

# DESIGN CONCEPT 2016

EXHIBITION OF SCHOOL PLANNING AND ARCHITECTURE



*A BUILDING CONNECTS EVERYTHING . . . PEOPLE, IDEAS AND SPACES.*

WEST CONTRA COSTA UNIFIED SCHOOL DISTRICT  
**PINOLE VALLEY HIGH SCHOOL** PINOLE, CA

## PINOLE'S MISSION STATEMENT

"The Pinole Valley High School Community will provide a safe, respectful and caring environment for learning. All community members including parents and staff will work as a team to support students in developing their capacity to meet or exceed mastery of academic standards and successfully adapt to the challenges of life, work and education in the global community."



## Expected Schoolwide Learning Results (ESLRs)

Pinole Valley High School graduates will be:

### Thinkers Who:

Analyze data and weigh information in all content areas.  
Employ higher level thinking skills to make informed, well-considered decisions.  
Recognize bias in speeches, writings, and other media.  
Develop and support arguments with evidence.

### Healthy Young Adults Who:

Demonstrate an understanding of the role of physical activity and nutrition in maintaining lifelong health in mind and body.  
Participate in activities that provide both recreation and exercise.  
Balance personal and social needs with school and work obligations in productive and self-fulfilling ways.

### Informed, Cultured Members of Society Who:

Read, reflect upon, and respond to a wide range of literature.  
Demonstrate the ability to write and speak in a literate, coherent way.  
Convey an appreciation for the visual and performing arts.  
Display the ability to communicate in a second language.  
Consider, in an unbiased way, the differing ideas and cultural mores of others.

### Neighbors and Good Citizens Who:

Contribute in positive ways to school and community.  
Show respect for themselves and others by exhibiting punctuality, accepting responsibility for their own choices and decisions, and behaving in socially responsible ways.  
Work in a cooperative way with others to achieve common goals.

### Knowledge Seekers Who:

Demonstrate initiative in assessing and fulfilling educational needs.  
Study and use lessons of the past as guideposts to the future.  
Recognize the importance of continuing to acquire knowledge and technological skills that will enable them to remain competitive in the global community.



# COMMUNITY PROCESS: PLAN SELECTION

## PLANNING PROCESS



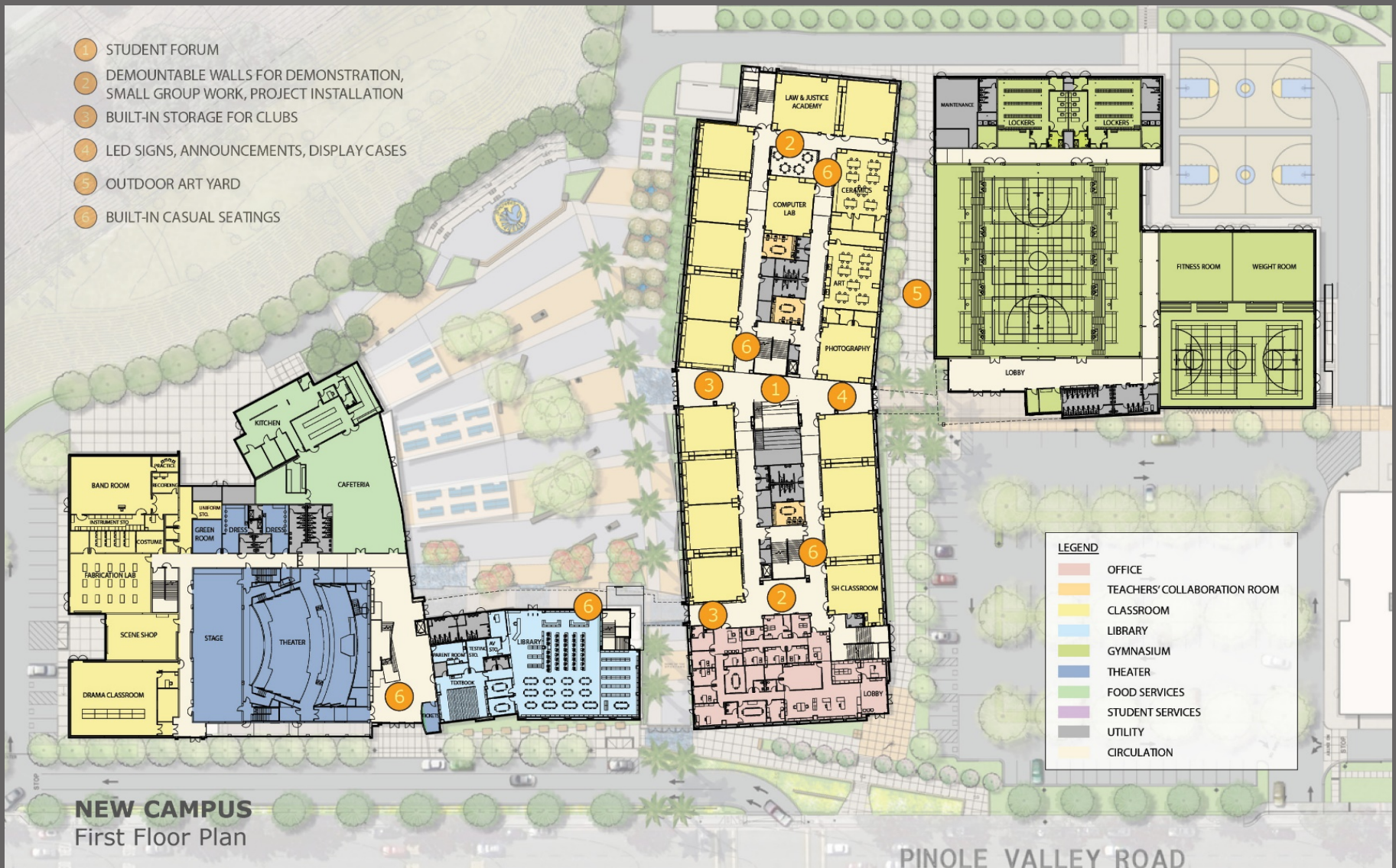
The City of Pinole is a small community that cherishes traditions and their community involvement is very important. Many planning meetings were conducted with a focus of encouraging Community Members to attend and participate directly in the planning process with Students and District Staff. Design charrettes and concept explorations allowed participants to share ideas and express concerns. This process promoted trust and allowed all participants to be engaged in the project. The floor plans above were generated from ideas and concerns shared during those meetings, culminating into a design consensus, e.g.: Interior\ exterior student gathering spaces, parent and community safety concerns, community theater performance opportunities and athletic facility needs.





