

Your ref -
Our ref 280530-00
File ref -

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21 July 2021

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Royal Far West (RFW), Manly –Wind Conditions – Section 75W modification

Dear Sir/Madam,

Please find herein a brief letter detailing the expected impact of the changes to the proposed re-development at the RFW Campus, Manly, on the local wind climate. This letter has been prepared in regard to the proposed Section 75W modification of the Part 3A Concept Approval MP10_0159. The architectural drawings (Lodgement S75W drawing set, issue B, dated 14 July 2021) by Murcutt Candalepas, Figure 1, have been reviewed from a pedestrian-level environmental wind perspective.

Winds from the north-east are the dominant prevailing wind direction for the site, as winds from the south and west are more shielded by upwind buildings. The major changes to the massing from a wind perspective are the semi-open undercroft to the east, the splitting of the massing of the east building to introduce a central open space, and the distribution of massing between the buildings. It is considered that these changes would have a small, but beneficial impact on the local wind environment at important locations. The opening of the undercroft and splitting of the east building, would reduce the acceleration around the corner of Wentworth Street and South Steyne for prevailing winds from the south.

All locations in and around the proposed development would be expected to meet the pedestrian safety criterion. From a wind comfort perspective, the compartmentalisation of the undercroft, with narrower and wider through-links, would reduce the impact of winds from the north-east accelerating through to the courtyard. The wind conditions through the undercroft would be suitable for transient use, if more sedentary activities are intended for these spaces, then additional landscaping or mitigation may be required.

The courtyard area to the west between the buildings is relatively well-protected for all wind directions, with the open undercroft encouraging more of a sea-breeze during hot-summer afternoons.

The wind conditions at the majority of locations around the perimeter of the site would be classified as suitable for pedestrian standing type activities, increasing in strength to pedestrian walking around the corners of courtyard entrances and within the undercroft. The more enclosed nature of the playground is a benefit to the site. The wind conditions around the site are considered to be suitable for the intended use.

A more detailed review will be conducted during the detailed design phase.

I hope this is of assistance, please do not hesitate to contact me on (02) 9320 9921, if you have any questions regarding any aspect of this report.

Yours sincerely,



Graeme Wood
Associate Principal



Figure 1: Comparison between existing and proposed floor plans at various levels

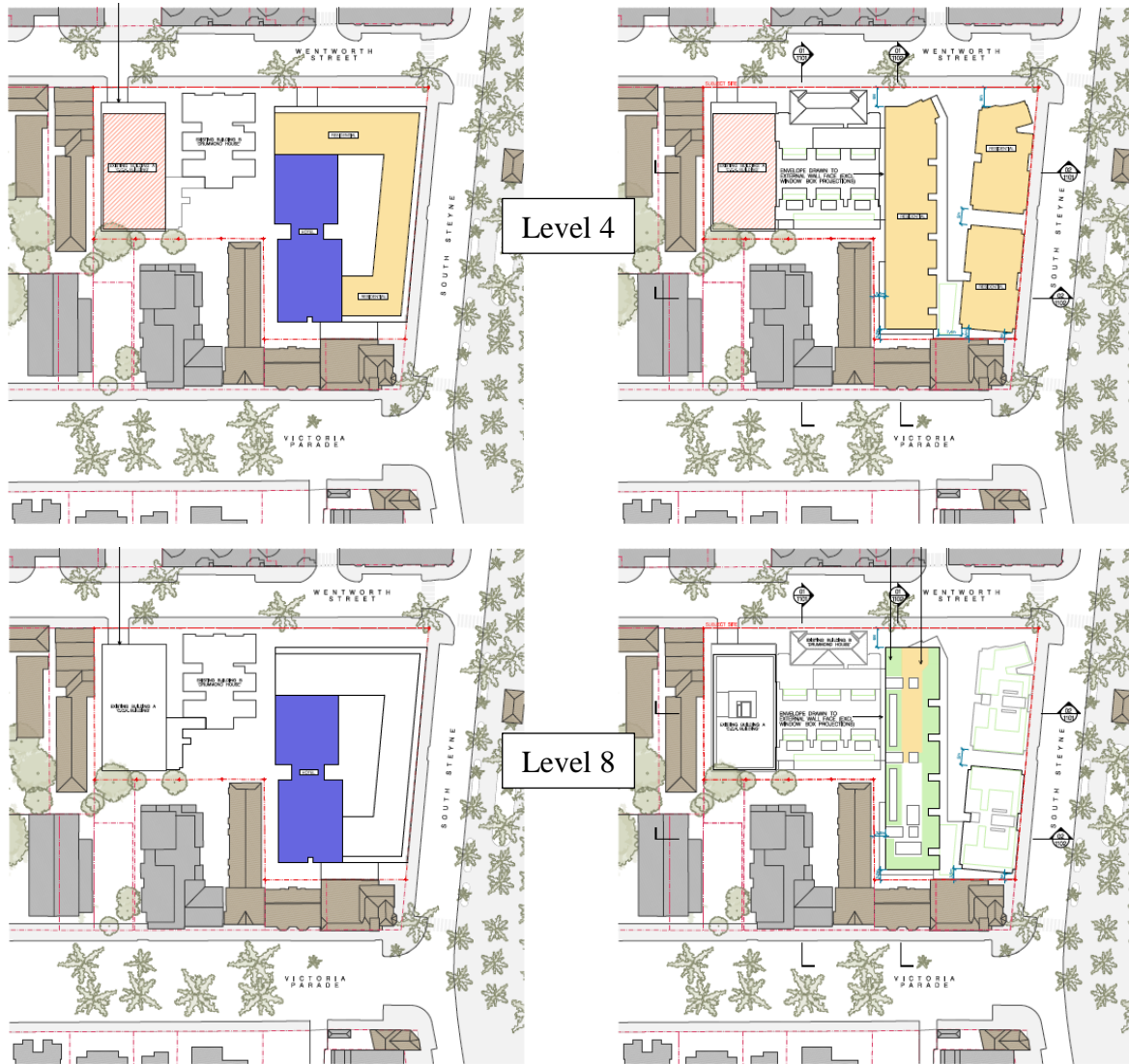


Figure 1: Comparison between existing and proposed floor plans at various levels