

NC Office of Early Learning (OEL) Demonstration Program Outdoor Learning Environments Initiative



NLI Team

Robin Moore, DiplArch
MCP, Director

Nilda Cosco, PhD, PI
Education Specialist, Project
director

Brad Bieber, MLA
Design Associate

Jesse Turner, RLA
Design Associate

The Natural Learning Initiative, College of Design, NC State University



About the Natural Learning Initiative



Creating environments for healthy human development and a healthy biosphere for generations to come

Promoting the natural environment in the daily experience of all children:

- Intervention through environmental design
- Evidence-based design through action research
- Education through learning processes, curriculum, and professional development
- Dissemination of information

NC STATE

DESIGN

NLI
NATURAL LEARNING INITIATIVE

DPI OLE Project Objectives

- ❁ Provide access to universally designed, rich environments that support different learning abilities and cultural backgrounds.
- ❁ Provide training and technical assistance for teachers, special service providers, administrators, families and community.
- ❁ Engage stakeholders in the planning process.
- ❁ Improve child outcomes.



DESIGN PROGRAMMING PROCESS/WORKSHOP

Parent and Teacher Surveys

Basic Questions:

1. What do you like about the existing outdoor learning environment?
2. What you do not like about the existing outdoor learning environment?
3. What would you like to add or change?
4. Other comments?

Two-day intensive training and design workshop

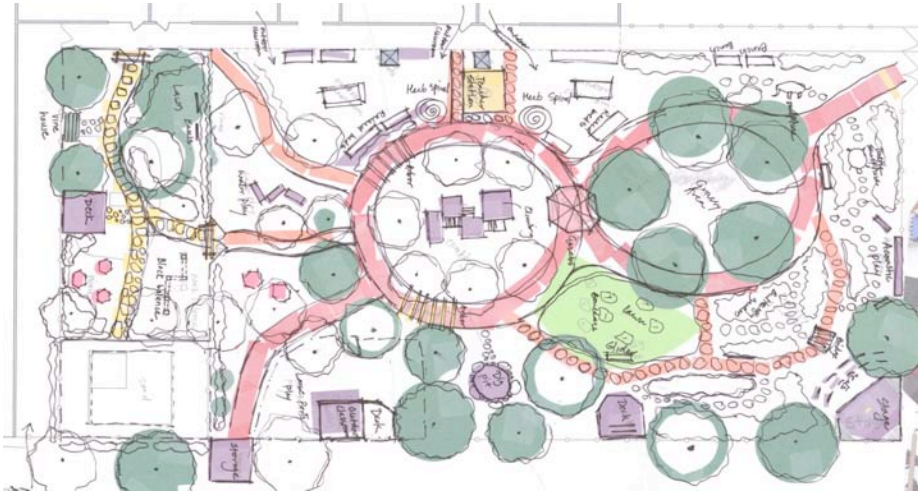
Greensboro Childrens Museum Edible Schoolyard Greensboro, NC



Schools developed a design program and created layouts for their outdoor spaces with the guidance of the NLI design team.



