

1999 AIA High School Design Competition Program

Program

You are to design an Environmental Education Center in the Marin Headlands. The mission of the center is to educate school children on a number of environmental topics including renewable energy, recycling, and sustainable community practices, as well as how these items relate back to the local plant and animal life. The center is to be powered primarily by locally generated renewable power sources such as wind or solar power. The center is equipped to handle day visits by classes in addition to overnight stays to cover an expanded educational program. It will be open to the general public on weekends. The center is operated by graduate students seeking to develop environmental education curriculum.

Site

The site is located in the Marin Headlands near the existing developments at Fort Cronkhite. The site has ocean views to the west and south. There is a view to the beach on the south. To the east and north are rolling hills of coastal scrub. The existing facilities, including the California Marine Mammal Center, Headlands Institute, and Golden Gate National Recreation Area Visitor Center are located to the east, as are the existing bathroom and dining facilities to be used by overnight guests of the Environmental Education Center.

The area allotted for the center is considerably smaller than the available land. The location of the building is flexible, but should take into account the existing views and the location of the access road. The building should also be sited to take advantage of either prevailing winds or sun angles or both depending upon the selection of the renewable energy source selected to power the center. Prevailing winds are from the west and fixed solar panels should face south southwest for maximum efficiency. As the mission of the center is to teach the advantages of sustainable development, effort should be made to integrate the building with the surrounding landscape. In addition, the renewable power generation equipment, including windmills or photovoltaic panels should be integrated in to the building. Portions of equipment should be accessible from the building for use in demonstrations. Provision should be made to accommodate renewable power sources, such as windmills or photoelectric panels in to the site, as these will be the primary source of power to the center.

The Environmental Education Center

The building shall be a single story structure not exceeding 3100 square feet, excluding outdoor areas. There is no specific height limit. The entry, bathrooms, and all exhibit space areas shall be accessible to the disabled.

Building Area

Entry Lobby	150 sq. ft.	Dormitory	700 sq. ft.
Exhibit Area	750 sq. ft.	Rest Rooms	170 sq. ft.
Classroom/Presentation Area	300 sq. ft.	Janitor's Closet	50 sq. ft.
Staff Work Room	250 sq. ft.	Circulation	300 sq. ft.
Storage Room	100 sq. ft.		
Kitchen/Snack Area	300 sq. ft.		