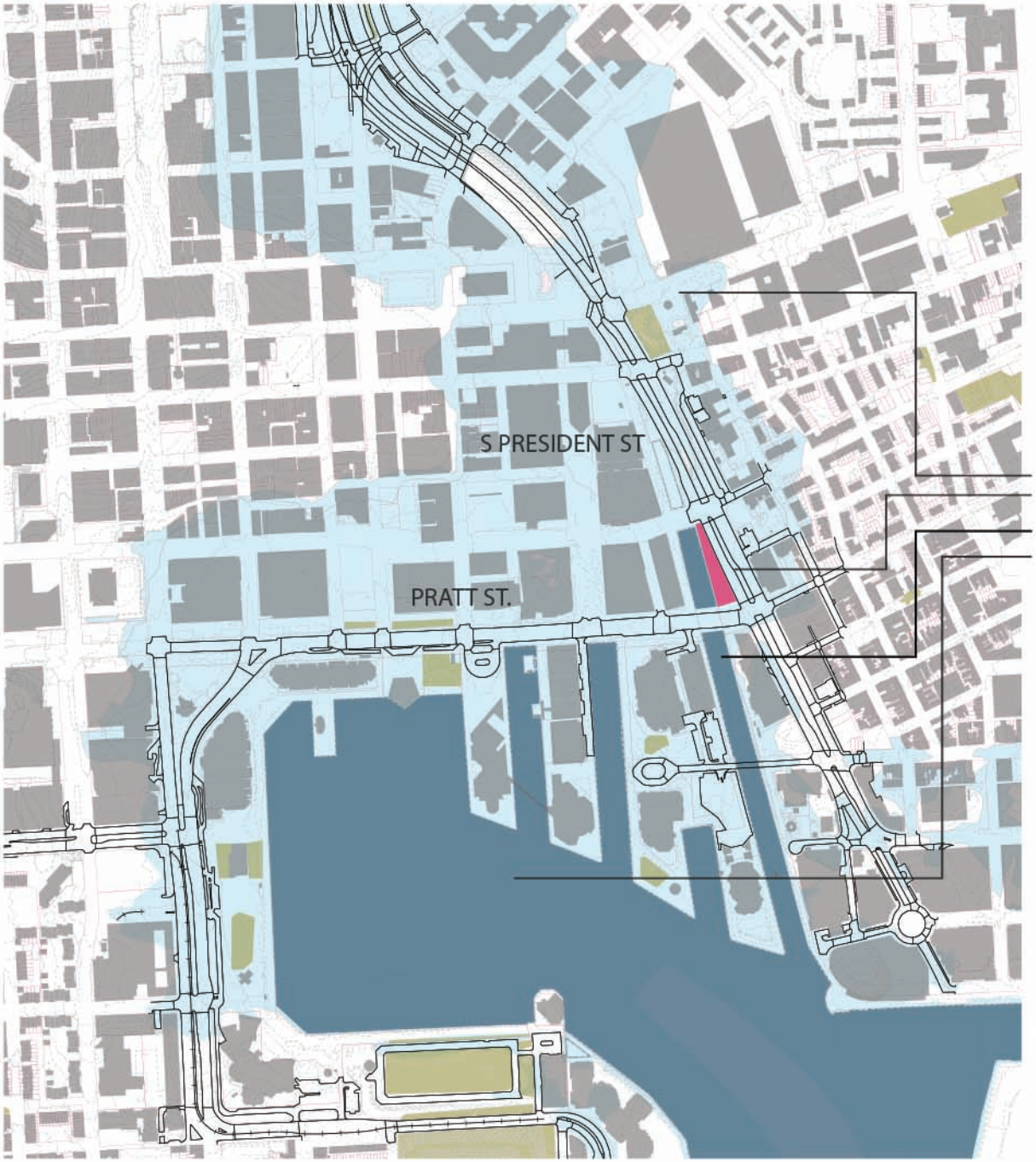
NAME: BALTIMORE INSTITUTE FOR ECOLOGICAL ECONOMICS
LOCATION: BALTIMORE, MD
CATEGORY: GRADUATE SUBMISSION - STUDIO PROJECT
PROJECT SYNOPSIS:

COURSE GOALS:
Comprehensive Building and Site Design: Course content bridges the gap between design and technology, between practice and education, in a studio setting. Explorations include the integration of conceptual and technical aspects of architectural form and assembly, highlighting the ways in which multiple layers of a building design are developed, coordinated and resolved.

PROJECT BRIEF:
Institute for Ecological Economics (IEE) – (a.k.a. - Environmental Research Office): the building as a model for future development; making ecological systems and processes visible/transparent; a "living building, like a tree; minimize the footprint; flexibility in design for future changes and multiple uses; food production on site (where possible); clustering offices around meeting and social areas; an ecological design aesthetic; harnessing ambient energies from site – wind, sun, water; and closing cycles to eliminate waste. Since the IEE scientists frequently study watersheds, wetlands and water processes, they would like to demonstrate the extent to which building can respond to the natural hydrology of a site and nearby watershed features. For the most constrained sites, using the buildings potential living "green" roof as a man-made watershed could be the subject of study and experimentation.

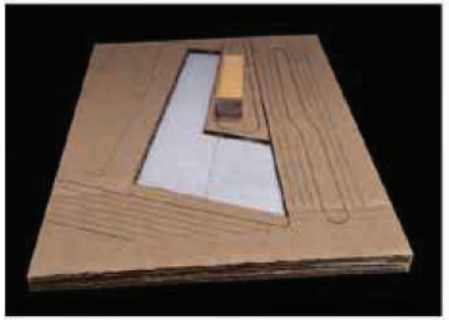
Building Size: 17,000sq ft

STUDENT DESIGN AGENDA:
As a team, we wanted our design to accomplish two major goals: First, to create a net-zero water filtration system to service the building. Second, to have that water filtration system extend into the urban landscape of our site to engage the public in the form of a wetland terrace park. We see our project solution as more than just a building but the designed intersection between public & private, research & education, collection & filtration, and building & landscape.

