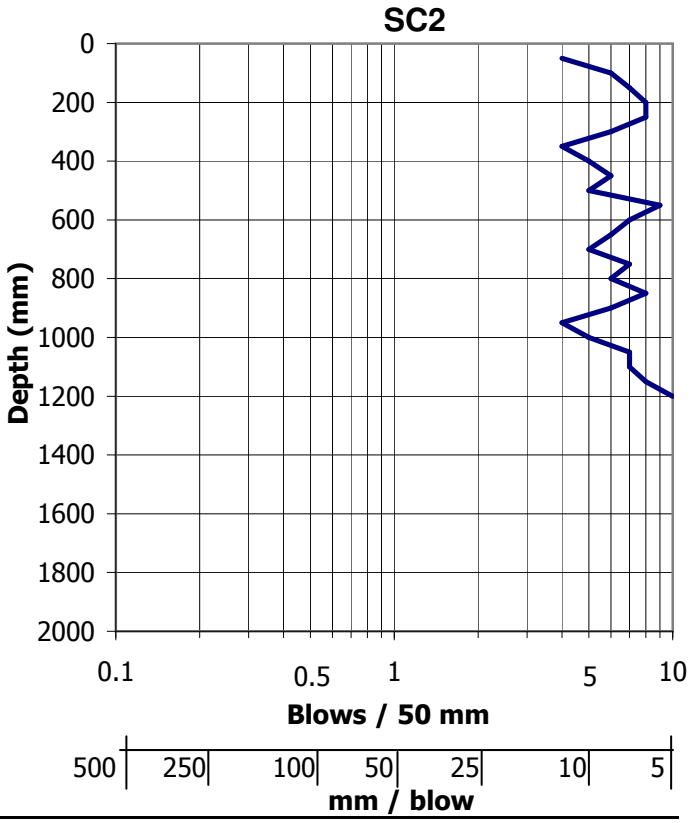
Test Number ***SC1 & SC2***

Sheet ***1***
of ***1***

SC1 Location: RL: 0 m	
mm Driven	No. of Blows
50	*0.5*
100	*0.5*
150	*1*
200	*1*
250	*0.5*
300	*0.5*
350	*1*
400	*1*
450	*0.5*
500	*0.5*
550	*1*
600	*0.5*
650	*0.5*
700	*1*
750	*1*
800	*1*
850	*2*
900	*2*
950	*4*
1000	*4*
1050	*4*
1100	*4*
1150	*3*
1200	*4*
1250	*4*
1300	*4*
1350	*3*
1400	*2*
1450	*2*
1500	*9*
1550	
1600	
1650	
1700	
1750	
1800	
1850	
1900	
1950	
2000	
Inferred Soil Type	
Watertable Depth	

SC2 Location: RL: 0m	
mm Driven	No. of Blows
50	*4*
100	*6*
150	*7*
200	*8*
250	*8*
300	*6*
350	*4*
400	*5*
450	*6*
500	*5*
550	*9*
600	*7*
650	*6*
700	*5*
750	*7*
800	*6*
850	*8*
900	*6*
950	*4*
1000	*5*
1050	*7*
1100	*7*
1150	*8*
1200	*10*
1250	
1300	
1350	
1400	
1450	
1500	
1550	
1600	
1650	
1700	
1750	
1800	
1850	
1900	
1950	
2000	
Inferred Soil Type	
Watertable Depth	





TONKIN & TAYLOR LTD
EXCAVATION LOG

EXCAVATION NUMBER: **TP 1**

PROJECT: Remarkables View Stage 2		Job Number: 880044
LOCATION: see site plan	Inclination: N/A	Direction: N/A

EASTING:	N/A mE	EQUIPMENT: 20T excavator	OPERATOR: Warren
NORTHING:	N/A mN	INFOMAP NO.	COMPANY: Beaver Construction
ELEVATION:	N/A m	DIMENSIONS:	HOLE STARTED: 16-Mar-07
METHOD:	N/A	EXCAV. DATUM: Ground Level	HOLE FINISHED: 16-Mar-07

PENETRATION (SPT)	GROUNDWATER / SEEPAGE	DEPTH (m)	GRAPHIC LOG	ENGINEERING DESCRIPTION: SOIL / ROCK CLASSIFICATION, PLASTICITY OR PARTICLE SIZE CHARACTERISTICS, COLOUR, WEATHERING, SECONDARY AND MINOR COMPONENTS	WATER CONTENT	GEOLOGICAL: SOIL / ROCK TYPE, ORIGIN, MINERAL COMPOSITION, DEFECTS, STRUCTURE, FORMATION
		0.2		Orange/grey, sandy gravelly SILT with rootlets. Gravel is fine to medium, sub-angular to sub-rounded. Soft to firm.	very moist	TOPSOIL
		0.4		Grey, sandy SILT with rare gravel. Gravel is fine to medium, sub-angular to sub-rounded. Soft to firm. Very moist		ALLUVIAL SEDIMENT
		0.6		Orange/grey, sandy gravelly SILT with boulders. Gravel is fine to coarse, sub-angular to sub-rounded, boulders are rounded to max 200mm. Soft to firm.	wet	GLACIAL TILL
		0.8				
		1.0				
		1.2				
	→	1.4				
		1.6		Brownish grey, pelitic SCHIST. Moderately to highly weathered. Moderately strong. Foliation 30/220.		BEDROCK
		1.8				
		2.0		Total Depth = 1.8 m		
		2.2				
		2.4				
		2.6				
		2.8				
		3.0				
		3.2				

COMMENT: Pit sides recollapsing, tension cracks on surface (upslope), moderate seepage at 1.4m depth	Logged By: PGF
	Checked Date:
PHOTO REF.: N/A	Sheet: 1 of 1

TONKIN & TAYLOR LTD
EXCAVATION LOG

EXCAVATION NUMBER: **TP 2**

PROJECT: Remarkables View Stage 2		Job Number: 880044
LOCATION: see site plan	Inclination: N/A	Direction: N/A

EASTING:	N/A mE	EQUIPMENT: 20T excavator	OPERATOR: Warren
NORTHING:	N/A mN	INFOMAP NO.	COMPANY: Beaver Construction
ELEVATION:	N/A m	DIMENSIONS:	HOLE STARTED: 16-Mar-07
METHOD:	N/A	EXCAV. DATUM: Ground Level	HOLE FINISHED: 16-Mar-07

PENETRATION (SPT)	GROUNDWATER / SEEPAGE	DEPTH (m)	GRAPHIC LOG	ENGINEERING DESCRIPTION: SOIL / ROCK CLASSIFICATION, PLASTICITY OR PARTICLE SIZE CHARACTERISTICS, COLOUR, WEATHERING, SECONDARY AND MINOR COMPONENTS	WATER CONTENT	GEOLOGICAL: SOIL / ROCK TYPE, ORIGIN, MINERAL COMPOSITION, DEFECTS, STRUCTURE, FORMATION
	NO SEEPAGE	0.1		Brownish grey, sandy gravelly SILT with cobbles and rootlets. Gravel is sub-angular to sub-rounded, fine to coarse, cobbles are angular to rounded. Soft to firm.	moist	COLLUVIUM
		0.2				
		0.3				
		0.4				
		0.5				
		0.6		Orange grey, silty SAND with rare gravel and boulders. Gravel is fine to medium, sub-rounded to rounded, boulders are rounded, max size 500mm. Medium dense.	moist	GLACIAL OUTWASH
		0.7		Brownish grey, silty sandy GRAVEL with cobbles and rare boulders. Gravel is angular to rounded, fine to coarse, cobbles are angular to sub-angular, boulders are rounded, max size 250mm. Medium dense to dense.	moist	GLACIAL TILL
		0.8				
		0.9				
		1.0				
		1.1				
		1.2		Brownish grey, pelitic SCHIST. Moderately to highly weathered. Weak to moderately strong. Foliation 32/218.		BEDROCK
		1.3				
		1.4		Total Depth = 1.3 m		
		1.5				
		1.6				

COMMENT: Unstable Pit sides, topsoil removed by others prior to ground investigation	Logged By: PGF
	Checked Date:
PHOTO REF.: N/A	Sheet: 1 of 1

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EXCAVATION LOG

EXCAVATION NUMBER: **TP 3**

PROJECT: Remarkables View Stage 2		Job Number: 880044
LOCATION: see site plan	Inclination: N/A	Direction: N/A

EASTING:	N/A mE	EQUIPMENT: 20T excavator		OPERATOR: Warren	
NORTHING:	N/A mN	INFOMAP NO.		COMPANY: Beaver Construction	
ELEVATION:	N/A m	DIMENSIONS:		HOLE STARTED: 16-Mar-07	
METHOD:	N/A	EXCAV. DATUM: Ground Level		HOLE FINISHED: 16-Mar-07	

PENETRATION (SPT)	GROUNDWATER / SEEPAGE	DEPTH (m)	GRAPHIC LOG	ENGINEERING DESCRIPTION: SOIL / ROCK CLASSIFICATION, PLASTICITY OR PARTICLE SIZE CHARACTERISTICS, COLOUR, WEATHERING, SECONDARY AND MINOR COMPONENTS	WATER CONTENT	GEOLOGICAL: SOIL / ROCK TYPE, ORIGIN, MINERAL COMPOSITION, DEFECTS, STRUCTURE, FORMATION
		0.0		Dark brown, silty SAND with rootlets.		TOPSOIL
		0.4		Greyish brown, sandy gravelly SILT with rare cobbles. Gravel is fine to medium, sub-angular to sub-rounded, cobbles are angular to sub-angular. Soft to firm.		COLLUVIUM
		0.8		Orangy grey, silty sandy GRAVEL with rare cobbles. Gravel is sub-angular to sub-rounded, cobbles are sub-angular. Loose to medium dense.		GLACIAL OUTWASH
		1.2		Brownish grey, sandy SILT with some gravel, cobbles, boulders and lenses of silty sand. Gravel is sub-angular to sub-rounded, cobbles are sub-rounded to rounded, boulders are sub-rounded to rounded, max size is 250mm. Firm to stiff.	moist	TILL
		1.6				
		2.0		Orangy grey, silty sandy GRAVEL with rare cobbles. Gravel is sub-angular to sub-rounded, cobbles are sub-angular. Medium dense to dense. Moist		TILL
		2.4		Brownish grey, sandy SILT with some gravel, cobbles, boulders and lenses of silty sand. Gravel is sub-angular to sub-rounded, cobbles are sub-rounded to rounded, boulders are sub-rounded to rounded, max size is 250mm. Stiff.	moist	TILL
		2.8				
	→	3.2		Brown, sandy SILT with some gravel, cobbles and lenses of silty sand. Gravel is sub-angular to sub-rounded, cobbles are sub-rounded to rounded, boulders are sub-rounded to rounded, max size is 250mm. Stiff.	moist	TILL
		3.6				
		4.0		Pelitic SCHIST. Moderately weathered. Moderately strong. Foliation 35/229.		BEDROCK
				Total Depth = 3.9 m		
		4.4				
		4.8				
		5.2				
		5.6				
		6.0				
		6.4				

COMMENT:	Logged By: PGF
	Checked Date:
PHOTO REF.: N/A	Sheet: 1 of 1

TONKIN & TAYLOR LTD
EXCAVATION LOG

EXCAVATION NUMBER: **TP 4**

PROJECT: Remarkables View Stage 2		Job Number: 880044
LOCATION: see site plan	Inclination: N/A	Direction: N/A

EASTING:	N/A mE	EQUIPMENT: 20T excavator	OPERATOR: Warren
NORTHING:	N/A mN	INFOMAP NO.	COMPANY: Beaver Construction
ELEVATION:	N/A m	DIMENSIONS:	HOLE STARTED: 16-Mar-07
METHOD:	N/A	EXCAV. DATUM: Ground Level	HOLE FINISHED: 16-Mar-07

PENETRATION (SPT)	GROUNDWATER / SEEPAGE	DEPTH (m)	GRAPHIC LOG	ENGINEERING DESCRIPTION: SOIL / ROCK CLASSIFICATION, PLASTICITY OR PARTICLE SIZE CHARACTERISTICS, COLOUR, WEATHERING, SECONDARY AND MINOR COMPONENTS	WATER CONTENT	GEOLOGICAL: SOIL / ROCK TYPE, ORIGIN, MINERAL COMPOSITION, DEFECTS, STRUCTURE, FORMATION
	NO SEEPAGE	0.1		Orange brown, silty gravelly SAND with rootlets. Gravel is fine to coarse, sub-angular to sub-rounded. Loose to medium dense.	moist	COLLUVIUM
		0.2				
		0.3				
		0.4				
		0.5		Grey brown, silty gravelly SAND with rare cobbles. Gravel is fine to coarse, sub-rounded to rounded, cobbles are sub-rounded to rounded. Moderately dense.	moist	TILL
		0.6				
		0.7				
		0.8				
		0.9				
		1.0				
		1.1				
		1.2		Grey, pelitic SCHIST. Moderately weathered. Moderately strong. Foliation 28/230.		BEDROCK
		1.3				
		1.4		Total Depth = 1.3 m		
		1.5				
		1.6				

COMMENT:	Logged By: PGF
	Checked Date:
PHOTO REF.: N/A	Sheet: 1 of 1

TONKIN & TAYLOR LTD
EXCAVATION LOG

EXCAVATION NUMBER: **TP 5**

PROJECT: Remarkables View Stage 2		Job Number: 880044
LOCATION: see site plan	Inclination: N/A	Direction: N/A

EASTING:	N/A mE	EQUIPMENT: 20T excavator	OPERATOR: Warren
NORTHING:	N/A mN	INFOMAP NO.	COMPANY: Beaver Construction
ELEVATION:	N/A m	DIMENSIONS:	HOLE STARTED: 16-Mar-07
METHOD:	N/A	EXCAV. DATUM: Ground Level	HOLE FINISHED: 16-Mar-07

PENETRATION (SPT)	GROUNDWATER / SEEPAGE	DEPTH (m)	GRAPHIC LOG	ENGINEERING DESCRIPTION: SOIL / ROCK CLASSIFICATION, PLASTICITY OR PARTICLE SIZE CHARACTERISTICS, COLOUR, WEATHERING, SECONDARY AND MINOR COMPONENTS	WATER CONTENT	GEOLOGICAL: SOIL / ROCK TYPE, ORIGIN, MINERAL COMPOSITION, DEFECTS, STRUCTURE, FORMATION
	NO SEEPAGE	0.1		Dark brown, TOPSOIL.		
		0.2		Orange brown, sandy gravelly SILT with rare cobbles. Gravel is sub-angular to sub-rounded, fine to coarse, cobbles are sub-angular to sub-rounded. Firm.	moist	COLLUVIUM
		0.3				
		0.4		Grey, pelitic SCHIST. Moderately weathered. Moderately strong.		BEDROCK
				Total Depth = 0.4 m		
		0.5				
		0.6				
		0.7				
		0.8				

COMMENT:	Logged By: PGF
	Checked Date:
PHOTO REF.: N/A	Sheet: 1 of 1

TONKIN & TAYLOR LTD
EXCAVATION LOG

EXCAVATION NUMBER: **TP 6**

PROJECT: Remarkables View Stage 2		Job Number: 880044
LOCATION: see site plan	Inclination: N/A	Direction: N/A

EASTING:	N/A mE	EQUIPMENT: 20T excavator	OPERATOR: Warren
NORTHING:	N/A mN	INFOMAP NO.	COMPANY: Beaver Construction
ELEVATION:	N/A m	DIMENSIONS:	HOLE STARTED: 16-Mar-07
METHOD:	N/A	EXCAV. DATUM: Ground Level	HOLE FINISHED: 16-Mar-07

PENETRATION (SPT)	GROUNDWATER / SEEPAGE	DEPTH (m)	GRAPHIC LOG	ENGINEERING DESCRIPTION: SOIL / ROCK CLASSIFICATION, PLASTICITY OR PARTICLE SIZE CHARACTERISTICS, COLOUR, WEATHERING, SECONDARY AND MINOR COMPONENTS	WATER CONTENT	GEOLOGICAL: SOIL / ROCK TYPE, ORIGIN, MINERAL COMPOSITION, DEFECTS, STRUCTURE, FORMATION
	NO SEEPAGE	0.1		Orangy grey, silty gravelly SAND with cobbles. Gravel is sub-angular to rounded, fine to coarse, cobbles are sub-angular to rounded. Dense.		TILL
		0.2				
		0.3				
		0.4				
		0.5				
		0.6				
		0.7		Grey, pelitic SCHIST. Moderately weathered. Moderately strong. Foliation 25/222.		BEDROCK
		0.8				
		0.9		Total Depth = 0.8 m		
		1.0				
		1.1				
		1.2				
		1.3				
		1.4				
		1.5				
		1.6				

COMMENT: Topsoil removed from area by others prior to ground investigation	Logged By: PGF
	Checked Date:
PHOTO REF.: N/A	Sheet: 1 of 1

TONKIN & TAYLOR LTD
EXCAVATION LOG

EXCAVATION NUMBER: **TP 7**

PROJECT: Remarkables View Stage 2		Job Number: 880044
LOCATION: see site plan	Inclination: N/A	Direction: N/A

EASTING:	N/A mE	EQUIPMENT: 20T excavator	OPERATOR: Warren
NORTHING:	N/A mN	INFOMAP NO.	COMPANY: Beaver Construction
ELEVATION:	N/A m	DIMENSIONS:	HOLE STARTED: 16-Mar-07
METHOD:	N/A	EXCAV. DATUM: Ground Level	HOLE FINISHED: 16-Mar-07

PENETRATION (SPT)	GROUNDWATER / SEEPAGE	DEPTH (m)	GRAPHIC LOG	ENGINEERING DESCRIPTION: SOIL / ROCK CLASSIFICATION, PLASTICITY OR PARTICLE SIZE CHARACTERISTICS, COLOUR, WEATHERING, SECONDARY AND MINOR COMPONENTS	WATER CONTENT	GEOLOGICAL: SOIL / ROCK TYPE, ORIGIN, MINERAL COMPOSITION, DEFECTS, STRUCTURE, FORMATION
	NO SEEPAGE	0.1		Dark brown, clayey SILT with rare gravel and rootlets. Gravel is fine to medium, sub-angular to sub-rounded. Soft.		TOPSOIL
		0.4		Orange brown, sandy gravelly SILT with rare cobbles. Gravel is fine to coarse, sub-angular to sub-rounded, cobbles are sub-angular to sub-rounded. Firm.	moist	COLLUVIUM
		0.5		Grey, pelitic SCHIST. Moderately weathered. Moderately strong. Foliation 31/226.		BEDROCK
				Total Depth = 0.5 m		
		0.6				
		0.7				
		0.8				

COMMENT:	Logged By: PGF
	Checked Date:
PHOTO REF.: N/A	Sheet: 1 of 1

TONKIN & TAYLOR LTD
EXCAVATION LOG

EXCAVATION NUMBER: **TP 8**

PROJECT: Remarkables View Stage 2		Job Number: 880044
LOCATION: see site plan	Inclination: N/A	Direction: N/A

EASTING:	N/A mE	EQUIPMENT: 20T excavator	OPERATOR: Warren
NORTHING:	N/A mN	INFOMAP NO.	COMPANY: Beaver Construction
ELEVATION:	N/A m	DIMENSIONS:	HOLE STARTED: 16-Mar-07
METHOD:	N/A	EXCAV. DATUM: Ground Level	HOLE FINISHED: 16-Mar-07

PENETRATION (SPT)	GROUNDWATER / SEEPAGE	DEPTH (m)	GRAPHIC LOG	ENGINEERING DESCRIPTION: SOIL / ROCK CLASSIFICATION, PLASTICITY OR PARTICLE SIZE CHARACTERISTICS, COLOUR, WEATHERING, SECONDARY AND MINOR COMPONENTS	WATER CONTENT	GEOLOGICAL: SOIL / ROCK TYPE, ORIGIN, MINERAL COMPOSITION, DEFECTS, STRUCTURE, FORMATION
	NO SEEPAGE	0.1		Dark brown, clayey SILT with rootlets. Soft.		TOPSOIL
		0.2				
		0.3		Orangy brown, sandy gravelly SILT. Gravel is fine to coarse, sub-angular to sub-rounded. Soft to firm.	moist	COLLUVIUM
		0.4				
		0.5				
		0.6				
		0.7				
		0.8		Pelitic SCHIST. Moderately weathered. Moderately strong. Foliation 18/216.		BEDROCK
		0.9		Total Depth = 0.8 m		
		1.0				
		1.1				
		1.2				
		1.3				
		1.4				
		1.5				
		1.6				

COMMENT:	Logged By: PGF
	Checked Date:
PHOTO REF.: N/A	Sheet: 1 of 1

TONKIN & TAYLOR LTD
EXCAVATION LOG

EXCAVATION NUMBER: **TP 9**

PROJECT: Remarkables View Stage 2		Job Number: 880044
LOCATION: see site plan	Inclination: N/A	Direction: N/A

EASTING:	N/A mE	EQUIPMENT: 20T excavator	OPERATOR: Warren
NORTHING:	N/A mN	INFOMAP NO.	COMPANY: Beaver Construction
ELEVATION:	N/A m	DIMENSIONS:	HOLE STARTED: 16-Mar-07
METHOD:	N/A	EXCAV. DATUM: Ground Level	HOLE FINISHED: 16-Mar-07

PENETRATION (SPT)	GROUNDWATER / SEEPAGE	DEPTH (m)	GRAPHIC LOG	ENGINEERING DESCRIPTION: SOIL / ROCK CLASSIFICATION, PLASTICITY OR PARTICLE SIZE CHARACTERISTICS, COLOUR, WEATHERING, SECONDARY AND MINOR COMPONENTS	WATER CONTENT	GEOLOGICAL: SOIL / ROCK TYPE, ORIGIN, MINERAL COMPOSITION, DEFECTS, STRUCTURE, FORMATION
	NO SEEPAGE	0.1		Dark brown, clayey SILT with rootlets. Soft.		TOPSOIL
		0.2				
		0.3		Orangy brown, sandy gravelly SILT. Gravel is fine to coarse, sub-angular to sub-rounded. Soft to firm.	moist	COLLUVIUM
		0.4				
		0.5				
		0.6				
		0.7				
		0.8		Pelitic SCHIST. Moderately weathered. Moderately strong. Foliation 18/216.		BEDROCK
		0.9		Total Depth = 0.8 m		
		1.0				
		1.1				
		1.2				
		1.3				
		1.4				
		1.5				
		1.6				

COMMENT:	Logged By: PGF
	Checked Date:
PHOTO REF.: N/A	Sheet: 1 of 1

TONKIN & TAYLOR LTD
EXCAVATION LOG

EXCAVATION NUMBER: **TP 10**

PROJECT: Remarkables View Stage 2		Job Number: 880044
LOCATION: see site plan	Inclination: N/A	Direction: N/A

EASTING:	N/A mE	EQUIPMENT: 20T excavator	OPERATOR: Warren
NORTHING:	N/A mN	INFOMAP NO.	COMPANY: Beaver Construction
ELEVATION:	N/A m	DIMENSIONS:	HOLE STARTED: 16-Mar-07
METHOD:	N/A	EXCAV. DATUM: Ground Level	HOLE FINISHED: 16-Mar-07

PENETRATION (SPT)	GROUNDWATER / SEEPAGE	DEPTH (m)	GRAPHIC LOG	ENGINEERING DESCRIPTION: SOIL / ROCK CLASSIFICATION, PLASTICITY OR PARTICLE SIZE CHARACTERISTICS, COLOUR, WEATHERING, SECONDARY AND MINOR COMPONENTS	WATER CONTENT	GEOLOGICAL: SOIL / ROCK TYPE, ORIGIN, MINERAL COMPOSITION, DEFECTS, STRUCTURE, FORMATION
	NO SEEPAGE	0.1		Dark brown, clayey SILT with rootlets. Soft.		TOPSOIL
		0.2				
		0.3		Orangy brown, sandy gravelly SILT. Gravel is fine to coarse, sub-angular to sub-rounded. Soft to firm.	moist	COLLUVIUM
		0.4				
		0.5				
		0.6				
		0.7				
		0.8		Pelitic SCHIST. Moderately weathered. Moderately strong. Foliation 18/216.		BEDROCK
		0.9		Total Depth = 0.8 m		
		1.0				
		1.1				
		1.2				
		1.3				
		1.4				
		1.5				
		1.6				

COMMENT:	Logged By: PGF
	Checked Date:
PHOTO REF.: N/A	Sheet: 1 of 1

TONKIN & TAYLOR LTD
EXCAVATION LOG

EXCAVATION NUMBER: **TP 11**

PROJECT: Remarkables View Stage 2			Job Number: 880044
LOCATION: see site plan	Inclination:	N/A	Direction: N/A

EASTING:	N/A mE	EQUIPMENT: 20T excavator		OPERATOR: Warren	
NORTHING:	N/A mN	INFOMAP NO.		COMPANY: Beaver Construction	
ELEVATION:	N/A m	DIMENSIONS:		HOLE STARTED: 16-Mar-07	
METHOD:	N/A	EXCAV. DATUM: Ground Level		HOLE FINISHED: 16-Mar-07	

PENETRATION (SPT)	GROUNDWATER / SEEPAGE	DEPTH (m)	GRAPHIC LOG	ENGINEERING DESCRIPTION: SOIL / ROCK CLASSIFICATION, PLASTICITY OR PARTICLE SIZE CHARACTERISTICS, COLOUR, WEATHERING, SECONDARY AND MINOR COMPONENTS	WATER CONTENT	GEOLOGICAL: SOIL / ROCK TYPE, ORIGIN, MINERAL COMPOSITION, DEFECTS, STRUCTURE, FORMATION
		0.0		Dark brown, sandy SILT with rootlets. Soft.		TOPSOIL
		0.4		Orange brown, sandy gravelly SILT with rare cobbles. Gravel is sub-angular to sub-rounded, fine to coarse, cobbles are sub-angular to sub-rounded. Firm. Moist.		COLLUVIIUM
		0.8		Dark grey, silty SAND with some gravel and cobbles. Gravel is sub-rounded to rounded, fine to coarse, cobbles are sub-rounded to rounded. Dense.	moist	GLACIAL TILL
		1.2				
		1.6		Orange grey, silty SAND with some gravel and cobbles and rare boulders. Gravel is sub-rounded to rounded, fine to coarse, cobbles are sub-rounded to rounded, boulders are sub-rounded, max size 200mm. Dense.	moist	GLACIAL TILL
		2.0				
		2.4				
	▶	2.8				
		3.2				
		3.6		Grey, pelitic SCHIST. Moderately weathered. Moderately strong.		BEDROCK
				Total Depth = 3.5 m		
		4.0				
		4.4				
		4.8				
		5.2				
		5.6				
		6.0				
		6.4				

COMMENT: Light seepage at 2.8m	Logged By: PGF
	Checked Date:
PHOTO REF.: N/A	Sheet: 1 of 1

TONKIN & TAYLOR LTD
EXCAVATION LOG

EXCAVATION NUMBER: **TP 12**

PROJECT: Remarkables View Stage 2		Job Number: 880044
LOCATION: see site plan	Inclination: N/A	Direction: N/A

EASTING:	N/A mE	EQUIPMENT: 20T excavator	OPERATOR: Warren
NORTHING:	N/A mN	INFOMAP NO.	COMPANY: Beaver Construction
ELEVATION:	N/A m	DIMENSIONS:	HOLE STARTED: 16-Mar-07
METHOD:	N/A	EXCAV. DATUM: Ground Level	HOLE FINISHED: 16-Mar-07

PENETRATION (SPT)	GROUNDWATER / SEEPAGE	DEPTH (m)	GRAPHIC LOG	ENGINEERING DESCRIPTION: SOIL / ROCK CLASSIFICATION, PLASTICITY OR PARTICLE SIZE CHARACTERISTICS, COLOUR, WEATHERING, SECONDARY AND MINOR COMPONENTS	WATER CONTENT	GEOLOGICAL: SOIL / ROCK TYPE, ORIGIN, MINERAL COMPOSITION, DEFECTS, STRUCTURE, FORMATION
	NO SEEPAGE	0.0		Dark brown, sandy SILT with rootlets. Soft.		TOPSOIL
		0.2		Orange brown, sandy gravelly SILT. Gravel is fine to coarse, angular to sub-rounded. Soft to firm.	moist	COLLUVIUM
		0.4				
		0.6		Yellowish grey, silty gravelly SAND with cobbles and boulders up to 200mm. Gravel is fine to coarse, sub-angular to rounded. Medium dense to dense.	moist	TILL
		0.8				
		1.0				
		1.2				
		1.4		Greenish brown, sandy silty GRAVEL. Gravel is fine to coarse, sub-angular to rounded. Dense.	moist	TILL
		1.6				
		1.8		Grey, pelitic SCHIST. Moderately weathered. Moderately strong.		BEDROCK
				Total Depth = 1.7 m		
		2.0				
		2.2				
		2.4				
		2.6				
		2.8				
		3.0				
		3.2				

COMMENT:	Logged By: PGF
	Checked Date:
PHOTO REF.: N/A	Sheet: 1 of 1

TONKIN & TAYLOR LTD
EXCAVATION LOG

EXCAVATION NUMBER:
TP 13

PROJECT: Remarkables View Stage 2		Job Number: 880044
LOCATION: see site plan	Inclination: N/A	Direction: N/A

EASTING:	N/A mE	EQUIPMENT: 20T excavator	OPERATOR: Warren
NORTHING:	N/A mN	INFOMAP NO.	COMPANY: Beaver Construction
ELEVATION:	N/A m	DIMENSIONS:	HOLE STARTED: 16-Mar-07
METHOD:	N/A	EXCAV. DATUM: Ground Level	HOLE FINISHED: 16-Mar-07

PENETRATION (SPT)	GROUNDWATER / SEEPAGE	DEPTH (m)	GRAPHIC LOG	ENGINEERING DESCRIPTION: SOIL / ROCK CLASSIFICATION, PLASTICITY OR PARTICLE SIZE CHARACTERISTICS, COLOUR, WEATHERING, SECONDARY AND MINOR COMPONENTS	WATER CONTENT	GEOLOGICAL: SOIL / ROCK TYPE, ORIGIN, MINERAL COMPOSITION, DEFECTS, STRUCTURE, FORMATION
	NO SEEPAGE	0.1		Dark brown, clayey SILT with rootlets. Soft.		TOPSOIL
		0.2		Orangy brown, sandy gravelly SILT. Gravel is fine to coarse, sub-angular to sub-rounded. Soft to firm.	moist	COLLUVIUM
		0.3				
		0.4		Pelitic SCHIST. Moderately weathered. Moderately strong. Foliation 18/216.		BEDROCK
				Total Depth = 0.4 m		
		0.5				
		0.6				
		0.7				
		0.8				

COMMENT:	Logged By: PGF
	Checked Date:
PHOTO REF.: N/A	Sheet: 1 of 1

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Tonkin & Taylor

1959 - 2009 50 YEARS

T&T Ref : 880044.3000 / LR001
26 November 2010

Beaver Contractors
c/- Clark Fortune McDonald & Associates
PO Box 553
Queenstown

Attention: Chris Hansen

Dear Chris

Remarkables View Sub-division, Queenstown
Site Layout in Relation to Queenstown Hill Landslide and Drainage Channel on the Western Boundary

1.0 Introduction

This letter has been completed by Tonkin & Taylor Ltd (T&T) and provides further information with regards to ground stability issues at the Remarkables View sub-division development, Middleton Road, Queenstown. This letter has been commissioned by Beaver Contractors and has been completed in accordance with the terms and conditions outlined in T&T proposal number 880044.00 / LoE001 dated March 2007.

This letter has been written as an addendum to and should be read in conjunction with T&T's Geotechnical Assessment Report completed for the site in April 2007 (GR001 880044.00).

The sub-division layout plan used for this assessment was provided by Clark Fortune McDonald & Associates (Job Number 10531, Drawing Number E001, dated 14 September 2010).

2.0 Observed Instability

During the site inspections completed in 2007 instability was observed in close proximity to the western boundary of the proposed subdivision. The areas of instability generally comprise the following:

- **The Queenstown Hill Landslide.**
  This feature is a large, historic and well documented landslide identifiable on the ground and from aerial photography. The main landslide body is located approximately 60m to 140m beyond the western boundary of the proposed subdivision and is not within the site boundary. Prior to site works completed for

this letter report the eastern margin of the landslide was poorly defined and the extent of active, inactive and unaffected areas required further investigation.

- **Shallow soil instability.**

  Shallow surface instability has been identified, typically comprising down slope creep of soil materials, minor scarp formation and terracing. The observed instability is shallow (typically <1.0m) and occurs as a result of high ground and surface water flow. This instability is not considered to be associated with any wider or deeper seated stability related to the adjacent Queenstown Hill landslide, and is typical of that observed in hillside environments.

3.0 Ground Investigations and Observed Geology

The following ground investigations have been completed along the western margin of the proposed subdivision for the purposes of this letter report:

- 19 test pits to depths of between 4.5 and 0.9m, and;
- Mapping of schist exposures and geomorphological features.

The locations of the test pits and mapped schist outcrops are shown on the attached Figure 1. The ground investigation was completed in October 2010.

4.0 Observed Geology

The subsurface materials encountered during the site investigation typically comprised:

- 0.1 to 0.7m of Topsoil, overlying;
- 0.0 to 0.5m of Colluvium, overlying;
- 0.0 to 4.0m of Alluvial materials, overlying;
- 0.0 to 1.3m of Glacial Till, overlying;
- Schist Bedrock at a depth of between 0.0 and 6.0 m below the existing ground surface.

