January 23, 2025
Handout 2

Las Gallinas Valley Sanitary District Multipurpose Building

Board Presentation
January 23, 2025

NOLL & TAM ARCHITECTS

Agenda

1. **Project Approach (10 mins)**
   - Q&A

2. **Project Overview (40 mins)**
   - Design Inspiration
   - Science and Seminar
   - Exterior Design
   - Interior Design
   - Site Design
   - Q&A

3. **Sustainability Mission (15 mins)**
   - Q&A

4. **Education Outreach and Exhibit Design (10 mins)**
   - Q&A

5. **Cost Estimate Summary (10 mins)**
   - Q&A

6. **Schedule & Next Steps (10 mins)**
   - Q&A

7. **Discussion**

Decision needed

1

Project Approach

District Mission

Protect public health and our environment, providing effective wastewater collection, treatment, and resource recovery

- Create and maintain a more suitable workplace to promote a sustainable, motivated, long-term and cohesive workforce
- Proactively manage risks created by climate change, sea level rise, fire, earthquakes and flooding

District Mission

Protect public health and our environment, providing effective wastewater collection, treatment, and resource recovery

- Cooperate with stakeholders to leverage opportunities for protecting the Bay and regional water resources
- Increase public education, acceptance and understanding of what we do
- Use public funds responsibly

Project Team

Design Team

- Architect: Noll & Tam Architects
- Civil: BKF Engineers
- Landscape: Quadriga
- Structural: IDA Structural Engineers
- MEP Engineer: Guttmann & Blaevoet
- Teledata / AV / Acoustical: SFMI
- Exhibit Designer: West Office Exhibition Design

- Cost Estimator: TBD Consultants
- CEQA Consultant: LSA
- Geotech: Miller Pacific Engineering Group

Las Gallinas Valley Sanitary District

- Mike Cortez
- Irene Huang
- Mel Liebmann
- Sahar Golshani

Ad-hoc Committee

- Megan Clark
- Barry Nitzberg (through end of 2024)
- Board member TBD (starting 2025)
- Curtis Paxton
- Mike Cortez

City of San Rafael

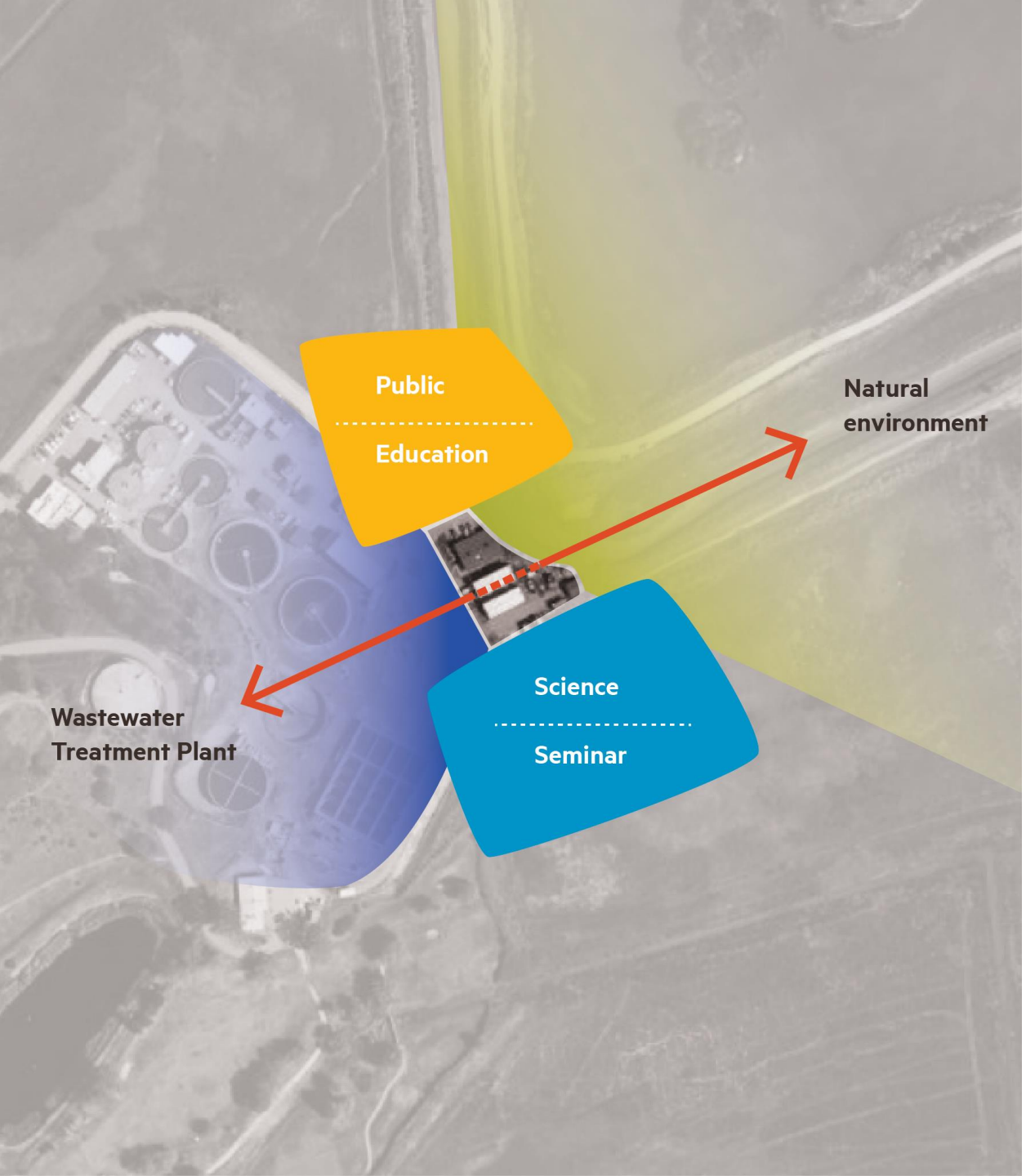
- Planning: Kristina Estudillo
- Fire Marshal: Robert Sinnott
- Building Official: Don Jeppson

