



28 September 2017

CPP Project 11355

FJMT Studio
Level 5, 70 King St
Sydney
NSW 2000

Attn: Ms. Elizabeth Carpenter

Project: Inner City High School

Dear Ms. Carpenter,

Please find herein a summary of expected wind conditions around the proposed Inner City High School Development. This letter specifically addresses a request from the Department of Planning regarding the likelihood of wind mitigation measures and the requirement (or lack thereof) for further studies. A more detailed qualitative assessment of the pedestrian wind environment may be found in Cermak Peterka Petersen (2017).

The proposed development projects above surrounding structures, and will therefore have some influence over flow conditions at the ground plane. Pedestrian areas in the public domain that may be affected by the building include the footpaths along Cleveland Street to the south, Chalmers Street to the east, and in Prince Alfred Park to the west. These areas are likely to be used as thoroughfares rather than for long-term or stationary activities.

The tower levels are setback from both Cleveland and Chalmers Streets, by approximately 20m in each case. In addition, existing low-rise structures separate the tower from these trafficable areas. This will minimise the impact of the subject development in terms of wind amenity, as vertical downwash flows will be redirected horizontally. For this massing and geometry, the influence of the subject development will generally decrease with distance from its façade, and the large setback will assist in maintaining conditions similar to the existing on these frontages.

The tower levels are also setback approximately 5-10m from the western and northern site boundaries by landscaped terraces descending to the lower level of the park. These will assist in minimising the influence of the structure at ground level. During strong winds from the west, relatively strong breezes would be anticipated at the windward corners of the development, however mitigation is not expected to be required unless long-term stationary type activity such as dining is intended at these areas. The ground-floor entries to the north and west are reasonably well protected by overhanging levels and local topography. On the southern, western, and northern site boundaries, existing large trees and planned landscaping will further assist in ameliorating winds for pedestrians.

Overall, the pedestrian wind environment would be expected to remain similar to the existing. Taking into account the points above and the intended use of the surrounding areas, no immediate need for permanent mitigation measures in the public domain is anticipated for this development.

Yours sincerely,



Tom Evans
Project Engineer
Cermak Peterka Petersen Pty. Ltd.

cc: Matt Glanville, CPP

References

Cermak Peterka Petersen (2017) Wind Assessment for: Inner City High School.
CPP11355_Inner City High School SSD - Issued 06.06.17_DS_R02