

# Beech Bluff County Park

Schematic Design

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# Today's Discussion

- Introduction
  - Project Team
  - PROS Parks
- Master Plan Review
- Site Plan Program
- Building Program
- Sustainability Strategies
- Budget and Schedule
- Questions



# Project Team



Surface

in situ studio



# Commissioners Goals / Objectives / Policies

- BOC Growth and Sustainability Objective GS1 (2020)
  - “Implement a comprehensive approach for preserving open space and developing parks and greenways to address gaps, leverage opportunities and resources, and enhance collaboration with municipal and non-profit partners.”
- Renewable Energy Resolution (2018)
- Native Plants Resolution (2018)
- Public Art Policy (2017)
- Wake County Design Guidelines & Standards
- Energy Design and Management Guidelines



# Introduction

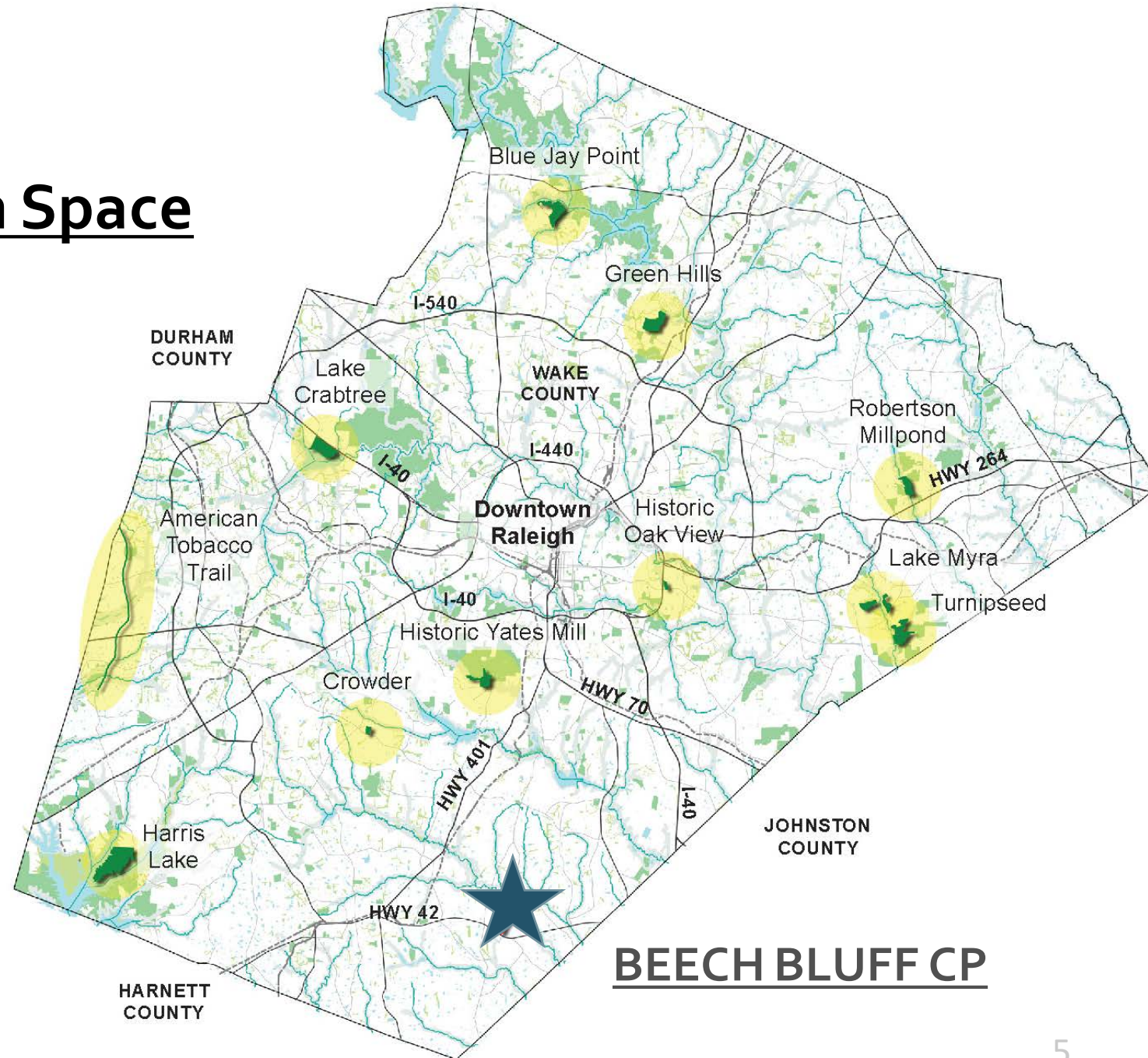
## Parks Recreation and Open Space

Natural Resource Based  
Programming Focus

- Cultural
- Environmental
- Recreational

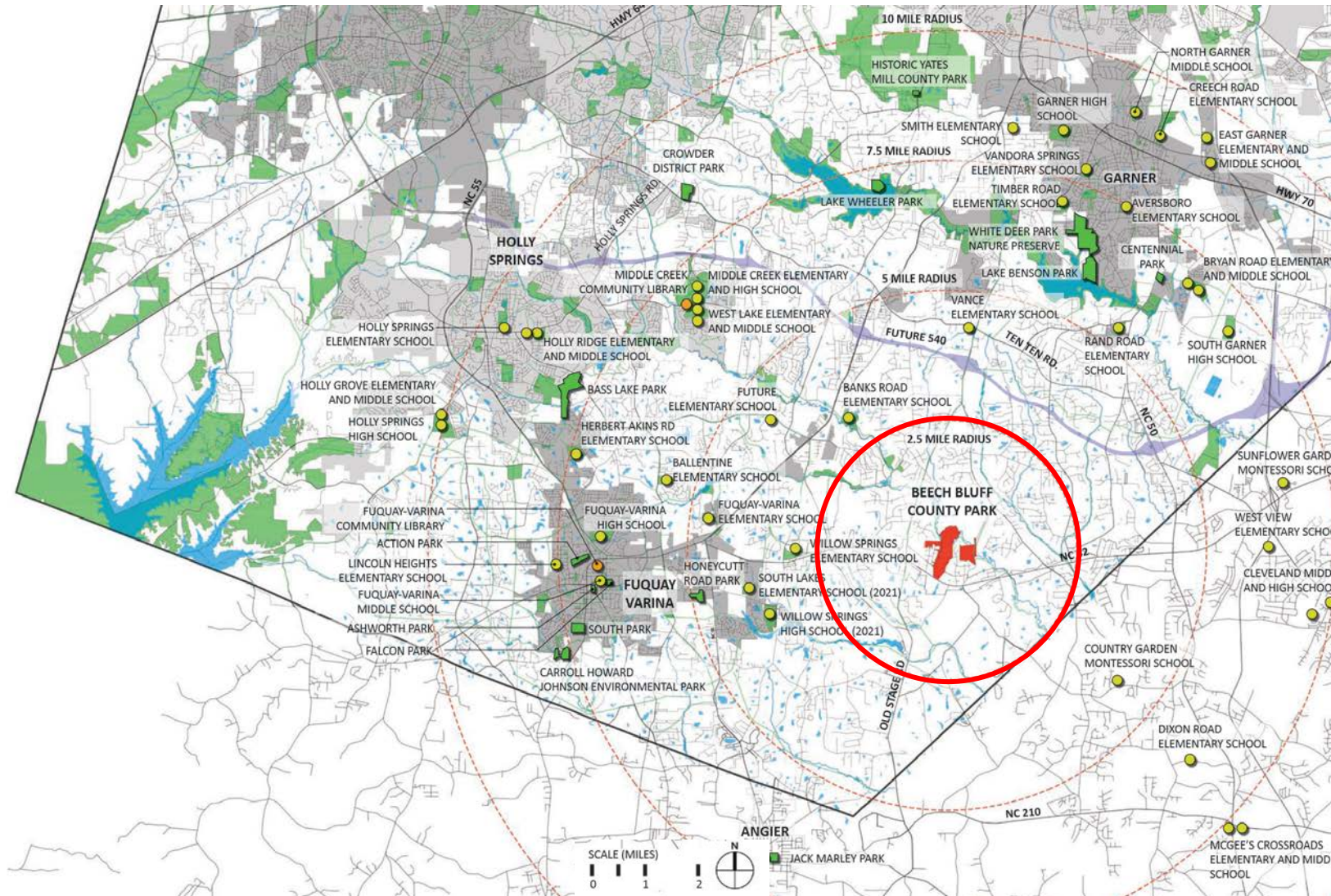
(8) County Parks

(2) Nature Preserves



**BEECH BLUFF CP**

# Site Context



- 2018 PRGOS Bond
- Located along NC HWY 42
- Wake County Jurisdiction
- Adjacent to Fuquay Varina and Garner

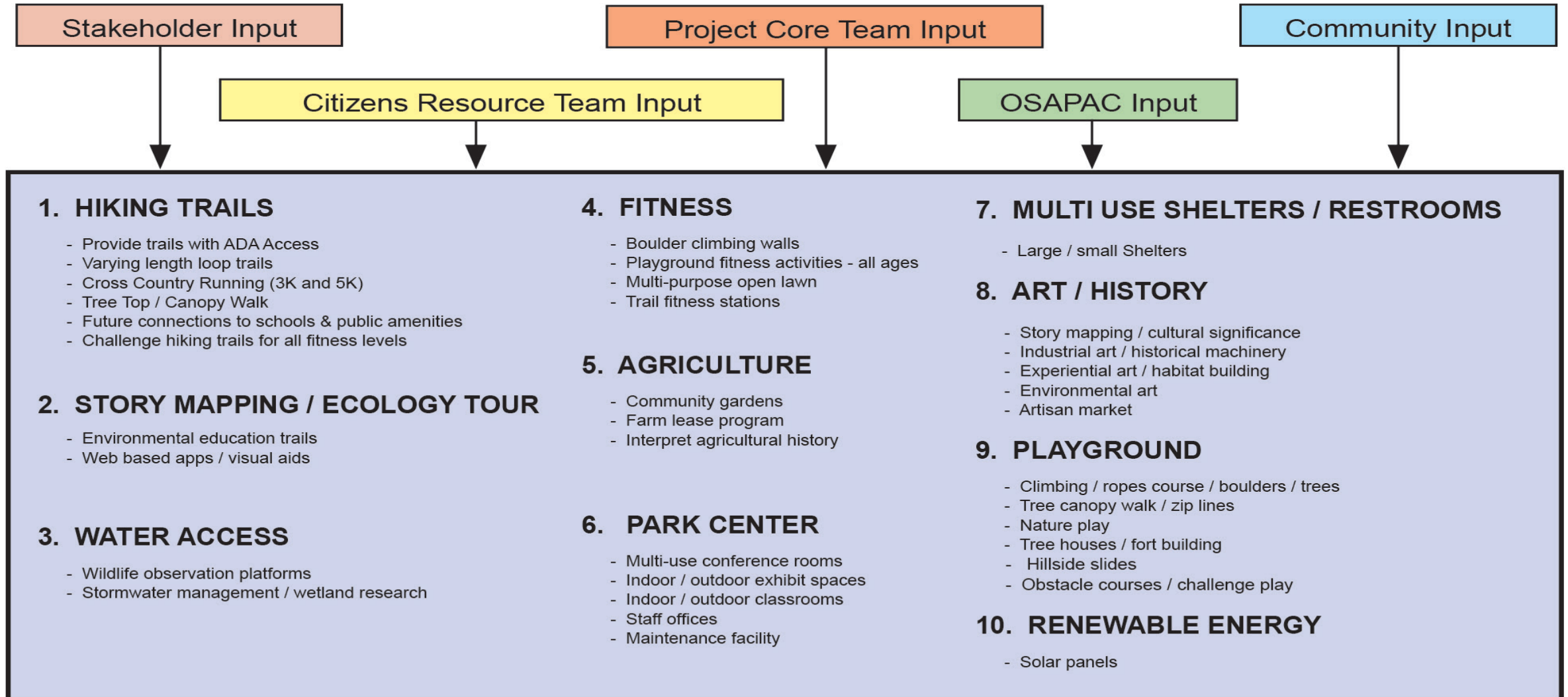
# Creating the Park Mission Statement

***Beech Bluff County Park* aims to provide a universally inclusive recreational amenity to the residents of Wake County and all visitors focusing on the following core principles:**

- Protect, Restore and Enhance **Ecological Diversity**
- Elevate **Historical and Cultural Significance**
- Promote **Human Health and Wellness**

The park is to be a model of **Resiliency and Stewardship**.

