

2014 Exhibition of School Planning and Architecture

White Hill Middle School Campus Master Plan & Design

Ross Valley School District
Fairfax, CA



Main Exterior Image



Main Site Diagram

Community Environment

White Hill Middle School is located on 22 acres at the northern edge of Marin County's Town of Fairfax and surrounded by hills, open space, and residential neighborhoods. The school's mission is to cultivate the whole child by fostering academic excellence, cultural richness, and social, emotional and physical development.

Originally built in 1967 and facing increases in student enrollment, White Hill Middle School required more flexible, safe, sustainable, accessible, and technology-enabled facilities. In response, the Ross Valley School District (RVSD) passed a \$41 million bond in 2010.

The first phase of the project, completed in 2013, includes the two new classroom buildings or "houses" for the 7th and 8th graders, a modernized 6th grade wing and enhanced art classrooms.



Central, outdoor gathering area

Community Environment

During the master plan stage, design meetings were regularly scheduled with a core stakeholder group that included District administrative staff, educators and community members. Many people provided input on overall strategy, including height, view opportunities, noise, and variety of places for reflection, group play and instruction, all of which reflect and celebrate the unique needs and attributes of the surrounding communities of Fairfax and San Anselmo, tightly knit towns that are tucked into Marin County's stunning landscape. Through the design of the classroom buildings, options were presented and trace paper sessions allowed for various stakeholders to help prioritize and express interests and concerns. Students and parents participated through focused sessions, identifying key issues on learning spaces and environmental issues. The design team's response to these concerns is articulated in the following sections of this submittal.



Pathways connect to outdoor gathering spaces. Conservation is on display

Learning Environment

The Small Learning (SLC) teaching model, adopted by the District, and employed throughout the campus design, is intended to break down the scale of the school. By creating smaller learning spaces with retractable walls that open interior classrooms onto one another, the design offers flexibility with intimate "houses" that encourage teachers to collaborate on curriculum and follow the progress of students more consistently with one another, thus connecting to students in more meaningful way.

The District also wanted to make evident the systems that support the school so the buildings and landscapes themselves could double as teaching tools. "Teaching patios" support outdoor learning, making conservation and resource management part of the everyday experience. The controls for the radiant heating and cooling are made visible to provide teaching opportunities.



Two story 7th Grade House, with 8th Grade House in the background

Learning Environment

With its easily configurable spaces, indoor / outdoor learning environments, and focus on interdisciplinary, small group education, the new campus supports a variety of learning styles and “learning everywhere, anytime philosophy.” The campus is a model of 21st Century education.

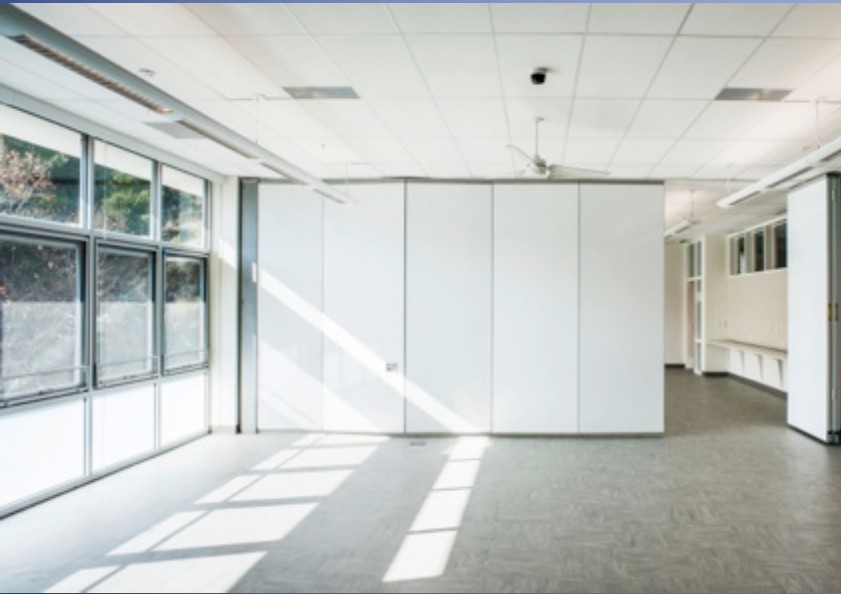
To support future changes in educational delivery systems, wireless ports are integrated into the classrooms to allow for flexibility and easy of connectivity inside each "house" and outside—from teaching patios to the central gather court space. Projectors (Epson) with IT controls on the teacher's walls are available in all classrooms. iPads are available for each student to connect to Apple TV boxes and document cameras. Viewing the campus' direct access to water as another educational opportunity, we embraced stormwater management with bioswales, pervious concrete paving and flow through planters that weave between the classroom buildings and throughout the site.



