SIMPSON MINING AND GEOTECHNICAL LTD

CONSULTING MINING & GEOTECHNICAL ENGINEERS

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55 Westerlea Drive Bridge of Allan FK9 4DO

REPORT ON BORES SUNK AT BROWNIESIDE, PLAINS

Client:

Aspire Joinery 26 Carnbroe Road Coatbridge ML5 4SG

Report No: 5037M/IS

Engineer: W. Simpson

Issued: 18 July 2018

Appendix 6

Directors: W. SIMPSON. BSc Msc Ceng MICE MIHTE FGS M SIMPSON Reg Office: 55 Westerlea Drive, Bridge of Allan, Company Reg No. 113447

SIMPSON MINING & GEOTECHNICAL LTD REPORT ON BORES SUNK AT BROWNIESIDE, PLAINS

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SIMPSON MINING & GEOTECHNICAL L'TD REPORT ON BORES SUNK AT BROWNIESIDE, PLAINS

3. INTRODUCTION.

This report discusses the results of the bores sunk by Phoenix Drilling Ltd on the 21st May 2018. The bores were set out and supervised by Simpson Mining and Geotechnical Ltd.

The report draws conclusions on the mining stability of the site, and gives recommendations on the most suitable foundation to be adopted from a mining view point.

4. BORES.

Three bores were sunk by a rotary drilling rig on 21st May 2018, the rig being supervised by the writer. The bores were correlated by the writer.

5. PREVIOUS WORK.

This report should be read together with our Coal Mining Risk Assessment Report, Report No 5037/IS dated 7th May 2018.

6. RESULTS OF BORES.

The bores revealed the site to be underlain by fill materials consisting of black blaes (colliery spoil), which varied in thickness from 1.10 metres at bore hole number 1, to 2.20 metres at bore number 2. The black blaes was underlain by boulder clay which extended down to depths varying from 6.8 metres at bore number 3, to 8.40 metres at bore number 2. These superficial deposits rested in turn on rock strata of the Lower Coal Measures.

The writer has correlated the coal encountered at a depth of 16.20 metres in bore number 1 as being the Virtuewell. The horizon described by the driller as black OIL SHALE at depths of 13.10 and 14.20 metres at bores numbers 2 and 3 has also been correlated as the Virtuewell Coal. The bores confirm our original assessment that the Virtuewell was probably too thin to have been worked beneath the site, and would have been affected by the near presence of of the quartz-dolerite sill. The bores confirm that the site is stable with regards to the Virtuewell Coal.

Trial pit number 1 excavated for foundation purposes exposed the old shaft which has already been treated and capped by the Coal Authority. It is recommended that as a precaution the position of the proposed workshop be moved 5 metres to the east.

W SIMPSON B.Sc.(Mining), M.Sc., C. Eng., MICE, MIHT, F.G.S.

APPENDIX

Crown Copyright Ucence No 0100020268 Windyrldge House Calder Country Park Sluice Plains Brownleside Sale Area (Blue - 2851 Sq m/0.704acres) 1:1250 Scale: Plan Size A4 MIII House NG Coords @ Centre 279693,666684 Date 04 Dec 2012 Prepared By ВНМ Plan No A2B DRAFT Sale PB Rail Projects - Scotland Buchanen House - 4th Floor 58 Port Dundas Road Glasgow NetworkRail

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SIMPSON MINING & GEOTECHNICAL LTD REPORT ON BORES SUNK AT BROWNIESIDE, PLAINS

APPENDIX 1

BORE LOGS



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Phoenix Drilling Limited

2 Nairn Road, Deans Industrial Estate, Livingston, EH54 8AY T: 01506 411448 F: 01506 414477 E: info@phoenixdrilling.co.uk www.phoenixdrilling.co.uk Core Runs Toby Installation Strata Description Flush% From Recovery Casing Extension of Cable Percussion? YES/NO Kexol Type:Depth Type/Depth 21 11 COMPOSED MUDSICALE ATHERED MUDSTENE 4 WEATHERTO SANDSTONIE 1 14 MURSTONIE COAL (VIRTUENEL L MUSSTONE 1 Samples/Core Left: Remarks Circulation Fluid Return % KOBI Rotary Drilling Complete? Plugged at: Orientation (Vertical unless stated) Other tests/samples Angle from Direction Horizontal 90 Depth Struck Ground Water Water Levels After On Pulling Casing After 20 mins Evening Time: Morning Sealed off Water sample? Casina Standing Times Inspection Pit Open Hole (Details in Total Hours this Sheet: Remarks) Time (hrs): Moving from BH to BH Remarks (including standing time details and visits to site by non Phoenix Drilling Staff) Drillers (2 & 3) / ALLAN



Phoenix Drilling Limited

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Client: Mr & Mrs G Fraser

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Logged By: I. Simpson

Excavation Method: Tracked Excavator

Excavation Date: 18th May 2018

Sheet: 1 of 1

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APPENDIX 2

POSITION OF OLD CAPPED SHAFT

