COTE Description—AIAOC 2016

Los Angeles Valley College Monarch Student Center

Measure 1: Intent & Innovation
The LEED Silver Design-Build Student Center is a hub of activity in the heart of campus. The project creates a dynamic and exciting new home for the Student Union along with a Health Center, cafeteria, bookstore, convenience store and administrative services. The architecture uses an open floor plan scheme surrounding a plaza to blur the boundaries between indoors and outdoors, offering access to a wide variety of spaces for students to gather, study, socialize or simply “see and be seen”.

Measure 2: Community
The new plaza provides a focal point to a campus with a sustainable park that connects to the existing mall and to other campus buildings.

Measure 3: Site
The design creates a sustainable park which is a demonstration of native and drought tolerance landscaping that links the south and north end of campus by winding through and under the new student union, which was “elevated” to a second floor level, opening the central plaza space to the adjacent campus mall.

Measure 4: Bioclimatic Design
Solar control using overhangs, louvers, and perforated metal visually demonstrates the sustainable quotient of the building. Computer modeling of the naturally ventilated cafeteria demonstrated the larger window of time that this feature would be viable to the campus.

Measure 5: Light and Air
Daylighting is provided for over 90% of the occupants, including the100% naturally daylit cafeteria space with direct and indirect lighting and controls.

Measure 6: Water
Low flow faucets, urinals, and dual flush toilets are 37% better than baseline design. All storm water is treated by a water retention basin that also controls the discharge rate before entering the city storm drain system. Native planting and efficient irrigation system reduce water use by 55% for landscape.

Measure 7: Energy
High performance Low-E glass, energy star roof, occupancy and daylighting controls, and an efficient HVAC system create a building that is 20.6 % better than Title 24. The profile of the building promotes the sustainable features of natural ventilation, natural daylighting, efficient stacking of spaces and solar control.

Measure 8: Materials
The interiors meet a "do more with less" approach with a polished concrete slab is used throughout the ground floor public space and recycled metal paneling used outside continues to the interior. Extensive recycled and regional material used meeting LEED requirements including certified wood. 75% of the construction waste was diverted from landfills.

Measure 9: Long Life
The project is a series of flexible column free spaces which can evolve with the university’s needs. Load bearing walls are at the perimeter allowing for reuse and restacking as future demands require.

Measure 10: Feedback
Using BIM/3D energy software to optimize the building’s features was particularly helpful in dialing in the design of the building envelope. The project’s stormwater management practices and sustainable landscape are a model for the campus and have been used as a case study within the LACCD system.

AIAOC Design Awards Performance Data Worksheet

Areas in Green are instructions.

1. BRIEF STATEMENT

In the space below list the energy efficiency and environmental performance goals for the project. These could be as simple as to comply with code minimum or as ambitious as to achieve zero net energy and/or eliminate all materials on the Living Building Challenge Red List. You are encouraged to describe environmental strategies throughout your design awards submittal materials .

The 41,000 square-footDesign-Build Student Center is tracking a LEED NC Silver rating and is a hub of activity in the heart of the campus providing a place for students to call home. The project creates a dynamic and exciting new home for the Student Union along with a Health Center, cafeteria, bookstore, convenience store and administrative services. The project's open floor plan concept surrounding a plaza blurs the boundaries between indoors and outdoors, offering access to a wide variety of spaces for students to gather, study, socialize or simply "see and be seen" offering a valuable place for the commuter campus where there was none before.

2. ENERGY EFFICIENCY

Projects in California (Complete section A *or* B. Complete C only if applicable.)

A. Modeled Performance for California Projects (If you complied using a computer model.)

Enter information from the Title 24 Building Energy Standards compliance report below. If you complied under 2013 Title 24, refer to form CF-1R-PERF for Residential Bldgs and NRCC-PRF for Nonresidential & Highrise Residential Bldgs.

Year of Title 24 Standard Used	Energy Budget of Baseline Bldg (Code Min) in kBtu/sf/yr	Modeled Performance Of Your Design in kBtu/sf/yr	Percent Savings Beyond Code Minimum
2008	395	312	21%

B. Prescriptive Compliance for California Projects (If you did NOT comply using a computer model.)

Year of Title 24 Standard Used	In the *prescriptive compliance path* , individual building components meet minimum requirements. If your project complied prescriptively, but your goal was to exceed minimum performance, enter the year of standard at left and briefly describe your energy efficiency strategy below.

C. Measured Performance for California Projects (If Available)

If you have measured data showing actual energy use for 12 months, enter it below as Energy Use Intensity (EUI) in kBtu/sf/year.

NA-only been opened for six months

Projects Outside of California (Complete section E *or* F. Complete G only if applicable.)

E. Modeled Performance for Non-California Projects (If you complied using a computer model.)

Enter information from the energy compliance report below. Your engineer or energy modeler should be able to provide this information.

Year of Title 24 Standard Used	Energy Budget of Baseline Bldg (Code Min) in kBtu/sf/yr	Modeled Performance Of Your Design in kBtu/sf/yr	Percent Savings Beyond Code Minimum

F. Prescriptive Compliance for Non-California Projects (If you did NOT comply using a computer model.)

Standard and Year of Standard	Some projects comply via the *prescriptive path* , where individual building components and equipment must meet minimum requirements. If your project complied prescriptively, but your goal was to exceed minimum performance, briefly describe what you did below.

G. Measured Performance (If Available)

If you have measured data showing actual energy use for 12 months, enter it below as Energy Use Intensity (EUI) in kBtu/sf/year.

3. RENEWABLE ENERGY & NET ENERGY USE (If Applicable)

If the project includes renewable energy, either on-site or through a purchase of off-site renewable energy, provide information on source, annual output, and net energy consumption.

Renewable Source	Annual Renewable Energy Production	Net Energy Consumption	Modeled or Actual Data
NA			

4. WATER EFFICIENCY, REUSE, AND MANAGEMENT (If Applicable)

California water efficiency standards are part of Title 24, Part 11, typically referred to as CalGreen. If your project achieved performance significantly beyond CalGreen minimum requirements, or incorporates innovative water efficiency, reuse, and management strategies and/or equipment, concisely describe them below.

A demonstration of native and drought tolerance landscaping that links the south and north end of campus by winding through and under the new student union, which was “elevated” to a second floor level, opening the central plaza space to the adjacent campus mall. The "sustainable park" is also a retention basin that polishes and controls the stormwater runoff which is collected in a seasonal waterfall from the butterfly roof. Native planting and efficient irrigation system reduce water use by 55% for landscape and low flow faucets, urinals, and dual flush toilets are 37% better than LEED baseline design.

5. MATERIAL USE & SELECTION FOR RESOURCE EFFICIENCY & HEALTH (If Applicable)

Briefly describe *exemplary* steps you took related to material use and selection. Examples might include exemplary performance in use reduction or reuse, incorporation of life cycle assessment and environmental product declarations, occupant and environmental health criteria & avoidance of chemical hazards, embodied energy and carbon, among many others.

The interiors meet a "do more with less" approach where a polished concrete slab is used throughout the ground floor public space and recycled metal paneling used outside for soffits continues to the interior. Extensive recycled and regional material used meeting LEED requirements including certified wood. 75% of the construction waste was diverted from landfills. LEED EQc1 and EQc2 requirements for Indoor Air Quality were meet during construction and before occupancy.