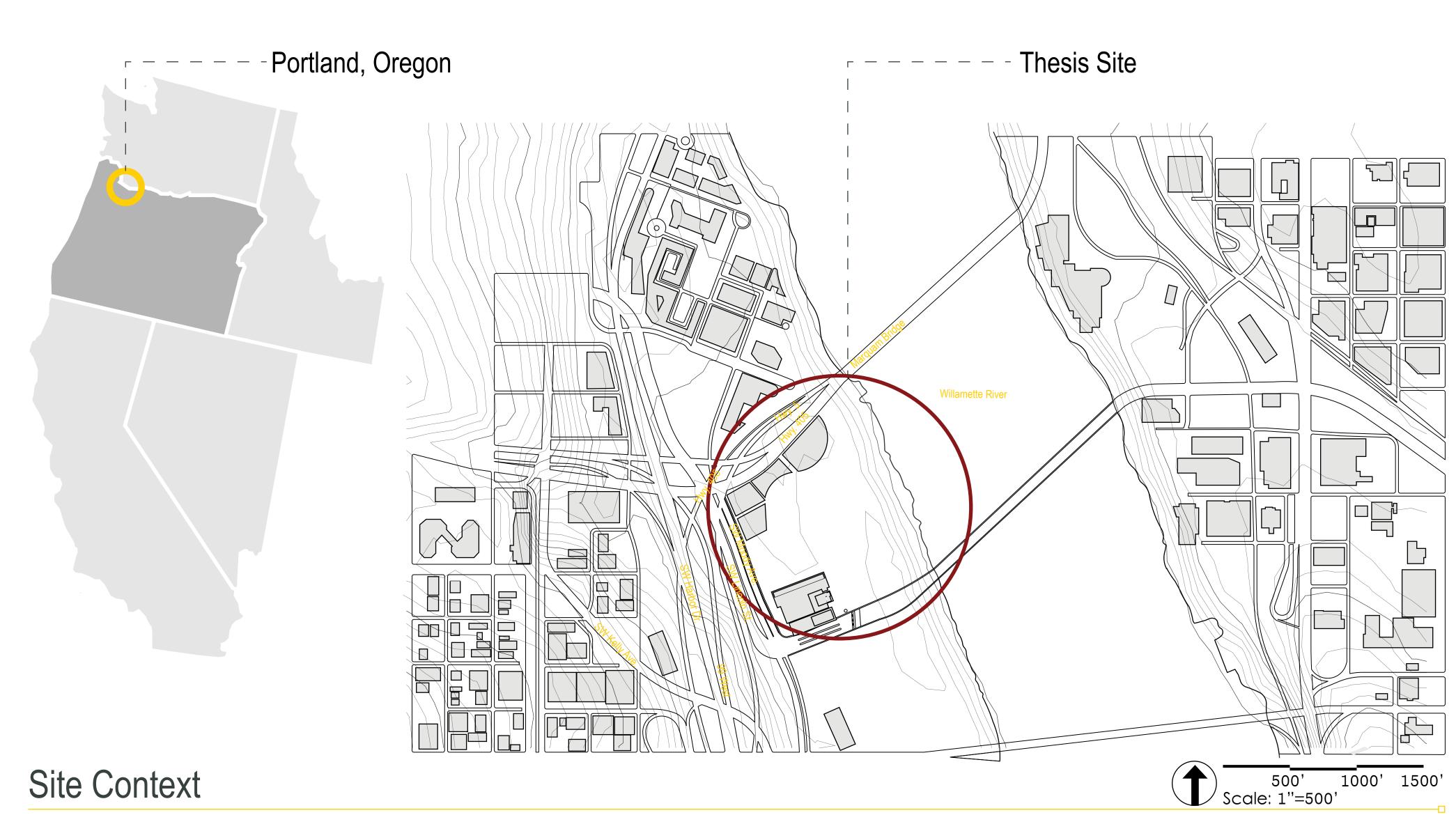
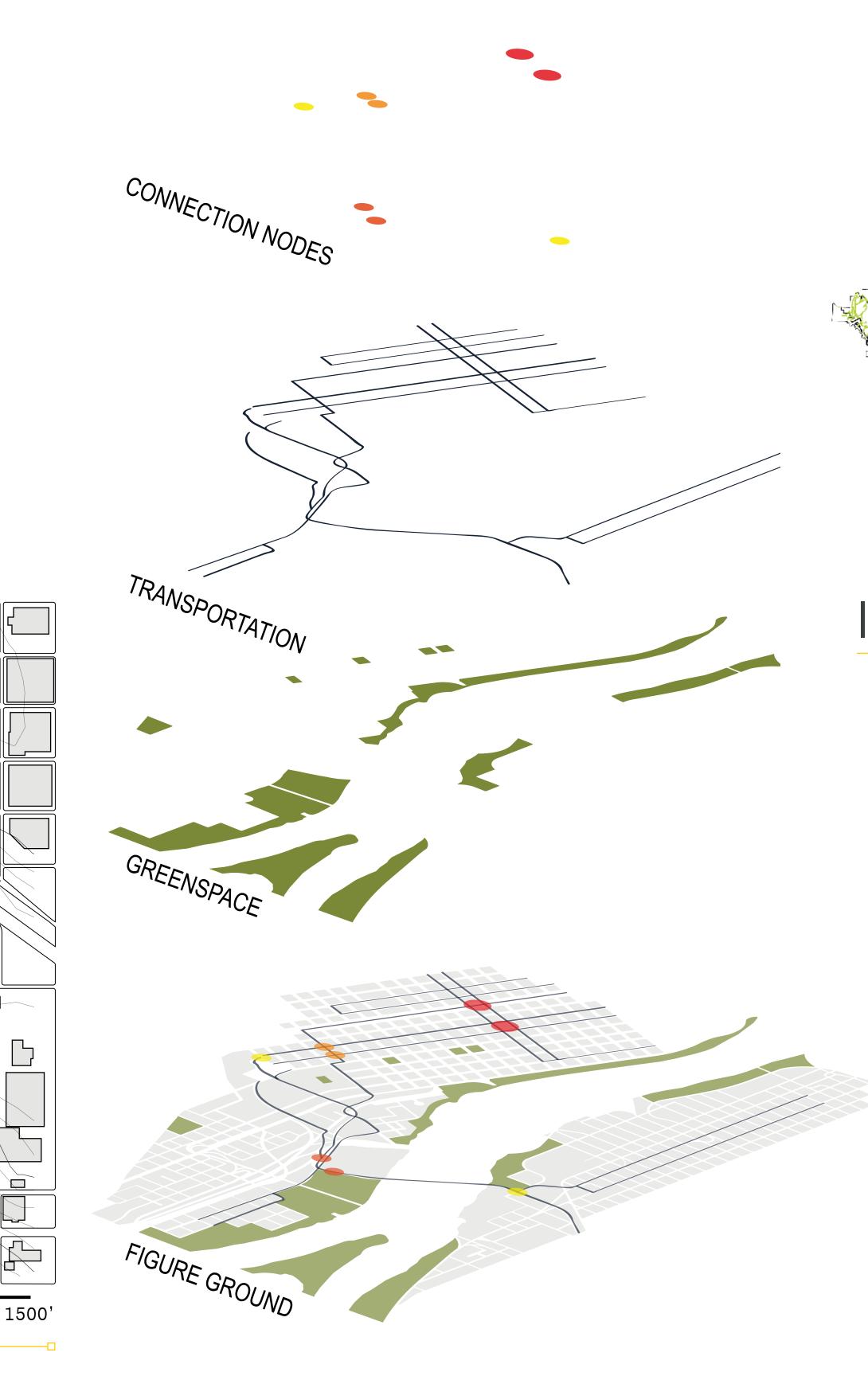
