

# Transitioning to Net-Positive Biophilic Urbanism:

## Building social and climate resilient urban communities by 2067

### Ravine Revitalization

To facilitate Net-Positive Biophilic Urbanism in the community, the land use of the large green space which dominates the community must be physically altered. Feasible solutions to successfully integrate the community into the ravine system can only be accomplished by taking into account the human factors which affect the project, and the multifaceted manner in which the revitalization must be addressed, aspects including:

#### 1. Pathways

- Replace disused paths with pervious concrete to optimize stormwater management;
- Install educational signage along paths, outlining biodiversity and aiding identification of various local species of flora and fauna, with a review every 10 years to help display the changes that may be occurring in the area;
- Install solar lighting along the northwest section of pathway, currently a gravel path, making it an inviting and safe space after the sun has set;
- Install benches at riverbank access points, especially near existing bridges;
- Install water safety and rescue equipment, as well as water hazard warning signs, at regular intervals along the river;

#### 2. Portals

- Install clear signage at every portal to the ravine system, including both pedestrian and cyclist paths;
- Plant native trees blocking the entrances to unofficial paths to deter unauthorized pedestrian traffic to unsafe or ecologically sensitive areas;

#### 3. Community Farming

- Allocate 5805m<sup>2</sup> of land in Panorama Park for community farming, allowing members of the community to grow crops on individual plots;
- Incorporate not only crops with touristic and aesthetic appeal, such as Aurora Golden Gala apples, but also popular food crops, such as potatoes;
- Use water reclamation techniques, ie. rainwater harvesting, to source water for irrigation needs;
- Build a public space adjacent to Panorama Park to serve as a local farmer’s market and community event venue.

### Community Building

In order for the area’s development to be worth the time and cost of revitalization, there needs to exist a group of people who are willing to use the facilities that are created, and spend time in the area. The high population density of the area demands that action is implemented within the revitalization plan to ensure that the use of the area remains safe and appropriate to its new calibre. This action will include the following aspects:

#### 1. Amphitheatre

- Build an amphitheatre near the southeastern part of the ravine region, serving as a centralized forum for residents to voice their concerns, perform plays, or otherwise engage with each other;
- Integrate the building itself with other parts of the community, allowing for free booking by residents for community events;
- Implement year-long maintenance to allow for full utility and longevity by the community;