Project Development

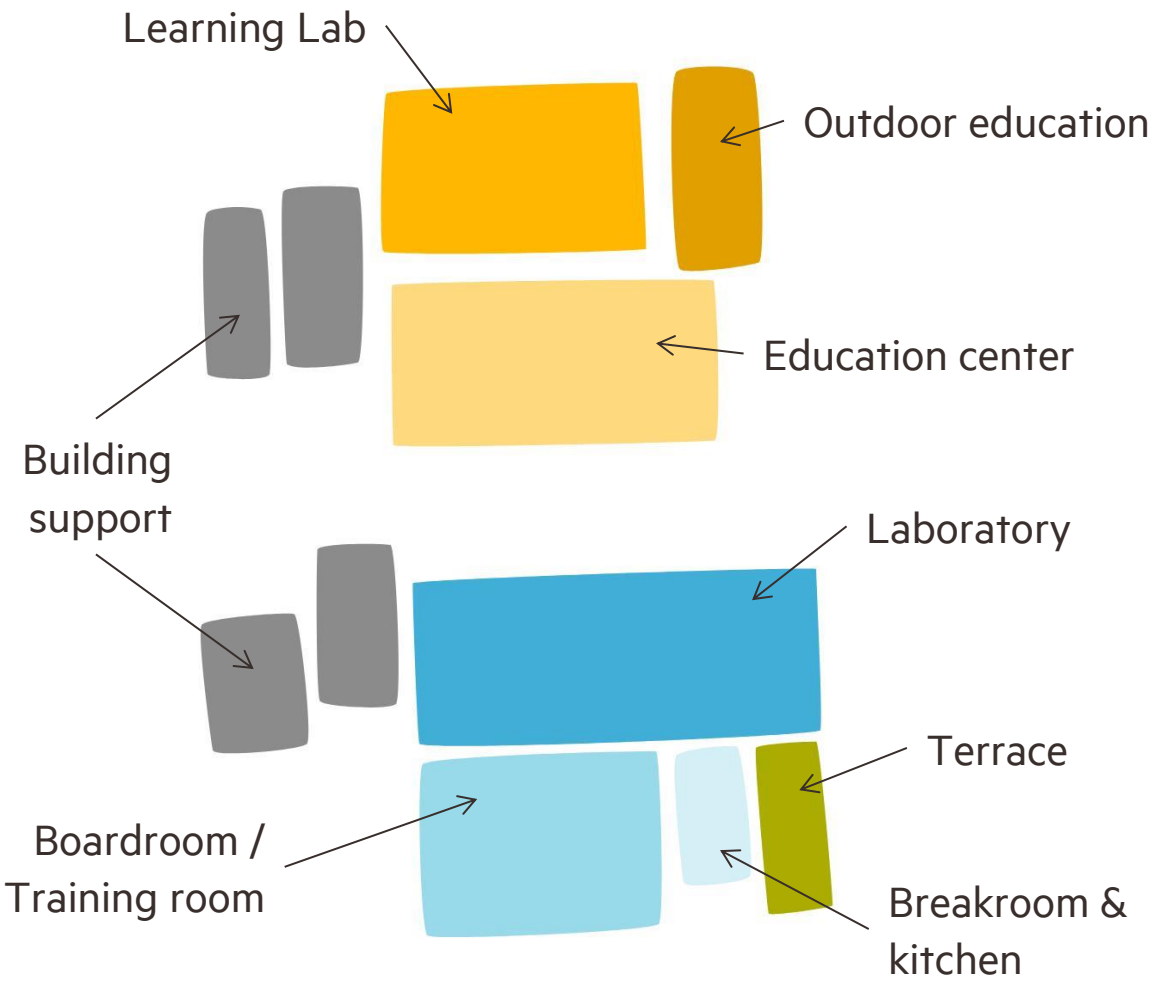
= We are here

Design Phases

- Preliminary Design (2 months)
  - Plan & program validation
  - Develop plan options
  - Weekly meetings with the District
  - (1) meeting with the Laboratory Director
  - (1) Ad-hoc Committee meeting
  - (1) meeting with Planning
- Schematic Design (2 months)
  - Engage consultant team
  - Weekly meetings with the District
  - (1) meeting with the Laboratory Director
  - (1) Ad-hoc Committee meeting
  - (1) meeting with Fire Marshal & Building Official
- Design Development (3 months)
  - Evaluate site utilities
  - Develop building systems
  - Weekly meetings with the District
  - (2) meetings with the Laboratory Director
  - (1) Ad-hoc Committee meeting
  - (1) meeting with Planning
  - (1) Board meeting
- Construction Documents (5 months)
  - Continue systems coordination and detail
  - Prepare documents for permit and bidding
  - Weekly meetings with the District
  - (1-2) meetings with the Laboratory Director
  - (1-2) meetings with Operations & Maintenance
  - (1-2) meetings with Aqua Engineering
  - (1-2) Ad-hoc Committee meetings

