

urbanFILTER

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The premise behind urban FILTER is to clean and activate a 75-acre post-industrial site located along the Cumberland River in Nashville, Tennessee. Nashville's goal to be the Healthiest City in the Southeast is approached by layering ecological, recreational, and nutritional programs on the site through a simple infrastructure. Passively employing the river's energy, this new infrastructure initiates clearing and cleaning of the sites contaminated soil gradually overtime.

As the Cumberland River enters the site it engages the constructed infrastructure to begin eroding its center. Designed to clean the soil through a combination of natural and artificial processes, these systems steer remediation in a predictable, beneficial way without dictating a formal outcome. In doing so it avoids using a mechanical solution to solve a previous industrial problem.

Urban FILTERs strategy is laid out in stages: first the infrastructure is built and begins cleaning the site. As water erodes the contaminated soil, wetlands grow, habitats form, and eventually the interior is completely removed, forming a large reservoir. Throughout this transformation, heavy sediment is deposited along the southern edge of the site, fertile soil is dropped to the west, and fine particulate matter is built-up along the eastern edge, forming a sandy beach.

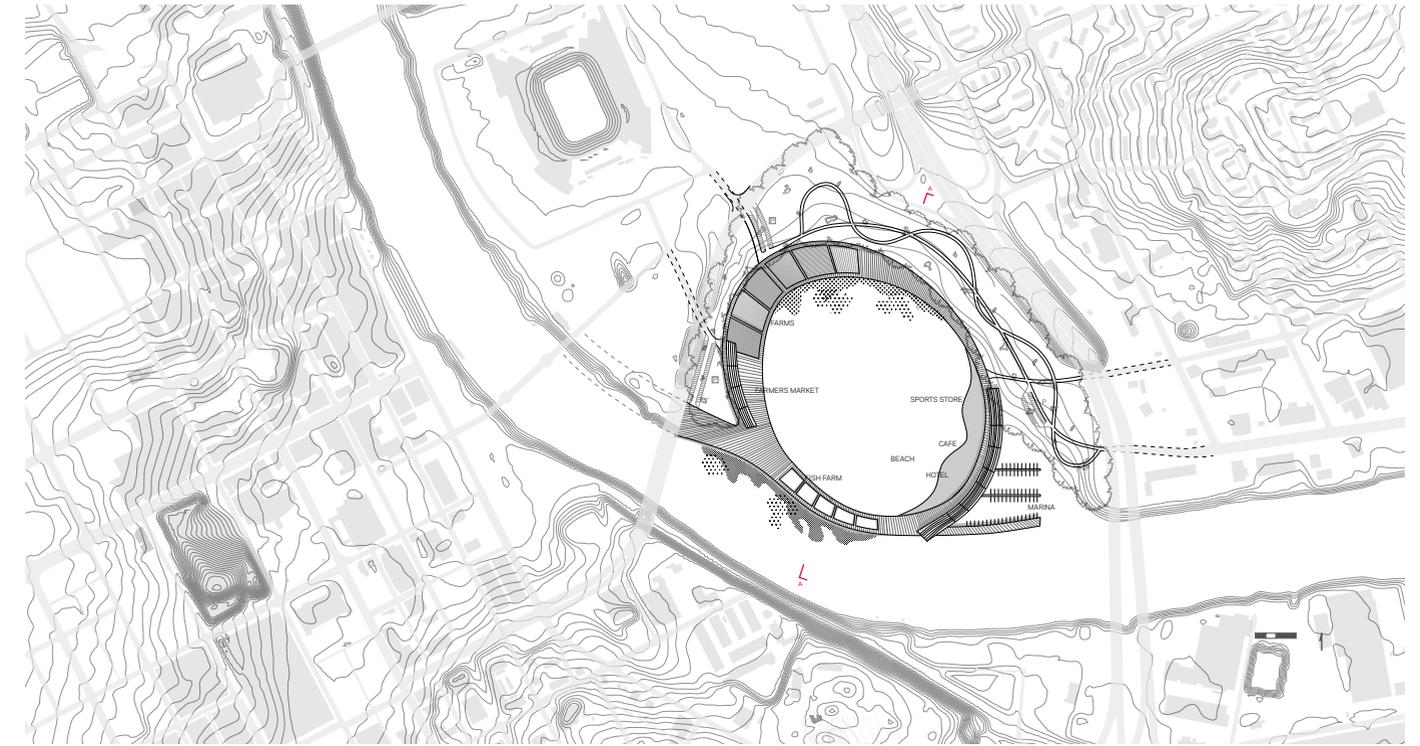
Adjacent to multiple highways, major roads, and surface parking lots, this site is an ideal location to collect and mitigate urban stormwater runoff. By planting a 34-acre forest along the northern perimeter, creating swales to channel stormwater, and lowland marshes that absorb water, urban FILTER cleans runoff, stabilizes soil, and provides a large sound and visual buffer from surrounding roadways.

