18 December 2012 CPP Project 6909

Frasers Property

Suite 11, Lumiere Commercial
Level 12, 101 Bathurst Street
Sydney
NSW 2000

Attn: Mr. Alex Sicari

Project: Frasers Central, Blocks 1 and 4

Dear Mr. Sicari,

The purpose of this report is to outline the changes to the wind environment around the site, due to the proposed revised massing and geometry of Frasers Blocks 1 and 4. This report covers the Central Park Concept Plan Mod 8 S75W Amendments, Blocks 1+4N Office Mod 4 S75W Amendment, and Block 4S Student Accommodation State Significant Development Application for Block 4S. The global wind conditions around the site are governed by more than the geometry of a single building, hence why the changes to these three large adjacent buildings have been grouped together in a single report for the approvals process.

Environmental wind tunnel testing for pedestrian comfort was reported in CPP report 4946 entitled '*Frasers Broadway Blocks 1, 4, and 8*' dated May 2009. The geometry tested and primary results are reproduced in Figure 1 showing areas around the development are generally acceptable for use as public standing around the perimeter of the site, with localised windier locations to the south of Block 4S where the area is classified as acceptable for pedestrian walking. Strong wind conditions at location 33 were caused by winds from the west quadrant being channelled between Blocks 4S, and 8. The proposed awnings and significant planting along Abercrombie Street, Figure 2, will assist in ameliorating these windy conditions.

From a wind engineering perspective, the important changes between the proposed building geometry and massing designs compared with that modelled and tested in the wind tunnel are:

1. The link bridge and roof connecting Blocks 4N and 4S has been deleted, Figure 3.

   For winds from the west, the removal of the link bridge will increase the amount of flow between Blocks 4N and 4S, but will keep the flow at a higher level without directing it to ground level. The amount of flow directed along Broadway will marginally decrease.

2. The general plan form shape of Block 4S has changed above Level 2 to be U-shaped with a central light-well, Figure 2 and is less articulated along the Abercrombie Street façade.

   The change in shape of Block 4S will not influence the wind conditions around the site as the external massing has not changed. The central courtyard, between the arms of the U-shape, will have relatively calm conditions for all wind directions.

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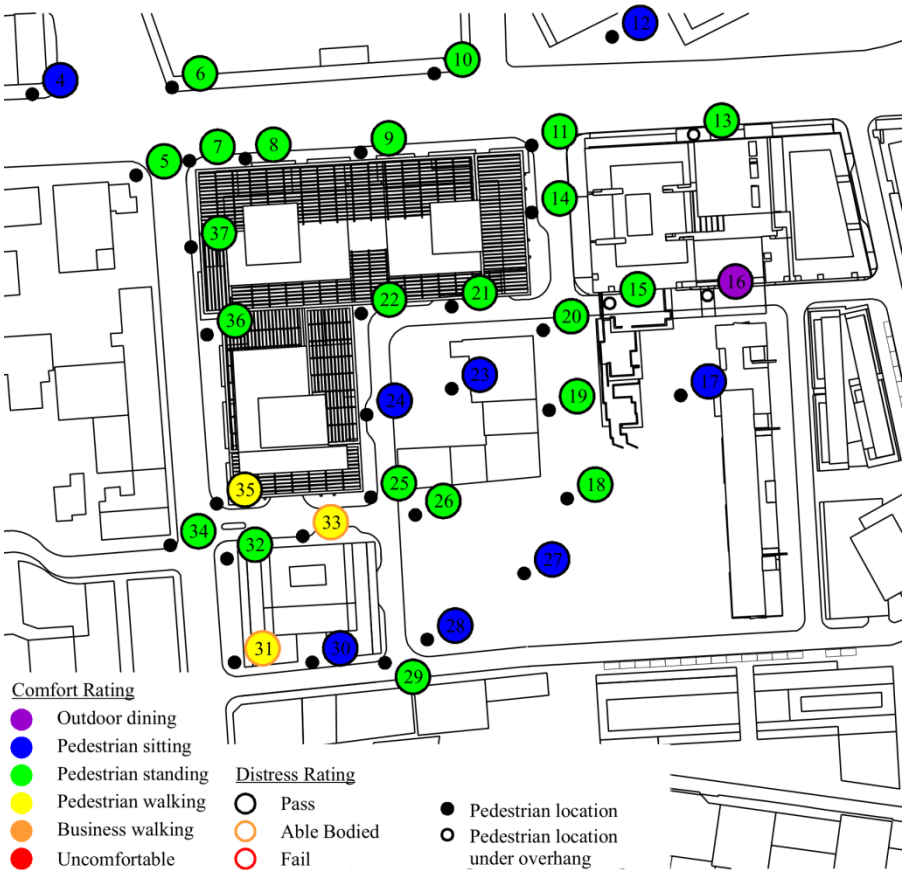

