

Before the Hearings Commissioners at Christchurch City Council

under: the Resource Management Act 1991

in the matter of: an application by Ryman Healthcare Limited for resource consent to establish and operate a comprehensive care retirement village at 100-104 Park Terrace and 20 Dorset Street, and 78 Park Terrace, Christchurch

between: **Ryman Healthcare Limited**
Applicant

and: **Christchurch City Council**
Consent Authority

Joint Witness Statement - Geotechnical

Dated: 26 January 2021

REFERENCE: Luke Hinchey (luke.hinchey@chapmantripp.com)
Nicola de Wit (nicola.dewit@chapmantripp.com)

chapmantripp.com
T +64 9 357 9000
F +64 9 357 9099

PO Box 2206
Auckland 1140
New Zealand

Auckland
Wellington
Christchurch



JOINT WITNESS STATEMENT - GEOTECHNICAL

- 1 This joint witness statement responds to the Commissioners' request, at the hearing on 25 January 2021, for Mr Pierre Malan and Mr John Aramowicz to caucus on the outstanding geotechnical issues relating to the Proposed Village.
- 2 The geotechnical engineers undertook caucusing on 26 January 2021.
- 3 The attendees at the meeting were:
 - 3.1 Mr Malan, Senior Geotechnical Engineer, Tonkin & Taylor Limited – for Ryman;
 - 3.2 Mr Aramowicz, Senior Civil & Geotechnical Engineer, Eliot Sinclair & Partners – for the owners of 15 Salisbury Street; and
 - 3.3 Ms Yvonne McDonald, Senior Subdivisions Engineer, Christchurch City Council – for the Council.
- 4 The attendees discussed the risk of property damage at:
 - 4.1 15 Salisbury Street; and
 - 4.2 All other neighbouring properties, primarily as it relates to Bishopspark Site.

How the works will be constructed to avoid damage to adjacent properties during construction arising from the Proposed Village basement works at the Site boundary, resulting from deformations caused by:

- 4.3 The construction of the basement retaining wall perimeter;
- 5 Mr Richard Turner, Planner, Mitchell Daysh also attended the meeting to assist with recording this statement.
- 6 In producing this statement, the experts have complied with the Environment Court Code of Conduct for Expert Witnesses.

Agreed Statement

- 7 Pierre Malan provided further explanation regarding the currently proposed construction methodology and has committed to providing further a summary of this methodology for John Aramowicz and Yvonne McDonald.
- 8 All experts agree that the proposed construction methodology has been selected to minimise the risk to adjacent properties, namely that it avoids the need for significant vibrations or pile driving.

- 9 Pierre Malan acknowledged that the reference to 'driven circular steel tubes' at Paragraph 28.1 of his evidence was incorrect, and that the intention is for the tubes to be pushed or plunged into wet concrete. John Aramowicz and Yvonne McDonald consider that this alleviates a significant number of their concerns with the potential for subsidence to private property.
- 10 John Aramowicz accepts that the 10 mm of subsidence calculated by Tonkin & Taylor appears to be low, but he is unable to confirm that this would be sufficient to avoid the risk of damage to rigid masonry walls. Yvonne McDonald considers that with review provisions to confirm that subsidence is under 10 mm, that any subsidence is considered largely cosmetic in nature. Pierre Malan reiterates his statement at Paragraph 45 of his evidence, that deformations of up to 10 mm are below levels that are normally expected to compromise structural performance.
- 11 All experts recommend that the construction management plan provide for the identification of potential at-risk structures, the review of the performance of the basement at a low risk location (expected to be at the Peterborough site), revisiting of the construction methodology and the reporting back to Council and neighbours of the results.
- 12 The meeting conclude 12.15pm on 26 January 2021.

Date: 26 January 2021



Pierre Malan



John Aramowicz



Yvonne McDonald

