

SELECTED WORKS

2026

PORTFOLIO

WILLIAM LIN

Civil Engineering · Urban Design · Planning

North Carolina State University

B.S. Civil Engineering 2027

Minor Landscape Architecture

ABOUT

WILLIAM LIN



I am a **Civil Engineering undergraduate student** at NC State University with a **minor in Landscape Architecture**, interested in the intersection of infrastructure, urban design, and community development. My work explores how technical systems and spatial design can shape more livable, connected cities.

Through projects in **planning, design, and engineering**, I approach problems at multiple scales, from corridor-level development strategies to human-centered public space. I am particularly interested in interdisciplinary work that bridges engineering, architecture, and urban planning.

Interests: Urban Design · Infrastructure · Real Estate Development · Cities

URBAN DESIGN & DEVELOPMENT

Large-scale planning, development strategy, and city systems



BLUE RIDGE BIOMEDICAL CORRIDOR

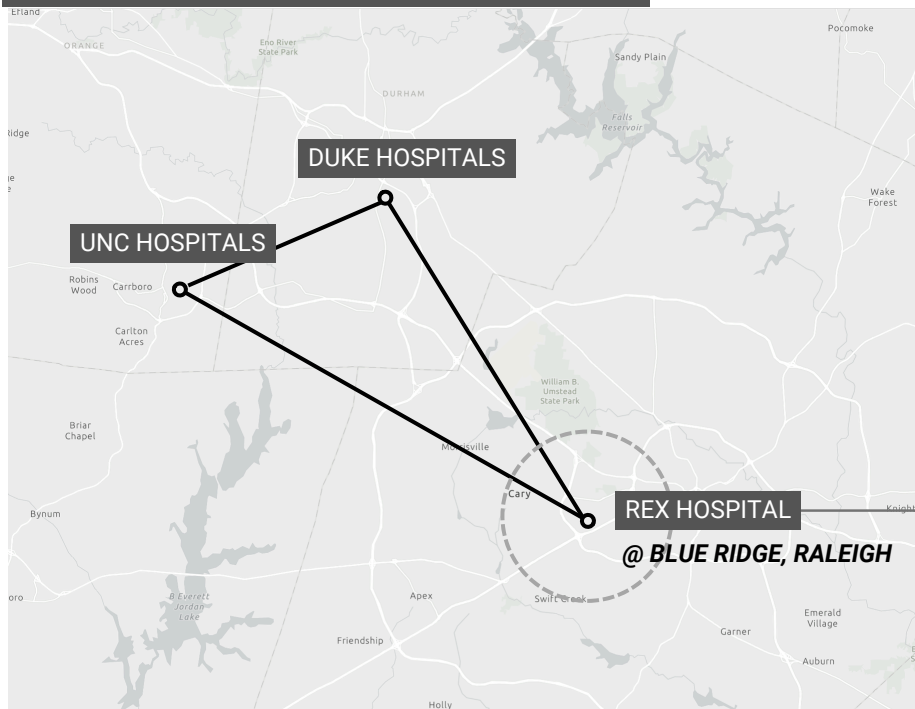
Urban Development Proposal

Role: Graphic Design, Development Strategy

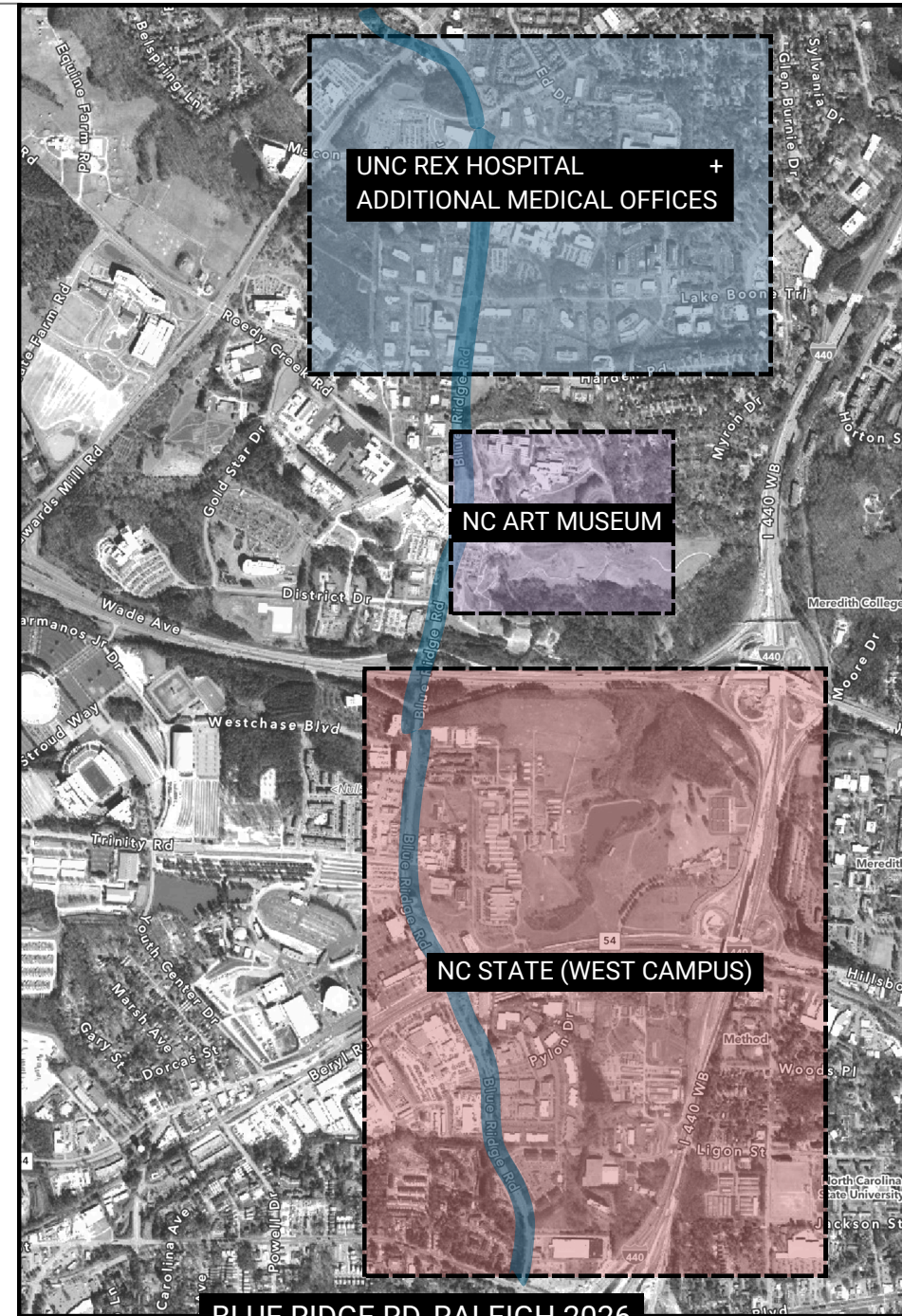
RED 512 Spring 2025, Capstone Group Project

This project revisits a previously proposed Blue Ridge Corridor Initiative that has since stalled. Building on existing institution anchors and state-owned land, the proposal reframes the corridor as a coordinated biomedical district, emphasizing mixed-use development, economic viability, and strengthened governance through a restructured corridor authority.

TRIANGLE LIFE SCIENCES ANCHORS



**A CENTRAL LINK BETWEEN UNC, DUKE, AND REX
A NEW BIOMEDICAL NEXUS.**



BLUE RIDGE RD, RALEIGH 2026

SYSTEMS + OPPORTUNITIES

Development is organized along a central corridor, activating key institutional nodes through mixed-use programming and improved connectivity



