Submission to Middlesex Centre Councillors

RE: Sept 21 Council Meeting - regarding 6-10-14 Elmhurst Proposed Development

We here in Old Kilworth (i.e., the Elmhurst-Beechnut block, along with other Kilworth neighbours), understand and accept that a revamping will happen to this area. Our community understands that **Bill 108, More Homes, More Choice Act (2019)** seeks to increase *"the supply of housing [to] help every person in Ontario by making housing more affordable."* However, we are vehemently opposed to the high density in the currently proposed development. We are concerned about the potential negative impacts on our groundwater systems, general environmental impacts, and traffic safety. We are also aware of the importance of these discussions as precedent setting for other future developments.

Please consider this a preliminary submission as our community completes a thorough examination of the developer's Geotechnical Report, through the lens of **Bill 108**, the Ministry of Environment's **Clean Water Act**, the Federal and Provincial **Climate Change Initiatives,** and the Upper Thames River Conservation Authority regulations.

We urge Middlesex Centre Council to take account of the following:

1. Excavations and Groundwater Control

The primary and most critical concerns revolve around the groundwater/storm water control and the potential contamination of our existing water wells and septic systems integrity, as a result of this proposed development. Since the mid 1960's, the Elmhurst and Beechnut property owners have been responsible for the maintenance and service of their individual water systems to ensure potable water and proper disposal of gray and black wastewater. The average lot size in this block is minimally a half-acre, necessary to accommodate properly functioning septic systems and septic integrity. Most crucial is the safety of our water wells, whether they be shallow dug wells or deep drilled ones. They provide our drinking water along with all the other aspects of daily living. Without a guarantee to keep our water source safe, maintaining the integrity and functionality of existing systems, we cannot accept any development or population density increase.

The following excerpt is from the Geotechnical Report provided by the developer. Please note the underlined portions:

> **4.2.2 Groundwater Control**
> Conventional groundwater control methods are <u>generally expected</u> to be suitable for shallow excavations (less than 4 m deep) at the site, to address surface water infiltration and minor shallow groundwater seepage for excavations which do not extend below the stabilized groundwater table.
> Where excavations extend below the stabilized groundwater table, or where groundwater levels are elevated, positive groundwater <u>control methods may need to be utilized</u> for construction dewatering. Soil permeability values in the undisturbed sand are expected to be in the range of

> 1.4 x10^{-4} to 1.6 x10^{-5} m/s, based on laboratory testing (presented in Section 4.4 below). This information is provided to assist with determining appropriate construction dewatering methods. Groundwater control measures at the site should be sufficient to maintain stable excavated slopes; and provide a dry and stable base for excavations and construction operations. The contractor should use a reasonable effort to direct surface run-off away from open excavations. Consideration should be given to carrying out a series of pre-tender test pits for contractors to obtain a better appreciation of the behavior of excavations and to confirm dewatering requirements. Contractors who might be involved in the job should witness these test pits.

The use of language such as 'generally', 'may', 'should be', 'might be', as underlined, does not give us confidence that our groundwater will be safe with this developer's study. This creates a legal liability issue which the developer and/or Middlesex Centre must address.

2. Well Water Integrity

Section 21.1 of **Bill 108** states that an *"authority shall provide the following programs or services within its area of jurisdiction*", specifically, "*programs and services related to the authority's duties, functions and responsibilities as a source protection authority under the Clean Water Act, 200*6." The **Clean Water Act** exists to "*protect existing and future sources of drinking water*." Specifically, council may require that an assessment report consider any existing or planned drinking water system specified in the resolution:

> *(a) in the case of a drinking water system that obtains its water from groundwater, the system has a well in the municipality that serves as the source or entry point of raw water supply for the system [2006, c. 22, s. 8 (3)].*

Importantly, *"A resolution passed under subsection (3) is not effective unless it identifies the location of every well and intake that serves as the source or entry point of raw water supply for the drinking water system". (2006, c. 22, s. 8 (4).*

The information found in the LDS report on water wells regarding the location, type and use of each lot's well is based on flawed data. Several nearby shallow wells do not appear on MOE records and many of the addresses on the **Well Records Data Catalogue** (https://www.ontario.ca/page/map-well-records) are incorrect. Please note that the vast majority of wells in close proximity are shallow and are in daily use.

From the Well Records Data we also found that the subsoil strata supporting our groundwater systems are very inconsistent in this area as it falls within the Elgin Basin. The following excerpt from the Geotechnical Investigation (**4.2.1 Excavation Support)** shows the need for extra review:

> In the event that soil conditions near the excavation vary materially from the above soils, the geotechnical consultant should review the soil conditions to confirm the design parameters. A prefabricated trench box may be used for servicing excavations (if required), provided that it is designed (by a professional engineer) to withstand the soil and hydrostatic loading (if applicable).