# Evaluating Program Options



# Defining the Project Initiatives

- Sustainable SITES Initiative
- Green Stormwater Infrastructure
- Solar Energy / Geothermal Considerations
- Park Center Buildings and Site Integration
- Restoring Native Plant Ecosystems
- Public Art as part of the design process
- Community Gardens / Demonstration Gardens
- Performance Monitoring



# Site Plan Program

## Beech Bluff County Park

# Sustainable SITES Initiative

*“Creating ecologically resilient communities”*

- Rating system for sustainable land development projects
- Administered by GBCI
- SITES and LEED synergies
- North Carolina certified projects



American Society of  
Landscape Architects



UNITED STATES  
BOTANIC GARDEN



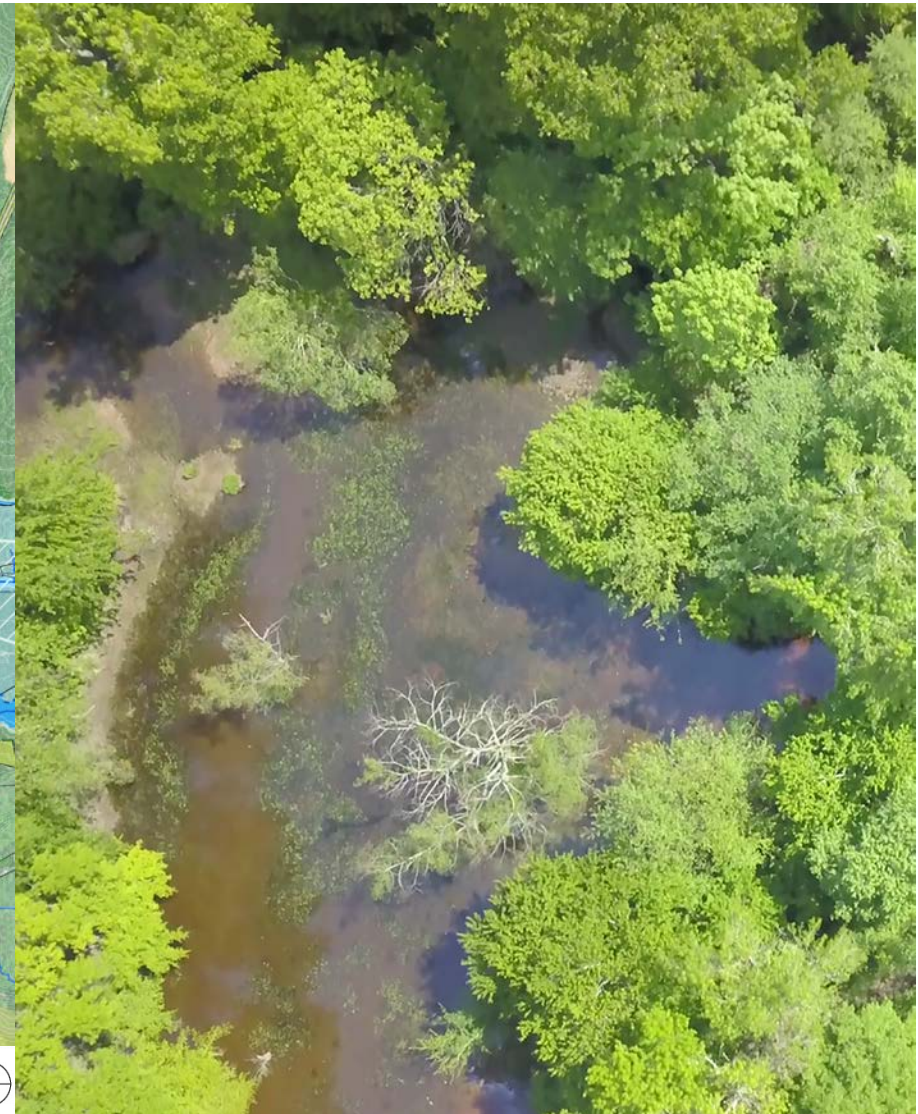
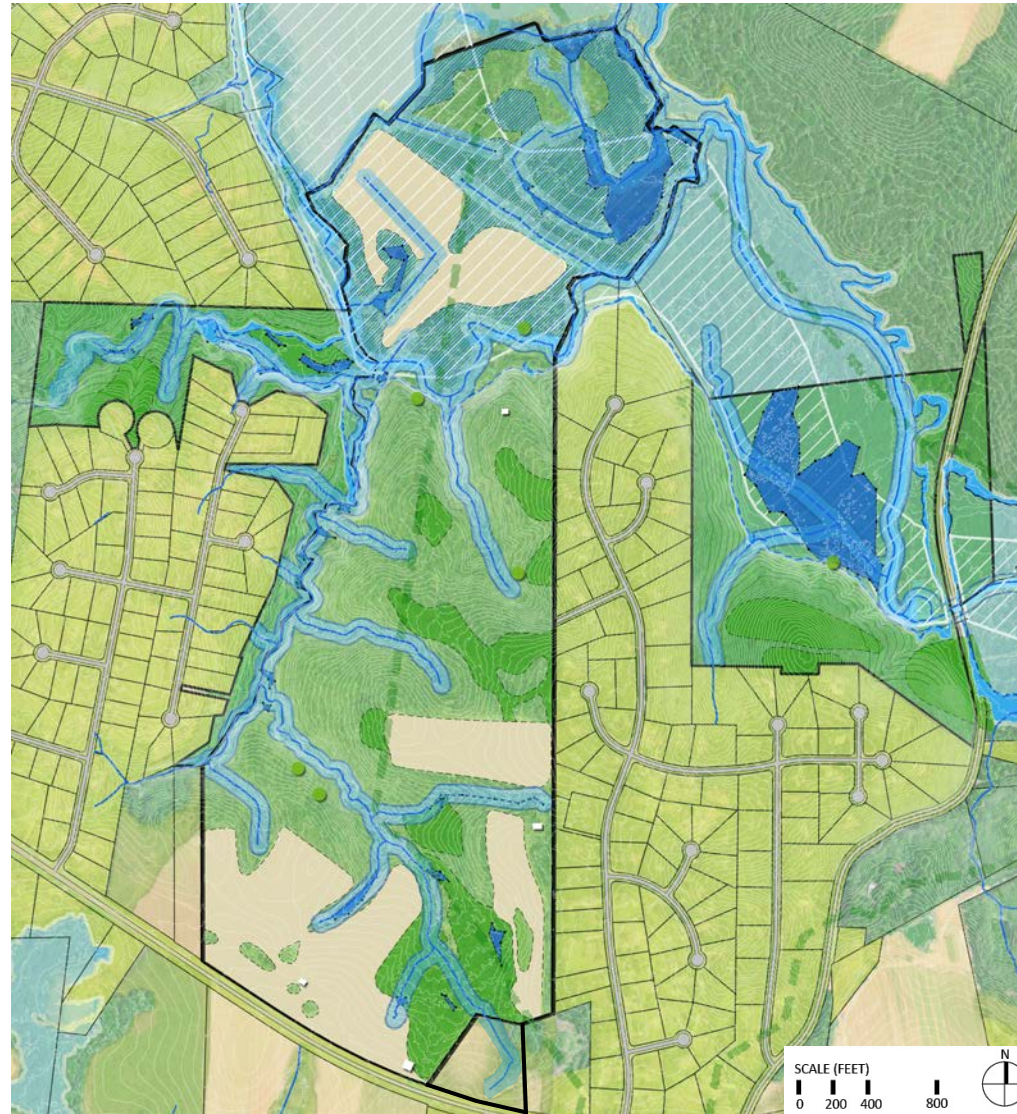
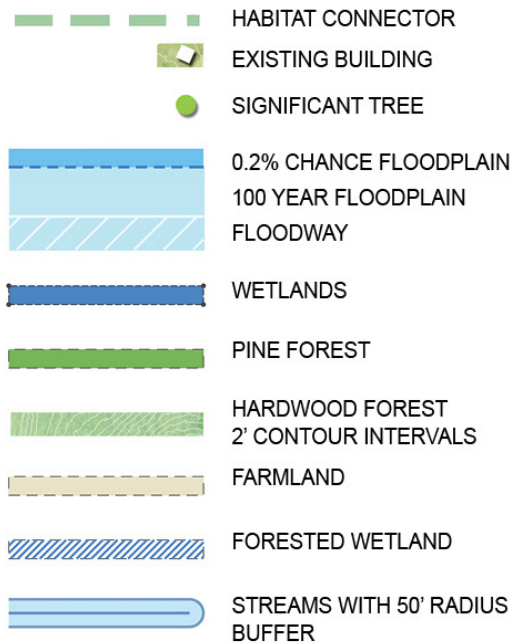
Charlotte Brody Discovery Garden