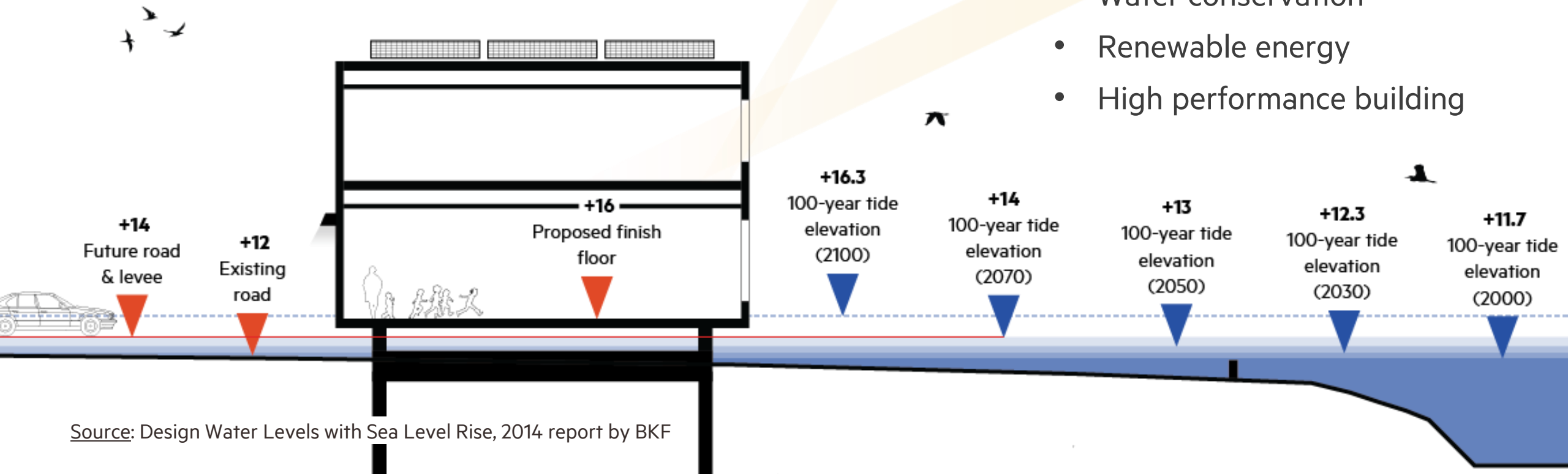


Parts & Pieces

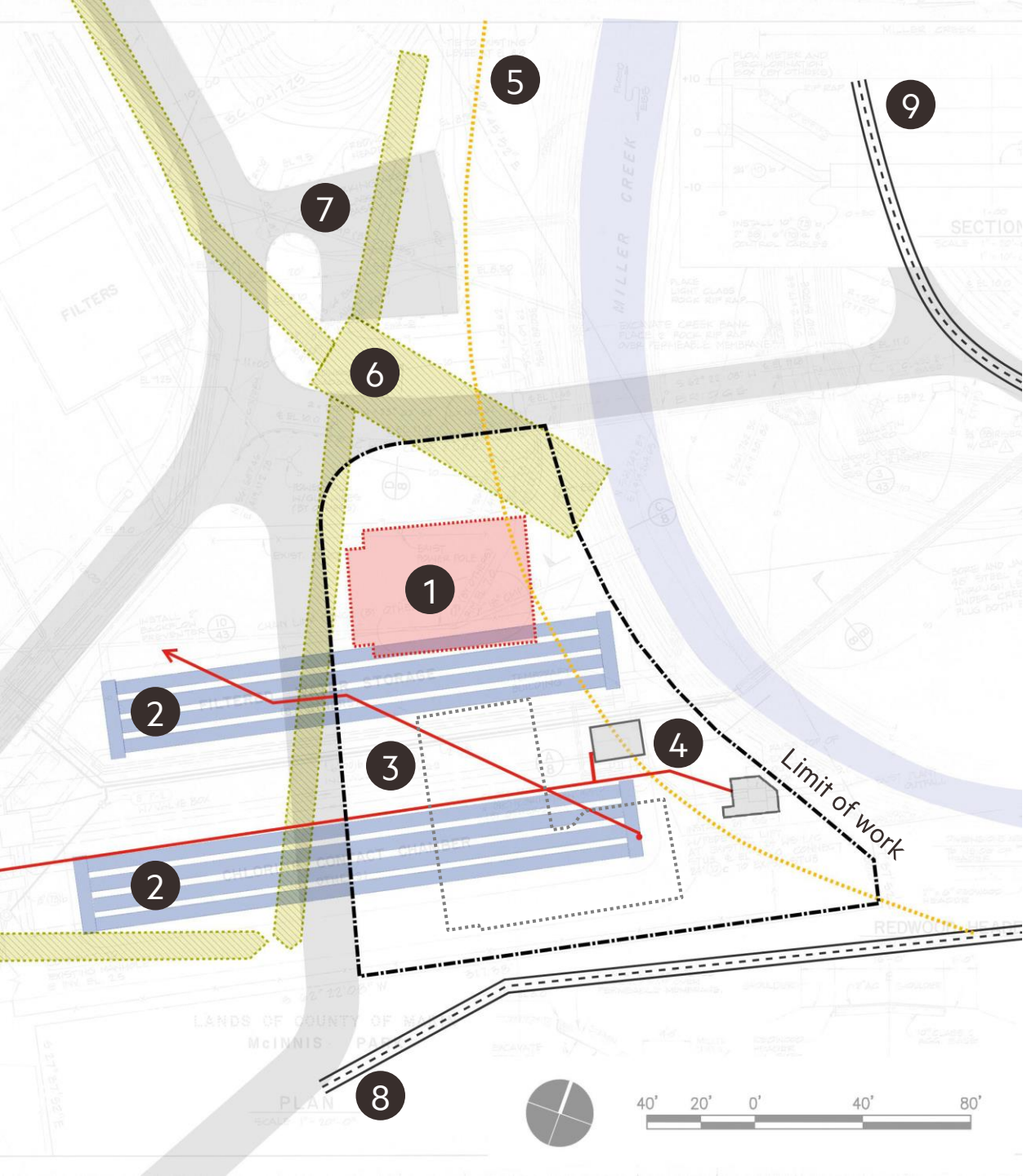


Design Requirements

- Sea level rise & storm surge
- Light pollution
- Bird safety
- Daylight & glare
- Water conservation
- Renewable energy
- High performance building