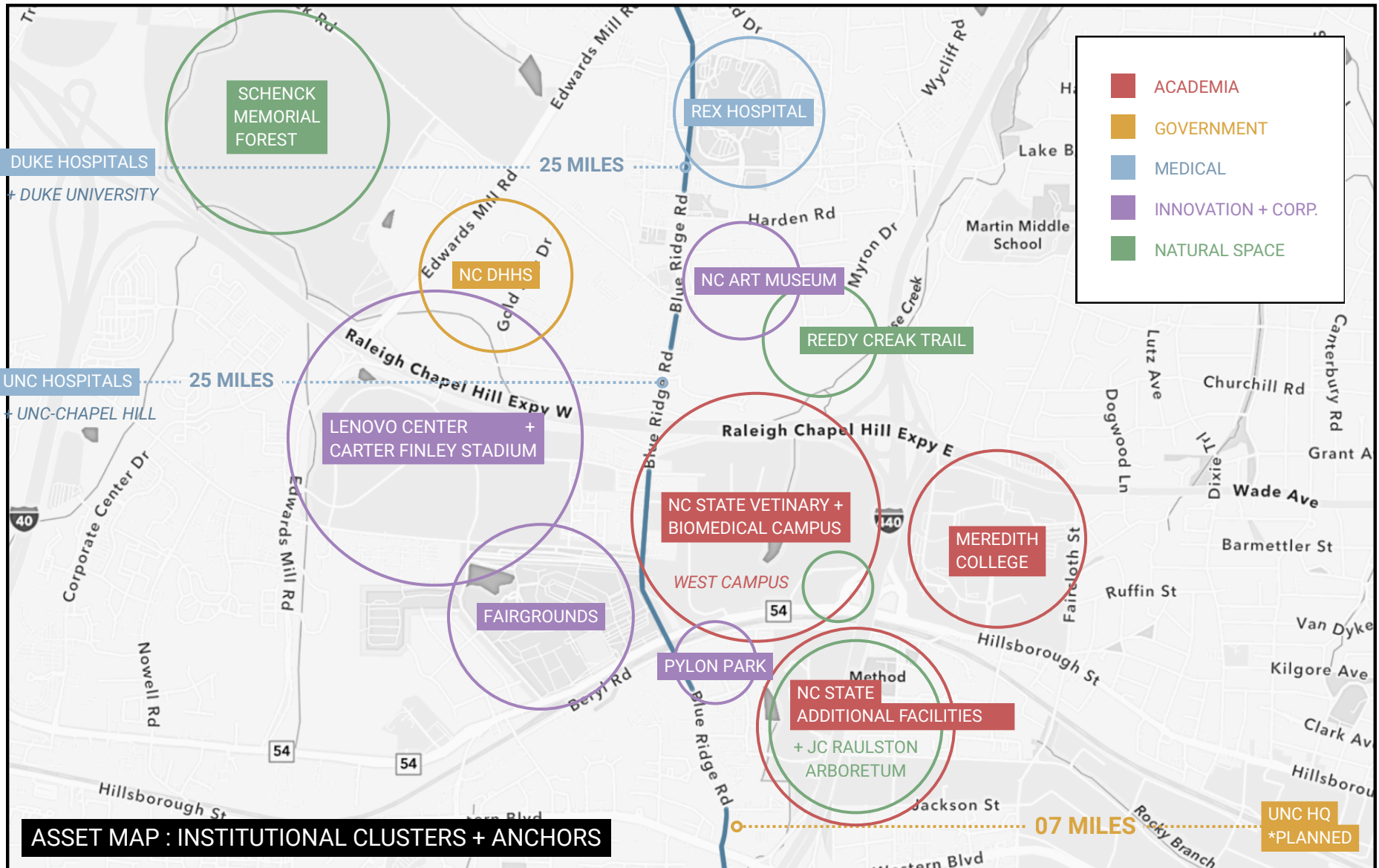
Create a formal corridor identity tied to healthcare and innovation

UNC Rex Hospital as Focal Point, **Annually...**

SERVES **34000** INPATIENT STAYS

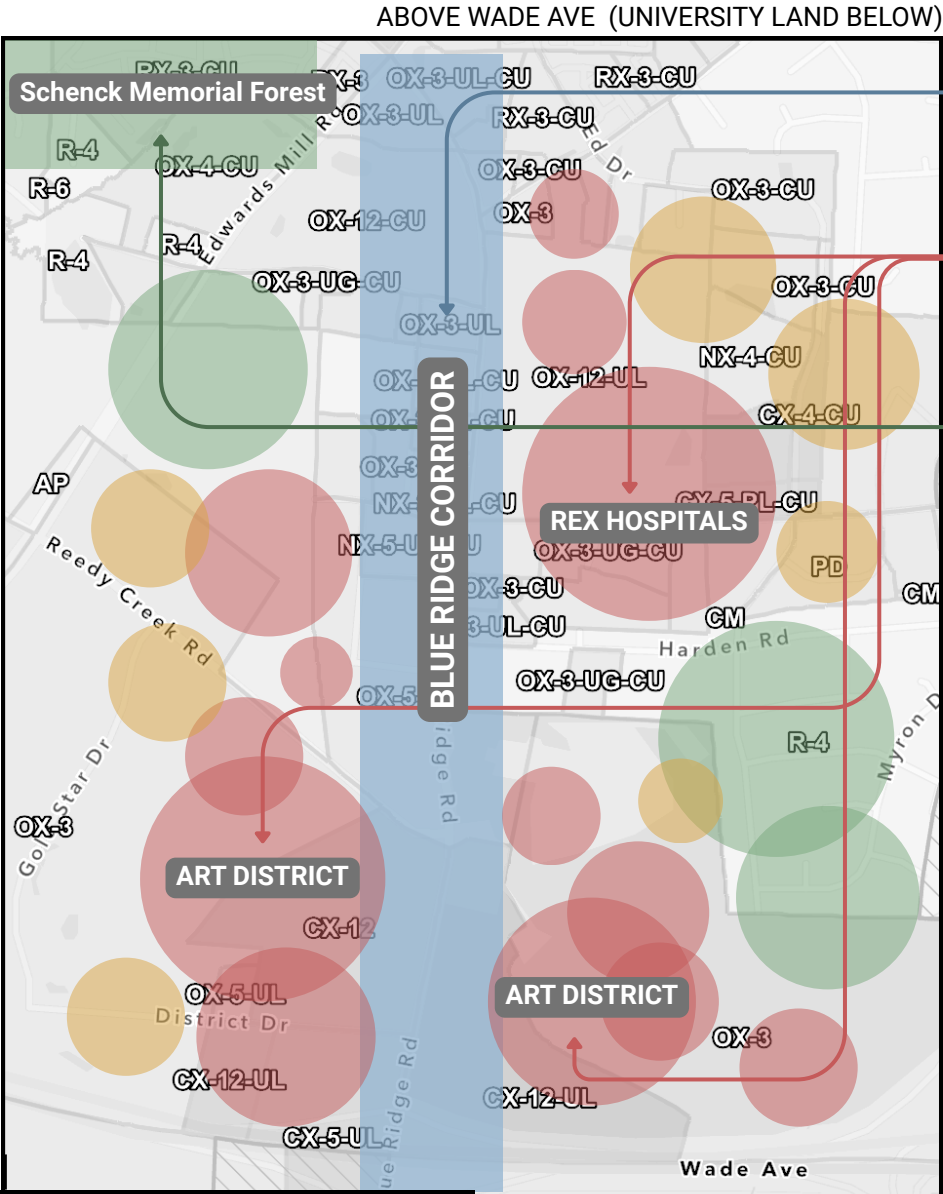
SERVES **200000** OUTPATIENT VISITS

EMPLOYS **6400** WORKERS



ZONING + DEVELOPMENT STRATEGY

Corridor intensification leverages existing infrastructure, while node-based density supports concentrated employment and housing clusters. Frontage conditions reinforce a continuous urban edge, promoting walkability and a cohesive streetscape.



CORRIDOR OVERLAY STRATEGY

KEY MOVES

- Targeted upzoning along the Blue Ridge corridor
- High-density mixed-use nodes at institutional anchors
- Transition zones to integrate surrounding neighborhoods

CORE CORRIDOR

- Mid-to-High density mixed-use
- Strong frontage rules

NODE AREAS

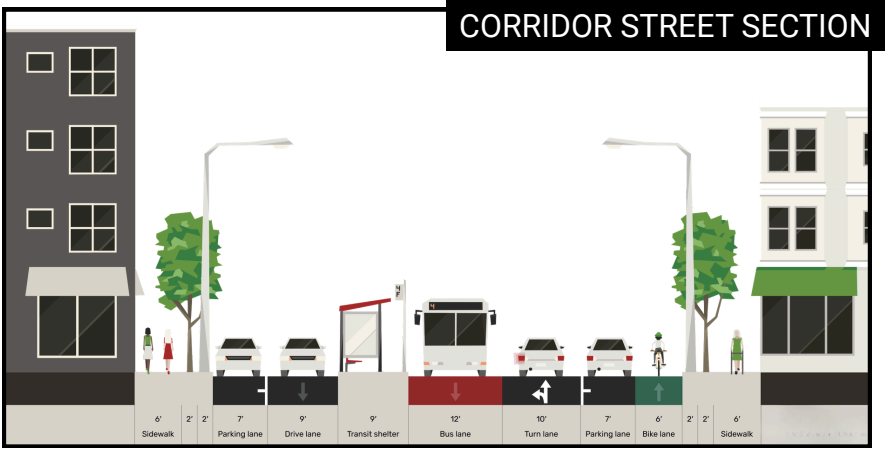
- Highest Density
- Major Development Clusters

TRANSITION AREAS

- Moderate Density
- Gradual Transition to Lower Density

GREEN SPACE

- Open Areas
- Protected Greenways



Street design reinforces UL/UG frontage conditions through continuous building edges and pedestrian activity.

The corridor is designed as a multimodal urban spine, prioritizing transit, walkability, and active frontages. Street design reinforces zoning strategies by supporting higher density, reducing car dependency, and creating a continuous public realm.

