

## Member Communication Experience

# Crafton Hills College Performing Arts Center

CMAA Sustainability Project Spotlight submitted by: Farrah Farzaneh, San Bernardino Community College, Director

### Project Team

- » **OWNER:** Crafton Hills College - San Bernardino Community College District
- » **AE:** [DLR Group](#)
- » **BUILDER:** Bernards
- » **OWNER'S REPRESENTATIVE:** AECOM

### Project Statistics

- » **USE:** Performing Arts Center
- » **SIZE:** 26,000 gross square feet
- » **CONSTRUCTION VALUE:** \$45,900,000
- » **CERTIFICATION(S):** LEED Gold (BD+C, v4)
- » **PROJECT WEBSITE:** <https://sbccd.edu/district-services/facilities-planning-construction/sustainability/projects/documents/chc-performing-arts-center-flyer.pdf>



### What is the most exciting sustainable feature of your project?

The project is implementing Phase Change Materials (PCMs) in the Music Labs. These products are often deleted from the projects, but on this project they remain and will be a key feature to highlight that is visible to students.

### What was the biggest challenge your team faced and how did you overcome it?

The client desires to get to Net Zero for this project. The predicted building EUI for the project is 38 Kbtu/sf/yr. In order to achieve the energy offset goal, the district committed to dedicate 160KW DC renewable system from the existing

campus solar towards this project, to support the energy budget of 38 Kbtu/sf to meet the net zero goal for this building.

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### What was the most interesting sustainable feature that didn't make it into the final project?

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In the early phases, exploration was done to evaluate if earth tubes could be implemented for pre-heating or pre-cooling the air before it was delivered to the building. It was determined that the seismic zone requirements for the system made it cost-prohibitive.

The project is targeting LEED Gold certification. Here are some sustainability strategies utilized:

- » Use of cutting edge phase change materials to stabilize indoor air temperature
- » Net Zero target with very low EUI of 38 kbtu/sf/yr
- » Dedicated 160 KW/DC solar PV system to offset energy usage
- » Strategic solar shading placement to provide comfortable outdoor and indoor areas
- » 50% of the site was restored with native vegetation and drought tolerant plants
- » Installation of bio-retention basin and permeable pavers
- » Ultra-low flow and high efficiency flush fixtures reduce water use over 40% from the baseline
- » Less than 20% window to wall ratio utilizing high performing glazing
- » Earth bermed' siting to passively reduce the heating and cooling loads



Outdoor Lobby



Music Lab Interior

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## About the Project

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CMAA has created the Sustainability Project Spotlight as a regular focus given to member projects nationwide that are building the way to a better future.

This Sustainability Project Spotlight focuses on the [Crafton Hills College Performing Arts Center](#). Crafton Hills College is part of the San Bernardino Community College District and is located in Yucaipa, California. The project is already being recognized by winning a Sustainable Innovation Award for Honor in Energy/Operational Carbon by the U.S. Green Building Council of Los Angeles.

*The CMAA Sustainability Subcommittee is actively seeking to spotlight your projects! Please email us at [communications@cmaanet.org](mailto:communications@cmaanet.org) with a project name and person to contact.*

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