

Nueva School

Hillsborough, California, U.S.A.

Founded in 1967, Nueva School is a pre-K-through-eighth-grade experimental school that aims to inspire passion for lifelong learning by developing students' imaginations through integrated studies. In 2007, the suburban campus underwent an expansion project that transformed an old parking lot into an innovative outdoor space that successfully merges the new student center, library, and classroom building. The landscape has become a model of sustainable design in Northern California, especially in regards to its ecological management of stormwater. The landscape also complements and enhances the school curriculum by demonstrating commitment to environmental stewardship and creating hands-on learning opportunities for students to engage with the local ecosystem.

Green roofs installed on top of the library and student center absorb and retain rainwater during storms, and reduce pollution and flood risks associated with rapid stormwater runoff. Together, the green roofs create more than 10,000 square feet of California grassland habitat that has attracted a diverse range of bird and insect populations, including the endangered Myrtle's Silverspot Butterfly. As another strategy for reducing stormwater runoff, the project also reduces the amount of exposed hard surface area. For example, part of a new parking lot is tucked beneath the classroom building. Remaining hard surfaces, such as those on the central plaza, classroom roof, and parking lot, steer water into vegetated swales that slowly filter and disperse the rainwater.

The site was chosen so that the new facilities could be integrated into the existing landscape, minimizing earth moving and deforestation. The architect and landscape architect worked together to create buildings that are insulated by the landscape. The library and student center are sunken into prevailing grass-covered slopes, which helps shield their facades from the southeast sun and winter winds. This means that less energy is needed

to heat and cool the building, resulting in lower utility costs and reduced CO² emissions. Photovoltaic (PV) solar panels span the roof of the new classroom building and provide the site with clean, renewable energy.

The construction project required the removal of a number of ailing and diseased Monterey Cypress trees. Rather than disposing of the wood, the tree was recycled and used to create shade screens, decking, and outdoor furniture used throughout the landscape. Cypress wood is naturally resistant to rot, insect infestation, and decay, so the recycled wood is expected to be used for a long time. Using salvaged materials helps keep material sourcing local. It also reinforces the educational mission of the school by serving as a tangible example of sustainable resource use in action.

Project Resources

LANDSCAPE ARCHITECT

Andrea Cochran Landscape Architecture
Andrea Cochran, FASLA; Horngsheng Tu;
Elaine Shaw; Sarah Keizer; Amir Kunin

ARCHITECT

Leddy Maytum Stacy Architects

LIVING ROOF

Rana Creek Habitat Restoration, Inc.

ARTIST (LEAF IMPRINTS)

Mary Martha Collins

LIGHTING

Architectural Lighting Design

IRRIGATION CONSULTANT

Russ Mitchell and Associates

STRUCTURAL ENGINEERS

Forrel Elsesser Engineers, Inc.

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Project Resources Cont.

CIVIL ENGINEERS

BKF

ELECTRICAL ENGINEERS

Integrated Design Associates, Inc.

MECHANICAL PLUMBING ENGINEERS

Rumsey Engineers

ACOUSTICAL ENGINEERS

Charles Salter Associates, Inc.

OWNER'S REPRESENTATIVE

Lake Street Ventures, LLC

GENERAL CONTRACTORS

Herrero Contractors, Inc.

LANDSCAPE CONTRACTOR

Gachina Landscape Management