

15 November 2021

Hughes Developments Ltd  
Christchurch

Attn: Alan Grove

**RE: Geotechnical Summary Letter - Faringdon Far West, Rolleston, Christchurch**  
**(Our Reference: 12903.000.000\_120)**

## 1 Introduction

ENGEO Ltd was requested by Hughes Developments Ltd to provide a geotechnical summary letter for the property at Faringdon Oval, Rolleston, Christchurch. The purpose of the letter is to support several geotechnical reports previously completed by ENGEO. This document should be considered supplementary to the reports outlined below and the full reports should be consulted for further detail.

## 2 Site Description

We understand that the Faringdon Oval development is the area bordered by East Maddisons Road, Selwyn Road and Goulds Road, southwest of the existing Faringdon Development. The approximate site location is shown in Appendix 1 of this report. ENGEO has previously completed the following geotechnical reports within this site:

- 597 East Maddisons Road dated 3 September 2020.
- 92 Dunns Crossing Road dated 13 December 2020.
- 108 Dunns Crossing Road dated 8 November 2019.
- 3/144 Dunns Crossing Road dated 14 August 2020.
- 130 Dunns Crossing Road dated 2 June 2021.

## 3 Geotechnical Investigation Summary

Our geotechnical investigations comprised of machine excavated test pits and hand augers with associated Scala penetrometer tests. The investigations revealed subsurface conditions across the site are consistent with the published geological mapping. Broadly, the subsurface conditions were topsoil overlying sandy gravel. In some testing locations, silt and sand deposits were encountered that are inferred to be in filled paleo channels where they have not remained as channel features.

Based on surrounding ECan boreholes, groundwater was typically recorded at over 5 m deep and up to approximately 10 m deep.

In none of the subsurface investigations completed to date or ECan boreholes reviewed, did we encounter any ground conditions inconsistent with the rest of the site. Therefore, based on the scope of testing completed to date, we consider that the site can be assessed as a large block with no specific areas of concern.

#### **4 Geotechnical Recommendations Summary**

Based on our site investigation and observations, and owing to the nature of the subsurface materials and depth to groundwater at the site, we consider the potential for liquefaction and lateral spreading on the site to be very low.

We therefore consider the site of the proposed subdivision to have Technical Category 1 (TC1) future land performance whereby future land damage from liquefaction unlikely, and ground settlements are expected to be within normally accepted tolerances.

Site specific testing will be required for Building Consent, to confirm the bearing materials and bearing capacity. For preliminary design, we anticipate that a geotechnical Ultimate Bearing Capacity of 300 kPa may be assumed for foundations bearing on native sandy gravel or engineered fill, below any topsoil. All topsoil shall be stripped from within building footprints.

## 5 Limitations

- i. We have prepared this report in accordance with the brief as provided. This report has been prepared for the use of our client, Hughes Developments Ltd, their professional advisers and the relevant Territorial Authorities in relation to the specified project brief described in this report. No liability is accepted for the use of any part of the report for any other purpose or by any other person or entity.
- ii. The recommendations in this report are based on the ground conditions indicated from published sources, site assessments and subsurface investigations described in this report based on accepted normal methods of site investigations. Only a limited amount of information has been collected to meet the specific financial and technical requirements of the Client's brief and this report does not purport to completely describe all the site characteristics and properties. The nature and continuity of the ground between test locations has been inferred using experience and judgement and it should be appreciated that actual conditions could vary from the assumed model.
- iii. Subsurface conditions relevant to construction works should be assessed by contractors who can make their own interpretation of the factual data provided. They should perform any additional tests as necessary for their own purposes.
- iv. This Limitation should be read in conjunction with the Engineering NZ / ACENZ Standard Terms of Engagement.
- v. This report is not to be reproduced either wholly or in part without our prior written permission.

We trust that this information meets your current requirements. Please do not hesitate to contact the undersigned on (03) 328 9012 if you require any further information.