The materials observed in the site investigation area consistent with those observed during T&T's 2007 geotechnical assessment. T&T's Geotechnical assessment report should be referred to for full descriptions of these materials and a general appraisal of the geological environment.

5.0 Observed Instability

The following comments are made with respect to stability along the western boundary of the proposed subdivision.

5.1 Queenstown Hill Landslide

Evidence from the test pit investigation and field mapping indicates the eastern margin of the Queenstown Hill landslide does not encroach into the western areas of the proposed sub-division. Orientations of the schist foliation along the western boundary are generally dip

direction = 240 to 280°/dip angle = 30 to 50°, and are typical of those observed in central and eastern areas of the sub-division. The foliation orientations indicate there has been no localised displacement of the schist bedrock material.

Field and aerial mapping confirms the active boundary of the landslide to be approximately 60 to 140m to the west of the proposed lots. There was no evidence for inactive landslide and associated unstable rock materials present between the active landslide and the western boundary of the proposed sub-division.

5.2 Shallow Soil Instability

Surface and groundwater flow paths were observed in close proximity to the western boundary of the proposed sub-division. The approximate locations of the flow paths are marked on attached Figure 1a. The observed flows are typically channelled into the gully present on the western margin of the site, as identified during construction of the lower part of the subdivision in 2007. Some shallow soil instability, typically comprising terracing ≤0.5m in height, was observed during the 2010 site inspection.

The observed instability is generally considered to be minor in nature and typical of that present in most Otago hillside environments. The instability is not expected to pose a significant risk to the proposed sub-division provided adequate drainage measures and appropriate earthworks are constructed in the affected areas. It should be noted that during the first phase of the subdivision construction (2007) earthworks have been completed in wet materials present in the lower area of the drainage gulley. In this area drainage measures were successfully constructed in to control surface and shallow ground seepage, and reduce the risk of instability to acceptable levels. It is expected that the same process will be undertaken as the sub-division extends upslope.

6.0 Conclusions and Recommendations

The following conclusions and recommendations are provided with respect to instability along the western margin of the proposed sub-division.

- The Queenstown Hill landslide is not considered to pose a significant risk to the proposed sub-division and no further works are required to establish the location of the eastern margin of the landslide in relation to the proposed Lot locations;
- Shallow instability associated with ground and surface water drainage was observed, however is considered to be minor in nature and typical of that present in most hillside environments in the Otago region.
- As the earthworks advance into areas of higher ground and surface water flows additional geotechnical inspections should be completed. These inspections should confirm the extent and nature of the requirements for slope re-profiling, subsoil drainage measures and other appropriate stabilisation measures as necessary (as completed during 2007 for the lower gully area);
- Where wet ground is present, temporary and permanent batter slopes should be constructed in accordance with the recommendations for wet soils in Table 5.3 and 5.4 of the previously issued T&T Geotechnical Assessment Report (Ref No .880044.00);

- Appropriate allowance should be made in the construction budget for drainage measures such as cut-off drains, horizontal and counterfort drains;
- Where appropriate, areas of vegetation should be left in place to improve stability of the near-surface soils and provide some erosion protection to the soil slopes whilst appropriate drainage construction or slope re-profiling is completed;

7.0 Report Closure

This report has been prepared by Tonkin & Taylor Ltd for the sole benefit of Beaver Contractors with respect to the particular brief given to us and it may not be relied upon in any other context or for any other purpose without our prior review and written agreement.

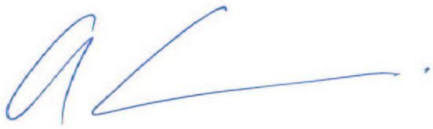
TONKIN & TAYLOR LTD
Environmental and Engineering Consultants

Report Prepared by:

……

Paul Faulkner
Engineering Geologist

Authorised for Tonkin & Taylor By:



……

Anthony Fairclough
Project Co-ordinator

Attachments: Figure 1a.

26-Nov-10
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FIGURE 1a

OUTCROPS, FOLIATION APPROXIMATELY 240-260

APPROXIMATE EDGE OF ACTIVE QUEENSTOWN HILL LANDSLIDE FROM T&T. PLANS & AERIAL MAPPING

OUTCROP A–K

TEST PIT 1–19

FOLIATION ORIENTATION (DIP DIRECTION/DIP)

OBSERVED OVERLAND & SHALLOW SOIL FLOW PATH

RANDOMLEY ORIENTATED SCHIST BLOCKS

FOLIATION MEASUREMENTS CUTS ABOVE ROAD

LOT 2 DP 351844

SEC 28 Blk XXI Shotover Survey District

SEC 1 SO 24003

SEC 64 Blk XXI Shotover Survey District

48 DP 20704

47 DP 20704

46 DP 20704

45 DP 20704

33 DP 10197

REFER PLAN 10471 E002

REFER PLAN 10226 E002

REFER PLAN 10534 E002

OVERHEAD POWER LINES

LIMIT OF CONSTRUCTION

NORTH

CLIENT REVIEW 30.09.10

Shotover Design Limited trading as
Clark Fortune McDonald & Associates
Licensed Cadastral Surveyors - Land Development - Planning Consultants
309 Lower Shotover Road, P.O.Box 553 Queenstown
Tel. (03)441-6044, Fax (03)442-1066, Email admin@cfma.co.nz
21 Reece Crescent, P.O.Box 550, Wanaka
Tel. (03)443-4448, Fax (03)443-4445, Email admin@cfma.co.nz
Shop 2, Otago House, 475 Moray Place, P.O. Box 5960
Tel. (03)470-1582, Fax (03)470-1583, Email admin@cfma.co.nz

Rev	Date	Revision Details	By
-	-	-	-

Tonkin & Taylor Ltd
Geotechnical Assessment November 2010
Job Number: 880044.300

FIGURE 1a

	Surveyed	Signed	Date	Job No.	Drawing No.
	Drawn	Signed	Date	Scale	1:1000 @ A1 1:2000 @ A3
	Designed	Signed	Date	Datum & Level	Rev.
				MSL	-

Notes:
All dimensions shown are in meters unless shown otherwise.
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S:\JOBS\10500\10531\acad\Engineering Drawings\10531_E001-E017_Engineering Design_29sept10.dwg Plotted 11 10 2010

GEOSOLVE
GEOTECHNICAL ENGINEERING | ENGINEERING GEOLOGY | PAVEMENTS | HYDROGEOLOGY | HYDROLOGY

ACENZ MEMBER

GeoSolve Ref: 150639
24 September 2015

Queenstown Hill Joint Venture
C/- Clarke Fortune McDonald & Associates
PO Box 553
Queenstown

Attention: Emma Dixon

Dear Emma,

Boundary Variation
Remarkables View Sub-division

1.0 Introduction

The letter details the results of an assessment completed by Geosolve Limited of the proposed boundary variation at the Remarkables View subdivision, with respect to the Queenstown Hill Landslide.

The work described in this letter has been completed in accordance with the terms and conditions outlined in Geosolve proposal reference number 150639, dated 23rd September 2015.

2.0 Proposed Boundary Change

The extent of the proposed boundary changes addressed by this report are shown on the attached plan completed by Clark Fortune McDonald & Associates (CFMA). The plan indicates it is proposed to extend areas of the sub-division in a westerly direction. This will result in the subdivision being closer to the existing Queenstown Hill Landslide located a short distance to the west.

3.0 Assessment

Work completed for the purposes of this assessment includes:

- A review if existing reporting and mapping data completed by the Tonkin & Taylor Ltd (T&T), and the undersigned, during 2010 for the previously proposed layout (T&T ref 880044.300 dated 26th November 2010). This work included detailed geomorphological mapping of the area and a test pitting exercise to assess the nature of the underlying soil and rock materials, and;
- A site inspection to review the proposed new boundary locations.

Extensive mapping and investigation was completed by the undersigned in 2010 to determine the approximate location of the landslide feature. Mapping of existing rock outcrops was supplemented by test pitting data in order to ascertain any variation in the schist foliation orientation. The approximate location of the landslide boundary was then determined. A summary map of the work completed by T&T in 2010 is attached.

A review of the existing data and inspection of the site indicates the proposed 2015 sub-division boundaries do not encroach into the area of the landslide, which is located approximately 30m beyond the nearest part of the proposed boundary.

4.0 Conclusion and Recommendations

In conclusion the proposed new boundary is assessed to not encroach onto the Queenstown Hill Landslide and is therefore considered acceptable. Due to the proximity of the landslide an increased level of fracturing may be present in the rock mass in some areas, however standard engineering solutions are expected to be appropriate to address this eventuality.

5.0 Applicability

This report has been prepared for the benefit of Queenstown Hill Joint Venture with respect to the particular brief given to us and it may not be relied upon in other contexts or for any other purpose without our prior review and agreement.

Yours faithfully,

Paul Faulkner

Senior Geotechnical Engineer

Attachments: Proposed Boundary Change Plan
T&T 2010 Site Map.

RURAL GENERAL ZONE

EDGE OF LANDSLIP AS PER T AND T REPORT DATED 2010

190

505

STAGE 5

143

142

134

182

183

184

185

186

187

188

189

LOW DENSITY RESIDENTIAL ZONE

117
921m2

118
908m2

119
662m2

120
738m2

121
838m2

122
913m2

123
696m2

124
608m2

320
678m2

321
618m2

322
1006m2

323
1180m2

STAGE 1

601
210m²

Old Boundaries

New Boundaries

501
9274m2

109
901m2

108
900m2

107
675m2

106
631m2 net
100m2 row
708m2

110
603m2

112
610m2

111
600m2
177m2 row
777m2

113
601m2
307m2 row
908m2

114
600m2

115
618m2 net
261m2 row
861m2

116
624m2

101
609m2

102
900m2

103
900m2

104
638m2

105
638m2

510
1707m2

700
2.16ha
Balance

QUEENSTOWN HEIGHTS
LOW DENSITY RESIDENTIAL
SUB-ZONE

600

600
7570m2
TO VEST IN THE QLDC
AS RECREATION RESERVE

131

132

CLIENT REVIEW 21.09.10

Shotover Design Limited trading as
Clark Fortune McDonald & Associates
Licensed Cadastral Surveyors - Land Development - Planning Consultants
309 Lower Shotover Road, P.O.Box 553 Queenstown
Tel. (03)441-6044, Fax (03)442-1066, Email admin@cfma.co.nz

Shop 2, Otago House, 475 Moray Place, P.O. Box 5960
Tel. (03)470-1582, Fax (03)470-1583, Email admin@cfma.co.nz

Rev.	Date	Revision Details	By
-	-	-	-

QUEENSTOWN HILL JOINT VENTURE CONCEPT PLAN
VARIATION TO STAGE 1 -
OLD V NEW BOUNDARIES

Client	Surveyed	Signed	Date	Job No.	Drawing No.
QTWN HILL JOINT VENTURE				12013	01
	Drawn ED	Signed	Date Aug 15	Scale	1:500 @ A1 1:1000 @ A3
	Designed JK/NM	Signed	Date July 15	Datum & Level Mt Nic 2000 & MSL	Rev. -

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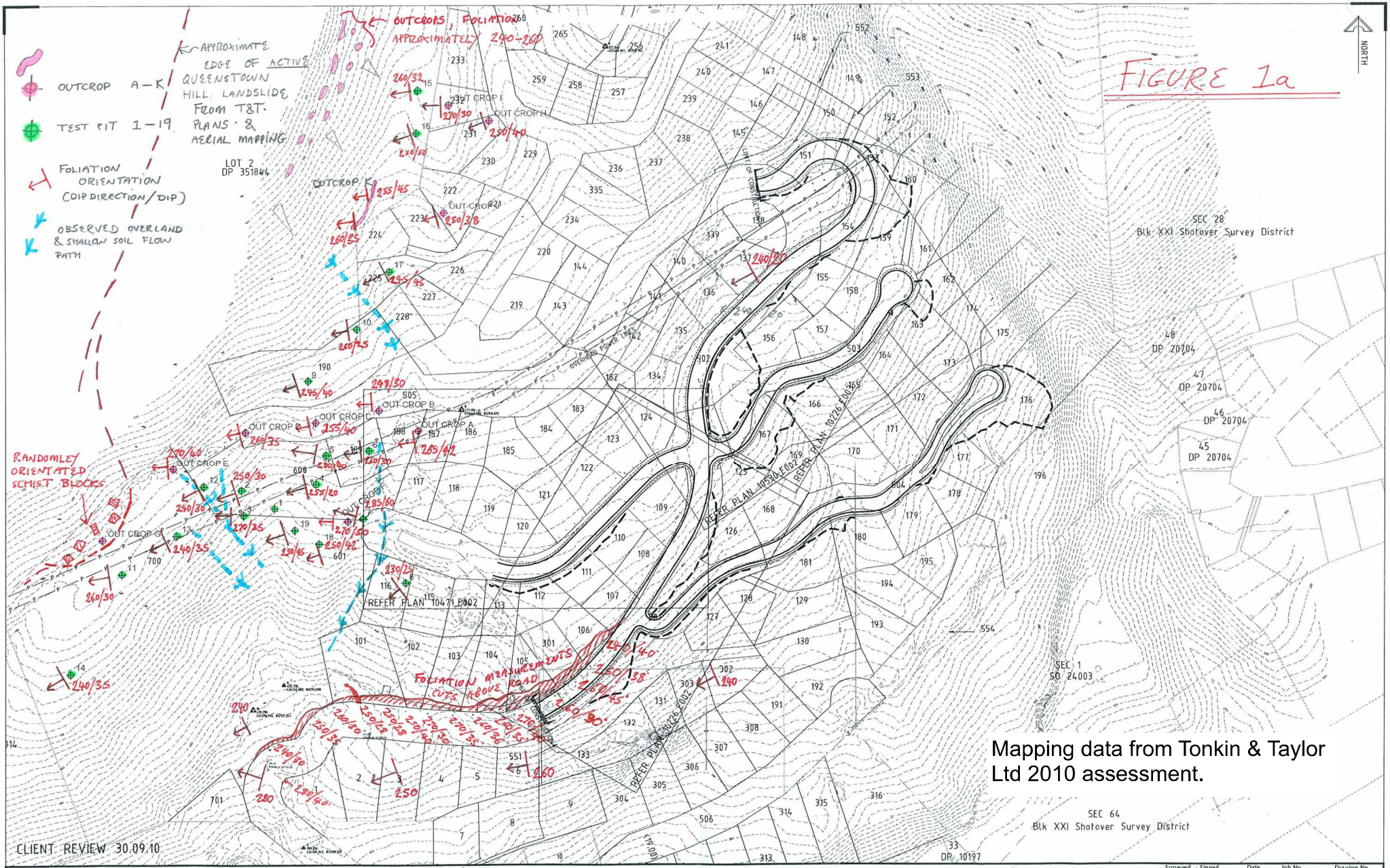
S:\JOBS\12000\12013\acad\12013 1 Variation Plan _ Rev B.dwg Plotted: 31.08.2015



Clark Fortune McDonald & Associates
Licensed Cadastral Surveyors - Land Development - Planning Consultants
309 Lower Shotover Road, P.O.Box 553 Queenstown
Tel. (03)441-6044, Fax (03)442-1066, Email admin@cfma.co.nz
21 Reece Crescent, P.O.Box 550, Wanaka
Tel. (03)443-4448, Fax (03)443-4445, Email admin@cfma.co.nz
Shop 2, Otago House, 475 Moray Place, P.O. Box 5960
Tel. (03)470-1582, Fax (03)470-1583, Email admin@cfma.co.nz

Rev. | Date | Revision Details | By

Tonkin & Taylor Ltd
Geotechnical Assessment November 2010
Job Number: 880044.300

FIGURE 1a

Surveyed | Signed | Date | Job No. | Drawing No.
Drawn | Signed | Date | Scale 1:1000 @ A1, 1:2000 @ A3
Designed | Signed | Date | Datum & Level MSL | Rev. –

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S:\JOBS\10500\10531\acad\Engineering Drawings\10531_E001-E017_Engineering Design_29sept10.dwg Plotted 11.10.2010

IN THE MATTER	of the Resource Management Act 1991
AND	
IN THE MATTER	of an application for resource consent
BY	ALBATROSS QT LIMITED
	Applicant
TO	QUEENSTOWN LAKES DISTRICT COUNCIL
	Consent Authority
	RM050520

DECISION OF COMMISSIONERS

(Trevor J Shiels and Lyal Cocks)

20 May 2008

A INTRODUCTION

1. We have been appointed as Commissioners to hear and determine a resource consent application on behalf of the Queenstown Lakes District Council.

2. The Applicant applies for subdivision consent to subdivide a property at 658A Frankton Road, Queenstown. The legal description of the site is Lot 2 Deposited Plan 305273. It has an area of 3.5105 hectares. The title reference is Computer Register Freehold 21293 (Otago).

3. The Applicant seeks to subdivide the property into 17 new residential allotments, ranging in size from 902m^2 to 8261m^2, with a balance of 7160m^2 being a private road within the subdivision.

4. The site is to the north of State Highway 6A (Frankton Road) between Queenstown and Frankton. It is on a steep south facing slope that rises above the highway. The site has views over Lake Wakatipu and surrounding mountains. Vegetation has recently been cleared. The site is now predominantly clear. There are rock outcrops on it. There is also a small creek running through it.

5. The site is approximately 2.4 km west of the Frankton Roundabout, where State Highway 6 and 6A meet. The site has road access by a Transit approved crossing point from Frankton Road. Three adjoining properties also share that access. Greenstone Terrace Apartments are to the west of the access (i.e. towards Frankton). Remarkables Apartments are to the east of the access (i.e. towards Queenstown). They are both immediately above the road. Each has a legal frontage to Frankton Road but no practical or lawful vehicular access to it, other than by way of the easement over the Applicant's property. Significantly further up the hill, and immediately to the east of the Applicant's site, is Pencarrow Lodge. It shares the same crossing point and has a long access way by way of an easement over the Applicant's property. To allow the proposed subdivision, that access would need to be altered. The easement document contemplates the possibility of altering the access and the easement to facilitate development of the Applicant's property.

6. On the opposite side of Frankton Road, there are several multi-unit residential developments. Greenstone Terrace Apartments and the Remarkables Apartments are effectively in front (to the south) of the main part of the Applicant's site. The sites to the west and north of the main part of the Applicant's site contain limited development, but share the same zoning. Pencarrow Lodge is immediately to the east of the main part of the Applicant's site.

7. The proposed subdivision requires approximately 12,000m^3 of

earthworks, for access and site development.

8. The Applicant proposes that a private road be formed from Frankton Road through the subdivided site to give access to the subdivided lots. The road was referred to in the documentation and at the hearing as "Road 6", and has a proposed lot number in the subdivision of Lot 200. It follows the current access used by Pencarrow Lodge for approximately 100 metres, but then takes a different line which is less steep but includes a tight bend. It then goes in the direction of the east of the site, where there is currently no formed access. Road 6 is a cul-de-sac. It has a turning circle at its end. There are six smaller branches from it, for further internal access. Access "A" is on the western boundary, towards the rear of the site. The existence of Access "A" leaves open the possibility of a vehicle link to any future development on the adjoining land to the west. Access "P" provides access to Pencarrow Lodge. Originally it was intended that each of the six branches from Road 6 be private easements of right of way. By the time of the hearing, it was proposed that Access "P" also be a private road.

9. The proposed legal width of Road 6 is 15 metres, but reducing to 12 metres where restricted by legal boundaries. The Applicant proposes a formed carriageway width of 6 metres and a maximum gradient of 1:6.

10. At the hearing, the Applicant proposes a legal width of 12 metres for Access "P", with a 3 metre formation.

11. For Access "G", the Applicant proposes a legal width of 6 metres with a 3 metre formation.

12. Details of the other accesses were largely uncontroversial and we do not need to set them out.

13. The Application was notified on 24 October 2007. There were 39 submissions received within the statutory time limit. Of these, 37 were in opposition, one from the New Zealand Fire Service asked for a condition, and one from the Otago Regional Council sought further investigations. There were seven late submissions. All were in opposition.

14. The Applicant did not consent to us receiving the late submissions and required us to make a ruling on them. We decided to accept the late submissions of S K Cuthbert, S Russell, L C Chui, and "The Balancing Act". Each of these submissions was only one day late and we saw no particular prejudice to the Applicant. Submissions from K & S Cook, M Andrews, and J Sanderson & J Billingham were four days late. There was no explanation of the lateness and there was no appearance by these people at the hearing. We decided to reject

these submissions. The submission of I Horrocks was four days late. Mr Horrocks is the Secretary of the Body Corporate for the neighbouring Greenstone Terrace Apartments. It was not clear whether the Body Corporate as such had been served with notice of the Application and it came to Mr Horrocks' attention quite late. The viewpoint of the Body Corporate of the neighbouring property is important. In those circumstances, we decided to accept that late submission.

15. An Affected Party Approval form was received from Transit New Zealand.

16. The hearing was held at Queenstown on 3 and 4 March 2008. We were assisted at the hearing by:

▪ Ms Rachel Beer	Committee Secretary, Lakes Environmental Ltd
▪ Mr Christian Martin	Planning Team Leader (Wanaka), Lakes Environmental Ltd
▪ Ms Malika Rose	Engineer, Lakes Environmental Ltd

17. At the hearing, appearances were entered as follows:

▪ Applicant	Mr M Garbett, Counsel
▪ B & K Moers (Pencarrow Lodge)	Mr R Makgill, Counsel
▪ S Wilde	Mr S Wilde
▪ I Horrocks (Secretary Greenstone Terrace Apartments Body Corporate)	Mr I Horrocks

18. A letter on behalf of the New Zealand Fire Service and an email from the Otago Regional Council were tabled at the hearing.

19. Prior to the hearing, we visited the site accompanied by Mr Martin, and Ms Rose. We also read and considered documents as follows:

- The Application and documents in support of it as appearing in the published Agenda for the meeting.
- The submissions of the submitters. (We have now disregarded the submissions of the late submitters whose submissions we did not accept).

- The section 42A Report prepared by Mr Martin and accompanied by the Engineering Report by Ms Alice Hill, Engineer, Lakes Environmental Limited, and also the Infrastructure Report in relation to the Application prepared by Rationale Limited, another Council contractor.

B CONSENTS REQUIRED

20. There was no suggestion that we needed to refer to the Queenstown Lakes District Council Transitional District Plan. The only relevant District Plan document is the Queenstown Lakes District Council Partially Operative District Plan (hereafter 'the Plan'). Plan Change 6 to the Plan also needs to be considered.

21. Under the Plan, the site is zoned Low Density Residential, as are all the immediately adjacent properties.

22. Under Rule 15.2.3.2, the subdivision would be a controlled activity with Council's control limited. The matters over which Council reserves control are set out in various parts of Section 15, but the potentially relevant ones appear to be as follows:

    - Sizes and dimensions of lots for access, utilities, reserves and roads (Rule 15.2.6.1(ii)).

    - Various matters in relation to subdivision design (Rule 15.2.7.1).

    - Various matters relating to property access (Rule 15.2.8.1 – not yet operative). We note that this rule is primarily concerned with access to the subdivided lots but is wide enough to enable us to consider interference with access to neighbouring properties.

    - The effect of listed natural and other hazards on the land within the subdivision and the effect of the subdivision on the impact of the listed natural and other hazards on the site or on other land in the vicinity. The listed hazards are as follows:

        (a) Erosion
        (b) Flooding and Inundation
        (c) Landslip
        (d) Rockfall
        (e) Alluvion
        (f) Avulsion
        (g) Unconsolidated Fill
        (h) Soil Contamination
        (i) Subsidence

(Rule 15.2.10.1)

- Various matters relating to water supply (Rule 15.2.11.1).
- Various matters relating to stormwater (Rule 15.2.12.1).
- Various matters relating to sewage treatment and disposal (Rule 15.2.13).
- Various matters relating to energy supply and telecommunications (Rule 15.2.15).
- Financial contributions to the provision of land and/or facilities for open space and recreation (Rule 15.2.16.1).
- Controls in respect of the creation or cancellation of easements for any purpose (Rule 15.2.18.1).

23. We reject the submission from Mr Makgill, supported to some extent by the planning witness for his clients, Mr Paul Whyte, that a separate land use consent is required for the proposed earthworks. His submission was that Rule 7.3.3.1(xv) imposed a relevant Site Standard for earthworks in the Residential Zones, and that compliance with that standard was a pre-condition for residential activity to be a permitted activity. But, as he acknowledged, that standard is qualified as follows:

> "except for earthworks associated with a subdivision that has both resource consent and engineering approval."

He argued that the proposed earthworks do not have resource consent or engineering approval at this time. That is correct, but irrelevant. There is no requirement for those consents to be in place before a subdivision consent is granted. The consents are only needed at the time when the earthworks are done.

24. We accept that the Assessment Matters for Earthworks in the Residential Zone are expressed more fully than those for earthworks associated with a subdivision. That is not sufficient to lead us to prefer a meaning of the rules other than the plain and obvious one. Further, while the Assessment Matters are more fully expressed in the Residential Zone, we are satisfied that there are no relevant matters that we cannot consider under the controls, and also Assessment Matters and Objectives and Policies, applicable to a subdivision consent application.

25. Mr Makgill also submitted that the Application was for a restricted discretionary activity because of non-compliance with a standard in the Transportation Section of the Plan. Under Rule 14.2.2.3, an activity that does not comply with a Site Standard in the

Transportation Section is a discretionary activity with the exercise of the Council's discretion being restricted to the matter(s) specified in that standard.

26. We then need to look at the potentially relevant standards in Section 14. We were particularly referred to Rule 14.2.4.1(iv) as follows:

> "**iv Parking Area and Access Design**
>
> All vehicular access to fee simple title lots, cross lease, unit title or leased premises shall be in accordance with the standards contained in NZS4404:1981, including amendments adopted by Council and subsequent amendments and updates of this Standard. Off-street parking spaces shall be separated from footpaths or adjoining roads by a physical barrier."

27. Plan Change 6 is relevant to that rule. It was notified on 12 October 2005, which is after this Application was lodged in June 2005. In due course, decisions were made on submissions and cross-submissions lodged, and these were notified on 17 October 2007. The decision was to amend Rule 14.2.4.1(iv) to read as follows:

> "**(iv) Parking Area and Access Design**
>
> All vehicular access to fee simple title lots, cross lease, unit title or leased premises shall be in accordance with the standards contained in NZS4404:2004, and
>
> All shared vehicular access serving residential and/or visitor accommodation units in the High and Low Density Residential Zones shall be in accordance with the standards set out in NZS 4404:2004 except for developments identified in the table below:

The Greater of the Actual Number of Units Serviced or; the Potential Number of Units served by the Access as a Permitted or Controlled Activity	**FORMED WIDTH (m)**	**LEGAL WIDTH (m)**
1 to 6	3.5	4
7 to 12	5	6

> Where the shared vehicle access adjoins a local distributor or higher road in the hierarchy, including a State Highway, it shall have a 5m formed width and a 6m legal width for a minimum length of 6m as measured from the legal road boundary.
>
> No private way or private vehicle access or shared access shall serve sites with a potential to accommodate more than 12 units on the site and adjoining sites.
>
> Private shared vehicle access shall have legally enforceable

> arrangements for maintenance put in place at the time they are created.
>
> Formed access widths for 1 to 6 units shall provide passing bays at intervals no greater than 25 metres (end of one passing bay to the beginning of the next) along the length of the access way. Passing bays shall be at least 8 metres long and at least 2.5 metres wide, plus any tapers desired."

28. In the partially operative plan, the standard makes an express reference to off-street parking spaces, but otherwise what is required has to be ascertained from the documents referred to. In the Plan Change 6 version of the standard, rather more is expressly set out. It is a later edition of NZS 4404 that is referred to. There are also references to documents other than NZS 4404:2004 itself.

29. There are unresolved appeals to the Environment Court against Council's decision on Plan Change 6, including at least one against the whole Plan Change.

30. At this stage of the decision our concern is to establish the activity status. Under Section 88A the activity status of the Application is fixed at the time it is lodged. It follows that we need to consider whether the proposal does comply with the Site Standard in Rule 14.2.4.1(iv) of the partially operative plan.

31. That so-called Site Standard has some legal difficulties. It is certainly open to the drafters of the Plan to express a Site Standard by reference to some externally established standard (and in particular a New Zealand Standard). What they cannot legally do is have a Site Standard in the Plan that is automatically amended by amendment or replacement of the externally established standard, and without going through the plan change process. Nor can the Site Standard in the Plan be subsequently amended by some Council process other than a Plan Change under the Resource Management Act.

32. In June 1994 the Council adopted amendments to NZS 4404:1981. This was before the District Plan was even notified. We therefore read the Site Standard in the partially operative plan as referring to NZS 4404:1981 as modified by Council in June 1994. We disregard NZS 4404:2004 in interpreting and applying Rule 14.2.4.1(iv) of the partially operative plan.

33. In applying the Site Standard to the factual circumstances we are dealing with, the first question we have to decide is whether vehicular access is in accordance with the standards contained in NZS 4404:1981, including the amendments adopted by the Council in June 1994.

34. NZS 4404:1981 (as modified) is not totally prescriptive. For example, Part 301.1.4 is as follows:

> "**301.1.4** Street design guidelines set out herein cannot be expressed entirely in performance terms nor can any single set of design standards be suitable for all local conditions. The following section of this Code is not intended to be a comprehensive design guide but to focus on a number of considerations which may be regarded as significant in meeting the design objectives." *(emphasis added)*

See also Part 301.1.6 as follows:

> "**301.1.6** The information presented should be appropriate for use as a general guide towards identification of functional, durable, cost effective urban street design and also to achieve residential streets in good living environments with long term public and private economies." *(emphasis added)*

35. We were particularly referred to Table 1 (as modified) of NZS 4404:1981. The status of Table 1 is set out in Part 30.2.2.2 of the New Zealand Standard as follows:

> "**301.2.2.2** ….. Table 1 suggests a relationship of street function to geometric structural design and is included as an indication of the type and range of streets and private streets that could be provided for in the proposed subdivision. It should however be noted that in terms of Section 325 and Section 347 of the Local Government Act 1974, the width of streets, access ways and service lanes must be in accord with the provisions of the district scheme or alternatively, in the case of streets only, in accord with the bylaws of the council." *(emphasis added)*

36. See also Part 301.2.2.5 as follows:

> "**301.2.2.5** Recommended carriageway widths are for acceptable practice. Where topography or other considerations make these dimensions technically difficult and uneconomical, they may be reduced."

37. In our view, it follows from the above quotations that Table 1 is not intended to be prescriptive, but is a "guideline" or "general guide", "suggests a relationship", and "is an indication of the type and range of streets and private streets that could be provided". Further, recommended carriageway widths are "for acceptable practice" but "may be reduced" where topography or other considerations make these dimensions technically difficult and uneconomic.

38. At most, what is proposed departs from guidelines. We cannot say that what is proposed is not "in accordance with the standards contained in NZS 4404:1981 (as amended)". Therefore, it complies

with the Site Standard in Rule 14.2.4.1(iv) of the partially operative plan.

39. An alternative approach is to note that NZS 4404:1981 (as amended) contemplates that there will be departures from Table 1. In particular, the possibility of topography making Table 1 dimensions technically difficult and uneconomic is identified on the Standard as a possible reason for reducing them. The Applicant particularly relies on the topography as a reason for departing from Table 1. So the departure and reason for it are both contemplated by NZS 4404:1981 (as amended). In those circumstances, we do not think it can be right to say that the vehicle access is not in accordance with the standards contained in NZS 4404:1981 (including amendments adopted by Council). They may not be in accordance with the figures in Table 1, but that is a different question.

40. Ms Rose also drew our attention to Rule 14.2.4.2(iii) of the partially operative plan. Nothing in Plan Change 6 would affect it. That rule is a Site Standard for a maximum gradient of 1 in 6 for a "private way". Road 6 is a "private way". Mr Makgill argues that, by reference to one or both editions of NZS 4404, the gradient required is a maximum of 1 in 8, and any departure from that requires a restricted discretionary activity consent. We do not agree. The Site Standard expressly dealing with gradient must take priority over any general reference to NZS 4404. That Site Standard in the partially operative plan is complied with.

41. We conclude that all the Site Standards in Section 14 of the partially operative plan are complied with. Therefore, as far as Section 14 is concerned, the proposed activity is a permitted one.

42. Plan Change 6, the external documents, and possibly the amendments to them may well be relevant, but not to the activity status.

43. A further matter that Mr Makgill raised was Section 106. This was also raised in the Otago Regional Council submission. As far as is relevant, it provides that, notwithstanding controlled activity status, we can refuse consent or impose conditions if we consider either that the Applicant's site is likely to be subject to material damage by erosion, falling debris, or slippage, or that any likely subsequent use of the Applicant's site is likely to accelerate, worsen, or result in material damage to the site, to other land, or to a structure, by erosion, falling debris, or slippage.

44. Mr Makgill submitted that the Applicant had provided insufficient information on the underlying stability of the site and its ability to accommodate the earthworks without incurring significant destabilisation and erosion. He referred to the evidence of Mr Young,

a geotechnical expert, and Mr Whyte and said that "by implication [they] contend that it is their view that the geotechnical information at hand indicates that there is a serious or real and substantial risk that the proposal will result in significant erosion, subsidence, or slippage". But their evidence did not say that, and Mr Makgill did not invite them to say that. We do not see that conclusion as implicit in their evidence. If that was their considered professional view (and assuming they were qualified, and had done the appropriate investigation to justify it), their professional duties required them to say so explicitly.

