

Regenerative Infrastructures

Reimagining our Relationship with the Environment

The built infrastructure of the 21st Century must answer the question as to how humans can make a return to living in symbiosis with the natural environment. As designers we need to think beyond our traditional roles and begin to offer solutions to complex problems that face our communities and our environment as a whole. The evolution of human beings brought the use of sophisticated tools and cooperative hunting and gathering techniques. Humans eventually shifted from a nomadic lifestyle too and began to stay in one place planting crops and creating shelters, their cultural and spiritual lives hinged to the natural world as agriculturalism became the means for survival.

As human civilization continues to grow, the means through which we utilize our natural resources has become increasingly complex, increasingly exploitative and increasingly set apart from the natural environment. Not only have we begun to contend with the negative impact we have had on the environment, but we've also begun to recognize the psychological consequences of our growing disconnect with nature. As Stephen Kellert states, "Most of our emotional, problem-solving, critical-thinking, and construction abilities continue to reflect skills and aptitudes learned in close association with natural systems and processes that remain critical in human health, maturation, and productivity. The assumption that human progress and civilization is measured by our separation from if not transcendence of nature is an erroneous and dangerous illusion."

Like our ancestors, we need to continue to develop sophisticated tools to solve the problems that threaten our survival as a species. Architects and designers need to create spaces that are not just beautiful and inspiring. They must consider how to re-introduce the natural environment in a way that is relevant and accessible to a diverse population. They need to create buildings that work with, and become a part of the natural environment. We need buildings that clean the air, filter water, generate power, create compost, grow food, while encouraging interaction with nature and one another. This could serve as a prototype for this world, and beyond.



Nic's Peak
Getting out into nature has proven psychological benefits. Getting up to the cabin, backpacking in the mountains, taking a walk in the woods, some people do such things to rejuvenate and recharge. However, not all have equal opportunity to have these experiences with the natural world. Instead of taking the city dwellers to the mountains, can you bring the mountains to city?

Series of rugged landscapes will simulate the environments of Northern Minnesota and western mountainous regions. They will have different levels of challenges and opportunities to partake in. All individuals, groups, schools will be able to test their wits and "escape" the city through various adventures, overnight backpacking trips and education sessions. For individuals the tower becomes a mechanism to "escape" the city, find oneself, learn some survival skills, or maybe have their own personal vision quest. There will be opportunities to camp, fish, swim, boat, hike, climb. Local companies can have office retreats with team building exercises, students will learn about the various environments of Minnesota and have summer camps, all within the confines of an urban environment. These important skills will tap into different areas of the brain critical for social and personal well-being, along with the development of critical thinking.

Nic's Peak EL. +911.0'

Lake Solitude EL. +760.0'

Moon Gate EL. +570.0'

Aeys' Crossing EL. +360.0'