E.S. KING VILLAGE REDEVELOPMENT

Mixed-Use Campus Edge Development

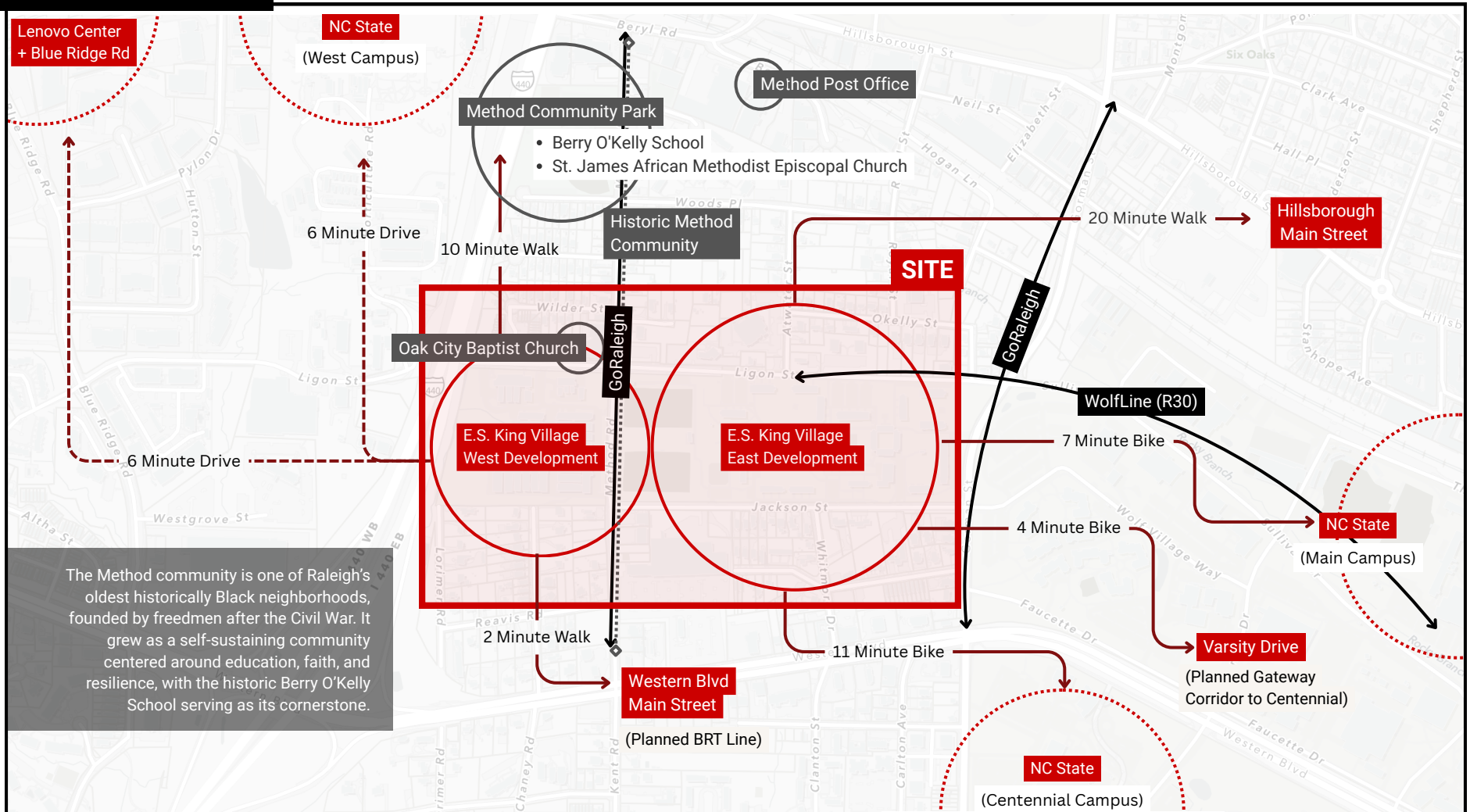
Role: Site Planning, Development Strategy, Maps

RED 512 Spring 2025, Capstone Group Project

Redevelopment of Existing Low-Density Student Housing

This project reimagines a ~40-acre NC State-owned site as a walkable, mixed-use academic village that addresses demand for student, graduate, and workforce housing. Positioned between Main and Centennial Campus and adjacent to the historic Method community, the proposal introduces a phased redevelopment strategy integrating housing, retail, open space, and community infrastructure.

SITE CONTEXT



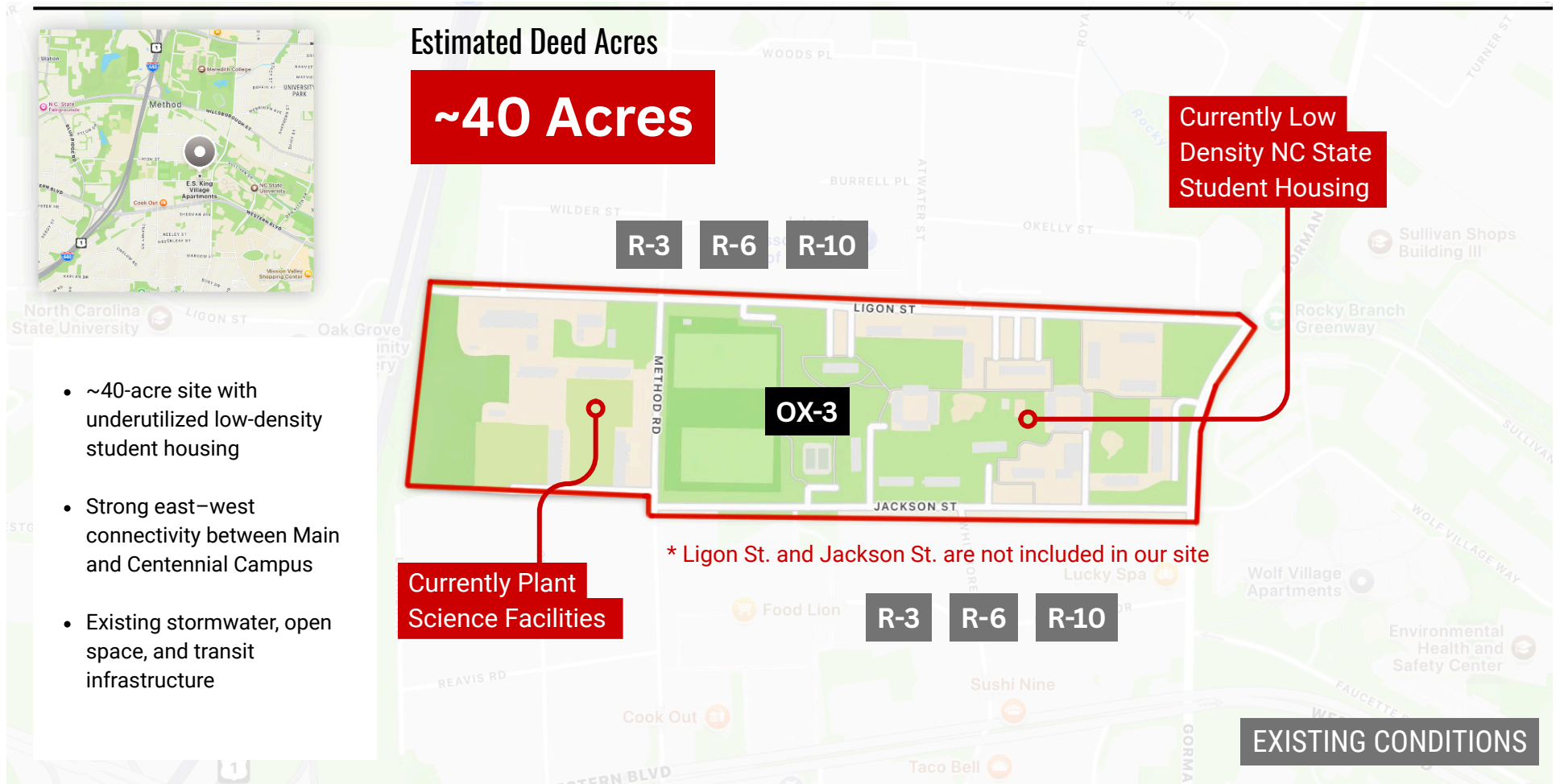
High-Growth Market

Raleigh ranks among the fastest-growing U.S. metros, driven by tech, education, and biotech job creation.

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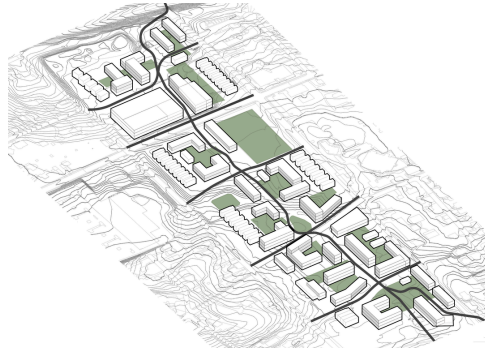
In-migration of families & students,
strong grad student/faculty housing
need.

- Strategic location between Main and Centennial Campus
- Strong demand for student and workforce housing
- Existing transit + future BRT access

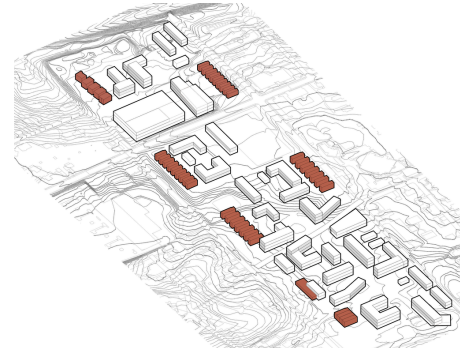


KEY DESIGN RESPONSE	
	The redevelopment strategy concentrates density internally, establishes a central mobility spine, and integrates open space to create a walkable, mixed-use campus district.