45. We should not overlook that Council has zoned this site for residential purposes. We will not readily assume that the area in general is in fact unsuitable for residential use. We would consider any site specific evidence, and would not close our minds to the possibility that the Council's zoning is fundamentally flawed. But there is no evidence, only speculative comments.

46. There is no jurisdiction for us to refuse consent under Section 106.

47. Overall, the proposal is a controlled activity.

C EVIDENCE AND SUBMISSIONS

48. We now summarise some of the key points of the submissions and evidence. This includes some comments and conclusions on the evidence.

- Submissions of Michael Garbett

49. Mr Garbett addressed us briefly and described the site and the relevant Plan provisions. He noted that while the Application had originally specified access to the subdivided lots by way of easements, the proposal had now changed so that access would be primarily by way of private road. We are satisfied that no jurisdictional issue arises from this change. He also explained the site layout, including a pedestrian easement and reticulation of services. He noted that the Applicant did not submit that there was any relevant permitted baseline.

50. Mr Garbett also submitted to us that the new private road proposed would in fact be a benefit for the neighbouring Pencarrow Lodge which we should take into account.

- Evidence of Gary Huish

51. Mr Huish is an experienced Traffic Engineer employed by Traffic Design Group Ltd. He gave evidence about the following issues:

    - The standard of the access road including the width, gradient

and pedestrian facilities;

- Additional levels of vehicular traffic that are likely to be created by the proposed development and the resulting traffic effect on the surrounding road network.

52. He described the site location, particularly from a traffic perspective. As already noted, access to the lots within the proposed subdivision would be primarily by way of a private road. Mr Huish explained this, and the access ways from it, their dimensions, relevant standards, and the effects on the neighbours (Greenstone Terrace Apartments, Remarkables Apartments, and Pencarrow Lodge). He accepted (on behalf of the Applicant) a number of the suggestions made in the section 42A Report for minor design changes or conditions.

53. He also noted that Frankton Road, as well as being a State Highway under the control of Transit New Zealand, is identified in the Plan as a major arterial route. Mr Huish then went on to give relevant statistics about the traffic volumes on Frankton Road and also survey material about turning movements to and from the entrance to Greenstone Terrace Apartments and Remarkables Apartments. He then analysed the traffic likely to be generated by the proposal and the effects of this on the access way and on Frankton Road, the District Plan provisions, and the particular points made by the submitters.

- Evidence of Graham Salt

54. Mr Salt is a Senior Geotechnical Engineer with Tonkin & Taylor Ltd and had earlier prepared reports filed by the Applicant with the Application. He identified the geotechnical issues, with the site having relatively shallow schist bedrock and being steep. There are defects within the schist which are the key geotechnical considerations, both under normal conditions and in earthquake conditions. However, he explained that well-established and standard engineering solutions are available and that a conservative design approach had been followed. He confirmed acceptance of the conditions proposed by the section 42A Report.

55. Mr Salt's approach was to accept that there were areas of uncertainty about precise design solutions, and these would have to be developed as work proceeded. However, he was confident there were available solutions for both the formation of the access road and for subsequent buildings on the various lots.

56. Mr Salt referred to the "stability zones" which were explained in more detail in the reports accompanying the Application. He has divided the site into six zones, to assess the suitability of specific areas for residential development. Zones A to E have varying levels of suitability or potential suitability for residential buildings, and it is

proposed that there be varying requirements for further geotechnical engineering investigation and reports before building takes place. Zone F is definitely unsuitable. The Applicant proposes that the subdivision consent prevent future building on Zone F. The mechanism for this is by way of identified building platforms on some of the lots and controls contained both in the subdivision consent conditions and in a consent notice.

57. He did not accept the view of one submitter that the work to be done would trigger a slip that would affect Greenstone Terrace Apartments and State Highway 6A. While that submitter has engineering qualifications he did not appear at the hearing and our inability to clarify matters with him limits the weight we can put on his submission. It is also relevant, as Mr Salt pointed out, that Transit New Zealand's geotechnical advisers did not share that concern. Mr Salt also gave a detailed response to a geotechnical report provided for Mr and Mrs Moers.

- Evidence of Chris Ferguson

58. Mr Ferguson is an experienced Planner, practising in Queenstown as Planning Manager with Clarke Fortune Macdonald & Associates.

59. He reviewed the District Plan provisions and noted the respects in which the subdivision was controlled. He then addressed the actual and potential effects of the environment and referenced these back to the criteria for controls.

60. He acknowledged the need to ensure that earthworks were appropriately retained and batters supported. He agreed with the section 42A Report recommendation for further conditions relating to the formation of a comprehensive site management plan to address effects of water runoff and dust.

61. Mr Ferguson also reviewed the issues relating to the private access road, its slope, and earthworks issues in relation to it. He noted that there is provision for access to future subdivisions and development on adjoining land through the linkages at Access A and Access P.

62. He also reviewed the geotechnical evidence and the zones with different levels of controls for future buildings. Mr Ferguson indicated that this could appropriately be secured by way of consent condition. Various issues had been raised in the section 42A Report about the precise terms of these conditions and additional conditions were suggested.

63. Mr Ferguson also explained the relationship of the identified Queenstown hill landslide (which is on the Hazards Register of the Council) with the site. He adopted the conclusions of Mr Salt that the

active slide toe was more than 70 metres upslope of the subdivision and presented no significant risk to either the subdivision or the State Highway below.

64. The issue of maintaining access to Mr and Mrs Moers' property was then reviewed. A particular problem is that construction of the proposed private road will interfere with the existing access to Mr and Mrs Moers' property and business. The Applicant had consulted contractors and defined the construction methodology and timing so that these effects could be better understood. As a result of this, two options were identified at the hearing. We will not complicate this decision with an attempt to describe in words what is plainly apparent from the diagrams produced.

65. We return to comment on Mr and Mrs Moers' concerns about the easement rights later, but at this stage note that the Applicant has gone to considerable trouble to present what we consider to be feasible options for maintaining access to that property. In particular, while the originally identified Option A may have led to interruptions of access for up to 30 minutes, Option B avoids this. We accept as a fact that in the long term, and once a new road is formed, Mr and Mrs Moers' property would benefit from a higher standard of road formation than presently exists.

66. Mr Ferguson went on to review the relevant District Plan Objectives and Policies. We express our own conclusion of these later in this decision and have taken into account everything he said.

67. The section 42A Report had raised the issue of whether resource consent was required from the Otago Regional Council for activities including earthworks, culverting, and discharge of stormwater to the small unnamed watercourse located within the north-western corner of the site. While the Otago Regional Council has submitted on the Application, the concerns raised in its submission were geotechnical. From the analysis presented by Mr Ferguson, we consider that no Otago Regional Council consent is necessary. If we are wrong on that, no consent we grant could avoid the need to obtain Otago Regional Council consent.

68. Mr Ferguson's conclusion was that the Applicant had identified the issues and methods to ensure stability and avoid development on unsuitable land. The Applicant had an expectation from the zoning that the land could be developed in accordance with the zone subject to dealing with the stability issue. He acknowledges the issue for Mr and Mrs Moers and accepted its significance to them. He noted that two options were being developed and that the Applicant was prepared to maintain access to Mr and Mrs Moers' property during construction by whichever option Mr and Mrs Moers chose.

- Submissions of R Makgill for Mr and Mrs Moers

69. Mr Makgill made submissions on a number of legal matters, which we deal with in this decision. He then introduced the evidence to be given by witnesses called for his clients.

- Evidence of Richard Young

70. Mr Young is a Senior Geotechnical Engineer with Beca Infrastructure in Christchurch and has provided advice to Mr and Mrs Moers based on information supplied by Tonkin & Taylor and Clarke Fortune Macdonald Associates with the Application.

71. Although he told us that he was familiar with the site, he does not appear to have done any significant site investigation work. We considered that his evidence was more a critique of possible ambiguities and uncertainties in the material provided for the Applicant rather than an independent assessment of the technical issues.

72. Mr Young referred us to published data indicating a high probability of an earthquake between 7.5 and 8 on the Richter scale along the South Island alpine fault within the next 50 years. However, as he acknowledged, if an earthquake of that magnitude were to directly affect the Applicant's site, instability of the surface material on the Applicant's site would not be the major concern for Mr and Mrs Moers.

- Further Consultation between the Geotechnical Experts

73. At the end of Mr Young's evidence, we were concerned that on very technical matters we were being presented with competing conclusions without the differences being clearly identified and analysed. We asked the geotechnical experts to confer further and report to us the next day and they agreed to do this. The next day, Mr Salt returned to the hearing and told us what he thought had been agreed with Mr Young and what he thought the differences were. Mr Young by this stage had returned to Christchurch. It transpired that Mr Young did not accept Mr Salt's report and, without objection from the Applicant, we later received from Mr Young his report on their discussions. We have taken into account what they both reported on their discussions, but in the end put little weight on it.

74. Overall, we were left very much with the initial differences between the two geotechnical experts unresolved. However, on reviewing the evidence, we consider Mr Salt had undertaken a careful and thorough analysis of the issues. He acknowledged uncertainty where there was uncertainty, and properly presented a professional opinion. We accept the point made by Mr Salt that the Applicant could not be expected to present fully-detailed plans at this stage and that in any

event the plans would need to be flexible to reflect what was found as work progressed. Nothing in what Mr Young said caused us to doubt Mr Salt's opinion that all stability issues can be adequately managed. We were somewhat concerned that Mr Young's evidence seemed designed to find fault with how matters were expressed and did not seem to be based on any independent field work or review of published material. We prefer the evidence of Mr Salt. Insofar as Mr Young's criticisms raise any doubts about the time to be taken for the work, we have taken this into account when considering the issue of disruption to access to Mr and Mrs Moers' property.

- Evidence of Paul Durdin

75. Mr Durdin is an Engineer employed as a Senior Transport Engineer with Abley Transportation Engineers Limited. He provided transportation evidence on behalf of Mr and Mrs Moers. His evidence was mainly concerned with the suitability of suggested conditions for ongoing access to Pencarrow Lodge and also the development standards at the proposed "access" roads.

76. He referred to the District Plan and Plan Change 6, NZS 4004:2004, and the Council's amendments and modifications to that, dated September 2005. He noted that NZS 4004:2004 provided a maximum gradient of 1 in 8 (12.5%). He considered that any departure from this could lead to treacherous driving and walking conditions in winter, given that the slope is south facing. He acknowledged that achieving a slope of 1 in 6 rather than 1 in 8 would be difficult given topographical constraints.

77. The Application proposed that "Access P" be formed to a width of 3 metres but Mr Durdin noted that NZS 4004:2004 would require a minimum formed width of 3.5 metres and recommended a condition to this effect. He also noted that if NZS 4004:2004 standards were applied, "Access P" should have a passing bay on it.

78. Mr Durdin did not suggest that we should decline consent but rather suggested that amended conditions should be imposed. This is significant in that, on any view of the planning rules, the only ground on which we could decline the Application would be access and parking issues, but the submitter's traffic expert did not feel able to ask us to do that.

79. In summary, Mr Durdin sought clarification on three points which we note, along with the outcome he contended for:

    (a) Maximum gradient of the access road.

        He contended this should be 1:8, or perhaps a heated road of 1:6.

(b) Minimum formed width of Access P.

He contended it should be 3.5 metres, not 3 metres.

(c) Requirements for passing bay(s) on Access P.

He considered there should be at least one.

- Evidence of Paul Whyte

80. Mr Whyte is an experienced Planner and a Senior Planner (Associate) in the Christchurch office of Beca Carter Hollings & Fermer. He is familiar with the Queenstown area and the site.

81. Mr Whyte noted the Low-Density Residential zoning and that Rule 15.2.3.2 stated that the subdivision shall be a controlled activity subject to compliance with all the Site and Zone Standards. He noted that some of the "standards" did not really justify that description and were more in the nature of Assessment Matters. Nevertheless, he accepted that in terms of the Subdivision Section the proposal is a controlled activity and complied with the Site and Zone Standards.

82. He then addressed the argument that a separate land use consent was required for the earthworks. We have dealt with and dismissed that argument.

83. He then referred to Rule 14.2.4.1(iv) in the Transport Section and Plan Change 6. His conclusion was that the Application was, in respect to access, a restricted discretionary activity. We deal with this particular issue elsewhere.

84. The actual and potential effects on the environment were then reviewed by Mr Whyte, with an emphasis on earthworks and stability, and the issue of access from Mr and Mrs Moers' property. We think it is fair to say that his criticism was not so much of the level of temporary access that the Applicant considered it would be able to provide but of a lack of guarantee that those expectations would be met.

85. Mr Whyte also reviewed the Objectives and Policies and we have taken everything he had to say on this and other matters in his evidence into account.

- Evidence of Kari Moers

86. Mrs Moers and her husband are the operators of Pencarrow Lodge, which had a Five Star rating. She described the activities on site and also the other activities that guests were involved in while staying at the Lodge. She listed various awards that the Lodge had received. She was concerned about any possible interruption to access to the

site, in particular for emergency services.

87. She described surface water issues they have encountered in their time at Pencarrow Lodge and explained her fears of slippage. She was also concerned about construction noise. She presented additional notes in response to the evidence that had been presented by the Applicant.

88. We have no doubt about the sincerity of the views of Mr and Mrs Moers and their genuine concern for the effect on them and their business. However, some of their concerns, e.g. surface water and construction noise, were expressed rather generally and without any technical data or expert opinion. In those circumstances, we can put very little weight on them.

89. One of their major concerns was continuation of access during the subdivision work. They have chosen to create their business up a steep hill where their only access is by way of a non-standard easement whereby the Applicant has the right (as between it and Mr and Mrs Moers) to vary the access way and construct a new one. While they are entitled to a proper consideration under the Resource Management Act of their concerns, they cannot necessarily expect this to give them the same benefit they would have if their property had public road access, or even a standard easement.

- Evidence of Ian Horrocks

90. In addition to his original submission, Mr Horrocks had made some further comment when writing to Lakes Environment Ltd on 20 February 2008 and that was included in the materials for the hearing.

91. To the extent that Mr Horrocks was complaining about past discussions with Council and Transit, we put that to one side. We can understand his frustrations but they are not matters that we should express a view on and nor should they influence our decision on the resource consent application.

92. Mr Horrocks was concerned with the 1 in 6 gradient on the proposed access to the subdivision. There is a fairly straight steep stretch of the private way where it would intersect with the access from Greenstone Terrace Apartments. Mr Horrocks was concerned about potential loss of control by vehicles in winter conditions. While he accepted that there was a condition for the maintenance of the access road, he doubted that this would be implemented in practice.

93. Mr Horrocks also believed that the present design of the entrance on Frankton Road was a danger and wanted the Council to address this, regardless of the proposal. In our experience, Transit New Zealand is particularly vigilant in protecting the interests of the highway users

when resource consent applications are made for adjoining properties. It has indicated its acceptance of the intersection of the access road and Frankton Road. That is notable.

94. Mr Horrocks also noted that Greenstone Terrace Apartments, Remarkables Apartments, and the proposed subdivision would share a common access on to the State Highway. He was concerned that the growth in traffic on the State Highway would mean that a right hand turn from this access would become impossible within five years. That concern was not expressed by any of the traffic experts but we accept that growth in traffic on the highway, even if not in the specified five years, could eventually make such a turn difficult. However, we consider that if this does happen it will be primarily because of growth of general traffic on the highway and will not be caused by this subdivision. For that reason, it is not really a relevant matter. It could only become significant if it caused on-site effects, e.g. queuing or excessive delays exiting. The evidence did not establish these effects were likely. Insofar as developments along Frankton Road are increasing the traffic on Frankton Road, this is a matter for the Council to keep in mind when making zoning decisions. The Applicant's land is zoned for residential use and it would not be appropriate to deny them their right to use it for residential purposes, even if Mr Horrocks' fears were borne out by expert evidence.

- Evidence of Steve Wilde

95. Mr Wilde owns an apartment at Greenstone Terrace Apartments. He said he was representing the Body Corporate Committee at the hearing. His originally filed submission is not expressed in that way but nothing turns on that. We accept his statement that the views he expressed were those of the Committee.

96. Mr Wilde was particularly concerned about the gradient of the road and its angle to Frankton Road, which he considered would prove hazardous in the winter months. He was critical of the way in which Mr Huish had dealt with this issue. He pointed out that as a private road the Council would have no obligation to provide gritting in winter. Partly as a result of this discussion, the Applicant proposed a condition for gritting of the road in winter conditions.

97. We accept that a relatively steep access road may present some problems in winter conditions. We note however that the subdivision site is zoned for residential use and not visitor accommodation. We think this increases the likelihood of drivers modifying their behaviour to the conditions. Driving difficulties in winter conditions are a factor common to a large number of Queenstown properties. This cannot now be a reason to prevent the owner from utilising the zoning given by the Plan.

98. Traffic engineering experience indicates that a right angle intersection with the road (which this access has) is generally preferable.

99. Mr Wilde wanted any consent conditioned on access not being onto Frankton Road. We doubt that we would have jurisdiction to impose such a condition, but in any event, having considered all the relevant evidence, we do not think any such condition is justified on the facts.

- Closing Statement from Michael Garbett

100. As usual, we asked staff to make concluding comments before inviting the Applicant to close. Ms Rose noted a need for conditions additional to those originally proposed. Mr Martin's view was that the Low-Density Residential Zone created a development right subject to conditions. Here, earthworks and stability were particularly relevant. He considered the grant of consent subject to conditions was appropriate.

101. Mr Garbett then addressed us on various legal issues including activity status. His submissions were helpful in relation to the need for a separate earthworks consent and also the applicable Transport Standards. He also noted that the Partially Operative District Plan's acceptance of a 1:6 gradient for a private way must prevail over anything inconsistent in either version of NZS 4404.

102. He then addressed us on issues relating to land stability and urged us to prefer the evidence of Mr Salt, which we have done.

103. In response to the submissions that the access way should be public, he advised us that the Applicant had sought the surrender of easements over the access way to enable this but they were not forthcoming. He further noted that the status of the access way as a private road does not extinguish the existing easements and that in the circumstances the suggestion that the access way should be a public road was impractical.

104. Mr Garbett then also reviewed various suggestions made during the course of the hearing about amended conditions and we have taken all of that into account.

105. At the end of Mr Garbett's closing submissions, Mr Makgill was able to advise us that Mr and Mrs Moers did have a preference for Option B of the two proposals for alternative access.

D STATUTORY CONSIDERATION

106. Section 104 sets out the matters we are to consider. The relevant parts are as follows:

"**104. Consideration of applications**

(1) When considering an application for resource consent and any submissions received, the consent authority must, subject to Part 2, have regard to –

(a) any actual and potential effects on the environment of allowing the activity; and

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

(c) any other matter the consent authority considers relevant and reasonably necessary to determine the application.

(2) When forming an opinion for the purposes of subsection (1)(a), a consent authority may disregard an adverse effect of the activity on the environment if the plan permits an activity with that effect."

107. Section 104A is specific to controlled activities, which we have found this to be.

"**104A Determination of applications for controlled activities**

After considering an application for a resource consent for a controlled activity, a consent authority —

(a) must grant the resource consent, unless it has insufficient information to determine whether or not the activity is a controlled activity; and

(b) may impose conditions on the consent under section 108 for matters over which it has reserved control in its plan or proposed plan."

108. We have already referred to Section 106, which we do not consider is applicable.

Actual and Potential Effects

109. On the basis of the section 42A Report, we consider the actual and potential effects on the environment under the following headings:

- Land, Flora and Fauna
- Infrastructure
- Land Stability and Natural Hazards

- Character and Amenity
- Transport
- Nuisance
- Positive Effects

★ Land, Flora and Fauna

110. The previous or on-going removal of trees from the site is not a matter we need to make a judgment on. It appears to be a permitted activity. We agree that the proposed earthworks will result in a site with an appearance similar to neighbouring properties and consistent with the expectations created by the zoning. On the evidence we heard, we do not consider that any Regional Council consents are needed in relation to watercourses but final responsibility for that remains with the Applicant.

★ Infrastructure

111. Appropriate arrangements have been made, or can be made, for water supply, wastewater, stormwater, power and telecommunications. These were not in contention and we accept the proposed conditions as adequately dealing with these.

★ Land Stability and Natural Hazards

112. Conclusions on this will be apparent from our discussion of the evidence. We were impressed by the careful analysis of Mr Salt and feel confident in accepting his evidence that, although more detailed investigation and design are necessary as matters progress, this will be attended to, and appropriate solutions are available. There has been a careful analysis of the site into stability zones following comprehensive work. Further, the result of this analysis is to be protected by the imposition of a Consent Notice so that any purchaser will be well aware of what can be done on any particular site.

113. We accept that no adverse geotechnical impacts of development are expected in general, nor on any particular neighbouring property. We note the concern about the Queenstown hill slip. We accept that it does not encroach on to this property. Nothing done on this site is likely to impact on that slip.

114. While we can understand the concerns of neighbours when a steep slope is being developed, we are confident that adverse effects will be avoided.

★ Character and Amenity

115. We comment under this heading in deference to the categorisation of effects in the section 42A Report. The scope for considerations of this

nature is severely limited by the controlled activity status of the proposal. However, we consider that the site density is well within the expectations of the zone and location and dimensions of lots respond appropriately to topographical and geotechnical considerations. The appearance of the site will be anticipated and acceptable given the expectations created by the zoning and current and future developments on Queenstown Hill.

★ Transport

116. We consider here the effects, and elsewhere identify the relevant plan rules and how far transport issues are relevant.

117. We are satisfied that the proposed activity will have at most a minor effect on traffic patterns on Frankton Road. Any delays in executing turns into Frankton Road will be caused by traffic on that road rather than traffic accessing or exiting the site. We accept that January traffic counts may not be the best indicators for peak hour traffic, but we are still confident in our conclusions on these points.

118. We accept that there will be an inconvenient interference with access to Pencarrow Lodge. However, it does not have road frontage and the easement gives the Applicant certain rights to re-align the access. We are not certain that we should be considering the adverse effects on the user of the right of way by alterations to access authorised by the easement. But assuming we should, and putting some weight on the rights and obligations under the easement, we consider that Option B for temporary access creates no more than minor adverse effects. It is inherent in construction work of this nature that there can be no absolute certainty about the time it will take, and we have taken this into account.

119. We repeat that no resource consent can override the rights Mr and Mrs Moers have under the easement and if the proposed activity, including the proposals for maintaining access, is inconsistent with the easement then they have remedies elsewhere.

120. Whether the new proposed access will be better than the existing one is to some extent a matter of personal preference. We are satisfied that it is not materially worse, but do not regard it as appropriate or necessary to hold that the new access is a positive effect we should consider.

121. Mr and Mrs Moers were concerned about maintenance obligations on the private road. It was explained, and we accept, that they have no obligations for maintenance of either the private road or Access P.

122. It was not explored in evidence, and we put no weight on it, but first principle economics suggests that the disadvantages in having their

access changed, including the need for a temporary access, would have been relevant to the price paid for their property.

123. We do not consider that there is anything more than a minor adverse effect on Mr and Mrs Moers.

124. Construction standards for roads require some flexibility. Leaving aside the status and relevance of various standards, we accept that a gradient of 1:8 is generally preferable to a gradient of 1:6 for a subdivision such as this. However, the various standards recognise that this is not always practicable. Queenstown is a mountain town. Large parts of it are built on steep slopes. We accept that the access road is on a southerly slope and that snow and ice conditions could be encountered in winter. However, this is not unusual, and is anticipated, in Queenstown. Mr Huish and Rationale Limited were both satisfied that the gradient was appropriate. Mr Durdin's evidence seemed more focussed on analysing rules and standards. Insofar as Mr Durdin's evidence is that a gradient of 1:6 is inappropriate, in all the circumstances we prefer the evidence of Mr Huish and the report of Rationale Limited.

125. The other transport issues relate to Access P and Access G.

126. The Applicant now proposes to form Access P to a width of 3.5 metres within a legal width of 12 metres. The traffic evidence is in agreement that 3.5 metres is an appropriate width. Mr Durdin recommended at least one passing bay. He did this on the basis that Plan Change 6 required it. Plan Change 6 as it currently stands introduces this requirement into Rule 14.2.4.1(iv), but it is a Site Standard, not an absolute requirement. We were not referred to NZS 4404:1981 or Council's amendments in this context. However, we note that paragraph 302.10.5.3 says "adequate turning and passing space shall be provided where length of the private way requires". Mr Durdin did not suggest that lack of a passing bay erected an unsafe situation. Neither Ms Rose nor Mr Huish considered that a passing bay was necessary. Given the totality of the traffic evidence and the current status of Plan Change 6, we do not consider that requiring a passing bay is justified. We do note that the width of Access P leaves open the possibility of either a widened carriageway in the creation of a passing bay in the future.

127. The other matter we need to decide is the width of Access G. Access G serves Lots 4 and 5. While it passes through Lot 3, there is no possibility of it being used for access to Lot 3. Mr Huish contends that a 3 metre formed width is appropriate. Council's amendments to NZS 4404:1981 indicate a 3 metre vehicle carriageway is appropriate for up to 3 dwelling units but a 4 metre vehicle carriageway for 4 or more dwelling units.. Ms Rose suggests it should be 4 metres. In particular, she notes that Lots 4 and 5 are each capable of having

more than one unit. Even so, it would have at most four dwelling units using it. Clearly, a wider carriageway would be difficult. NZS 4404:2004, which is the document that Plan Change 6 refers to, indicates that a 2.75 metre vehicle carriageway is appropriate for up to 3 lots or 6 dwelling units. , We doubt that there will be much use of bicycles to access these lots, given the topography, but there is a pedestrian easement from the end of Access G which may well be used. Given the difficult terrain, and the relatively short length of Access G, and considering that the standards referred to in the operative plan would support 3 metres, we have decided that 3 metres is the appropriate width.

128. While various standards suggest that access for a subdivision of this size should be by public road rather than private road, we did not receive any evidence that having access by private road would lead to adverse effects. Mr Makgill ultimately advised us that his clients were concerned to achieve, if possible, public road standards, but were less concerned about status. They have no maintenance obligations to their boundary and we are satisfied that the access they will get is appropriate.

★ Nuisance

129. Inevitably, there is some nuisance to neighbours during development of this nature. It is inherent in the zoning that neighbours must accept at least the normal level of nuisance created by such developments subject to appropriate controls. The Lakes Environmental Engineer considered that all appropriate construction methodology and site management methods are available to control these effects. We concur. The adverse effects and the disruption of access to Mr and Mrs Moers have been fully canvassed elsewhere. Standard construction noise conditions can be imposed.

★ Positive Effects

130. There is a small positive effect in enabling further residential development adjoining existing development. However, we can reach our conclusion without putting weight on that.

Summary Of Effects

131. Overall, we find no significant adverse effects that have not been avoided or adequately mitigated. The development is consistent with the expectations created by the zoning. We do not consider that the fears of owners of the Remarkables Apartments or Greenstone Terrace Apartments are fully justified. At most, there will be a slightly increased level of inconvenience in sharing an access. In principle, it cannot be right that they can fully develop their sites and then veto a much less dense development of the site behind them because of the

combined traffic level. Any inconvenience to Mr and Mrs Moers is no doubt to be regretted but the potential for this was always there given the zoning of the land and the fact that they do not have direct access on to a road. That cannot be allowed to be a significant factor preventing neighbouring land owners developing their sites in accordance with the expectations of the Plan.

Plan Provisions

132. The first matter to consider is that the Applicant's site is zoned Low Density Residential. The purpose of the Low Density Residential Zone is to provide for provide for low density permanent living accommodation, maintaining a dominance of open space and low building coverage. The zone seeks to maintain and enhance the low density residential areas with ample open space and low rise development with the expectation that there will be minimal adverse effects experienced by residents.

133. We have carefully analysed the relevant provisions of the Plan and determined the activity status as a "controlled activity". Section 106 is not relevant. We therefore must grant the consent and our discretion is confined to the imposition of conditions.

134. We have identified the relevant areas of control under Section 15 of the Plan. Each of these identified areas of control has Assessment Matters specified and we have taken all of those into account in our discussion of effects and also our discussion of Objectives and Policies.

135. For the avoidance of doubt, we repeat that there is nothing we would have wanted to take into account if earthworks were discretionary that we have not been able to take into account under the Assessment Matters at Rule 15.2.10.2.

136. We have held that all standards in the operative Transportation Section are complied with so the proposed activity is a permitted one as far as the operative Section 14 is concerned.

137. We need, however, to consider Section 14 as it would stand under proposed Plan Change 6 following Council's decisions.

138. We were given a copy of Table 3.1 from NZS 4404:2004 and also Council's amendments to that standard. Given the current version of Plan Change 6, Council's amendments have no direct relevance, although they could still be evidence of what is generally regarded as appropriate in Queenstown.

139. We are unclear how far Table 3.1 is intended as a prescriptive requirement, or only as a guideline as the corresponding Table in NZS

4404:1981 is. To be conservative, we will assume that it is prescriptive. Even so, we cannot give it full weight. Even if Plan Change 6 becomes operatives in its present form, Table 3.1 is at best part of a Site Standard triggering a consent requirement. But we cannot even give it that much weight because the appeal process could see the Plan Change amended or abandoned.

140. We do not overlook that the Plan Change also amends the Assessment Matters, but that amendment also has limited weight, given the current status of the Plan Change.

141. The Plan Change 6 Site Standard does say that no private way shall serve sites with a potential to accommodate more than 12 units. We take that into account. We also take into account that it is part of a Plan Change that is not yet finalised. We also take into account that, even if adopted, non-compliance would trigger a requirement for restricted discretionary consent which we would have discretion to grant. We heard no evidence that private status would lead to adverse effects and, weighing all matters as we must, that is more significant than the Site Standard in the Plan Change.

142. Although the Transportation Section of the partially operative plan does not trigger any consent requirement, we do not overlook the standards in it, including that for gradient, in exercising our overall discretion. The Assessment Matters in that section also help us apply the more broadly expressed Assessment Matters in the Subdivision Section.

143. We will assume that all Objectives and Policies are properly relevant notwithstanding that the proposal is for a controlled activity, and now comment on those we were specifically referred to and which we consider are relevant.

144. "**Part 4 – District Wide Issues**

4.8 Natural Hazards

Objective 1

Avoid or mitigate loss of life, damage to assets or infrastructure, or disruption to the community of the District, from natural hazards.

1.4 To ensure buildings and developments are constructed and located so as to avoid or mitigate the potential risk of damage to human life, property or other aspects of the environment.

1.5 To ensure that within the consent process any proposed developments have an adequate assessment completed to identify any natural hazards and the methods used to avoid or mitigate a hazard risk.

1.6 To discourage subdivision in areas where there is a high probability that a natural hazard may destroy or damage human life, property or other aspects of the environment."

145. Mr Salt's assessment, and review by Lakes Environmental staff, are an adequate assessment to identify any natural hazard and the methods used to avoid or mitigate the hazard risk. As noted earlier, we consider that this was professionally presented, acknowledged uncertainty where there was some, but left us satisfied that there were available solutions which would be developed as the work progress. The area of the site is not an area where there was a high probability but a natural hazard may destroy or damage human life, property, or other aspects of the environment.

146. "**4.9 Urban Growth**

Objective 2 - Existing Urban Areas and Communities

Urban growth which has regard for the built character and amenity values of the existing urban areas and enables people and communities to provide for their social, cultural and economic well being.

Policies:

2.1 To ensure new growth and development in existing urban areas takes place in a manner, form and location which protects or enhances the built character and amenity of the existing residential areas and small townships.

Objective 3 - Residential Growth

Provision for residential growth sufficient to meet the District's needs.

Policies:

3.1 To enable urban consolidation to occur where appropriate."

147. The site is zoned Low Density Residential. To a considerable extent, these Objectives have been addressed in the zoning decision. Making the effort to build on sites such as this in a safe way helps maintain a compact town and limits some of the pressures for a further spreading of the town into new areas. The development will not appear inconsistent with the adjoining allotments and will contribute towards urban consolidation. Overall, we consider that there are two Objectives in the associated Policies set out above which support the Application.

148. "**4.10 Earthworks**

Objectives

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

(a) Water bodies.

(b) The nature and form of existing landscapes and landforms, particularly in areas of Outstanding Natural Landscapes and Outstanding Natural Features.

(c) Land stability and flood potential of the site and neighbouring properties.

(d) The amenity values of neighbourhoods.

(e) Cultural heritage sites, including waahi tapu and waahi taoka and archaeological sites.

(f) The water quality of the aquifers."

Detailed Policies follow the Objective.

149. This is an effects-based Objective and we have already concluded that there will be no significant adverse effect from the earthworks. In particular, the proposal avoids or mitigates adverse effects from earthworks on land stability and amenity values of neighbours.

150. "**<u>Part 15 – Subdivision and Financial Contributions</u>**

Objective 1 – Servicing

The provision of necessary services to subdivided lots and developments in anticipation of the likely effects of land use activities on those lots and within the developments.

Policies:

1.1 To integrate subdivision roading with the existing road network in an efficient manner, which reflects expected traffic levels and the safe and convenient management of vehicles, cyclists and pedestrians.

1.2 To ensure safe and efficient vehicular access is provided to all lots created by subdivision and to all developments.

1.3 To achieve provision of pedestrian, cycle and amenity linkages, where useful linkages can be developed.

1.4 To avoid or mitigate any adverse visual and physical effects of

subdivision and development roading on the environment.