21st Century Learning Classroom & Innovation Lab



Teaching patios with storm water management and bioswales on display



Retractable walls allow for flexible classroom configurations and cross-pollination between the SLC's

Physical Environment

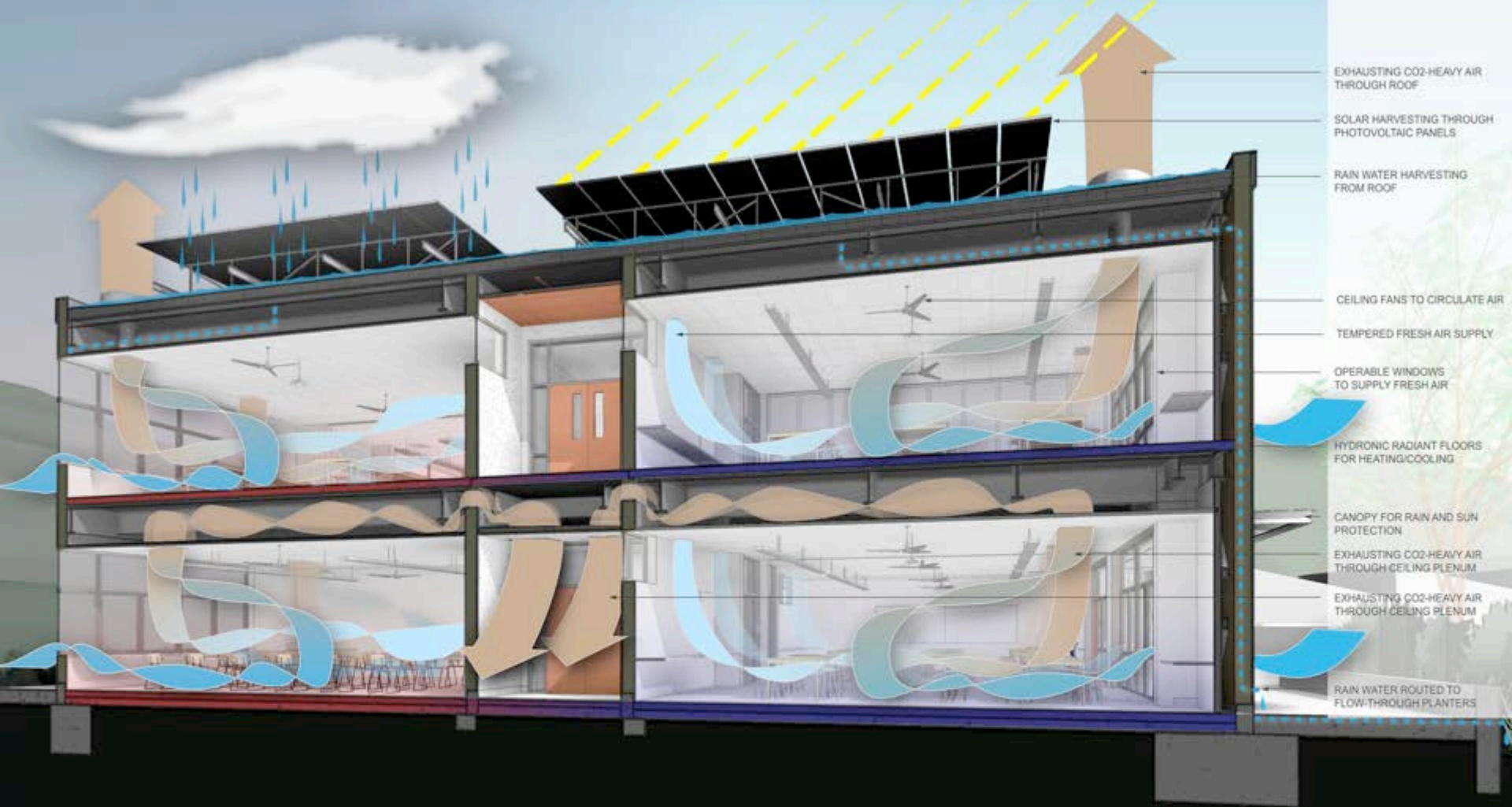
The proximity of the classrooms to one another and the desire for collaboration made good acoustics, air flow, comfortable lighting and healthy materials a top priority. The buildings were oriented to allow for daylight to serve as primary lighting. Operable windows allow for natural ventilation and are supplemented with low energy ducted fans on the roof.