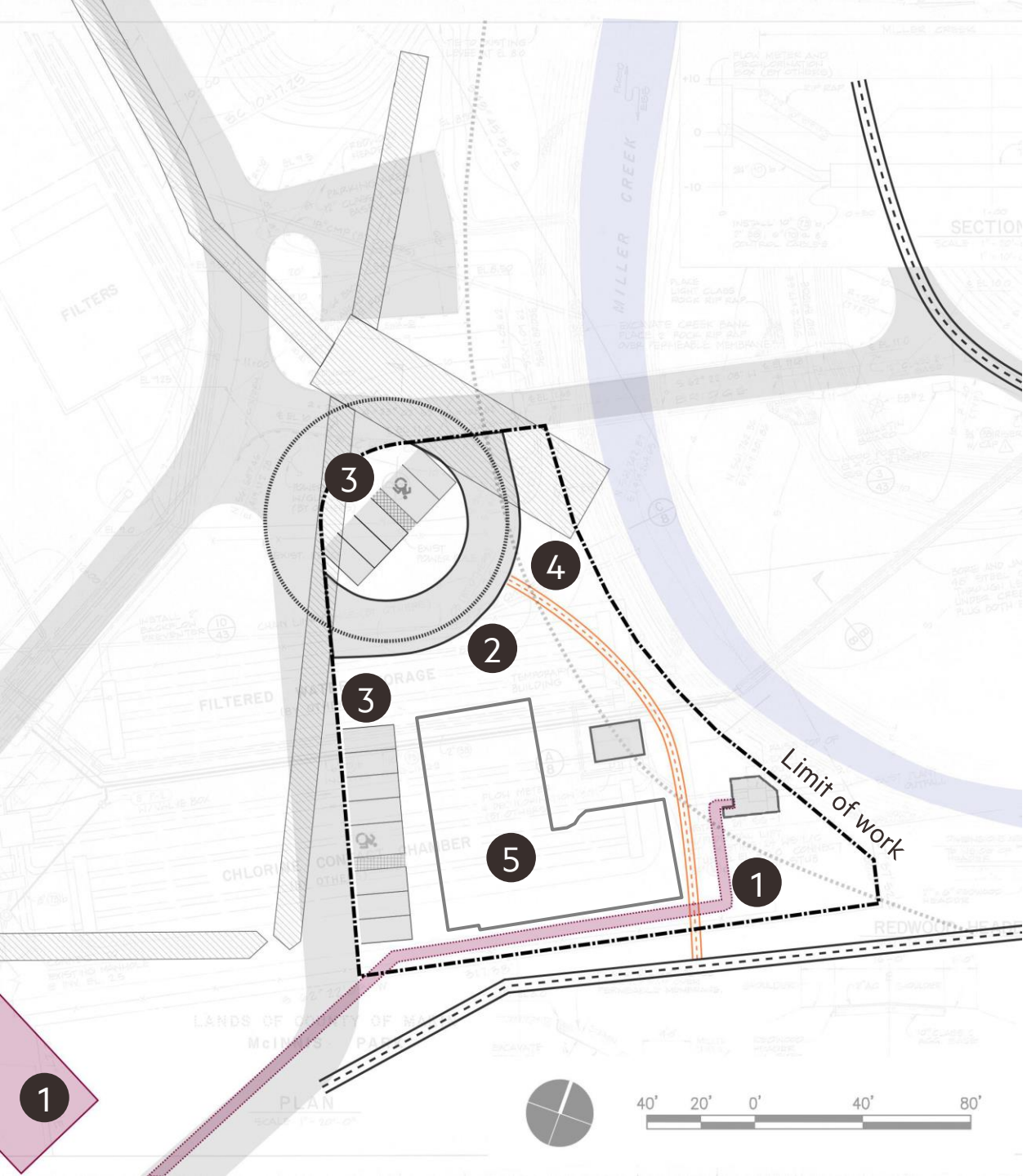


Source: Design Water Levels with Sea Level Rise, 2014 report by BKF



Existing Conditions

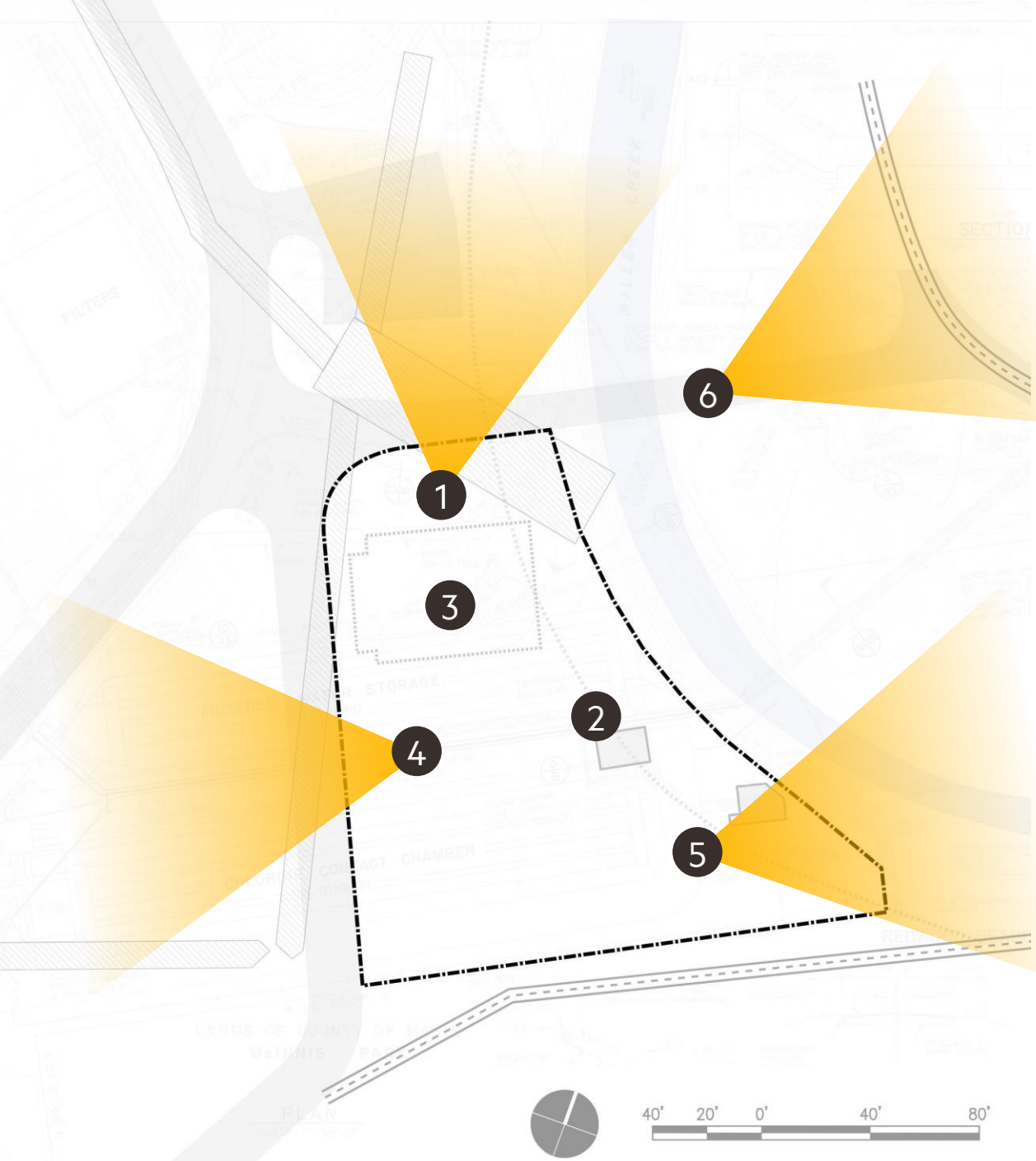
1. Laboratory & classroom
2. Underground chlorine disinfection system
3. Site utilities
4. Outfall & Pond diversion boxes
5. Creek setback
6. PG&E easement
7. Public parking
8. SF Bay Trail
9. Las Gallinas Wildlife Ponds

