



Kollaard Associates

Engineers

210 Prescott Street, Unit 1
P.O. Box 189
Kemptville, Ontario K0G 1J0

Civil • Geotechnical •
Structural • Environmental •
Hydrogeology

(613) 860-0923

FAX: (613) 258-0475

July 10, 2024

240639

DCR Phoenix Homes
18 Bentley Avenue
Ottawa, Ontario
K2E 6T8

Attention: Mr. Mike Boucher

RE: GEOTECHNICAL MEMORANDUM
PROPOSED ZONING BYLAW AMENDMENT
DEVELOPMENT TO BUSINESS PARK INDUSTRIAL ZONE
O'KEEFE COURT AND FALLOWFIELD ROAD
OTTAWA, ONTARIO

Dear Sirs:

This memorandum is intended to provide comment with respect to the use of the previously completed geotechnical reports and letters prepared by Kollaard Associates Inc for the proposed development known as O'Keefe Court to support the current application for a zoning bylaw amendment.

It is understood that the client is in the process of applying for a zoning bylaw amendment that would permit two additional uses of the site: Car Dealership and Animal Clinic. A potential layout for the site is illustrated on the O'Keefe Court Ottawa Concept Plan prepared by Fotenn Planning + Design Rev 6 dated January 31, 2024. The building construction type associated with these two additional uses is already permitted in the current zoning for the site known as O'Keefe Court.

Previously Completed Geotechnical Works

Kollaard Associates Inc previously provided geotechnical guidelines on three separate occasions consisting of the preliminary subsurface investigation dated August 10, 2006; the additional subsurface investigation dated March 5, 2008 and the letter providing additional geotechnical guidelines dated June 17, 2013.

Kollaard Associates previously completed the preliminary subsurface investigation report and additional subsurface investigation letter for a development at the above location consisting of



proposed residential and commercial development. The additional subsurface investigation completed in 2008 was to verify that soft or firm silty clay was not present at any part of the site and that the initial guidelines provided in 2006 were valid for the entire site. Revised plans for development consisting of a Commercial / Business Park Development, including office uses, hotel and associated secondary uses, and a place of worship prompted the letter providing the additional guidelines in 2013. The additional guidelines provided in 2013 referenced a height strategy figure which identified building structures of between 4 to 12 storeys in height.

Current Requirements

It is understood that the City of Ottawa requires a memo verifying that the conclusions made in the above noted geotechnical works for the overall subdivision will not change with what is currently proposed with this development.

The City of Ottawa also requires that the memo verify that the previous investigations adhered to today's standards and guidelines when it comes to carrying out geotechnical investigations.

Soil Background Information

The previously completed geotechnical works indicate that the overall subdivision is underlain by shallow bedrock, glacial till and silty clay. Based on the results of the test pits and boreholes put down at the site for the investigations, the silty clay is stiff to very stiff in consistency. Beneath the silty clay, both boreholes encountered a deposit of glacial till. The glacial till is in a loose to compact state of packing. Refusal to auger advancement and/or practical refusal was encountered on the surface of bedrock or on large boulders within the boreholes and test pits at depths ranging between about 1.3 to 5.5 metres below the existing ground surface.

Geotechnical Considerations and Verification of Conclusions

With the potential exception of variance of the fill thickness at the site and removal of some of the topsoil, there have been no changes to the subsurface conditions at the site since the previously completed geotechnical works. The native subsurface conditions will not have changed in the short geotechnical time period between 2013 and the current time. Any changes to the fill thickness if present or any removal of topsoil would not have changed the geotechnical recommendations for the site.

A review of the previously completed geotechnical works indicates that the works were completed to provided engineering guidelines on the geotechnical aspects of the preliminary design of the project and to verify that there were no subsurface conditions such as soft marine deposited sensitive silty clay which would preclude the construction of residential or commercial buildings on conventional



spread footing foundations. The geotechnical works also provided preliminary guidelines with respect to: engineered fill; groundwater; seismic site classification; the installation of site services and construction of roadways and parking areas.

In addition to the above geotechnical guidelines, the previously completed geotechnical works all provided a similar recommendation paraphrased as follows:

The exact building locations, building size, construction type and foundation requires are not known at this time. As such, these preliminary allowable bearing pressures, factored ultimate bearing resistances and geotechnical recommendations are subject to changed with more detailed, site specific geotechnical investigations for site specific design purposes.

Since there has been no significant change to the site from a geotechnical perspective, the previously provided geotechnical conclusions remain valid.

Conformance of Previously Completed Geotechnical Works to Current Standards

The previously geotechnical works were completed using sound engineering principles and procedures that are in conformance to today's standards and remain valid for the intended purpose. However, it is acknowledged that the previously completed works were not completed in consideration of all of today's standards and guidelines.

As an example: Using today's standards, a site specific Multichannel Analysis of Surface-Waves test would be completed at the site to determine the seismic site classification. Using today's standards, this test would be completed during the site specific geotechnical investigation and reporting in support of the site plan control approval.

The previously completed geotechnical works were completed to verify that the proposed subdivision site was suitable for the construction and development associated with the intended use of the site. The previously completed works were also completed to conclusively demonstrate that there were no underlying geotechnical concerns which would preclude the development of the site and construction of buildings using conventional spread footing foundations. The previously completed works were not intended and are not intended to replace a site specific geotechnical investigation required in support of a site plan control application.

The current application is in support of a zoning amendment to permit additional uses of the site. There are no proposed changes within the zoning amendment that would result in a different building construction than previously approved for the site. In addition, the current application acknowledges that a specific site plan control application will have to be completed for each development. This supports the recommendations in the geotechnical works that site specific geotechnical investigations be completed once the specific development is known.



Conclusions

In summary, Kollaard Associates considers:

- The geotechnical conclusions provided in the previously completed geotechnical works remain valid to support the current zoning bylaw amendment;
- There are no geotechnical conditions at the site that would preclude the construction of the buildings permitted by the proposed zoning supported by conventional spread footing foundations;
- A site specific geotechnical investigation should be completed for each site at the site plan control approval stage;
- The site (building) specific geotechnical investigation and report will be completed in accordance with current standards and guidelines.

We trust this letter provides sufficient information for your purposes. If you have any questions concerning this letter please do not hesitate to contact our office.

Yours truly,

Kollaard Associates Inc.



Steve deWit, P. Eng.