1.7 To ensure the design and provision of any necessary infrastructure at the time of subdivision takes into account the requirements of future development on land in the vicinity.

Objective 2 - Cost of Services to be Met by Subdividers

The costs of the provision of services to and within subdivisions and developments, or the upgrading of services made necessary by that subdivision and development, to be met by subdividers."

151. Necessary services are provided to the subdivided lots. There is provision for future integrated subdivision roading having regard to future possible developments on adjoining sites. Particular provision is made for safe and convenient pedestrian access. We also consider that vehicular access is safe and efficient. The normal servicing requirements are met by the standard for conditions.

152. No issues arise as to the cost of services and development contributions will be levied in the normal way.

153. **"Objective 5 - Amenity Protection**

The maintenance or enhancement of the amenities of the built environment through the subdivision and development process.

Policies:

5.1 To ensure lot sizes and dimensions to provide for the efficient and pleasant functioning of their anticipated land uses, and reflect the levels of open space and density of built development anticipated in each area.

5.2 To encourage the protection of significant trees or areas of vegetation, upon the subdivision of land.

5.3 To minimise the effects of subdivision and development on the safe and efficient functioning of services and roads."

154. Lot sizes and dimensions are appropriate. The anticipated density is much lower than the zoning might allow. There are no significant trees or areas of vegetation on the site, whatever may have been the previous situation. Having regard to the expert traffic evidence, we do not consider that there would be more than minimal effects on the safe and efficient functioning of services and roads.

155. "**Part 14 – Transport**

Objective 1 – Efficiency

Efficient use of the District's existing and future transportation resource and of fossil fuel usage associated with transportation.

Policies:

1.1 To encourage efficiency in the use of motor vehicles.

1.2 To promote the efficient use of roads by ensuring that the nature of activities alongside roads are compatible with road capacity and function.

1.3 To require access to property to be of a size, location and type to ensure safety and efficiency of road functioning."

156. Allowing development even on steep and challenging sites within the existing developed area does encourage efficiency in the use of motor vehicles. A Low Density Residential development here is compatible with the capacity and function of Frankton Road, and the access is of a size, location and type that ensures safety and efficiency of road function.

157. "**Objective 2 - Safety and Accessibility**

Maintenance and improvement of access, ease and safety of pedestrian and vehicle movement throughout the District.

Policies:

2.1 To ensure the intensity and nature of activities along particular roads is compatible with road capacity and function, to ensure both vehicle and pedestrian safety.

2.2 To ensure intersections and accessways are designed and located so:

- *good visibility is provided.*
- *they can accommodate vehicle manoeuvres.*
- *they prevent reverse manoeuvring onto arterial roads; and*
- *are separated so as not to adversely affect the free flow of traffic on arterial roads."*

158. The nature of this activity is compatible with the road capacity and function and both vehicle and pedestrian safety have been ensured with careful attention to the roading design and in particular the intersection with Frankton Road and with accesses to neighbouring properties.

159. "**Objective 3 - Environmental Effects of Transportation**

Minimal adverse effects on the surrounding environment as a result of road construction and road traffic.

Policies:

3.1 To discourage traffic in areas where it would have adverse environmental effects.

3.2 To support the development of pedestrian and similar links within and between settlements and the surrounding rural areas, in order to improve the amenity of the settlements and their rural environs."

160. There is a specifically designed pedestrian link within the subdivision which we think is useful. Road construction is consistent with what would be expected in the Low Density Zone, and the Objectives and Policies are generally supported.

161. Overall, we do not consider that there is anything in the Objectives and Policies that this proposal is inconsistent with and in general they are supportive of the proposal.

162. The activity status is controlled and we have reviewed all the relevant controls, the Assessment Matters relevant to them, and the effects. We accept that, if Plan Change 6 were adopted as it stands, the activity status would be restricted discretionary. Even if Plan Change 6 was operative now, we would grant this application, subject to conditions. The somewhat confused transport standards, and possible changes to them, do not affect the ultimate decision. In common with much of Queenstown, this site is steep and needs careful management. We are satisfied that the Applicant and its advisers have fully appreciated this and proper conditions to avoid or mitigate adverse effects are proposed.

Other Matters

163. The position in relation to the easement from Mr and Mrs Moers might have been considered under this heading but we had dealt with it elsewhere.

Part 2

164. There is some ambiguity in Environment Court and High Court cases as to the role of Part 2 of the Act in considering a controlled activity application. We will assume it is to be applied with full force. Notwithstanding that, there is nothing in Part 2 that identifies new matters for us to consider, or changes the emphasis we would otherwise put on the matters already considered.

E CONCLUSION

165. As will be apparent from what had gone before, we propose to grant the consent. On our analysis of the activity status and the application of Section 106, we are required to grant consent, but in any event would have no hesitation in doing so. We have considered everything that was raised by the submissions, in the reports of Lakes Environmental staff and other Council advisers, and at the hearing. We are satisfied that the grant of consent subject to the conditions that appear below is entirely appropriate and fully accords with the purpose of the Act.

166. The section 42A Report included draft conditions. The Applicant provided its own draft after the hearing. We have dealt with the differences in substance. The need to carefully consider the relationship between the District Plan and the New Zealand Standards possibly also has implications for the wording of conditions. However, where the Applicant and Lakes Environmental have agreed on the form of a condition and no other party would be affected by any difficulties with the wording, we have not attempted to re-draft the conditions.

F DECISION

CONSENT IS HEREBY GRANTED pursuant to sections 104 and 104A of the Resource Management Act 1991 to subdivide Lot 2 Deposited P305273, Computer Freehold Register 21293 (Otago)l SUBJECT TO the following conditions imposed pursuant to sections 108 and 220:

Conditions of Consent

1. That the activity be undertaken in accordance with the plans drawn by Clark Fortune McDonald and Associates, dated 25 February 2008, titled *'Lots 1-17 and 200 Being a Proposed Subdivision of Lot 2 D.P. 305273'* (stamped as approved 20 May 2008) and specifications submitted with the application, with the exception of the amendments required by the following conditions of consent.

2. All engineering works shall be carried out in accordance with the Queenstown Lakes District Council's policies and standards, being New Zealand Standard 4404:2004 with the amendments to that standard adopted on 5 October 2005, except where specified otherwise.

3. The subdividing owner of the land shall provide a letter to the Council advising who their representative is for the design and execution of the engineering works and construction works required in association with this subdivision and shall confirm that these representatives will be responsible for all aspects of the works covered under sections 1.4 & 1.5 of NZS4404:2004 "Land Development and Subdivision Engineering", in

relation to this development.

4. Prior to the commencement of any works on the land being subdivided and prior to the Council signing the Title Plan pursuant to Section 223 of the Resource Management Act 1991, the consent holder shall provide to the Queenstown Lakes District Council for review, copies of specifications, calculations and design plans as is considered by Council to be both necessary and adequate, in accordance with Condition (2), to detail the following engineering works required:

   (a) The provision for building platforms 7, 8, 9, 10 and 17 to be formed as per specific geotechnical design and under suitably qualified geotechnical professional supervision.

   (b) The provision of a water supply to the boundary of Lots 1 through 17 in terms of Council's standards and connection policy. This shall include an Acuflow GM900 as the toby valve.

   (c) The provision of a private water storage scheme that augments water pressures provided to the lots to levels that are acceptable to achieve W3 fire flow, and which comply with Council's amendments to NZS4404:2004.

   (d) The provision of fire hydrants with adequate pressure and flow to service the development with a Class W3 fire risk in accordance with the NZ Fire Service Code of Practice for Firefighting Water Supplies 2003. Any lesser risk must be approved in writing by Fire Service NZ, Dunedin Office.

   (e) The provision of a foul sewer connection to the boundary of Lots 1 through 17 in accordance with Council's standards and connection policy.

   (f) The provision for final engineering design for a reticulated stormwater system that will dispose of stormwater into the stream to the west of the site and to the existing 375mm main adjacent to Frankton Road. Final design shall address the capacity in the waterway and the sizing of the culvert under the access road.

   (g) The provision of a stormwater connection to the boundary of Lots 1 through 17 in accordance with Council's standards and connection policy to dispose of water from all impervious areas within the site to the reticulation described in part (f) above.

   (h) The final design of all earthworks associated with the access road by a suitably qualified engineer and geotechnical professional. Said design shall include the design of all retaining walls and slopes of all batters given consideration of Tonkin and Taylor's Geotechnical

Investigation reports dated June 2005 and June 2007. The consent holder shall submit to Council a final plan of the proposed earthworks associated with the access road for approval. If considered necessary, Council may have the earthworks design independently peer reviewed.

(i) The provision for a comprehensive site management plan for all earthworks required in the establishment of this subdivision. The consent holder shall submit a site management plan to Council for approval and shall implement the approved site management plan prior to any works on site. The site management plan shall include provision for silt traps (in the form of fabric filter dams or straw bales) to be in place prior to the commencement of works on site to trap stormwater sediments before stormwater is funnelled into the creek on the western portion of the subject site. Site drainage paths shall be constructed and utilized to keep any silt laden materials on site and to direct the flows to the silt traps. Silt traps shall be replaced or maintained as necessary to assure that they are effective in their purpose. The principle contractor shall take proactive measures in stopping all sediment laden stormwater from entering the creek. The principal contractor shall recognize that this may be above and beyond conditions delineated in this consent. These measures shall be implemented prior to the commencement of any earthworks on site and shall remain in place for the duration of the project.

(j) The provision of pilot cuts by a suitably qualified engineer and geotechnical professional for the full depth of proposed excavations associated with the access to understand necessity of rock anchors or additional retention (temporary or permanent). Following pilot cuts, any recommendations made by said professionals shall be implemented. Pilot cuts shall also inform the feasibility of the construction methodology for the main access. The consent holder is advised that a variation to this consent may be required if ground conditions encountered on site differ to the extent that substantially modified methods or design of excavation is required.

(k) The provision of the access road ("Road 6") to Lots 1 through 17 from Frankton Road to be in terms of Table 3.1 of Council's amendments to NZS4404:2004 to be formed to not less than 6m and a legal width of not less than 12m. Indented parking shall be provided along Road 6 in the configuration of either 3 lots of bays to hold 3 cars minimum or 2 lots of bays to hold 4 cars minimum. No Parking lines shall be provided along the length of Road 6 apart from where the parking bays are situated. The legal width shall be 15m wherever possible.

(l) "Access P" as shown on Clark Fortune McDonald's drawing 9074-22c

shall be constructed according to NZS4404: 2004 standards for surfacing, kerb/channel and engineering design and to a formed width of 3.5 m and a legal width of 12m. This shall be constructed with a minimum depth of 150mm M4 AP40 aggregate and provision shall be made for the disposal of stormwater.

(m) "Access G" as shown on Clark Fortune McDonald's drawing 9074-22c shall be constructed according to NZS4404:2004 standards for surfacing, kerb/channel and engineering design and to a formed width of 3m and a legal width of 6m. This shall be constructed with a minimum depth of 150mm M4 AP40 aggregate and provision shall be made for the disposal of stormwater.

(n) Road lighting shall be provided in accordance with Council's road lighting policies and standards. Any road lighting installed on private roads/rights of way/access lots shall be privately maintained and all operating costs be the responsibility of the lots serviced by such access roads. Any lights installed on private roads/rights of way/access lots shall be isolated from the Council lighting network circuits.

(o) The provision of a temporary access during the construction period to Lot 2 DP 20473, generally in accordance with the 'Option B' temporary access plan prepared by Clark Fortune McDonald & Associates and as attached with Appendix [D] to the evidence of Mr Ferguson, but shall be modified to include:

(i) a maximum centreline gradient through both hair-pin bends of no more than 1 in 5.5;

(ii) Passing bays located at each bend and along the straight section between chainage 100 to 160.

(p) The pedestrian access easement between Access D and Access G shall ensure access is available to the public at all times.

5. Prior to the certification pursuant to Section 224(c) of the Resource Management Act 1991, the applicant shall complete the following:

(a) The submission of 'as-built' plans in accordance with Council's as-built standards and information required to detail all engineering works completed in relation to or in association with this subdivision.

(b) The completion of all works detailed in Condition (4) above.

(c) The consent holder shall provide a suitable and usable power supply and telecommunications connection to the lots. These connections shall be underground from any existing reticulation and in accordance

with any requirements/standards of Aurora Energy/Delta and Telecom.

(d) A suitably qualified Registered Engineer experienced in soils investigations shall provide certification, in accordance with NZS 4431: 1989, for all areas of fill within the site on which buildings may be founded.

(e) A suitably qualified geotechnical professional shall provide a completed Schedule 2A as found on page 40 in NZS4404:2004 that shall provide the Council assurance that the building platforms on Lots 7, 8, 9, 10 and 17 are suitable for residential development.

(f) Where this development involves the vesting of assets in the Council, the consent holder shall submit to Council a copy of the Practical Completion Certificate, including the date it was issued and when it lapses. This information will be used to ensure the Council's Engineering consultants are aware of the date where the asset is no longer to be maintained by the consent holder and to assist in budgeting for the Annual Plan.

(g) All signage, including road names, shall be installed and necessary road markings completed on all Public or Private Roads (if any), created by this subdivision.

(h) The consent holder shall provide evidence to the Council of a responsible body (management group) that has been created to undertake responsibility for the ongoing maintenance of the main internal access road (including any stormwater disposal), including provision for gritting and/or de-icing of the main access way, the pedestrian link between Access D and Access G, and the water supply system.

6. Prior to certification pursuant to Section 224 of the Act and in accordance with Section 221 of the Resource Management Act 1991, a consent notice shall be registered on the pertinent Certificate of Title for the performance of the following conditions on a continuing basis:

(a) No building shall be constructed within Zone E without a comprehensive geotechnical report being prepared by a suitably qualified geotechnical engineer. Subsurface investigations will be required and the report must confirm suitability of the site for the proposed building. No building consent will be issued for any proposed building within Zone E without Council's approval of the geotechnical report. Council may require that this report is peer reviewed. Zone E is as shown in the plan drawn by Clark Fortune McDonald and Associates, titled Potters Hill – Proposed Development of Lot 2 D.P. 305273 dated 3 March 2007 and attached to this

consent notice.

(b) At the time that a dwelling is erected on Lots 1-17 the owner for the time being shall construct a vehicle crossing to Council Standards.

(c) Any building on Lots 7, 8, 9, 10 and 17 shall be fully contained within the engineered building platform established at the time of subdivision as shown in the plan drawn by Clark Fortune McDonald and Associates, titled Potters Hill – Proposed Development of Lot 2 D.P. 305273 dated 3 March 2007 and attached to this consent notice. A geotechnical report and design shall be provided by a suitably qualified geotechnical engineer for any building proposed outside of this platform. This report and design shall be submitted with the building consent application.

(d) A geotechnical report and design shall be provided by a suitably qualified geotechnical engineer for any building within Lot 11 or 12 that falls within Zone D of the land suitability classification (refer Tonkin & Taylor, "Albatross QT Subdivision – Supplementary Geotechnical Investigations", Job no: 890815, June 2007). This report and design shall be submitted with the building consent application.

(e) In the event of future subdivision of any of the lots or in the event that more than one residential unit is built on each lot, the owner for the time being shall pay the Council the required additional headworks fees for any additional residential units on the property greater than one.

(f) At such a time where a high level reticulated water pressure zone is provided by the QLDC that can serve the subdivision, the private water storage scheme shall be decommissioned and all lots shall connect to the high pressure reticulation.

(g) All the owners of Lots 1 – 17 are advised that the internal access road (and associated stormwater disposal), the pedestrian link between Access D and Access G, and water supply infrastructure are privately owned and are the responsibility of the management company created at the time of subdivision. The Queenstown Lakes District Council is not responsible for any part of the water infrastructure or roading to any lot within any stage of this subdivision.

7. The consent holder shall provide Council with the name of a suitably qualified and experienced Engineer who is to supervise all excavation procedures. This engineer shall continually assess the condition of the excavation and implement any design changes / additions if and when necessary.

8. If at any time Council, or its elected representatives, receive justifiable complaints about or proof of effects from vibration sourced from the earthworks activities approved by this resource consent, the consent holder at the request of the Council shall cease all earthworks activities and shall engage a suitably qualified professional who shall prepare a report, which assesses vibration caused by earthworks associated with this consent and what adverse effect (if any) these works are having on any other land and buildings beyond this site. Depending on the outcome of this report a peer review may be required to be undertaken by another suitably qualified professional at the consent holder's expense. This report must take into consideration the standard BS 5228:1992 or a similar internationally accepted standard. Both the report and peer review (if required) shall be submitted to Council for acceptance and approval.

9. Within four weeks of completing the earthworks the consent holder shall submit to the Council an as built plan of the fill. This plan shall be in terms of New Zealand Map grid and shall show the contours indicating the depth of fill. Any fill that has not been certified by a suitably qualified and experienced engineer in accordance with NZS 4431 shall be recorded on the as built plan as "uncertified fill".

10. All temporary retention systems shall be installed immediately following excavation to avoid any possible erosion or instability.

11. No earthworks, temporary or permanent, are to breach the boundaries of the site.

12. Upon completion of the earthworks, the consent holder shall complete the following:

    a) Any damage to all existing road surfaces and berms that result from work carried out for this consent shall be remedied.

    b) All earth-worked areas shall be top-soiled and grassed or otherwise permanently stabilised within 6 weeks.

    c) An engineer's design certificate/producer statement shall be submitted with regards to any permanent retaining systems on site and forwarded to Council.

13. All necessary easements shall be granted or reserved.

<u>Advice Notes</u>

(i) In granting this resource consent, pursuant to Part 8 Subpart 5 and Schedule 13 of the Local Government Act 2002 and the Council's Policy on Development Contributions contained in Long Term Council Community Plan (adopted by the Council on 25 June 2004) the Council has identified

that a Development Contribution is required. A Development Contribution Notice, detailing how contributions were calculated, will be forwarded under separate cover.

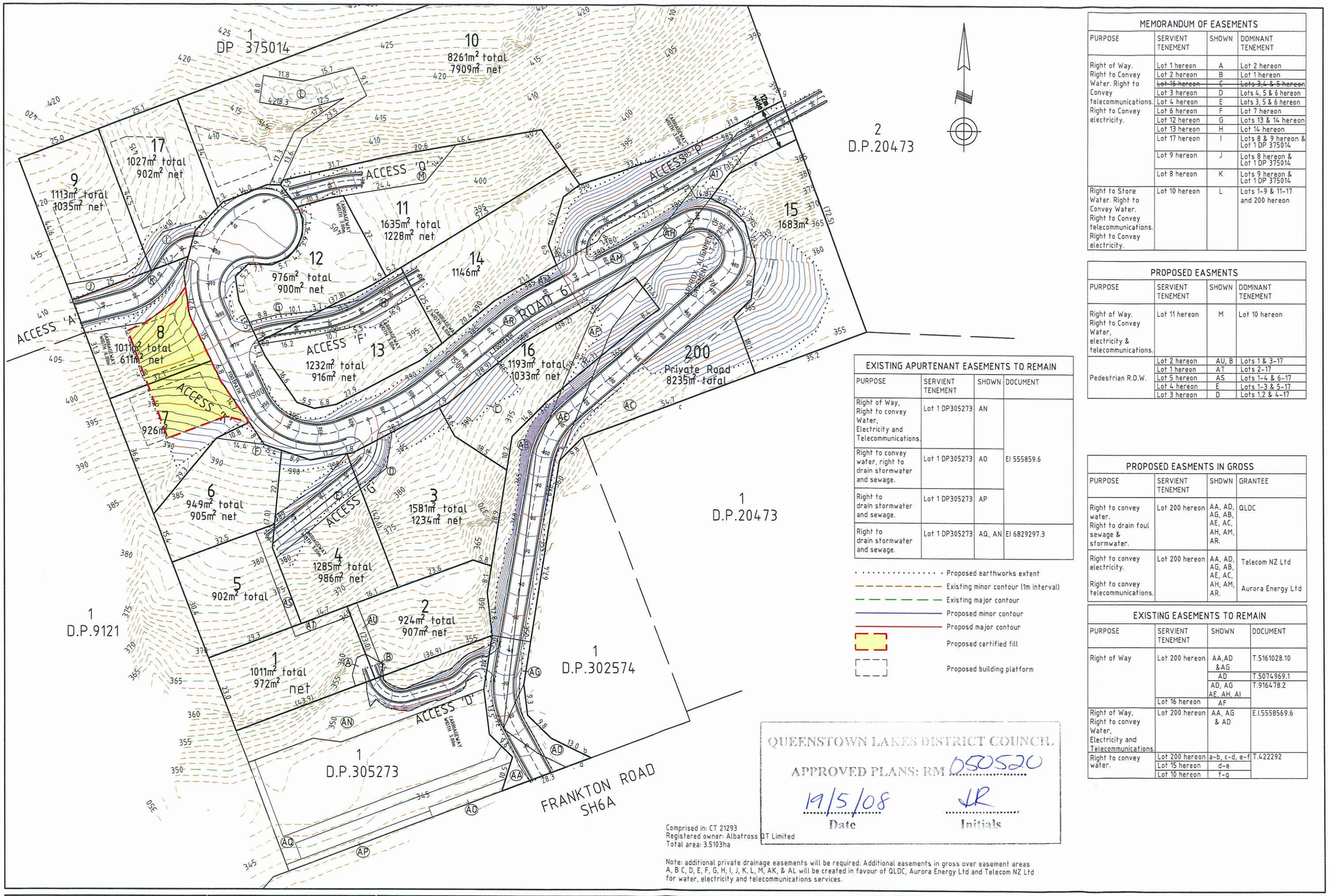
(ii) The Council may elect to exercise its duties and functions through the employment of independent consultants.

(iii) The consent holder is advised they may also be required to obtain any necessary resource consent from the Otago Regional Council to construct the subdivision.

Dated this 20th day of May 2008

_____

Trevor J Shiels
for Commissioners



MEMORANDUM OF EASEMENTS

PURPOSE	SERVIENT TENEMENT	SHOWN	DOMINANT TENEMENT
Right of Way. Right to Convey Water. Right to Convey telecommunications. Right to Convey electricity.	Lot 1 hereon	A	Lot 2 hereon
	Lot 2 hereon	B	Lot 1 hereon
	~~Lot 16 hereon~~	~~C~~	~~Lots 3,4 & 5 hereon~~
	Lot 3 hereon	D	Lots 4, 5 & 6 hereon
	Lot 4 hereon	E	Lots 3, 5 & 6 hereon
	Lot 6 hereon	F	Lot 7 hereon
	Lot 12 hereon	G	Lots 13 & 14 hereon
	Lot 13 hereon	H	Lot 14 hereon
	Lot 17 hereon	I	Lots 8 & 9 hereon & Lot 1 DP 375014
	Lot 9 hereon	J	Lots 8 hereon & Lot 1 DP 375014
	Lot 8 hereon	K	Lots 9 hereon & Lot 1 DP 375014
Right to Store Water. Right to Convey Water. Right to Convey telecommunications. Right to Convey electricity.	Lot 10 hereon	L	Lots 1-9 & 11-17 and 200 hereon

PROPOSED EASMENTS

PURPOSE	SERVIENT TENEMENT	SHOWN	DOMINANT TENEMENT
Right of Way. Right to Convey Water, electricity & telecommunications.	Lot 11 hereon	M	Lot 10 hereon
Pedestrian R.O.W.	Lot 2 hereon	AU, B	Lots 1 & 3-17
	Lot 1 hereon	AT	Lots 2-17
	Lot 5 hereon	AS	Lots 1-4 & 6-17
	Lot 4 hereon	E	Lots 1-3 & 5-17
	Lot 3 hereon	D	Lots 1,2 & 4-17

EXISTING APURTENANT EASEMENTS TO REMAIN

PURPOSE	SERVIENT TENEMENT	SHOWN	DOCUMENT
Right of Way, Right to convey Water, Electricity and Telecommunications.	Lot 1 DP305273	AN	EI 555859.6
Right to convey water, right to drain stormwater and sewage.	Lot 1 DP305273	AO	
Right to drain stormwater and sewage.	Lot 1 DP305273	AP	
Right to drain stormwater and sewage.	Lot 1 DP305273	AQ, AN	EI 6829297.3

PROPOSED EASMENTS IN GROSS

PURPOSE	SERVIENT TENEMENT	SHOWN	GRANTEE
Right to convey water. Right to drain foul sewage & stormwater.	Lot 200 hereon	AA, AD, AG, AB, AE, AC, AH, AM, AR.	QLDC
Right to convey electricity. Right to convey telecommunications.	Lot 200 hereon	AA, AD, AG, AB, AE, AC, AH, AM, AR.	Telecom NZ Ltd Aurora Energy Ltd

EXISTING EASEMENTS TO REMAIN

PURPOSE	SERVIENT TENEMENT	SHOWN	DOCUMENT
Right of Way	Lot 200 hereon	AA,AD &AG	T.5161028.10
		AD	T.5074969.1
		AD, AG AE, AH, AI	T.916478.2
	Lot 16 hereon	AF	
Right of Way, Right to convey Water, Electricity and Telecommunications	Lot 200 hereon	AA, AG & AD	E.I.5558569.6
Right to convey water.	Lot 200 hereon	a-b, c-d, e-f	T.422292
	Lot 15 hereon	d-e	
	Lot 10 hereon	f-g	

QUEENSTOWN LAKES DISTRICT COUNCIL
APPROVED PLANS: RM 050520
19/5/08 Date
KR Initials

Comprised in: CT 21293
Registered owner: Albatross QT Limited
Total area: 3.5103ha

Note: additional private drainage easements will be required. Additional easements in gross over easement areas A, B C, D, E, F, G, H, I, J, K, L, M, AK, & AL will be created in favour of QLDC, Aurora Energy Ltd and Telecom NZ Ltd for water, electricity and telecommunications services.

CLARK FORTUNE McDONALD & ASSOCIATES
REGISTERED LAND SURVEYORS LAND DEVELOPMENT & RESOURCE MANAGEMENT CONSULTANTS
309 Lower Shotover Road, P.O.Box 553 Queenstown
Tel. (03)442-0990, Fax (03)442-1066, Email q.t.surv@xtra.co.nz

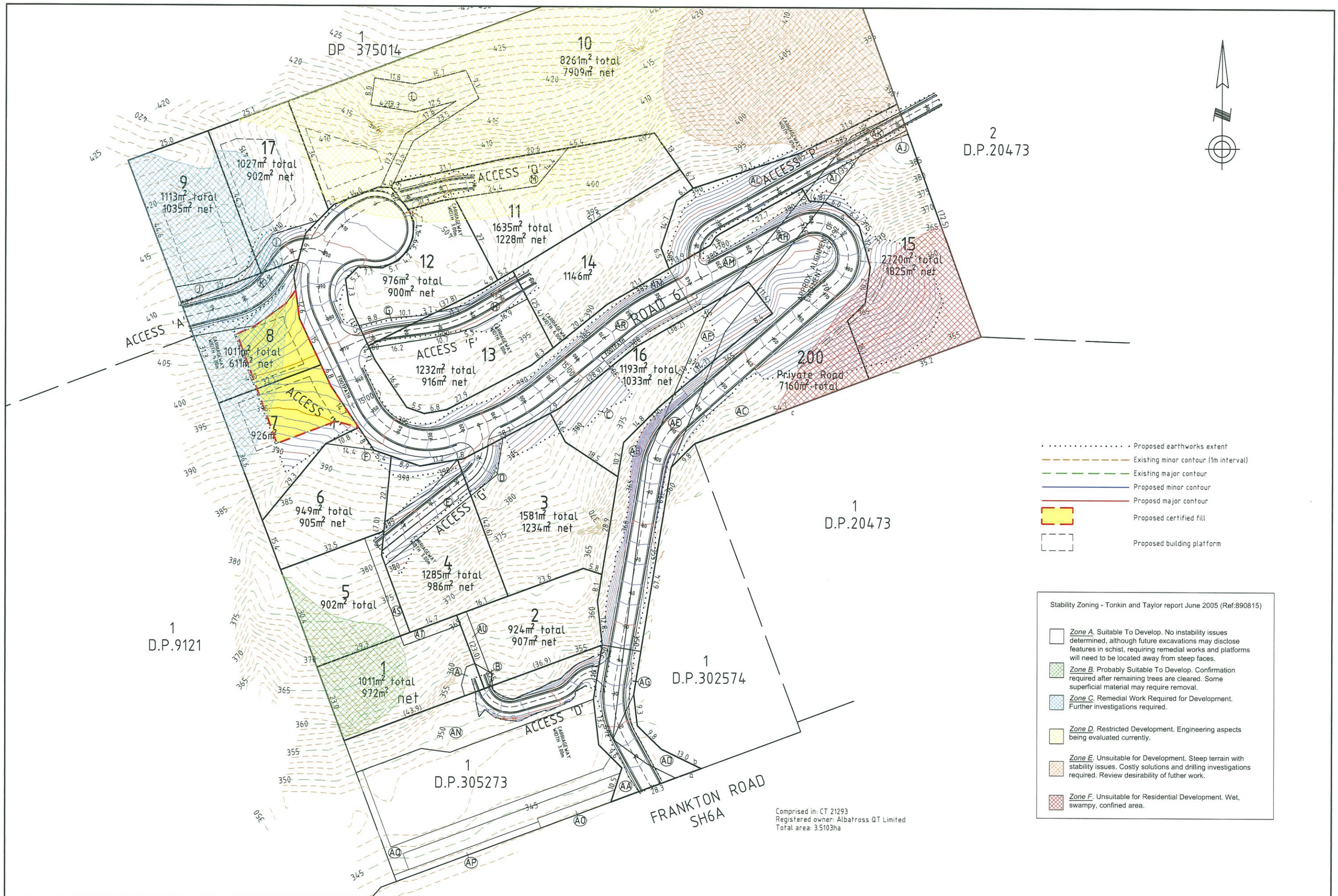
ISSUE	COMMENTS	BY	DATE
1	RC applin CivicCorp	PJF	10-6-05

LOTS 1-17 & 200 BEING A PROPOSED SUBDIVISION OF LOT 2 D.P.305273

PROJECT: POTTERS HILL
PRINCIPAL: ALBATROSS QT LTD.
APPROVED: DESIGN:
CHECKED: DRAWN: EJD

REVISION	COMMENTS	BY	DATE
D	Area Lot 17	TS	07-02-07
E	Lots 10, 11 & 12	TS	22-02-07
F	Building platforms Lots 7, 8, 9, 10 & 17	TS	13-06-07
G	Roadways etc	TS	30-07-07
H	Private Road and easements	CCH	25-02-08

SURVEY: FB
LEVEL: LB
SCALE: 1:1000 @A3
DATUM: M.S.L.
JOB No.: 9074
DRAWING: 9074-21
Revision: H



Stability Zoning - Tonkin and Taylor report June 2005 (Ref:890815)

- *Zone A*. Suitable To Develop. No instability issues determined, although future excavations may disclose features in schist, requiring remedial works and platforms will need to be located away from steep faces.
- *Zone B*. Probably Suitable To Develop. Confirmation required after remaining trees are cleared. Some superficial material may require removal.
- *Zone C*. Remedial Work Required for Development. Further investigations required.
- *Zone D*. Restricted Development. Engineering aspects being evaluated currently.
- *Zone E*. Unsuitable for Development. Steep terrain with stability issues. Costly solutions and drilling investigations required. Review desirability of futher work.
- *Zone F*. Unsuitable for Residential Development. Wet, swampy, confined area.

