Attachment-12 Community Energy Initiative Commitment

- the Opposite sidewalk (North side of Speedvale) has full sun 11am-6pm and meets the requirement.
- Opposite sidewalk (East side of Manhattan) on Sept 21 has full sun 9am to 2pm and meets the requirement.

The analysis concludes that the proposed building meets the City of Guelph's Shadow Impact Criteria or are not applicable, except for shadows cast to amenity space on-site. However, amenity space and seating areas have been provided on both the west and east sides of the building allowing users an alternative option.

8.10 URBAN DESIGN BRIEF

A fulsome Urban Design Brief (UDB) has also been prepared by SBM Ltd, to support of the proposed development applications and the preliminary building design prepared by Newton Group Ltd. The UDB report has been submitted under separate cover and outlines the proposed development efforts to meet municipal guidelines and best practices. The UDB is intended to be read in conjunction with this Planning Justification Report.

The brief concluded that:

- The form and character of the proposed development that would reinforce the streetwall and animate the public realm.
- The proposed building would use a variety of building materials, colours, lighting, and landscaping to create visual interest on all sides of the building.
- The design of the proposed site layout and building is at an appropriate height and scale that represent good urban design principles.

8.11 COMMUNITY ENERGY INITIATIVE

The City of Guelph's website states that the Community Energy Initiative (CEI), formerly called the Community Energy Plan (CEP), is the City's commitment to use and manage energy more effectively. The main goal of the CEI is for Guelph to become a Net Zero Carbon community by 2050.

The Guelph CEP, dated April 3rd, 2007, set a target for the City to reduce energy consumption by 50% and greenhouse gas emissions by 60% on a per-capita basis over 2006 levels by 2031. In 2010, the CEP was re-named the CEI as the group transitioned from a focus on planning to implementation.

The CEI is tasked with identifying ways to:

- Take actions within our sphere of influence, as a community and as a municipality.
- Develop strategic partnerships to maximize and expand that sphere of influence.
- Advocate for provincial and federal action to support our efforts.

The proposed development has incorporated a variety of building and site design features that support the City's objectives for energy and water efficiency and conservation. The CEI update has ranked the 20 recommended actions to reach its target. The potential actions that may be utilized in the proposed development include solar energy, active transportation, and stricter codes on new buildings.

The CEI has assisted the City in advancing the use of solar energy. According to the CEI update, Guelph has 49% more than the provincial average for rooftop solar arrays per person. The development project may contain approximately 224 photovoltaic solar panels located on the rooftop of the building, if funding is able to be achieved. The estimated power output of the rooftop ballasted PV system would be 80 kilowatts and the approximate hours of energy production per year would be 87,150 kWhrs. The approximate energy savings would be $13,020 per year.

The Canada Mortgage and Housing Corporation (CMHC) also contains its own energy efficiency standards that must be met to obtain financing. The CMHC standards are more stringent than the Ontario Building Code standards. The development project will be meeting the CMHC standards, in turn, exceeding the Ontario Building Code standards. CMHC requires that new projects achieve a minimum of a 25% decrease in energy consumption and greenhouse gas emissions relative to the 2015 National Energy Code for Buildings or the 2015 National Building Code, or a minimum of a 15% decrease relative to the 2017 National Energy Code for Buildings.

Applicable actions the proposed development may partake in to promote energy efficiency include:

- **Transportation:** 48 parking spaces will be provided for the development. Reducing the parking rate to only provide what the residents will require will encourage alternative means of transportation, in turn promoting more energy-friendly methods, such as walking, cycling, public transit, and carpooling.
- **Built Infrastructure:** As the need for affordable housing is becoming more apparent, more affordable houses need to be built. This development will provide approximately 50% of units to be affordably priced units sold to Habitat Families
- **Energy Resources**: The development proposal may include installing PV solar panels on the rooftop of the building to reduce the overall energy consumption of the building.
- **Environmental Performance and Thermal Comfort:** High quality windows will provide natural ventilation and will improve the air quality and reduce the energy consumption of the heating and cooling of the building.
- **Water Efficient Landscaping:** Drought resistant landscape material will be specified as much as possible on the Landscape Plans.

The proposed development is proposing to implement these efficient and effective measures to contribute to the City's goal to reduce energy consumption and greenhouse gas emissions.