Figure 1: Results from previous wind tunnel testing

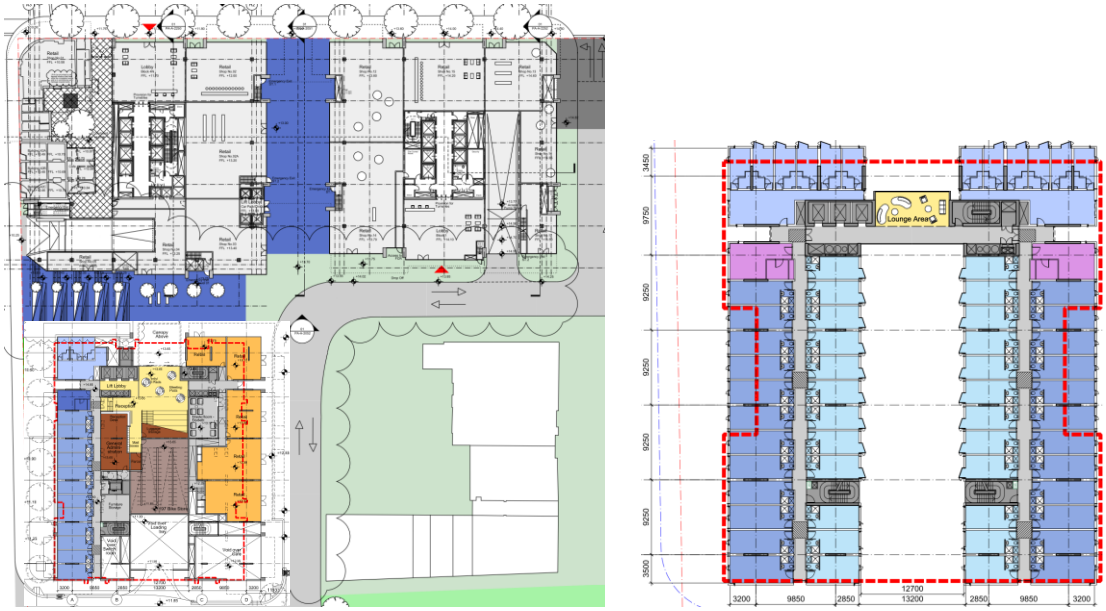

Figure 2: Ground floor plan of Blocks 1&4 (L) and Level 5 plan of Block 4S (R)

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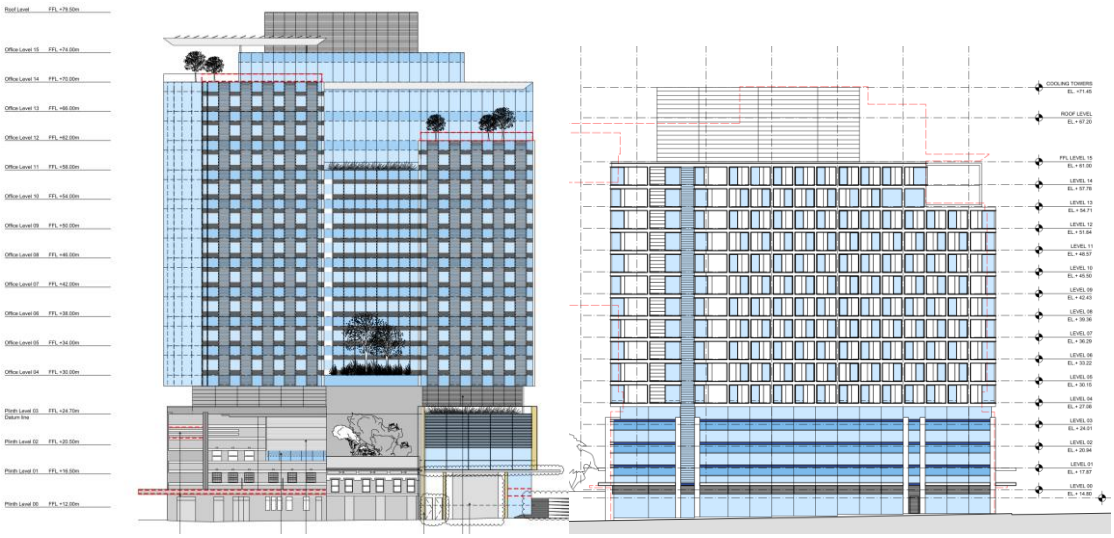
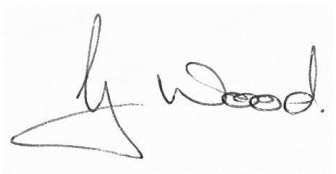


Figure 3: West elevation from Abercrombie Street

It is considered that the proposed changes to the development will not significantly impact the environmental wind conditions around the development and the findings from the previous wind-tunnel test remain appropriate; showing that the wind conditions are suitable for use as a public accessway and in many areas suitable for more leisurely activities.

Yours sincerely,



Graeme Wood
Director

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