

Sustainable Design

Sustainable design is a goal for the State of California and the Administrative Office of the Courts. Strategies that support this goal will reduce environmental impacts and long term operating costs, while providing qualitative enhancements to the workplace. The East Contra Costa County Courthouse building and site have been developed as a high performance project that embraces the principals of sustainable design. A LEED® silver rating is required at a minimum. The team has made a preliminary assessment of the LEED points available on the project (see attached scorecard). In order to ensure the certification at the silver rating, an additional 10 points should be targeted in the MAYBE column.

Site

The proposed landscape design for the courthouse includes bioretention on site to slow the release of stormwater from paved and roof areas, and provide preliminary treatment prior to release to the storm drain system. Landscape plantings planned for use include native grasses and appropriate trees and shrubs so that water use for irrigation can be reduced by half. Trees will shade parking, plazas and walkways, and an energy-star compliant roofing coupled with a green roof over the jury assembly pavilion will be used to reduce temperatures around the building as well as contribution to the urban heat island effect.

Energy

Design strategies are being developed that will reduce energy use. Preliminary energy modeling indicates that energy savings of approximately 30% can be achieved. Savings result from use of an efficient HVAC system, efficient lighting, an improved building envelope and high efficiency fans and motors throughout. Rooftop areas will be developed to be "PV ready" to accommodate solar PV if and when future funding supports their use.

Water

Water conservation strategies include use of water efficient plumbing fixtures, and use of native landscape plantings that reduce irrigation requirements.

Materials

Materials have been selected that will meet functional and budget requirements while also promoting use of recycled content and low environmental impact over the lifecycle. All wood will be FSC certified and casework will be made with wheatboard cores. The design is being developed with convenient locations for collection of recyclables in office areas and pantries, and waste materials from construction will also be recycled.

Indoor Environment

The courthouse is being developed as a quality workplace with good indoor air quality, ample daylighting, and views. All of the courtrooms will have access to daylight, through a combination of exterior windows and skylights. Interior offices will be equipped with transom and sidelights to bring light further into the building for the open office areas. In addition, workstation groupings are provided with direct access to daylighting on the first floor by eliminating enclosed spaces in the center of the building on the north. Strategies to promote good indoor air quality may include the use of displacement ventilation in courtrooms, use of low-VOC materials, and construction practices that will protect the building from contamination during the construction process.

