



Date: October 17, 2016

Reference: WC790-02F04- WE Letter

Lane Cove Council

48 Longueville Road

Lane Cove NSW 2066

Attn: Ms Rebecka Groth

RE: 496-520 PACIFIC HIGHWAY, ST LEONARDS
Wind Environment Review for the Updated Design

Since the original Wind Environment Study review was undertaken for the proposed development at 496-520 Pacific Highway (report reference WC790-02F02, dated August 1, 2016 and WC790-02F03, dated September 27, 2016) updated information has been provided for the proposed development. This includes the following key documents which regards to the wind environment study

- Updated Architectural Drawings, dated October 10, 2016
- Revised Pedestrian Wind Environment Study, dated October 4, 2016 (report ref: WC687-09F02(rev0))
- Landscape Development Application, dated October 2016 (Issue J)
- Response to Council Letter of 6 October 2016 (dated October 11, 2016)
- RFI 1 – Pedestrian Wind Environment Letter, dated October 11, 2016 (report ref: WC687-10F02(rev0))

The following key changes to the built form are noted in the latest revised design which will have an impact from a wind perspective:

- Revised façade line for Ground Level associated with the retail tenancies along Friedlander Place, southern aspect and northern aspect of the tower.
- The awning design has been revised.

WINDTECH Consultants Pty Ltd ABN 72 050 574 037

Head Office: 607 Forest Road, Bexley, NSW 2207, Australia

P +61 2 9503 0300 **E** reception@windtech.com.au **W** www.windtechconsult.com

Sydney | Abu Dhabi | London | Melbourne | Mumbai | New York | Shanghai | Singapore

Based on the abovementioned design changes, the following comments are made:

- The wind comfort criteria used as part of the analysis is noted to have been revised from the previous wind report (changed from short exposure to comfortable walking for the main areas). Subsequently the treatments have been scaled down with this change. It is not clear if Council is aware/accepting of these revised conditions.
- The wind comfort criteria at Point 12 is noted to have been revised to comfortable walking criteria (from short exposure) however the landscape drawings indicate that this area is still proposed for outdoor seating as part of the retail tenancy. Either the wind report or landscape drawings should be updated to reflect the intended use of this space.

Reference is made within the wind environment letter that the removal of the trees along the Pacific Highway is not expected to have an adverse wind effect due to the shielding provided to the southerly winds by the adjacent Mirvac development. This is unclear from the results presented in the updated wind environment report. The wind conditions at the north-eastern corner of the site are noted to be similar to the previously presented results, although it is noted that the wind comfort criteria has been relaxed (Point 12). Furthermore it is noted that the wind conditions are slightly stronger from the southerly directions for the latest design scheme. At this stage the trees along the Pacific Highway should be retained until further reasoning can be provided.

- The gap between the retail façade and the spiral staircase at the south-eastern corner of the site is noted to have widened in the recent set of architectural drawings, compared to that presented in the wind report. Previously it had been recommended that a full-height impermeable screen be included in this area. Clarification is therefore sought as to the removal of this screen with this design change or if it's a result of a relaxation of the wind comfort criteria.

RFI 1 document provides a desktop assessment on the expected effect of the change in the design of the ground level façade, particularly at the south-eastern corner of the site. The letter recommends that the full-height impermeable screen between the façade and the elevator/stairwell be re-introduced in the final design.

- The updated Wind Environment Report notes that tree planting (in light green) be included as proposed, with dense hedge planting beneath. The landscape masterplan indicated that palm trees are currently proposed for these locations which will not be effective for wind mitigation. Clarification that the palms have not been considered as trees and therefore are not required for wind mitigation and only the hedge planting is being relied upon for wind mitigation.

- Location of the wind sensors have been provided within the response to councils queries. From the results from the wind tunnel it is noted that there will need to be a different wind speed warning for the various levels of the tower. Recommendations have also been made with regards to the use and selection of furniture for the balconies, to be included in the bi-laws.

Regards,

A handwritten signature in blue ink, appearing to read 'Kevin Peddie', with a stylized flourish at the end.

Kevin Peddie
Associate Director