Hlice Ferguson Foundation

ALICE FERGUSON FOUNDATION LIVING BUILDINGS

ENHANCING EXPLORATION AT HARD BARGAIN FARM

PROJECT NEED: New and expanded education facilities will dramatically improve AFF's ability to educate and inspire students, teachers, and the community to explore and protect our natural environment, agricultural heritage, and the Potomac River.



THE PLAN: Planned facilities include a new day-use education building and overnight lodge, connected by innovative stormwater management designed as native gardens with an educational sculpture series. A new ADA-compliant wetlands boardwalk will immerse children in nearby emerging wetlands.

Design and construction decisions will be evaluated for costbenefit and long-term return on investment. Environmental and operational savings are expected to come from:

- net-zero energy consumption
- lowered greenhouse emissions
- recharge to local aquifers

 protection of Potomac River and Chesapeake Bay water quality THE LIVING BUILDING

CHALLENGE: In keeping with the Foundation's legacy of environmental commitment, new education facilities will go beyond current standards for green buildings and will become the nation's first Living Building. The U.S. Green Building Council has issued a challenge to raise the standards of sustainability in the built environment above the current LEED certification system.

A Living Building is one that: generates all of its own energy with renewable resources, captures and treats all of its water on-site, and uses resources efficiently and for maximum beauty.

HISTORY: Alice Ferguson Foundation (AFF) owns and operates Hard Bargain Farm, a 330-acre working farm and education center located along the Potomac River in rural Accokeek, Maryland. This child-centered farm sits within view of Mount Vernon, just 10 miles south of Washington, D.C. Annually, thousands of public school students and teachers participate in education programs at the Farm. The local community also enjoys music and theater programs held at the Farm's outdoor amphitheater. Hands-on experiences help children connect with the natural environment, farming, and the cultural heritage of the Potomac River Watershed - with a larger goal of encouraging personal environmental responsibility.

LIVING BUILDING REQUIREMENTS

Habitat Exchange: 3 set aside habitat for developed land Civilized Learning and Work: fresh air and daylight provided to all workspaces

Net Zero Water: no impact on aquifers

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Net Zero Energy: 100% of energy generated on site

> Limits to Growth: built on previously degraded sites

Construction Waste: diverts >90% construction 9 waste from landfills

> Education and Inspiration: open to the public for tours and learning

Responsible Site Selection: no impact on sensitive lands

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Design for Spirit: 16 respectful of the place and design heritage Materials Red List: eliminates toxic materials

Ventilation/Source Countrol:

exceeds standards for indoor air quality

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Carbon Footprint: 6 purchases carbon off-sets for construction impact

Responsible Industry: uses FSC-certified or salvaged woods

Sustainable Water Discharge:

no impact on waste water systems

Appropriate Materials Radius: 8 uses local materials and services

POTOMAC RIVER HABITAT STUDY COMPLEX Alice Ferguson Foundation Accokeek, Maryland