As the infrastructure circumvents the site, it systematically varies to offer a variety of functions, programs, and activities. Beginning at the north and moving counter-clockwise, the infrastructure morphs from stormwater filter,

to community garden, to fish farm, and becomes thickened for a hotel, marina, restaurants, and sporting good store. The infrastructure essentially acts as a dense boardwalk, looping in and around itself to create multiple unique experiences, where visitors have the option to cycle, swim, or even fish.

Believing a healthy city is built from both active and nutritional lifestyles, urban FILTER takes advantage of the cleaned, fertile soil; capitalizing on the new productive landscape. This non-discriminatory, senior friendly, and enterprising activity allows people to occupy and directly engage the site.

The underlying thesis behind urban FILTER is to create an adaptable and flexible infrastructure, which evolves overtime. By cleaning and then activating the site with a variety of programs, both hard and soft, it creates a microclimate that can respond to various environmental and economic changes, becoming a dynamic riverfront destination.



INFRASTRUCTURE / YEAR 0

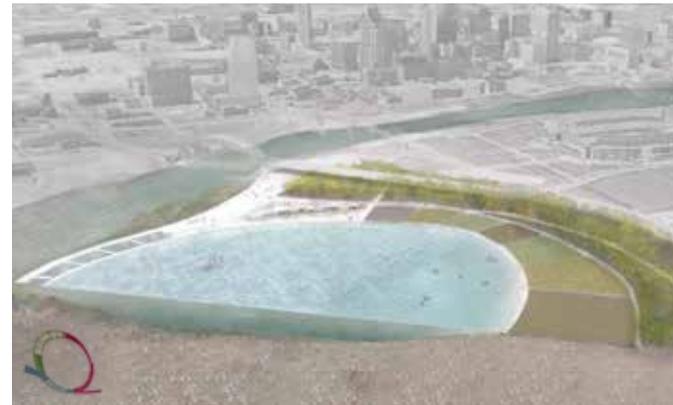


1. Light infrastructure is built to passively transform the site
2. Plants are used to begin Phytoremediation process
3. Wetlands are developed along the river's edge

FILTER / YEAR 5



1. Stormwater runoff is channeled through swales
2. Contaminated soil is slowly eroded
3. River is filtered through the wetlands



STABILIZE / YEAR 10

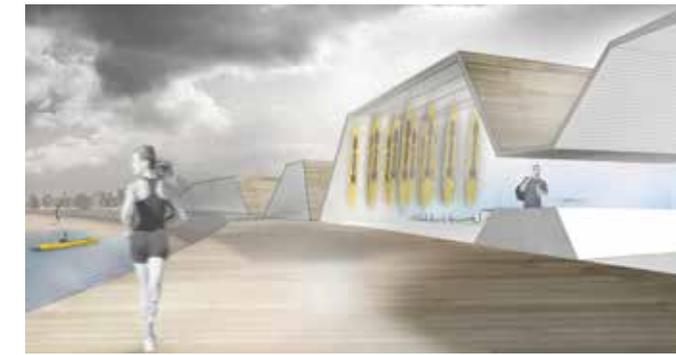
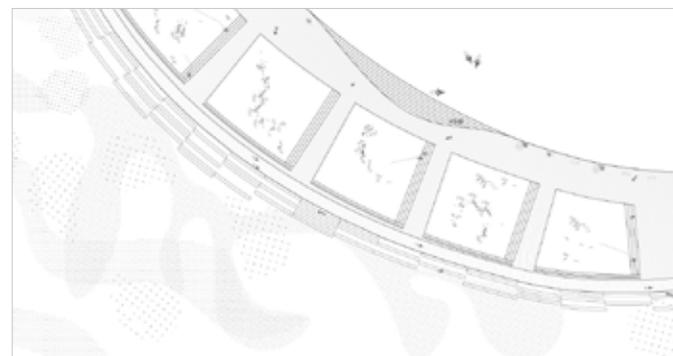


1. Upland trees remove large debris and stabilize soil
2. Lowland marsh plantings absorb contaminants
3. Fertile soil and sediment is deposited within the site

PRODUCTIVE / YEAR 15



1. Fine sand is built-up creating a beach
2. Fertile soil is planted with edible crops
3. 34-acre forest is maturing, creating a sound buffer



RECREATION



LAND:



ECOLOGY