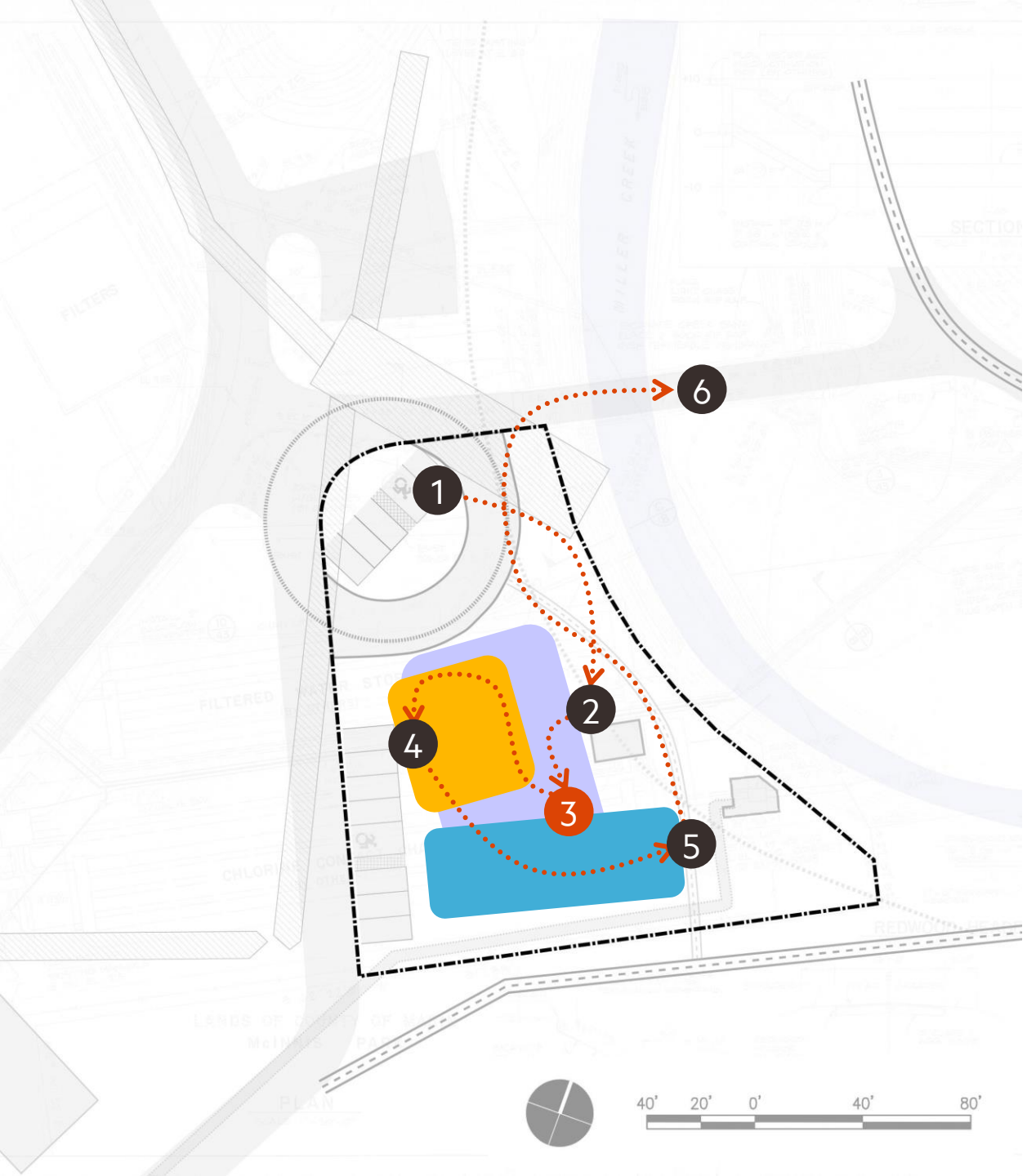


Design Considerations

1. Planned UV building & piping
2. Vehicular access:
   - visitor drop-off
   - tour/school bus
   - firetruck
3. Public & staff parking
4. SF Bay Trail connection
5. New Multipurpose Building

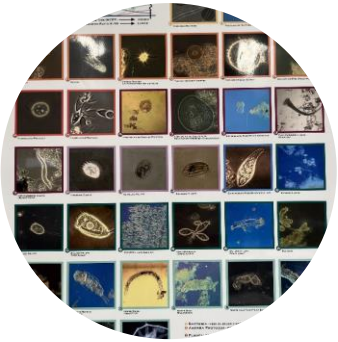
Educational Opportunities





Water Quality Lab

3



The District's lab must monitor water coming out of the plant for a variety of chemicals and microorganisms found within. While effluent from the plant naturally contains an ecosystem of microorganisms, an overpopulation and certain species can cause issues in the treatment process.

The District relies on a variety of staff to operate the plant and ensure the quality of the effluent being released. From those testing water in the laboratory to those operating the collection and distribution systems, District employees keep residents and the environment safe.