Horseshoe Farm Nature Preserve

# Existing Site

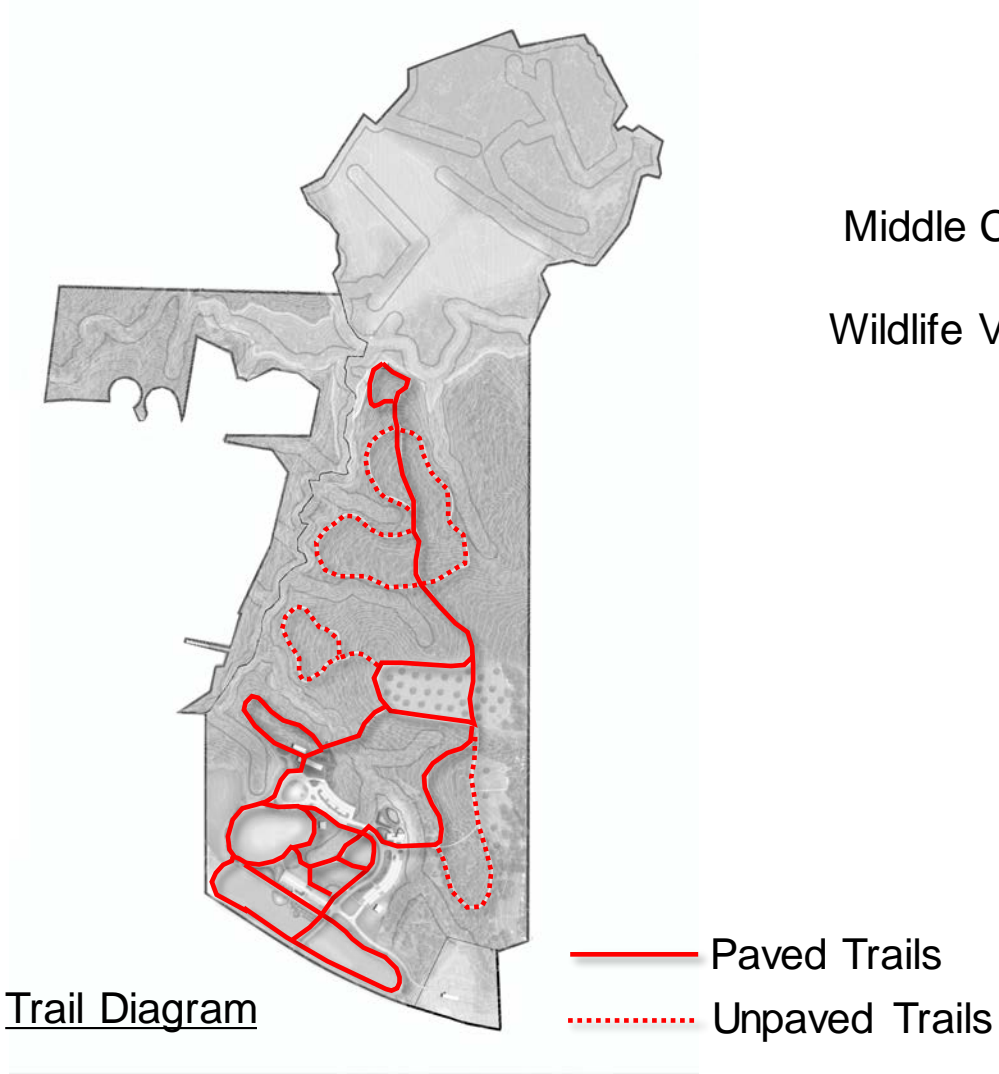
- 304 Acres
- Separate Parcels
- Middle Creek
- Surrounding Context



