

4415
13 January 2020

Selwyn District Council
PO Box 90
Rolleston

Attention: R. Love



Dear Sir,

**RE: Private Plan Change PC64 – Hughes Developments Ltd
Farringdon West & South East
Geotechnical Summary Peer Review**

Geotech Consulting has been asked to carry out a peer review of the geotechnical report submitted as part of plan change application PC64. In particular the review is to confirm that the report contains sufficient information to understand the effects relating to geotechnical risk and hazard, and is consistent with MBIE guidance for geotechnical assessment of subdivisions.

The report forwarded is in fact two letters both by ENGEO Ltd, dated 27 November 2019 and addressed to Hughes Developments Ltd. The two letters are:

- *Geotechnical Summary Letter – Farringdon West, Rolleston, Christchurch*, which relates to the properties at 479, 503, 523, 553 & 583 East Maddisons Road, 844 Selwyn Road and 870 Goulds Road. This letter refers to seven geotechnical reports dated between December 2017 and July 2019, which have not been forwarded.
- *Geotechnical Summary Letter – Farringdon South East, Rolleston, Christchurch*, which relates to the properties at 417 Springston Rolleston Rd and 994, 700, 708, 701, & 728 Selwyn Road. This letter refers to four geotechnical reports dated between December 2016 and October 2019, which have not been forwarded.

Both letters state that geotechnical testing was carried out with machine excavated test pits, hand auger boreholes and scala penetrometer tests. The tests confirmed that both areas are underlain with shallow gravel. In some places the topsoil directly overlies the gravel, in others there is a relatively thin layer of silt and sand between the two. Reference to Ecan well logs indicates the groundwater depth is at least 5m deep and that the gravel extends many tens of metres depth.

Both letters conclude that there are no areas of specific geotechnical concern, that the potential for liquefaction and lateral spreading is very low, and future performance can be considered to be equivalent MBIE Foundation Technical Category TC1.

Review Comments

These letters are very brief overviews of the geotechnical reporting. There is no information supplied in respect to the number and depths of the site testing. RMA section 106 hazards are not considered, other than the conclusion with respect to liquefaction hazard. However, the letters do effectively conclude that the sites are suitable for residential subdivision, even if not specifically stated in these terms.

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

It would clearly be advantageous to see the eleven geotechnical reports completed for the two areas, but common sense tells us that the land is free of any significant geotechnical hazard. The land is flat and therefore not subject to slippage, rockfall or serious erosion, distant from any river and hence free of significant flooding, river erosion or avulsion risk. We also note that both areas are adjacent to land that either has already been subdivided or is in the process of being developed. It is well known that the Rolleston area is free of significant geotechnical hazard.

Review Conclusion

Although the information supplied is light on detail, the summaries report geotechnical conditions consistent with those underlying most, if not all, of Rolleston, and it can be concluded that there are no geotechnical risks of any magnitude that would prevent the land in question being suitable for residential subdivision and development. The extent of work as summarised complies with the intent of the MBIE Guidance requirements, in our professional opinion, and is sufficient for the assessment of risk for the private plan change application.

Yours faithfully

Geotech Consulting Limited



Ian McCahon