



# RUSD STEM HIGH SCHOOL

## Building for the Future

A state of the art public STEM high school on the premises of a world class public research university, University of California, Riverside

Ruhnau Clarke Architects  
Design Presentation  
September 2018

RUHNAU  
CLARKE  
ARCHITECTS

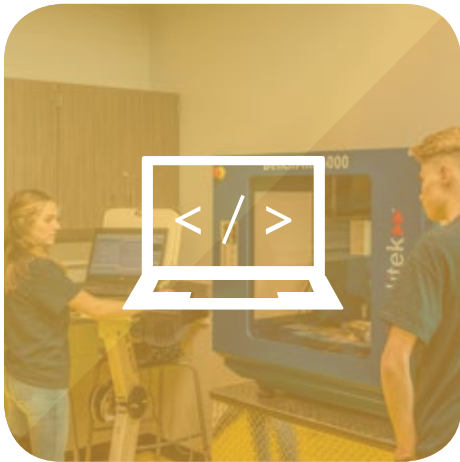
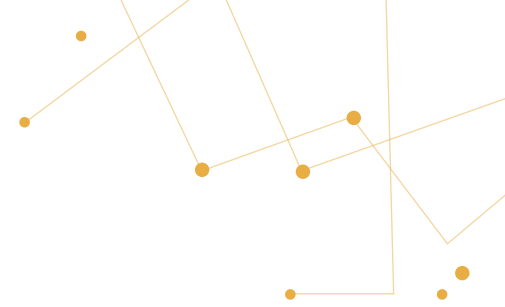
# WHY STEM

## FOUNDATIONAL TENETS

- 1 Quality**  
Provide high level of STEM teaching and learning.
- 2 Equity**  
Ensure equitable Access and Success for ALL students at the Riverside STEM High School.
- 3 Experience**  
Offer a variety of interdisciplinary STEM areas of study with capstone projects and industry certification.
- 4 Partnerships**  
Create a STEM Partnership Forum to facilitate robust partnerships with higher education, business and industry.
- 5 STEM Ambassadors**  
Ensure all students graduate with strong STEM knowledge, develop into socially responsible citizens and cultivate a joy of learning.

