



## VALDOR ENGINEERING INC.

Municipal • Land Development • Water Resources  
Site Development • Project Management • Contract Administration  
Consulting Engineers - est. 1992

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22 September 2017

File: 17140

### **Innovative Planning Solutions Inc.**

150 Dunlop Street East, Suite 201  
Barrie, Ontario  
L4M 1B1

Attention: **Darren Vella, MCIP, RPP**  
President & Director of Planning

**Re: Servicing Brief - Proposed Commercial Development  
Millbrook Subdivision, Phase 1 (15T-14001)  
Tower Hill Development Inc.  
Southwest Corner of Fallis Line / County Road 10  
919 Fallis Line, Millbrook, Township of Cavan Monaghan**

As requested we have completed a review of the servicing requirements for the above noted proposed commercial development and we provide this Servicing Brief which summarizes our findings for reference with respect to your Official Plan Amendment and Zoning By-law Amendment applications.

The subject site is comprised of two parcels, one of which is located within the Millbrook Subdivision (west parcel) and one which is located immediately adjacent to the Millbrook Subdivision (east parcel) as indicated in **Figure 1**. The west part of the site was draft plan approved for residential uses and is currently vacant whereas the east part of the site contains a detached dwelling. Our firm completed the detailed engineering design for the Millbrook Subdivision and the underground servicing of this subdivision is currently in progress.

We understand that the proposed commercial development will consist of relatively small buildings which include a 230 m<sup>2</sup> restaurant and a 1246 m<sup>2</sup> retail building and associated parking areas on a 0.93 hectare site. A schematic of the servicing arrangement is provided in **Figure 2** and the servicing requirements are summarized as follows:

#### **Water Servicing**

The commercial development will be serviced by a proposed water service connection to the 250mm diameter Fallis Line watermain located north of the subject site. This service connection will supply both the proposed restaurant and the retail building via a site watermain. The municipal fire hydrant on Fallis Line are within 90m of the principal entrance of the buildings so a private site fire hydrant will not be required. A water meter will be provided in a mechanical room each building

#### **Wastewater Servicing**

With respect to wastewater servicing, a sanitary service connection will be provided from the 200mm diameter sanitary sewer located on Horizon Avenue to the south of the subject site. A manhole will be provided at the street line in accordance with Township



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standards. A site sanitary sewer will be required to provide connections to the restaurant and the retail building.

### **Storm Drainage & Stormwater Management**

With regards to storm drainage, the subject site will be provided with a storm service connection to the 375mm diameter storm sewer on Horizon Avenue located south of the subject site. In accordance with Township criteria, a manhole will be provided at the street line and a site storm sewer will be constructed to convey runoff captured by the parking lot catchbasins and the roof drains.

Given that the west part of the subject site was planned to be for residential lots and the east part of the site currently contains a detached dwelling, the downstream storm sewer was sized based on a runoff coefficient of 0.50. The proposed commercial development will result in a higher runoff coefficient in the order of 0.90 and therefore on-site stormwater detention is required in order to restrict discharge to the allowable release rate in accordance with the subdivision engineering design. It is anticipated that this on-site detention can readily be accommodated using roof top, ground surface and / or underground storage with an orifice restrictor installed in the control manhole.

With regards to stormwater quality treatment, based on a review of the sizing of the stormwater management pond in the Phase 1 Millbrook Subdivision, it has been determined that there is sufficient permanent pool volume to provide treatment for the proposed commercial development. The location of the stormwater management pond is indicated in **Figure 1**.

Based on the foregoing, the proposed commercial development can be adequately serviced with water, wastewater and storm drainage in accordance with the requirements of the Township of Cavan Monaghan. The detailed engineering design for the subject site is to be completed in conjunction with the site plan application.

Should you have any questions or require additional information, please do not hesitate to contact us.