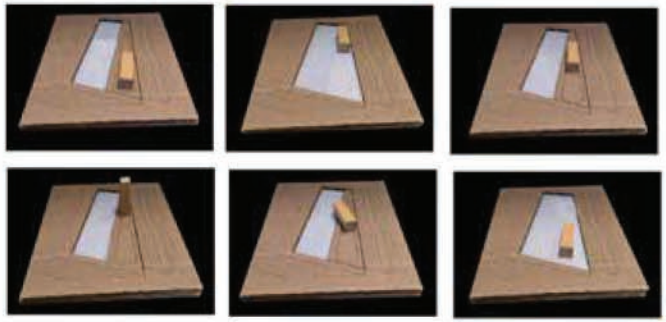


Hydro & Vehicular Flow - Site Map

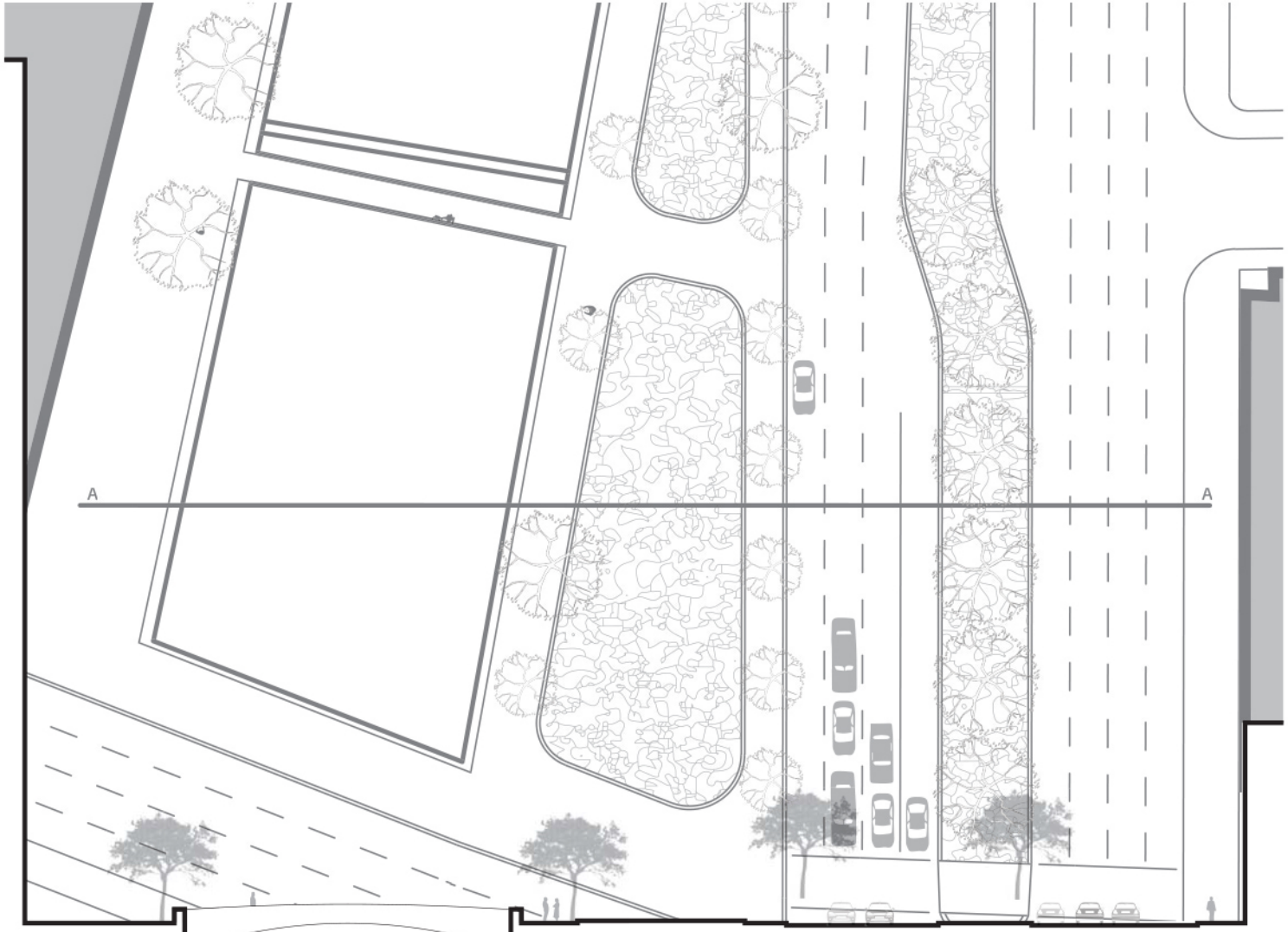
Site Areial



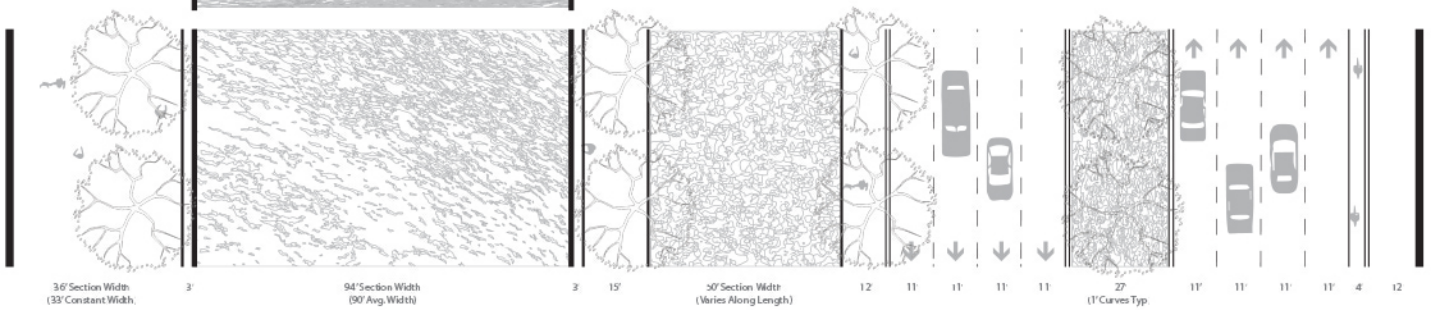
Canal Engagement Massing Study



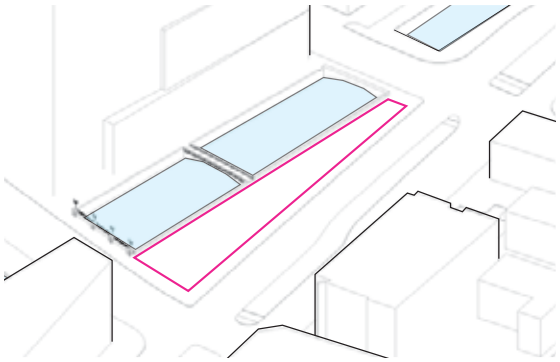
Existing Condition



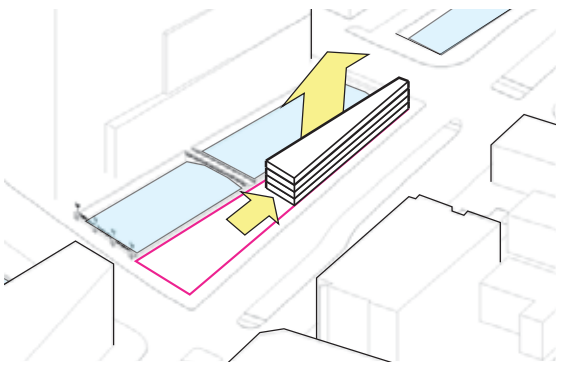
Section A-A