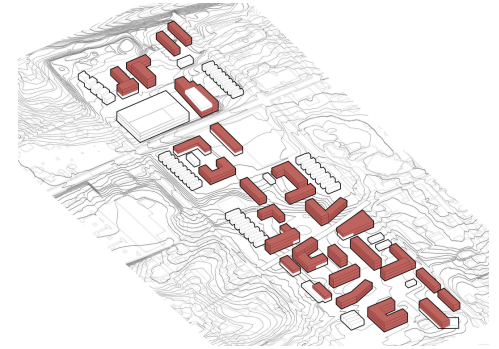
MASTERPLAN



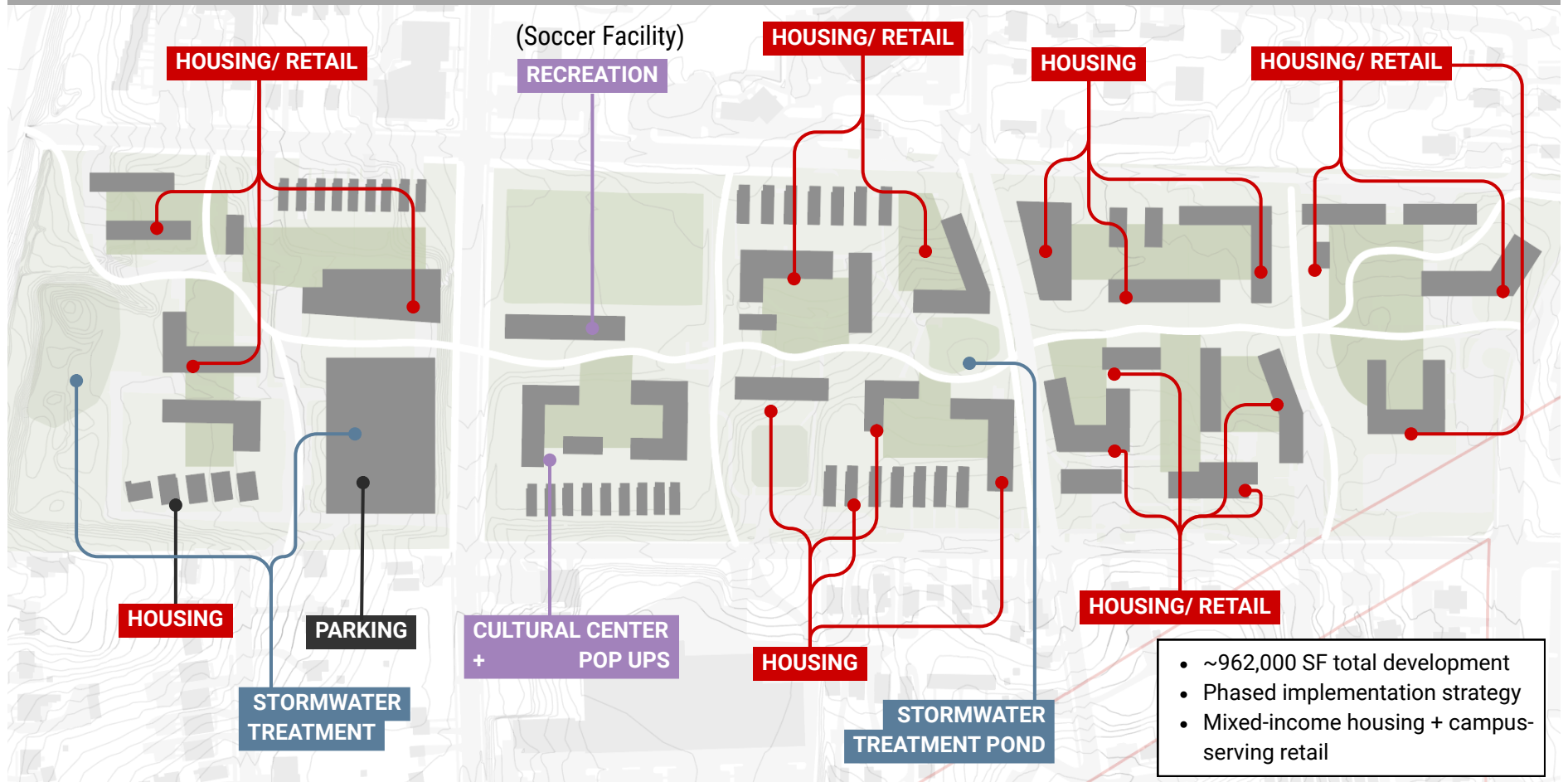
OPEN SPACE + MOBILITY NETWORK



TOWNHOUSES



APARTMENTS



INFRASTRUCTURE & SYSTEMS

Technical and conceptual approaches to infrastructure design

03

THE AGORA

Mixed-Use Sustainable Development System

Role: Graphics, Sustainability Features

ASCE Sustainable Solutions 2025 Group Project

The Agora is a mixed-use redevelopment that integrates housing, public space, and infrastructure into a unified sustainable system. Designed as a walkable community hub, the project combines renewable energy, water reuse, multimodal transportation, and public amenities to create a resilient and socially activated urban environment.

P I L L A R S

HEDONISTIC SUSTAINABILITY

Sustainability enhances quality of life

DEMOCRATIC URBANISM

Public space and accessibility for all

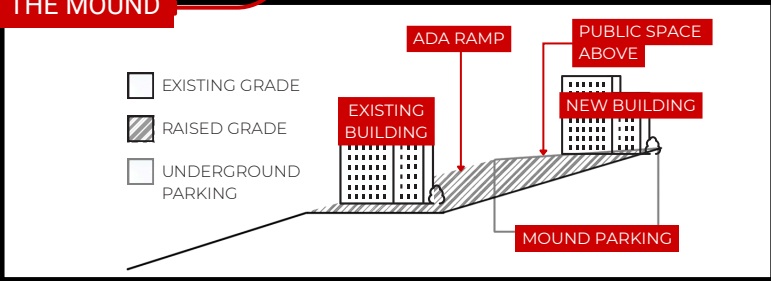
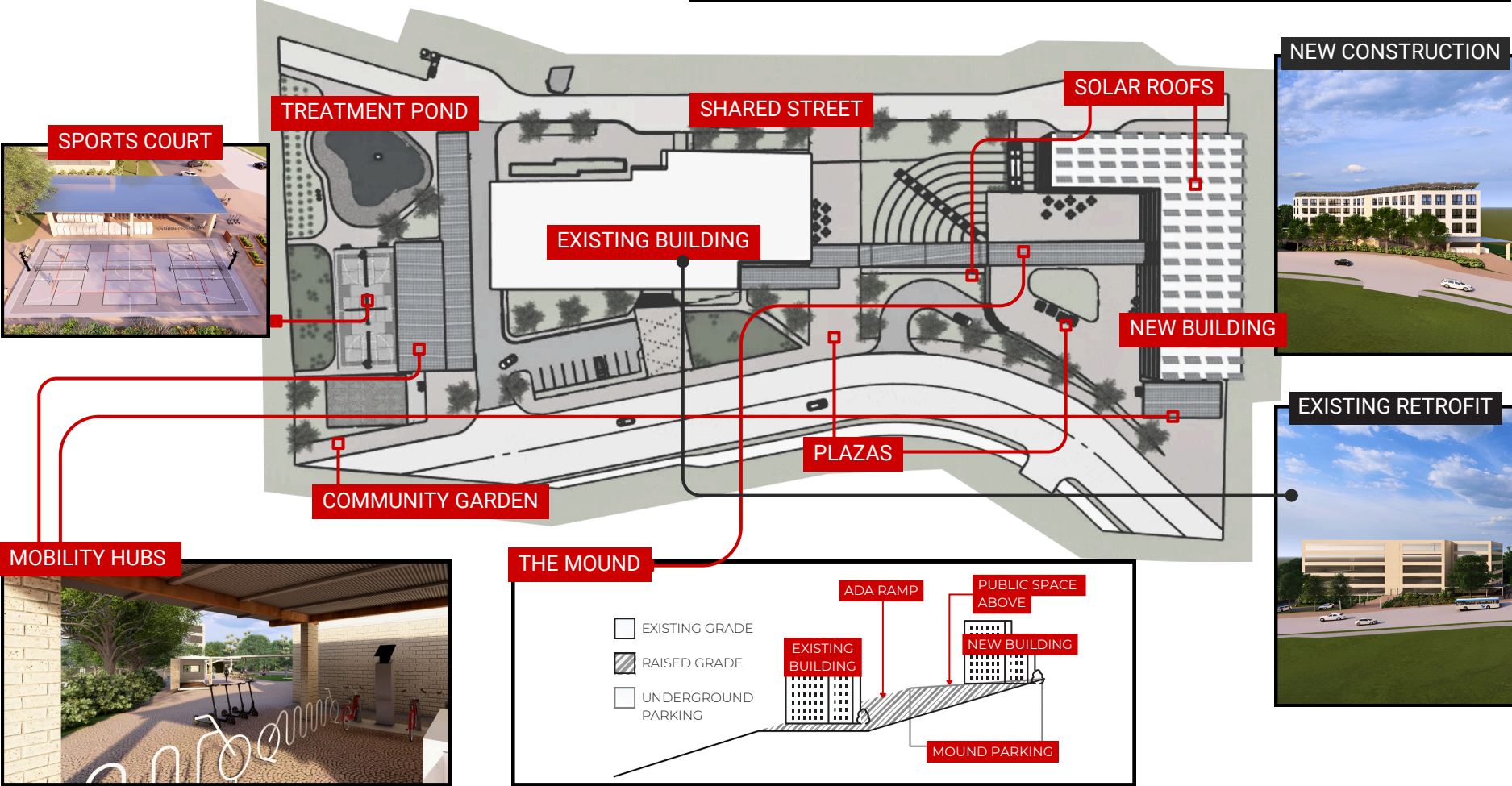
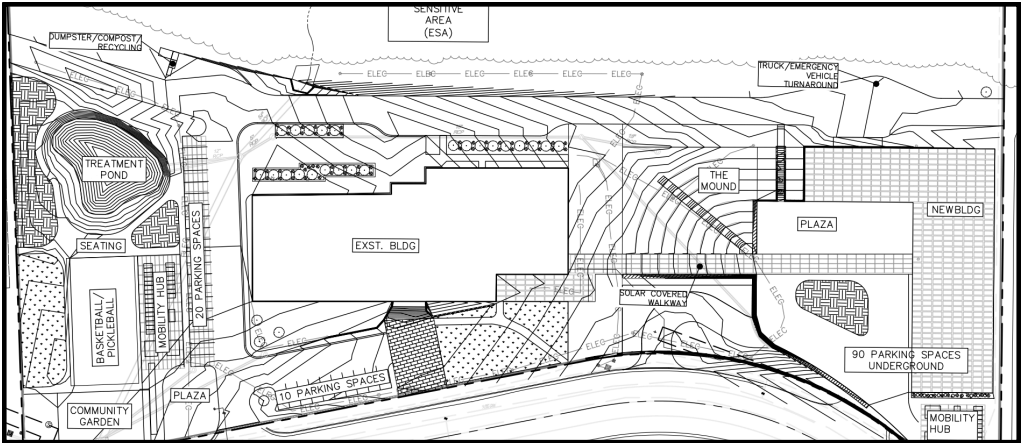
EFFORTLESS CONNECTIVITY

