8 September 2020

Mr Kelvin Back
Hughes Developments Ltd
8 Mill Lane
Merivale
Christchurch 8014

Dear Kelvin

RE: Summary of Environmental Investigations - Faringdon West, Rolleston, Canterbury (Our Reference: 12903.000.000_98)

1 Introduction

ENGEO Ltd was requested by Hughes Developments Ltd to provide a summary of environmental investigations for the property at Faringdon West, Rolleston, Canterbury. The purpose of the letter is to summarise several environmental preliminary site investigation (PSI) and detailed site investigation (DSI) 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 SouthEast development is the area bordered by Selwyn and Springston Rolleston Roads, southeast of the existing Faringdon Development. The approximate site location is shown in Appendix 1 of this report. ENGEO has previously completed the following environmental reports within this site:

- 583 East Maddisons Road dated 1 December 2017.
- 523 East Maddisons Road dated 22 May 2018.
- 533 East Maddisons Road & 870 Goulds Road dated 27 September 2018.
- 503 East Maddisons Road dated 14 December 2018.
- 830 Selwyn Road dated 13 December 2018.
- 479 East Maddisons Road dated 16 May 2019
- 844 Selwyn Road dated 19 July 2019.
- 858 Selwyn Road dated 1 September 2020.

3 Environmental Investigation Summary

A summary of the environmental works to date are included in Table 1 below.

Table 1: Summary of Environmental Works

Address	Phase	Work required
583 East Maddisons Road	PSI completed, no areas of concern.	Asbestos demolition survey of buildings required as constructed prior to 2000.
523 East Maddisons Road	PSI completed, two areas identified - burn pits.	DSI for burn pits. Asbestos demolition survey of buildings required as constructed prior to 2000 – include sampling of PACM material located on concrete pad in southern paddock
503 East Maddisons Road	PSI and DSI completed. Burn pit area above NES human health for residential land use.	Remediation of burn pit, RAP and SVR required.
479 East Maddisons Road	PSI completed, two offal pits and small burn pit identified.	DSI for offal pits and small burn pit required. Asbestos demolition survey of buildings required as constructed prior to 2000.
858 Selwyn Road	DIS completed, one burn pile identified and one sheep foot bath identified.	Remediation of burn pile and sheep dip, RAP and SVR required. Asbestos demolition survey of buildings required as constructed prior to 2000.
844 Selwyn Road	PSI completed, one offal pit identified.	DSI for offal pit required.
830 Selwyn Road	PSI completed, no areas identified.	NA
533 East Maddisons Road	PSI completed, no areas identified.	NA
870 Goulds Road	PSI completed, one waste pit identified.	DSI for burn pit required.

4 Environmental Recommendations

It is recommended that detailed site investigations be undertaken at 523 East Maddisons Road, 479 East Maddisons Road, 844 Selwyn Road and 870 Goulds Road for the various areas of concern. Dependent on the findings of the DSI, a remedial action plan or site management plan should be drafted to manage or remediate the soils on-site, followed by a soil validation report (required for these sites as 503 East Maddisons burn pit and 858 Selwyn Road sheep foot bath and burn pile requires remediation prior to redevelopment). It is also recommended that an additional sample be collected from 503 East Maddisons to assess whether additional potentially contaminated material has been burnt after sampling in December 2018. These reports outlined above should be undertaken by a suitably qualified environmental practitioner (SQEP).

It is recommended due to the age of the buildings on-site that asbestos demolition surveys are undertaken at 858 Selwyn Road, 583 East Maddisons Road, 523 East Maddisons Road and 479 East Maddisons Road. The Health and Safety at Work (Asbestos) Regulations 2016 state if a building constructed or installed prior to January 2000 requires demolition or refurbishment, a full asbestos survey must be undertaken by a competent person.

