

4415
17 June 2013

Selwyn District Council
PO Box 90
Rolleston



Attention: Craig Friedel

Dear Sir,

RE: Plan Change – Anderson – Trents Rd, Prebbleton, - PC 41
Geotechnical Report Peer Review

Geotech Consulting has been asked to carry out a peer review on the geotechnical report for the proposed plan change of the property at 311 Trents (Lot 2 DP 51743) from Inner Plains to Living 3 zone. The report is by Riley Consultants Ltd dated 28 February 2013, for D & S Anderson, to provide information for a consent to subdivide the 9.2 ha property into 16 lots. In particular the peer review is to ensure compliance with the CERA guidelines for the geotechnical assessment of subdivisions.

The report describes a site investigation of eight test pits to a maximum of 5 m depth with associated scala penetrometer tests, two dynamic probe tests to refusal at 4.5 & 7.5m depths, and two infiltration tests. The test pits showed 0.2 – 0.25m of topsoil over silty sand which is between 0.35m and 1.6m thick over sandy gravel. Deeper information is reported from regional geology maps and three Ecan well-logs, one of which is on the site itself. The Ecan data base indicates a ground water level of 7 – 11m depth, with a water level recorded in the well on the site at 9.3m in July 1987.

The liquefaction hazard is described as low, given the gravel soils and depth to groundwater, and that an equivalent Foundation Technical category TC1 is appropriate. The report indicates that the surface silty sand does not fully comply with the requirements of “good ground” as defined in NZS3604, which requires an ultimate bearing capacity of 300 kPa, but that specific design for 200 kPa ultimate bearing is needed. Field testing at each building site is recommended at building consent stage.

We agree that there is minimal to no liquefaction potential at the site and an equivalent TC1 category is appropriate. The extent of work reported complies with the intent of the CERA requirements at both plan change and subdivision stages, with a suitable number of tests and relevant deep bores to determine the ground profile. There is no geotechnical impediment to the proposed rezoning.

Yours faithfully

Geotech Consulting Limited

Ian McCahon

Dr. Mark Yetton E-mail myetton@geotech.co.nz
Nick Traylen E-mail ntraylen@geotech.co.nz
Ian McCahon E-mail mccahon@geotech.co.nz

Tel (03) 9822 538
Fax (03) 3257 555
PO Box 130 122
4 / 6 Raycroft Street
Christchurch 8141 New Zealand

GEOLOGICAL & ENGINEERING SERVICES