

# October 20, 2015

Planning Administration Town of Halton Hills 1 Halton Hills Drive, Halton Hills, Ontario L7G 5G2

# To Whom It May Concern:

Re: Sustainable Design Brief for the Application for Official Plan Amendment and Rezoning for 71 Main Street, Georgetown, Ontario.

#### Introduction

The new mixed-use project at the McGibbon Hotel, located at the corner of Main Street South and Mill Street, Georgetown, fulfills the Official Plan's requirement for downtown densification in creating a vibrant mixed-use space for an otherwise challenged older tavern.

Along with the architectural elements that seek to breathe new life into the heart of the town, specific design decisions have been made that highlight the proposal's intentions for an environmentally sustainable and economically viable project.

#### Adaptive Re-use

The existing three-storey brick McGibbon Hotel building currently stands underutilized and challenged by the growth of the town. Considered a particularly strong example of adaptive re-use, the repurposing of the old McGibbon Hotel to become a new mixed-use commercial residential development compliments the surrounding context. Adding approximately 200 to 250 new residents into the downtown core, the new project brings back a vibrant retail culture at grade which encourages more pedestrian movement.

#### Geo-thermal

Harnessing the heating and cooling capacity of the earth, the new mixed-use development utilizes geo-thermal technologies as the primary mechanical system. This allows for many advantages both in the short term and long term. For instance, the mechanical penthouse, which would otherwise be at the top of the roof, is buried into the ground, tapping into an energy source that has very little impact to the environment, and requiring next to no fossil fuels for heating and cooling of the building. Further, its location below grade



mitigates any noise 'pollution' from the building that would have otherwise been handled by rooftop mechanical units.

The integrated geo-thermal system, along with high performance glazing and building envelope systems would reduce the overall operating cost of the building. There would be an estimated savings of 40% in energy costs when compared to burning traditional fossil fuels. The use of geo-thermal systems will stabilize energy costs, and will reduce environmental pollution.

# **Urban Heat Island - Roof Terraces**

To minimize its height and presence along Main Street, the building terraces away from the corner. This creates green roof conditions across the footprint of the site which reduces the urban heat island effect.

The terraces also serve to capture rain water which will be diverted to an underground cistern and can be reused for irrigation. Further, the cistern acts as a slow storm water discharge into the Municipal storm system.

On the north side of the building, a green wall is located on the lower terrace to mitigate the view and noise of the outdoor parking area it overlooks. This green wall serves as a backdrop for the lower suite terraces which would otherwise have a compromised view.

### **Exterior Building Materials and Longevity**

Material choices were made that encourage longevity and a timeless character. Brick and masonry located on the lower floors will be complimented with a high performance glazing system above. The glazing system on the first 4 storeys will include bird friendly fritted glass. As much as possible, materials are locally sourced from Canada or the United States, rather than internationally imported. However, depending on the quality of the technology for certain building assemblies, selected items may be imported from Europe, for instance: insulated glass units, and is a decision based on thermal performance.

Jaegap Chung MRAIC Principal, Studio JCI

> 55 Eglinton Ave E suite 606 Toronto ON M4P 1G8 t. 416 901 6528 f. 416 901 8962 www.studiojci.com