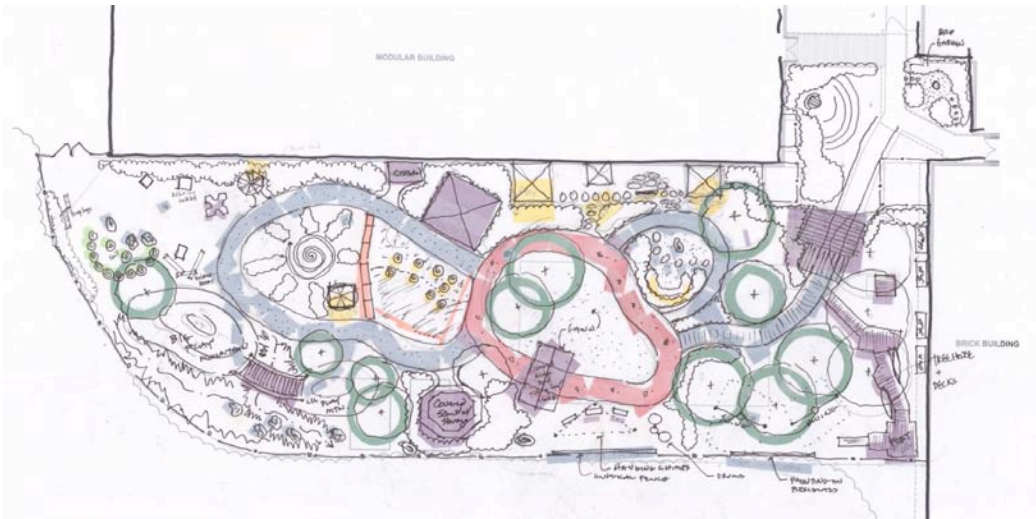
Workshop Diagrams



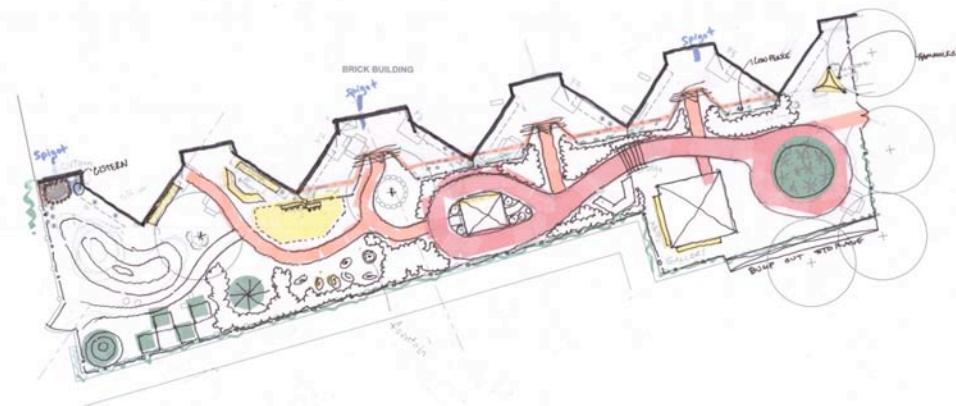
Catawba Elementary School, Catawba County Schools



