

**BEFORE THE PALMERSTON NORTH CITY COUNCIL**

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**IN THE MATTER** of the Resource Management Act 1991

**AND**

**IN THE MATTER** of Private Plan Change: Whisky Creek

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**STATEMENT OF EVIDENCE OF DAVID REI MILLER  
FOR PALMERSTON NORTH CITY COUNCIL**

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Dated:

14 JULY 2022

## **STATEMENT OF EVIDENCE OF DAVID REI MILLER**

### **FOR PALMERSTON NORTH CITY COUNCIL**

#### **INTRODUCTION**

[1] My name is David Rei Miller. I hold the qualifications of Bachelor of Engineering (with Honours) and Master of Engineering (with Honours). I am a Chartered Professional Engineer for Water and Wastewater, a Chartered Member of Engineering New Zealand, and have 16 years' experience as an engineer in local government.

[2] My role with Palmerston North City Council (PNCC) was Activity Manager – Water Supply from 8 June 2020 to 10 June 2022. I am acting for PNCC as an independent witness.

[3] In preparing this evidence I have read and considered the following material:

- (a) The Private Plan Change Proposal
- (b) The Planning Joint Witness Statement

#### **CODE OF CONDUCT**

[4] I confirm that I have read and agree to comply with the Code of Conduct for Expert Witnesses contained in the Environment Court Practice Note 2014. I confirm that I have considered all the material facts that I am aware of that might alter or detract from the opinions that I express, and that this evidence is within my area of expertise.

#### **SCOPE OF EVIDENCE**

My evidence is primarily intended to support the Whisky Creek Service Assessment dated 2 May 2022 (known as the Mik Report) and clarify the question of available capacity in the water supply network to support the proposed development.

#### **Water Supply Report**

[5] The Mik Report was drafted during my absence with COVID-19. On returning to work, I reviewed the Water Supply section of it, requesting only minor changes. I

was satisfied with the approach and conclusions, both of which were in line with similar reports that we completed during my time at PNCC.

- [6] The report was largely based on water network modelling, which uses software calibrated by field measurements to determine current flows and pressures, as well as anticipated flows and pressures under various development scenarios.
- [7] In particular, tests are made against firefighting requirements, as these are normally the constraint and the determining factor in sizing the water supply network for Palmerston North. The relevant document is SNZ PAS 4509:2008 (the New Zealand Fire Service Firefighting Water Supplies Code of Practice). It should be noted that compliance with this is not mandatory – it is best practice – and that many water suppliers around the country do not have a stated level of compliance with it.
- [8] The report identified existing level of service issues relating to flow and pressure, plus anticipated worsening of these with the proposed development scenario, and recommended infrastructure improvements to address these. However, modelling was done at the peak time on the peak day, to determine the worst case scenario, with a view towards being compliant with PNCC levels of service 100% of the time.

#### **Re-evaluation**

- [9] The report as it stands and as it is summarised above is valid. It was prepared to enable PNCC to cater for future development and ensure it would meet its levels of service commitments (as they pertain to water availability, pressure and flow, with firefighting included) at all times, including the worst case scenario of the peak time on the peak day, even after full future development.
- [10] Notwithstanding this, Section 4.2 on p18 of SNZ PAS 4509:2008 (the New Zealand Fire Service Firefighting Water Supplies Code of Practice) specifies that:  
  
*“It is recommended that water supply systems be designed to provide 60% of annual peak demand in addition to the fire flow.”*
- [11] The implication of this is that the peak time on the peak day does not need to be used when assessing compliance. Mr Eng Lim of PNCC, who carried out the water network modelling, assured me that in modelled scenarios using only 60% of peak

demand, there were no capacity constraints or level of service issues even at full development.

[12] Therefore, while it would be necessary for PNCC to facilitate infrastructure improvements before full development is achieved in order to meet its levels of service 100% of the time, it cannot be said that there are any water supply constraints that could reasonably stop the development from proceeding.

A handwritten signature in blue ink, appearing to read "D. Rei Miller". The signature is stylized with a large initial "D" and a trailing flourish.

David Rei Miller