

IN THE MATTER of the Resource Management Act 1991

AND

IN THE MATTER of an application to Masterton District Council by Welhom Developments Limited ("**Welhom**") for a private plan change to the combined Wairarapa District Plan ("**Plan Change**")

JOINT STATEMENT OF CIVIL ENGINEERING EXPERTS

1. INTRODUCTION

1.1 This joint witness statement relates to expert conferencing on the topic of civil engineering. Participants in the conferencing were:

- (a) Russell Brents engaged by Summerset; and
- (b) Ryan Rose engaged by Masterton District Council.

1.2 We confirm that we have read the Environment Court's Code of Conduct set out in the Environment Court's Practice Note 2023. We have complied with the Code of Conduct in preparing this joint statement. Except where we state that we are relying on the evidence of another person, this evidence is within our area of expertise. We have not omitted to consider material facts known to us that might alter or detract from the opinions expressed in this evidence.

2. ISSUES THAT ARE AGREED BETWEEN EXPERTS

2.1 Mr. Brents and Mr. Rose during a break from the hearing on 8/3/2023, met to discuss the water supply for the existing Cashmere Oaks Subdivision and new evidence received from a local engineer. The new evidence was pressure data from a data logger installed on the water supply trunk main over 3 days at the end of January 2022 (**attached** to this joint witness statement). The data from CF projects the local engineer of record for

Cashmere Oaks Stage 2 provided data logger results as attached in reference 1.

- 2.2 The data received from CF Projects measured the pressures in Bar from a point along the 300mm Trunk Water Supply Main in Cashmere Oaks. The range in pressure on average were as high as 2.09 Bar (209.0 kPa) and as low as 1.99 Bar (199.0 kPa). This range of pressures indicated the high and low levels in the existing reservoir in Titoki Street. This reservoir works as a gravity feed main between the high and low levels. When the low level is achieved the reservoir is filled by a pump until the high level is reached and/or is full.
- 2.3 The range of high to low pressures as measured by the data logger are at or less than 10 kPa, which suggests there is little noticeable pressure in the mains over the course of operations even during peak times.
- 2.4 After review and a brief discussion, it was agreed there is likely to be very little pressure drop in the system with the addition of the proposed development site.
- 2.5 The statement in 2.4 above, that there will be negligible pressure drop, includes the effects of the addition of a booster pump to the system. Then large flow available, and the subsequent low pressure variation, means that the potential issues raised previously by Mr Rose in his evidence related to potable water pumping are no longer considered to be an issue.

9 March 2023



Russell Brents



Ryan Rose