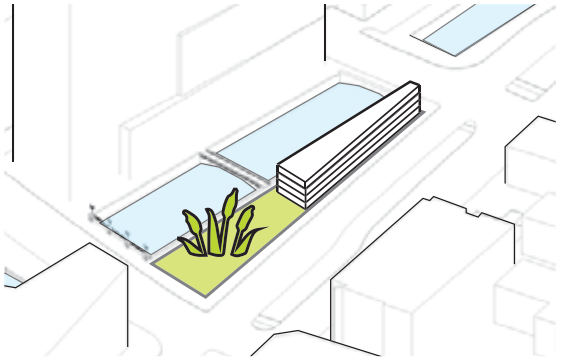
Major Design Moves



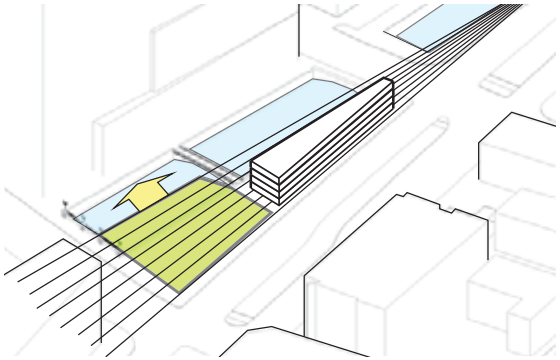
Original Site



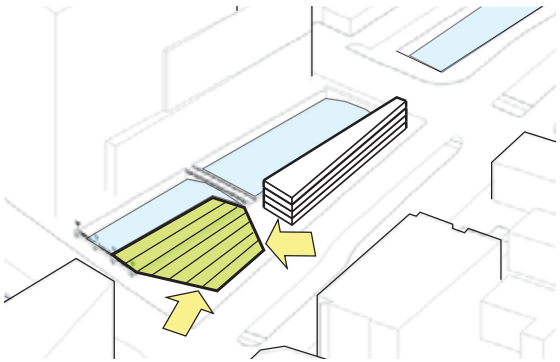
Densify Program



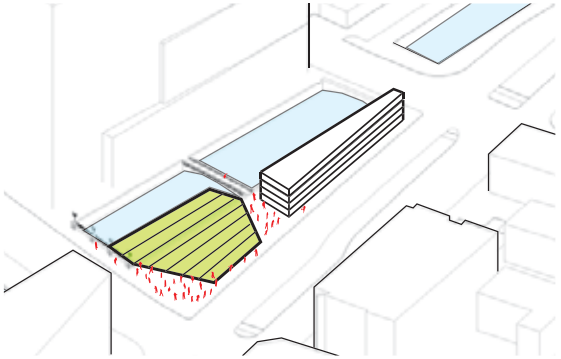
Restore Wetland



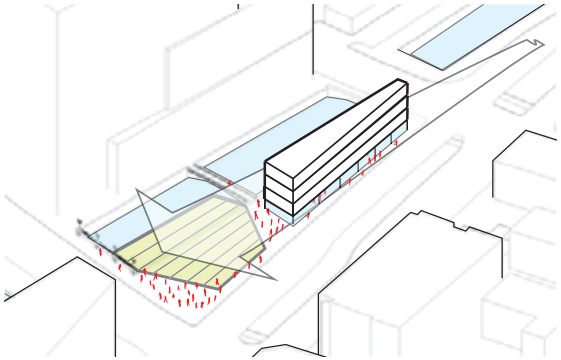
Terrace Wetland



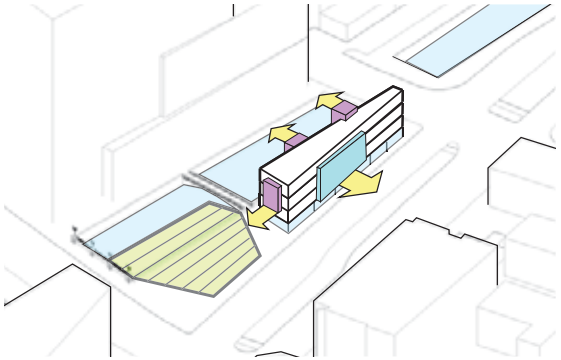