# FLOOR PLAN

# LEARNING ENVIRONMENT



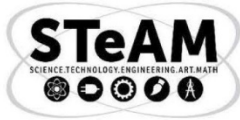
The District substantially invested in educational facilities to support educational curriculum needed to meet the challenges of today's global community. The facts are that educational curriculum continues to evolve with different curriculum focuses. Additionally, technology evolves very rapidly and provides educators with different tools and opportunities to educate our students. Classrooms must be able to adapt to unknown technology innovations and educational paradigms. The term "21<sup>st</sup> Century" classrooms has now evolved to "Adaptive Learning Classrooms." These classrooms are equipped with technology and flexible spatial layouts to accommodate different curriculum focuses, e.g.: STEM, STEAM, Project Based Learning, Brain Based Learning, Common Core, etc.

## LEARNING CLASSROOMS

P<sub>3</sub> R<sub>1</sub> O<sub>1</sub> J<sub>6</sub> E<sub>1</sub> C<sub>3</sub> T<sub>1</sub>  
B<sub>3</sub> A<sub>1</sub> S<sub>1</sub> E<sub>1</sub> D<sub>2</sub>  
L<sub>1</sub> E<sub>1</sub> A<sub>1</sub> R<sub>1</sub> N<sub>1</sub> I<sub>1</sub> N<sub>1</sub> G<sub>1</sub>

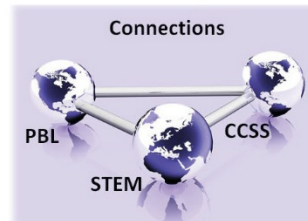


BRAIN BASED  
LEARNING



### SUSTAINABLE DESIGN FEATURES:

- DAYLIGHTING
- LIGHTING CONTROLS
- OPERABLE WINDOWS
- ENERGY EFFICIENT LIGHTING
- ACOUSTICAL PERFORMANCE (35DB)
- DISPLACEMENT VENTILATION
- LOW OR NO VOC FINISHES
- SUNSHADING DEVICES







All planning participants were passionate about the project design. The students preferred a "modern" facility that mirrors current society and reflects "computer technical" aesthetics. However, the Parents\ Community viewpoint was that modernist styles were trendy and didn't represent the true character of the City of Pinole and a "historic" style that was "timeless" better reflected the character of Pinole. Both sides reached consensus on a style termed "Historic-Modern." The historic style would be applied to the exterior street frontage, but the interior quad area and building interior of the school site plan would house the modern style. Building materials would also be used to reflect the "Historic-Modern" theme.