Conservation is on display through radiant flooring controls shown in each SLC house, educating students about how systems work. PV panels on the roof are visible from campus windows (targeting net zero energy) and water systems are integrated to emphasize conservation and tie to the evident site water management.

Water historically runs east west across the site, flooding the hardscape play areas and original classrooms.

To mitigate this issue and provide a teaching moment, a mixture of flow through planters, bioswales with constructed weirs, and pervious paving provide water management. These elements are integrated into the teaching patios to provide an educational story about water management and environmental stewardship, one that is integrated and apparent in their everyday lives on campus.

Designed using Collaborative for High Performance Schools (CHPS) guidelines. Designed using LEED for Schools guidelines. Net Zero electricity.





Sustainable design strategies

Planning Process

The planning and community engagement processes were, in many ways one and the same for this project. As mentioned in the “Community” section of this submittal, during the master plan stage, design meetings were regularly scheduled with a core stakeholder group that included District administrative staff, educators and community members.

A key outcome was to ensure that existing campus pathways and views to the surrounding hillsides were considered in the placement of new buildings. The site is organized and designed to respond to the regional qualities of the site. The new classroom buildings have been sited and organized around a central outdoor gathering space that extends the existing entrance courtyard to the north. This new outdoor space is designed to allow for a variety of activities that range from small social space to large school assemblies.



Campus connection / integration with landscape; Purposeful placement of buildings



Students under sunshades

- classrooms
- flex space
- teachers
- storage
- toilets
- balcony



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0 30

Floor plan: 6th grade classrooms + teacher's lounge

- classrooms
- flex space
- teachers
- storage
- toilets
- balcony
- learning center
- art



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Floor plan: Music classrooms + 7th grade classrooms

