Bluff Park School Outdoor Classroom Project

To begin the process of developing a master plan for outdoor classrooms at the vacant lot adjacent to Bluff Park Elementary School, the project team including Pam Conville, Connie Shaffer, Stephen Presley, Julie Adams and Jennafer Collins met at various times at the site. There have been several other parents and teachers that have assisted in the process and many who have expressed interest in helping as the project continues. A site inventory and analysis map was created using mapping information provided by the City of Hoover and on-site evaluation.

The Inventory of on-site materials shows small amounts of granite cobblestones and paver bricks. There are several large outcroppings of boulders and smaller loose stones throughout the site. A mortared in place stone retaining wall is located on the upper 1/3 of the site. There is a nice stand of mature trees and an established vegetative buffer along two property lines. Natural drainage ways are evident as is a drainage ditch along Cloudland Drive.

Garnered from a class curriculum by grade, teacher input, and on-line research, a list of Program Elements was developed.

Outdoor Classrooms

- 1 Multiple outdoor classroom sites with access to various natural systems, e.g. water, vegetation, wildlife, geology
- 2 Seating for students within "classrooms"
- 3 Herb, vegetable and flower garden and/or fruit growing area
- 4 Retain a "wild area" with narrow path in western portion of site
- 5 Use natural drainage to develop a wet/dry aquatics "classroom"

Vegetation and Natural Systems

- 1 New vegetative buffer of native plant species along north side (parking lot side) to provide a sense of place and separation
- 2 Maintain and enhance natural drainage ways through site Circulation
- 7 Pathway system through site accessing classrooms and special features
- 8 A gateway feature through which to enter site
- 9 Continuation of chain link fence along south side of property along Cloudland Drive
- 10 Kiosk with site map, acknowledgment of donors, etc.
- 11 Whole-site handicap accessibility, including curb ramp from parking lot to site, and accessible path system.

Miscellaneous Requirements

- 12 Provide opportunities for various civic groups to participate in creating and maintaining the site
- 13 Add quarterly weed control for project area to existing school landscape maintenance program.
- 14 Trash receptacles, first-aid kits and water fountain locations.

Project Description

Entrance Gateway

An accessible path utilizing on-site paving materials leads to an arbor with climbing vines. This controlled point of entry and exit would be constructed of recycled materials such as old power poles, chain and wisteria. The adaptive reuse of materials is a common element found throughout the project.

Outdoor Learning Center #1

Approached from the stepping stone path soon after entering the site from the west or from the side adjacent to the Gardening Learning Center, Center #1 utilizes the site's natural boulders for seating and room definition. Trees are dotted around the space and would make for a general use classroom, as well as weather center for the upper grades. The stepping stones could be concrete set with different animal tracks commonly found in our region.

Gardening Learning Center

The area designated for cultivated gardening is the sunniest location on site. One or two small trees may need to be removed to allow for enough room and light in this area. The winding crushed stone path borders the garden on the north allowing several points of access. The gardening center has a low "rabbit fence" for pea vines to grow, several pockets for herbs, perennials and annual flowers to attract bees and butterflies, tepee type structures for supporting gourds, fruiting plants, a compost bin, cultivated rows for vegetables, a trash receptacle, wooden garden shed for equipment storage and a cistern. A hose bib is needed for watering and clean-up.

Outdoor Learning Center #3

At the far eastern portion of the site just past the Gardening area, Center #3 has direct access to the drainage ditch which presents an opportunity for students to view geology, and soils. Another aspect of this center is a stone pile left intact for insect investigation. Recommended seating is wooden benches.

Natural Aquatics Center

The site's natural storm water drainage leads to this area. Restoration of a wetland environment with appropriate plants and soils will allow for aquatic wildlife to inhabit the area for study. The surrounding boulder outcrop provides seating and a proposed dock would allow for student interaction without wet feet. The water level would be low, but would vary according to the amount of rainfall. This area requires further research to determine the exact procedures needed to create a viable a wetland habitat. The wet/dry stream bed feeds into the wetland area. Streamside enhancement through rock and plant placement will help direct and delineate the stream.

Outdoor Learning Center #5

By crossing a low wooden bridge over the wet/dry stream bed, students of all ages will be able to study on wood benches near the existing stone retaining wall. This area, with its proximity to both the stream and vegetative buffer on the south, provides space for bird and bat houses, feeders and wildlife habitat exploration.

The Front Yard

A broad lawn area located just to the right of the site's entrance is a learning center and a gathering place. The lawn would be irrigated and maintained much like any home landscape with shrubs and groundcovers at the edges. The Front Yard is yet another example of a typical land use in our region. It provides an opportunity to study and acknowledge its use and appeal while illustrating the differences between it and the rest of the outdoor classroom site.

Outdoor Learning Center #6

On the upper side of the stone retaining wall accessed by the path system that veers right, Center #6 would be enhanced with a mixture of native trees and shrubs. The benefits are twofold; the plants illustrate what naturally grows in our region as well as provides a sense of place and separation between classrooms. The seating would be tree stumps set securely on end.

Outdoor Learning Center #7

The specimen Sycamore tree on the western end of the property is a beautiful example of what can happen when a tree is left to reach its full potential. This area would have simple log seating. The logs, surrounding trees and stumps all help tell the story of plant life cycles.

The Wild Trail

The western side of the site that has not been cleared of underbrush will be kept as it is with the addition of a trail. The undergrowth will be cut through for a 5' wide mulch trail with 7' height clearance. This trail will take the students into an area that has been left naturally wild and unkempt. There is a mix of invasive exotic plants and native plants, animals and insects that can exist in counterpoint to the rest of the more manicured and programmed project site.

Cost Estimate

The Cost Estimate attached provides lists the various components of the plan separated into major projects. The cost estimate is meant to provide a ball park estimate of costs assuming most materials and labor must be paid for.

Informative websites:

www.kidsgardening.org
www.alabamawildlife.org/conservation_education
www.nps.gov
www.backhomemagazine.com
www.epa.gov/superfund/sites
www.sccdistrict.com/ethics