Before the Independent Hearings Panel At Wellington City Council

Under Schedule 1 of the Resource Management Act 1991

In the matter of Hearing submissions and further submissions on the

Proposed Wellington City District Plan

Statement of supplementary planning evidence of Nicholas John Locke and Michael Robert Donn on behalf of Wellington City Council

Date: 19 June 2023

INTRODUCTION:

- This is a joint supplementary evidence statement from Michael Robert Donn and Nicholas John Locke. We are respectively employed as an Associate Professor for Building Environments at Te Herenga Waka Victoria University of Wellington, and as a Principal Research Engineer at WSP New Zealand Limited.
- We have prepared this statement of evidence on behalf of the Wellington City Council (the **Council**).
- 3 We have read the respective evidence of:

Te Herenga Waka Victoria University of Wellington ID 106

a. Peter Coop

Kāinga Ora ID 391 & FS 89

a. Matt Heale

Retirement Villages Association of New Zealand Incorporated ID 350 & FS126 and Ryman Healthcare Limited ID 346 & FS128

- a. Nicola Marie Williams
- We have prepared this statement of evidence in response to expert evidence submitted by the people listed above to support the submissions and further submissions on the Proposed Wellington City District Plan (the Plan / PDP).

QUALIFICATIONS, EXPERIENCE AND CODE OF CONDUCT

- 5 Our evidence-in-chief sets out our qualifications and experience as wind experts.
- We confirm that we are continuing to abide by the Code of Conduct for Expert Witnesses set out in the Environment Court's Practice Note 2023, as applicable to this Independent Panel hearing.

SCOPE OF EVIDENCE

7 Our statement of evidence:

- a. Addresses the expert evidence of those listed above.
- b. Is focused on issues directly related to our areas of expertise and wind matters discussed in our evidence-in-chief.

RESPONSES TO EXPERT EVIDENCE

Te Herenga Waka Victoria University of Wellington ID 106 - Peter Coop

- We agree with Mr Coop's submission seeking clarification of where and how the proposed wind controls for the Tertiary Education Zone (TEDZ) and Hospital Zone (HOSZ) apply. The overall aim of the proposed wind rules that apply to these zones, is to provide consistent wind controls for development within these zones to manage wind effects upon adjacent public spaces (which are not zoned TEDZ or HOSZ). The rules seek to manage both the safety in these public spaces and deterioration of the wind environment. As with other large campus developments, the wind rules apply only where these spaces or zones interface with other zones. The focus for the TEDZ and HOSZ is on the effects of large developments within these zones on adjacent public spaces which sit outside these zones.
- We note that consideration of wind conditions (through the Wind Chapter rule framework) in the Proposed District Plan (PDP) for the TEDZ and HOSZ is limited to the consideration of wind effects from development within these zones on adjacent public streets. Accordingly we note that the consideration of wind effects from development within these zones themselves does not fall within the scope of the PDP. However, we highlight that unsafe wind speeds will in theory be controlled by safety in design obligations under the Health and Safety at Work Act, albeit in a less certain and predefined manner.
- We should also point out that Mr Coop's proposed criteria for triggering a wind assessment truncates the maximum distance from a road that a large buildings could affect ground level wind conditions, noting that he is suggesting 20m from a legal road. The best practice wind guidance provides assistance here see Figure 1 below. In general, if a public space is within 1 building height away from the proposed development, and the space between the public space and the proposed building is essentially low-rise buildings, then assessment of the wind effects of the building on the public space is appropriate.

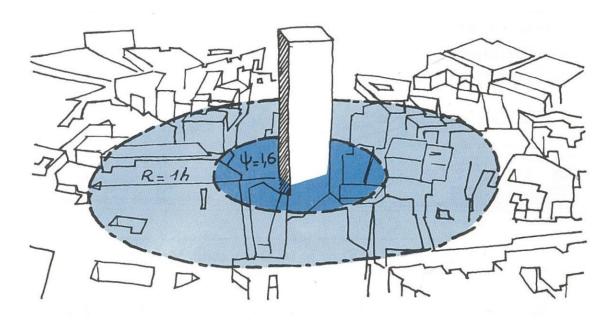


Figure 1. Influence of a tall building on surrounding wind conditions at ground level.

And, on Mr Coop's illustration about the Victoria University "Culliford Drive, a kerb and channel road that bisects the [Kelburn] campus": we agree with the underlying assumption that passers-by would expect that such an apparently public road would be subject to the same comfort and amenity wind rules as elsewhere in the City. However, we understand that such a consideration is currently outside the scope and intention of the PDP notified proposed wind rules for TEDZ and HOSZ.

Kāinga Ora ID 391 & FS 89 - Matt Heale

We acknowledge Mr Heale's general support for the proposed building heights that trigger an assessment of wind effects.

Retirement Villages Association of New Zealand Incorporated ID 350 & FS126 and Ryman Healthcare Limited ID 346 & FS128 - Nicola Marie Williams

We disagree with Ms Williams submission that the objectives and policies of the wind chapter be limited to a sole focus on safety. The amenity and comfort of public space in relation to wind effects are important parts of the rule frameworks. Comfort and amenity need to be considered when discretionary applications are made and when discretion is required for developments that do not comply with the cumulative effect wind standard. The cumulative effect wind standard in the Operational and Proposed District Plan controls comfort level winds as well as unsafe wind conditions.

We note that strong wind conditions generally impact the elderly disproportionately, as they are more easily unbalanced by wind gusts. ACC claim data¹ from 2010 to 2021 shows that injuries associated with "wind" are highest for people aged 65+ years, see Figure Two below. For Wellington, the ACC costs are in the range of \$1m per year and growing. Over 60% of the injury claims are soft tissue and laceration injuries. We recommend that comfort and amenity of pedestrians from wind have greater, rather than less, consideration when building development occurs in retirement villages and adjacent public spaces.

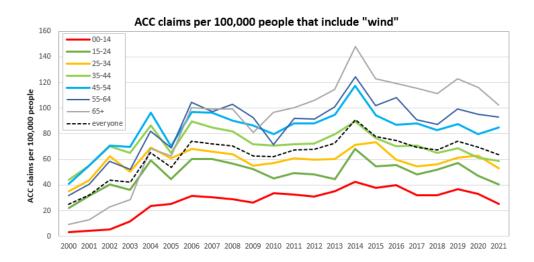


Figure 2: Showing ACC claims per 100,000 people that include wind

Date: 19/06/2023

¹ Official Information Act response GOV-021404, 16 November 2022, ACC Analytics Reference AR-3345, Wind injuries claim data, Period 1 January 1992 to 30 September 2022

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