



May 2022

**Re: 25 Hillcrest Avenue & 3154 Hurontario Street Redevelopment Low Impact Development Measures**

The following memorandum has been prepared to outline the proposed low impact development (LID) measures planned as part of the proposed mixed-use development located at 25 Hillcrest Avenue & 3154 Hurontario Street. These measures take into consideration the design concept, the site location, orientation of the buildings, the site access strategy and programming requirements.

**The Site**

**Site Selection and Density**

The site is located in a prime location for redevelopment and is ideally suited for higher density to take advantage of its close proximity to tri-modal public transit and amenities within walking distance. Increasing density on the site will decrease each resident's carbon footprint by reducing their reliance on vehicular transportation.

**Access to Transit**

The site is directly adjacent to the Cooksville Go Station, a future LRT stop along Hurontario Street and within a 5-10 minute walk of Dundas Street West with access to the proposed bus rapid transit system.

**Walkability**

The proposed development is located within a 5-10 minute walk (400m – 800m radius) of several grocery stores, restaurants, retail shops, services, banks, medical offices, schools and educational institutions. The site is also well connected to green spaces and public parks within walking distance including Sgt David Yakichuk Park and Fairview Park to the west; and Richard Jones Park and John C. Price Park to the east with further connections to the Cooksville Creek ravine system.

**Landscape and Stormwater Management Strategies**

**Landscape First Approach**

The design concept is fostered around a landscape first approach. A community forest and publicly accessible green space is located at the heart of the development activating the public realm and providing a space for residents and visitors to gather.



### **Trees and Native Plantings**

The community forest, ravines walks and street edges will be densely planted with a variety of native trees, shrubs, grasses and plantings in softscape beds flush with the pedestrian pathways. A minimum of 20m<sup>3</sup>-30m<sup>3</sup> of high-quality soil will be provided for trees to ensure a healthy growing medium. The community forest will follow the Miyawaki Forest Method where a diversity of species is planted densely together to share resources, ensure quick succession and mimic the natural processes of a forest environment.

### **Rainwater Harvesting**

Rainwater harvesting through cisterns will be implemented and used for irrigation of the landscape features.

### **Stormwater Run-off Mitigation**

The community forest will help to mitigate stormwater run-off and naturally absorb water through the landscaping. The pedestrian pathways and driveways will use permeable paving surfaces where possible to further mitigate run-off.

### **Limited Hardscape**

The extensive landscape features will aim to limit the heat island effect by offering shade from the tree canopy across the site and through the use of high albedo, light coloured materials for any hardscape areas.

### **Green Roofs**

The landscape extends up to the podium roof levels where most non-amenity roof areas will be designed with green roof systems. The outdoor rooftop amenity spaces will be designed with planted areas, raised planting beds and high albedo paved surfaces to further reduce the heat island effect.

## **Public Realm and Pedestrian Comfort**

### **Pedestrian Walkways**

The landscape design prioritizes the pedestrian experience by providing safe, direct and continuous pedestrian connections across the site and to the adjacent blocks. The pedestrian paths along the street edge as well as through the publicly accessible green space provide a minimum 2.1m clearway to circulate comfortably. Weather protection is provided by continuous balconies wrapping the building forms as well as shelter from the tree canopy throughout the densely planted community forest.

### **Bicycle Parking**

Dedicated bike parking is located at the parking levels as well as at grade for ease of access for residents and visitors to the site. 275 short term bicycle parking spaces are located at grade along the street edges and within the publicly accessible green space and driveways. 1914 long term bicycle spaces are located at the P1 and P1 mezzanine levels with secure access.



## **Exterior Building Features**

### **Site and Building Lighting**

Exterior lighting will be dark sky compliant and shielded to point downwards. This will minimize light trespass to neighbouring buildings and reduce impacts of light pollution on birds and other wildlife.

### **Bird Friendly Glazing**

Bird friendly glazing will be implemented for exterior glazing within 12m above grade. This includes the use of visual markers spaced appropriately and the use of low reflectivity on opaque materials and muted reflections on glass surfaces.

### **Low-Carbon and Regional Materials**

As the design progresses, building materials will be selected with consideration for their carbon footprint. This includes the embodied carbon required to produce and ship the material. A preference will be given for local, regional materials. Exterior materials will be chosen based on superior performance to offset the operational carbon footprint of the buildings' operating systems.

## **Conservation Strategies**

### **Construction Waste Diversion**

A construction waste diversion program will be developed as the project progresses and implemented throughout the construction process. The intention is to divert any recyclable material from the landfill and encourage reuse practices where possible.

### **Erosion & Sediment Control**

An erosion and sediment control plan will be developed as the project progresses and implemented throughout the construction process. The construction manager will follow the City of Mississauga and Credit Valley Conservation Authority guidelines to implement appropriate measures for preventing loss of top soil and containing dust during construction.

### **Indoor Water Use Reduction**

As the design progresses, high efficiency and low flow fixtures will be selected to reduce water consumption.

### **Bi-sorter Recycling**

A bi-sorter waste system will be installed in each building to encourage residents to sort waste, organic and recyclables for disposal.