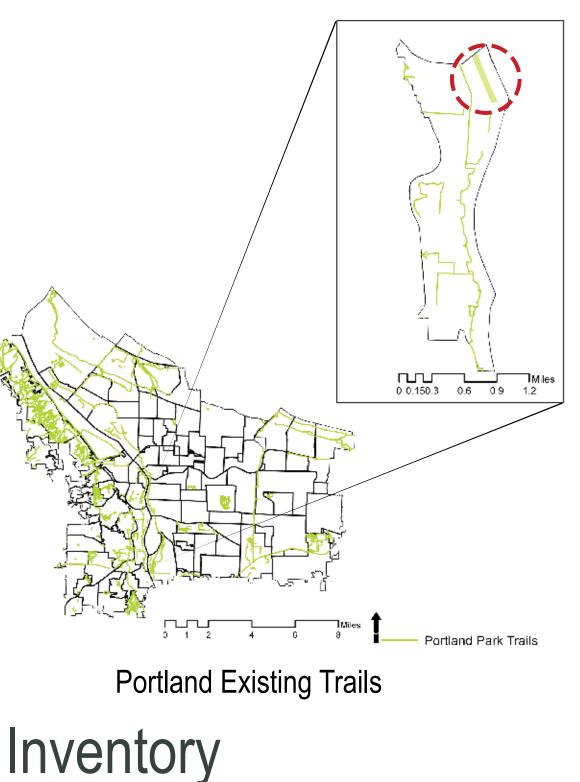


