

Cardiff Elementary School
1888 Montgomery Avenue

Executive Summary Presentation

June 16, 2016

Welcome!

Cardiff Elementary School

Looking to the Future



ELEMENT	TOTAL COST	GFA	\$/SF AREA
Classroom Buildings [CS]	\$8,437,367	30,500	\$277
Multi-Purpose Building [CS]	\$2,359,863	8,000	\$295
Warming Kitchen / Custodial Offices [CS]	\$1,187,306	2,500	\$475
Historic Building Modernization [CS]	\$278,635	800	\$348
Existing Building to Remain Renovation [CS]	\$1,000,000	17,500	\$57
Montgomery Drop-Off [CS]	\$288,231	5,400	\$53
Mozart Drop-Off [CS]	\$345,842	6,800	\$51
Interim Housing [CS]	\$1,443,071		
New Parking Lot [CS]	\$698,476	10,250	\$68
Soccer Field [CS]	\$144,304	22,635	\$6
Site [CS]	\$3,632,185	90,887	\$40
Dynamic Learning Spaces [CS/AH]	\$990,000		
Solar System [CS/AH]	\$1,000,000		
Modular Buildings & Shed [AH]	\$975,000		
Upper Parking Lot Paving [AH]	\$50,000		
Track & Field Completion [AH]	\$150,000		

COSTS

CLASSROOM BUILDINGS | \$8,437,367 – 30,500 SF

Durability / Energy / Sustainability

- New structures will be more durable, non-combustible, and more energy efficient than their predecessors
- Codes, regulations, and guidelines all moving toward Zero Net energy
 - Title 24 – New edition in effect January 2017
 - Project will comply with the 2016 CBC
- Creating Green Building Envelopes
 - Integration of natural daylight/ natural ventilation
- Solar Energy – approximately 20% - 25% of roof square footage required for Photovoltaic (PV) panels



Clerestory windows & natural light at Julian H.S.



CLASSROOM BUILDINGS | \$8,437,367 – 30,500 SF

Enhanced Learning Environments

- Designing enhanced learning environments makes for enhanced learning experiences
- “When classrooms are clean, healthy, and daylit, students will be more comfortable, less prone to illness and more focused on their studies.”¹
- “According to researchers at Lawrence Berkeley National Laboratories, when ventilation rates are at or below minimum standards (roughly 15 cfm per student), an associated decrease of 5%–10% occurs in certain aspects of student performance tests (LBNL IAQ Resource Bank).”¹

¹“The Impact of School Buildings on Student Health and Performance,” McGraw-Hill Research Foundation in partnership with The Center for Green Schools

MULTI-PURPOSE BUILDING | \$2,359,863 – 8,000 SF

Durability / Energy / Sustainability

- Constructed of modern, durable, non-combustible materials
- Design includes passive conditioning systems, offering ease of use
 - Auto louvres, vents, clerestory windows, shades – all to take advantage of the benign coastal environment

Building Upgrades

- Building will be designed to accommodate the entire student body and staff (current building cannot), allowing for school-wide gatherings, seminars, etc.
- Design includes indoor/outdoor amphitheater for large assemblies and flexibility.
- Proposed location is amenable to community use
 - New location improves cohesive/safe campus layout



Auditorium at Lilac Elementary School

WARMING KITCHEN | \$1,187,306 – 2,500 SF

Functionality

- The proposed Warming Kitchen includes square footage for storage, custodial space, and other necessities required for food service
- The layout of the Warming Kitchen will include circulation paths for students to move through the food service line safely and comfortably



Sample Food Service Area Layout, Skyline Elementary

HISTORIC & EXISTING BUILDING RENO/MODERNIZATION | \$1,278,635

Preservation & Modernization

- Existing historical features of the site, including native trees, will be preserved, and renovated where possible
- Renovation of the existing historic brick building
- The historic bell will remain
- By the numbers:
 - \$278,635 for historic building modernization
 - \$1,000,000 for renovation of existing buildings to remain



SITE / ARCHITECTURAL CONTEXT | \$3,632,185

Contextual Architecture

- The overall design will be contextual, and will speak to and complement the architecture and scale of the surrounding community
 - Single-story buildings



Cardiff Library

Vicinity aerial/street views



SITE / ARCHITECTURAL CONTEXT | \$3,632,185

Site Plan

- The site plan design moves away from the current “Finger Plan,” toward courtyard outdoor spaces shaped by the surrounding classrooms to accommodate outdoor learning areas, utilizing valuable outdoor space.



Sample outdoor learning spaces, Skyline Elementary

Existing Site Plan



Proposed Site Plan



SOLAR / MAINTENANCE

Project Scope

2014-15 Electricity Usage:

Cardiff + Ada Harris = 50mWh / Month
Annual Cost : \$150k

350 kWh DC Solar System:

Generates approximately 50mWh / Month
1,000 panels
\$1m installed @ \$3/W

Proposal:

Use solar cost savings to increase annual maintenance budget

Thank You!