Pedestian-first, multimodal system



MASTERPLAN

The masterplan organizes the site around a central public spine, integrating mixed-use buildings, open space, and infrastructure systems. Density is concentrated around active nodes while circulation prioritizes pedestrians and cyclists. Environmental systems are embedded throughout the site, transforming infrastructure into visible and experiential elements.



SYSTEMS + METRICS

\$40M
Project Value

- 88 residential units (40% affordable)
- 22,000 SF retail
- 32,000 SF public space

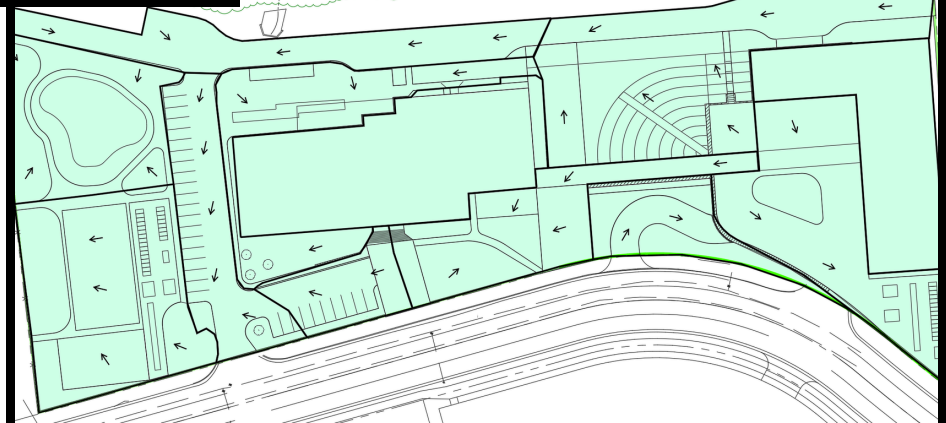
- 68% renewable energy
- 40% water reuse
- 75% waste reduction

ENERGY SYSTEMS



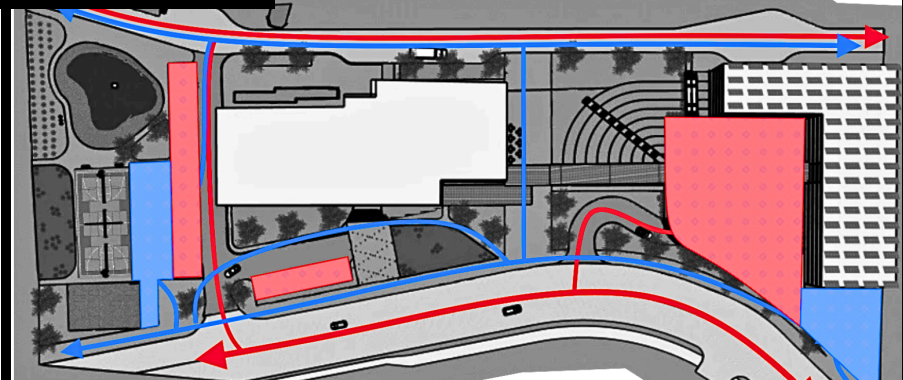
Solar and piezoelectric systems generate up to **68% of site energy**, supported by a building management system and microgrid infrastructure.

STORM WATER



Rainwater harvesting and greywater recycling supply up to **40% of total water demand while reducing runoff** and improving water quality.

TRANSPORTATION



VEHICULAR PARKING
MOBILITY HUB
VEHICLE ROUTES
BICYCLE ROUTES

A multimodal network prioritizes pedestrians and cyclists, supported by shared streets and mobility hubs that enhance regional connectivity.

PUBLIC REALM



Over 32,000 SF of public open space creates a network of plazas, recreational areas, and community amenities that activate the site socially.

Together, these systems reduce environmental impact, improve efficiency, and enhance everyday user experience.