Early Childhood Development Center, Asheboro City Schools



Mary Frances Wall Center, Cabarrus County Schools



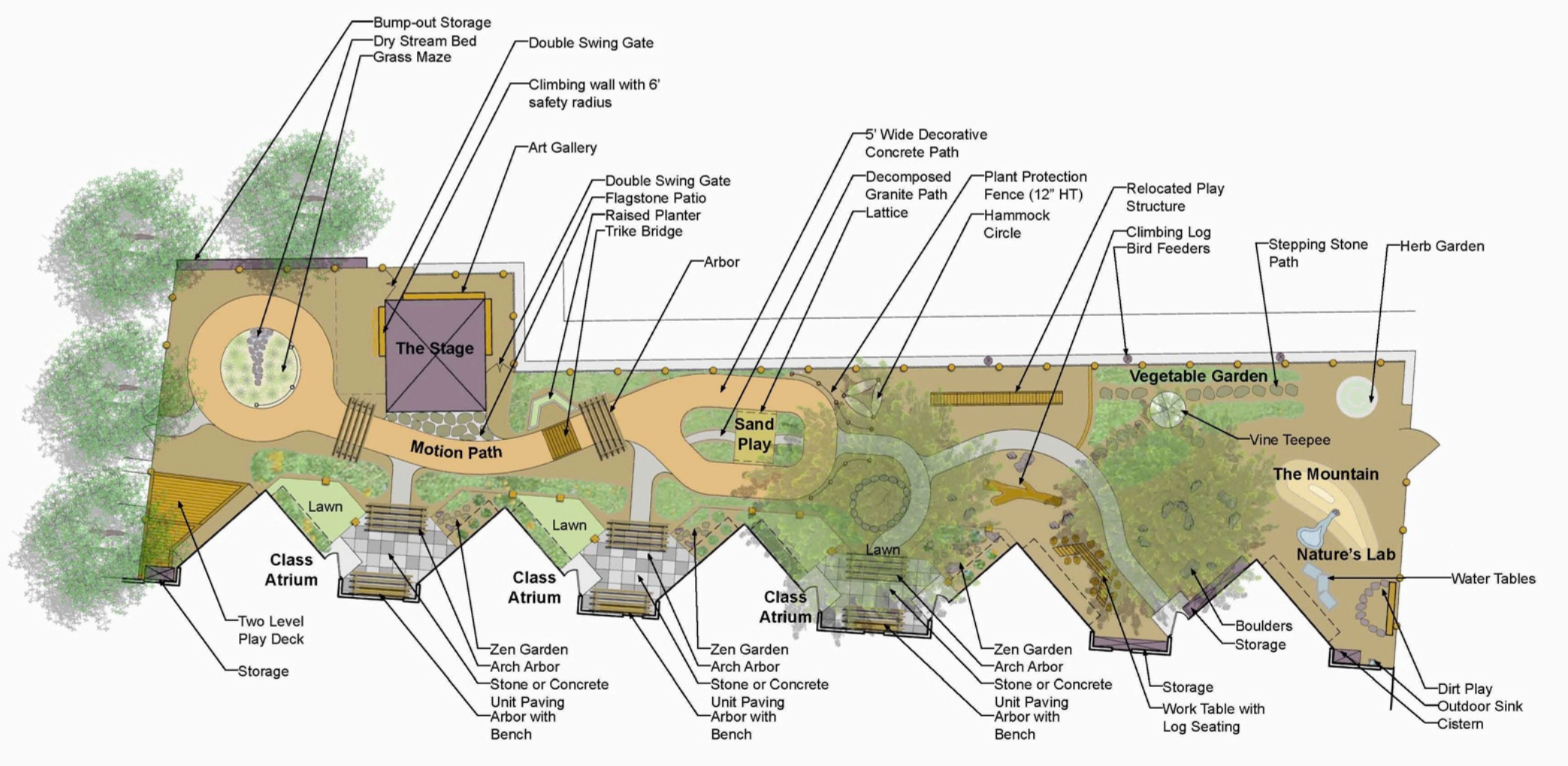
Asheville City Schools Preschool, Asheville City Schools