# Habitat Section



# Proposed Site Plan



Middle Creek Floodplain

Wildlife Viewing Platform

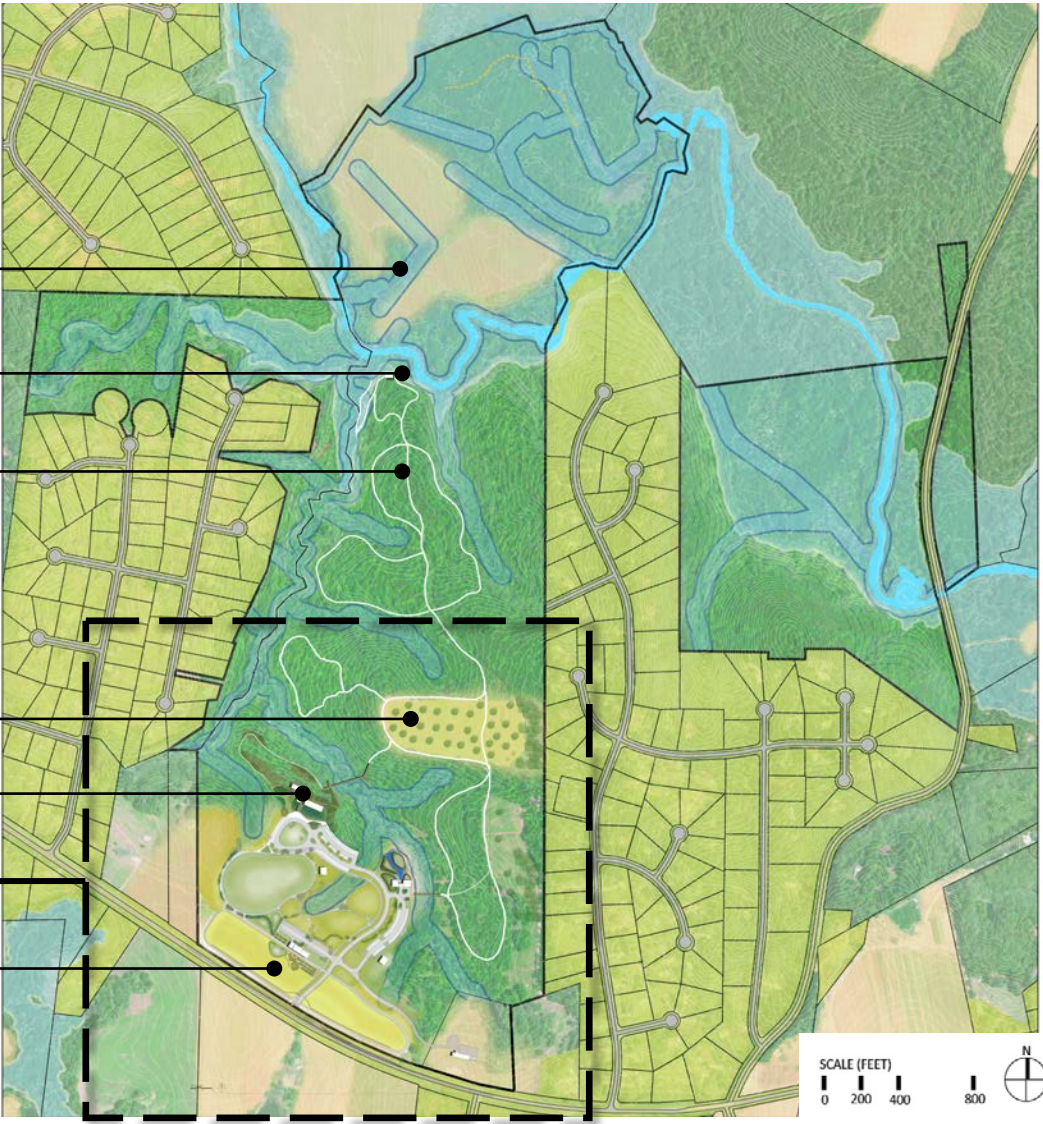
Forest Trails

Native Prairies

Park Center

Activity Center

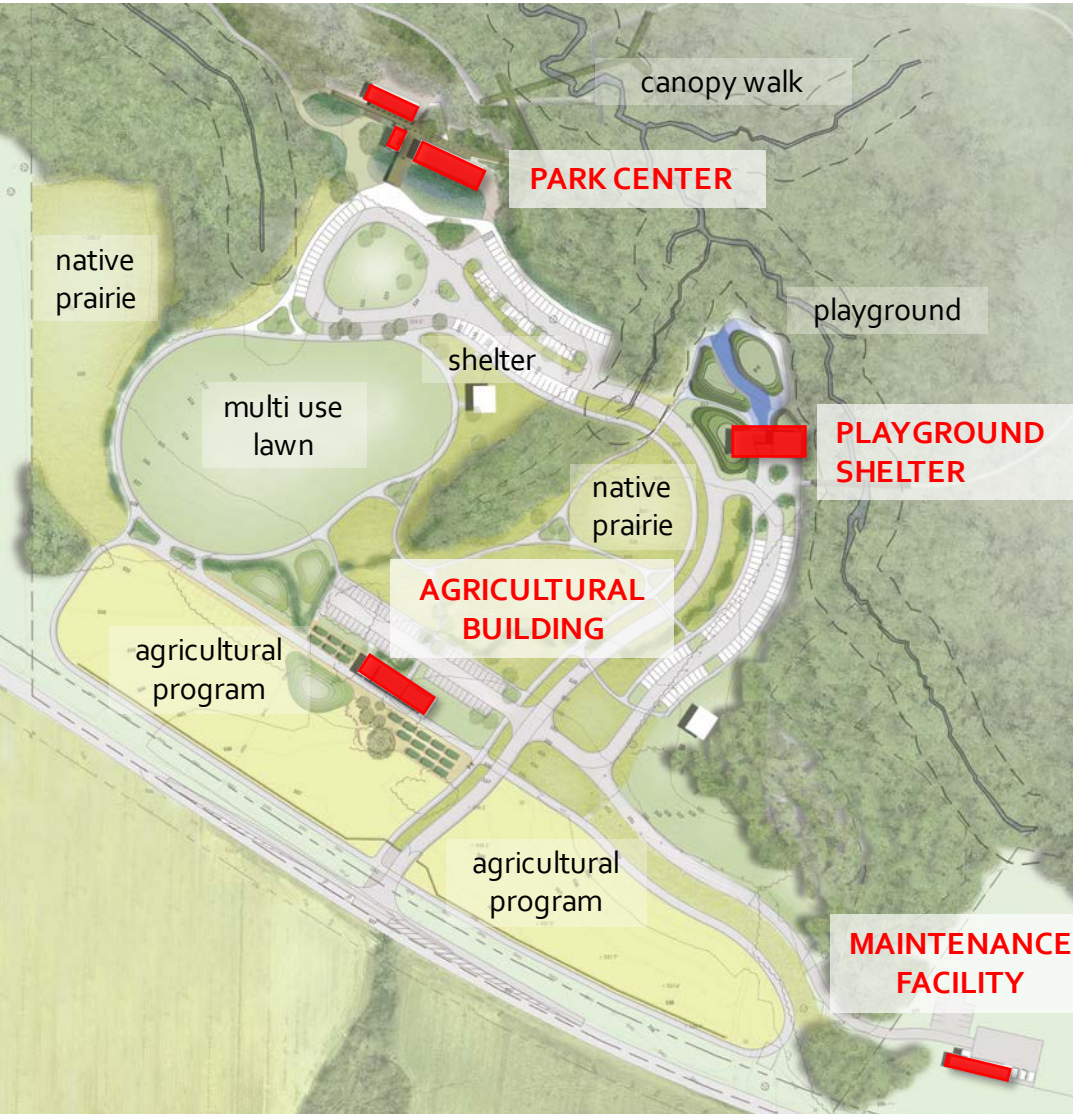
Agriculture



# Proposed Site Plan



# Site Plan / Strategies



## BUILDING

+

## SITE

- Solar energy
- Location and orientation
- Rainwater harvesting