Yours very truly,

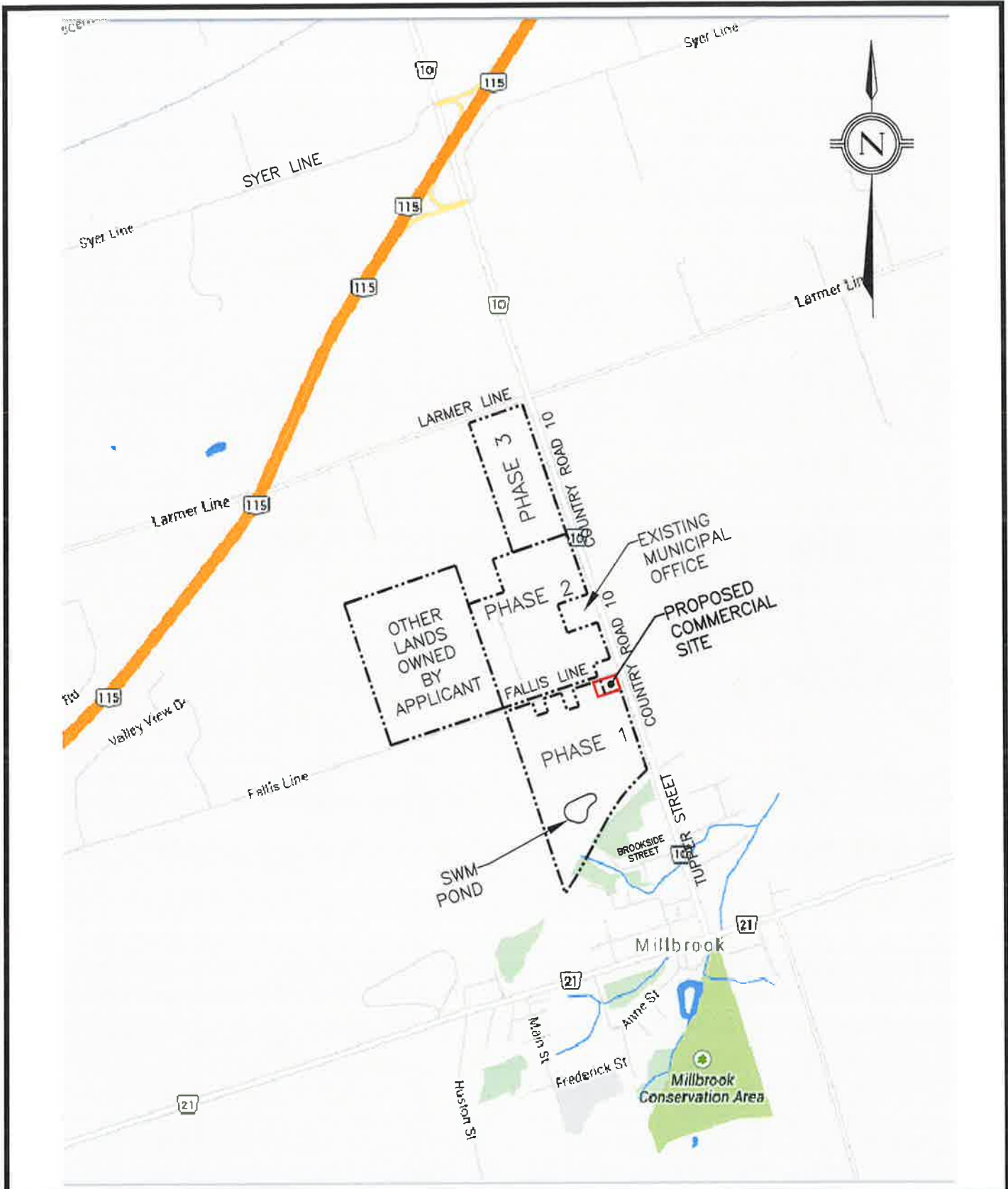
**VALDOR ENGINEERING INC.**



**David Giugovaz, P.Eng.**  
Senior Project Manager

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c: Luka Kot, Towerhill Development Inc.



**PROPOSED COMMERCIAL SITE  
919 FALLIS LINE  
TOWNSHIP OF CAVAN MONAGHAN**



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**LOCATION PLAN**

SCALE N.T.S.  
DATE SEPTEMBER 2017

CKD. BY D.G.  
DRAWN BY E.T.

DWG. FIGURE 1  
PROJECT 17140