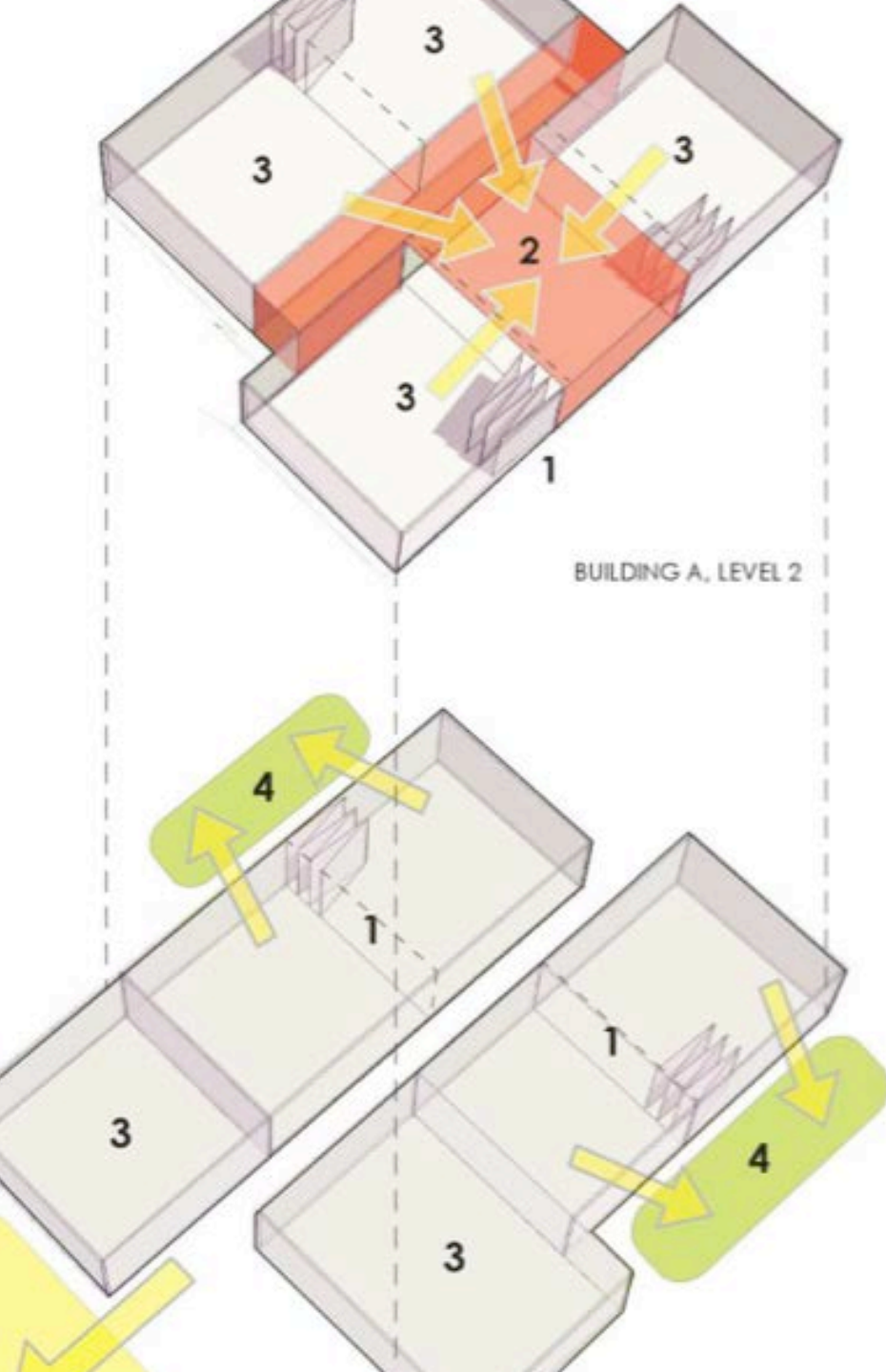
- classrooms
- flex space
- teachers
- storage
- toilets
- balcony
- learning center
- art



0 30



Floor plan: 8th grade classrooms



BUILDING A, LEVEL 2



- 1 **OPERABLE WALLS**
provide flexibility for classrooms to expand and contract classroom
- 2 **FLEX CLASSROOM**
flexible space allows for gatherings of varying sizes
- 3 **TYPICAL CLASSROOMS**
- 4 **TEACHING PATIOS**
operate similarly to flex classroom, providing gathering space outside
- 5 **GATHERING SPACES**

Exhibition of School Planning and Architecture Project Data

Submitting Firm :	WRNS Studio
Project Role	Master Planner, Architect, Interior Designer
Project Contact	Pauline Souza
Title	Partner, Director of Sustainability, Project Manager
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Other Firm:	
Project Role	N/A
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Construction Firm:	Plant Construction Company
Project Role	General Contractor
Project Contact	Darrel Petray
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Exhibition of School Planning and Architecture Project Details

Project Name	White Hill Middle School Campus Master Plan and Design
City	Fairfax
State	California
District Name	Ross Valley School District
Supt/President	Eileen Rohan
Occupancy Date	January 2014
Grades Housed	6 th , 7 th , 8 th
Capacity(Students)	600
Site Size (acres)	22 acres
Gross Area (sq. ft.)	44,000 sq. ft. (Phase 1)
Per Occupant(pupil)	70 sq. ft.
gross/net please indicate	86% (includes corridors, restrooms, storage, etc.)
Design and Build?	No
If yes, Total Cost:	
Includes:	
If no,	Lease-Leaseback
Site Development:	\$850,000
Building Construction:	\$18.17 m (Phase 1)
Fixed Equipment:	\$90,000 (Phase 1)
Other:	
Total:	\$17.1 m

Nine months was dedicated to the planning process. The design team continues to meet monthly with the District to review success of the Building Management System. Prior to the 2014/2015 school year, additional meetings will be held with the District to review how the systems are working.