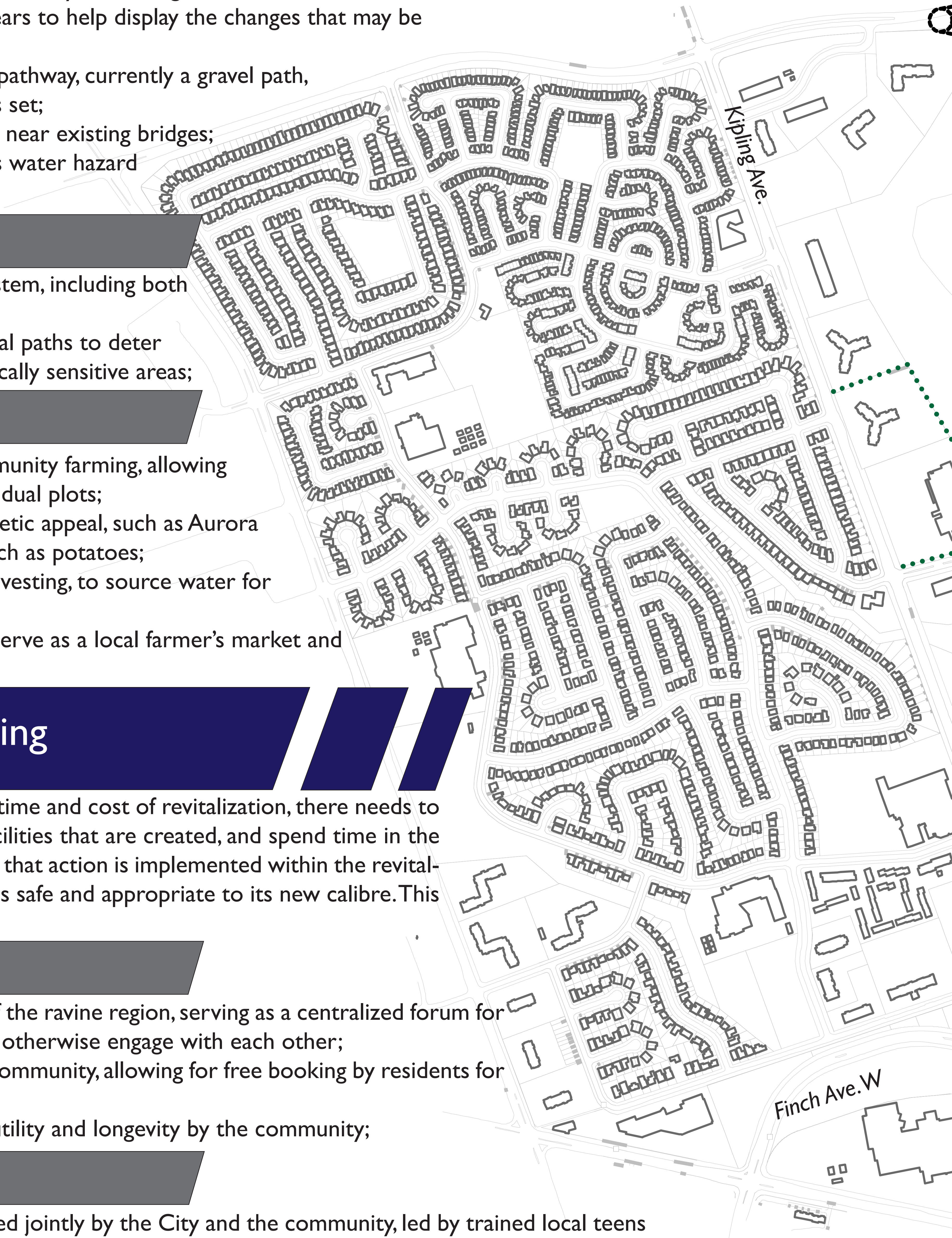
#### 2. Summer Camp

- Create a low cost summer camp organization headed jointly by the City and the community, led by trained local teens working to improve the lives of their younger neighbours, and offer them guidance;
- Allow for positive interaction between participants and resources unavailable in the region;
- Revitalize the soccer field near the southeast parking lot, adding hedging to demarcate a playing area, new goalposts with untorn netting, and a level field, as a facility for both camp participants and park visitors to use;
- Promote constructive actions across the community, and the wider region;