Em's Lake EL. +210.0'
• Fish farm
• Canoeing
• Kayak
• Fishing

Greenway Connection EL. -25.0'
• Bike shop
• Cafe

Fresh Water Lake EL. +0.0'
• Splash pad
• Skateboard Park

Base Plaza EL. +0.0'
• Food Trucks
• Seasonal Market

NICOLLET AVE

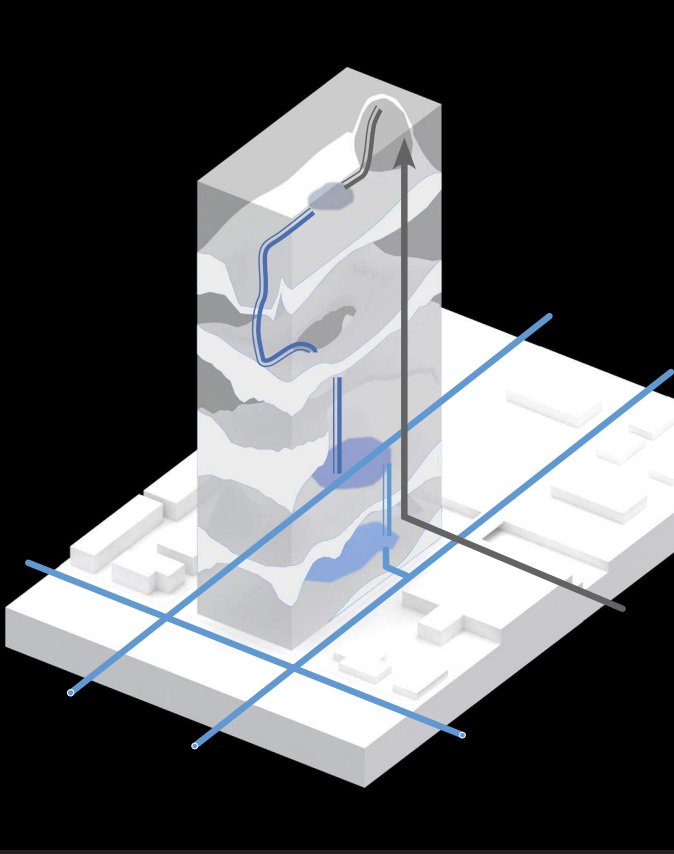
LAKE STREET

1ST AVENUE S

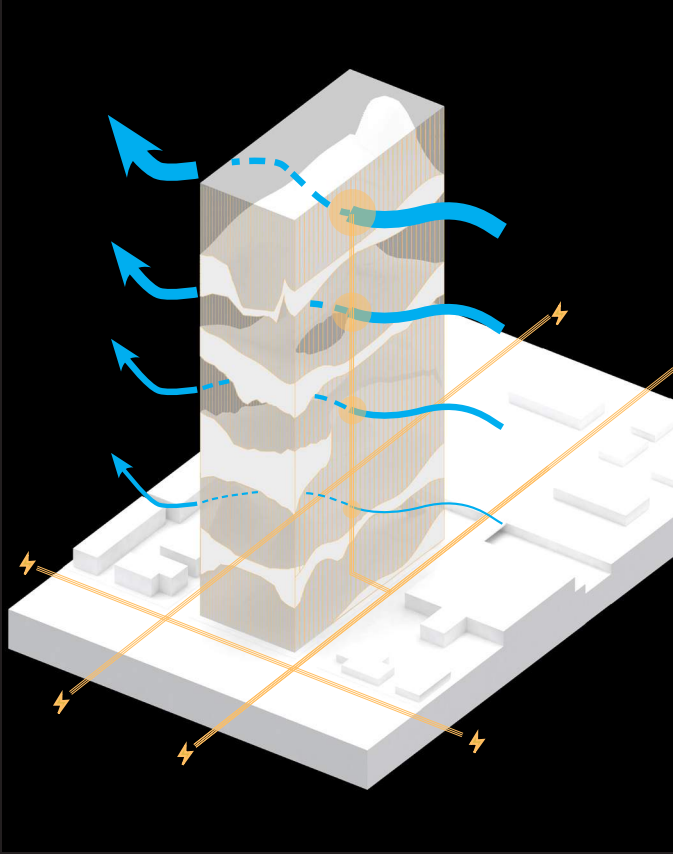
Generation and Distribution

The infamous Knart site is one of the most challenging sites in Minneapolis. The obvious disruption to the continuity of Nicollet Avenue created a physical and psychological barrier north and south of the building. Stitching the street back together will begin to heal the wound, but will also be part of a new form of creation and dissemination. As the Midtown Greenway was historically a major connective tissue of the capitalistic system, via railroad, it has now been transformed into a vital amenity to the vast trail systems and overall health of citizens. The proposed tower aims to rectify many of the issues created by the thinking of the last century.