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

Natalie Flatman

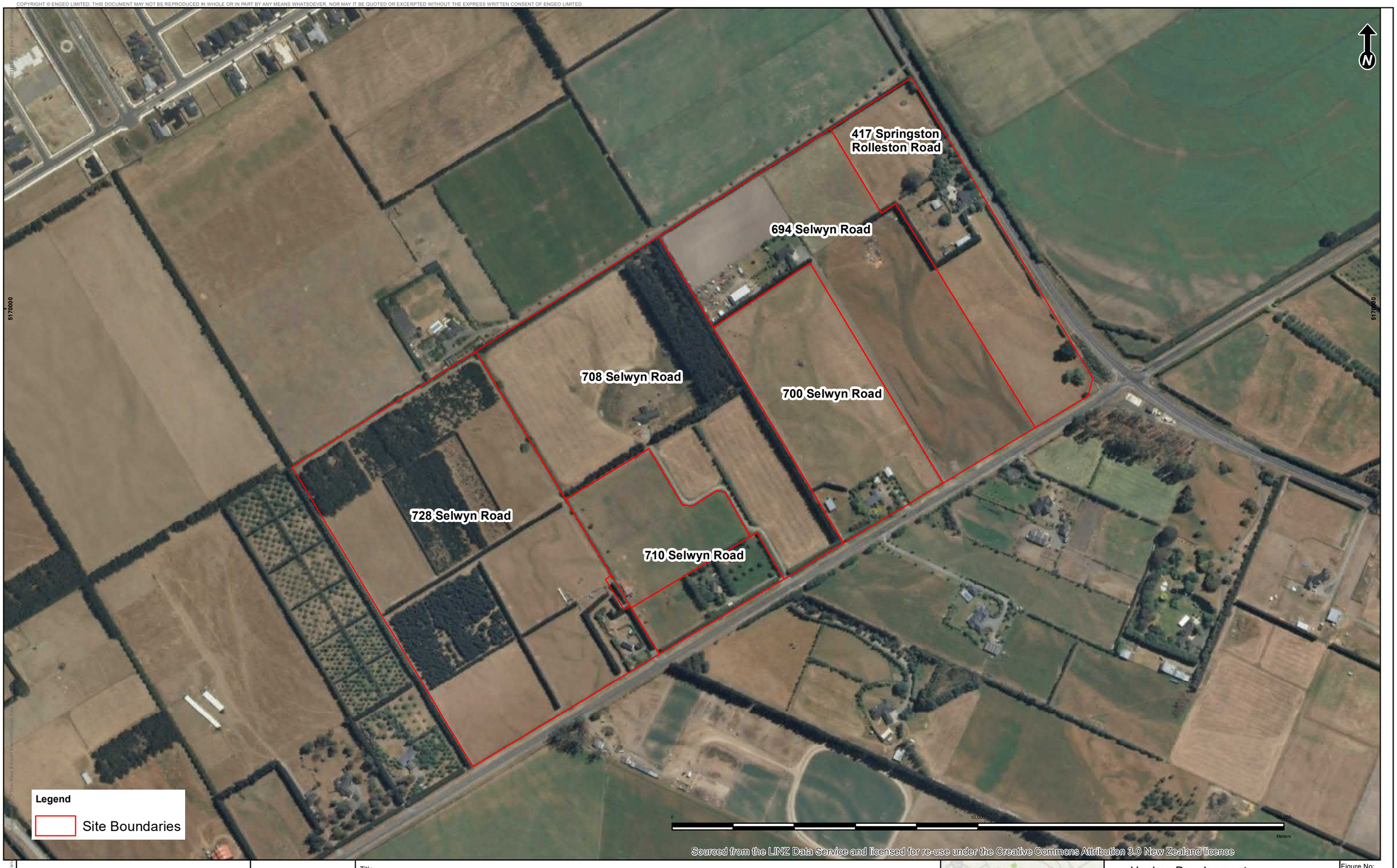
Environmental Scientist

Report reviewed by

Dave Robotham, CEnvP SC

Principal Environmental Consultant

Attachments: Figure of Sites



ENGEO

Christchurch Office
124 Montreal Street
Sydenham, Christchurch 8023
Tel: 03 328 9012
www.engeo.co.nz

Title: Farington Site Plan - South East

Aerial: LINZ and Eagle Technology, CC-BY-3.0-NZ.
Map image: LINZ NZTopo Series, CC-BY-3.0-NZ.

PROJECTION: NZGD 2000 New Zealand Transverse Mercator

Land Information New

Client: Hughes Developments

Project: South East Faringdon Rolleston

Designed: NF
Drawn: NF
Checked: DR
Date: Nov 19

Proj No: 12903.000.000

Scale: 1:4,000

Figure No: 1

Size: A3

Revision: A

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ORIGINAL FIGURE PRINTED IN COLOUR

1550000

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583 East Maddisons Road

523 East Maddisons Road

553 East Maddisons Road

503 East Maddisons Road

870 Goulds Road

830 Selwyn Road

479 Selwyn Road

858 Selwyn Road

844 Selwyn Road

Legend

Site Boundaries

0 10,000 20,000 Meters

ENGEO

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Tel: 03 328 9012
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Title: Farington Site Plan - West

Aerial: LINZ and Eagle Technology, CC-BY-3.0-NZ.
Map image: LINZ NZTopo Series, CC-BY-3.0-NZ.

PROJECTION: NZGD 2000 New Zealand Transverse Mercator

Land Information New

Client: Hughes Developments

Project: Faringdon West
Faringdon
Rolleston

Designed: NF
Drawn: NF
Checked: DR
Date: Sep 20

Proj No: 12903.000.000

Scale: 1:5,000

Figure No: 1

Size: A3

Revision: A

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