- Geothermal energy
- Insulation
- Recycled materials
- Performance monitoring
- High reflectance materials

- Habitat restoration
- Limit disturbance
- Reuse existing soils
- Preserve prime farmland
- Preserve forest community
- Integrated stormwater management
- Salvage and reuse existing materials
- Native Plants Landscaping

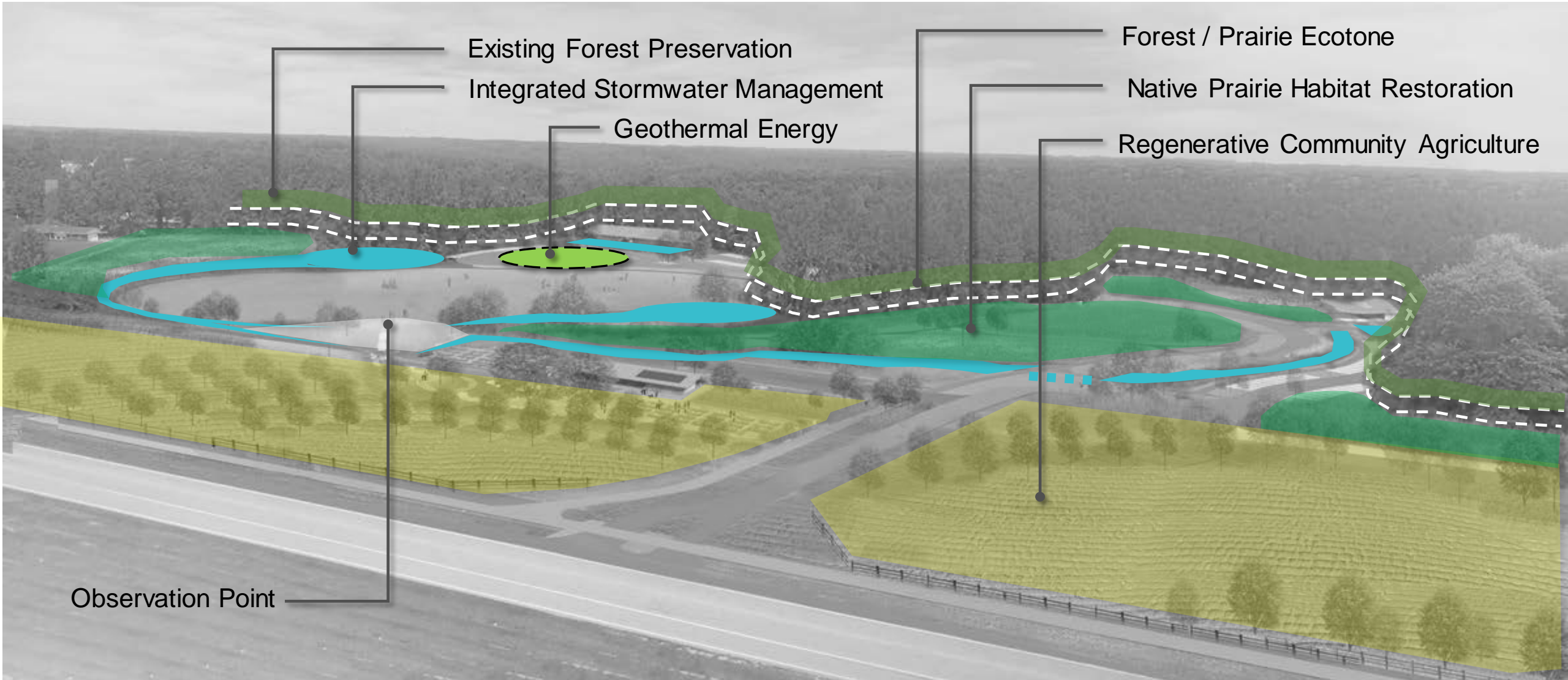
SCALE (FEET)