## BENEFITS OF A STEM HIGH SCHOOL

# STEM PATHWAYS



Computer Science



Environmental/Agricultural Science



Bio-Medical/Allied Health

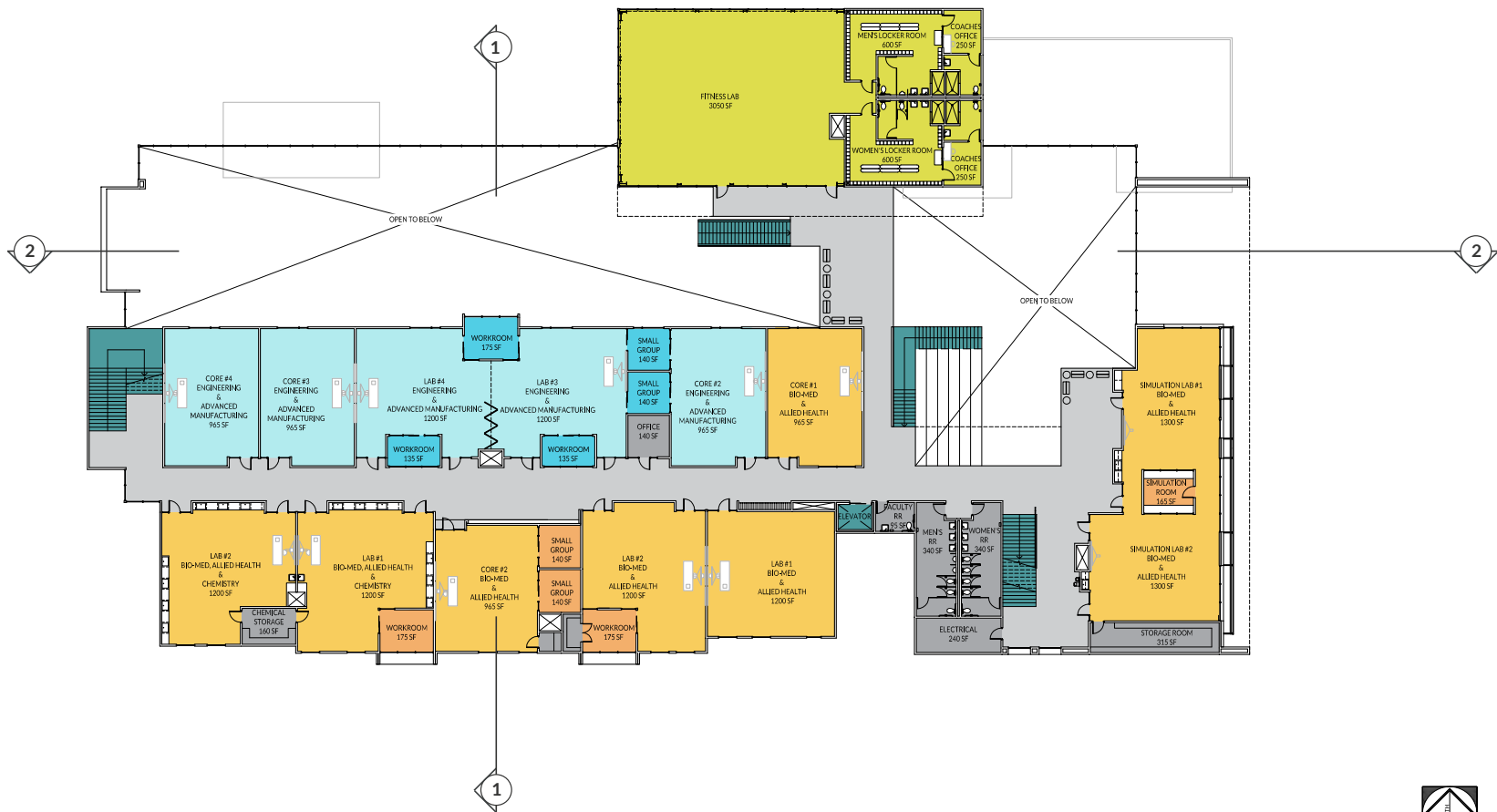


Engineering & Advanced Manufacturing

# CONCEPTUAL FLOOR PLAN: 1ST FLOOR



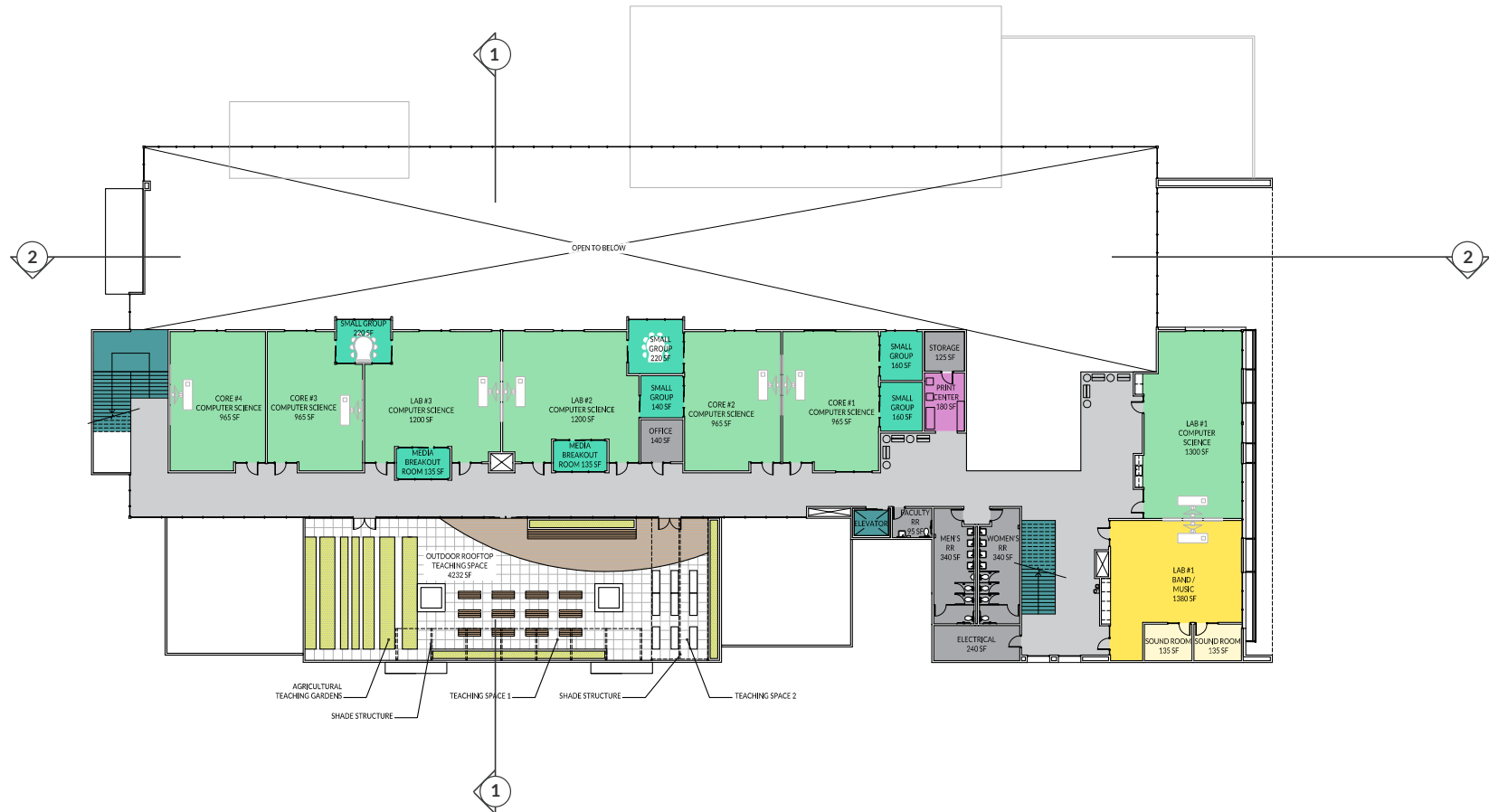
# CONCEPTUAL FLOOR PLAN: 2ND FLOOR



SECOND FLOOR | 2



