



**JABLONSKY, AST AND PARTNERS**  
Consulting Engineers

1129 Leslie Street  
Don Mills, Ont. M3C 2K5  
Telephone (416) 447-7405  
Fax (416) 447-2771  
[www.astint.on.ca](http://www.astint.on.ca)  
E-mail [jap@astint.on.ca](mailto:jap@astint.on.ca)

April 23, 2018

Greatwise Developments G&S Group of Companies  
333 Wilson Ave., Suite 200  
Toronto, ON M3H 1T2

Attn: Mr. Zaf Kelekvan

Re: Alta Vista on the Park  
West of 1701 Kilborn Ave., Ottawa, ON  
Vertical Addition on Existing Parking Garage  
Our Project No. 17062

Dear Mr. Kelekvan,

We have performed a limited scope structural analysis for the above referenced structure for the purpose of determining if the existing structure has sufficient capacity and/or can be reinforced to accommodate a vertical addition.

The existing structure is located at the Playfair Residences, west of 1701 Kilborn Ave., Ottawa, Ontario and was constructed in approximately 1969. It is largely a reinforced concrete structure composed of three levels of parking, one underground, one at grade, and one above grade. The underground level is connected to the underground parking garage servicing the rest of the Playfair Residences site. The existing structure is exposed to the elements and has been reasonably maintained with minor damage from the elements and/or vehicular impact. The proposed alterations include a residential vertical addition with the framing of structural steel columns with steel joists and metal deck.

For the purpose of this investigation, we have performed an analysis on the columns indicated in SKS-1. The columns are representative of the typical columns on each level. The columns that were reviewed were approximately 12"x16", for Column C1, located on both levels of the existing structure. Based on the site measure sized of the columns, we are of the opinion that the structure was originally designed for a specified load of approximately 2.4kPa, which is in keeping with the existing use of the structure as parking.

For the purpose of this investigation, we have assumed the original specified concrete strength to be 3,000psi (20.6MPa) and that the concrete has attained a 30 percent increase in specified concrete strength as a result of long term strength gain. We have also assumed the yield strength of the reinforcing steel to be 30,000psi (207MPa). The capacity of the columns based on the foregoing assumed properties was determined based on the current Building Code and are indicated on the schedule on SKS-2.

The foundations were unable to be investigated due to the existing slab-on-grade and current use of the structure as a parking garage. We assumed the soil bearing capacity to be 4ksf (192kPa), based on existing drawings from 1701 Kilborn Ave.

P.F. Ast, P.ENG D. Tari, P.ENG M. Shiu, P.ENG R. Asman, P.ENG  
J.N. Vivian, P.ENG R.J. Watson, P.ENG C.J. Slama, P.ENG R. Martinez, P.ENG G. Minski, CET  
Associated Office, Ferta Engineering Consultants Ltd., #165, 1209 - 59 Avenue S.E., Calgary, Alberta T2H 2P6  
Tel: (403) 259-5325 Fax: (403) 255-5549 Email: [fruch.pagnotta@ferta.ca](mailto:fruch.pagnotta@ferta.ca)



With respect to the vertical addition, we have assumed the structure will follow a different grid of the typical floors with a transfer floor above the top level of the existing structure to redistribute the load to the existing columns. We have assumed that the lateral capacity of the structure will be provided by new elevator cores and stair cores that extend the full height of the new building.

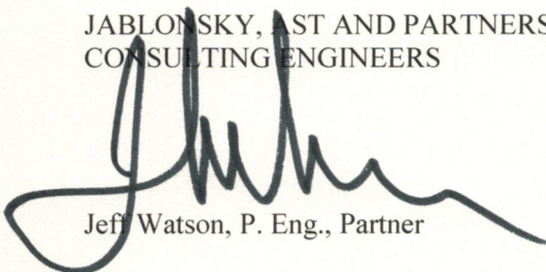
Based on the foregoing, we have determined that the existing structure can be reinforced to accommodate a vertical addition of up to eight storeys, plus roof. The reinforced structure would include repairing any elements damaged by the elements and/or vehicular impact, enlarging the existing concrete columns, and enlarging the existing concrete footings.

In summary, we believe that the existing structure can be structural reinforced to support up to an 8 storey, plus roof, vertical addition based on the assumed material properties as noted. The concrete compressive strength, yield strength of reinforcing steel, and the amount of reinforcing steel should be established to confirm the results of our analysis. In addition, the soil bearing capacity and anticipated settlement resulting from the proposed vertical addition should be confirmed.

We trust this satisfies your requirements at this time. Should you have any questions regarding the foregoing, please do not hesitate to contact this office.

Respectfully submitted,

JABLONSKY, EAST AND PARTNERS  
CONSULTING ENGINEERS



Jeff Watson, P. Eng., Partner

cc: Michael Cosentino, EIT, JAP