Comprised in: CT 21293
Registered owner: Albatross QT Limited
Total area: 3.5103ha

CLARK FORTUNE McDONALD & ASSOCIATES
REGISTERED LAND SURVEYORS LAND DEVELOPMENT & RESOURCE MANAGEMENT CONSULTANTS
309 Lower Shotover Road, P.O.Box 553 Queenstown
Tel. (03)442-0990, Fax (03)442-1066, Email q.t.surv@xtra.co.nz

ISSUE	COMMENTS	BY	DATE
1	RC applin CivicCorp	CF	3.8.07

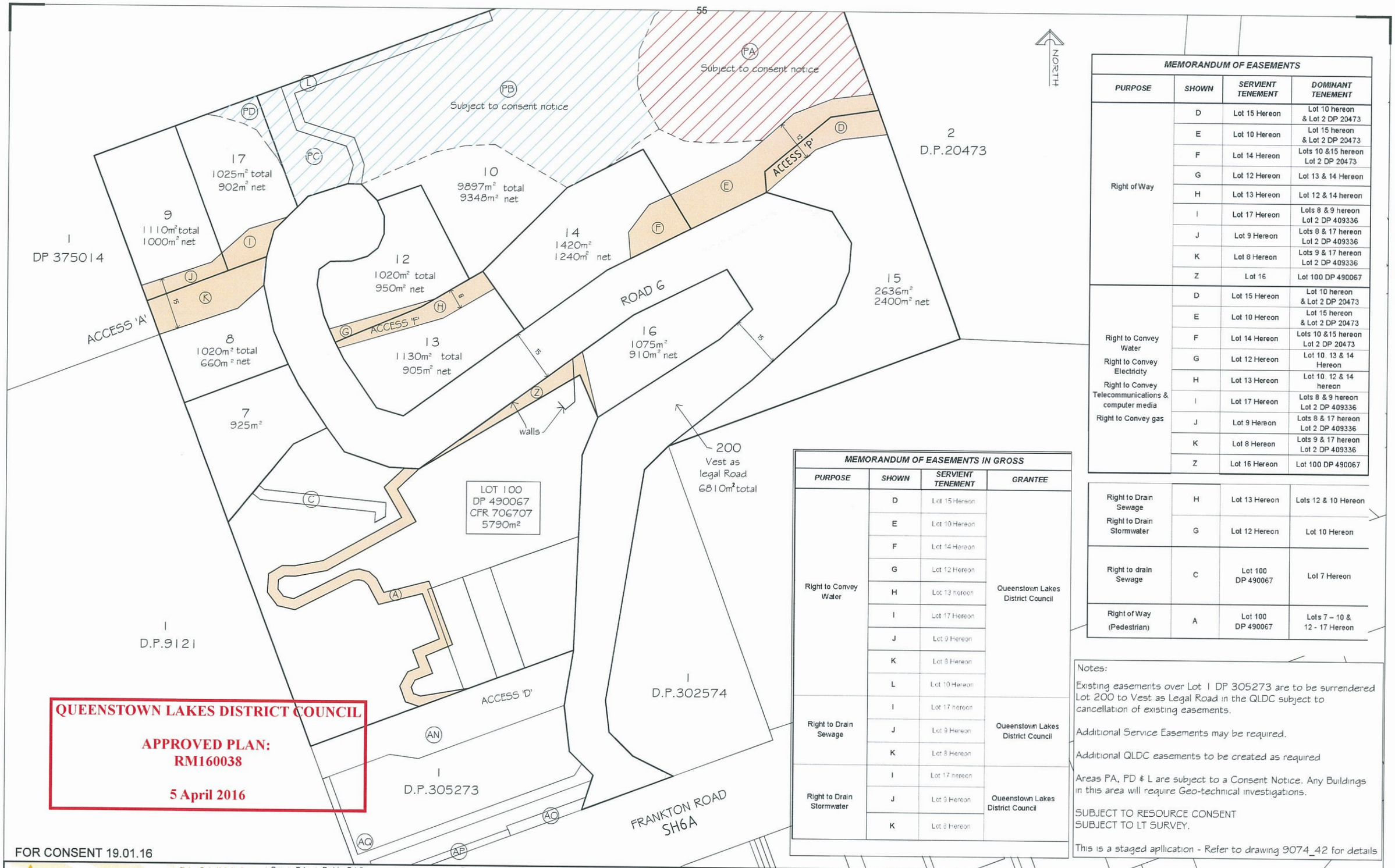
POTTERS HILL - PROPOSED DEVELOPMENT OF LOT 2 D.P.305273

PROJECT: POTTERS HILL
PRINCIPAL: ALBATROSS QT LTD.

APPROVED: | DESIGN:
CHECKED: | DRAWN: EJD

REVISION	COMMENTS	BY	DATE
A	ADD CONTOURS AND ROAD DESIGN	SC	3.08.07

SURVEY: PB | LEVEL: LB
SCALE: 1:1000 @A3 | DATUM: M.S.L.
JOB No.: 9074 | DRAWING: 9074-22c | Revision: ^



QUEENSTOWN LAKES DISTRICT COUNCIL

APPROVED PLAN:
RM160038

5 April 2016

FOR CONSENT 19.01.16

MEMORANDUM OF EASEMENTS

PURPOSE	SHOWN	SERVIENT TENEMENT	DOMINANT TENEMENT
Right of Way	D	Lot 15 Hereon	Lot 10 hereon & Lot 2 DP 20473
	E	Lot 10 Hereon	Lot 15 hereon & Lot 2 DP 20473
	F	Lot 14 Hereon	Lots 10 &15 hereon Lot 2 DP 20473
	G	Lot 12 Hereon	Lot 13 & 14 Hereon
	H	Lot 13 Hereon	Lot 12 & 14 hereon
	I	Lot 17 Hereon	Lots 8 & 9 hereon Lot 2 DP 409336
	J	Lot 9 Hereon	Lots 8 & 17 hereon Lot 2 DP 409336
	K	Lot 8 Hereon	Lots 9 & 17 hereon Lot 2 DP 409336
	Z	Lot 16	Lot 100 DP 490067
Right to Convey Water Right to Convey Electricity Right to Convey Telecommunications & computer media Right to Convey gas	D	Lot 15 Hereon	Lot 10 hereon & Lot 2 DP 20473
	E	Lot 10 Hereon	Lot 15 hereon & Lot 2 DP 20473
	F	Lot 14 Hereon	Lots 10 &15 hereon Lot 2 DP 20473
	G	Lot 12 Hereon	Lot 10, 13 & 14 Hereon
	H	Lot 13 Hereon	Lot 10, 12 & 14 hereon
	I	Lot 17 Hereon	Lots 8 & 9 hereon Lot 2 DP 409336
	J	Lot 9 Hereon	Lots 8 & 17 hereon Lot 2 DP 409336
	K	Lot 8 Hereon	Lots 9 & 17 hereon Lot 2 DP 409336
	Z	Lot 16 Hereon	Lot 100 DP 490067
Right to Drain Sewage	H	Lot 13 Hereon	Lots 12 & 10 Hereon
Right to Drain Stormwater	G	Lot 12 Hereon	Lot 10 Hereon
Right to drain Sewage	C	Lot 100 DP 490067	Lot 7 Hereon
Right of Way (Pedestrian)	A	Lot 100 DP 490067	Lots 7 – 10 & 12 - 17 Hereon

MEMORANDUM OF EASEMENTS IN GROSS

PURPOSE	SHOWN	SERVIENT TENEMENT	GRANTEE
Right to Convey Water	D	Lot 15 Hereon	Queenstown Lakes District Council
	E	Lot 10 Hereon	
	F	Lot 14 Hereon	
	G	Lot 12 Hereon	
	H	Lot 13 hereon	
	I	Lot 17 Hereon	
	J	Lot 9 Hereon	
	K	Lot 8 Hereon	
	L	Lot 10 Hereon	
Right to Drain Sewage	I	Lot 17 hereon	Queenstown Lakes District Council
	J	Lot 9 Hereon	
	K	Lot 8 Hereon	
Right to Drain Stormwater	I	Lot 17 hereon	Queenstown Lakes District Council
	J	Lot 9 Hereon	
	K	Lot 8 Hereon	

Notes:

Existing easements over Lot 1 DP 305273 are to be surrendered Lot 200 to Vest as Legal Road in the QLDC subject to cancellation of existing easements.

Additional Service Easements may be required.

Additional QLDC easements to be created as required

Areas PA, PD & L are subject to a Consent Notice. Any Buildings in this area will require Geo-technical investigations.

SUBJECT TO RESOURCE CONSENT
SUBJECT TO LT SURVEY.

This is a staged application - Refer to drawing 9074_42 for details

Shotover Design Limited trading as
Clark Fortune McDonald & Associates
Licensed Cadastral Surveyors - Land Development - Planning Consultants
309 Lower Shotover Road, P.O.Box 553 Queenstown
Tel. (03)441-6044, Fax (03)442-1066, Email admin@cfma.co.nz

Shop 2, Otago House, 475 Moray Place, P.O. Box 5960
Tel. (03)470-1582, Fax (03)470-1583, Email admin@cfma.co.nz

Rev.	Date	Revision Details	By
K	02.06.15	Adjust bdys to fit current eng design	RB
L	01.10.15	Add Pencarrow Easement	RB
M	11.12.15	Update to reflect Stage 1 Tiers subdivision	CH
N	19.01.16	Remove platforms & combine Lot 11 & 10	RB

THE TIERS SUBDIVISION
LOTS 2, 7 -10, 12 - 17 & 200 BEING A SUBDIVISION OF LOT 2 DP 305273

Client: ALBATROSS QT

Surveyed	Signed	Date	Job No.	Drawing No.
-		-	9074	21 Sheet 001

Drawn	Signed	Date	Scale
RWB		19.01.16	1:500 @ A1 1:1000 @ A3

Designed	Signed	Date	Datum & Level	Rev.
-		-	Mt Nic 2000 & MSL	N

Notes:
All dimensions shown are in meters unless shown otherwise.
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- Ensuring the information is the most recent issue.
- Copyright on this drawing is reserved.

QUEENSTOWN LAKES DISTRICT COUNCIL

www.qldc.govt.nz

DECISIONS OF THE QUEENSTOWN LAKES DISTRICT COUNCIL

CHANGE OF CONDITION – SECTION 127 AND LAND USE – SECTION 88

NOTIFICATION UNDER s95 AND DETERMINATION UNDER s104

RESOURCE MANAGEMENT ACT 1991

Applicant:	Albatross QT Limited
RM reference:	RM160038
Application:	Application under section 127 of the Resource Management Act 1991 (RMA) to change Condition 1 of RM050520 as amended by resource consents RM050520.01, RM130069 and RM150928, and to change conditions 4a, 4c, 4k and 4m, 5e, 6a, 6c, and 6d of resource consent RM050520 as amended by RM050520.01. Application under section 88 of the RMA for a land use consent to breach the required minimum site distances for Accesses F and P.
Location:	658A Frankton Road, Queenstown
Legal Description:	Lot 1 Deposited Plan 485139 held in Computer Freehold Register 688943
Zoning:	Low Density Residential
Activity Status:	**Discretionary**
Decision Date:	**5 April 2016**
Reissue Date:	**13 May 2016**

SUMMARY OF DECISIONS

1. Pursuant to sections 95A-95F of the RMA the application will be processed on a **non-notified** basis given the findings of Section 6.0 of this report. This decision is made by Paula Costello, Senior Planner, on 8 April 2016 under delegated authority pursuant to Section 34A of the RMA.

2. Pursuant to Section 127 of the RMA, consent is **GRANTED** subject to the change to conditions outlined in Section 7.4 of this decision. An updated set of conditions of RM050520.01 is provided in Appendix 1 of this decision. The consent only applies if the conditions outlined are met. To reach the decision to grant consent the application was considered (including the full and complete records available in Council's electronic file and responses to any queries) by Paula Costello, Senior Planner, as delegate for the Council.

3. Pursuant to section 104 of the RMA, consent is **GRANTED** subject to the changes to conditions outlined in Section 7.4 of this decision. The consent only applies if the conditions outlined are met. To reach the decision to grant consent the application was considered (including the full and complete records available in Council's electronic file and responses to any queries) by Paula Costello, Senior Planner, as delegate for the Council.

4. This decision was reissued on 12 May 2016 under section 133A of the Act with respect to Condition 5(e) to ensure that this condition was applicable to all lots. This reissue was made to amend this error and with the agreement of the applicant including the extension of relevant timeframes under s37 of the Act. This reissue decision was made by Paula Costello, Senior Planner, as delegate for the Council.

1. SITE DESCRIPTION

The applicant has provided a detailed description of the proposal, the site and locality and the relevant site history in Sections 1.1, 1.2 and 1.3 of the report entitled Albatross QT Ltd Variation to Conditions RM050520.01, prepared by Nick Geddes of Clark Fortune McDonald and Associates, dated Final December 2015 on the report pages and submitted as part of the application (hereon referred to as the applicant's AEE and attached as Appendix 3). These descriptions are considered accurate and are adopted for the purpose of this report.

The following site history is relevant to the application:

- RM050520 was notified and subsequently approved on 20 May 2008, this consent granted consent to subdivide a site into 17 fee simple residential allotments with associated earthworks.

- RM090646 was granted on 7 October 2009 to vary Condition 1 of resource consent RM050520, to include a staging condition to enable the subdivision to proceed in three stages.

- An extension to the lapse date of RM050520 was granted pursuant to Section 125 of the Act on 21 December 2012. RM050520 now lapses on 20 May 2016.

- RM130069 was granted 24 March 2014 for a variation of conditions 1 and 6(g) of RM050520, subject to the imposition of additional new conditions 1A and 4(q). Condition 14 was also varied.

- RM050520.01 was granted on 12 September 2014 to vary conditions 1, 13 and 14 of resource consent RM050520.

- Resource consent RM150928 was granted 18 December 2015 to vary condition 1 of RM050520.01 to make changes to easements and realign boundaries.

PROPOSAL

The application has been amended since it was lodged to include a land use consent application to breach the minimum site distance visibility for Access P and F. This has resulted in a revised AEE, the most recent version is dated February 2016. The most recent approved Scheme Plan approved by resource consent RM150928 on 18 December 2015, prepared by Clark Fortune McDonald and Associates, Reference 9074 Revision M is dated 11/12/2015.

Variation/cancellation of condition

The application seeks consent to undertake a number of variations to conditions of subdivision RM050520 as amended by consent decisions RM050520.01 and RM150928.

The application has been assessed by Council's consulting engineer, Mr Alan Hopkins. Mr Hopkins has advised that the majority of the physical works for this subdivision have been completed and certification under section 224c of the RMA will be sought in the near future. He further notes that matters relating to geotechnical certification (items 2, 6 and 7 below) have been based largely on further geotechnical investigations which have been undertaken by the applicant's consultants Tonkin & Taylor and Geosolve Limited.
It should be clarified that although the application refers to an amalgamation of Lots 10 and 11, it is not proposed to amalgamate these lots in the typical subdivision process, but rather the applicant seeks to join approved Lots 10 and 11 together, creating a larger lot.

The proposal seeks consent to achieve the following;

1. Amalgamate Lots 10 and 11 due to unfavourable geotecnical conditions;
2. Remove building platforms and revise geotechnical certification for Lots 7,8,9 10 and 17,
3. Remove private water supply requirements,
4. Revise indented parking arrangements on Road 6,
5. Remove requirement to form Access G,
6. Formalise geotechnical Zone E on a scheme plan and amend geotechnical certification for Zone E,
7. Formalise geotechnical Zone D on a scheme plan and amend geotechnical certification for Zone D.

The above variation to the resource consent affects the following conditions imposed by RM150520 as amended by RM150520.01 and RM150928.

- Condition 1 of resource consent RM050520.01 and as amended by RM150928,
- Condition 4a of resource consent RM050520 as amended by RM050520.01
- Condition 4c of resource consent RM050520 as amended by RM050520.01
- Condition 4k of resource consent RM050520 as amended by RM050520.01
- Condition 4m of resource consent RM050520 as amended by RM050520.01
- Condition 5e of resource consent RM050520 as amended by RM050520.01
- Condition 6a of resource consent RM050520 as amended by RM050520.01
- Condition 6c of resource consent RM050520 as amended by RM050520.01
- Condition 6d of resource consent RM050520 as amended by RM050520.01

The following changes are sought:

Condition 1

Condition 1 as amended by RM150928 currently states;

*1. That the activity be undertaken in accordance with the plans drawn by Clark Fortune McDonald and Associates, dated 01.01.14, Referenced 9074-21 Revision M and titled The Tiers Subdivision Lots 2, 7-17 and 200 Being a Subdivision of Lot 2 DP 305273 (**stamped as approved 18 December 2015**) and specifications submitted with the application, with the exception of the amendments required by the following conditions of consent.*

The applicant seeks the following changes, shown as underlined:

*1. That the activity be undertaken in accordance with the plans drawn by Clark Fortune McDonald and Associates, dated ~~01.01.14~~ 19.01.2016, Referenced 9074-21 Revision ~~M~~ N and titled The Tiers Subdivision Lots 2, 7- 10, 12 - 17 and 200 Being a Subdivision of Lot 2 DP 305273 (**stamped as approved ~~18 December 2015~~ March 2016**) and specifications submitted with the application, with the exception of the amendments required by the following conditions of consent.*

Condition 4a

Condition 4a of RM050520.01 currently states;

4. Prior to the commencement of any works on the land being subdivided and prior to the Council signing the Title Plan pursuant to Section 223 of the Resource Management Act 1991, the consent holder shall provide to the Queenstown Lakes District Council for review, copies of specifications, calculations and design plans as is considered by Council to be both necessary and adequate, in accordance with Condition (2), to detail the following engineering works required:

a. *The provision for building platforms 7, 8, 9, 10 and 17 to be formed as per specific geotechnical design and under suitably qualified geotechnical professional supervision.*

The applicant seeks the following changes shown as strikethrough:

~~*(a) The provision for building platforms 7, 8, 9, 10 and 17 to be formed as per specific geotechnical design and under suitably qualified geotechnical professional supervision.*~~

Condition 5e

Condition 5e of RM050520.01 currently states;

5. Prior to the certification pursuant to Section 224(c) of the Resource Management Act 1991, the applicant shall complete the following:

e) A suitably qualified geotechnical professional shall provide a completed Schedule 2A as found on page 40 in NZS4404:2004 that shall provide the Council assurance that the building platforms on Lots 7, 8, 9, 10 and 17 are suitable for residential development.

The applicant seeks the following changes shown as strikethrough and underlined:

~~*e) A suitably qualified geotechnical professional shall provide a completed Schedule 2A as found on page 40 in NZS4404:2004 that shall provide the Council assurance that the building platforms on Lots 7, 8, 9, 10 and 17 are suitable for residential development.*~~

e) The consent holder shall provide a geotechnical completion report and a Schedule 2A "Statement of professional opinion as to suitability of land for building construction" in accordance with Section 2.6.1 of QLDC's Land Development and Subdivision Code of Practice that has been prepared by suitably qualified geotechnical engineer as defined in Section 1.2.2 and demonstrates to Council that all lots are suitable for building development

In the event that the site conditions on any lot are only found to be suitable for building construction subject to certain mitigation measures and/or remedial works being carried out, then a suitably qualified and experienced professional shall submit to the Council for review and approval full details of such works. The consent holder shall be responsible for implementing all necessary mitigation measures and/or remedial works required to prepare the land for building construction.

A consent notice condition shall be registered on the relevant Computer Freehold Registers for any lot in respect of which the Schedule 2A statement indicates that building construction would only be suitable if certain mitigation measures and/or remedial works were carried out at the time of construction. The consent notice condition shall require that, prior to any construction work (other than work associated with geotechnical investigation), the owner of such a lot shall submit, to council for certification, plans prepared by a suitably qualified engineer detailing the proposed mitigation measures and/or remedial works AND require the owner to implement all such measures prior to occupation of any building.

A consent notice condition shall be registered on the relevant Computer Freehold Registers for any lot in respect of which the Schedule 2A statement indicates that no building construction would be suitable within the lot or on any part of a lot. The consent notice condition shall refer to the Schedule 2A statement and record that no residential development may be undertaken on the lot or on the relevant part of the lot.

Condition 6c

Condition 6c of RM050520.01 currently states;

6. *Prior to certification pursuant to Section 224 of the Act and in accordance with Section 221 of the Resource Management Act 1991, a consent notice shall be registered on the pertinent Certificate of Title for the performance of the following conditions on a continuing basis:*

    c) *Any building on Lots 7, 8, 9, 10 and 17 shall be fully contained within the engineered building platform established at the time of subdivision as shown in the plan drawn by Clark Fortune McDonald and Associates, titled Potters Hill – Proposed Development of Lot 2 D.P. 305273 dated 3 March 2007 and attached to this consent notice. A geotechnical report and design shall be provided by a suitably qualified geotechnical engineer for any building proposed outside of this platform. This report and design shall be submitted with the building consent application.*

The applicant seeks the following changes, shown as strikethrough and underlined:

~~c) *Any building on Lots 7, 8, 9, 10 and 17 shall be fully contained within the engineered building platform established at the time of subdivision as shown in the plan drawn by Clark Fortune McDonald and Associates, titled Potters Hill – Proposed Development of Lot 2 D.P. 305273 dated 3 March 2007 and attached to this consent notice. A geotechnical report and design shall be provided by a suitably qualified geotechnical engineer for any building proposed outside of this platform. This report and design shall be submitted with the building consent application.*~~

c) A consent notice condition pursuant to s.221 of the Resource Management Act 1991 shall be registered on the Computer Freehold Register for Lot 7, 8, 9 & 17 providing for the performance of any ongoing requirements for building construction as outlined in Condition 5(e) (above).

Condition 4c

Condition 4c of RM050520.01 currently states;

4. *Prior to the commencement of any works on the land being subdivided and prior to the Council signing the Title Plan pursuant to Section 223 of the Resource Management Act 1991, the consent holder shall provide to the Queenstown Lakes District Council for review, copies of specifications, calculations and design plans as is considered by Council to be both necessary and adequate, in accordance with Condition (2), to detail the following engineering works required:*

    c) The provision of a private water storage scheme that augments water pressures provided to the lots to levels that are acceptable to achieve W3 fire flow, and which comply with Council's amendments to NZS4404:2004.

The applicant seeks the following changes, shown as strikethrough;

~~*c) The provision of a private water storage scheme that augments water pressures provided to the lots to levels that are acceptable to achieve W3 fire flow, and which comply with Council's amendments to NZS4404:2004.*~~

Condition 4k

Condition 4k of RM050520.01 currently states;

4. *Prior to the commencement of any works on the land being subdivided and prior to the Council signing the Title Plan pursuant to Section 223 of the Resource Management Act 1991, the consent holder shall provide to the Queenstown Lakes District Council for review, copies of specifications, calculations and design plans as is considered by Council to be both necessary and adequate, in accordance with Condition (2), to detail the following engineering works required:*

k) The provision of the access road ("Road 6") to Lots 1 through 17 from Frankton Road to be in terms of Table 3.1 of Council's amendments to NZS4404:2004 to be formed to not less than 6m and a legal width of not less than 12m. Indented parking shall be provided along Road 6 in the configuration of either 3 lots of bays to hold 3 cars minimum or 2 lots of bays to hold 4 cars minimum. No Parking lines shall be provided along the length of Road 6 apart from where the parking bays are situated. The legal width shall be 15m wherever possible.

The applicant seeks the following changes, shown as strikethrough and bold;

k) Table 3.1 of Council's amendments to NZS4404:2004 to be formed to not less than 6m and a legal width of not less than 12m. Indented parking shall be provided along Road 6 in the configuration of ~~either 3 lots of bays to hold 3 cars minimum or 2 lots of bays to hold 4 cars minimum~~ ***4 lots of bays to hold two cars****. No Parking lines shall be provided along the length of Road 6 apart from where the parking bays are situated. The legal width shall be 15m wherever possible.*

Condition 4m

Condition 4m of RM050520.01 currently states;

4. Prior to the commencement of any works on the land being subdivided and prior to the Council signing the Title Plan pursuant to Section 223 of the Resource Management Act 1991, the consent holder shall provide to the Queenstown Lakes District Council for review, copies of specifications, calculations and design plans as is considered by Council to be both necessary and adequate, in accordance with Condition (2), to detail the following engineering works required:

m) "Access G" as shown on Clark Fortune McDonald's drawing 9074-22c shall be constructed according to NZS4404:2004 standards for surfacing, kerb/channel and engineering design and to a formed width of 3m and a legal width of 6m. This shall be constructed with a minimum depth of 150mm M4 AP40 aggregate and provision shall be made for the disposal of stormwater.

The applicant seeks the following changes, shown as strikethrough;

~~m)"Access G" as shown on Clark Fortune McDonald's drawing 9074-22c shall be constructed according to NZS4404:2004 standards for surfacing, kerb/channel and engineering design and to a formed width of 3m and a legal width of 6m. This shall be constructed with a minimum depth of 150mm M4 AP40 aggregate and provision shall be made for the disposal of stormwater.~~

Condition 6a

Condition 6a of RM050520.01 currently states;

6. Prior to certification pursuant to Section 224 of the Act and in accordance with Section 221 of the Resource Management Act 1991, a consent notice shall be registered on the pertinent Certificate of Title for the performance of the following conditions on a continuing basis:

a. *No building shall be constructed within Zone E without a comprehensive geotechnical report being prepared by a suitably qualified geotechnical engineer. Subsurface investigations will be required and the report must confirm suitability of the site for the proposed building. No building consent will be issued for any proposed building within Zone E without Council's approval of the geotechnical report. Council may require that this report is peer reviewed. Zone E is as shown in the plan drawn by Clark Fortune McDonald and Associates, titled Potters Hill – Proposed Development of Lot 2 D.P. 305273 dated 3 March 2007 and attached to this consent notice.*

The applicant seeks the following changes, shown as strikethrough and underlined;

~~*(a) No building shall be constructed within Zone E without a comprehensive geotechnical report being prepared by a suitably qualified geotechnical engineer. Subsurface investigations will be required and the report must confirm suitability of the site for the proposed building. No building consent will be issued for any proposed building within Zone E without Council's approval of the geotechnical report. Council may require that this report is peer reviewed. Zone E is as shown in the plan drawn by Clark Fortune McDonald and Associates, titled Potters Hill – Proposed Development of Lot 2 D.P. 305273 dated 3 March 2007 and attached to this consent notice.*~~

a) No building shall be constructed within AREA PA DP xxxxxx without a comprehensive geotechnical report being prepared by a suitably qualified geotechnical engineer. Subsurface investigations will be required and the report must confirm suitability of the site for the proposed building. No building consent will be issued for any proposed building within AREA PA DP xxxxxx without Council's approval of the geotechnical report. Council may require that this report is peer reviewed.

Condition 6d

Condition 6d of RM050520.01 currently states;

6.Prior to certification pursuant to Section 224 of the Act and in accordance with Section 221 of the Resource Management Act 1991, a consent notice shall be registered on the pertinent Certificate of Title for the performance of the following conditions on a continuing basis:

d) A geotechnical report and design shall be provided by a suitably qualified geotechnical engineer for any building within Lot 11 or 12 that falls within Zone D of the land suitability classification (refer Tonkin & Taylor, "Albatross QT Subdivision – Supplementary Geotechnical Investigations", Job no: 890815, June 2007). This report and design shall be submitted with the building consent application.

The applicant seeks the following changes, sown as strikethrough and underlined;

~~*c) A geotechnical report and design shall be provided by a suitably qualified geotechnical engineer for any building within Lot 11 or 12 that falls within Zone D of the land suitability classification (refer Tonkin & Taylor, "Albatross QT Subdivision – Supplementary Geotechnical Investigations", Job no: 890815, June 2007). This report and design shall be submitted with the building consent application.*~~

c) A geotechnical report and design shall be provided by a suitably qualified geotechnical engineer for any building within Lots 10 or 17 that falls within in Areas PB, PC, PD & L DP xxxxx (refer Zone D on Tonkin & Taylor report, "Albatross QT Subdivision – Supplementary Geotechnical Investigations", Job no: 890815, June 2007). This report and design shall be submitted with the building consent application.

The application can be assessed under section 127 as the proposal relates to a variation to consent conditions and will not result in a change to the consented activity.

Land Use

Land use consent is sought to allow a reduction to the minimum site distance specified in the District Plan for Accesses F and P. Condition 4k of RM050520.01 requires the formation of eight indented parking spaces within the legal width of Access Road 6. Due to the steep topography and bedrock outcrops the consent holder has stated that locating these parks in accordance with District Plan standards for the Low Density zone is difficult to achieve. The consent holder has therefore applied to breach *rule 14.2.4.2 iv Minimum Site Distances from Vehicle Access* of the District Plan in regard to Accesses P and F. This rule requires a minimum sight distance of 45m within a 50km/hr speed limit.

2. ACTIVITY STATUS

2.1 RESOURCE MANAGEMENT ACT 1991

The proposed activity requires resource consent for the following reasons:

Cancellation/Variation

- A **discretionary** activity consent pursuant to section 127(3)(a) of the RMA, which deems any application to change or cancel consent conditions to be a discretionary activity.

Land Use

- A **restricted discretionary** activity consent pursunat to Rule 14.2.4.2 iv Minimum Site Distances from Vehicle Access in regard to Accesses P and F. This rule requires a minimum sight distance of 45m within 50km/hr speed limit. Council's discretion is with respect to this matter.

Overall the application is assessed as a **discretionary activity.**

3. SECTION 95A NOTIFICATION

The applicant has not requested public notification of the application (s95A(2)(b)).

No rule or national environmental standard requires or precludes public notification of the application (s95A(2)(c)). The consent authority is not deciding to publicly notify the application using its discretion under s95A(1) and there are no special circumstances that exist in relation to the application that would require public notification (s95A(4)).

A consent authority must publicly notify an application if it decides under s95D that the activity will have or is likely to have adverse effects on the environment that are more than minor (s95A(2)(a)). An assessment in this respect follows.

4. ASSESSMENT OF EFFECTS ON THE ENVIRONMENT (s95D)

4.1 MANDATORY EXCLUSIONS FROM ASSESSMENT (s95D)

A: Effects on the owners or occupiers of land on which the activity will occur and on adjacent land (s95D(a)).

B: Trade competition and the effects of trade competition (s95D(d)).

*C: The following persons have provided their **written approval** and as such adverse effects on these parties have been disregarded (s95D(e)).*

No written approvals have been provided in support of the application.

4.2 PERMITTED BASELINE (s95D(b))

The consent authority **may** disregard an adverse effect of the activity if a rule or national environmental standard permits an activity with that effect. In this case, no permitted baseline has been applied.

4.3 ASSESSMENT: EFFECTS ON THE ENVIRONMENT

Taking into account Sections 4.1 and 4.2 above, the following outlines an assessment as to whether the activity will have or is likely to have adverse effects on the environment more than minor:

As part of the processing of this application, a report was received from Council's consulting Resource Management Engineer, Mr Alan Hopkins. Mr Hopkins's report is accepted and his findings are relied on for the purposes of this assessment.

Cancellation/Variation to Consent Conditions

Subdivision Condition 1 of RM050520 as amended by subsequent decisions RM050520.01 and RM150928: Amalgamate Lots 10 and 11

Resource consent RM050520.01 approved a scheme plan (as amended by RM150928) that specified building platforms on certain lots where further geotechnical investigation were considered necessary, the geotechnical investigations were to be completed prior to certification of the subdivision under section 224c of the RMA. Condition 4(a) of RM050520.01 requires '*The provision for building platforms on lots 7, 8, 9, 10 and 17 to be formed as per specific geotechnical design and under suitably qualified geotechnical professional supervision.'*

The consent holder engaged Geosolve Ltd to undertake the required additional geotechnical investigation. In a letter dated 23 November 2015 (Geosolve Ref: 140412) Geosolve confirmed that considerable remedial work would be required within the building platform on Lot 10 in order to be able to build on the platform. The applicant states that due to the considerable costs associated with this remedial work they now seek to remove the building platform and join together Lots 10 and 11 creating a larger Lot 10 with the buildable area over previous Lot 11.

Mr Hopkins states that the removal of the building platform and the joining together of these lots is well founded and recommends Condition 1 of RM050520.01 is varied to reflect the change. The advice of Mr Hopkins is accepted. Any adverse effect of creating a larger lot will not result in adverse effects of a more than minor nature.

The recommended wording for condition 1 is:

1.That the activity be undertaken in accordance with the plans drawn by Clark Fortune McDonald and Associates, dated 01.01.14 19.01.16, Referenced 9074-21 Revision ~~M~~ N and titled The Tiers Subdivision Lots 2, 7-~~17~~10,12-17 and 200 Being a Subdivision of Lot 2 DP 305273 (stamped as approved ~~December 2015~~ April 2016) and specifications submitted with the application, with the exception of the amendments required by the following conditions of consent.

RM050520.01 Conditions 1, 4a, 5e and 6c: Geotechnical Constraints Lots 7, 8, 9, 10 and 17

The approved conditions of RM050520.01 require further geotechnical investigation to confirm the geotechnical requirements to construct buildings in the platforms contained in Lots 7, 8, 9, 10 & 17. As discussed above, it is proposed that the Lot 10 building platform will be removed and the lot joined together with Lot 11.

The applicant states that the geotechnical investigations on Lots 7, 8, 9 & 17 have determined that the original intentions sought by conditions 4a, 5e & 6c would be better served by a more detailed consent condition, as proposed as revised condition 5(e).

Mr Hopkins has reviewed the proposal and is satisfied that the intent of the original conditions will be maintained and that the revised condition will provide a more detailed and logical approach. Mr Hopkins recommends that condition 1 be amended as above, condition 4a be cancelled, and conditions 6c and 5e be amended as proposed. The advice of Mr Hopkins is accepted. Any adverse effects will remain no more than minor.

The recommended amendments are;

Condition 1. Amended as above.

Condition 4(a): Deleted as follows;

~~*4a.The provision for building platforms 7, 8, 9, 10 and 17 to be formed as per specific geotechnical*~~

~~*design and under suitably qualified geotechnical professional supervision.*~~

Condition 6c: Amended as follows;

~~*6c. Any building on Lots 7, 8, 9, 10 and 17 shall be fully contained within the engineered building platform established at the time of subdivision as shown in the plan drawn by Clark Fortune McDonald and Associates, titled Potters Hill – Proposed Development of Lot 2 D.P. 305273 dated 3 March 2007 and attached to this consent notice. A geotechnical report and design shall be provided by a suitably qualified geotechnical engineer for any building proposed outside of this platform. This report and design shall be submitted with the building consent application.*~~

6c. A consent notice condition pursuant to s.221 of the Resource Management Act 1991 shall be registered on the Computer Freehold Register for Lot 7, 8, 9 & 17 providing for the performance of any ongoing requirements for building construction as outlined in Condition 5(e) (above).

Condition 5e: Amended as follows;

~~*5(e): A suitably qu*~~

~~*page 40 in NZS4404:2004 that shall provide the Council assurance that the building platforms on Lots 7, 8, 9, 10 and 17 are suitable for residential development.*~~

5(e) The consent holder shall provide a geotechnical completion report and a Schedule 2A "Statement of professional opinion as to suitability of land for building construction" in accordance with Section 2.6.1 of QLDC's Land Development and Subdivision Code of Practice that has been prepared by suitably qualified geotechnical engineer as defined in Section 1.2.2 and demonstrates to Council that all lots are suitable for building development

In the event that the site conditions on any lot are only found to be suitable for building construction subject to certain mitigation measures and/or remedial works being carried out, then a suitably qualified and experienced professional shall submit to the Council for review and approval full details of such works. The consent holder shall be responsible for implementing all necessary mitigation measures and/or remedial works required to prepare the land for building construction.

