

Ryman Karori

Audit of the response to the Assessment of the Wind Effects

BUILDING ENVIRONMENTAL PERFORMANCE SIMULATION

November 8, 2020

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Wind Situation

The report that I have been asked to respond to says:

6. WIND EFFECTS

“The further information request seeks the following with respect to wind effects:

“Further Information Response –26 Donald Street and 37 Campbell Street, Karori 812.

The Wind Report recommended landscaping as part of mitigation of wind effects. There do not appear to be any cross-references between the Wind Report and the landscape plan. Can you please provide additional information to confirm that the mitigation by planting recommended in the Wind Report is achievable. This information should be confirmed by WSP reviewing the landscape plan and vice versa. Can you please confirm if the Wind Report has reviewed the proposed landscaping plan to ensure that the plans are consistent with the wind recommendations and vice versa.

“WSP have advised (in the response provided as Appendix E) that the Wind Report had been informed by an assessment of a draft Indicative Landscape Plan. WSP have since reviewed the submitted Indicative Landscape Plan and acknowledged that while slight amendments had been made to the plan, their initial assessment remains applicable and consistent with the wind recommendations.

“When considering the suitability of the Indicative Landscape Plan for wind mitigation purposes, WSP conclude that:

- The type and scale of proposed landscaping, together with the proposed fencing and buildings of the Proposed Village **will provide some shelter for areas within the Site and outside the Site;**
- Wind conditions within the Site are generally expected to be about the same or better than those currently experienced around the Site, noting that some locations within the Site are expected to be windy;
- As detailed in the Wind Report, it is considered that “there is potential for wind conditions within the Site **to be further improved using additional planting (trees and shrubbery), screens and fencing**”, however “it would be more appropriate to wait for pedestrian / resident use patterns to develop to assess the need for additional wind mitigation, **and target this in the most appropriate locations as part of the detailed design of landscaping for the Site**”;
- The benefits of planting, in terms of providing wind shelter, are not fully realised until the plants are mature, however it is understood that, where possible, **Ryman prefer to plant relatively mature plant specimens**; and
- Construction of the proposed fencing will occur prior to occupation of the Site, and will provide wind shelter.

“Sullivan & Wall Landscapes have confirmed (in the response provided as Appendix F) that the mitigation planting recommended in the Wind Report is achievable and consistent with the Indicative Landscape Plan. When considering the suitability of the Indicative Landscape Plan for wind mitigation purposes, Sullivan & Wall Landscapes conclude that:

- The proposed species within the Site are appropriate for the wind conditions;
- Planting along the southern boundary (native evergreen species) is appropriate for the wind conditions, but will take some time to be effective;
- Planting along the south western and north eastern boundaries is considered to be wind hardy; and
- It is envisaged that at the detailed planting planning stage, additional planting of smaller tree species and shrubs will be integrated into the Proposed Village in areas that require additional shelter for pedestrians and seating areas. To be certain that the proposed species can withstand the wind condition, Sullivan & Wall Landscapes will also seek further opinion of the species suitability, and change the species to something more robust if required”

Assessment of the proposed wind mitigation measures

The material presented above does not demonstrate that the two consultants have actually talked to each other. I have highlighted in red the issues of concern in the supplied report. In simple note form, these red highlights suggest that this perfunctory approach has still not resolved the reason for the coordinated response requested:

1. It would seem that the Landscape and Wind effects report is attempting to be reassuring that they will carefully consider whether the species to be planted will be appropriate for the wind conditions. No mention is made of how big the proposed species to be planted need to be to provide the shelter as specified by WSP. It is not just whether the plants will grow, but will they function to shelter people? Knee high grasses for example will most likely grow, but would not meet what the WSP assessment recommends..
2. No plan is proposed for dealing with the identified issue that shelter will “take some time to be effective”. If some time is some years, what shelter will be provided in the meantime? Will this interim shelter work well to assist the planting to reach the scale identified by WSP as needed?
3. The recommendation of WSP in regards to wind shelter meeting the needs identified after construction is not, to my knowledge acknowledged in the proposal. How will this be actually happen? Have WSP been contracted to conduct an on-site Post Occupancy survey of usage? If people after construction are avoiding places that are too windy, how will this need be determined?
4. And finally, if for maintenance cost reduction, at some time in the future the planting becomes an inconvenience to be removed, what guarantees are to be provided by the developer that the wind shelter function will be replaced with an equivalent device or planting?