PROJECT OF THE YEAR & BEST GREEN PROJECT, SOUTHERN CALIFORNIA = SUBMITTED BY ZGF Architects LLP

Net-Zero Building Touts Energy, Land Conservation

A philanthropic organization sought a peaceful new headquarters that embraces and protects the surrounding environment while serving as a model for future green building projects.

To realize these goals for the Conrad N. Hilton Foundation, the collaborative project team creatively re-imagined the way systems and architecture are integrated in a highly sustainable way.

The result is a 22,240-sq-ft, LEED-Platinum building that is also designed to operate as a netzero energy use facility. It's the first of four planned structures that will make up the campus.

The net-zero strategy relies largely on 100% natural ventilation. A passive downdraft HVAC system uses thermal buoyancy to propel the flow of ventilation and cooling air through the building without the use of fans. Air is exhausted from the offices into a central atrium and out through digitally controlled clerestory windows.

An automatic external shade system controls direct sunlight whenever the outside air temperature exceeds 80°F.

Floor-to-ceiling glass at each end of the building provides dramatic views out to the landscape and provides ample light deep into the interior. Structural steel framework is exposed and integrated into the interior finishes, which also include extensive millwork made from FSC-sourced light ash.

To allow for construction, the team widened the main roadway that travels along a steep hill, creating a large amount of displaced earth. To minimize environmental impacts, crews raised the site's existing grade by 25 ft so that the soil could be used during grading and contouring.

The project also implemented numerous land preservation strategies, including rainwater collection in an underground cistern, green roofs and native habitat restoration. Crews retained hundreds of oak trees and planted more than 140 additional trees. As part of a two-year, biologist-monitored program, an onsite plant restoration preserve was established. To ensure sustainability, the team collected seeds from native plants threatened by the new construction. They will be germinated in a controlled environment, with seedlings planted later outside the project's footprint.

One judge called it a "fantastic looking building" and a "great use of the site."





Conrad N. Hilton Foundation Headquarters

Agoura Hills

KEY PLAYERS

CONTRACTOR MATT Construction, Santa Fe Springs

OWNER Conrad N. Hilton Foundation, Agoura Hills

LEAD DESIGN ZGF Architects LLP, Los Angeles

STRUCTURAL ENGINEER KPFF Consulting Engineers, Los Angeles

CIVIL ENGINEER Stantec Consulting Services, Thousand Oaks

MEP ENGINEER WSP / Built Ecology, San Francisco

CONSTRUCTION MANAGEMENT Bigelow Development Associates, Malibu

LANDSCAPE ARCHITECT Van Atta Associates, Santa Barbara

CONSULTANTS Rocky Mountain Institute, Boulder, Colo.; The Cadmus Group, Portland, Ore.; David Nelson & Associates, Littleton, Colo.; Alden, Fort Colllins, Colo.; GeoSoils, Carlsbad; Envicom Corp., Agoura Hills



