



Description:

The philosophy of stewardship and education has been crucial in the planning and development of Sully Woodlands. The region encompasses 4,400 acres and 43 parks with specific-use zones, such as community-serving recreation space and resource-stewardship areas, that were designated in each park. The Sully Woodlands Regional Masterplan was approved in 2006. The masterplan recommends an interpretive center to educate the public about natural and cultural stewardship.

The careful and responsible management of FCPA's natural and cultural resources provides a unique opportunity for active and interactive educational experiences. To support this vision, the Park Authority is proposing to develop the Sully Woodlands Stewardship Education Center. The proposed facility is to be a state-of-the-art interpretive center to provide educational services, to serve as a gateway to the greater Sully Woodlands, and core facilities to allow the space to be rented to the public. The project will be located at Ellanor C. Lawrence Park in Sully Woodlands.

To align with the sustainable mission and goals of the Park Authority, the project will be designed to meet the rigorous sustainable design standards of the Living Building Challenge and be one of only a few facilities in the region that will meet these standards.



<u>Living Building</u> Challange:	Meets FCPA Mission:
Place:	 Landscape consists of native plantings. Protect and restore site during and after development. Encourage creation of communities based on pedestrian and not automobile. "Habitat Exchange" – each hectare of development an equal amount of land away from the project site set aside in perpetuity.
Water:	 Net positive water is sourced and treated on site and returned to the natural water cycle. Using stormwater on site for internal water needs. Intent to realign how people use water and redefine "waste" in the built environment.
Energy:	 ✓ Produce 105% of energy needed on site. Passive preferred over mechanical strategies to provide occupant comfort. ✓ Rely solely on renewable forms of energy and operate year-round in a pollution-free manner. ✓ Utilize Photovoltaic solar panels, natural daylighting, and other systems.
Health & Happiness:	 To create a robust, healthy spaces, and encourage a highly productive building. Must have operable windows to provide fresh air to the indoor environment. Indoor air quality to be the almost indistinguishable from surrounding outdoor fresh air.

Fairfax County Park Authorit

<u>Living Building</u> <u>Challange:</u>	<u>Meets FCPA</u> <u>Mission:</u>	
Materials:	✓ •	All materials vetted for life-cycle environmental impacts and their effects on human health.
Equity:	✓ • ✓ • ✓ •	Building and program to benefit community and raise awareness. Creates communities with equitable access to all regardless of physical abilities, age, or socioeconomic status. Project may not block access to, nor diminish the quality of, fresh air, sunlight, and natural waterways for any member of society, or adjacent developments.
Beauty:	√ • √ •	Natural materials and human scaled spaces create a comfortable and tranquil environment that connects people with the landscape in holistic, non-intrusive way. Design buildings that elevate our spirits.



Project Space Program:

Site:

- Learning Pods: STEAM, Nature Play, Animal Enclosure
- Biofiltration swales
- Parking Lot Expansion
- Solar Picnic Table
- Amphitheater (future)

Building: (7,000 sf)

- 2 Multipurpose spaces: Enclosed (1400 sf) and open (800 sf)
- Education Kiosk
- Kitchen
- Public Toilets
- Demonstration Mechanical and Electric rooms.

Sustainable Features:

- Photovoltaics to produce 105% of energy used by building.
- Rainwater Reuse system
- Radiant Heating
- Wastewater Treatment System
- Passive Cooling







Precedents

ACCESSIBLE PERMEABLE TRAILS



ecomposed Granite | Limberlost Trail, Shenandoah, VA



NATURE PLAY



andwalk

Design Development Progress SULLY WOODLANDS STEWARDSHIP EDUCATION CENTER 8 November 2018

Concepts for exterior spaces

Fairfax County Park Authority









Stormwater elements designed to demonstrate how the system works.

Filtration system:





#11 Bid Option: Rainwater Recovery & Wastewater Treatment | Hitchcock Center for the Environment



#11 Bid Option: Rainwater Recovery & Wastewater Treatment | Lake County, Illinois



Structure made from renewable lumber to reduce carbon footprint.

CLT AND GLULAM





SAMPLE APPLICATION



Reclaimed Modern | Julian Weber Architects





MULTIPURPOSE INTERIOR



Reclaimed and reused finishes







Passive cooling to include large doors, transom vents, large fans