# CONCEPTUAL FLOOR PLAN: 3RD FLOOR

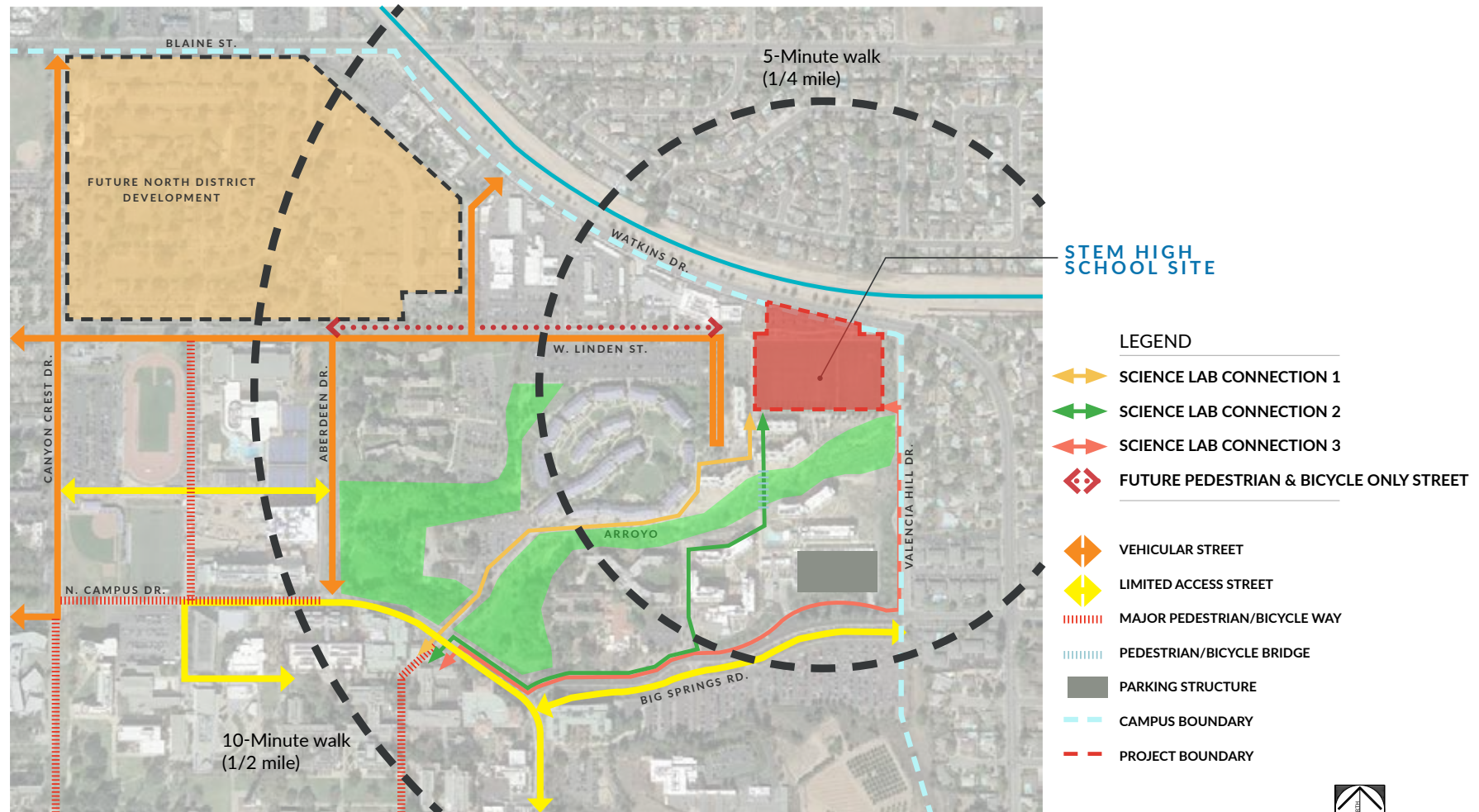


THIRD FLOOR | 3





# CONTEXT DIAGRAM



# CONTEXT: SITE IMAGES



WATKINS DR. LOOKING EAST | 1



WATKINS DR. LOOKING WEST | 2



CORP YARD | 3



CORP YARD | 4



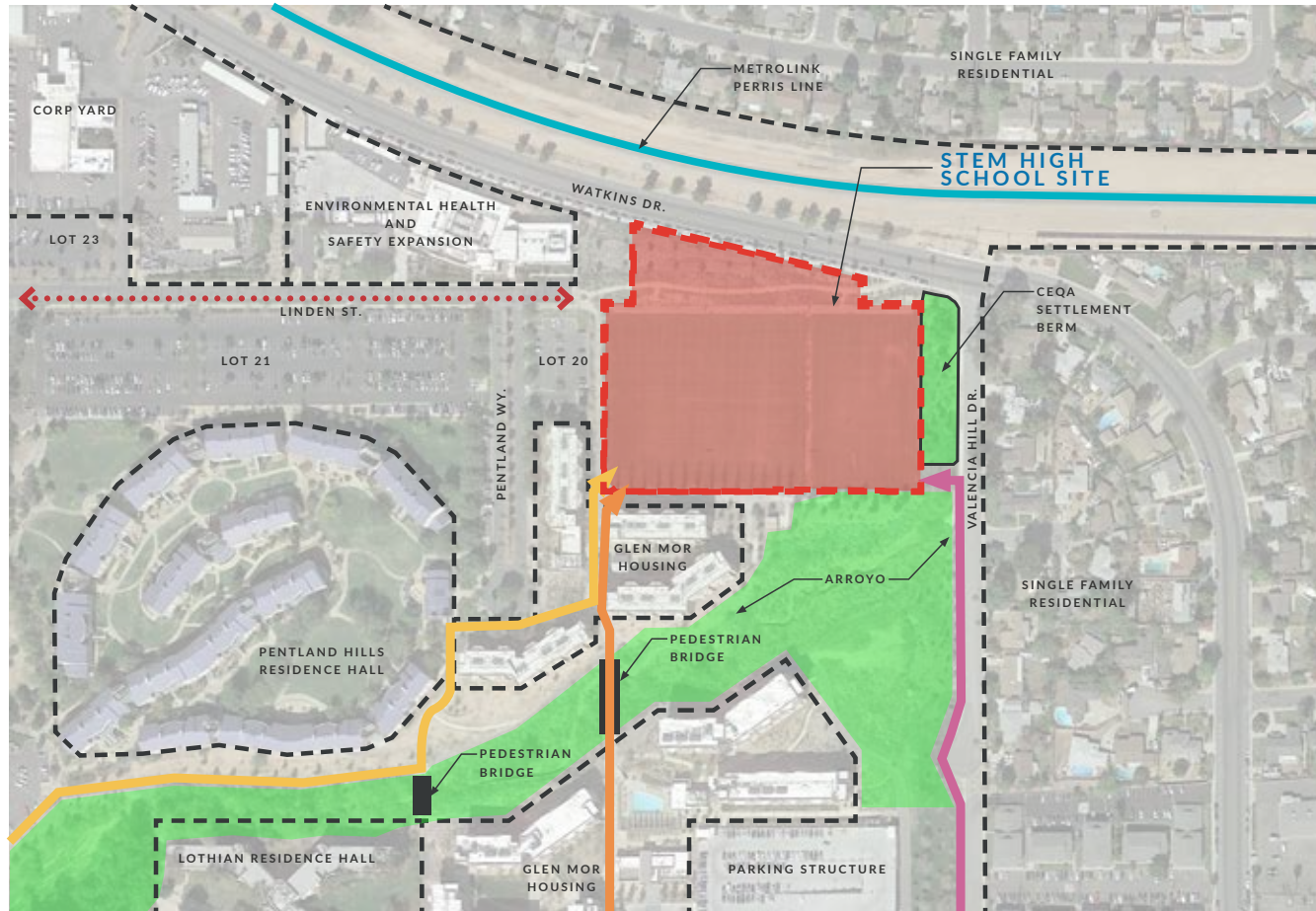
GLEN MOR HOUSING | 5



GLEN MOR HOUSING | 6



# CONTEXT: SITE PLAN



## LEGEND

- ↔ SCIENCE LAB CONNECTION 1
- ↔ SCIENCE LAB CONNECTION 2
- ↔ SCIENCE LAB CONNECTION 3
- ◊ FUTURE PEDESTRIAN & BICYCLE ONLY STREET
- PROJECT BOUNDARY



# CONTEXT: STREET TREE DIAGRAM



LINDEN ST. PALM TREE LINED AXIS | 1



VALENCIA HILL DR. CEQA BERM | 2  
Existing naturalized berm  
with Canary Island Pines