## Site Plan Considerations:



- Building orientation to maximize **daylighting** and minimize heat gain in classrooms
- Easy **access** and **supervision** of quad, parking, and drop-off areas
- **Outdoor environment** shielded from busy road and surrounded by hillside. Student Quad amphitheater provides a protective oasis
- Easy ground floor access to encourage **community shared use** of Library and Theater
- One-stop **student services** center with Health Clinic and Career Center
- **Maximize length of drop-off** to avoid traffic congestion
- **Ease of flow** between Cafeteria and outdoor lunch shelters
- Maximize **outdoor play** areas



PINOLE VALLEY ROAD

The District has a Board approved Sustainable Building Policy for its school building program. Sustainable goals for this project are to exceed Title 24 by 25%. An energy efficient air-cooled chiller central plant HVAC system is designed, with radiant heating units and insulation values of R-26 for walls and R-45 for roofs. Buildings are oriented north-south to maximize daylight and minimize summer heat gain with thermal displacement ventilation. Storm water measures employ an underground water detention basin under the ball fields, which provides an opportunity to use the water for landscaping.





**THE MODERN:** PUBLIC LOBBIES, LARGE COMMON AREAS, AND SIGNATURE SPACES; UTILIZED CURTAIN WALLS, SKYLIGHTS, ATRIUMS AND LIGHT WELLS TO CONNECT STUDENTS TO MULTI-STORIED SPACES AND BRING LIGHT INTO ALL PARTS OF THE BUILDING.



- EXPLORING ARCHITECTURAL STYLES, FORMS, AND MATERIALS • BUILDING CONSENSUS WITH COMMUNITY •

### Key Design Concepts:

- Collegiate
- Contextual
- Welcoming
- Permanent
- Sense of Community
- Street-front Presence
- Historical Reference



CONTEMPORARY



MODERNISM



HISTORICAL



COLLEGIATE



## EXTERIOR VIEW



**THE HISTORIC:** EMPLOYS RED BRICK MATERIALS, ROOF MANSARDS AND COLUMN ARCH FORMS ON THE EXTERIOR STREET FACADE FOR THE COMMUNITY.





**VIEW OF QUAD:**

**A CENTRAL EXTERIOR QUAD INCORPORATES HISTORIC AND MODERN MATERIALS. FLEXIBLE EXTERIOR PUBLIC SPACES ENERGIZE AND ENHANCE LEARNING OPPORTUNITIES AND PROVIDE A SPECIAL PLACE FOR STUDENT GATHERING AND PERFORMANCES.**

# Exhibition of School Planning and Architecture

## Project Data

Submitting Firm :	WLC Architects, Inc.
Project Role	Architect
Project Contact	Mr. Kevin MacQuarrie
Title	Vice President, Principal
Address	2600 Tenth Street, Suite 500
City, State or Province, Country	Berkeley, CA 91730
Phone	(510) 450-1999

Joint Partner Firm:	Not Applicable
Project Role	
Project Contact	
Title	
Address	
City, State or Province, Country	
Phone	

Other Firm:	Not Applicable
Project Role	
Project Contact	
Title	
Address	
City, State or Province, Country	
Phone	

Construction Firm:	Lathrop Construction
Project Role	General Contractor
Project Contact	Rick Martellaro
Title	President
Address	4001 Park Road
City, State or Province, Country	Benicia, CA 94510
Phone	(707) 746-8000



# Exhibition of School Planning and Architecture

## Project Details

<b>Project Name</b>	Pinole Valley High School Replacement Campus
<b>City</b>	City of Pinole / Contra Costa County
<b>State</b>	California
<b>District Name</b>	West Contra Costa Unified School District
<b>Supt/President</b>	Dr. Bruce Harter
<b>Occupancy Date</b>	2018
<b>Grades Housed</b>	Grade Levels 9 to 12
<b>Capacity(Students)</b>	1,600
<b>Site Size (acres)</b>	22 acres
<b>Gross Area (sq. ft.)</b>	267,000 sq. ft.
<b>Per Occupant(pupil)</b>	166 sq. ft. per pupil
<b>gross/net please indicate</b>	Gross square footage
<b>Design and Build?</b>	Designed
<b>If yes, Total Cost:</b>	\$127,000,000.00
<b>Includes:</b>	New academic campus, landscaping and street improvements
<b>If no,</b>	
<b>Site Development:</b>	Not applicable
<b>Building Construction:</b>	Not applicable
<b>Fixed Equipment:</b>	Not applicable
<b>Other:</b>	
<b>Total:</b>	\$127,000,000.00