2

Project Overview

Design Inspiration

Design Ideas

Framing Views

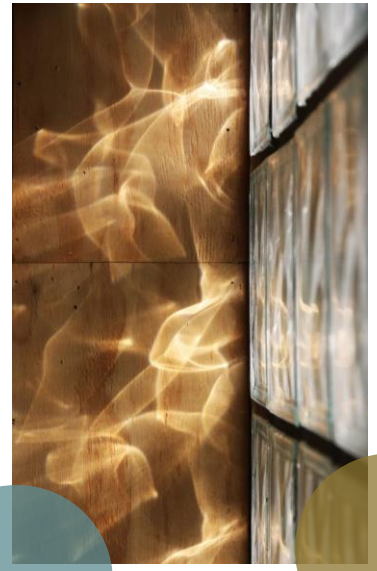
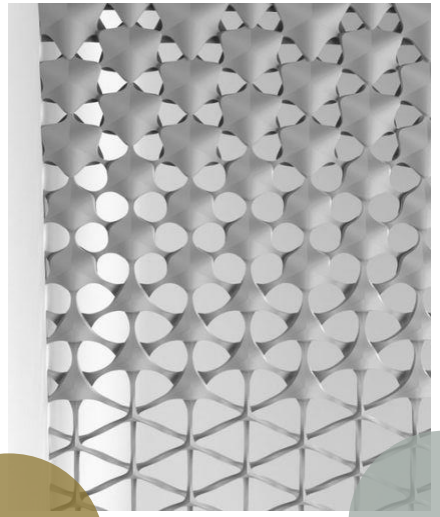



Light on the Land

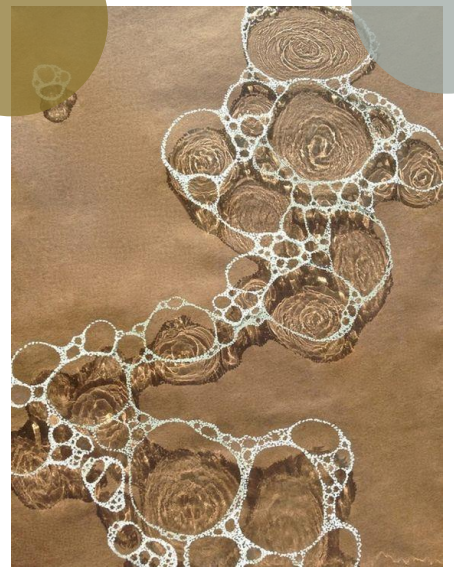

Inviting Interaction



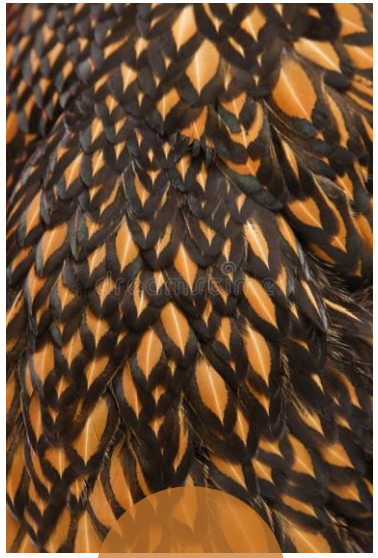
Materials Inspiration | Transient cycles