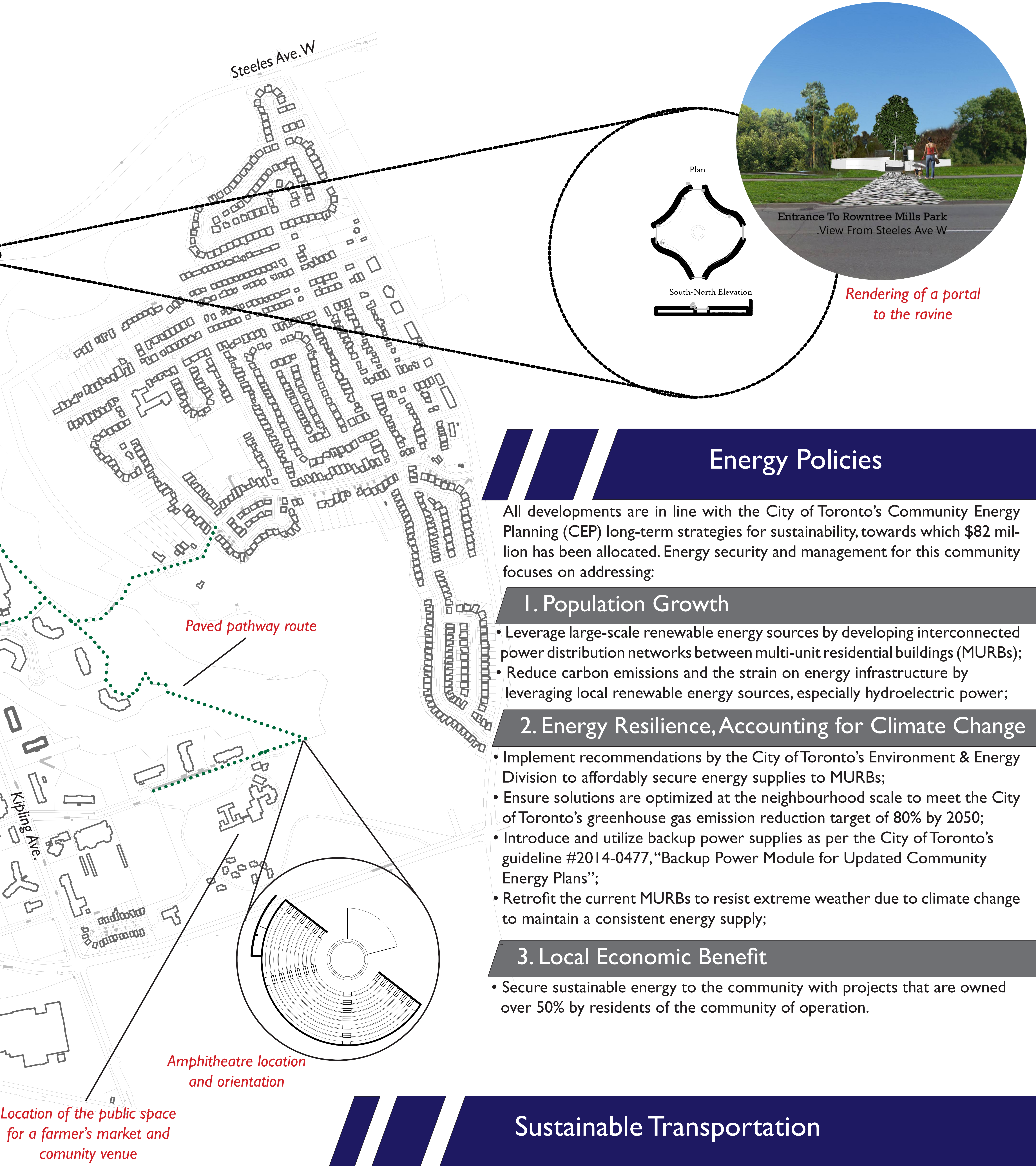
#### 3. Art Installation

- Create a graffiti mural underneath the concrete bridge near the southeastern edge of the region, serving as an area in which local artists can openly express their creativity and be publically lauded for their work;
- Allow for a lasting impression of those attempting to create a strong, supportive community culture in the area;
- Use the area for multiple purposes and art styles, defining the region as a hub for urban art and up-and-coming artists.

### Site Map







## Energy Policies

All developments are in line with the City of Toronto’s Community Energy Planning (CEP) long-term strategies for sustainability, towards which \$82 million has been allocated. Energy security and management for this community focuses on addressing:

### 1. Population Growth

- Leverage large-scale renewable energy sources by developing interconnected power distribution networks between multi-unit residential buildings (MURBs);
- Reduce carbon emissions and the strain on energy infrastructure by leveraging local renewable energy sources, especially hydroelectric power;

### 2. Energy Resilience, Accounting for Climate Change

- Implement recommendations by the City of Toronto’s Environment & Energy Division to affordably secure energy supplies to MURBs;
- Ensure solutions are optimized at the neighbourhood scale to meet the City of Toronto’s greenhouse gas emission reduction target of 80% by 2050;
- Introduce and utilize backup power supplies as per the City of Toronto’s guideline #2014-0477, “Backup Power Module for Updated Community Energy Plans”;
- Retrofit the current MURBs to resist extreme weather due to climate change to maintain a consistent energy supply;

### 3. Local Economic Benefit

- Secure sustainable energy to the community with projects that are owned over 50% by residents of the community of operation.

## Sustainable Transportation

Interconnectivity is essential to maintain a region’s efficiency and worth as the city continues to grow within the next 50 years. As planned expansion occurs along Finch, bringing more people through the various kinds of places that define the region: residential, industrial, natural, the need to connect all these different places rises. To solve this issue, within five years, a system of paved bike lanes and paths will connect MURBs with existing TTC and GO transit stops, and improve access through the ravine system. They will be fitted with areas to lock bikes, and as time progresses and a move toward more sustainable vehicles becomes affordable for everyone, electric vehicle charging ports may also be constructed. Within the scope of this project, by 2067, there would be a station at the center of the ravine, accessible to the community with the proposed pathways, and to Toronto at large via the TTC.