

Concept: Living Architecture
Proposal: The CycleX Living Village
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Architecture holds vast potential to unite the construction of human dwellings with the production of food, as well as site specific ecosystem services, with the goals of regenerating depleted ecologies and fostering new symbiotic relationships. I propose the unification of arbortecture, (the growth of buildings and infrastructure out of living trees) and agroforestry to produce a multilayered system of regenerative land stewardships that weaves human beings into the surrounding ecology tapestry. I believe that CycleX is the perfect site to explore the growth of a living village as a proof of concept. The Living Village system operates on parallel timescales, combining the long term timescale of trees with the short term needs of human beings through the cultivation of fast growing pioneer species, fruit and nut trees, perennial and annual food crops, as well as companion plants with both aesthetic and ecological value. The system is highly site specific, and the site design plays off the specific ecology of CycleX.

Willow cuttings from the surrounding landscape will be harvested in late winter and planted around platforms elevated on hay bales. Slower growing species of fruit and nut trees are planted around the willow. These trees will be gradually shaped using the willow as scaffolding, as the willow grows more quickly. Over time the slower growing trees will be grafted into the form of a dwelling.

The initial focus of this project will be the construction of an outdoor kitchen space and a composting toilet system complete with latrines. The outdoor kitchen will incorporate the existing metal structure on the site with minimal modifications. The design consists of a clear vinyl waterproof membrane attached to a steel conduit frame. Each vertical member of this frame will be paired with two cuttings of *Salix alba*. Over time the cuttings will thicken, engulfing the aluminum conduit and strengthening the structure. Vines will be planted around the structure, and will gradually entwine the metal and willow.

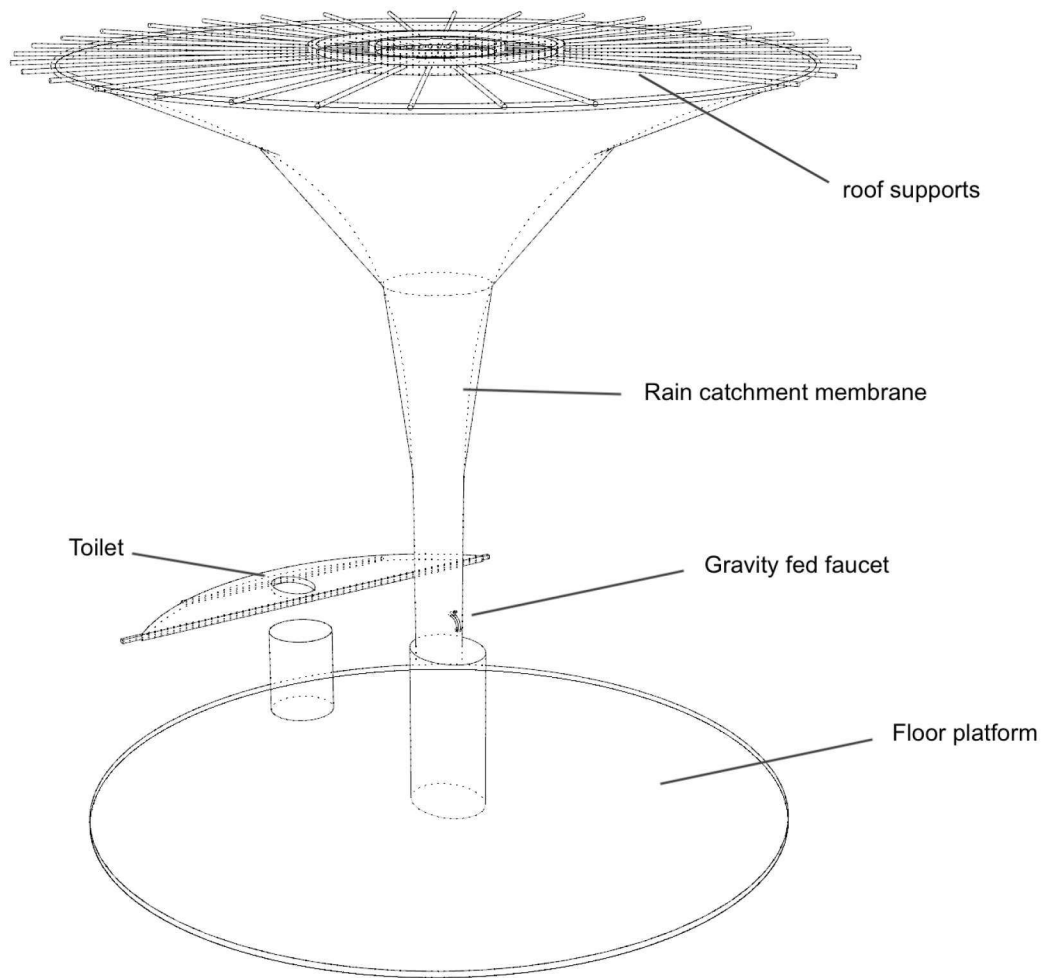
Life Kitchen





Plant list:

- 20' *Salix Alba* cuttings (34)
- *Apios Americana* bare root (3)
- *Vitis aestivalis* bare root (2)



Willow Lilac Latrines: *Salix purpurea* cuttings will be used to create woven walls that enclose toilet facilities. The cuttings will be threaded through a metal rebar frame and a light canvas will be attached to the inside of the structure, creating immediate privacy as the willow thickens over time. The ends of the willow cuttings will be bowed outwards to support a clear vinyl roof membrane that keeps the interior dry while catching rain. Bare root *Syringa vulgaris* will be planted around the edges of the structure giving the area the smell of lilacs in the spring. Rain water will be stored in a central column, allowing the user to wash their hands using gravity fed pressure without electricity. A painted wooden door is attached to the metal frame.



Tree-cabin-01:

Dwellings will evolve gradually from yurts around a fixed foundation into cabins of living wood. A wooden platform will be built and willow cuttings will be planted around it. These cuttings will be bent into a diagrid structure. eye hooks will be embedded in the living willow diagrid and will be connected to an internal membrane, creating a yurt. The tops of the willow will be attached to a metal ring that attaches to a hyperbolic roof membrane, which is eventually replaced with a clear polycarbonate floor as the willow thickens and the slower growing trees mature.