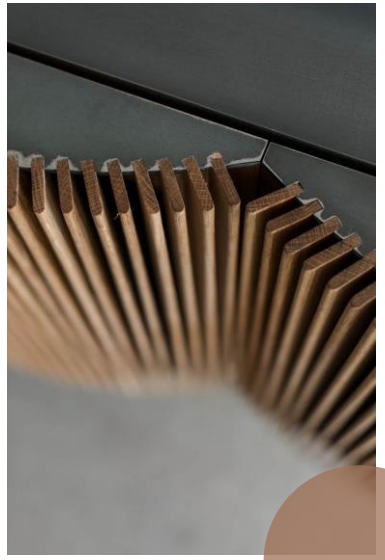




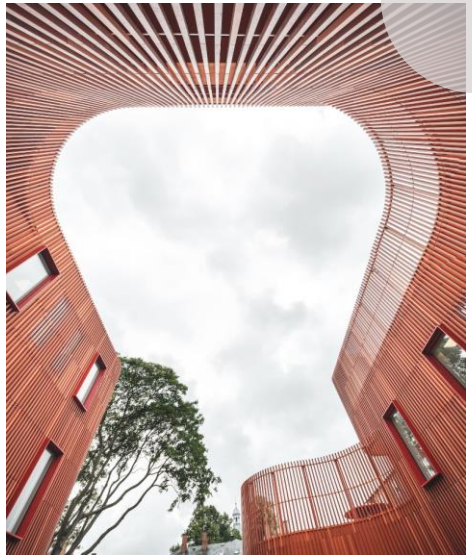


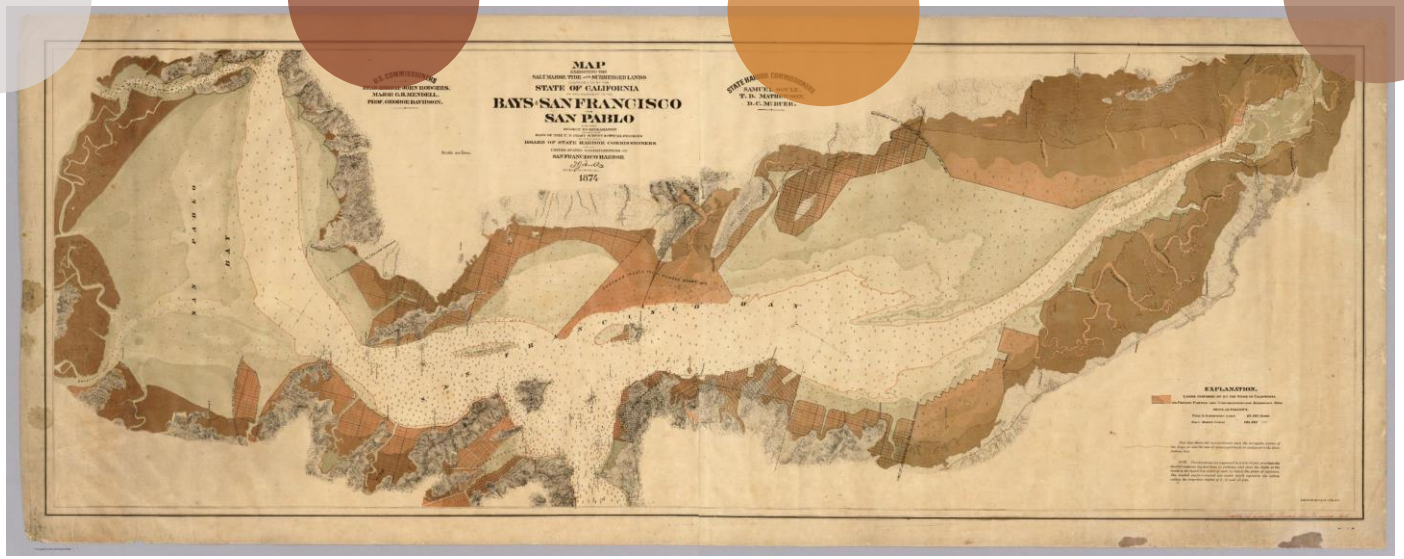



Materials Inspiration | Wyandotte Jetty



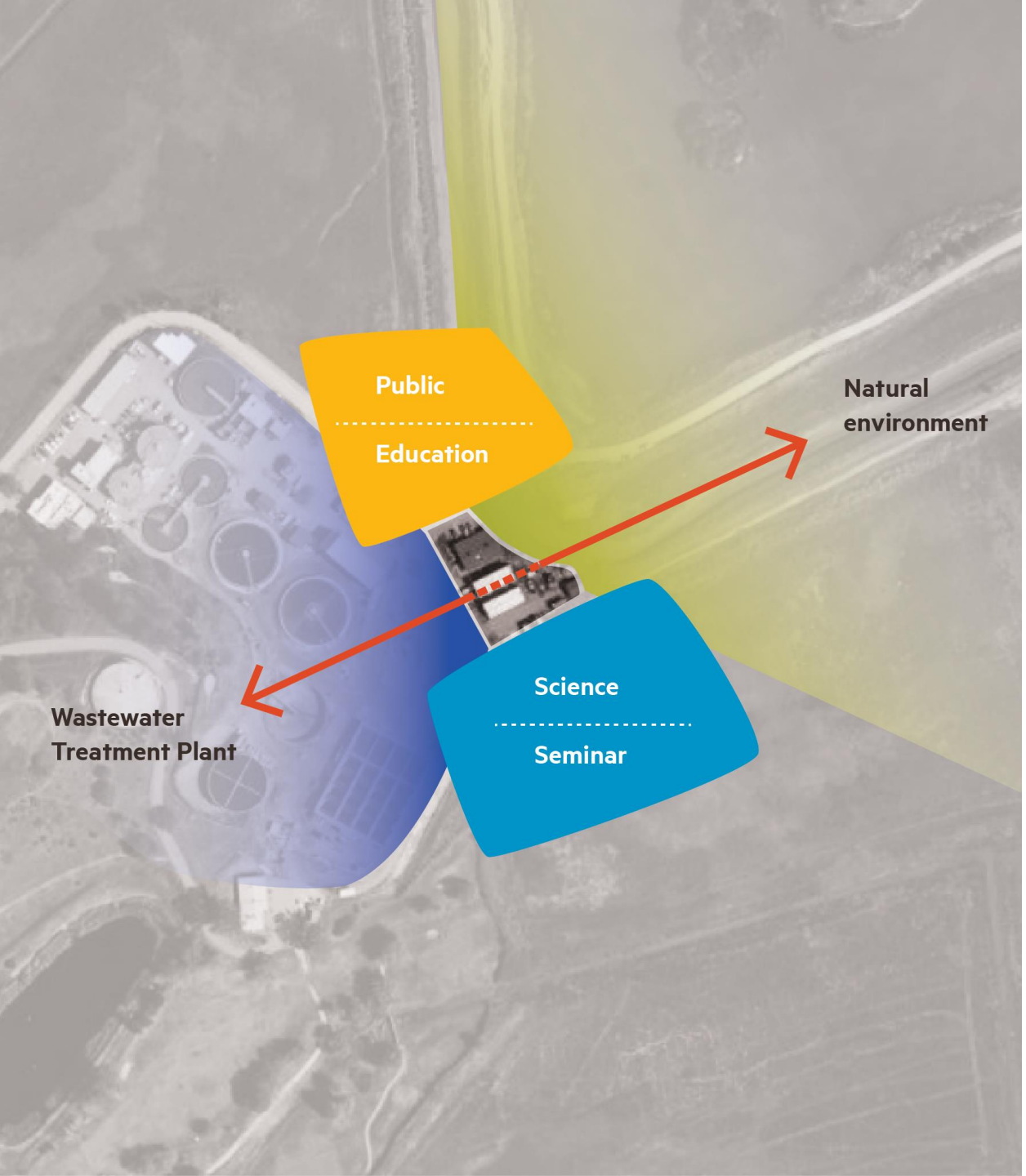