Sculpt Wetland



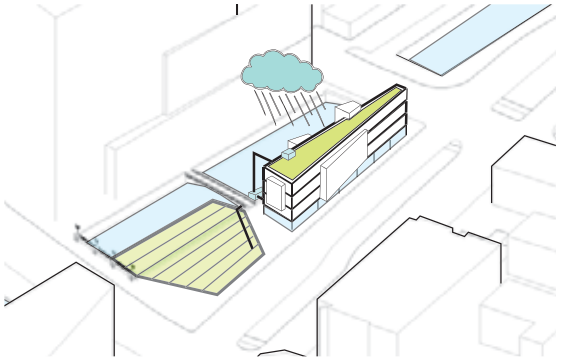
Design Public Zones



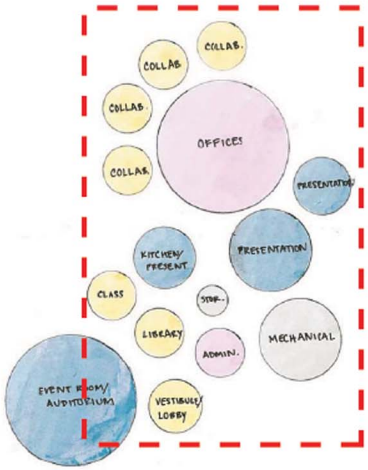
Ground Floor Transparency

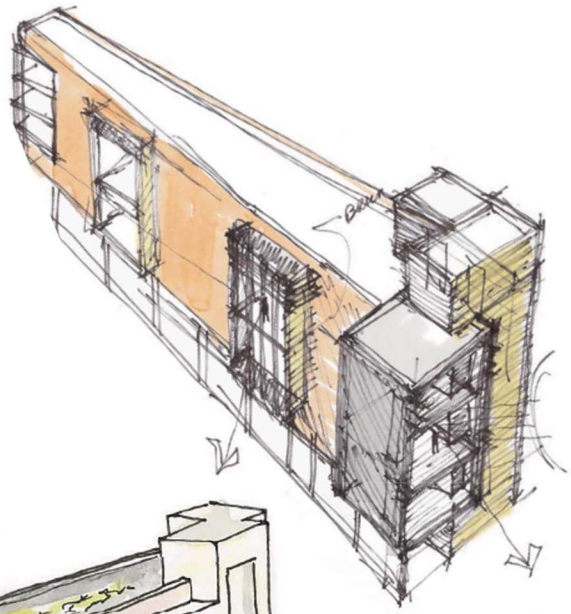


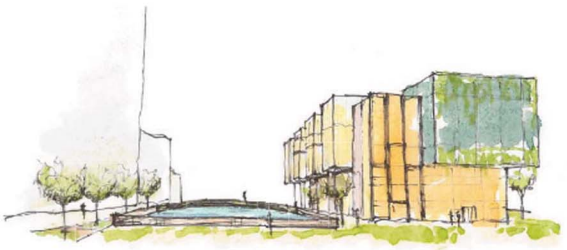
Addative Program Zones

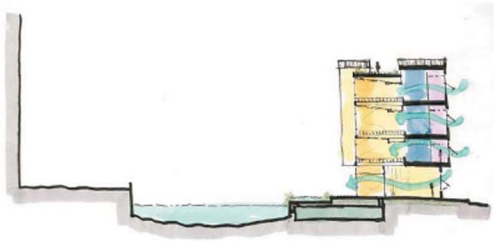


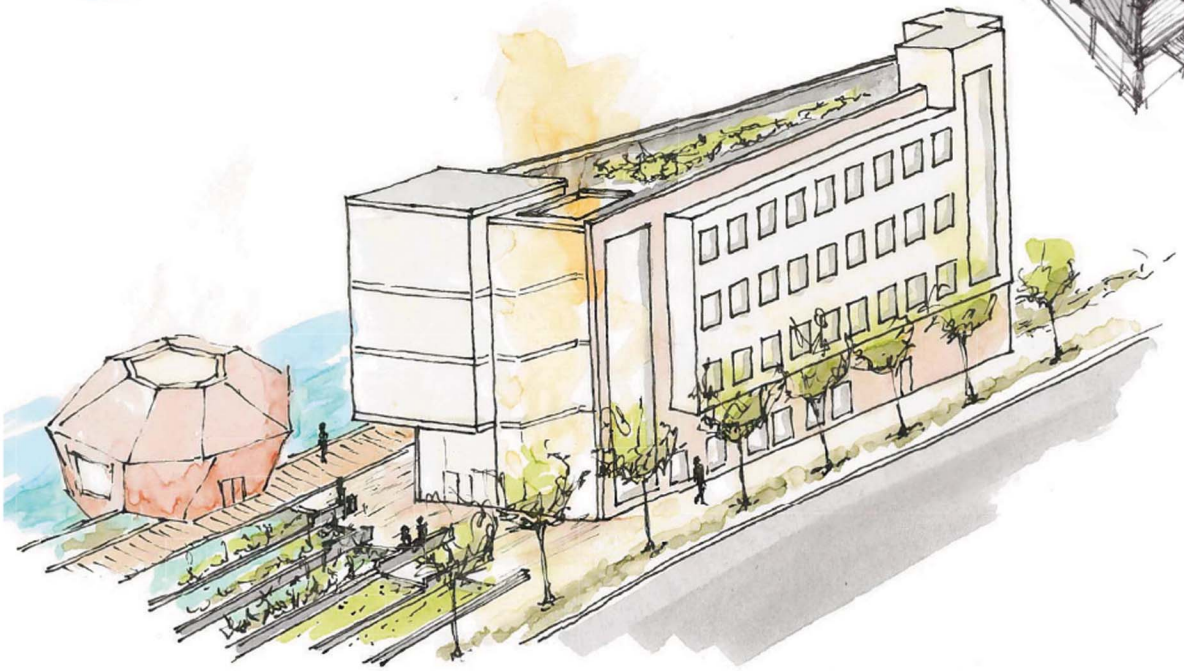