MODELING & BUILT WORK

Spatial modeling, form exploration, and constructed systems



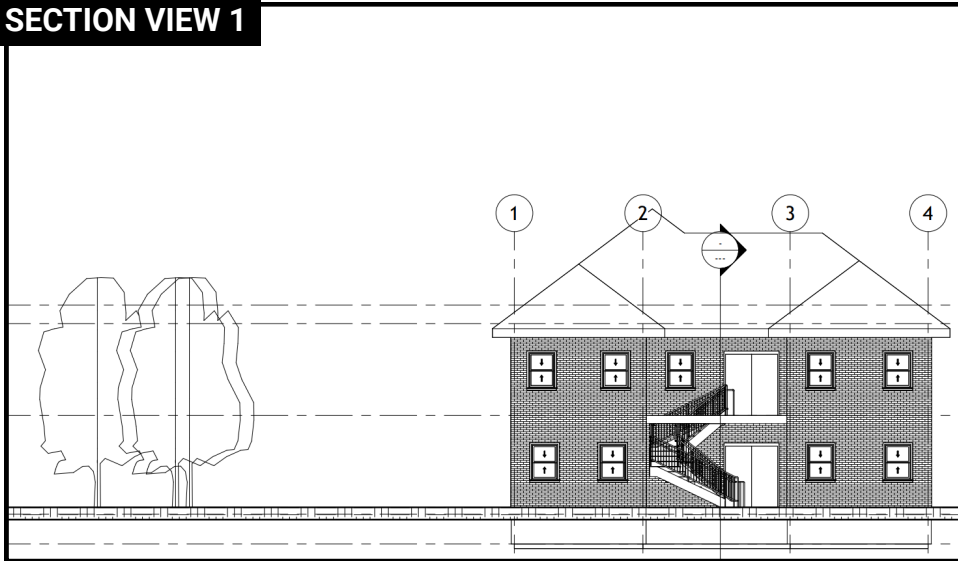
04

REVIT MODELING PRACTICE

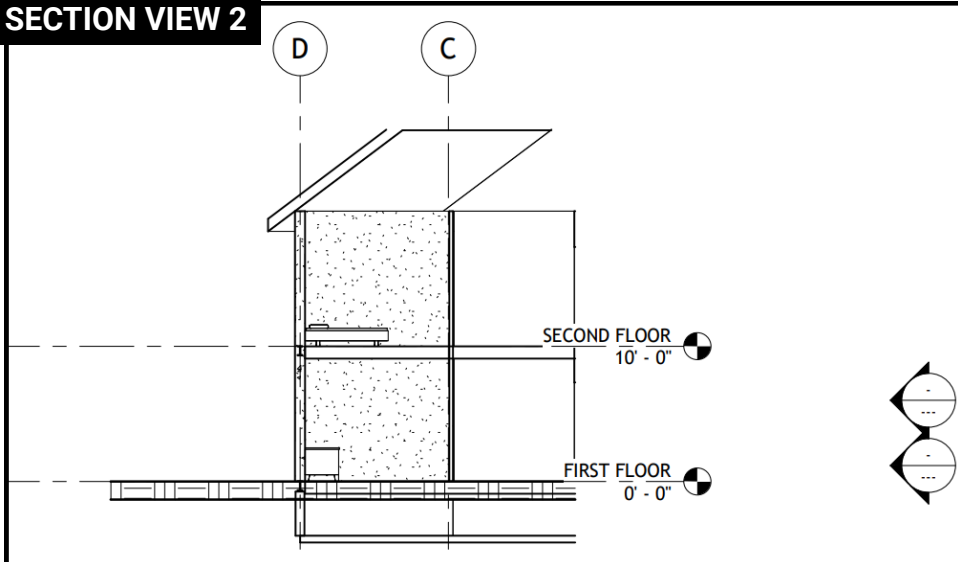
Revit House Model Plans

CE 367, Spring 2026

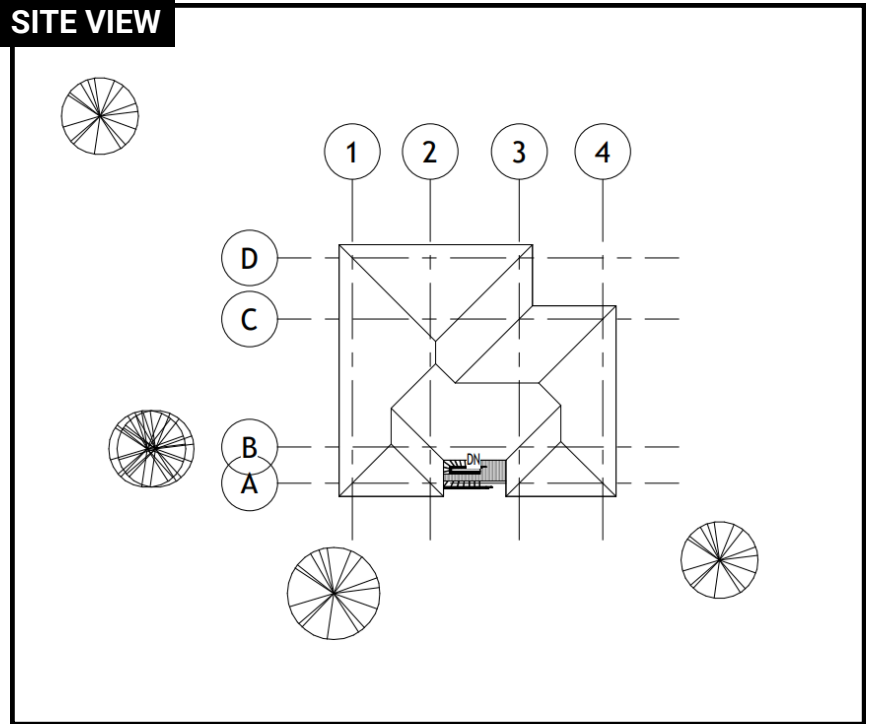
SECTION VIEW 1



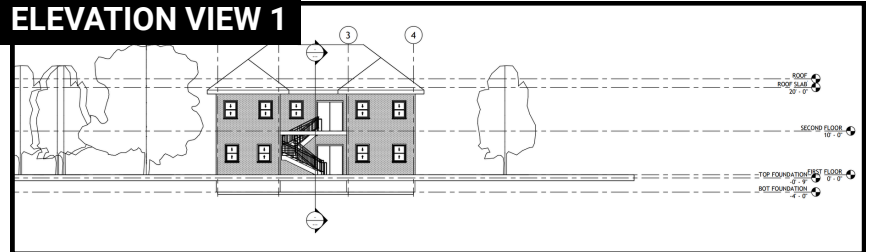
SECTION VIEW 2



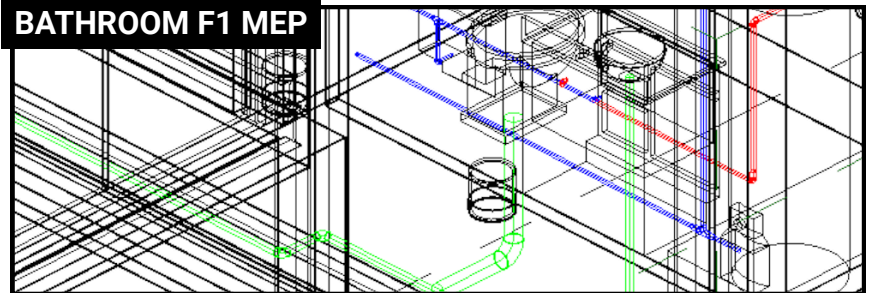
SITE VIEW



ELEVATION VIEW 1