Remediating the Willamette Riverfront of Portland







Thesis Statement

Through the use of a phytoremediation greenway, this proposed plan revitalizes the Willamette Riverfront in the South Waterfront District of Portland, Oregon to reconnect the community with its urban waterront.

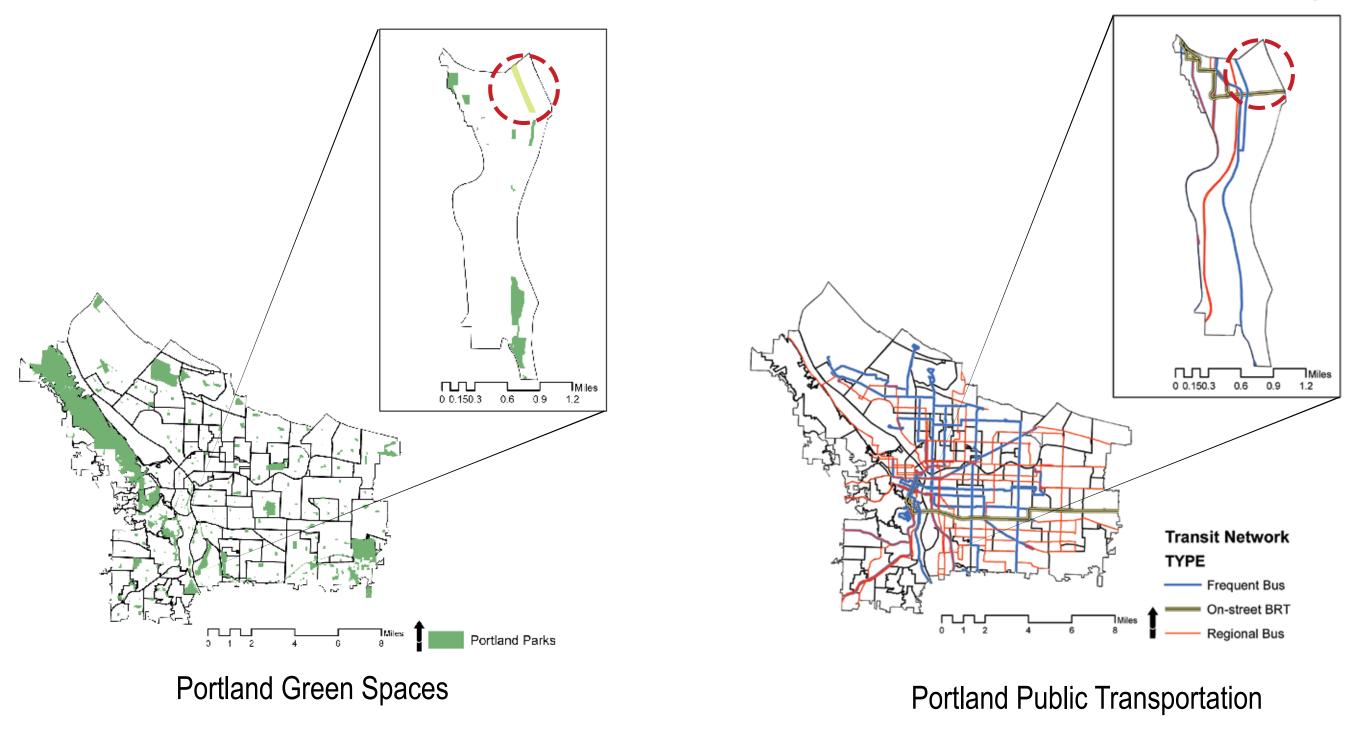
Circulation Inventory