Report prepared by



**Jed Watts**

Engineering Geologist

Report reviewed by



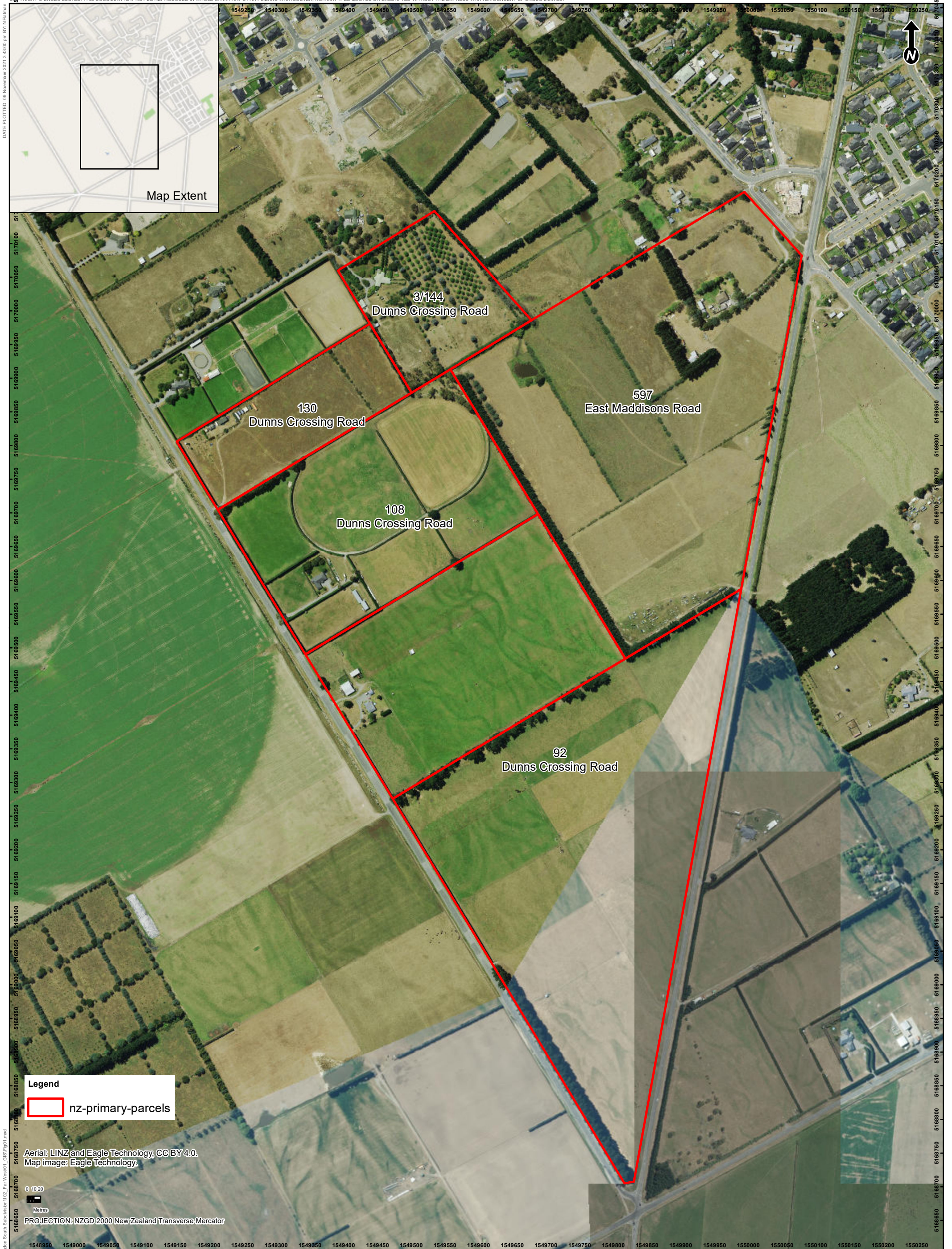
**Greg Martin, CMEngNZ (PEngGeol)**

Principal Engineering Geologist

### Attachments:

- Site plan





	<b>Tauranga Office</b> 1/314 Maunganui Road Mount Maunganui Tauranga 3116 Tel: 07 777 0209 www.engeo.co.nz	Title:  Faringdon Oval - Site Location Plan	Client: Hughes Developments Ltd		Figure No:  <b>1</b>
			Project:  Faringdon Oval	Designed: NF	
				Drawn: NF	
				Checked: DR	
				Date: Nov 21	
Proj No: 12903.000.000		Scale: 1:5,000	Size: A3		
			Revision: A		