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400



# Site Sustainability Strategies





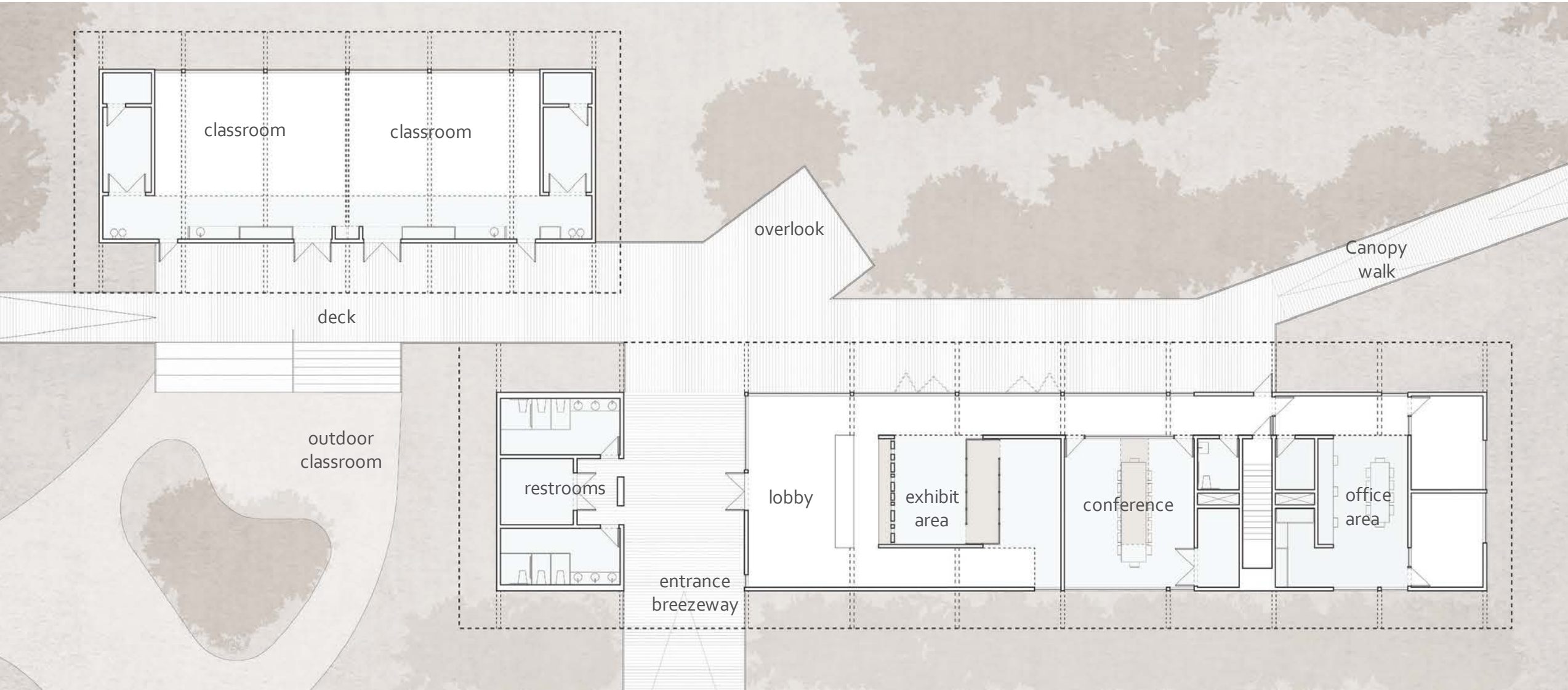
# Building Program

**Beech Bluff County Park**

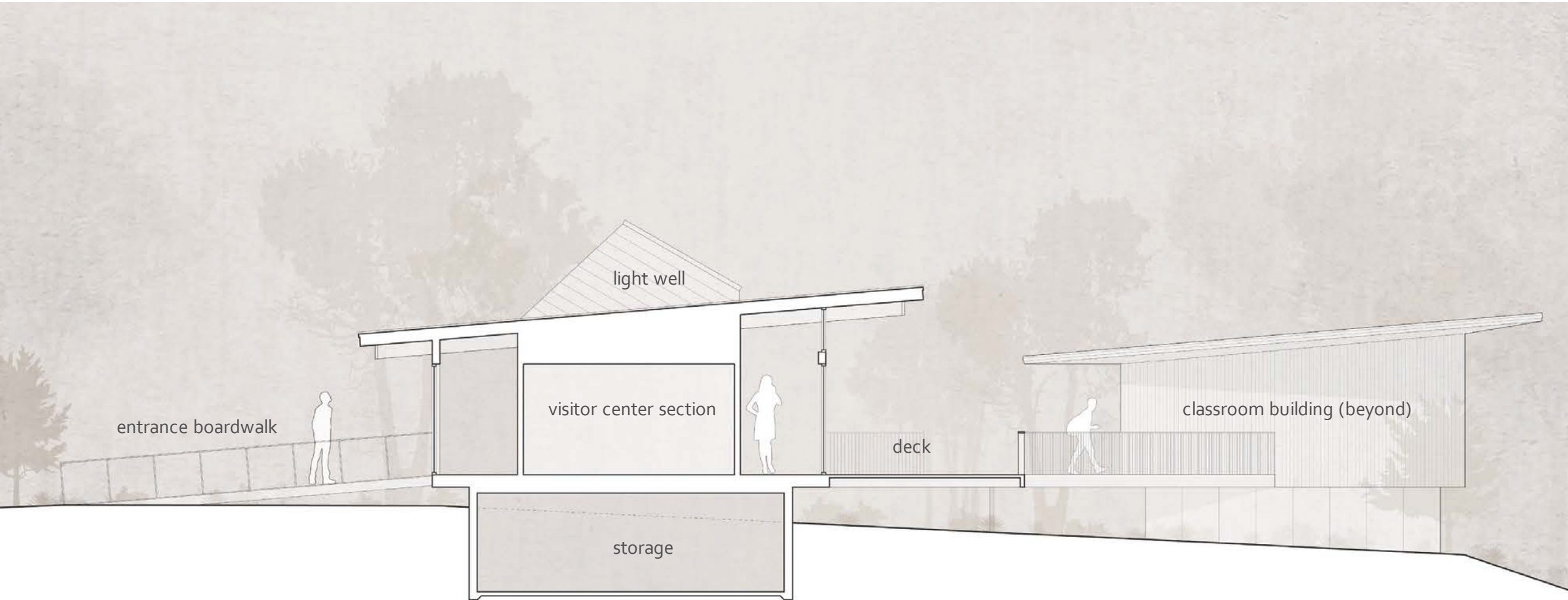
# Park Center Perspective



# Park Center Plan



# Park Center Section



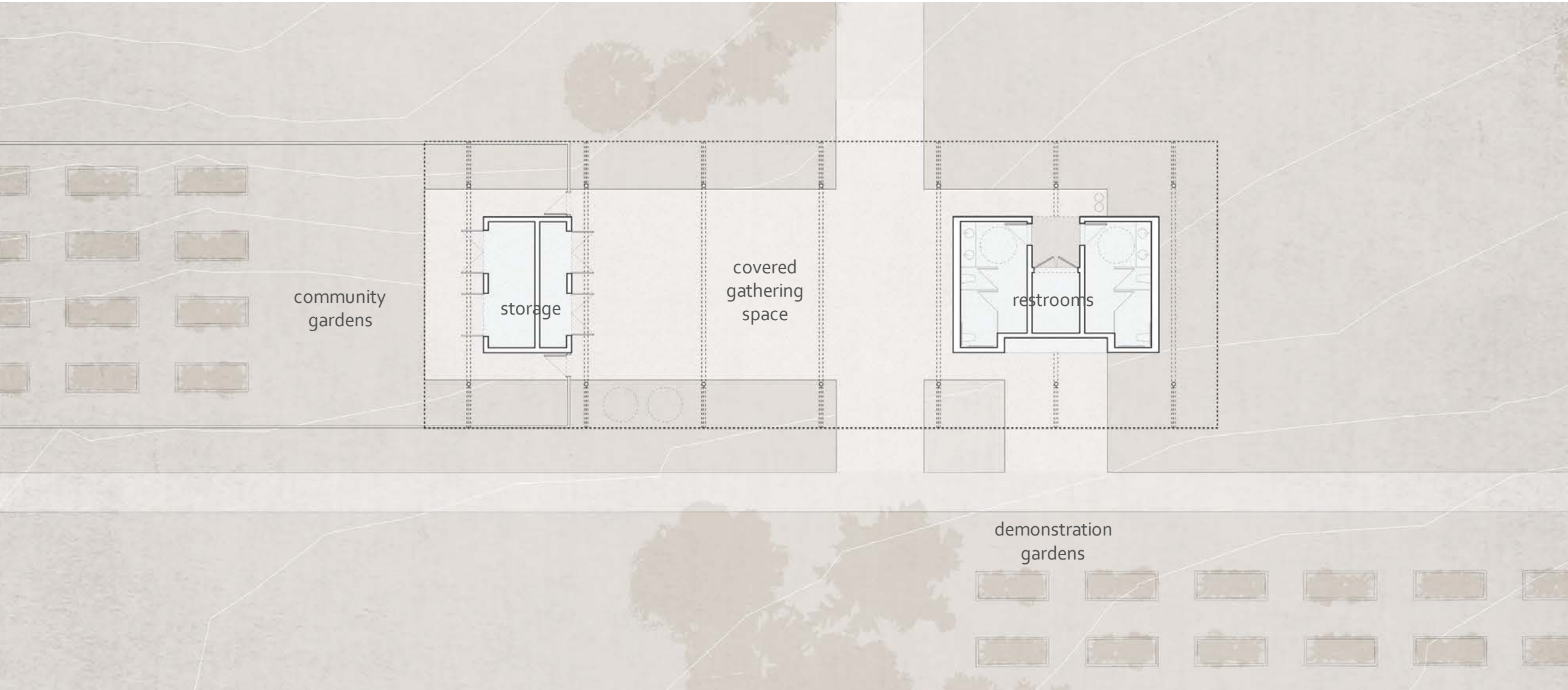
# Park Center Perspective



# Agricultural Building Perspective



# Agricultural Building Plan



# Playground Shelter Perspective



# Playground Shelter Perspective




# Maintenance Facility Perspective



# Building Sustainability Strategies

1. REDUCED WINDOWS ON SOUTHERN ELEVATION
2. EIGHT FOOT OVERHANGS ON SOUTHERN ELEVATION
3. WATER FROM ROOF SHED ONTO RAIN GARDEN BELOW
4. LIGHT MONITORS DELIVER INDIRECT NORTHERN LIGHT TO INTERIORS
5. SIX FOOT OVERHANGS ON NORTHERN ELEVATION
6. PHOTOVOLTAIC ARRAYS
7. GEOTHERMAL WELLS
8. RAINWATER HARVESTING



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# Summary, Budget and Schedule

## Beech Bluff County Park

# Project Take-Aways

- Park Center Buildings and Site Integration
- Solar Energy Considerations
- Green Stormwater Infrastructure
- Sustainable SITES Initiative
- Public Art as part of the design process
- Demonstration Gardens / Community Gardens
- Native Plants Landscaping / Agricultural Landscaping
- Broad Educational Program Opportunities

# Schedule



# Project Budget Summary

## Estimated Project Costs

• Site Development / Landscaping / Ag.	\$ 5,800,000
• Building Construction	\$ 4,965,000
• Public Art	\$ 120,000
• <u>Professional Services, Permits, Fees</u>	<u>\$ 933,700</u>

<i>Estimated Sub-Total Project Cost</i>	\$11,818,700
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<u><i>Project Contingency</i></u>	\$ 1,181,870
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<u><b>Total Project Budget</b></u>	<b>\$13,000,570</b>
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Multiple Matching Grant Opportunities (PartF, etc...)

A faint, light blue map of Wake County, North Carolina, is centered on the slide. The word "Questions?" is written in white, bold, sans-serif font across the middle of the map.

# Questions?