Schematic Design



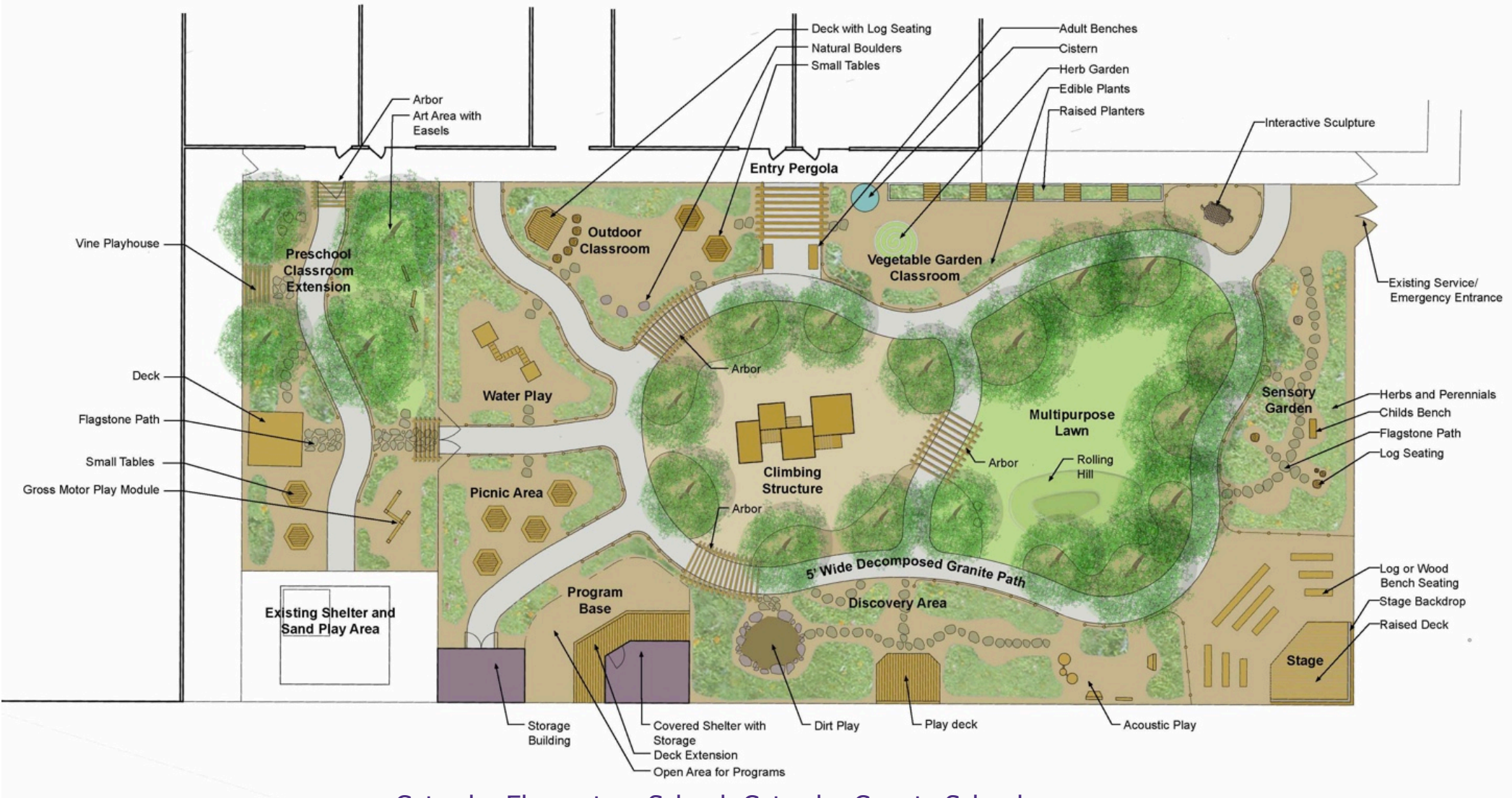
Early Childhood Development Center, Asheboro City Schools

Schematic Design



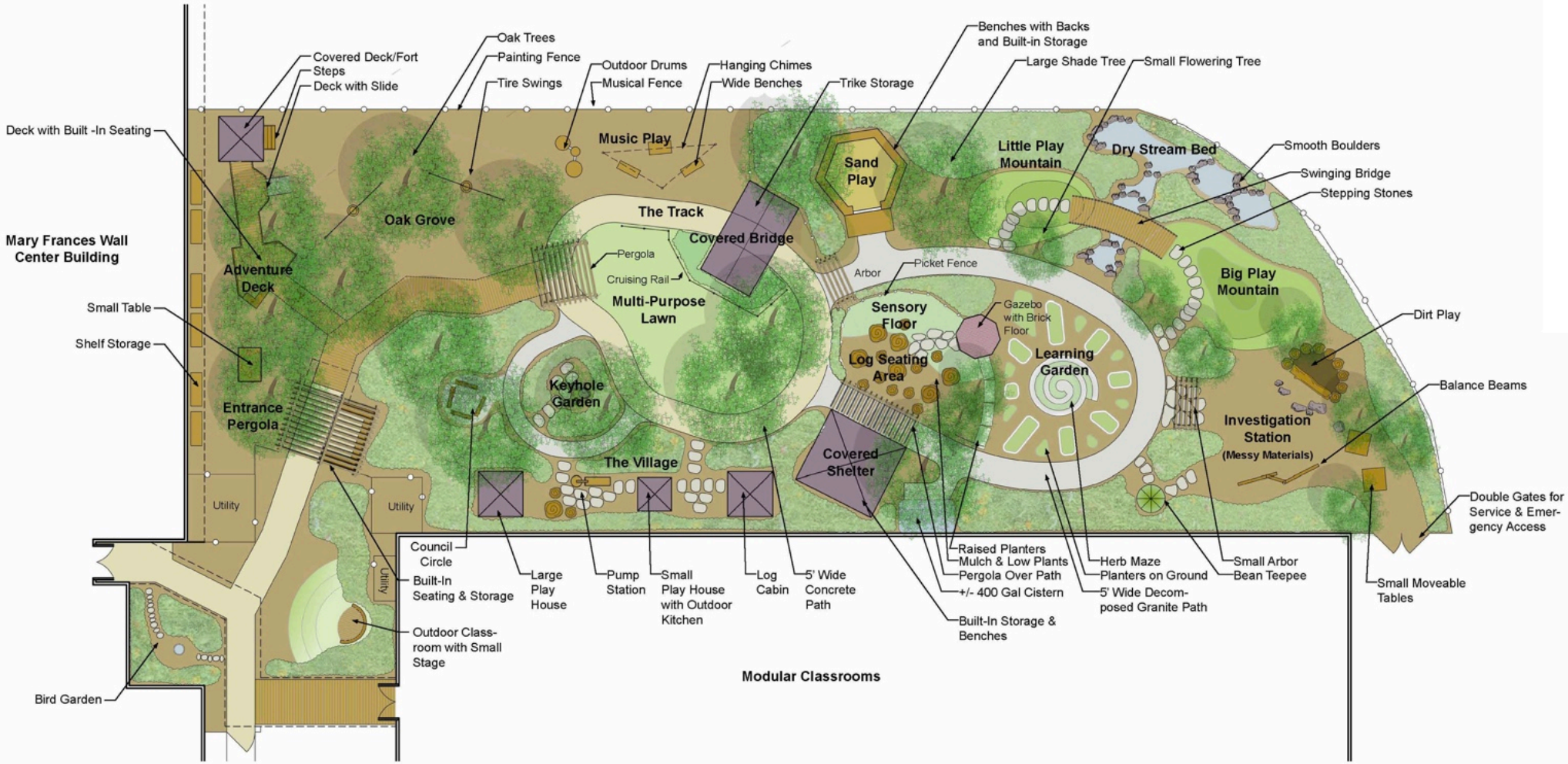
Asheville City Schools Preschool, Asheville City Schools