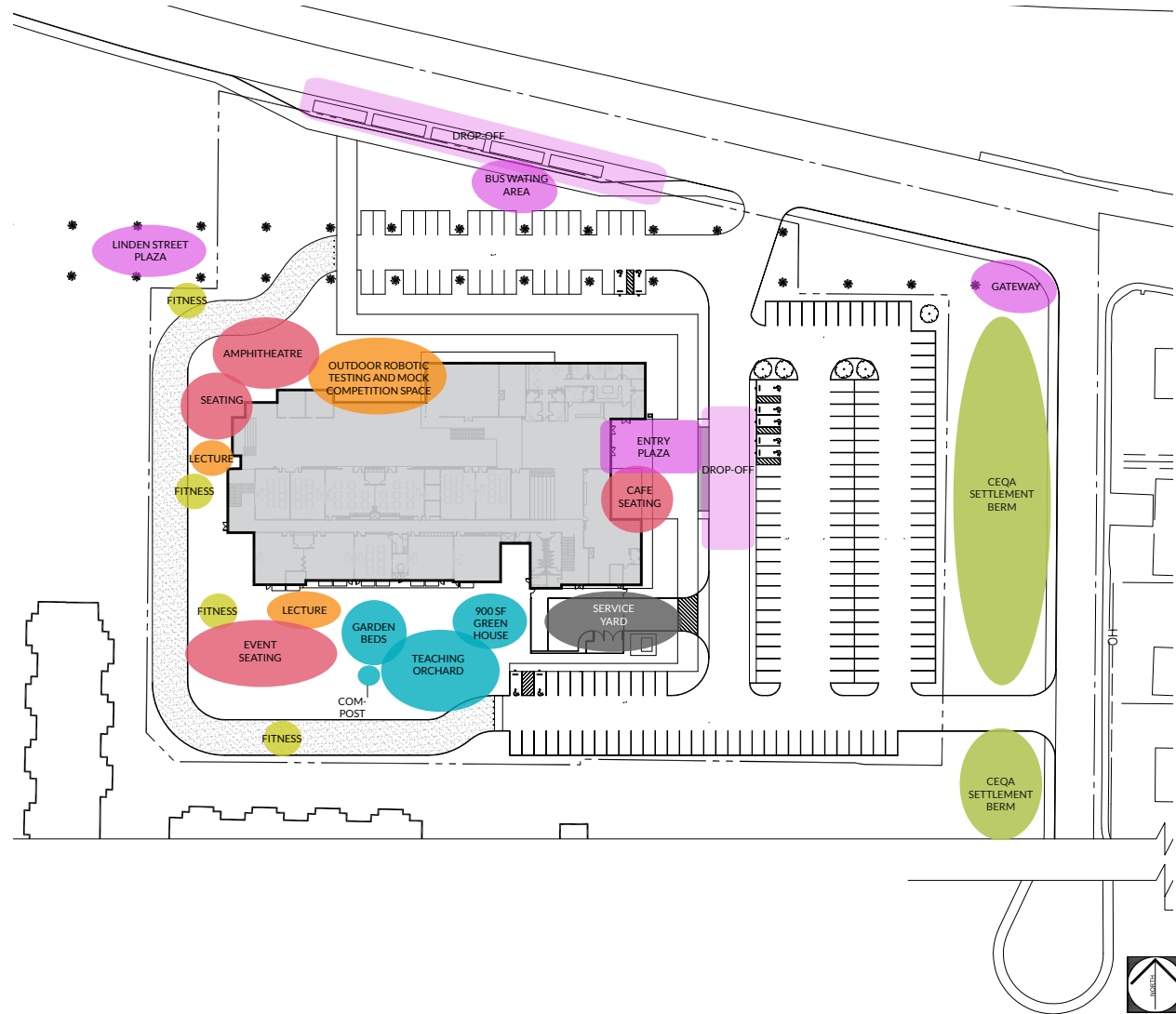


UCR ARROYO | 3

# SITE PROGRAM

## LEGEND

- ENTRY & ARRIVAL
- STEM COMMUNAL SPACE
- LECTURE / EDUCATION SPACE
- RECREATION / FITNESS
- AGRICULTURAL PROGRAM
- CEQA





# LANDSCAPE INSPIRATIONAL IMAGES



GREEN HOUSE AND PLANTERS



OUTDOOR ASSEMBLY SEATING



RAISED GARDEN BEDS



TEACHING ORCHARD



EVENT AND SCHOOL GATHERING SPACE



FITNESS & RECREATION



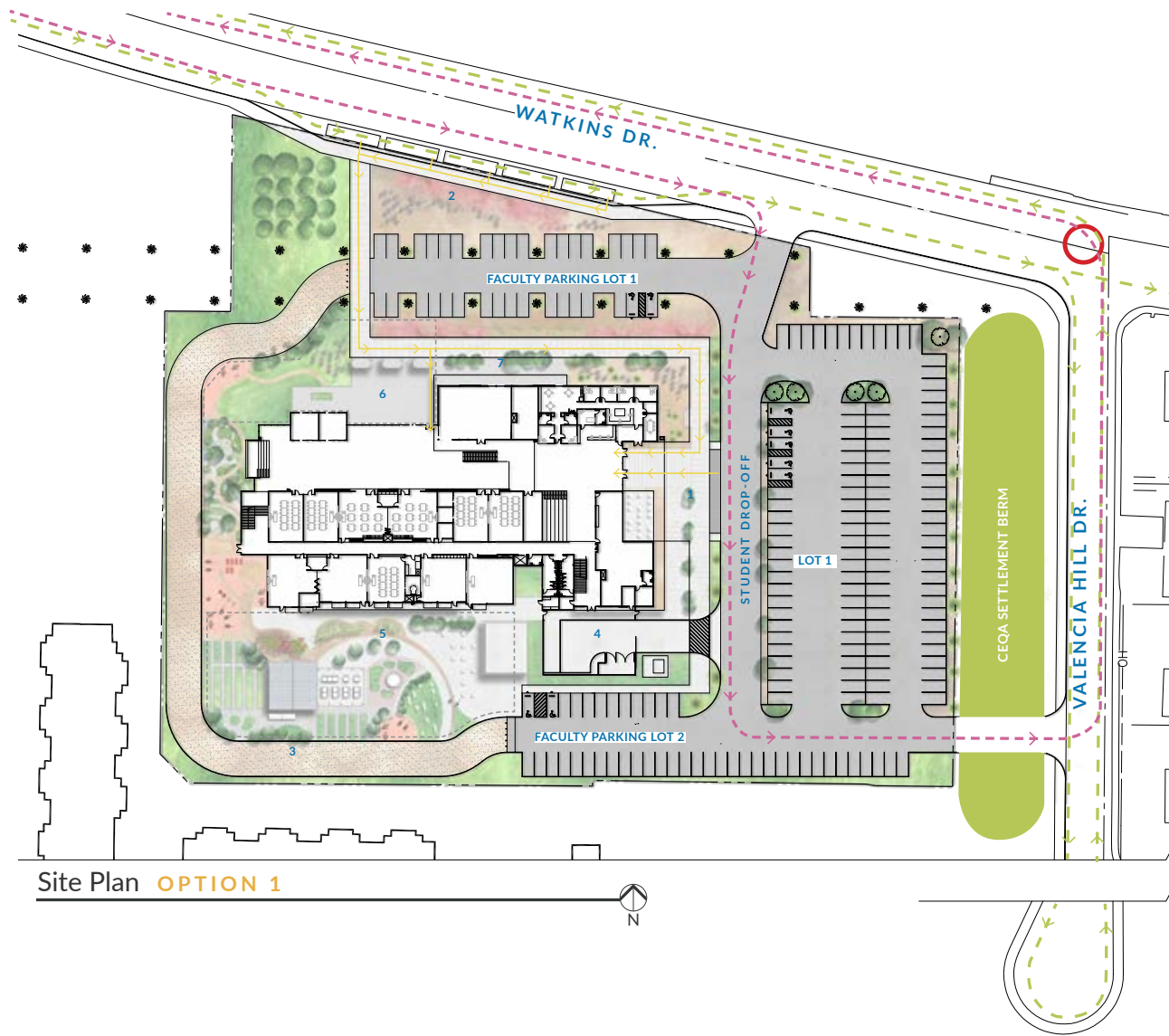
ENGINEERING TESTING & ROBOTICS



INDOOR/OUTDOOR CLASSROOM

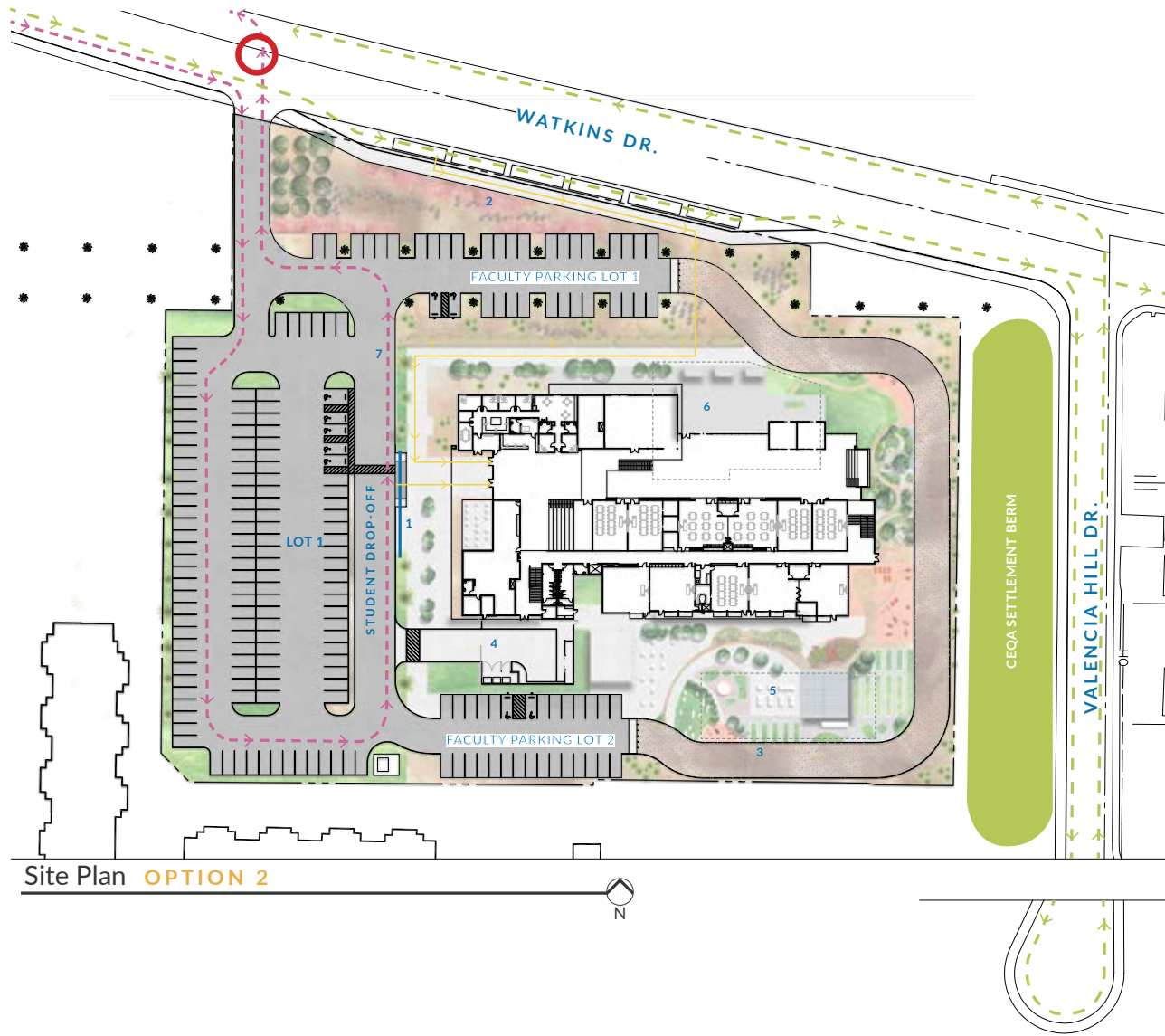


# SITE PLAN OPTION 1



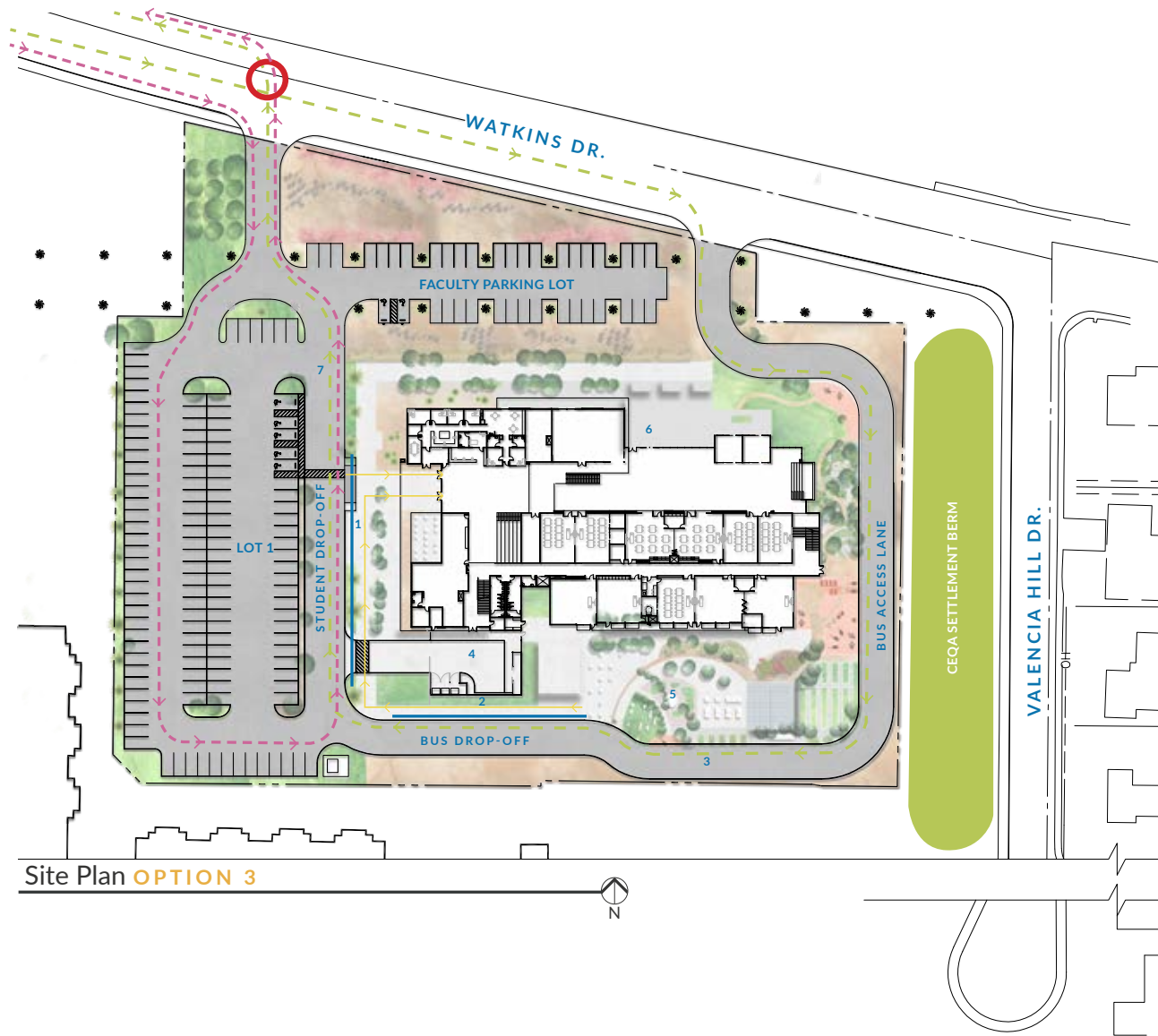
Site Plan **OPTION 1**

# SITE PLAN OPTION 2



Site Plan **OPTION 2**

# SITE PLAN OPTION 3





# CONCEPT 1

## BOX SPRINGS MOUNTAINS



▲ Natural mountain terrain, vegetation and trails.