Currently there are two existing greenways on the northern and southern ends of the thesis site. This creates a large disconnect between downtown Portland and the South Waterfront District. By joining these two greenways this gap is closed.

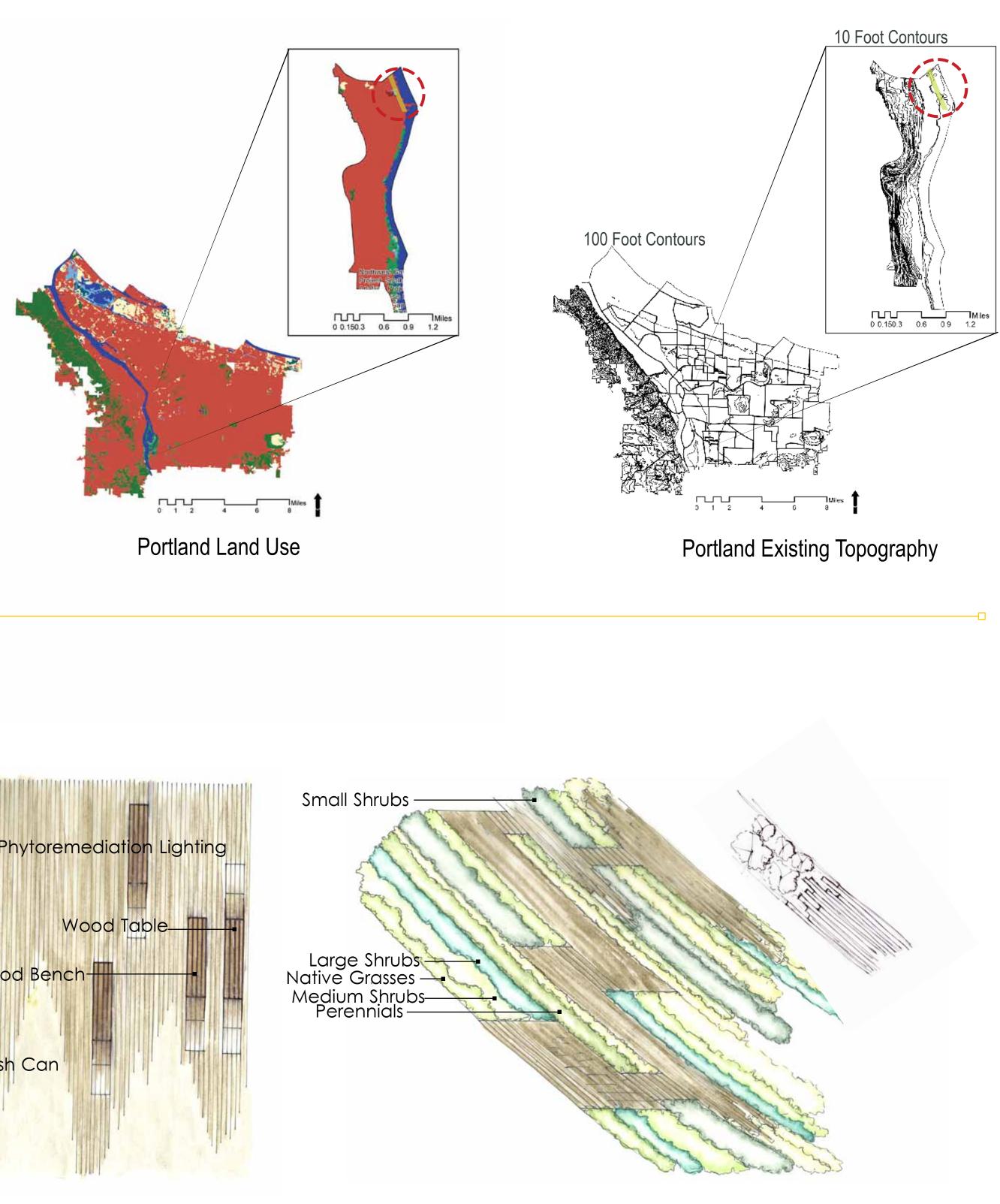
Public transit stops are located on the western and southern ends of this thesis site, causing dense pedestrian traffic nodes with nowhere to wait for their connecting routes.