Closed Loop Water System

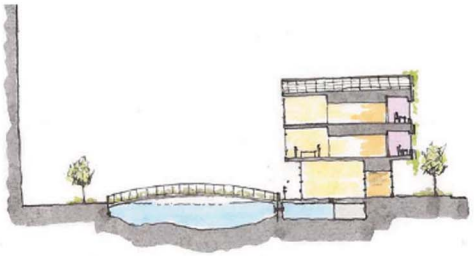












SECTION A-A
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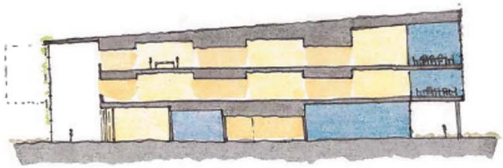

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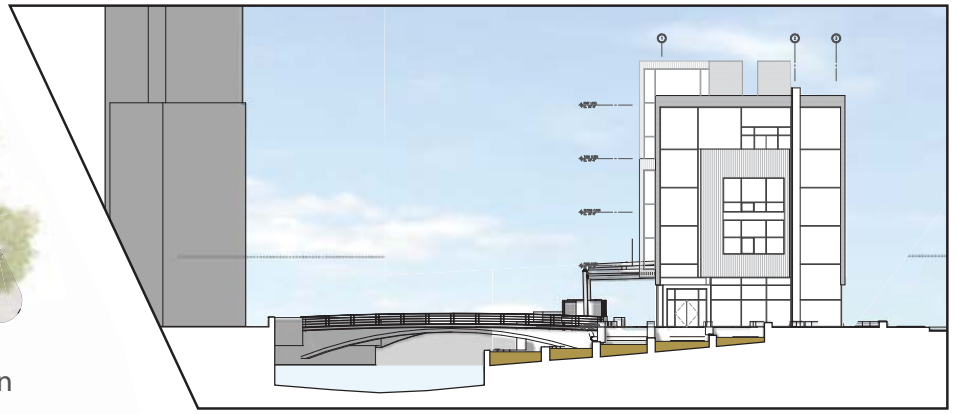
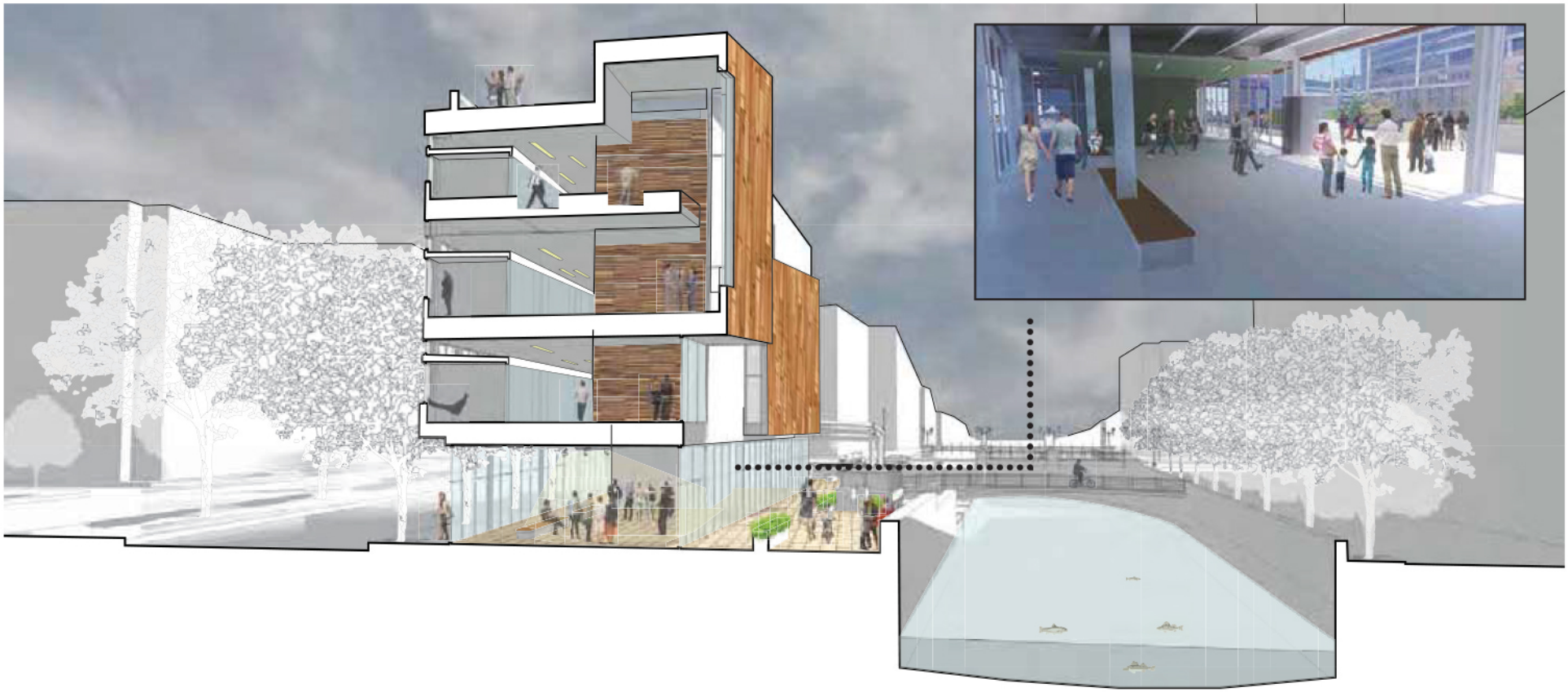
Research Center