A consent notice condition shall be registered on the relevant Computer Freehold Registers for any lot in respect of which the Schedule 2A statement indicates that building construction would only be suitable if certain mitigation measures and/or remedial works were carried out at the time of construction. The consent notice condition shall require that, prior to any construction work (other than work associated with geotechnical investigation), the owner of such a lot shall submit, to council for certification, plans prepared by a suitably qualified engineer detailing the proposed mitigation measures and/or remedial works AND require the owner to implement all such measures prior to occupation of any building.

A consent notice condition shall be registered on the relevant Computer Freehold Registers for any lot in respect of which the Schedule 2A statement indicates that no building construction would be suitable within the lot or on any part of a lot. The consent notice condition shall refer to the Schedule 2A statement and record that no residential development may be undertaken on the lot or on the relevant part of the lot.

RM050520.01 Condition 4c: Private Water Supply

Condition 4c relates to the provision of a private water storage scheme. The application states that the original private water supply solution anticipated by RM050520.01 for the site has been problematic and therefore an alternative water connection has been made by the consent holder to the Council network in Middleton Road. The applicant has therefore applied to cancel Condition 4c relating to the provision of a private water storage scheme.

Mr Hopkins has provided advice that Council gave engineering approval on 19 November 2015 for a new water supply connection. This line has been installed and will be vested to Council under the section 224c subdivision certification process. Mr Hopkins has reviewed the new water supply connection and notes that it is fed relatively directly from the Council reservoir with limited pipe loss and is satisfied that the subdivision will be provided with the required flows and pressures as per Council standards. He notes that conditions 4d of RM050520.01 requires the consent holder to confirm suitable firefighting flows and pressures prior to section 224c certification, and that this condition remains in place and will ensure that these flows and pressures are confirmed prior to the issuing of certificates of titles. Mr Hopkins accepts that the new approved connection to Council's water network allows condition 4c to be cancelled. The advice of Mr Hopkins is accepted. Any adverse effects on water supply will be no more than minor.

RM050520.01 Condition 4k: Indented Car Parking

This condition requires the provision of either three lots of indented parking bays to hold three cars minimum or two lots of indented parking bays to hold four cars minimum.

The application states that while the total eight required parking spaces can be provided, due to existing topography, the configuration of these spaces cannot be met, and therefore an amendment is sought to allow an alternative to provide four bays to hold two cars each.

Mr Hopkins states that:

"On review of the greater site I accept that the topography limits the ability to provide fewer large multi car parking bays and is better suited to four bays holding two cars each. This layout will in my opinion be of greater benefit to motorists as parks will be more spread out through the site and reduce walking distance to buildings serviced. I therefore recommend Condition 4(k) be amended to allow a configuration of 4 lots of bays hold 2 cars minimum."

This advice is accepted. Any adverse effects will remain no more than minor.

The following changes to Condition 4k are recommended:

4k. The provision of the access road ("Road 6") to Lots 1 through 17 from Frankton Road to be in terms of Table 3.1 of Council's amendments to NZS4404:2004 to be formed to not less than 6m and a legal width of not less than 12m. Indented parking shall be provided along Road 6 in the configuration of either 3 lots of bays to hold 3 cars minimum or 2 lots of bays to hold 4 cars minimum or 4 lots of bays to hold two cars. No Parking lines shall be provided along the length of Road 6 apart from where the parking bays are situated. The legal width shall be 15m wherever possible.

RM050520.01 Condition 4m: Access G

This condition relates to the formation of Access G. Lot 1 DP 485139 (RM050520.01 Stage 1) has recently been subject to subdivision and land use consent RM150087 which approved a 5 metre wide access into Lot 1 DP 485139. Stage 1 of RM150087 completed the 5m wide access and titles have subsequently been issued. Mr Hopkins is satisfied that Condition 4(m) relating to the formation of Access G has therefore become redundant and he recommends that the condition can be deleted. This advice is accepted and it is concluded that the cancellation of condition 4m will not result in adverse effects that are more than minor.

RM050520.01 Condition 1 and 6a: Geotechnical Zone E

The conditions of RM050520.01 require that further geotechnical investigations be carried out within specific areas defined on a plan as Zones. The plan was drawn by Clark Fortune McDonald and Associates, titled Potters Hill – Proposed Development of Lot 2 D.P. 305273 dated 3 March 2007 and appears in the RM050520.01 decision. Mr Hopkins advises that the applicant has completed the geotechnical investigations and is currently working towards meeting section 224c of the RMA requirements. During this certification process, the consent holder has determined that the geotechnical condition 6a is problematic in achieving the intention of the condition and has requested a replacement condition which is considered to better represent the geotechnical complications of Zone E. They have also requested that Zone E be depicted on the scheme plan rather than on a separate plan as per the current requirements of conditions. Zone E is therefore denoted as "PA" on the revised scheme plan.

Mr Hopkins has reviewed the proposed amendment to condition 6a and is satisfied that it achieves the intention of the original condition while providing more concise and logical wording. He is also satisfied that the inclusion of the Zone as easement PA on the scheme plan is sensible to ensure all applicable geotechnical information is clearly shown on the title plans.

The following changes are recommended:

1. Condition 1 as recommended above.

2. Condition 6a be amended as follows:

~~*6(a) No building shall be constructed within Zone E without a comprehensive geotechnical report being prepared by a suitably qualified geotechnical engineer. Subsurface investigations will be required and the report must confirm suitability of the site for the proposed building. No building consent will be issued for any proposed building within Zone E without Council's approval of the geotechnical report. Council may require that this report is peer reviewed. Zone E is as shown in the plan drawn by Clark Fortune McDonald and Associates, titled Potters Hill – Proposed Development of Lot 2 D.P. 305273 dated 3 March 2007 and attached to this consent notice.*~~

6a. No building shall be constructed within AREA PA DP xxxxxx without a comprehensive geotechnical report being prepared by a suitably qualified geotechnical engineer. Subsurface investigations will be required and the report must confirm suitability of the site for the proposed building. No building consent will be issued for any proposed building within AREA PA DP xxxxxx without Council's approval of the geotechnical report. Council may require that this report is peer reviewed.

RM050520.01 Conditions 1 and 6(d) Geotechnical Zone D

Mr Hopkins advises that the consent holder has completed the geotechnical investigations and is currently working towards meeting 224c requirements. As above during this process, it has been determined that the geotechnical condition 6d is problematic in achieving the intention of the condition and has requested a replacement condition which is considered to better represent the geotechnical complications of Zone D. Likewise the consent holder has requested Zone D be depicted on the scheme plan rather than a separate plan as per the current requirements of the conditions. Zone E is therefore denoted as "PB", "PC", "PD" & "L" on the revised scheme plan.

Mr Hopkins has reviewed the amended condition 6d as proposed by the consent holder and is satisfied that it achieves the intention of the original condition 6d while providing a more concise and logical wording. He is also satisfied that the inclusion of the Zone as easement "PB", "PC", "PD" & "L" on the scheme plan is sensible to ensure all applicable geotechnical information is clearly shown on the title plans.

The following changes are recommended to Condition 6d:

~~*6d. A geotechnical report and design shall be provided by a suitably qualified geotechnical engineer for any building within Lot 11 or 12 that falls within Zone D of the land suitability classification (refer Tonkin & Taylor, "Albatross QT Subdivision – Supplementary Geotechnical Investigations", Job no: 890815, June 2007). This report and design shall be submitted with the building consent application.*~~

6d. A geotechnical report and design shall be provided by a suitably qualified geotechnical engineer for any building within Lot 10 or 17 that falls within Areas PB, PC, PD & L DP xxxxxx (refer Zone D on Tonkin & Taylor report, "Albatross QT Subdivision – Supplementary Geotechnical Investigations", Job no: 890815, June 2007). This report and design shall be submitted with the building consent application.

Land Use: Minimum Site Distances

Condition 4(k) of RM050520.01 requires the formation of eight indented parking spaces within the legal width of Access Road 6. The application states that locating these car parks in accordance with District Plan standards is difficult to achieve due to the sites steep topography and existing bedrock outcrops. Therefore the applicant has applied to breach rule 14.2.4.2 iv Minimum Sight Distances from Vehicle Access of the District Plan in regard to Accesses P and F. The rule specifies a minimum sight distance of 45m within a 50 km/hr speed environment.

The applicant has submitted a Traffic Engineering assessment prepared by Bartlett Consulting Ltd titled 'Accesses P and F, Visibility Assessment, The Tiers Subdivision, Queenstown' dated 16/02/2016. This report finds that the speed environment for the site is considerably less than 50 km/hr and the assessment concludes that reduced sightlines in accordance with Table 1 of the report are compliant with Austroads and NZTA guidance.

As part of Mr Hopkin's assessment, he raised specific questions in relation to the impact of indented parking on sightlines. In response to the issues raised, Section 6 of the Bartlett report states:

'The methods for assessing, or measuring, visibility sight distance only consider permanent obstructions such as: boundary fences, buildings, road alignment, permanent vegetation and topography. It does not consider temporary items such as parked vehicles on the roadside or verge.

Both the Operative QLDC District Plan and Austroads do not mention parking within their assessment matters for visibility sight distance. The only document which does consider the effects of parking on visibility sight distance is RTS 6. This document states that sight lines should be kept clear of permanent obstructions, specifically excluding parking for accesses onto a local road. Based on RTS 6 roadside parking, as a temporary obstruction, is excluded from the assessment of visibility sight distance.

The New Zealand Land Transport Rule 2004 does provide some useful guidance as to where parking is acceptable (legal) and where it is not acceptable (illegal). For a vehicle entrances and exits the Land Transport Rule states:

A driver or person in charge of a vehicle must not stop, stand, or park the vehicle so as to obstruct entry to or exit from any driveway.

This goes on to provide some definition on what is considered to be an obstruction as: For the purposes of this clause, a vehicle parked alongside any part of a kerb crossing provided for a driveway or within 1 m of the prolongation of the side of a driveway must be regarded as obstructing entry or exit.

It is acknowledged that the parking bay provided does reduce the visibility sight distance at Accesses F and P. Based on the Rule, unless stopping is otherwise controlled, it is legal to park 1m away from an access. This will have an impact on the available visibility sight distance however it complies with the Rule and is typical in urban environments.'

The Bartlett report concludes that visibility of the sight distances from the accesses comply with national guidance and the overall effects of the non-compliance with Section 14.2.4.2 iv of the District Plan are considered to be less than minor. Mr Bartlett acknowledges, that although the location of the parking is not ideal, it is considered acceptable, as it does not contravene national guidance.
Mr Hopkins has reviewed the findings and accepts the Bartlett Consulting assessment report. He states that the sightlines provided at Access P and F are acceptable based on the actual speed environment. He however states that ideally the parking in the vicinity of Access P and F would be relocated to increase sightlines from the access but acknowledges that there is no legal requirement or national best practice guidelines requiring this parking to be relocated. Mr Hopkins is of the opinion that although not ideal the location of the indented parking poses a similar risk and restriction to sightlines as many existing on street parking situations elsewhere within urbanised areas of the district. He goes on to state *"that ultimately the relocation of this parking would require extensive rock breaking and cost to the consent holder and therefore would necessitate a clear legislative requirement to which the Bartlett report has confirmed does not exist."*

Mr Hopkins recommends that consent is granted in respect to the rule breach for reduced sightlines from Accesses 'P' and 'F' and that these sightlines can be reduced in accordance with Table 1 of the Bartlett Consulting Ltd ' Accesses P and F, Visibility Assessment, The Tiers Subdivision, Queenstown' report dated 16/02/2016. Mr Hopkins notes that this recommendation does not take into account reduced sightlines associated with indented car parking as this is only considered a temporary restriction under national guidelines.

The advice of Mr Hopkins is accepted.

Based on the advice of Mr Hopkins any adverse effects associated with the reduced sightlines will be no more than minor.

4.4 DECISION: EFFECTS ON THE ENVIRONMENT (s95A(2))

Overall the proposed activity is not likely to have adverse effects on the environment that are more than minor.

5. EFFECTS ON PERSONS

Section 95B(1) requires a decision whether there are any affected persons (under s95E) in relation to the activity. Section 95E requires that a person is an affected person if the adverse effects of the activity on the person are minor or more than minor (but not less than minor).

5.1 MANDATORY EXCLUSIONS FROM ASSESSMENT (s95E)

No exclusions have been applied.

5.2 ASSESSMENT: EFFECTS ON PERSONS

Taking into account Section 5.1 above, the following outlines an assessment as to whether the activity will have or is likely to have adverse effects on persons that are minor or more than minor:

Resource consent RM050520 was processed on a notified basis. Written approval was obtained from Transit New Zealand (now New Zealand Transport Agency). Thirty eight submissions were received in opposition to the development, one neutral submission was received and seven late opposing submissions were received.

The main points of the submissions were summarised in the [then] reporting Planner's section 42A report as follows:

- *Ground stability concerns. Earthworks may result in damage to neighbouring sites.*
- *Road construction concerns (earthworks, slips, noise, dust, steepness, timeframes)*
- *Proposal may affect value of neighbouring property.*
- *Proposed footpath passes close to neighbouring property and residences.*
- *Safety and congestion concerns over the State Highway 6 intersection and increased traffic.*
- *Uncertainty over what type of development will follow if proposed lots are created.*
- *Water run-off during and after construction.*
- *There will be an increased demand on existing services.*
- *The onus of further geotechnical investigations should not be put on future land owners.*
- *Insufficient geotechnical investigations have been undertaken to support subdivision of the site. Stability issues remain.*
- *No assessment of geology and land instability with regard to stormwater has been undertaken.*
- *The subdivision may be subject to natural hazards and therefore requires consideration pursuant to section 106 of the Act.*
- *Construction methodology for the access does not provide for delays and is unlikely to be completed within the timeframe suggested. The temporary access ramp will not be an equivalent alternative.*

A number of submitters raised geotechnical concerns and although parking and access were not specifically raised, issues around increased traffic, access onto the State Highway, and construction methodology for access were raised.

The changes requested as part of this application have come about as a response to the results of the further geotechnical investigations that were required by the conditions imposed on RM150520.01. The amendments avoid the need for considerable remedial works required for Lots 10 and 11 if these lots were to be built on as previously consented. The changes to the conditions better reflect the geotechnical complications of Zones E and D, whilst ensuring the original intension of the original conditions are retained.

No persons will be adversely affected by the change from a private water supply to a supply from Council's network. Existing conditions of consent will ensure that water flow and water pressure comply with Council standards.

The deletion of condition 4m in relation to the formation of Access G will not result in adverse effects as the formation of this access occurred as part of RM150087.

Having regard to the nature of the above submissions, it is determined that there will be no potential adverse effects on submitters.

The findings of Mr Hopkins are adopted and relied upon, that the sightlines for Accesses P and F are acceptable based on the speed environment, and it is concluded that any adverse effects on traffic and pedestrian safety will be less than minor.

5.3 DECISION: EFFECTS ON PERSONS (s95B(1))

In terms of Section 95E and Section 127 (4) of the RMA, no person is considered to be adversely affected.

6. OVERALL NOTIFICATION DETERMINATION

Given the decisions made above in Sections 4.4 and 5.3 the application is to be processed on a non-notified basis.

7. S104 ASSESSMENT

7.1 EFFECTS (s104(1)(a))

Actual and potential effects on the environment have been outlined in Section 4 of this report.

7.2 RELEVANT DISTRICT PLAN PROVISIONS (s104(1)(b)(vi))

The relevant policies and objectives are contained in Parts 14 and Part 15 of the District Plan.

Part 14

Within Part 14, the most relevant objective is Objective 2 relating to safety and accessibility which seeks to maintain and improve access, ease and safety of pedestrians and vehicle movements. Supporting Policy 2.6 seeks to ensure that intersections and accessways are designed to be located so good visibility is provided. Objective 5 relates parking and loading and seeks sufficient accessible parking and loading facilities to cater for the anticipated demands of activities while controlling adverse effects. The most relevant supporting policy is 5.5 relating to design and parking areas to ensure safety.

Mr Bartlett's evidence concludes that the visibility of the site distance from the accessways complies with national guidance on these matters and that any adverse effects will be less than minor. Mr Hopkins has assessed the evidence and is agreement with Mr Bartlett that the sightlines are acceptable. The proposal is therefore not contrary to the relevant objectives and policies.

Part 15

Objective 1 – Servicing, all development lots will be appropriately serviced subject to existing conditions and requirements of the RM050520.01 consent.

Objective 5 – Amenity Protection, the lot sizes and dimensions remain appropriate for residential development and consistent with the density anticipated of the Low Density Residential zone. The proposal is considered to meet this objective and policy of the District Plan.

The proposal is considered to meet the relevant objectives and policies of the District Plan.

PROPOSED DISTRICT PLAN

The Queenstown Lakes District Council notified the Proposed District Plan on 26 August 2015, under this plan the site is zoned Low Density Residential. There are no relevant rules in the Proposed District Plan which have immediate legal effect and the proposal is considered to accord with the relevant objectives and policies of the Proposed District Plan.

PART 2 OF THE RMA

Part 2 of the RMA is concerned with sustainable management of natural and physical resources. The variation and land use will enable the efficient implementation of the subdivision resource consent without creating adverse effects that are more than minor. The proposal is consistent with the sustainable management principal of the Act.

7.4 DECISION 1: CANCELLATION/VARIATION PURSUANT TO SECTION 127 OF THE RMA

Consent is **granted** for the application by Albatross QT Ltd to change Condition 1 of resource consent RM050520.01 as amended by RM150928, such that:

1 Condition 1 of resource consent RM050520.01 as amended by RM150928 is amended to read as follows (deleted text struck-through, added text **bold underlined**):

*1. That the activity be undertaken in accordance with the plans drawn by Clark Fortune McDonald and Associates, dated ~~01.01.14~~ **19.01.2016**, Referenced 9074-21 Revision ~~M~~ **N** and titled The Tiers Subdivision Lots 2, 7- **10, 12** - 17 and 200 Being a Subdivision of Lot 2 DP 305273 (**stamped as approved ~~18 December 2015~~ April 2016**) and specifications submitted with the application, with the exception of the amendments required by the following conditions of consent.*

2 Condition 4a of resource consent RM050520.01 is cancelled as follows (deleted text struck-through):

~~4a. The provision for building platforms 7, 8, 9, 10 and 17 to be formed as per specific geotechnical design and under suitably qualified geotechnical professional supervision.~~

3 Condition 4c of resource consent RM050520.01 is cancelled as follows (deleted text struck-through):

~~4c. The provision of a private water storage scheme that augments water pressures provided to the lots to levels that are acceptable to achieve W3 fire flow, and which comply with Council's amendments to NZS4404:2004.~~

4 Condition 4k of resource consent RM050520.01 is amended to read as follows (deleted text struck-through, added text **bold underlined**):

*4k. The provision of the access road ("Road 6") to Lots 1 through 17 from Frankton Road to be in terms of Table 3.1 of Council's amendments to NZS4404:2004 to be formed to not less than 6m and a legal width of not less than 12m. Indented parking shall be provided along Road 6 in the configuration of either 3 lots of bays to hold 3 cars minimum or 2 lots of bays to hold 4 cars minimum **or 4 lots of bays to hold two cars.** No Parking lines shall be provided along the length of Road 6 apart from where the parking bays are situated. The legal width shall be 15m wherever possible.*

5 Condition 4m of resource consent RM050520.01 is cancelled as follows (deleted text struck-through):

~~4(m). Access G" as shown on Clark Fortune McDonald's drawing 9074-22c shall be constructed according to NZS4404:2004 standards for surfacing, kerb/channel and engineering design and to a formed width of 3m and a legal width of 6m. This shall be constructed with a minimum depth of 150mm M4 AP40 aggregate and provision shall be made for the disposal of stormwater.~~

6 Condition 5e of resource consent RM050520.01 is amended to read as follows (deleted text struck-through, added text **bold underlined**):

~~5e. A suitably qualified geotechnical professional shall provide a completed Schedule 2A as found on page 40 in NZS4404:2004 that shall provide the Council assurance that the building platforms on Lots 7, 8, 9, 10 and 17 are suitable for residential development.~~

5e. The consent holder shall provide a geotechnical completion report and a Schedule 2A "Statement of professional opinion as to suitability of land for building construction" in accordance with Section 2.6.1 of QLDC's Land Development and Subdivision Code of Practice that has been prepared by suitably qualified geotechnical engineer as defined in Section 1.2.2 and demonstrates to Council that all lots are suitable for building development

In the event that the site conditions on any lot are only found to be suitable for building construction subject to certain mitigation measures and/or remedial works being carried out, then a suitably qualified and experienced professional shall submit to the Council for review and approval full details of such works. The consent holder shall be responsible for implementing all necessary mitigation measures and/or remedial works required to prepare the land for building construction.

A consent notice condition shall be registered on the relevant Computer Freehold Registers for any lot in respect of which the Schedule 2A statement indicates that building construction would only be suitable if certain mitigation measures and/or remedial works were carried out at the time of construction. The consent notice condition shall require that, prior to any construction work (other than work associated with geotechnical investigation), the owner of such a lot shall submit, to council for certification, plans prepared by a suitably qualified engineer detailing the proposed mitigation measures and/or remedial works AND require the owner to implement all such measures prior to occupation of any building.

A consent notice condition shall be registered on the relevant Computer Freehold Registers for any lot in respect of which the Schedule 2A statement indicates that no building construction would be suitable within the lot or on any part of a lot. The consent notice condition shall refer to the Schedule 2A statement and record that no residential development may be undertaken on the lot or on the relevant part of the lot.

7 Condition 6a of resource consent RM050520.01 is amended to read as follows (deleted text struck-through, added text **bold underlined**):

~~*6a. No building shall be constructed within Zone E without a comprehensive geotechnical report being prepared by a suitably qualified geotechnical engineer. Subsurface investigations will be required and the report must confirm suitability of the site for the proposed building. No building consent will be issued for any proposed building within Zone E without Council's approval of the geotechnical report. Council may require that this report is peer reviewed. Zone E is as shown in the plan drawn by Clark Fortune McDonald and Associates, titled Potters Hill – Proposed Development of Lot 2 D.P. 305273 dated 3 March 2007 and attached to this consent notice.*~~

6a. No building shall be constructed within AREA PA DP xxxxxx without a comprehensive geotechnical report being prepared by a suitably qualified geotechnical engineer. Subsurface investigations will be required and the report must confirm suitability of the site for the proposed building. No building consent will be issued for any proposed building within AREA PA DP xxxxxx without Council's approval of the geotechnical report. Council may require that this report is peer reviewed.

8 Condition 6c of resource consent RM050520.01 is amended to read as follows (deleted text struck-through, added text **bold underlined**):

~~*6c. Any building on Lots 7, 8, 9, 10 and 17 shall be fully contained within the engineered building platform established at the time of subdivision as shown in the plan drawn by Clark Fortune McDonald and Associates, titled Potters Hill – Proposed Development of Lot 2 D.P. 305273 dated 3 March 2007 and attached to this consent notice. A geotechnical report and design shall be provided by a suitably qualified geotechnical engineer for any building proposed outside of this platform. This report and design shall be submitted with the building consent application.*~~

6c. A consent notice condition pursuant to s.221 of the Resource Management Act 1991 shall be registered on the Computer Freehold Register for Lot 7, 8, 9 & 17 providing for the performance of any ongoing requirements for building construction as outlined in Condition 5(e) (above).

9 Condition 6d of resource consent RM050520.01 is amended to read as follows (deleted text struck-through, added text **bold underlined**):

~~*6d. A geotechnical report and design shall be provided by a suitably qualified geotechnical engineer for any building within Lot 11 or 12 that falls within Zone D of the land suitability classification (refer Tonkin & Taylor, "Albatross QT Subdivision – Supplementary Geotechnical Investigations", Job no: 890815, June 2007). This report and design shall be submitted with the building consent application.*~~

6d. A geotechnical report and design shall be provided by a suitably qualified geotechnical engineer for any building within Lot 10 or 17 that falls within Areas PB, PC, PD & L DP xxxxxx (refer Zone D on Tonkin & Taylor report, "Albatross QT Subdivision – Supplementary Geotechnical Investigations", Job no: 890815, June 2007). This report and design shall be submitted with the building consent application.

DECISION 2: LAND USE CONSENT PURSUANT TO SECTION 88 OF THE RMA

Consent is granted for a breach of minimum site distances, subject to the conditions outlined in Appendix 2 of this decision report imposed pursuant to section 108 of the RMA.

Advice Note

- All other conditions of RM050520 and RM150520.01 and RM150928 shall continue to apply. A copy of an updated set of conditions is attached as Appendix 1 to this decision. This new set of conditions takes into account the unchanged conditions of Decision RM050520, the amendments to conditions made by RM050520.01 and by RM150928.

8. OTHER MATTERS

Local Government Act 2002: Development Contributions

This proposal is not considered a "Development" in terms of the Local Government Act 2002 as it will not generate a demand for network infrastructure and reserves and community facilities.

For the forgoing reasons a Development Contribution is not required.

Administrative Matters

The costs of processing the application are currently being assessed and you will be advised under separate cover whether further costs have been incurred.

This resource consent is not a consent to build under the Building Act 2004. A consent under this Act must be obtained before construction can begin.

The Council will contact you in due course to arrange the required monitoring. It is suggested that you contact the Council if you intend to delay implementation of this consent or reschedule its completion.

If you have any enquiries please contact Jane Sinclair on phone 021442370 or email vsinclair@xtra.co.nz.

Report prepared by

Jane Sinclair
CONSULTANT PLANNER

Decision made by

Paula Costello
SENIOR PLANNER

APPENDIX 1 – Updated Conditions of Resource Consent RM050520.01
APPENDIX 2 – Land Use Consent Conditions
APPENDIX 3 – Applicant's AEE

APPENDIX 1 – UPDATED CONDITIONS OF RESOURCE CONSENT RM050520 AS AMENDED BY RM150520.01. NOTE THAT NEW NUMBERING HAS OCCURRED AS A RESULT OF THE AMENDMENTS TO THE CONDITIONS.

1. *That the activity be undertaken in accordance with the plans drawn by Clark Fortune McDonald and Associates, dated 19.01.2016, Referenced 9074-21 Revision N and titled The Tiers Subdivision Lots 2, 7- 10, 12 - 17 and 200 Being a Subdivision of Lot 2 DP 305273 (**stamped as approved 5 April 2016**) and specifications submitted with the application, with the exception of the amendments required by the following conditions of consent.*

1A. Prior to any certification under section 223 of the Resource Management Act 1991, the consent holder shall:

EITHER

(i) If prior to certification under section 223 of the Resource Management Act 1991 the consent holder obtains written consent from all registered proprietors of land taking the benefit of easements T.5161028.10, T.5074969.1, T.916478.2, E.I.5558569.6 and T.422292 to the surrender of those existing interests in land over any part of the area marked as "*Road to dedicate in the Queenstown Lakes District Council*" on the Clark Fortune McDonald & Associates plan, dated 15 January 2013, titled *"Potters Hill Subdivision – Access Road Overall Plan View*" (Drawing No. E_001), the area shown marked as "*Road to dedicate in the Queenstown Lakes District Council*" on that plan shall vest in the Council under section 238 of the Resource Management Act 1991.

OR

(ii) If prior to certification under section 223 of the Resource Management Act 1991 the consent holder is unable to obtain written consent from all registered proprietors of land taking the benefit of easements T.5161028.10, T.5074969.1, T.916478.2, E.I.5558569.6 and T.422292 to the surrender of those existing interests in land over any part of the area marked as "*Road to dedicate in the Queenstown Lakes District Council*" on the Clark Fortune McDonald & Associates plan, dated 15 January 2013, titled *"Potters Hill Subdivision – Access Road Overall Plan View*" (Drawing No. E_001), the area shown marked as Lot 200 (also marked as 'Road 6') on the plans titled '*Lots 1-17 and 200 Being a Proposed Subdivision of Lot 2 D.P. 305273'* (stamped as approved 20 May 2008) shall be a private road.

2. All engineering works shall be carried out in accordance with the Queenstown Lakes District Council's policies and standards, being New Zealand Standard 4404:2004 with the amendments to that standard adopted on 5 October 2005, except where specified otherwise.

3. The subdividing owner of the land shall provide a letter to the Council advising who their representative is for the design and execution of the engineering works and construction works required in association with this subdivision and shall confirm that these representatives will be responsible for all aspects of the works covered under sections 1.4 & 1.5 of NZS4404:2004 "Land Development and Subdivision Engineering", in relation to this development.

4. Prior to the commencement of any works on the land being subdivided and prior to the Council signing the Title Plan pursuant to Section 223 of the Resource Management Act 1991, the consent holder shall provide to the Queenstown Lakes District Council for review, copies of specifications, calculations and design plans as is considered by Council to be both necessary and adequate, in accordance with Condition (2), to detail the following engineering works required:

a. The provision of a water supply to the boundary of Lots 1 through 17 in terms of Council's standards and connection policy. This shall include an Acuflow GM900 as the toby valve.

b. The provision of fire hydrants with adequate pressure and flow to service the development with a Class W3 fire risk in accordance with the NZ Fire Service Code of Practice for Firefighting Water Supplies 2003. Any lesser risk must be approved in writing by Fire Service NZ, Dunedin Office.

c. The provision of a foul sewer connection to the boundary of Lots 1 through 17 in accordance with Council's standards and connection policy.

d. The provision for final engineering design for a reticulated stormwater system that will dispose of stormwater into the stream to the west of the site and to the existing 375mm main adjacent to Frankton Road. Final design shall address the capacity in the waterway and the sizing of the culvert under the access road.

e. The provision of a stormwater connection to the boundary of Lots 1 through 17 in accordance with Council's standards and connection policy to dispose of water from all impervious areas within the site to the reticulation described in part (f) above.

f. The final design of all earthworks associated with the access road by a suitably qualified engineer and geotechnical professional. Said design shall include the design of all retaining walls and slopes of all batters given consideration of Tonkin and Taylor's Geotechnical Investigation reports dated June 2005 and June 2007. The consent holder shall submit to Council a final plan of the proposed earthworks associated with the access road for approval. If considered necessary, Council may have the earthworks design independently peer reviewed.

g. The provision for a comprehensive site management plan for all earthworks required in the establishment of this subdivision. The consent holder shall submit a site management plan to Council for approval and shall implement the approved site management plan prior to any works on site. The site management plan shall include provision for silt traps (in the form of fabric filter dams or straw bales) to be in place prior to the commencement of works on site to trap stormwater sediments before stormwater is funnelled into the creek on the western portion of the subject site. Site drainage paths shall be constructed and utilized to keep any silt laden materials on site and to direct the flows to the silt traps. Silt traps shall be replaced or maintained as necessary to assure that they are effective in their purpose. The principle contractor shall take proactive measures in stopping all sediment laden stormwater from entering the creek. The principal contractor shall recognize that this may be above and beyond conditions delineated in this consent. These measures shall be implemented prior to the commencement of any earthworks on site and shall remain in place for the duration of the project.

h. The provision of pilot cuts by a suitably qualified engineer and geotechnical professional for the full depth of proposed excavations associated with the access to understand necessity of rock anchors or additional retention (temporary or permanent). Following pilot cuts, any recommendations made by said professionals shall be implemented. Pilot cuts shall also inform the feasibility of the construction methodology for the main access. The consent holder is advised that a variation to this consent may be required if ground conditions encountered on site differ to the extent that substantially modified methods or design of excavation is required.

i. The provision of the access road ("Road 6") to Lots 1 through 17 from Frankton Road to be in terms of Table 3.1 of Council's amendments to NZS4404:2004 to be formed to not less than 6m and a legal width of not less than 12m. Indented parking shall be provided along Road 6 in the configuration of either 3 lots of bays to hold 3 cars minimum or 2 lots of bays to hold 4 cars minimum or 4 lots of bays to hold two cars**.** No Parking lines shall be provided along the length of Road 6 apart from where the parking bays are situated. The legal width shall be 15m wherever possible.

j. "Access P" as shown on Clark Fortune McDonald's drawing 9074-22c shall be constructed according to NZS4404: 2004 standards for surfacing, kerb/channel and engineering design and to a formed width of 3.5 m and a legal width of 12m. This shall be constructed with a minimum depth of 150mm M4 AP40 aggregate and provision shall be made for the disposal of stormwater.

k. Road lighting shall be provided in accordance with Council's road lighting policies and standards. Any road lighting installed on private roads/rights of way/access lots shall be privately maintained and all operating costs be the responsibility of the lots serviced by such access roads. Any lights installed on private roads/rights of way/access lots shall be isolated from the Council lighting network circuits.

l. The provision of a temporary access during the construction period to Lot 2 DP 20473, generally in accordance with the 'Option B' temporary access plan prepared by Clark Fortune McDonald & Associates and as attached with Appendix [D] to the evidence of Mr Ferguson, but shall be modified to include:

(i) a maximum centreline gradient through both hair-pin bends of no more than 1 in 5.5;

(ii) Passing bays located at each bend and along the straight section between chainage 100 to 160.

m. The pedestrian access easement between Access D and Access G shall ensure access is available to the public at all times.

n. Should the option in condition 1A(i) be applicable, the consent holder shall include the following design requirements:

(i) Utility services shall be designed to QLDC standards and located so as to have minimal impact on road operation and/or maintenance;

(ii) Street lighting shall be in accordance with Councils standards and the Southern Lights Strategy;

(iii) Landscaping on the inside of the curve at CH180 shall be minimal to ensure little impact on through visibility;

(iv) The layout of the curb at CH180 shall be designed to the appropriate engineering standards and satisfy the tracking requirements for the identified design (two cars passing) and medium rigid vehicle negotiating curve without venturing over centreline;

(v) Pavement and servicing shall be designed to a suitable level to minimise on-going maintenance issues. This should be designed by an appropriately qualified pavement and servicing specialist and may be subject to peer review on behalf of Council.