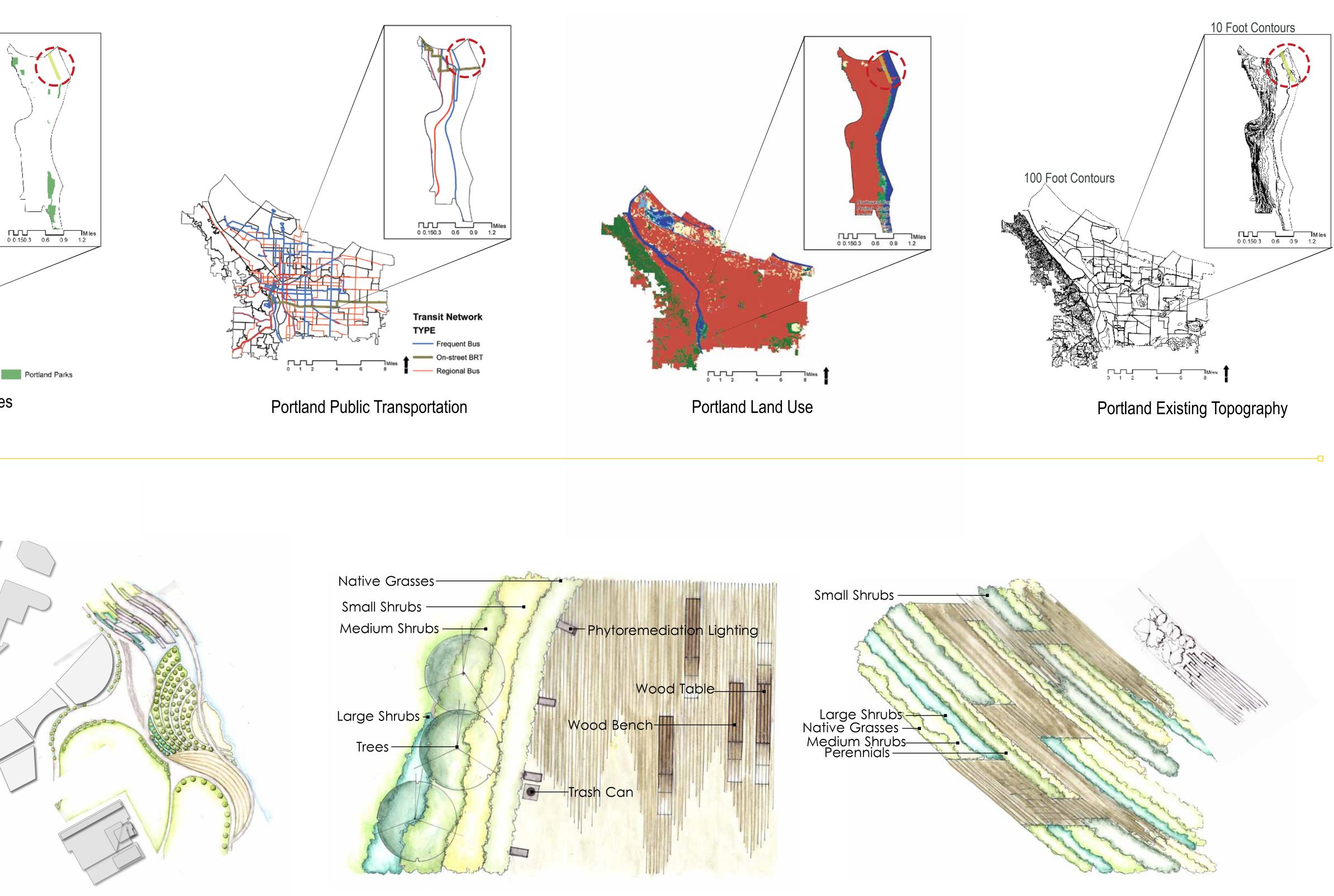
Project Goals

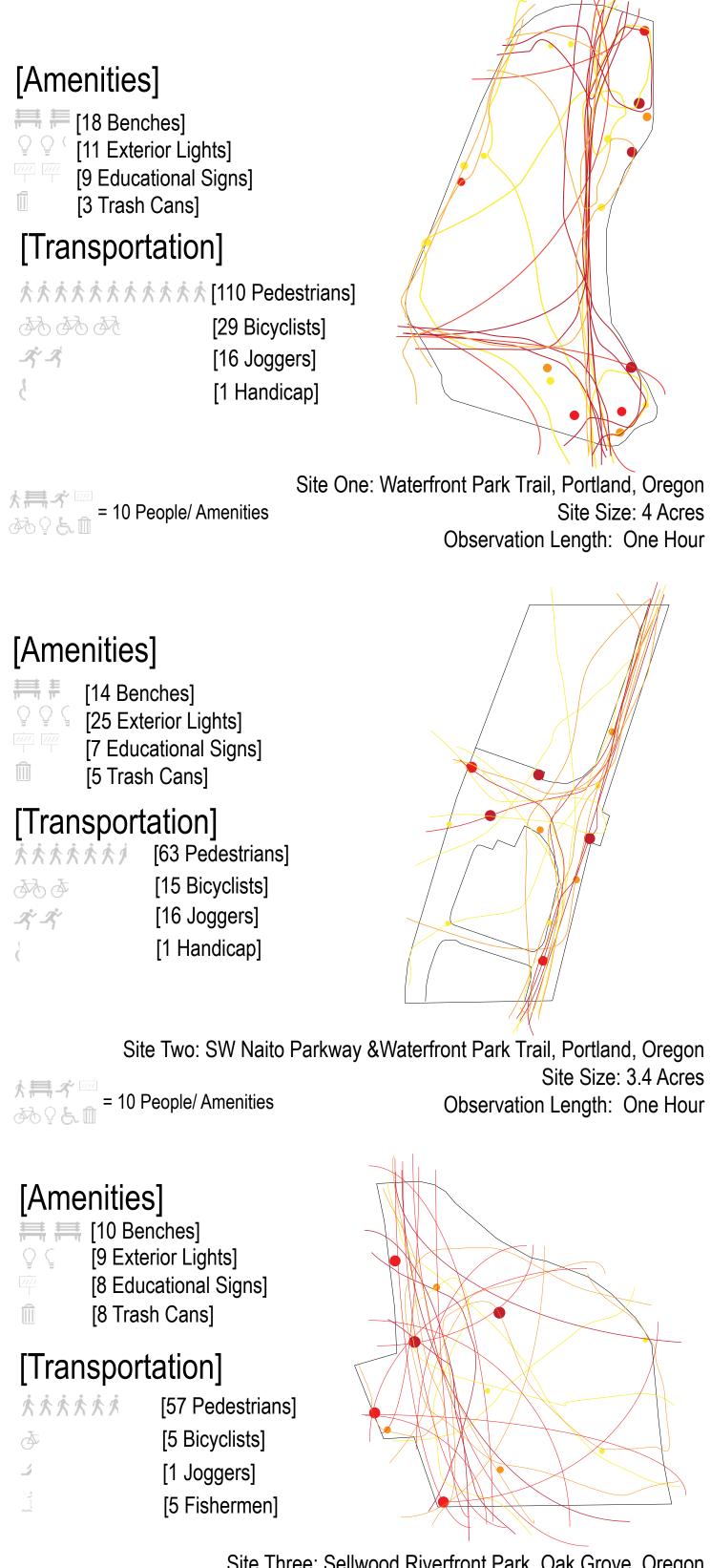
- 1. Ecological Movement: Water
- 2. Educating Site Visitors on Phytoremediation
- 3. Linking Transportation Systems to the Site