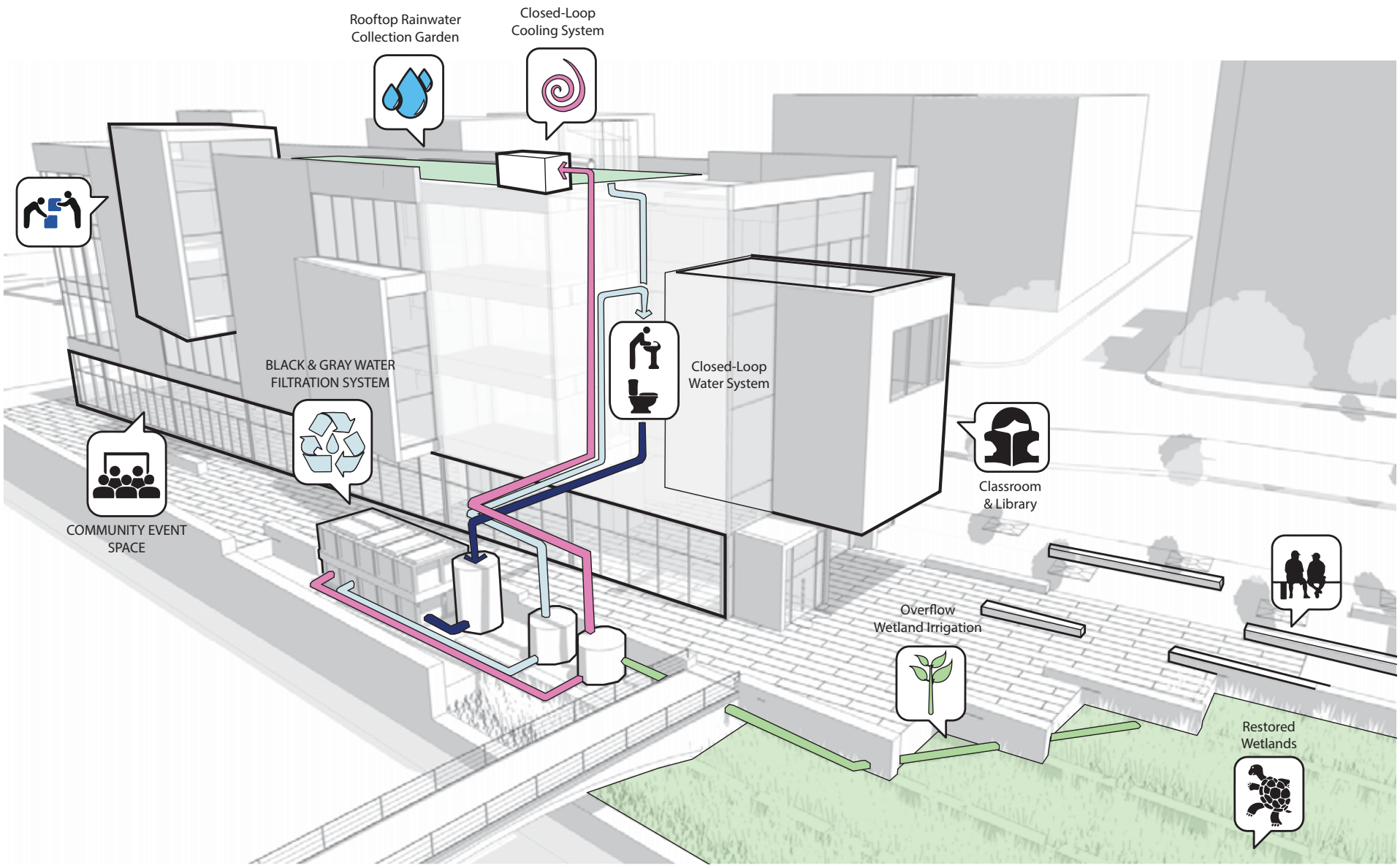
Proposed Site Plan

Public Wetland Engagement Park

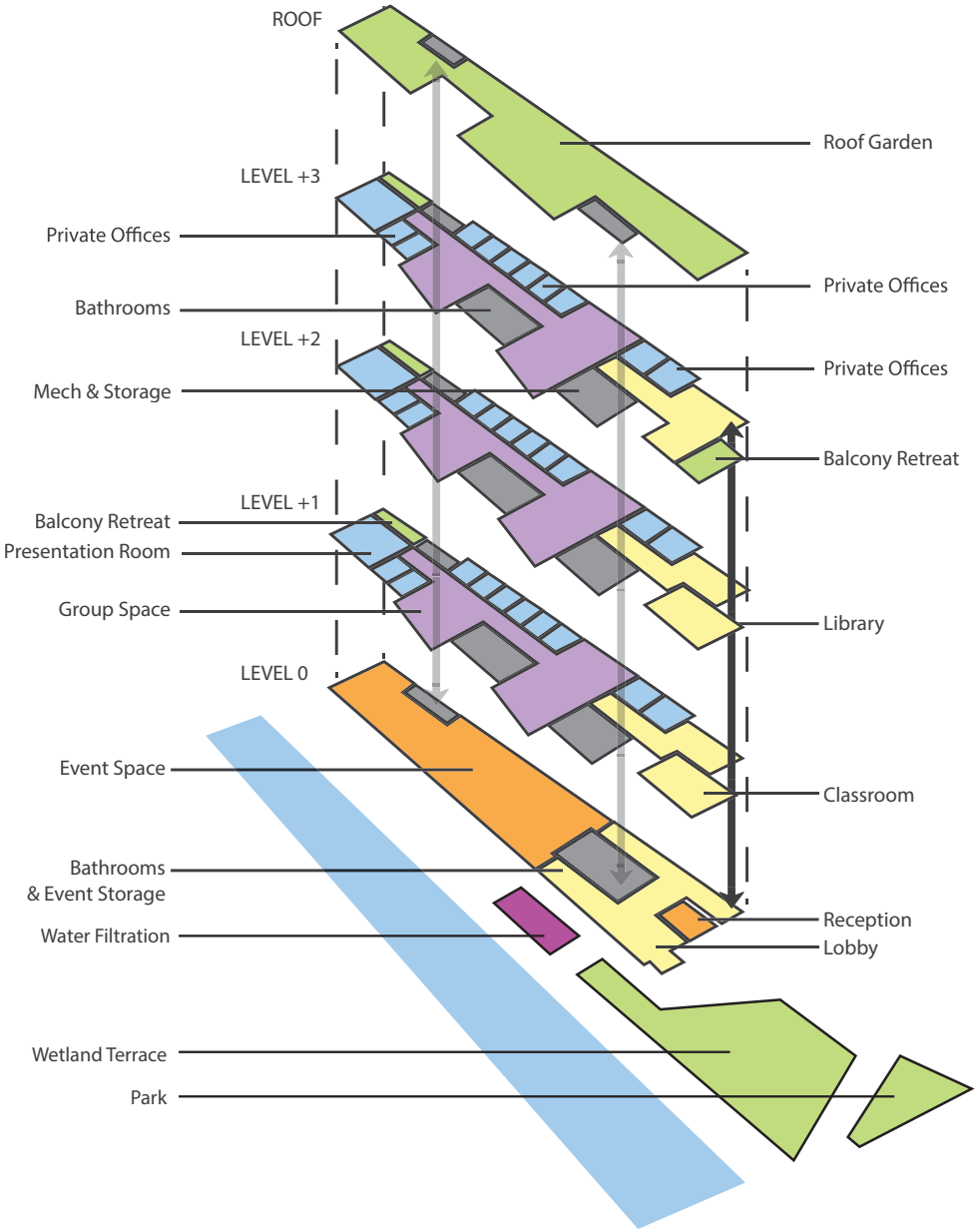




Integrated Water Filtration System

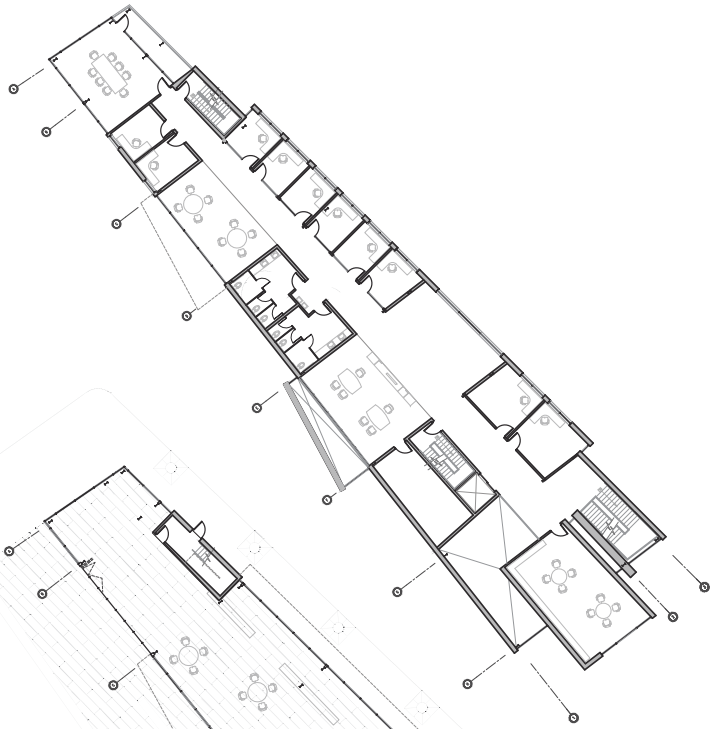


Program

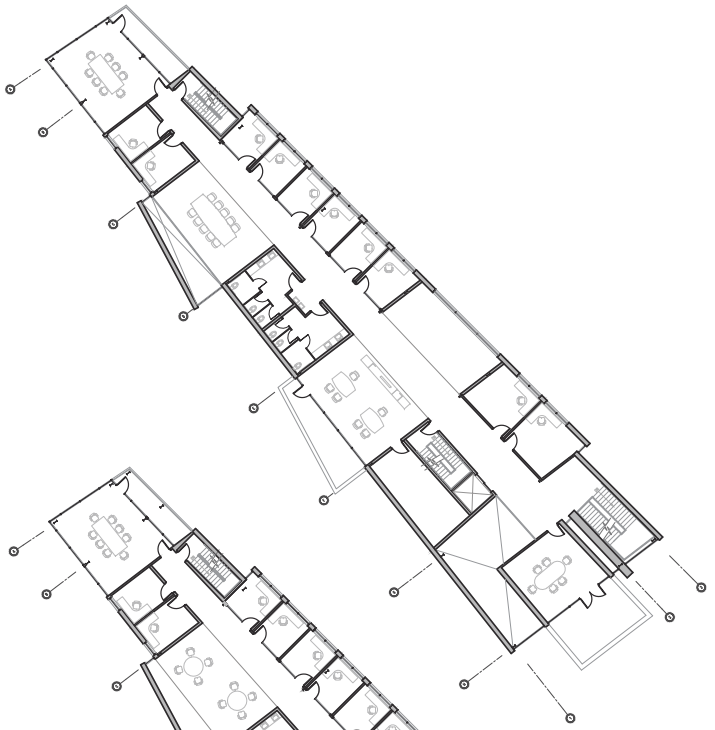