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Additionally, upon recent discussion with a well-drilling organization we were informed that ''*if the proposed development site is drained, it will have a direct and detrimental impact on shallow wells down-stream. In my opinion, at present the municipality does not have a means to properly drain this property without direct impact to neighbours' water tables. Draining will cause shallow well depletion and may cause groundwater surge to existing septic beds.*''

The proposed area is at the top of Elmhurst St. and excess water can only flow downhill towards yards with wells and septic systems. In addition, runoff from streets and rooftops during increasingly common torrential downpours is likely to contain contaminants (e.g., salt, vehicle contaminants) which may find entry points into the groundwater systems through the shallow wells.

It seems that an agreed upon contingency plan (in the event of contamination or damage to the integrity of the wells) and more careful study of the groundwater and drinking water systems in Old Kilworth would be prudent given that other properties along the northeast section of Kilworth have been purchased by potential developers, and the likelihood of increasing pressure on our water systems seems assured.

3. Environmental Impact

While seeking to "*clarify rules and paths to compliance to not unnecessarily burden development*," **Bill 108** still clearly stipulates the need to "*protect species at risk*" and protect "*the greenbelt*". The proposed development is located adjacent to a green belt along the Thames River in an area with endangered species (e.g., Black walnut trees, Butternut trees[1]). As such, we would anticipate that Upper Thames River Conservation Authority has been consulted to identify any species, according to the **Environmental Species Act**, **2007** which "*requires that the authorized party execute specified beneficial actions that will assist with the protection or recovery of one or more species specified in the agreement (the benefiting species) that exist within the identified geographic area and are listed on the Species at Risk in Ontario List as an endangered, threatened or special concern species*".

Furthermore, in Canada's climate plan document, **Canada's Climate Actions for a Healthy Environment and a Healthy Economy (2021***),* creating climate change resilience is an important component. It notes that "*Canada's climate is warming approximately twice as fast as the global average, and more than 3 times the global average in Northern Canada. The impacts of climate change – from flooding to coastal erosion, dangerous heat waves and wildfire – pose a threat to Canadians' health, wealth, and safety.*" Allowing a such density within these mature

[1] We do not currently know what type of endangered or threatened species are on the lots; however, Butternut and Black Walnut trees are found on Elmhurst St.

lots would mean the unnecessary cutting of mature trees that absorb significantly more Co2 than young trees. These mature trees help reduce emissions, cool the surroundings, guard against run off, and provide habitat for animals along the greenbelt. Planning for a higher density development in a mature lot located at the top of a hill, near an eroding river bank, with an absence of public transportation or nearby amenities (within walking distance or safe cycling distance), works against Canada's plan to create climate resilience and reduce emissions. We understand for the municipality it is a fine balance between development and environmental concerns. Please help us preserve more of this green space by reducing the proposed density.

4. Traffic & Pedestrian Safety

Another concern of residents is the additional traffic that the community will experience on roads originally designed and constructed for a low density area.

Based on observed car usage in the area, the proposed development would likely average 2 cars per household given the lack of public transit and lack of amenities nearby. This would add upwards of 90 vehicles (e.g., residential cars, delivery trucks, property maintenance) using Kilworth's small roads multiple times each day. These numbers do not take into consideration any future developments on other nearby lots.

Because of the difficulty with the Elmhurst-Glendon Drive intersection (i.e., poor visibility, fast traffic, no left hand turns, an icy bridge) much of the additional traffic would be re-routed along Parkland or other small streets to exit via Kilworth Park Drive or Jefferies. We are very concerned about the following:

- safety of drivers trying to turn onto a busy accident-prone section of Glendon Drive.
- safety of pedestrians—especially school children waiting at bus stops during peak times—on narrow streets without sidewalks.
- Overflow parking spilling onto our narrows streets (given a dearth of visitor parking)
- Construction traffic that will fill our road ways

Given the high percentage increase of homes that this development represents, **a traffic study** reviewing the impacts of the traffic on Elmhurst St. and the surrounding narrow streets would be a prudent step for a development of this scale.

5. Recommendations

First, as a group, we would like to suggest that a development of approximately 10 to 12 single family homes would be the most appropriate use of these three lots without compromising fundamental sustainability. We understand that **Bill 108** encourages infill and development, and as such, an increase from 3 to 12 homes quadruples the original density.

Second, the ultimate goal of sustainability is to meet the basic needs of all and to extend to everyone the right of quiet and safe enjoyment of their homes and to fulfill their aspirations for a better life while monitoring and regulating the use of finite resources.

In this vein, we urge the county to do a careful review of the dangers surrounding additional traffic, environmental concerns, and the risk to the area groundwater and resident wells. The county is asked to work with the developer to create contingency plans and permanent solutions in the event that ground water and thus our drinking water is compromised. This may include assurances of the developer or the municipality to fund the extension of current municipal services (or the drilling of deeper wells) to affected residents as well as the construction and inspection of appropriate drainage systems, ensuring proper ground/storm water controls.

Such guarantees in the event of damage and the diligent consultation with the appropriate authorities will help mitigate impacts on our environment, ensure the safety of our pedestrians, protect our ground water, and alleviate the concerns of many Kilworth residents. If we work together, we can maintain the beauty and quiet culture of Kilworth, protect the interests of the current residents, and also increase the availability of homes mandated by **Bill 108.**

Thanking you, in advance, for your consideration.