



Doc Ref: WD898-04F01(rev0)- WE Memo

Date: April 3, 2018

To: DRILL P/L

Address: PO Box 131
Double Bay, NSW 1360

**RE: 24-26 RAILWAY PARADE, WESTMEAD
PEDESTRIAN WIND ENVIRONMENT MEMO**

This memo discusses the potential impact of the updated design on the proposed development located at 24-26 Railway Parade, Westmead. The memo references the results from the most recent Pedestrian Wind Environment Study report issued for 24-26 Railway Parade, Westmead (Ref. No. WD898-03F01(rev1)- WE Report) which also included treatment testing as part of the study.

Updated drawings have been provided to Windtech on 27th March, 2018 for the proposed 24-26 Railway Parade development. These drawings indicate that the wind mitigation measures initially proposed, and tested, in WD898-03F01(rev1)- WE Report have been incorporated in the updated design of the development. The treatments for the ground floor include the densely foliating trees along Railway Parade and Ashley Lane, extension of proposed southern awning at the south-eastern corner and glazing in the opening above the awning along Railway Parade at the southern end of the atrium. These wind mitigation measures were necessary to ensure suitable wind conditions within and around the development at Ground level areas, particularly within the arcade and the public open spaces. The treatment strategies recommended in this memo are in-principle in nature and have been formulated based on the previous testing.

The following critical changes that have been observed in the latest set of architectural drawings issued:

- The extents of the western building have been increased by 1m towards the arcade and public open spaces.
- Addition of canopy to the Tenancy 4 on Ground Floor.
- Addition of an open terrace space on Level 1. This open terrace space has been designated as F&B precinct.
- Addition of public stair access from Ground Floor to the Level 1 F&B precinct.

Upon inspection of the updated drawings and taking into consideration the results of the wind tunnel testing, this memo confirms that the extension of the western building will not have any considerable impact on the prevailing wind conditions around the development. The narrower arcade can potentially lead to an increase in southerly winds funnelling through the area. However, it is expected that with the inclusion of the proposed vegetation along Railway Parade and the glazing at the southern end of the atrium above the awning, the wind conditions within the arcade will be suitable for its intended uses.

On the other hand, the inclusion of a canopy for the Tenancy 4 on Ground Level will further improve the local wind conditions by further minimising the winds downwashed off the western façade of the development. It is also recommended that the proposed vegetation in the public open space towards the north-west of the development site be retained to ensure comfortable wind conditions for seating area of Tenancy 4.

It should be noted that the prevailing westerly winds can directly impact the open terrace space on Level 1 and the public staircase access to Level 1. Furthermore, the designation of the open terrace space as an F&B precinct indicates that patrons will be seated in the terrace area for extended periods of time. It is, therefore, recommended that the impermeable balustrades be retained around the periphery of the open terrace space on Level 1, as indicated in Figure 1. The balustrades are expected to protect any patrons seated in the vicinity from adverse wind conditions. Furthermore, the proposed vegetation for the public open spaces will further improve the wind conditions around the staircase and Level 1 F&B precinct.

With the inclusion of these in-principle recommendations, it is expected that the wind conditions within and around the development will be suitable for their intended uses.

Target Criteria



A.G. Davenport (1972) criterion for short exposure.
W.H. Melbourne (1978) criterion for safety.

Treatments Legend



Retention of Impermeable Balustrade

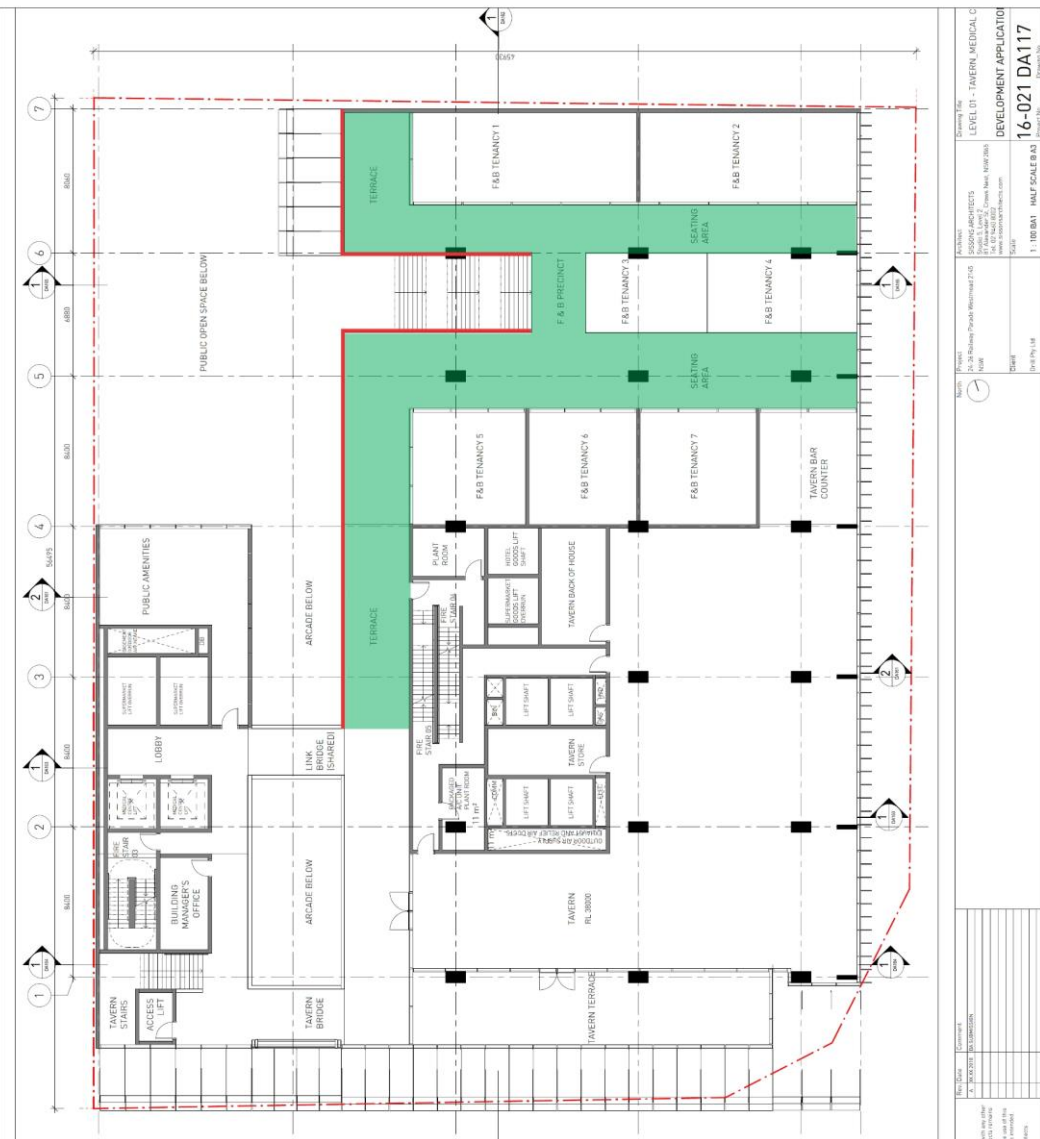


Figure 1: Recommended In-Principle Treatments and Wind Speed Criteria for Level 1 F&B Precinct

DOCUMENT CONTROL

Date	Revision History	Issued Revision	Prepared By (initials)	Instructed By (initials)	Reviewed & Authorised by (initials)
April 03, 2018	Initial.	0	AC	HK	HK

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