Design Process







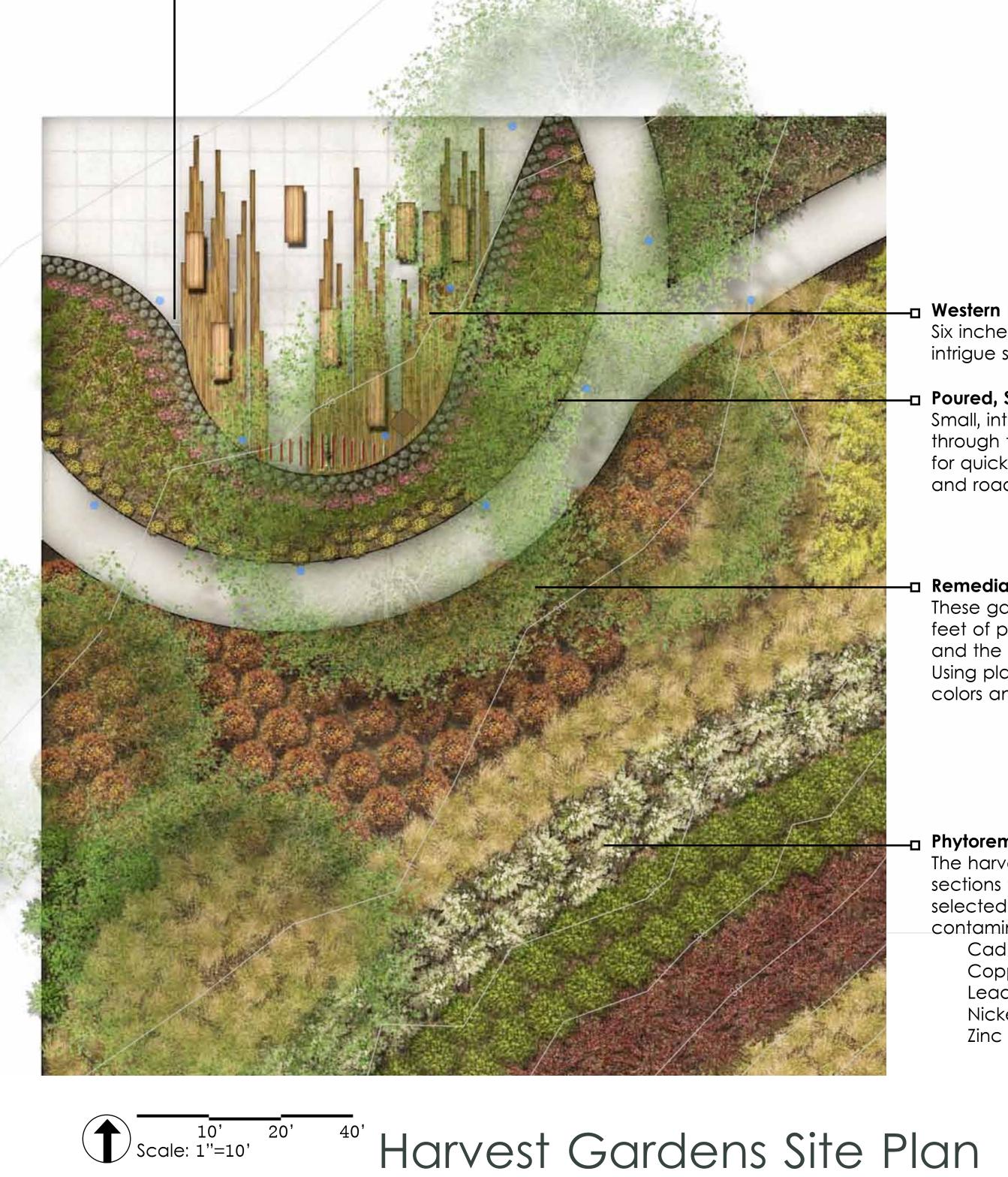
Site Three: Sellwood Riverfront Park, Oak Grove, Oregon Site Size: 3.7 Acres Observation Length: One Hour