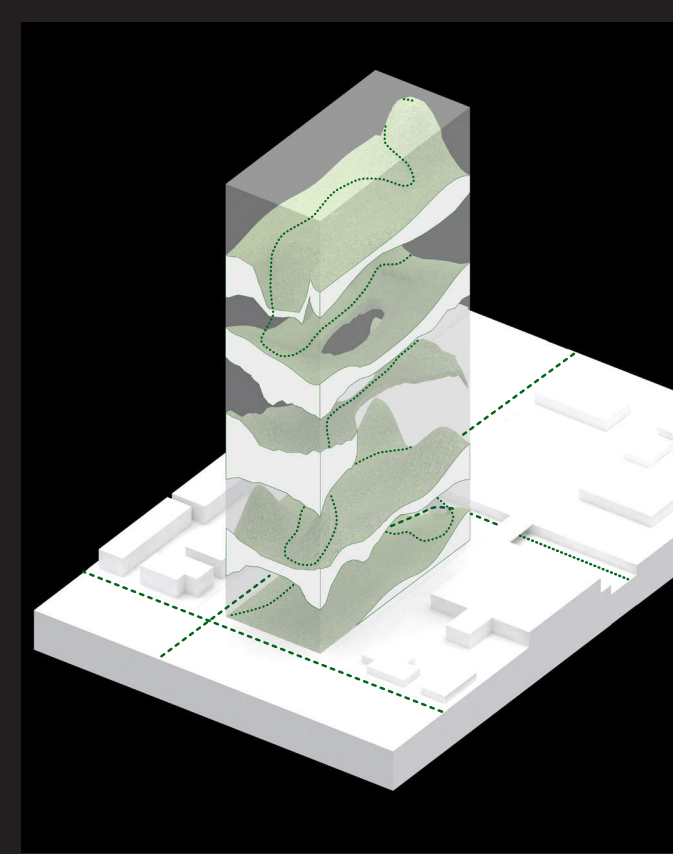
This tower will help clean the air, filter water, generate and store electricity, create sources of food, all while bringing the rugged natural landscape to the inner city. Grey water will be captured from the surrounding neighborhood, filtered down through the various landscapes, eventually becoming drinkable and distributed to the community. Fish and herbs will be grown and harvested, to be sold to the local community and restaurants. A woven system of cables supports the structure. Filters and mini-turbines are embedded within this fabric to clean the air and generate electricity.



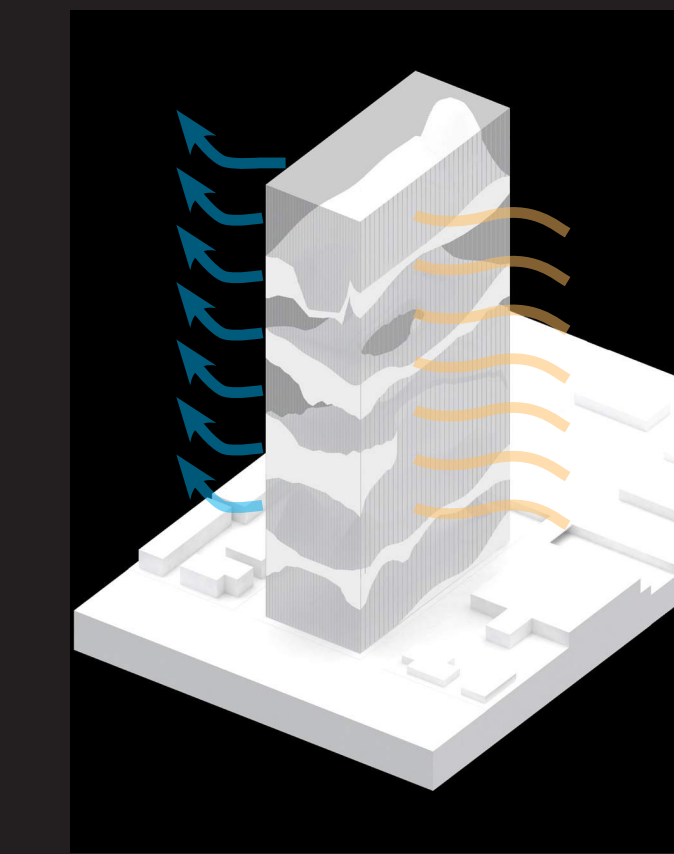
Water Generation - Filtering System



Energy Generation - Integrated Mini-Turbines



Trail System



Air Filtration

