



SUSTAINABLE ARCHITECTURE

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INTRODUCTION

During the Spring 2021 semester, I took the class ARCH271: People, Planet, & Profit: Building Sustainable Places. This course combined two of my biggest passions, scientific sustainability and artistic design, and allowed me to challenge my previously held perceptions about what sustainability looks like within a community. To apply my learning to this practicum project, I developed a real estate development analysis for creating a **community garden** in my hometown, Takoma Park.



Community garden in Capitol Hill (hillrag.com)

URBAN ANALYSIS

As I learned in ARCH271, an effective community is made up of a blend of several different urban planning elements. Revered author and urban planner Kevin Lynch identified the following elements in his book, *Image of the City*:

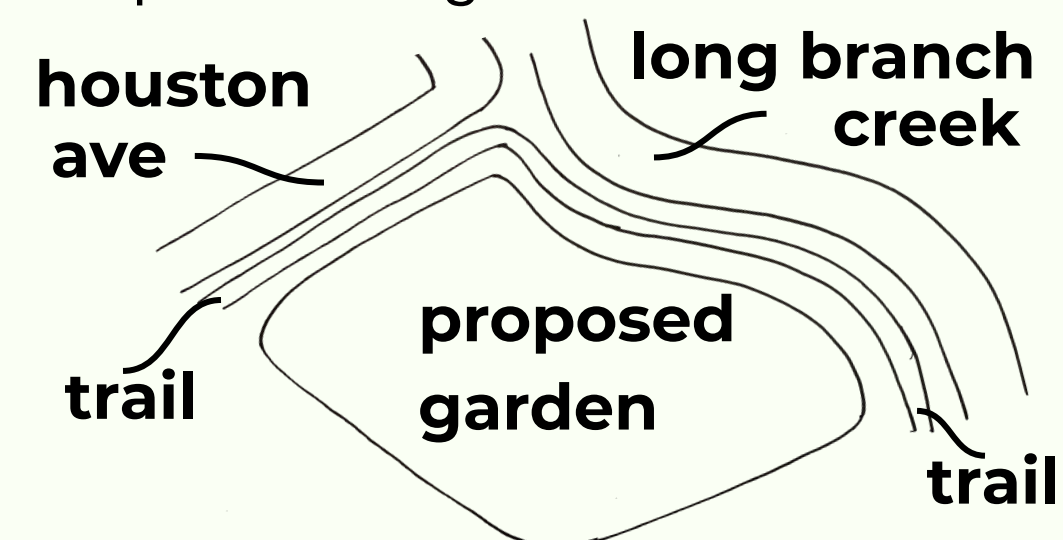
1. **Paths**—Streets, sidewalks, and other channels in which people travel
2. **Edges**—Real or perceived boundaries that inhibit movement in a direction
3. **Nodes**—Areas that people can enter and that serve as the foci of an area
4. **Landmarks**—Points of reference in which a person cannot enter
5. **Districts**—Large, two-dimensional areas that share common qualities

When I turned a critical eye to my hometown, I realized that it had many paths, edges, and landmarks, as well as clear district borders, but it lacked many community nodes. To fix this, I knew I wanted to implement sustainability and science into my real estate development proposal, but I also wanted it to be accessible to the entire community. The perfect solution? A community garden—anyone can contribute, and everyone can reap the fruits (or vegetables).

ISSUE CONFRONTING SITE & LOCATION

Since my urban analysis led me to conclude that Takoma Park needed more nodes, this community garden will improve my hometown's urban legibility. It will also address issues we discussed during my time in SGC, such as improving the soil quality, air quality, and decreasing the amount of CO₂ in the immediate area. While one community garden cannot reverse the damage caused by other human activity such as fossil fuel burning, it takes steps in the right direction.

This spot by the Long Branch Creek is an ideal location; it receives plenty of water and sunlight, and it is very accessible to the neighboring community. Plus, with the nearby elementary school, young children could get involved!



BENEFITS OF A COMMUNITY GARDEN

There is a wealth of information about the benefits of community gardens, and they have the potential to improve several different aspects of a community. These advantages can include, but are not limited to:

sustainability

- Improving soil and air quality
- Increasing animal & plant biodiversity
- Reducing food miles for transport of fresh produce
- Improving water filtration
- Reducing waste through compost
- Improving the urban microclimate
- Utilizing otherwise empty plots of land

community

- Decreasing food insecurity
- Improving physical health, both through access to fresh produce and the physical activity involved
- Improving dietary habits
- Decreasing crime rates
- Promoting sense of community unity
- Improving mental health and promoting relaxation

Furthermore, community gardens are low-cost investments (especially when everyone contributes to the cause) and can be maintained indefinitely. Why not start a community garden in your hometown?



Community garden in Philadelphia (natlands.org)

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