5. Prior to the certification pursuant to Section 224(c) of the Resource Management Act 1991, the applicant shall complete the following:

a. The submission of 'as-built' plans in accordance with Council's as-built standards and information required to detail all engineering works completed in relation to or in association with this subdivision.

b. The completion of all works detailed in Condition (4) above.

c. The consent holder shall provide a suitable and usable power supply and telecommunications connection to the lots. These connections shall be underground from any existing reticulation and in accordance with any requirements/standards of Aurora Energy/Delta and Telecom.

d. A suitably qualified Registered Engineer experienced in soils investigations shall provide certification, in accordance with NZS 4431: 1989, for all areas of fill within the site on which buildings may be founded.

e. *The consent holder shall provide a geotechnical completion report and a Schedule 2A"Statement of professional opinion as to suitability of land for building construction" in accordance with Section 2.6.1 of QLDC's Land Development and Subdivision Code of Practice that has been prepared by suitably qualified geotechnical engineer as defined in Section 1.2.2 and demonstrates to Council that all lots are suitable for building development*

In the event that the site conditions on any lot are only found to be suitable for building construction subject to certain mitigation measures and/or remedial works being carried out, then a suitably qualified and experienced professional shall submit to the Council for review and approval full details of such works. The consent holder shall be responsible for implementing all necessary mitigation measures and/or remedial works required to prepare the land for building construction.

A consent notice condition shall be registered on the relevant Computer Freehold Registers for any lot in respect of which the Schedule 2A statement indicates that building construction would only be suitable if certain mitigation measures and/or remedial works were carried out at the time of construction. The consent notice condition shall require that, prior to any construction work (other than work associated with geotechnical investigation), the owner of such a lot shall submit, to council for certification, plans prepared by a suitably qualified engineer detailing the proposed mitigation measures and/or remedial works AND require the owner to implement all such measures prior to occupation of any building.

A consent notice condition shall be registered on the relevant Computer Freehold Registers for any lot in respect of which the Schedule 2A statement indicates that no building construction would be suitable within the lot or on any part of a lot. The consent notice condition shall refer to the Schedule 2A statement and record that no residential development may be undertaken on the lot or on the relevant part of the lot.

f. Where this development involves the vesting of assets in the Council, the consent holder shall submit to Council a copy of the Practical Completion Certificate, including the date it was issued and when it lapses. This information will be used to ensure the Council's Engineering consultants are aware of the date where the asset is no longer to be maintained by the consent holder and to assist in budgeting for the Annual Plan.

g. All signage, including road names, shall be installed and necessary road markings completed on all Public or Private Roads (if any), created by this subdivision.

h. The consent holder shall provide evidence to the Council of a responsible body (management group) that has been created to undertake responsibility for the ongoing maintenance of the main internal access road (including any stormwater disposal), including provision for gritting and/or de-icing of the main access way, the pedestrian link between Access D and Access G, and the water supply system.

6. Prior to certification pursuant to Section 224 of the Act and in accordance with Section 221 of the Resource Management Act 1991, a consent notice shall be registered on the pertinent Certificate of Title for the performance of the following conditions on a continuing basis:

a. No building shall be constructed within AREA PA DP xxxxxx without a comprehensive geotechnical report being prepared by a suitably qualified geotechnical engineer. Subsurface investigations will be required and the report must confirm suitability of the site for the proposed building. No building consent will be issued for any proposed building within AREA PA DP xxxxxx without Council's approval of the geotechnical report. Council may require that this report is peer reviewed.

b. At the time that a dwelling is erected on Lots 1-17 the owner for the time being shall construct a vehicle crossing to Council Standards.

c. A consent notice condition pursuant to s.221 of the Resource Management Act 1991 shall be registered on the Computer Freehold Register for Lot 7, 8, 9 & 17 providing for the performance of any ongoing requirements for building construction as outlined in Condition 5(e) (above).

d. A geotechnical report and design shall be provided by a suitably qualified geotechnical engineer for any building within Lots 10 or 17 that falls within Areas PB, PC, PD & L DP xxxxxx (refer Zone D on Tonkin & Taylor report, "Albatross QT Subdivision – Supplementary Geotechnical Investigations", Job no: 890815, June 2007). This report and design shall be submitted with the building consent application.

e. In the event of future subdivision of any of the lots or in the event that more than one residential unit is built on each lot, the owner for the time being shall pay the Council the required additional headworks fees for any additional residential units on the property greater than one.

f. At such a time where a high level reticulated water pressure zone is provided by the QLDC that can serve the subdivision, the private water storage scheme shall be decommissioned and all lots shall connect to the high pressure reticulation.

g. All the owners of Lots 1 – 17 are advised that the internal access road (and associated stormwater disposal), the pedestrian link between Access D and Access G, and water supply infrastructure are privately owned and are the responsibility of the management company created at the time of subdivision. The Queenstown Lakes District Council is not responsible for any part of the water infrastructure or roading to any lot within any stage of this subdivision. This condition shall not include the internal access road if condition 1A (i) applies; that is, the internal access road is vested in Council. For the avoidance of doubt, the internal access road is the area shown marked as "*Road to dedicate in the Queenstown Lakes District Council*" on the Clark Fortune McDonald & Associates plan dated 15 January 2014, titled "*Potters Hill subdivision – Access Road Overall Plan View*" (Drawing no. E_001).

7. The consent holder shall provide Council with the name of a suitably qualified and experienced Engineer who is to supervise all excavation procedures. This engineer shall continually assess the condition of the excavation and implement any design changes / additions if and when necessary.

8. If at any time Council, or its elected representatives, receive justifiable complaints about or proof of effects from vibration sourced from the earthworks activities approved by this resource consent, the consent holder at the request of the Council shall cease all earthworks activities and shall engage a suitably qualified professional who shall prepare a report, which assesses vibration caused by earthworks associated with this consent and what adverse effect (if any) these works are having on any other land and buildings beyond this site. Depending on the outcome of this report a peer review may be required to be undertaken by another suitably qualified professional at the consent holder's expense. This report must take into consideration the standard BS 5228:1992 or a similar internationally accepted standard. Both the report and peer review (if required) shall be submitted to Council for acceptance and approval.

9. Within four weeks of completing the earthworks the consent holder shall submit to the Council an as built plan of the fill. This plan shall be in terms of New Zealand Map grid and shall show the contours indicating the depth of fill. Any fill that has not been certified by a suitably qualified and experienced engineer in accordance with NZS 4431 shall be recorded on the as built plan as "uncertified fill".

10. All temporary retention systems shall be installed immediately following excavation to avoid any possible erosion or instability.

11. No earthworks, temporary or permanent, are to breach the boundaries of the site.

12. Upon completion of the earthworks, the consent holder shall complete the following:

    a. Any damage to all existing road surfaces and berms that result from work carried out for this consent shall be remedied.

b. All earth-worked areas shall be top-soiled and grassed or otherwise permanently stabilised within 6 weeks.

c. An engineer's design certificate/producer statement shall be submitted with regards to any permanent retaining systems on site and forwarded to Council.

13. All necessary easements shall be shown in the Memorandum of Easements attached to the Survey Plan and shall be duly granted or reserved. This includes ROW easements in favour of adjacent Lot 2 DP 20473 & Section 2 SO 300537 over the private road (should the access not be dedicated in Council as road).

14. This subdivision may be staged. For the purposes of issuing approvals under Sections 223 and 224(c) of the Resource Management Act 1991, the conditions of this consent shall be applied only to the extent that they are relevant to each particular stage proposed. This consent may be progressed in the following stages:

    (i) Stage 1 – Lots 1 & 203 (Road)
    (ii) Stage 2 – Lots 16, 16, 200 & 201 (Road)
    (iii) Stage 3 – Lots 7 – 14, 17, 202 (Road).

Advice Notes (RM050520)

(i) In granting this resource consent, pursuant to Part 8 Subpart 5 and Schedule 13 of the Local Government Act 2002 and the Council's Policy on Development Contributions contained in Long Term Council Community Plan (adopted by the Council on 25 June 2004) the Council has identified that a Development Contribution is required. A Development Contribution Notice, detailing how contributions were calculated, will be forwarded under separate cover.

(ii) The Council may elect to exercise its duties and functions through the employment of independent consultants.

(iii) The consent holder is advised they may also be required to obtain any necessary resource consent from the Otago Regional Council to construct the subdivision.

Advice notes (RM090646)

- All other conditions of RM050520 shall continue to apply.
- The conditions above require that services and access shall be formed to the boundary of the balance lot in each stage.

APPENDIX 2 – LAND USE CONDITIONS

General Conditions

1. That the development must be undertaken in accordance with the application as submitted, with the exception of the amendments required by the following conditions of consent.

2a. This consent shall not be exercised and no work or activity associated with it may be commenced or continued until the following charges have been paid in full: all charges fixed in accordance with section 36(1) of the Resource Management Act 1991 and any finalised, additional charges under section 36(3) of the Act.

2b. The consent holder is liable for costs associated with the monitoring of this resource consent under Section 35 of the Resource Management Act 1991 and shall pay to Council an initial fee of $100. This initial fee has been set under section 36(1) of the Act.

3. All engineering works shall be carried out in accordance with the Queenstown Lakes District Council's policies and standards, being New Zealand Standard 4404:2004 with the amendments to that standard adopted on 5 October 2005, except where specified otherwise.

4. Sightlines provided from Accesses P and F may be reduced in accordance with Table 1 of the Bartlett Consulting Ltd ' Accesses P and F, Visibility Assessment, The Tiers Subdivision, Queenstown' report dated 16/02/2016.

APPENDIX 3 – APPLICANT'S AEE

ATTACHMENT [A]

Information & Assessment of Effects on the Environment

Albatross QT Ltd

Variation to Conditions RM050520.01
Distance of Vehicle Crossing from Intersection

February 2016

Prepared by: Nick Geddes

CLARK FORTUNE MCDONALD & ASSOCIATES
REGISTERED LAND SURVEYORS, LAND DEVELOPMENT & PLANNING CONSULTANTS

1.0 A DETAILED DESCRIPTION OF THE PROPOSAL:

1.1 Site Description

The subject site is located on the northern side of Frankton Road (State Highway 6A), between Queenstown and Frankton. The site is legally described as Lot 1 DP 485139, being 2.8081 hectares in area and contained within computer freehold register identifier 688943. A recent search copy of computer freehold register is contained within Attachment [B].

The topography of the site rises up from Frankton Road from 345 to 430 metres above sea level. The terrain consists of moderately to steeply sloping land.

The site affords access from Frankton Road via a right of way easement on the southern boundary.

The site has been felled of wilding Douglas Firs and Sycamore.

There are no structures or buildings on the site. A small stream dissects the north-western corner of the site.

1.2 Planning History

RM050520	Approved on 20 May 2008, by Commissioners Mr Trevor Shields and Mr Lyall Cocks. This granted consent to subdivide Lot 2 Deposited Plan 305273 into 17 fee simple residential allotments with associated earthworks.
RM090646	Approved 7 October 2009, by Commissioner Clarke. This granted consent to vary condition 1 of resource consent RM050520, and include an additional staging condition to enable the subdivision to proceed in three stages.
RM050520.125	Approved 21 December 2012, by Commissioner Sinclair. This granted consent to increase lapse date of RM050520 by three years.
RM130069	Granted in part, subject to the imposition of additional conditions to application sought variation of conditions of consent to enable road to vest. 24th March 2014, by Commissioners Taylor and Kelly.
RM050520.01	Granted 12th September 2014 to change Conditions 1, 13 and 14 of RM050520 to amend the subdivision design, reference to easements and staging.

A full copy of the decision for RM050520.01 is contained in Attachment [D] to this application.

RM150928 Application under section 127 of the Resource Management Act 1991 (RMA) to change Condition 1 of resource consent RM050520.01 to amend various subdivision boundaries and easements.

A full copy of the decision for RM150928 is contained in Attachment [D] to this application.

Summary;

The RM050520 approved the subdivision of Lot 2 DP 305273 into 17 separate fee simple lots and was staged by RM090646. Staging and lot configurations were amended to provide the first stage of the original subdivision in one lot and this stage was completed resulting in Lot 1 DP 485139 and the remainder of the land subject to subdivision RM050520.01 is held as a balance parcel being Lot 2 DP 485139 which is the subject site for the purposes of the current application.

1.3 The Proposal

The current application seeks consent to undertake variations to the conditions of RM050520.01 which are detailed in Part A while consent is sought for a breach to the minimum sight distance required from an intersection to a vehicle crossing which is contained in Part B of this application:

Part A

Seeks to undertake variations to the conditions of RM050520.01 which include:

1. Amalgamate Lots 10 & 11;
2. Remove Building Platforms and revise conditions relating to geotechnical certification for Lots 7,8,9,10 & 17;
3. Remove Private Water Supply requirements;
4. Revised indented parking arrangement on Road 6;
5. Remove requirement to form Access G;
6. Formalise Geotechnical Zone E on a scheme plan and amend geotechnical certification for Zone E area;
7. Formalise Geotechnical Zone D on a scheme plan and amend geotechnical certification for Zone D area;

2, 6 & 7 have been based largely on further geotechnical investigations which have been undertaken on the subject site. The results of these investigations are contained in Attachment [H] of this application.

1.3.1 RM050520.01 Condition 1: Amalgamate Lots 10 & 11

The approved scheme plan for the subdivision under RM050520.01 specifies building platforms on certain lots where further geotechnical consideration is required prior to 224c certification. The consent holder is currently in the process of completing the 224c requirements and has undertaken further geotechnical reporting in relation to the building platform on Lot 10.

Further geotechnical investigation has determined that considerable remedial work is required within the building platform on Lot 10 in order to be able to build in this location. The level of work is financially prohibitive by comparison with any building which could be constructed in this location over a platform of this size. As such, the current application seeks to remove the building platform from the approved subdivision.

However, to remove the Lot 10 platform would result in Lot 10 issuing without a confirmed area to construct a dwelling which is at odds with the intention of the subdivision and District Plan policies.

The entire area of Lot 11 is buildable. The current application seeks consent to amalgamate lots 10 and 11 providing one larger lot (lot 10) with a buildable area over the previous Lot 11. The revised Lot 10 is depicted on the proposed scheme plan contained in Attachment [F] to this application.

To facilitate the amendments detailed above, the current application seeks to amend condition 1 of RM050520.01 as follows:

~~Strikethrough~~ denotes text to be deleted.
Underlined denotes text to be added.

That the activity be undertaken in accordance with the plans drawn by Clark Fortune McDonaldand Associates, dated ~~01.01.14~~ 19.01.16, Referenced 9074-21 Revision ~~M~~ N and titled The Tiers Subdivision Lots 2, 7-10, 12-17 and 200 Being a Subdivision of Lot 2 DP 305273 (**stamped as approved 18 December 2015**) and specifications submitted with the application, with the exception of the amendments required by the following conditions of consent.

1.3.2 RM050520.01 Conditions 1, 4(a), 5(e) & 6(c) Geotechnical Constraints Lots 7,8,9,10 & 17:

The approved subdivision RM050520.01 requires further geotechnical investigation to confirm geotechnical requirements to construct buildings in the platforms contained in Lots 7, 8, 9, 10 & 17. Lot 10 has been discussed above in Part 1.3.1.

Geotechnical investigations on Lots 7, 8, 9 & 17 have determined that the original intentions sought by conditions 4(a), 5(e) & 6(c) would be better served by a more detailed consent condition which appears as the replacement condition 5(e) below.

To facilitate the above, a number of RM050520.01 conditions are required to be altered or deleted:

Condition 1:

~~Strikethrough~~ denotes text to be deleted.
Underlined denotes text to be added.

The removal of the building platforms from the approved scheme plan requires a revised plan to be submitted which has been detailed in Part 1.3.1 above.

Condition 4(a):

~~Strikethrough~~ denotes text to be deleted.
Underlined denotes text to be added.

~~The provision for building platforms 7, 8, 9, 10 and 17 to be formed as per specific geotechnical design and under suitably qualified geotechnical professional supervision.~~

Condition 5(e):

~~Strikethrough~~ denotes text to be deleted.
Underlined denotes text to be added.

~~A suitably qualified geotechnical professional shall provide a completed Schedule 2A as found on page 40 in NZS4404:2004 that shall provide the Council assurance that the building platforms on Lots 7, 8, 9, 10 and 17 are suitable for residential development.~~

The consent holder shall provide a geotechnical completion report and a Schedule 2A "Statement of professional opinion as to suitability of land for building construction" in accordance with Section 2.6.1 of QLDC's Land Development and Subdivision Code of Practice that has been prepared by suitably qualified geotechnical engineer as defined in Section 1.2.2 and demonstrates to Council that proposed lots 7, 8, 9 & 17 are suitable for building development

In the event that the site conditions within lots 7, 8, 9 & 17 are only found to be suitable for building construction subject to certain mitigation measures and/or remedial works being carried out, then a suitably qualified and experienced professional shall submit to the Council for review and approval full details of such works. The consent holder shall be responsible for implementing all necessary mitigation measures and/or remedial works required to prepare the land for building construction.

A consent notice condition shall be registered on the relevant Computer Freehold Registers for any lot in respect of which the Schedule 2A statement indicates that building construction would only be suitable if certain mitigation measures and/or remedial works were carried out at the time of construction. The consent notice condition shall require that, prior to any construction work (other than work associated with geotechnical investigation), the owner of

such a lot shall submit, to council for certification, plans prepared by a suitably qualified engineer detailing the proposed mitigation measures and/or remedial works AND require the owner to implement all such measures prior to occupation of any building.

A consent notice condition shall be registered on the relevant Computer Freehold Registers for any lot in respect of which the Schedule 2A statement indicates that no building construction would be suitable within the lot or on any part of a lot. The consent notice condition shall refer to the Schedule 2A statement and record that no residential development may be undertaken on the lot or on the relevant part of the lot.

Condition 6(c):

~~Strikethrough~~ denotes text to be deleted.
Underlined denotes text to be added.

~~Any building on Lots 7, 8, 9, 10 and 17 shall be fully contained within the engineered building platform established at the time of subdivision as shown in the plan drawn by Clark Fortune McDonald and Associates, titled Potters Hill – Proposed Development of Lot 2 D.P. 305273 dated 3 March 2007 and attached to this consent notice. A geotechnical report and design shall be provided by a suitably qualified geotechnical engineer for any building proposed outside of this platform. This report and design shall be submitted with the building consent application.~~

A consent notice condition pursuant to s.221 of the Resource Management Act 1991 shall be registered on the Computer Freehold Register for Lot 7, 8, 9 & 17 providing for the performance of any ongoing requirements for building construction as outlined in Condition 5(e) (above).

1.3.3 RM050520.01 Condition 4(c): Private Water Storage

Water supply has been somewhat problematic on the site. Solutions anticipated by RM050520.01 cannot be realised and a new water connection has been made by the consent holder from Middleton Road. As such, condition 4(c) is no longer required:

~~Strikethrough~~ denotes text to be deleted.

~~The provision of a private water storage scheme that augments water pressures provided to the lots to levels that are acceptable to achieve W3 fire flow, and which comply with Council's amendments to NZS4404:2004.~~

1.3.4 RM050520.01 Condition 4(k): Indented Parking

The intention of RM050520.01 is to provide either 3 lots of bays to hold 3 cars minimum or 2 lots of bays to hold 4 cars minimum. The number of parking spaces is achievable but due to the existing topography of the site the configuration of these spaces cannot be met and the condition cannot be fulfilled. Four bays to hold two cars each can be provided.

To facilitate the parking as detailed above, the current application seeks to amend this condition as follows:

~~Strikethrough~~ denotes text to be deleted.
Underlined denotes text to be added.

The provision of the access road ("Road 6") to Lots 1 through 17 from Frankton Road to be in terms of Table 3.1 of Council's amendments to NZS4404:2004 to be formed to not less than 6m and a legal width of not less than 12m. Indented parking shall be provided along Road 6 in the configuration of ~~either 3 lots of bays to hold 3 cars minimum or 2 lots of bays to hold 4 cars minimum~~ 4 lots of bays to hold two cars. No Parking lines shall be provided along the length of Road 6 apart from where the parking bays are situated. The legal width shall be 15m wherever possible.

1.3.5 RM050520.01 Condition 4(m): Access G

Lot 1 DP 485139 (RM050520.01 Stage 1) was subject to subdivision and landuse consent RM150087 which approved a 5 metre wide access into Lot 1 DP 485139. Stage 1 of RM150087 completed the 5m wide access and titles have been issued. As such, condition 4(m) has become redundant and can be removed:

~~Access G" as shown on Clark Fortune McDonald's drawing 9074-22c shall be constructed according to NZS4404:2004 standards for surfacing, kerb/channel and engineering design and to a formed width of 3m and a legal width of 6m. This shall be constructed with a minimum depth of 150mm M4 AP40 aggregate and provision shall be made for the disposal of stormwater.~~

1.3.6 RM050520.01 Conditions 1 & 6(a): Geotechnical Zone E

Further geotechnical investigations is required by RM050520.01 within specific areas defined on a plan as Zones. The plan was drawn by Clark Fortune McDonald and Associates, titled Potters Hill – Proposed Development of Lot 2 D.P. 305273 dated 3 March 2007 and appears in the decision of RM050520.01.

The consent holder has completed geotechnical investigations and is currently working towards meeting 224c requirements. During this process it has been determined that the geotechnical condition 6(a) is problematic in achieving the intention of the condition whilst meeting 224c requirements. As such, a replacement condition is considered to better represent the geotechnical

complications of Zone E whilst Zone E has been accurately depicted on the scheme plan rather than a separate plan as per current RM050520.01 conditioning.

Zone E is required within the areas denoted as "PA" on the revised scheme plan which is contained in Attachment [F]. The revised scheme plan has already been conditioned within Part 1.3.1 of this application. However, a further amendment is required to amend condition 6(a) to reflect the revised geotechnical requirement within area "PA":

~~Strikethrough~~ denotes text to be deleted.
Underlined denotes text to be added.

~~No building shall be constructed within Zone E without a comprehensive geotechnical report being prepared by a suitably qualified geotechnical engineer. Subsurface investigations will be required and the report must confirm suitability of the site for the proposed building. No building consent will be issued for any proposed building within Zone E without Council's approval of the geotechnical report. Council may require that this report is peer reviewed. Zone E is as shown in the plan drawn by Clark Fortune McDonald and Associates, titled Potters Hill – Proposed Development of Lot 2 D.P. 305273 dated 3 March 2007 and attached to this consent notice.~~

No building shall be constructed within AREA PA DP xxxxxx without a comprehensive geotechnical report being prepared by a suitably qualified geotechnical engineer. Subsurface investigations will be required and the report must confirm suitability of the site for the proposed building. No building consent will be issued for any proposed building within AREA PA DP xxxxxx without Council's approval of the geotechnical report. Council may require that this report is peer reviewed.

1.3.7 RM050520.01 Conditions 1 & 6(d): Geotechnical Zone D

The consent holder has completed geotechnical investigations and is currently working towards meeting 224c requirements. During this process it has been determined that the geotechnical condition 6(a) is problematic in achieving the intention of the condition whilst meeting 224c requirements. As such, a replacement condition is considered to better represent the geotechnical complications of Zone D whilst Zone D has been accurately depicted on the scheme plan rather than a separate plan as per current RM050520.01 conditioning.

Zone D is required within the areas denoted as "PB", "PC", "PD" & "L" on the revised scheme plan which is contained in Attachment [F]. The revised scheme plan has already been conditioned within Part 1.3.1 of this application. However, a further amendment is required to amend condition 6(a) to reflect the revised geotechnical requirement within area "PB", "PC", "PD" & "L":

~~Strikethrough~~ denotes text to be deleted.
Underlined denotes text to be added.

~~A geotechnical report and design shall be provided by a suitably qualified geotechnical engineer for any building within Lot 11 or 12 that falls within Zone D of the land suitability classification (refer Tonkin & Taylor, "Albatross QT Subdivision – Supplementary Geotechnical Investigations", Job no: 890815, June 2007). This report and design shall be submitted with the building consent application.~~

A geotechnical report and design shall be provided by a suitably qualified geotechnical engineer for any building within Lot 10 or 17 that falls within Areas PB, PC, PD & L DP xxxxxx (refer Zone D on Tonkin & Taylor report, "Albatross QT Subdivision – Supplementary Geotechnical Investigations", Job no: 890815, June 2007). This report and design shall be submitted with the building consent application.

Part B

The approved scheme plan RM050520.01 appears on page 14 of the RM150928 decision document which is contained in Attachment [D].

The parking spaces are a requirement of condition 4(k) of RM050520.01 as discussed in Part 1.3.4 above. Eight parking spaces are required in total and must be located within the legal width of Access Road 6 which is a minimum of 15m. It must be accepted that the steep topography of the site makes locating these parks within the legal width of the road problematic.

Due to the topography of the site parking spaces are located where they restrict site distances from intersections between Accesses F and P where the sightline distances are as follows:

- Access F; Uphill site distance 29m and downhill 38m.
- Access P; Uphill site distance 94m and downhill 50m.

The proposed parking spaces and their relationship with intersections in terms of traffic safety and vehicle movement have been addressed by Mr Jason Bartlett, Traffic Engineer. Mr Bartlett's comments appear in his report which is contained in Attachment [I] of this application.

1.4 Statutory Provisions

1.4.1 Part A: Resource Management Act 1991

Section 127 of the Resource Management Act provides for the holder of a resource consent to apply for a change of a condition of the consent. Section 127 states:

(3) Sections 88 to 121 apply, with all necessary modifications, as if—

(a) the application were an application for a resource consent for a discretionary activity; and

(b) the references to a resource consent and to the activity were references only to the change or cancellation of a condition and the effects of the change or cancellation respectively.

(4) For the purposes of determining who is adversely affected by the change or cancellation, the local authority must consider, in particular, every person who—

(a) made a submission on the original application; and
(b) may be affected by the change or cancellation.

In accordance with Section 3(a) above the proposed variation is for a discretionary activity.

1.4.2 Part B: Queenstown Lakes District Council Operative District Plan

14.2.2.3 Discretionary Activities

Any activity which does not comply with the following Site Standards shall be a Discretionary Activity with the exercise of the Council's discretion being restricted to the matter(s) specified in that standard.

14.2.4.2(vi) Site Standard: Distances of Vehicle Crossings from Intersections

No part of any vehicle crossing shall be located closer to the intersection of any roads than the distances permitted in Table 5 below. The proposal includes to Access points:

- Access F; Uphill site distance 29m and downhill 38m.
- Access P; Uphill site distance 94m and downhill 50m.

1.4.3 Proposed Queenstown Lakes District Council District Plan

The subject site is located within the Low Density Residential Zone of the Proposed District Plan and contains no known protected items or areas of significant vegetation. Submissions towards the Proposed District Plan closed on the 23rd of October.

It is considered unnecessary to undertake a weighting exercise. However, it is worthy to note what direction Council policy makers intend for the Proposed Zone. These have been assessed and it is considered that the proposed zone is more permissive towards the proposal than the Operative Zone.

1.4.4 National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health 2012.

An assessment of Local and Regional Council records has been undertaken and finds there is no record suggesting an activity on the HAIL has taken place on the piece of land which is subject to this application. The assessment and records and contained in Attachment [G].

Overall, the application is a **discretionary** activity.

1.5 Classes of Activities

1.5.1 Queenstown Lakes District Operative District Plan

The site is located within the Low Density Residential Zone of the Queenstown Lakes District Plan. The site does not contain any known protected items, areas of significant vegetation or designations.

Part A of the current application is made under section 127 of the Resource Management Act 1991 as detailed in Part 1.3 above. Relevant Chapters of the District Plan (Parts 7, 14 & 15) have been considered and no further consents are considered necessary above or beyond those applied for in Part 1.3 above.

Part B of the current application relates to a non-compliance in relation to Part 14.2.4.2(vi) of the Operative District Plan. Relevant Chapters of the District Plan (Parts 7, 14 & 15) have been considered and no further consents are considered necessary above or beyond those applied for in Part 1.3 above.

1.5.2 Queenstown Lakes District Proposed District Plan

The Proposed Low Density Residential Zone contains Objectives, Policies and Development Controls which are considered to be more permissive than the Operative District Plan. The Proposed District Plan does not seek to introduce any Objective, Policy or Development Control which precludes the current application.

1.5.3 Computer Freehold Register

A number of relevant instruments are registered on the title for the subject property:

Land Covenant 10097957.3, requires all buildings to be new and signed off by Albatross QT Ltd, building design and materials must authorized by Albatross QT Ltd and not deviated from without further permission from Albatross QT Ltd, restrictions on landscaping, restrictions on fencing, timing of building works, surfacing of driveways, restrictions on clotheslines, letterboxes and liability of damage to roading, keeping of animals, restriction on further subdivision, non-objection clauses, restrictions on signage, must permit access by Albatross QT Ltd, consequences of breach of covenant, arbitration and conflict resolution.

Encumbrance 10154387.2, relates to the management of the company The Tiers Management Limited in its duties to monitor and maintain roading, stormwater disposal, pedestrian access and water supply.

Copies of the above are contained in Attachment [B] to this application.

Summary, the applicant is Albatross QT Ltd. However, Land Covenant 10097957.3 is not enforceable by any third party or QLDC.

2.0 ASSESSMENT OF THE ACTIVITY'S EFFECTS ON THE ENVIRONMENT

It is usual when assessing applications to amend a consented development to treat consented development as forming a consented baseline where any consequent environmental effects could be implemented at any time until it expires so the purpose of the Act is best met by confining the enquiry to consideration of differences between what is now proposed and what is already consented.

2.2.1 Permitted Baseline

Section 104 of the Resource Management Act 1991 provides that a consent authority may disregard an adverse effect of the activity on the environment if a national environmental standard or the plan permits an activity with that effect.
The permitted baseline allows:

- Up to 100m3 of earthworks within a 12 month period.
- The maximum permitted area of bare soil exposed from any earthworks where the average depth is greater that 0.5m, is 200m2 within a 12 month period.
- A maximum height of cut up to 2.4m and fill up to 2m.
- The construction of one dwelling per 450m2 that meets all the site and zone standards of the District Plan relating to bulk and location. These include standards such as 4.5m setback from roads, one setback of 4.5m from internal boundaries and all others of 2m.
- It is permitted to erect a fence less than 2m in height.

Only adverse effects over and above those that could arise from the permitted baseline will be taken into account in the following assessment.

2.2.2 Existing Environment

Consents listed in Part 1.2 above approve subdivision and landuse development on site for 17 residential fee simple lots.

2.2.3 Land, Flora and Fauna

Due to the nature and scale of the current application there will be no adverse effects upon land, flora and fauna which have not already identified and approved as part of RM050520.01.

2.2.4 Infrastructure

Part A of the current application seeks to remove Condition 4(c) of RM050520.01 which relates to the provision of water to the subdivision. A new water connection has been made by the consent holder from Middleton Road which satisfies the demand required for the remainder of the proposed subdivision. Therefore, no adverse effects above or beyond those anticipated and approved by RM050520.01.

Part B of the current application does not result in any impact upon infrastructure while effects on traffic and vehicle movements have been discussed in Part 2.2.6 below.

2.2.4 Earthworks

Part A of the current application does not seek to amend or remove conditions which relate to earthworks while the changes proposed do not result in any effects upon the earthworks approved under RM050520.01. As such, it is considered that the current application will not have any impact upon earthworks and the conclusions reached in the decision on RM050520.01remain applicable.

Part B of the current application does not require any earthworks not already anticipated and approved under RM050520.01.

2.2.5 Natural Hazards

The decision for RM050520.01 provides conditions of consent relating to natural hazards.

Part A of the proposal seeks amendments to facilitate the completion certification of the subdivision. Geotechnical reporting to support these changes has been provided to Council's Engineering Department and is contained in Attachment [H]. Critically, the subsurface conditions on the property have not changed but the administration of these has. The revised methods of administration detailed in Part 1.3.1 above are considered to result in more comprehensive mitigation of areas of geotechnical instability. The proposed changes do not result in any adverse effects above or beyond those anticipated and approved under RM050520.01.

Part B of the current application does not require any geotechnical consideration not already anticipated and approved under RM050520.01.

2.2.6 Traffic Generation and Vehicle Movements

The decision for RM050520.01 provides conditions of consent relating to traffic generation and vehicle movements. Part A seeks to amend:

Condition 4(k) specifies the number of indented parking spaces and the configuration. The proposal seeks to amend the configuration of these spaces due to topographical constraints on the site while the total number of spaces provided remains the same.

Condition 4(m) requires a minimum standard for Access G which has already been formed to a standard which has been accepted by RM150087 and signed off as part of completion certification for this subdivision. The formed standard Access G has been constructed in accordance with the standard required by RM150087 and no adverse effects of this were identified in RM150087. As such, the removal of this condition is not considered to result in any adverse effects above or beyond those anticipated and approved under RM050520.01.

