Before Queenstown Lakes District Council

In the matter of

The Resource Management Act 1991

And

The Queenstown Lakes District Proposed District Plan Topic 13 Queenstown Mapping – Group 1C (Queenstown Urban (Central, West, and Arthurs Point))

SUMMARY STATEMENT OF EVIDENCE OF PETER NICOLSON FOR

Gertrude's Saddlery Limited (494)

Larchmont Developments Limited (527) and (1281)

Dated 9 August 2017

Solicitor:
Rosie Hill
Anderson Lloyd
Level 2, 13 Camp Street, Queenstown 9300
PO Box 201, Queenstown 9348
DX Box ZP95010 Queenstown
p + 64 3 450 0700 | f + 64 3 450 0799
rosie.hill@al.nz

Counsel:
Warwick Goldsmith
Barrister
PO Box 213, Queenstown 9365
m + 64 021 220 8824
warwickgoldsmith@gmail.com

SUMMARY EVIDENCE

- 1 My name is Peter Nicolson.
- My Evidence in Chief dated 9 June 2017 outlines my experience and qualifications relevant to this evidence in respect of the Queenstown Mapping Hearings of the Proposed District Plan (PDP).
- Two site visits to 111 Atley Road (the Site) for the purposes of geotechnical investigations were carried out, firstly on 8 November 2016 for a high-level prepurchase site inspection, and secondly on 7 May 2017, for broad-scale geomorphological mapping to support the current request for rezoning of the Site. Detailed topographic data was available for the second site visit, resulting in a revision of the initial report on the Site and with some additional geological and geotechnical field data being recorded.
- Both reports are based on preliminary, broad-scale geomorphological mapping only. No subsurface investigations have yet been carried out, and further detailed assessments to accompany future resource consent applications will be required to confirm areas suitable for final platform locations, to identify building platform set-backs, and other site-specific concerns that may arise. This is standard practice in many areas of the Queenstown-Lakes District at the more detailed design and building phase of a development.
- In addition to my two site inspections, a third, confirmatory site visit was also carried out on 7 June 2017 by Paul Faulkner, Senior Engineering Geologist with GeoSolve. Mr Faulkner identified some additional local instability adjacent to the southern boundary of the Site, and this has been taken into account by my Evidence in Chief. Confirmatory peer review site visits are standard practice within Geosolve when assessments in relation to plan changes are undertaken.
- Based on these investigations, the Site is expected to comprise schist bedrock with overlying terrace alluvium and/or glacial deposits, in turn overlain by loess and thin colluvium (in localised areas), and by surficial topsoil. Natural hazards were considered at a high level as part of this investigation, which included potential regional seismic hazards and slope stability.
- No active fault traces are known to exist in the immediate vicinity of the Site. A severe seismic risk exists over the Wakatipu region as a whole, due to a high probability of rupture of the Alpine Fault occurring within the next 50 years.
- Potential slope stability hazards within or near the Site are confined to some areas located on or adjacent to the southern boundary, where schist bluffs have formed due to historic, and possibly more recent, slips and/or rockfall, and an isolated area of slow soil creep close to this boundary observed on the third

(post report) site visit. Most of the southern property boundary is positioned at varying distances upslope of these bluffs.

- The northern part of the Site is within a 'nil to low risk liquefaction category', the southern part in a "probably low risk" category. Site observations allow us to conclude that there is an overall nil to low risk of liquefaction.
- Future residential development on the Site, to a low density residential level (LDR) of development (being approximately 450m² lot area), would not be impeded by any geotechnical issues observed on the Site, apart from in some areas close to the southern boundary where bluffs have formed, and where localised surficial instability has been recently noted. As site investigations to date have been preliminary only, future construction close to these areas will need to be assessed in detail on a case-by case basis, and setback distances provided, or excluded areas identified, if necessary.
- The Site overall is considered suitable for LDR use, subject to standard sitespecific engineering solutions applicable at the detailed design phase of future development and construction. Geological conditions and associated risks are acceptable for the intended use of the Site, subject to the caveats mentioned above. As noted in the reports, detailed investigations will be required to finalise specific engineering requirements for future building areas.

Peter Nicolson

9 August 2017