ROOF
Roof Garden
LEVEL +3
Private Offices
Private Offices
Bathrooms
LEVEL +2
Private Offices
Mech & Storage
Balcony Retreat
LEVEL +1
Balcony Retreat
Presentation Room
Group Space
Library
LEVEL 0
Event Space
Classroom
Bathrooms
& Event Storage
Reception
Water Filtration
Lobby
Wetland Terrace
Park

Floor Plans

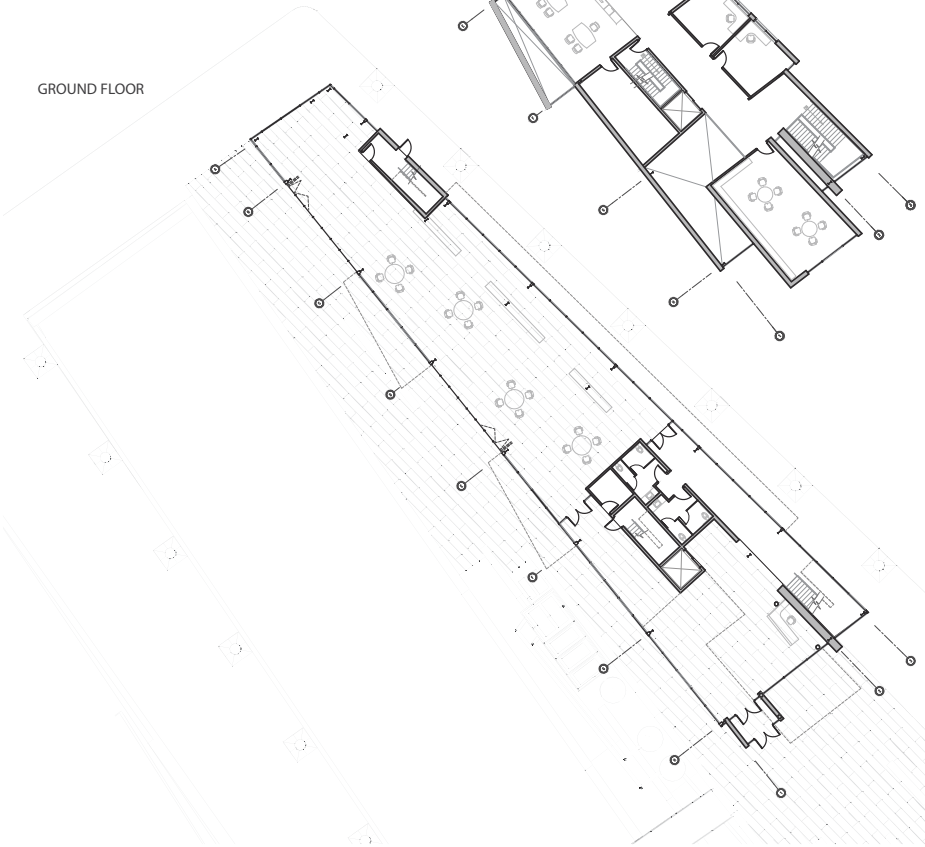
FIRST FLOOR



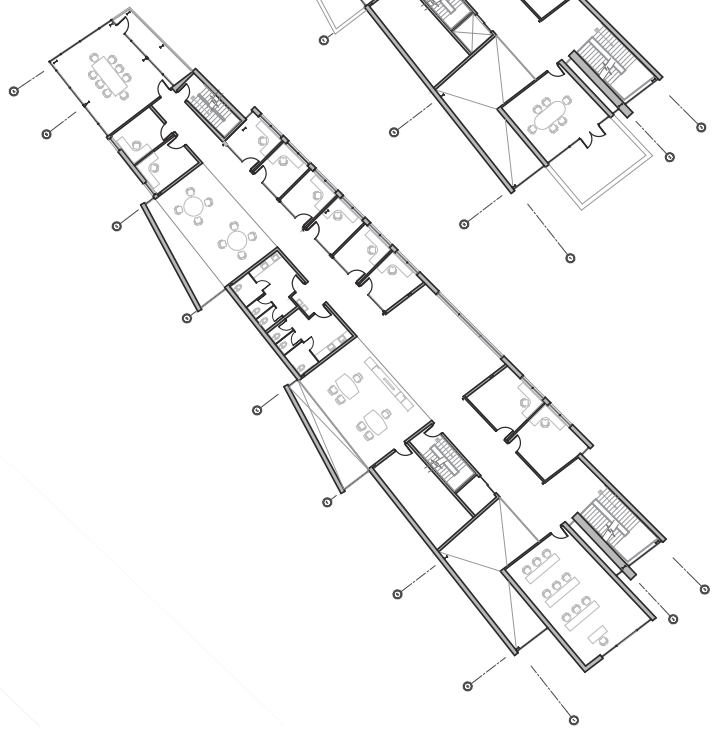
THIRD FLOOR



GROUND FLOOR



SECOND FLOOR



Structural & Cross Ventilation Systems