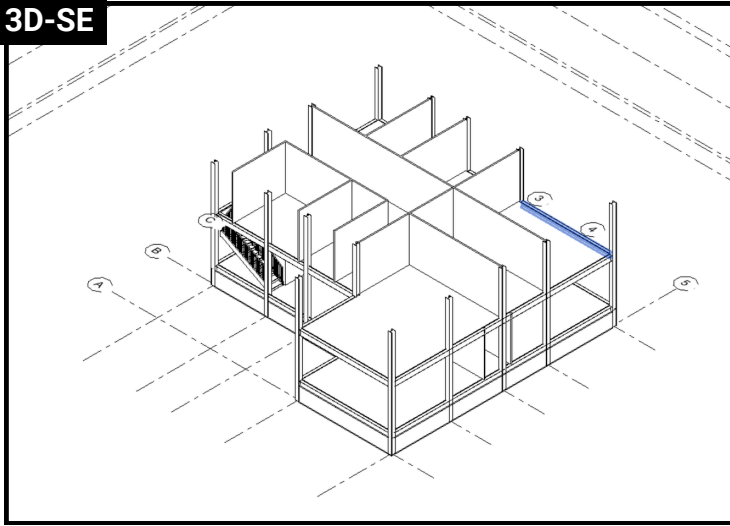


BATHROOM F1 MEP

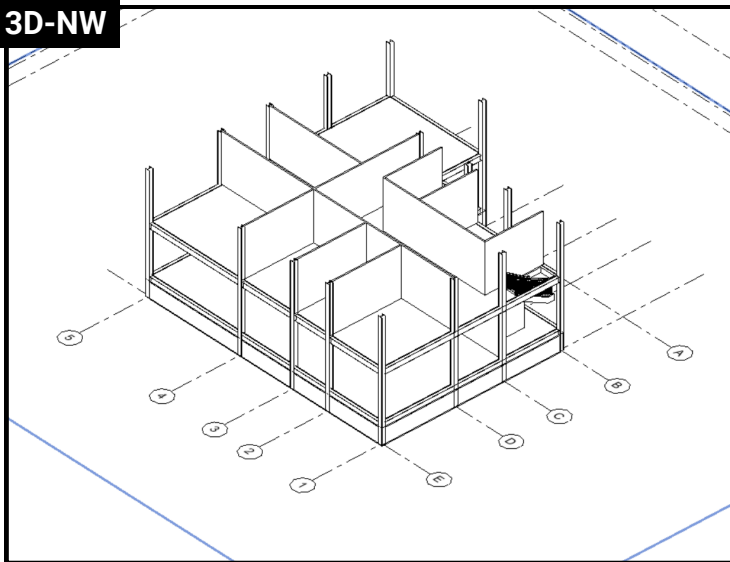


REVIT MODELING PRACTICE

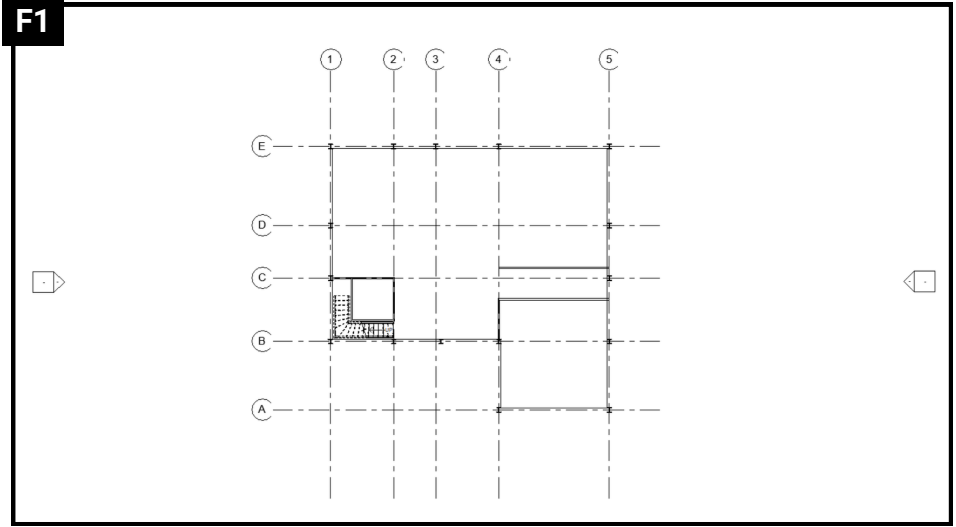
3D-SE



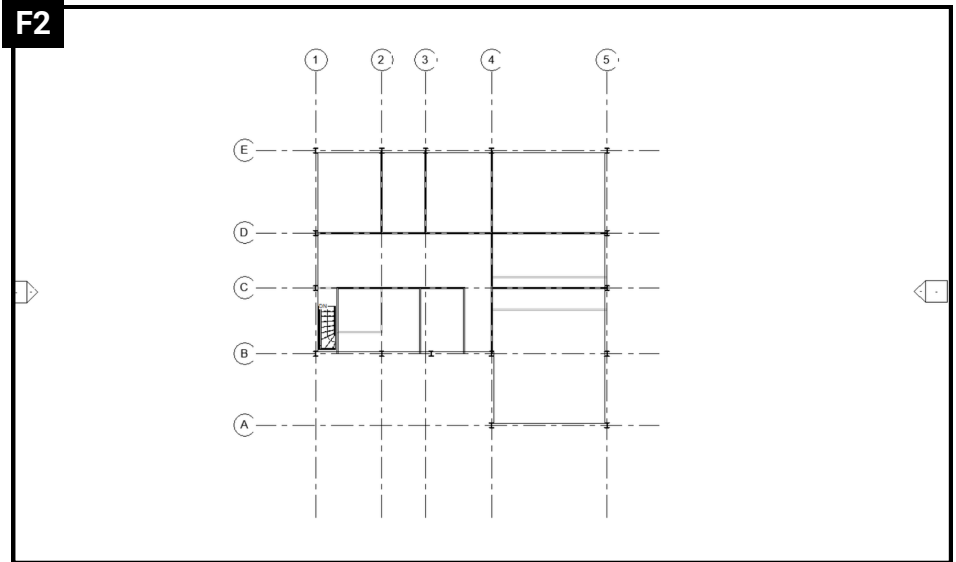
3D-NW



F1



F2

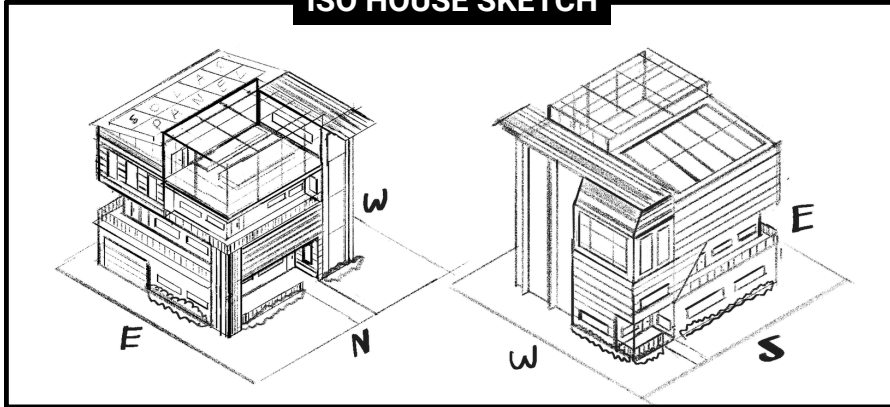


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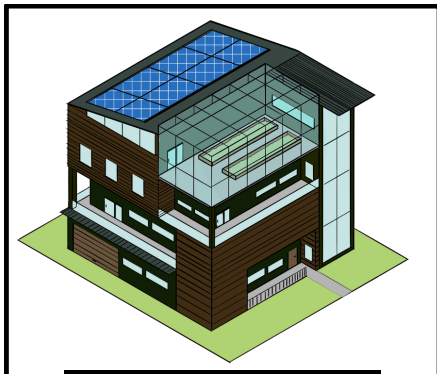
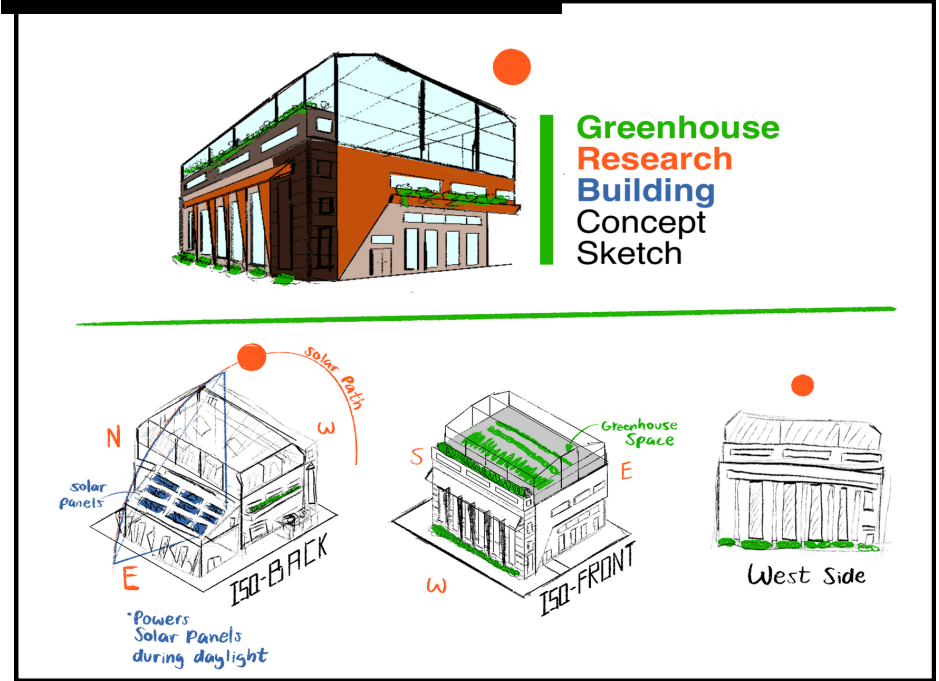
CONCEPT + FORM EXPLORATION

