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31 August 2016

The Directors
Westpark Rangiora Ltd
P O Box 622
RANGIORA 7440

Dear Sir/Madam

RE: Summary of Geotechnical Investigations for Westpark subdivision, Rangiora

Westpark Rangiora Limited engaged Aurecon New Zealand to undertake geotechnical investigations for the proposed subdivision at the corner of Oxford Road and Lehmans Road (see attached Figure). The purpose of the investigations was to determine the nature and composition of the underlying ground conditions, to identify any geotechnical issues at the site, and to recommend any remediation options that may be required as part of the proposed development.

The ground investigation comprised:

- A site walkover by an Aurecon geotechnical engineer.
- Review of readily available geotechnical information.
- Drilling one machine drilled borehole to 15m to supplement existing ECan well records.
- Carrying out 14 hand auger boreholes and 14 dynamic cone penetrometer (DCP) tests.
- Excavating nine test pit excavations to approximately 4m depth.

The results of our investigations identified the following:

- The site is typically underlain by 1.5m to 3m of sandy silt overlying gravels to the 15m depth investigated.
- Groundwater was encountered at 7m depth in the deep borehole.
- The liquefaction potential at the site is considered to be low, and the site is likely to behave similarly to MBIE Residential Technical Category I (TC1) land.
- NZS3604:2011 type foundations are likely to be suitable for residential houses subject to building specific investigations and design.

Based on our investigations, we consider that the site is suitable for development from a geotechnical perspective and the site complies with the requirements of Clause 106 of the Resource Management Act.

We note that Aurecon investigations were for the purpose of subdivision investigations and house specific investigations will be required to meet the requirements of building consent applications. Further details are included in our geotechnical report, "Westpark Lehmans Road Rangiora – Geotechnical Investigation Report for Land Subdivision Consent", Ref 240845, dated 15 December 2015:

Yours faithfully



Robert Kamuhangire
Senior Geotechnical Engineer



Ian McPherson
Technical Director – Ground Engineering