Schematic Design



Catawba Elementary School, Catawba County Schools

Schematic Design



Mary Frances Wall Center, Cabarrus County Schools

Typical Settings - Gathering Places and Entrances



Outdoor Classroom/Program Base



Vine Teepee



Playhouses



Entrances Arbors and Pergolas



Entrances Arbors and Pergolas

Typical Settings - Pathways, Lawns, and Decks



Primary Concrete Paths



Secondary Paths



Flagstone Patios and Paths



Multi-Purpose Lawn



Decks and Stages

Typical Settings - Sand/Earth Play, Water Play, Gardening



Earth Play



Sand Play with Built-In Seating



Water Play (water tables)



Gardening



Raised Garden Beds

Typical Settings - Balancing, Climbing, Loose Parts



Log Balance Beam



Climbing Wall



Natural Loose Parts



Manufactured Loose Parts

The impact of the outdoors

- Being outdoors is the strongest correlate of physical activity (Sallis et. al, 1993)
- Diverse, natural environments support attention functioning of children, gross motor development, children's health, and richer play (Grahn, P. et al, 1997 ; Faber Taylor, A. et al, 2001)
- Preschool physical activity tracks throughout childhood (Moore, L et al, 2003)



Potential Community Partners

- Botanical garden, community garden or garden clubs
- Girl and Boy Scout Troops
- Rotary, Kiwanis, Junior League and other service organizations
- Local Partnership Board members
- Hospital and/or County Health Department
- Plant nurseries and garden centers
- Landscaping companies
- Farmers
- NC Cooperative Extension
- Community Colleges
- Child Care Health Consultant
- Parks & Recreation Departments
- Arts Council or Art Museum
- Businesses
- Community Foundation
- Other?

One year later....



Munchkin Academy, Buxton NC 2009 – before



Munchkin Academy, Buxton NC 2010 – after



Munchkin Academy, Buxton NC 2010 – after

NLI Project Team

Nilda Cosco, PhD, PI Education Specialist

Robin Moore, Director, NLI

Brad Bieber Design Associate

Shweta Nanekar, Design Associate

Jesse Turner, RLA Landscape Architect

Phone: (919) 515-8345

www.naturalearning.org

