## ANNEXE 8. ÉTUDE DES VENTS (2015)

T. Stathopoulos 402 Lakeshore Road Beaconsfield, Québec Canada H9W 4H9

Mr. André Bachand Prével 1020 William Montréal, Québec, H3C 0M2 December 30, 2015

Dear Mr. Bachand:

## Re: Project Domaine des Franciscains: Wind Study

Further to our email communications earlier this month and the sent drawings of the updated Project *Domaine des Franciscains*, as finally approved to go forward with the zoning adjustment, please note that, as per your request.

- 1. I have examined the previous study of wind environmental conditions at the pedestrian level around the proposed new site located on the south side of *Boulevard René Levesque Ouest*, between Seymour and Hope streets in Montreal, as well as the report entitled "Wind Environmental Conditions around the Project *Domaine des Franciscains*" dated November 2012.
- 2. I have looked at the differences between the old proposal and the current one. These consist mainly of a decrease in the height of the two towers from 22 storeys to 19 storeys.
- 3. I have visited the site to check any major change in the surroundings not considered previously. In this regard, there appears to be new construction on the east/northeast side of the project site currently under way.

On the basis of this information, I have formulated the expert opinion that the conclusions and recommendations of the above-mentioned November 2012 report dealing with the anticipated wind conditions at public spaces around the new complex in relation with the wind criteria of the City of Montreal and on the effect of the various features of the project regarding the wind regime in its vicinity, are **still valid and effective.** 

This conclusion was reached based on the following considerations:

- Lowering the building height leads always to an improvement of pedestrian level wind conditions around the
  site of the project. This is because the wind-induced pressure difference between the top of the building and
  the ground level depends on the building height, so a reduced height leads to reduced pressure differences
  and, consequently, reduced speed down-flows in the vicinity of the project.
- The new construction on the east/northeast side of the project will have zero influence on the pedestrian level
  wind conditions for the dominant westerly/southwesterly winds; and may actually cause a likely sheltering
  effect for secondary north/northeasterly winds, those known for bringing snow in Montreal.

I trust that the above is satisfactory. If you have any questions, please do not hesitate to contact me.

Yours very truly

Ted Stathopoulos, Ph.D, Eng, F.CAE, F.ASCE, F.SEI Professor, Building, Civil and Environmental Engineering Concordia University

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