

Sponge Kent City Urban Design Proposal

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ABSTRACT

The goal of the project is to find suitable sites for the World Relief Seattle (WRS) community garden that explains and transforms the goal of the King County 2020 Strategic Action Plan (SCAP). WRS is considered as a global humanitarian organization that finds sustainable solutions that solve climate change crisis. In addition, it brings community from different backgrounds together by improving access to quality services that meets their needs. The new location of the WRS community garden will offer sustainable urban farming, provide local food, and serve as a social and entrepreneurial hub for the immigrants. The chosen worksite will provide sustainable management to tackle different environmental challenges as well as improving the site area by proposing different urban design strategies. The proposed strategies will bring people together by building community connections through planning an equitable community. Furthermore, the adaptation measures will build a new sustainable development to enhance climate resilience planning.

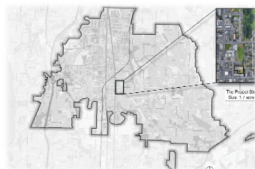


Figure: This map shows where the project study area is located in the City of Kent

INTRODUCTION AND PURPOSE

The project site is currently vacant and located in a mixed-use zone in the city of Kent. It is about twelve minutes drive from the Green River. The aim of the project is to provide urban design interventions that aligns with King County Strategic Climate Action Plan and/or World Relief Seattle goals. **Purpose:** The selected site is in a flood zone and a high contaminated groundwater. There are many buildings that are affected by flooding such as the Mill Creek Middle School. Floods impact on both individuals and communities, and have social, economic, and environmental consequences. Currently, the neighborhood is largely automobile oriented, in addition, it is well connected by public transportation where Kent Station is within five minutes walking. There are some issues to address in the existing conditions such as, many impervious surfaces like parking lots; flood risks, and lack of active edges within the walking distance. The impervious surfaces could be removed and repurpose for creation of more green space, landscaping, and other development to improve the creation of green areas that could respond to water catchment and adapt to climate change. The redevelopment will also foster economic opportunities for all the refugees and encourage social engagement through urban plans.

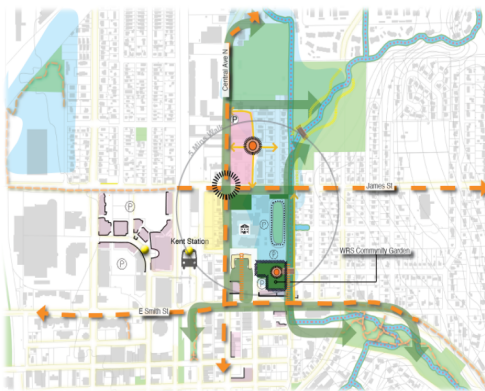


Figure : Urban Design Framework

Legend	
	Flood Zone
	Institutional Use
	Proposed Green Space
	Proposed Commercial/Retail Hub
	Existing Commercial Use
	Proposed Housing
	Proposed Pedestrian Bridge
	Living Street
	Green Connections
	Proposed Bike Lanes
	Proposed Active Edges
	Existing Active Edges
	Proposed Pedestrian Paths
	Existing Pedestrian Paths
	Existing Node
	Proposed Node
	Proposed Gateway

RESULTS AND DISCUSSION

To achieve a Sponge Zone, proposing pedestrian pathways and redeveloping land to foster economic opportunities as well as resiliency will provide the opportunity to incorporate environmentally friendly elements such as small rainwater gardens, small retention ponds, and pervious pavement to offset the storm water run-off of the neighborhood. Proposing living streets and more green spaces to be viewed as a social space and to allow pedestrian flow through green spaces or unpaved right of way as well as formal paths such as sidewalks and dedicated pedestrian pathways to increase pedestrian safety.

PROPOSED SOLUTION/RECOMMENDATIONS

Since the selected site is in an area at high risk of flooding; my goal is to implement a design strategy to combat flooding and create a flood resilient-environment, in other words, a (sponge zone) that aligns with King County Climate Action Plan goals. This will be done through transforming the existing impervious surfaces such as parking lot to a mixed-use development and green spaces. The project design proposal will create a better place for all people regardless their immigration status by providing an easy access to local food, promote its social connection, foster economic opportunities, and encourage people to walk and cycle by proposing protected bike lanes and living streets to cut carbon emissions and help improve the air quality in the urban areas. In other words, with a defined pedestrian network, the neighborhood can transform into a pedestrian and transit-oriented community which accommodates the car only as much as necessary. In a sense, the community can become pedestrianized towards the residents rather than the through traffic. Moreover, preserving the existing trees and planting more trees to increase climate resilience.

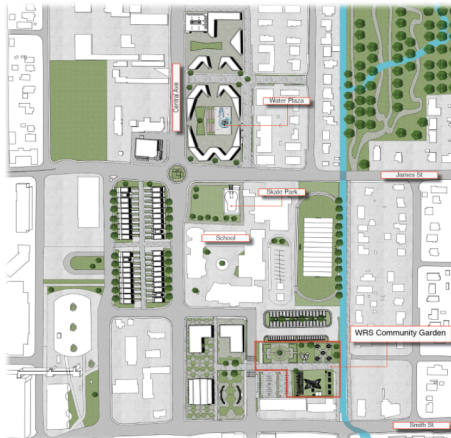


Figure : Proposed Site Plan



Figure : Precedent – Water Plaza in Rotterdam, Netherlands.

METHOD(S)

Through urban design analysis I was able to analyze both Kent Regional Analysis as well as the project site analysis. WRS required that the potential site is city-owned, on level ground, with easy access to water as well as public transportation, and most importantly close to affordable multi-family housing. The first method was to study the regional climate vulnerability by using Geographic Information System (GIS) and gathering different public data from the King County GIS Data Hub. The second method was conducting a feasibility study to find potential sites for the community garden placement; the study consisted of multiple steps that led to the chosen proposed site.

CONCLUSIONS

The proposal will include the following:

- A retail/commercial food hub that will foster economic opportunities as well as social engagement.
- Proposing affordable housing development close to the retail/commercial hub to encourage communities in a way that that are relative to employment and other service centers in which it has a direct implication for transport and mobility, and that it helps with energy consumption and greenhouse gas emissions.
- Skateparks and Water Plaza will function as a water catchment/management and playground area for all people.
- Food Hub next to the community garden to increase access to local food.
- The proposed community garden will help with increase access to local fresh food, improve food security, and increase activities through the urban seating area within the community garden. Moreover, the garden will be ADA accessible that will offer a raised garden bed and accessible pathways.

"New Ideas must use old buildings" said Jane Jacobs in her seminal *The Death and Life of Great American Cities*. Adaptive reuse of the unused spaces is considered to be a strategy for a sustainable urban development. In other words, the reuse of spaces and buildings stock causes a positive change that would foster diverse urban environment as well as sustainable alternatives to enhance the space for the inhabitants.

REFERENCES

- *The Death and Life of a Great American Cities*. (n.d.). Retrieved From May 17, 2022. http://www.petkovstudio.com/bg/wp-content/uploads/2017/03/The-Death-and-Life-of-Great-American-Cities_Jane-Jacobs-Complete-book.pdf
- Williams, J. (2020, May 25). *How Rotterdam is designing for future floods*. The Earthbound Report. <https://earthbound.report/2012/05/18/building-of-the-week-rotterdam-water-plaza/>