Part B of the current application seeks consent to breach the minimum sightlines from the intersection of Road 6 with Access F and P. The shortfall in the sightline has been assessed by Traffic Engineer, Jason Bartlett and his comments are contained in Attachment [I]. Mr Bartlett concludes that:

"The Accesses F and P will serve typically residential dwellings although it is noted that Access P serves a property which is known to have operated as a B&B style visitor accommodation. The accesses do not comply with the minimum visibility sight distances site standards, Section 14.2.4.2 iv Minimum Sight Distances from Vehicle Access, of the Operative QLDC District Plan. The QLDC site standards require a minimum visibility sight distance of 45m within a posted 50km/hr speed limit.

The alignment of the adjacent road, Road 6, is considered to be generally steep with tight bends, which will create a slow operating speed. The operating speed approaching Access F is considered to be 20km/hr (uphill and downhill), whilst the operating speed on approach to Access P is 20km/hr uphill and 40km/hr downhill. Based on these operating speeds the available visibility sight distance is compliant with Austroads Guidance and NZTA guidance (RTS 6: Guidelines for visibility at driveways) for the particular access usage, either residential or visitor accommodation.

It is acknowledged that parking will affect visibility sight distances from accesses, or intersections, in general. The only guidance that discusses parking at accesses is NZTA RTS 6 which states that for accesses onto local roads visibility sight distance should consider permanent obstructions excluding parking. Accesses F and P will comply with this national guidance.

The New Zealand Land Transport Rule 2004 would allow legal roadside parking up to 1m from the access. The parking provided in this situation is similar to what is legally allowed and often occurs in any urban environment. The parking is therefor considered to be in an acceptable location. The overall effects as a result of the non-compliance with the minimum visibility sight distance requirements of the Operative QLDC District Plan are considered to be less than minor. The location of the proposed parking is not ideal, although given national guidance and legal instruments the location is considered to be acceptable."

Based upon Mr Bartlett's assessment and conclusion any adverse effects upon traffic safety will be less than minor.

2.2.7 Nuisance

Part A of the current application does not seek to amend or remove conditions which mitigate effects associated with nuisance while the changes proposed do not result in any effects of nuisance not already approved under RM050520.01. As such, it is considered that the current application will not have any impact upon nuisance considerations and comments / conclusions in decision documents for RM050520.01 remain applicable.

Part B of the current application does not include any works not already anticipated and approved under RM050520.01.

2.2.8 People and Built Form

Part A of the current application does not seek to amend or remove conditions which mitigate effects towards people and built form.

It is considered that there are not any effects upon people and/or built form not already approved under RM050520.01. As such, it is considered that the current application will not have any impact upon people and built form and the conclusion above remains applicable.

With the exception of Traffic effects discussed above, Part B of the current application is not considered to have any adverse effect upon people and built form in the area.

2.2.9 Effects on Persons

Part A: RM050520.01 was processed on a notified basis and attracted a number of submissions which are set out in the section 42A report contained in Attachment [E] and the decision document contained in Attachment [D]. However, given the nature of the proposal no parties to the original consent are considered to be adversely affected.

Therefore, any effects upon persons are considered to be within the scope of the original approval of RM050520.01.

Part B: With the exception of Traffic effects discussed above, Part B of the current application is not considered to have any adverse effect upon people and built form in the area.

3.0 DISTRICT PLAN: OBJECTIVES AND POLCIES ASSESSMENT

Consideration of relevant Objectives and Policies in terms of Part A of the current application is set out in Part 3.1 below while an assessment has been undertaken of Part B against relevant Objectives and Policies in Part 3.2:

3.1 Part A: Section 127 Variation

RM050520.01 assessed Objectives and Policies in relation to Part 4 and 15 of the Operative District Plan.

Part 4

The assessment undertaken towards the decision for RM050520.01 found that the development was not contrary to relevant Objectives and Policies for the following reasons:

"Left satisfied that there were available solutions which would be developed as the work progresses. The area of the site is not an area where there was a high probability but a natural hazard may destroy or damage human life, property, or other aspects of the environment."

"The site is zoned Low Density Residential. To a considerable extent, these Objectives have been addressed in the zoning decision. Making the effort to build on sites such as this in a safe way helps maintain a compact town and limits some of the pressures for a further spreading of the town into new areas. The development will not appear inconsistent with the adjoining allotments and will contribute towards urban consolidation. Overall, we consider that there are two Objectives in the associated Policies set out above which support the Application."

"This is an effects-based Objective and we have already concluded that there will be no significant adverse effect from the earthworks. In particular, the proposal avoids or mitigates adverse effects from earthworks on land stability and amenity values of neighbours."

Due to the nature of the current proposal it is consider that the conclusions reached above are still appropriate and the current proposal is not contrary to the relevant Objectives and Policies in terms of Part 4 of the District Plan.

Part 14

The assessment undertaken towards the decision for RM050520.01 found that the development was not contrary to relevant Objectives and Policies for the following reasons:

"Allowing development even on steep and challenging sites within the existing developed area does encourage efficiency in the use of motor vehicles. A Low Density Residential development here is compatible with the capacity and function of Frankton Road, and the access is of a size, location and type that ensures safety and efficiency of road function".

"The nature of this activity is compatible with the road capacity and function and both vehicle and pedestrian safety have been ensured with careful attention to the roading design and in particular the intersection with Frankton Road and with accesses to neighbouring properties".

"There is a specifically designed pedestrian link within the subdivision which we think is useful. Road construction is consistent with what would be expected in the Low Density Zone, and the Objectives and Policies are generally supported".

Due to the nature of the current proposal it is consider that the conclusions reached above under RM050520.01 are still appropriate and the current proposal is not contrary to the relevant Objectives and Policies in terms of Part 14 of the District Plan.

Part 15

The assessment undertaken towards the decision for RM050520.01 found that the development was not contrary to relevant Objectives and Policies for the following reasons:

"No issues arise as to the cost of services and development contributions will be levied in the normal way."

"Lot sizes and dimensions are appropriate. The anticipated density is much lower than the zoning might allow. There are no significant trees or areas of vegetation on the site, whatever may have been the previous situation. Having regard to the expert traffic evidence, we do not consider that there would be more than minimal effects on the safe and efficient functioning of services and roads."

Due to the nature of the current proposal it is consider that the conclusions reached above under RM050520.01 are still appropriate and the current proposal is not contrary to the relevant Objectives and Policies in terms of Part 15 of the District Plan.

3.2 Part B: Landuse Consent

14.1.3 Objectives and Policies

Objective 1 – Efficiency

Efficient use of the District's existing and future transportation resource and of fossil fuel usage associated with transportation.

Policies:

1.1 To encourage efficiency in the use of motor vehicles.

1.2 To promote the efficient use of all roads by adopting and applying a road hierarchy with associated access standards based on intended function.

1.3 To promote the efficient use of roads by ensuring that the nature of activities alongside roads are compatible with road capacity and function.

1.4 To protect the safety and efficiency of traffic on State Highways and arterial roads, particularly State Highway 6A, by restricting opportunities for additional access points off these roads and by ensuring access to high traffic generating activities is adequately designed and located.

1.5 To promote the efficient use of fuel for transport purposes, by providing for a District wide policy of consolidated urban areas, townships, retail centres and residential environments.

1.6 To promote and provide for the consolidation of new areas of residential development and for higher density development within identified areas.

1.7 Enabling for home occupations within residential areas to reduce travel time and costs between home and work.

1.8 To consider options for encouraging and developing greater use of public transportation facilities and in particular to continue to investigate the options for alternative transport means.

1.9 To require off-road parking and loading for most activities to limit congestion and loss of safety and efficiency of adjacent roads and to promote the maintenance and efficiency of those roads.

1.10 To require access to property to be of a size, location and type to ensure safety and efficiency of road functioning.

The proposal is considered to be consistent with the above policies for the following reasons:

- Subject to the erection of a stop sign on Access P the location of parking spaces on Road 6 is considered to be an efficient use of the road reserve which will facilitate parking without compromising the movement and safety of vehicles.
- The safety and efficiency of State Highways and arterial roads will not be compromised.
- There will be no impact upon the efficient use of fuel for transport purposes.
- The proposal enables residential development within the low density residential zone.
- Home occupations can occur within the subdivision.
- There will be no impact upon the use of public transportation facilities.

<u>Objective 2 - Safety and Accessibility</u>

Maintenance and improvement of access, ease and safety of pedestrian and vehicle movement throughout the District.

Policies:

2.1 To maintain and improve safety and accessibility by adopting and applying a road hierarchy with associated design, parking and access standards based on the intended function.

2.2 To ensure the intensity and nature of activities along particular roads is compatible with road capacity and function, to ensure both vehicle and pedestrian safety.

2.3 To ensure access and movement throughout the District, and more particularly the urban areas, for people with disabilities is not unreasonably restricted.

2.4 To encourage the development of pedestrian and cycle accessways, within the main townships.

2.5 To maintain and upgrade, where appropriate, the existing roads and provide for new roads and related facilities where these are important for providing access. In particular, to investigate and/or make provision for:

- a new road link from Man Street to the One Mile roundabout.
- a new road linking Queenstown and Frankton on the northern side of SH6A above Frankton Arm.
- a long term roading network for the Frankton flats area to protect the through route function of State Highways and provide access to residential, commercial and recreational activities.

2.6 To ensure intersections and accessways are designed and located so:

- good visibility is provided.
- they can accommodate vehicle manoeuvres.
- they prevent reverse manoeuvring onto arterial roads; and
- are separated so as not to adversely affect the free flow of traffic on arterial roads.

2.7 To ensure vegetation plantings are sited and/or controlled so as to maintain adequate visibility and clearance at road intersections and property access and to prevent the icing of roads during winter months, except and unless that vegetation is important to the visual amenity of the District or is protected as part of the Heritage Provisions.

The proposal is considered to be consistent with the above policies for the following reasons:

- Subject to the erection of a stop sign on Access P the location of parking spaces on Road 6 is considered to be an efficient use of the road reserve which will facilitate parking without compromising the movement and safety of vehicles.
- The intensity and nature of activities along Road 6 is compatible with roads capacity and function.
- Access and movement for people with disabilities is not unreasonably restricted.
- Road 6 has been designed to accommodate vehicle movement in association with the approved subdivision RM050520.01 and it is considered unnecessary to consider upgrading, existing roads and/or provide for new roads and related facilities.

Objective 3 - Environmental Effects of Transportation

Minimal adverse effects on the surrounding environment as a result of road construction and road traffic.

Policies:

3.1 To protect the amenities of specified areas, particularly residential and pedestrian orientated town centres from the adverse effects of transportation activities.

3.2 To discourage traffic in areas where it would have adverse environmental effects.

3.3 To support the development of pedestrian and similar links within and between settlements and the surrounding rural areas, in order to improve the amenity of the settlements and their rural environs.

3.4 To ensure new roads and vehicle accessways are designed to visually complement the surrounding area and to mitigate visual impact on the landscape.

3.5 To maintain and enhance the visual appearance and safety of arterial roads which are gateways to the main urban centres.

3.6 To incorporate vegetation within roading improvements, subject to the constraints of road safety and operational requirements, and the maintenance of views from the roads.

3.7 To implement appropriate procedures, in conjunction with the takata whenua and Historic Places Trust, should any waahi tapu or waahi taonga be unearthed during roading construction. (see Section 4.3 Objective 1 Policy 1 for consultation procedures with takata whenua).

3.8 To set areas aside for staff car parking in Business and Industrial Zones.

The proposal is considered to be consistent with the above policies for the following reasons:

- The proposal will not compromise any amenity currently afforded within the area.
- Pedestrian links have already been approved as part of the underlying subdivision consent RM050520.01.
- The proposal does not include any earthworks or excavation.
- The subject site is not located in a Business or Industrial Zone.

Objective 4 - Town Centre Accessibility and Car Parking

The subject site is not located in a Town Centre.

Objective 5 - Parking and Loading - General

Sufficient accessible parking and loading facilities to cater for the anticipated demands of activities while controlling adverse effects.

Policies:

5.1 To set minimum parking requirements for each activity based on parking demand for each land use while not necessarily accommodating peak parking requirements.

5.2 To ensure business uses have provision for suitable areas for loading vehicles on-site.

5.3 To ensure car parking is available, convenient and accessible to users including people with disabilities.

5.4 To require all off-street parking areas to be designed and landscaped in a manner which will mitigate any adverse visual effect on neighbours, including outlook and privacy.

5.5 To require the design of parking areas to ensure the safety of pedestrians as well as vehicles.

5.6 To set areas aside for staff car parking in business and industrial zones.

The proposal is considered to be consistent with the above policies for the following reasons:

- Parking demand has assessed as part of the underlying subdivision consent RM050520.01.
- The proposal does not include any Business use.
- Access and movement for people with disabilities is not unreasonably restricted.
- The proposal does not include off-street parking.
- Subject to the erection of a stop sign on Access P the location of parking spaces on Road 6 is considered to be an efficient use of the road reserve which will facilitate parking without compromising the movement and safety of vehicles.
- The subject site is not located in a Business or Industrial Zone.

Objective 6 - Pedestrian and Cycle Transport
Objective 7 - Public and Visitor Transport
Objective 8 - Air Transport
Objective 9 - Three Parks Zone

The proposal is not considered relevant in terms of Objectives 6-9.

4.0 DISTRICT PLAN: RULES AND ASSESSMENT CRITERIA

An assessment of relevant criteria has been undertaken in Part 2 of this application with reference to Part A of the proposal and any effects above or beyond RM050520.01. Assessment criteria relevant to Part B are considered below:

14.3.2(v) Assessment Matters - Access

(a) Whether adequate sightlines are available from alternative access points.

(b) The extent to which the safety and efficiency of the adjoining road would be compromised by an access point located closer to an intersection or with lesser unobstructed site distances, than is permitted by the Plan.

(c) The extent to which conflicts between vehicles could be created by vehicles queuing across the vehicle crossing; confusion between vehicles turning at the crossing or the intersection; inadequate rate of driver assimilation of data, thereby adversely affecting the safety of the road.

Traffic safety and any potential conflicts related to the shortfall in the sightlines has been assessed by Traffic Engineer, Jason Bartlett and his comments are contained in Attachment [I]. Mr Bartlett concludes that:

"The Accesses F and P will serve typically residential dwellings although it is noted that Access P serves a property which is known to have operated as a B&B style visitor accommodation. The accesses do not comply with the minimum visibility sight distances site standards, Section 14.2.4.2 iv Minimum Sight Distances from Vehicle Access, of the Operative QLDC District Plan. The QLDC site standards require a minimum visibility sight distance of 45m within a posted 50km/hr speed limit.

The alignment of the adjacent road, Road 6, is considered to be generally steep with tight bends, which will create a slow operating speed. The operating speed approaching Access F is considered to be 20km/hr (uphill and downhill), whilst the operating speed on approach to Access P is 20km/hr uphill and 40km/hr downhill. Based on these operating speeds the available visibility sight distance is compliant with Austroads Guidance and NZTA guidance (RTS 6: Guidelines for visibility at driveways) for the particular access usage, either residential or visitor accommodation.

It is acknowledged that parking will affect visibility sight distances from accesses, or intersections, in general. The only guidance that discusses parking at accesses is NZTA RTS 6 which states that for accesses onto local roads visibility sight distance should consider permanent obstructions excluding parking. Accesses F and P will comply with this national guidance.

The New Zealand Land Transport Rule 2004 would allow legal roadside parking up to 1m from the access. The parking provided in this situation is similar to what is legally allowed and often occurs in any urban environment. The parking is therefor considered to be in an acceptable location. The overall effects as a result of the non-compliance with the minimum visibility sight distance requirements of the Operative QLDC District Plan are considered to be less than minor. The location of the proposed parking is not ideal, although given national guidance and legal instruments the location is considered to be acceptable."

Based upon Mr Bartlett's assessment and conclusion any adverse effects upon traffic safety will be less than minor.

(d) Whether the hours of operation of activities on the site coincide with the peak flows and vehicle queues on the road.

All activities within the area are residential. Road 6 has been designed to accommodate the maximum yield of the residential lots within the subdivision consent RM050520.01.

(e) Whether the speed and volume of vehicles on the road could increase the adverse effects of the access on the safety of road users.

This has been addressed in parts (a) to (c) above and further detail is contained in Attachment [I] to this application.

(f) Whether the geometry of the road could mitigate the adverse effects of the access.

This has been addressed in parts (a) to (c) above and further detail is contained in Attachment [I] to this application.

(i) Whether there is efficient public transport within the vicinity of the proposed activity.

There is an efficient public transport network located on Frankton Road.

(j) The proximity of residential areas, visitor accommodation, commercial offices or other mixed use developments to the proposed activity, and the ability for people to walk to and from the site.

All activities within the area are residential. Road 6 has been designed to accommodate the maximum yield of the residential lots within the subdivision consent RM050520.01.

(k) Where there is any consideration to any requirement for coach parking recognition be given to the availability of designated coach parking provided off site.

Coach parking is not required.

(l) Where a reverse manoeuvre is undertaken from a rear site whether the effects are mitigated by the width of access and visibility at the road boundary.

The proposal does not include any reverse manoeuvring.

(m) The extent to which the limited width of an access is mitigated by sufficient on-site manoeuvring.

All access widths have been approved by RM050520.01.

(n) The likelihood of future development which could result in increased traffic generation.

Road 6 has been designed to accommodate the maximum yield of the residential lots within the subdivision consent RM050520.01.

(o) The extent to which the reduced width of an access is mitigated by the provision of passing areas and/or turning heads.

All access widths have been approved by RM050520.01.

(p) The extent to which the proposed development:

(i) Is in accordance with an approved structure plan or overall development plan for the area,

(ii) Can prove that the site will contain fewer units, to be controlled by subdivision covenants, vesting of land as reserve, or other appropriate measures, and

(iii) Can prove that any adjoining land may be more reasonably and economically accessed by an alternative route or that the development of adjoining land is so unlikely as to make provision for future access unreasonable.

The proposal is considered to be consistent with the above criteria for the following reasons:

- There is no approved structure plan or overall development plan.
- Road 6 has been designed to accommodate the maximum yield of the residential lots within the subdivision consent RM050520.01.

(q) Whether the reduced access width avoids turns requiring such methods as mirrors or signalling devices, where the removal, vandalism or malfunctioning of such methods may lessen public safety and convenience.

(r) Where the anticipated use of accessways is to a multi-unit residential or visitor accommodation development, where reduced access widths may be considered because the development includes ready access to parking and building entry points.

(s) Whether there is the possibility of redesign of the development to avoid or mitigate reasons advanced for creation of narrower accessways than required, even though such redesign may result in fewer units.

(t) The extent to which the reduced access widths form part of a structure plan development adopting the "new urbanism" design style, where it is appropriate to provide for lesser access widths in order to enhance urban amenity values.

All access widths have been approved by RM050520.01.

5.0 RESOURCE MANAGEMENT ACT 1991: PART 2

The assessment undertaken towards the decision for RM050520.01 in regard to Part 2 of the RMA concluded the development was acceptable for the following reason:

"There is some ambiguity in Environment Court and High Court cases as to the role of Part 2 of the Act in considering a controlled activity application. We will assume it is to be applied with full force. Notwithstanding that, there is nothing in Part 2 that identifies new matters for us to consider, or changes the emphasis we would otherwise put on the matters already considered."

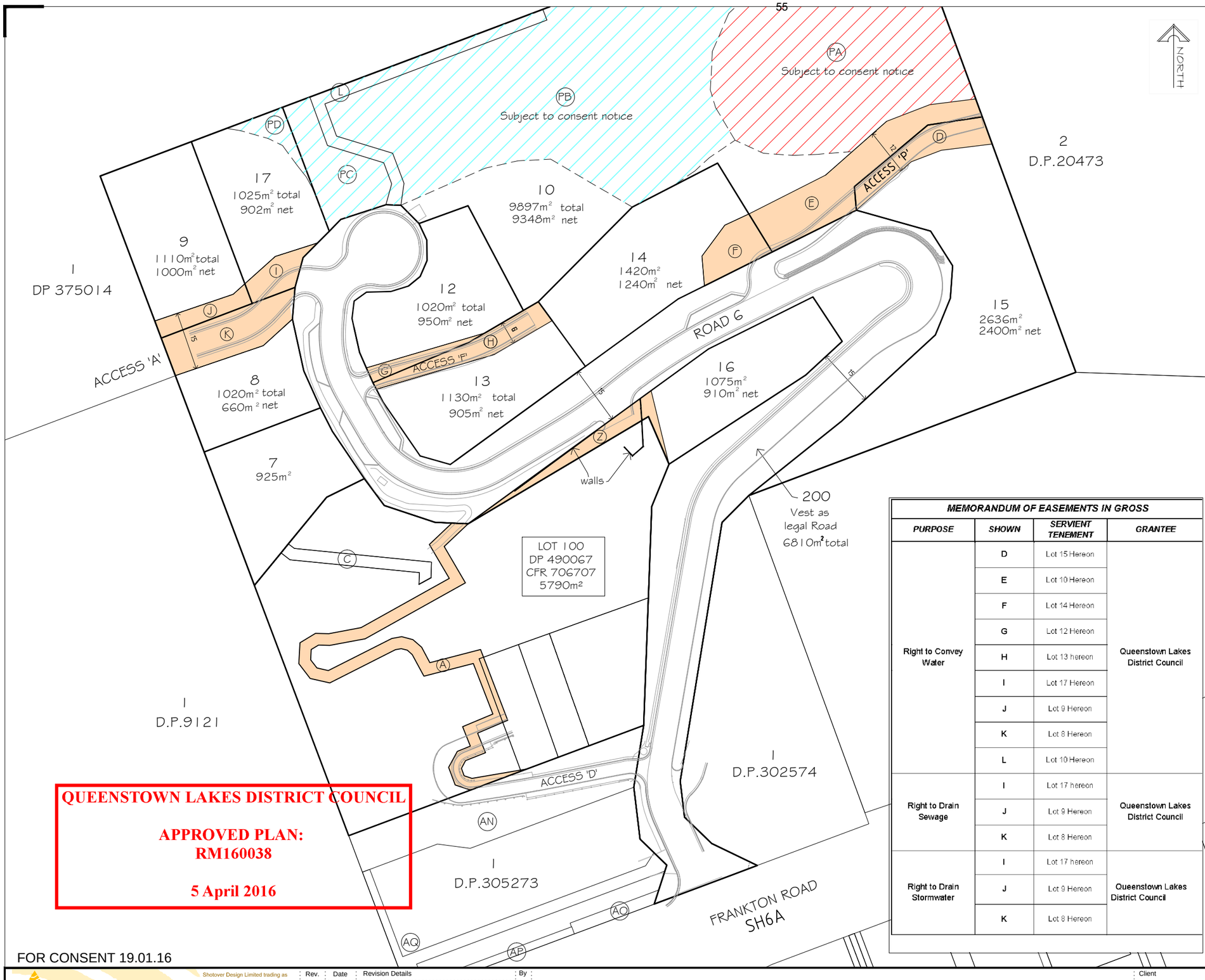
Due to the nature of Part A of the current proposal it is not considered to compromise the above conclusion and meets the purpose and principles of sustainable management set out in Part 2 of the Act.

Part B of the proposal aligns with the Objectives and Policies of the Transport Chapter of the Operative District Plan. Future development will promote sustainable management of natural and physical resources within the site, whilst ensuring that social, economic, and cultural well-being is provided for. The proposal will avoid, remedy, and mitigate adverse effects of activities on the environment.

Overall, the proposal is in keeping with the purpose and principles of the RMA.

AEE prepared by **Nick Geddes**
CLARK FORTUNE MCDONALD & ASSOCIATES

29th February 2016
Amended: 04.03.16



QUEENSTOWN LAKES DISTRICT COUNCIL

APPROVED PLAN:
RM160038

5 April 2016

FOR CONSENT 19.01.16

MEMORANDUM OF EASEMENTS

PURPOSE	SHOWN	SERVIENT TENEMENT	DOMINANT TENEMENT
Right of Way	D	Lot 15 Hereon	Lot 10 hereon & Lot 2 DP 20473
	E	Lot 10 Hereon	Lot 15 hereon & Lot 2 DP 20473
	F	Lot 14 Hereon	Lots 10 &15 hereon Lot 2 DP 20473
	G	Lot 12 Hereon	Lot 13 & 14 Hereon
	H	Lot 13 Hereon	Lot 12 & 14 hereon
	I	Lot 17 Hereon	Lots 8 & 9 hereon Lot 2 DP 409336
	J	Lot 9 Hereon	Lots 8 & 17 hereon Lot 2 DP 409336
	K	Lot 8 Hereon	Lots 9 & 17 hereon Lot 2 DP 409336
	Z	Lot 16	Lot 100 DP 490067
Right to Convey Water Right to Convey Electricity Right to Convey Telecommunications & computer media Right to Convey gas	D	Lot 15 Hereon	Lot 10 hereon & Lot 2 DP 20473
	E	Lot 10 Hereon	Lot 15 hereon & Lot 2 DP 20473
	F	Lot 14 Hereon	Lots 10 &15 hereon Lot 2 DP 20473
	G	Lot 12 Hereon	Lot 10, 13 & 14 Hereon
	H	Lot 13 Hereon	Lot 10, 12 & 14 hereon
	I	Lot 17 Hereon	Lots 8 & 9 hereon Lot 2 DP 409336
	J	Lot 9 Hereon	Lots 8 & 17 hereon Lot 2 DP 409336
	K	Lot 8 Hereon	Lots 9 & 17 hereon Lot 2 DP 409336
	Z	Lot 16 Hereon	Lot 100 DP 490067
Right to Drain Sewage Right to Drain Stormwater	H	Lot 13 Hereon	Lots 12 & 10 Hereon
	G	Lot 12 Hereon	Lot 10 Hereon
Right to drain Sewage	C	Lot 100 DP 490067	Lot 7 Hereon
Right of Way (Pedestrian)	A	Lot 100 DP 490067	Lots 7 – 10 & 12 - 17 Hereon

MEMORANDUM OF EASEMENTS IN GROSS

PURPOSE	SHOWN	SERVIENT TENEMENT	GRANTEE
Right to Convey Water	D	Lot 15 Hereon	Queenstown Lakes District Council
	E	Lot 10 Hereon	
	F	Lot 14 Hereon	
	G	Lot 12 Hereon	
	H	Lot 13 hereon	
	I	Lot 17 Hereon	
	J	Lot 9 Hereon	
	K	Lot 8 Hereon	
	L	Lot 10 Hereon	
Right to Drain Sewage	I	Lot 17 hereon	Queenstown Lakes District Council
	J	Lot 9 Hereon	
	K	Lot 8 Hereon	
Right to Drain Stormwater	I	Lot 17 hereon	Queenstown Lakes District Council
	J	Lot 9 Hereon	
	K	Lot 8 Hereon	

Notes:

Existing easements over Lot 1 DP 305273 are to be surrendered Lot 200 to Vest as Legal Road in the QLDC subject to cancellation of existing easements.

Additional Service Easements may be required.

Additional QLDC easements to be created as required

Areas PA, PD & L are subject to a Consent Notice. Any Buildings in this area will require Geo-technical investigations.

SUBJECT TO RESOURCE CONSENT
SUBJECT TO LT SURVEY.

This is a staged apllication - Refer to drawing 9074_42 for details

Shotover Design Limited trading as
Clark Fortune McDonald & Associates
Licensed Cadastral Surveyors - Land Development - Planning Consultants
309 Lower Shotover Road, P.O.Box 553 Queenstown
Tel. (03)441-6044, Fax (03)442-1066, Email admin@cfma.co.nz
Shop 2, Otago House, 475 Moray Place, P.O. Box 5960
Tel. (03)470-1582, Fax (03)470-1583, Email admin@cfma.co.nz

Rev.	Date	Revision Details	By
K	02.06.15	Adjust bdys to fit current eng design	RB
L	01.10.15	Add Pencarrow Easement	RB
M	11.12.15	Update to reflect Stage 1 Tiers subdivision	CH
N	19.01.16	Remove platforms & combine Lot 11 & 10	RB

THE TIERS SUBDIVISION
LOTS 2, 7 -10, 12 - 17 & 200 BEING A SUBDIVISION OF LOT 2 DP 305273

Client: ALBATROSS QT	Surveyed: -	Signed	Date: -	Job No.: 9074	Drawing No.: 21 Sheet 001
Notes: All dimensions shown are in meters unless shown otherwise. Any person using Clark Fortune McDonald drawings and other data accepts the risk of: - Using the drawings and other data in electronic form without requesting and checking them for accuracy against the original hard copy versions. - Ensuring the information is the most recent issue. - Copyright on this drawing is reserved.	Drawn: RWB	Signed	Date: 19.01.16	Scale: 1:500 @ A1, 1:1000 @ A3	
	Designed: -	Signed	Date: -	Datum & Level: Mt Nic 2000 & MSL	Rev.: N

S:\JOBS\9000\9074\acad\9074_21N_RC Plan.dwg Plotted: 20.01.2016

Attachment D

Section 32AA

The costs, benefits, efficiency, and effectiveness of the recommended rules are set out below, showing additions to the notified text in underlining and deletions in ~~strike through text~~:

Rule 7.4.9

~~Dwelling,~~ Residential Unit, ~~Residential Flat~~

~~7.4.9.1 One (1) per site in Arrowtown.~~

~~7.4.9.2 For all other locations, two (2) or less per site.~~

7.4.9.1 Development of no greater than one residential unit per 450m² net site area, except within the following areas:

(a) The Queenstown Heights Overlay Area where the maximum site density shall be one residential unit per 1500m² net site area with the exception of Lot 2 DP 409336 where there shall be no more than 749 residential units.

Note – Additional rates and development contributions may apply for multiple units located on one site.

Costs	**Benefits**
• The 450m² net site area represents a decrease in the permitted density for the zone.	• The redrafted wording of the rule takes into account the size of the site and responds to potential geotechnical constraints on Lot 2 DP 409336. • The notified policy was not supported by s32 analysis.
Efficiency	**Effectiveness**
• This change is efficient as it correlates with the minimum site area specified in Chapter 27: Subdivision and Development for the zone and the Queenstown Heights Overlay Area.	• These changes are effective as they remove ambiguity as to what density is permitted within the zone regardless of the number of dwellings proposed on a site and provide a definitive maximum for Lot 2 DP 409336.

Rule 7.4.10

~~Dwelling,~~ Residential Unit, ~~Residential Flat~~

~~7.4.10.1 Two (2) or more per site in Arrowtown.~~

~~7.4.10.2 For all other locations, three (3) or more per site.~~

7.4.10.1 Development of no greater than one residential unit per 300m² net site area, except within the following areas:

(a) Site located within the Queenstown Heights Overlay Area with the exception of Lot 2 DP 409336 where there shall be no more than 749 residential units.

(b) Sites located within the Air Noise Boundary or located between the Air Noise Boundary and Outer Control Boundary of Queenstown Airport.

Control ~~Discretion~~ is ~~restricted~~ reserved to all of the following:

- ~~The location, external appearance, site layout and design of buildings and fences~~
- ~~The extent to which~~ How the design advances housing diversity and promotes sustainability either through construction methods, design or function
- Privacy for the subject site and neighbouring residential units
- In Arrowtown, ~~the extent to which the development responds positively to~~ consistency with Arrowtown's character, utilising the Arrowtown Design Guidelines ~~2006~~ 2016 as a guide
- ~~The extent to which the development positively addresses the s~~Street activation
- Building dominance ~~The extent to which building mass is broken down and articulated in order to reduce impacts~~ on neighbouring properties and the public realm
- Parking and access: safety, and efficiency and impacts to on-street parking and neighbours
- Design and integration of landscaping. ~~The extent to which landscaped areas are well integrated into the design of the development and contribute meaningfully to visual amenity and streetscape, including the use of small trees, shrubs or hedges that will reach at least 1.8m in height upon maturity.~~
- Natural Hazards. ~~Where a site is subject to any natural hazard and the proposal results in an increase in gross floor area: an assessment by a suitably qualified person is provided that addresses the nature and degree of risk the hazard(s) pose to people and property, whether the proposal will alter the risk to any site, and the extent to which such risk can be avoided or sufficiently mitigated.~~

Note – Additional rates and development contributions may apply for multiple units located on one site.

Costs	**Benefits**
• Applying a restricted discretionary activity status for residential units between 300m² and 449m² net site area will trigger consent regardless of the number of dwellings. This results in additional costs for developers.	• The redrafted wording of the rule takes into account the size of the site. • This rule allows control over the design of residential units on smaller lots to ensure that adverse effects are avoided, remedied or mitigated. • The notified policy was not supported by s32 analysis.
Efficiency	**Effectiveness**
• These changes are effective as they remove ambiguity as to what density is permitted within the zone regardless of the number of dwellings.	• These changes are effective as they remove ambiguity as to what density is permitted within the zone regardless of the number of dwellings

proposed on a site. • The change collaborates with minimum allotment size in the Queenstown Height Overlay Area.	proposed on a site.

Rule 27.6.1

Recommended Amendments to Rules 27.6.1 – Minimum Lot Area Table

27.6.1 No lots to be created by subdivision, including balance lots, shall have a net site area or where specified, average, less than the minimum specified.

Residential	Queenstown Heights Sub Zone	~~1500m²~~ No minimum

Costs • No minimum lot size may affect living amenity, however given Low Density Residential development controls this will be effectively managed.	**Benefits** • The notified Rule was not supported by s32 analysis and lead to an inefficient use of land zoned residential. • The amended Rule will enable compact urban form and increase density for the residential zone.
Efficiency • The change collaborates with Low Density Residential density provisions.	**Effectiveness** • These changes are effective as they allow greater flexibility in subdivision design.