4415
16 September 2022

Selwyn District Council
PO Box 90
Rolleston

GEOTECH
consulting ltd

Attention: Justine Ashley,

Dear Ms Ashley,

RE: Proposed District Plan
DPR-0162 Millars Machinery Ltd
461 Drain Road, Doyleston
Geotechnical Evidence Peer Review

Geotech Consulting has been asked to carry out a peer review on the geotechnically related evidence submitted in support of the re-zoning of land from that in the Proposed District Plan. The review is an assessment of the evidence presented and the appropriateness of the submitted land use for the site. Any information gaps are to be identified.

The geotechnical evidence submitted on behalf of Millars Machinery Ltd is

- *Natural Hazards Risk assessment, 461 Drain Road, Doyleston*, dated 4 October 2021, by Eliot Sinclair & Partners Ltd, for Millars Machinery Ltd

A second report *Detailed Site Investigation, 461 Drain Road, Doyleston*, dated 4 October 2021, by Eliot Sinclair & Partners Ltd, for Millars Machinery Ltd has also been viewed. This report is focused on potential contamination and has not been reviewed in detail, although it contains some additional background information that is useful and supportive of the natural hazards assessment.

1. Natural Hazards Assessment Report

1.1 Summary

The Eliot Sinclair report was prepared to address the geotechnical suitability of the land for rezoning to residential use (1.0). The subject site is an 8.8 hectare property (Part RS 5979) located on the southwest side of Doyleston township with frontages into Drain Road and Leeston Road (5.1). It is essentially flat. A desk top review of available geological mapping and known active faults (5.2) and available data (5.4) demonstrates the general area is underlain with deep gravel soils from a shallow depth, liquefaction hazard is low and faulting is distant.

Site testing (6.0) was carried out in 2017 with nine machine auger boreholes to about 2.5m depth. The tests show about 0.3m of topsoil over gravelly silt to between 0.9m and 1.1m where the gravel is found extending to the base of the holes (6.2).

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The water table was measured at monthly intervals in six standpipes for a four year period and found to vary between 0.5m and 2.3m depth. Scala tests show the upper 0.2m to 0.6m of soil to be soft but complying with the definition of “good ground” in NZS3604 below that (6.3).

Natural hazards are assessed in section 7.0, following a method from GNS and found to be not present or negligible. Consequently, the report finds the site geotechnically suitable for residential development (8.0). Site specific geotechnical investigation is recommended for any proposed development.

1.2 Comment

The report adequately characterizes the geotechnical conditions and natural hazards to demonstrate that the site is geotechnically suitable for residential development.

2. Conclusion

The evidence submitted is sufficient to demonstrate that the land is geotechnically suitable for residential development. No additional information is required.

Yours faithfully
Geotech Consulting Limited

Ian McCahon