▲ Lush natural landscape in organic arrangements contrasted by clean lined hardscape.



▲ Landscaped mounds alongside hardscape encouraged interaction with the outdoor environment.



▲ Hard seating nestled into the landscape.



▲ Teaching spaces (amphitheater) carved out and incorporated into the landscape.



# CONCEPT 2

## ARROYO



▲ Natural arroyo landscape.



▲ Boulders integrated into natural arroyo.



▲ Site drainage meanders throughout the site, interacting with paths and outdoor teaching spaces.



▲ Drainage clearly expressed and integrated into circulation paths to offer teaching opportunities.

# LANDSCAPE PLANTING FRAMEWORK



Entry garden with soft desert textures and colorful accents.



Arroyo creek beds with varied grasses, native shrubs and boulders.



Topographic landforms with textural buffer planting.

Educational fruit and vegetable garden.





# LANDSCAPE TREE FRAMEWORK



Platanus  
Racemosa



Quercus  
Agrifolia



Parkinsonia  
Aculeata



Tipuana Tipu



Citrud Sinensis



Washingtonia  
Robusta Hybrid  
(Existing)



# LANDSCAPE TREE SELECTION



Parkinsonia Aculeata



Acacia Podalyriifolia



Citrus Sinensis



Washingtonia Robusta (Hybrid)



Arbutus Marina



Quercus Agrifolia



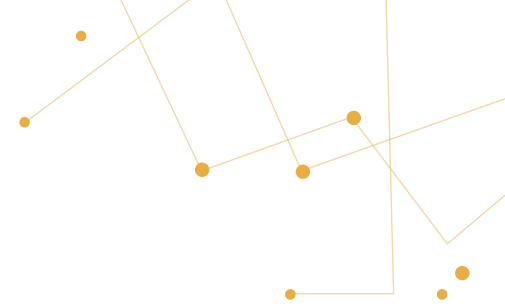
Tipuana Tipu



Platanus Racemosa



# LANDSCAPE UNDER STORY PLANTING



**ENTRY GARDEN**



Muhlenbergia Dubia



Aloe



Agave 'Blue Glow'



Yucca Filamentosa



Anigozanthos 'Bush Sunset'



Senecio Serpens



**ARROYO**



Carex Divulsa



Chondropetalum Tectorum



Dietes Bicolor



Lantana 'Gold'



Muhlenbergia Linheimerii



**LANDFORMS & BUFFER**



Baccharis Pilularis 'Twin Peaks'



Festuca Mairei



Salvia Pozo 'Blue'



Rosmarinus Officinalis 'Tuscan Blue'



Rhamnus Umbulata 'Minor'

# SITE COMPARISON

## Current



### Light Pollution

- Direct light and glare spill from lights will be contained on the site.



### Noise

- Limited noise impacts from outdoor activities except for limited hours of the day on North and South side of the building.
- Nighttime noise should be virtually eliminated.



### Traffic

- Through traffic will bypass school because of school zone speed limits.
- Signalized intersection will make for safer traffic movements in and around school zone.

## Future

# CONCEPTUAL RENDERING EXTERIOR





# CONCEPTUAL RENDERING MAIN ENTRANCE





# CONCEPTUAL RENDERING EXTERIOR



# CONCEPTUAL RENDERING INTERIOR