Concept Sketches and a Cardboard Bird
2023

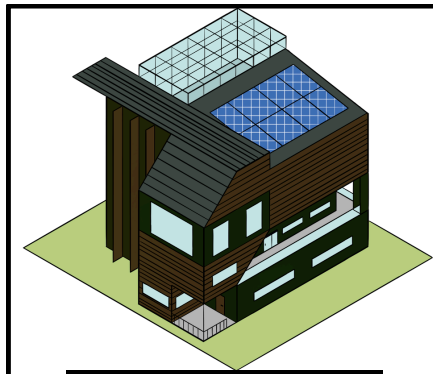
ISO HOUSE SKETCH



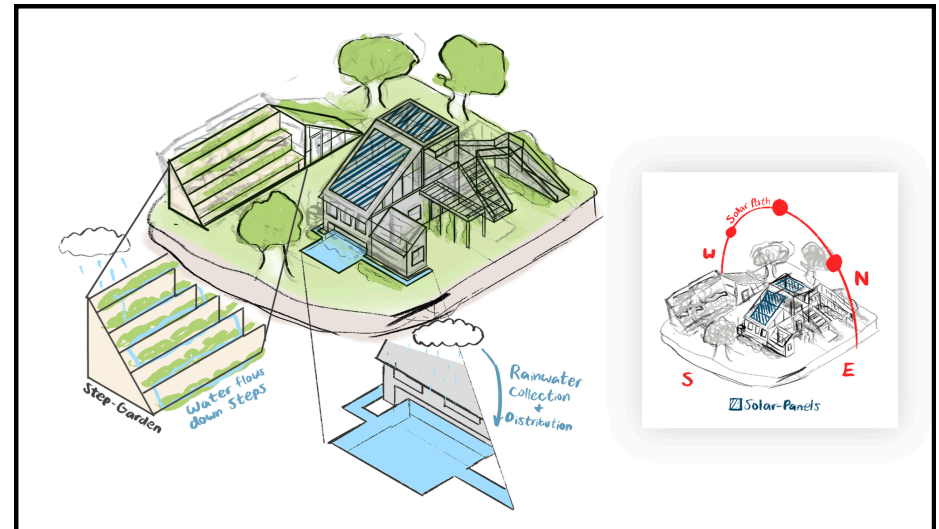
RESEARCH GREEN HOUSE CONCEPT



ISO HOUSE RENDER



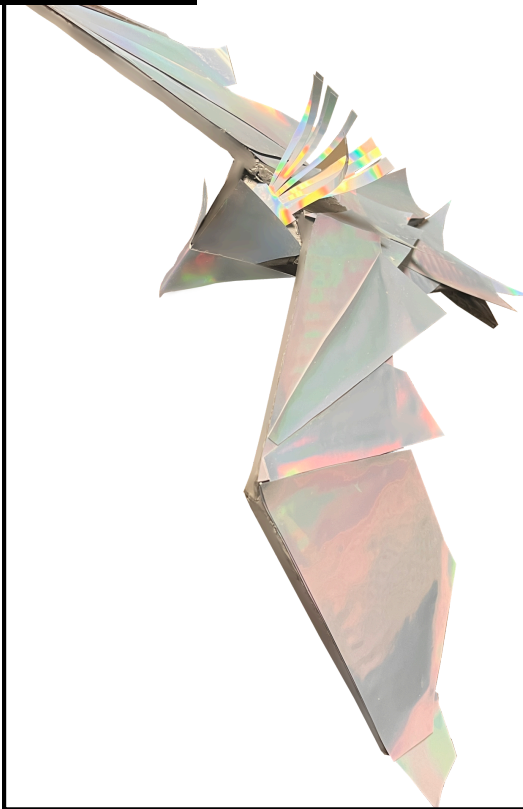
ISO HOUSE RENDER



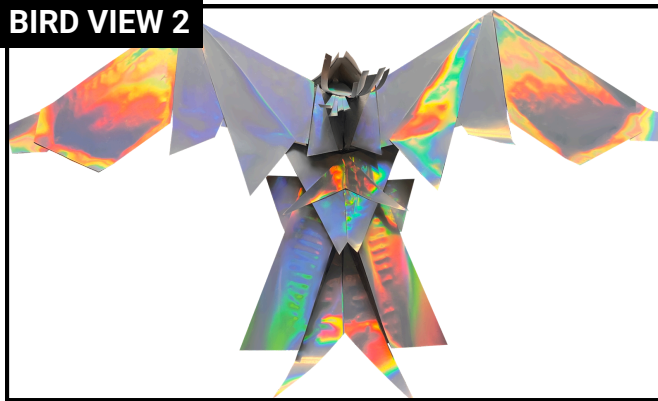
SOLAR-PUNK INSPIRED CONCEPT

CONCEPT + FORM EXPLORATION

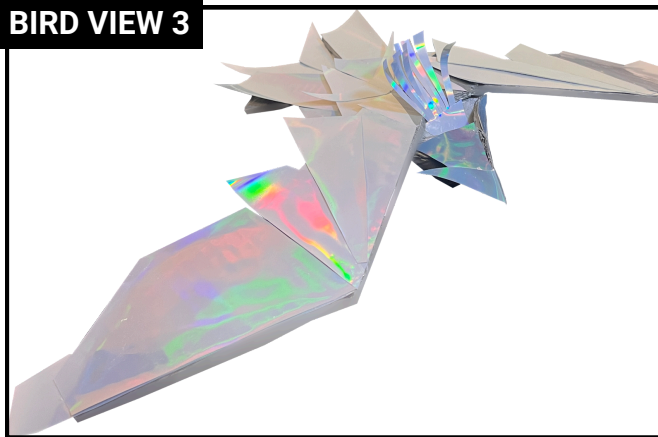
BIRD VIEW 1



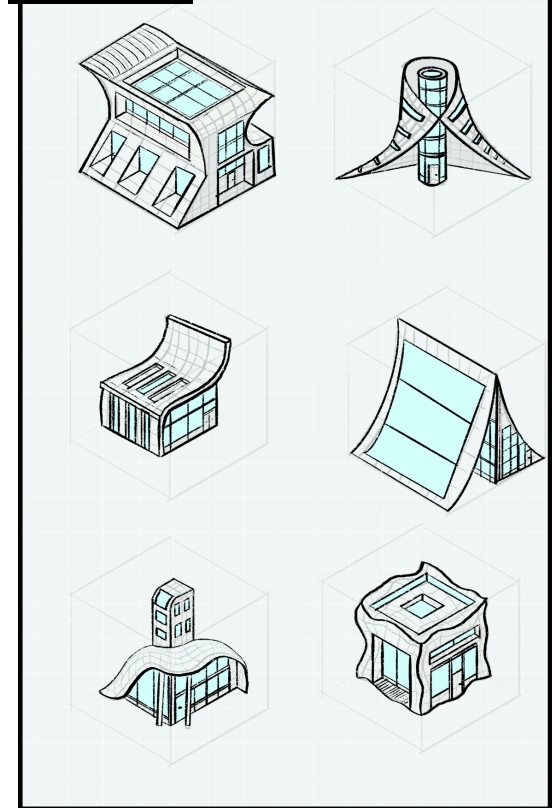
BIRD VIEW 2



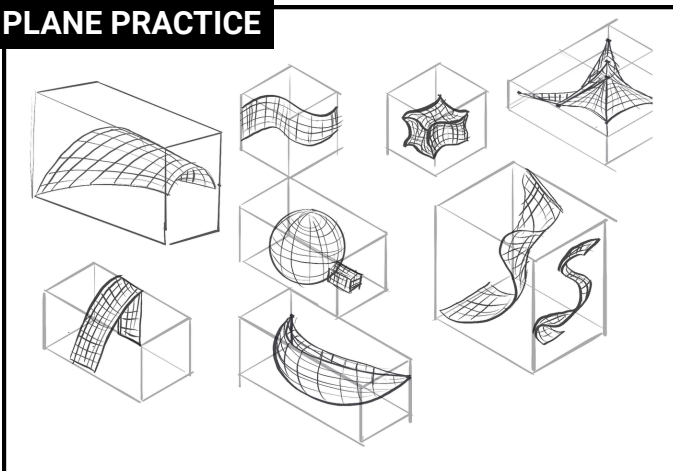
BIRD VIEW 3



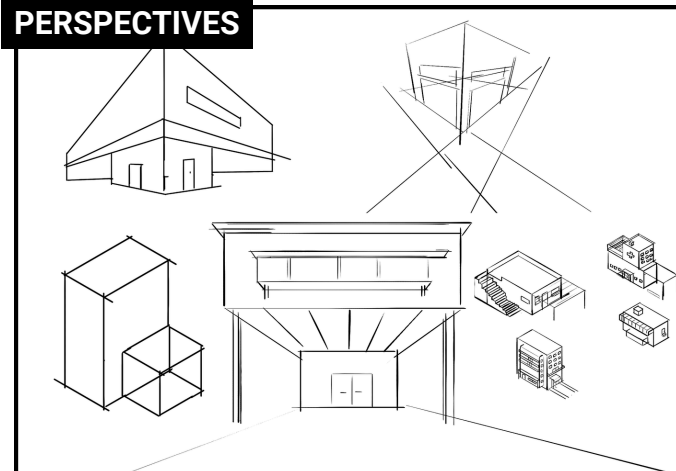
SKETCHES



PLANE PRACTICE



PERSPECTIVES



GRAPHICS & COMMUNICATION

Visual storytelling through diagrams, branding, and design

06

SOLACE SERIES

Digital Illustrations

2024



SOLACE



SOLACE



ILLUSTRATIONS



LAC GENTAU



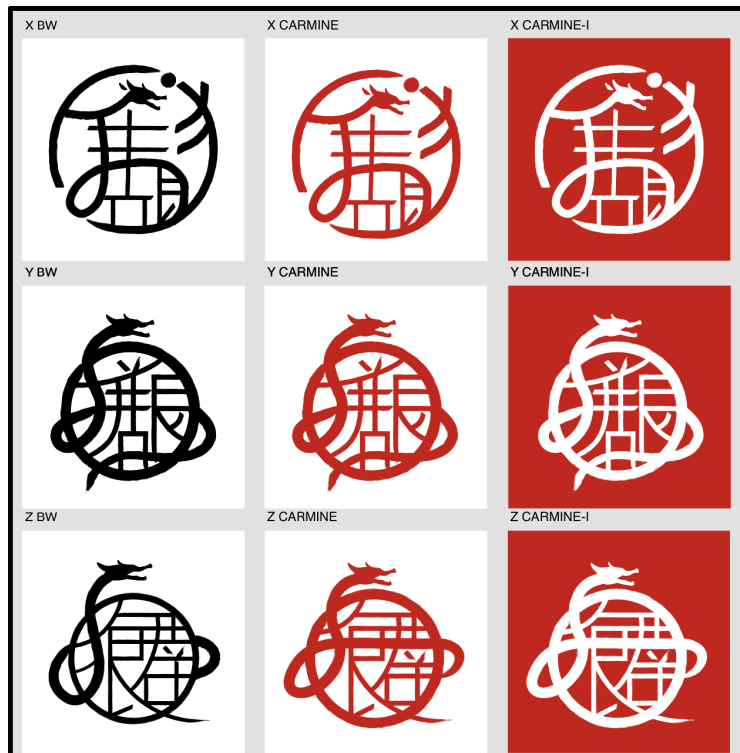
08

CUSA at NC State

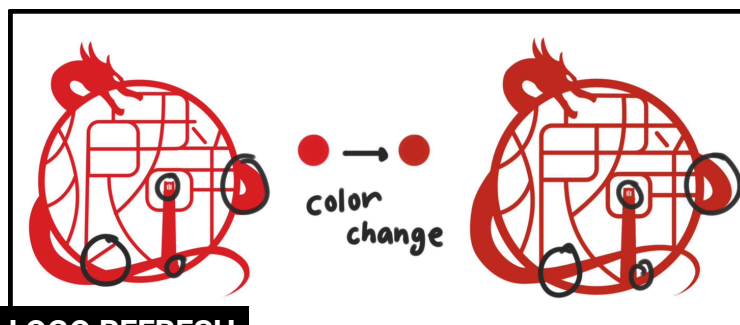
Club Logo and Branding

2025

MERCH DESIGNS + MARKETING MOCKUPS



LOGO VARIATIONS / ITERATIONS



LOGO REFRESH