Remediation Demonstration Lighting

Each light is connected to indicator pipes that lead under ground beneath the phytoremediation harvesting gardens. These indicator pipes have specific indicators spaced ten feet apart so they are site specific.

Each light is ten feet tall and built out of stainless steel. The bottom four feet are whole stainless steel while the top four feet are the lights made out of plexiglass with stainless steel lining. The LED lights have different colors for each intimate seating breakout space. These different colors reflect the different contaminants that are being taken up by each harvesting section.



- Western Red Cedar Wood Flooring Six inches wide, staggering into poured concrete to intrigue site visitors to the intimate seating space
- Poured, Stamped Concrete Eight Foot Walking Path Small, intimate walking path carrying site visitors through the remediation demonstration gardens for quicker and quaint access to the waterfront and roadways.
- Remediation Demonstration Gardens These gardens keep a distance of at least thirty feet of plantings between pedestrian walkways and the phytoremediation harvesting gardens. Using plants hardy to Portland, they provide vivid colors and textures.

– Phytoremediation Harvesting Gardens The harvesting gardens are separated into three sections that remediate the spaces of the selected heavy metals contaminants. These contaminants are as follows:

Cadmium Copper Lead Zinc

Ornamental Grass Plantings Staggering Into Western Red Cedar Boardwalk The boardwalk consists of main walking spaces that break off into smaller boardwalk and seating areas at each level. Each smaller space is then separated out by mass plantings of ornamental grasses, perennials, and shrubs. These plantings have a teared affect and get larger as they move back. Low lighting in each smaller space illuminates the boardwalk and plantings from the ground up for night time use.

Western Red Cedar Main Boardwalk

The main boardwalks meander from the main poured concrete walking path down to the waterfront boardwalk. These boardwalks range from six feet wide to twenty feet wide for interesting variations at each separate level.

These main boardwalk paths have various bench sizes as well as trash cans for site visitors as well as stainless steel post railings with a six inch wide cedar railing tops. These railings have lighting installed to shine down at the boardwalk to help light the walking paths for site visitors.

Boardwalk Views to Willamette River ____ The southern side of the boardwalks contain open views to the Willamette Riveras well as the remediation demonstration terrace gardens.

The boardwalks meet the main poured concrete path at a contour level of twenty five feet and drop various amounts for each level ranging from two feet to eight feet. The drop off viewing distance from the boardwalk to the river starts at twenty five feet until meeting the waterfront access boardwalk that is level with the river.

Boardwalk Site Plan () Scale: 1''=10' 20' 40'