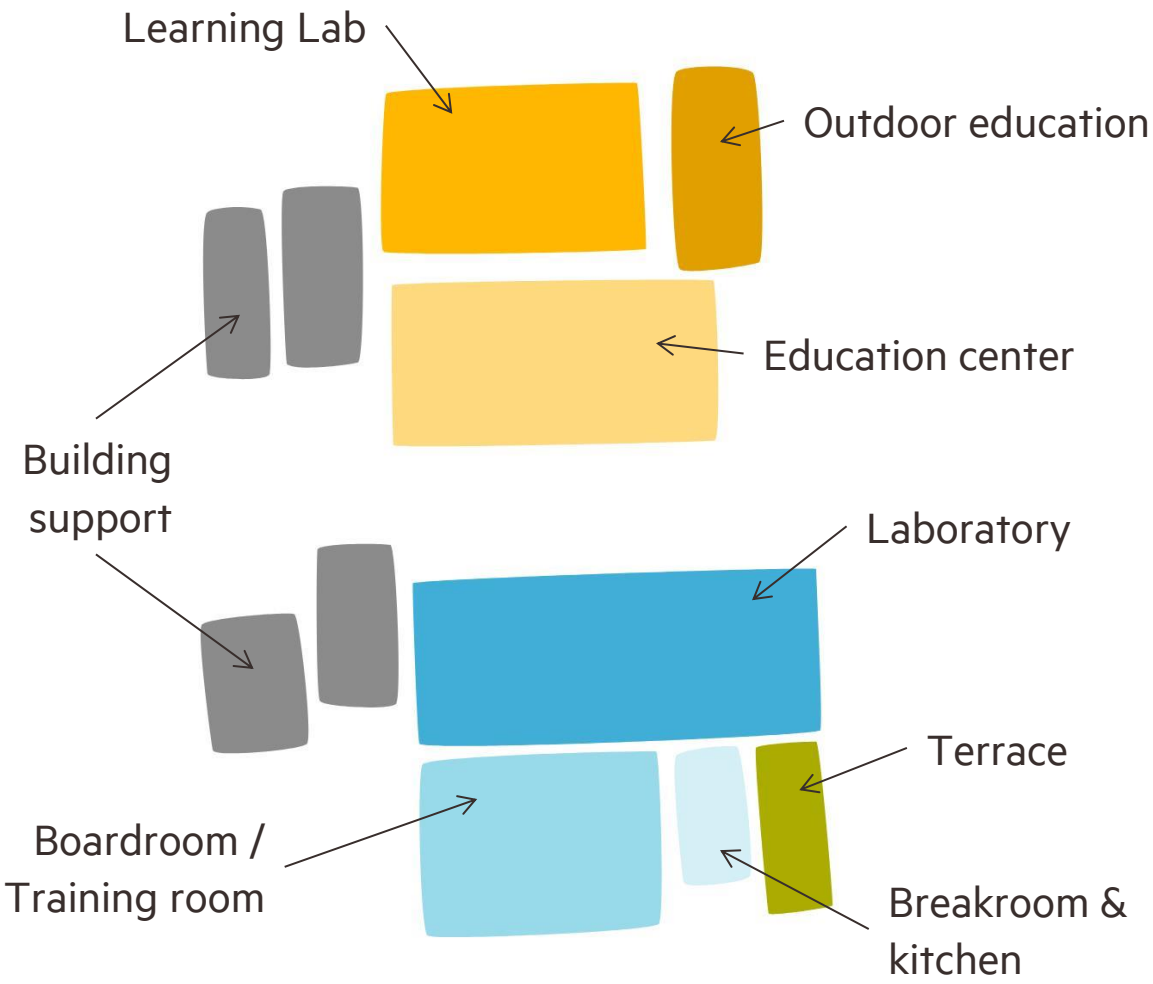


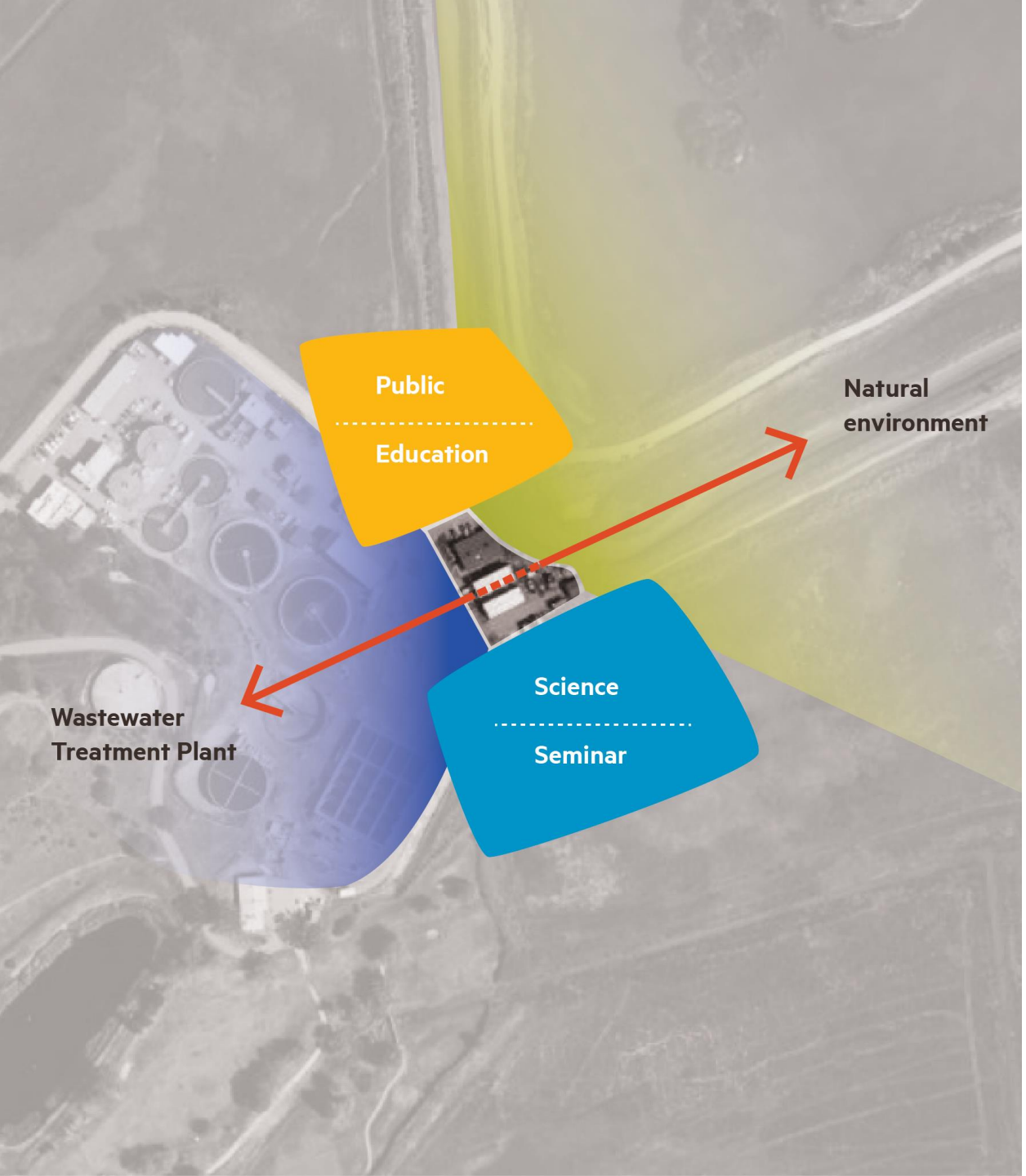
Project Overview

Science and Seminar



Parts & Pieces





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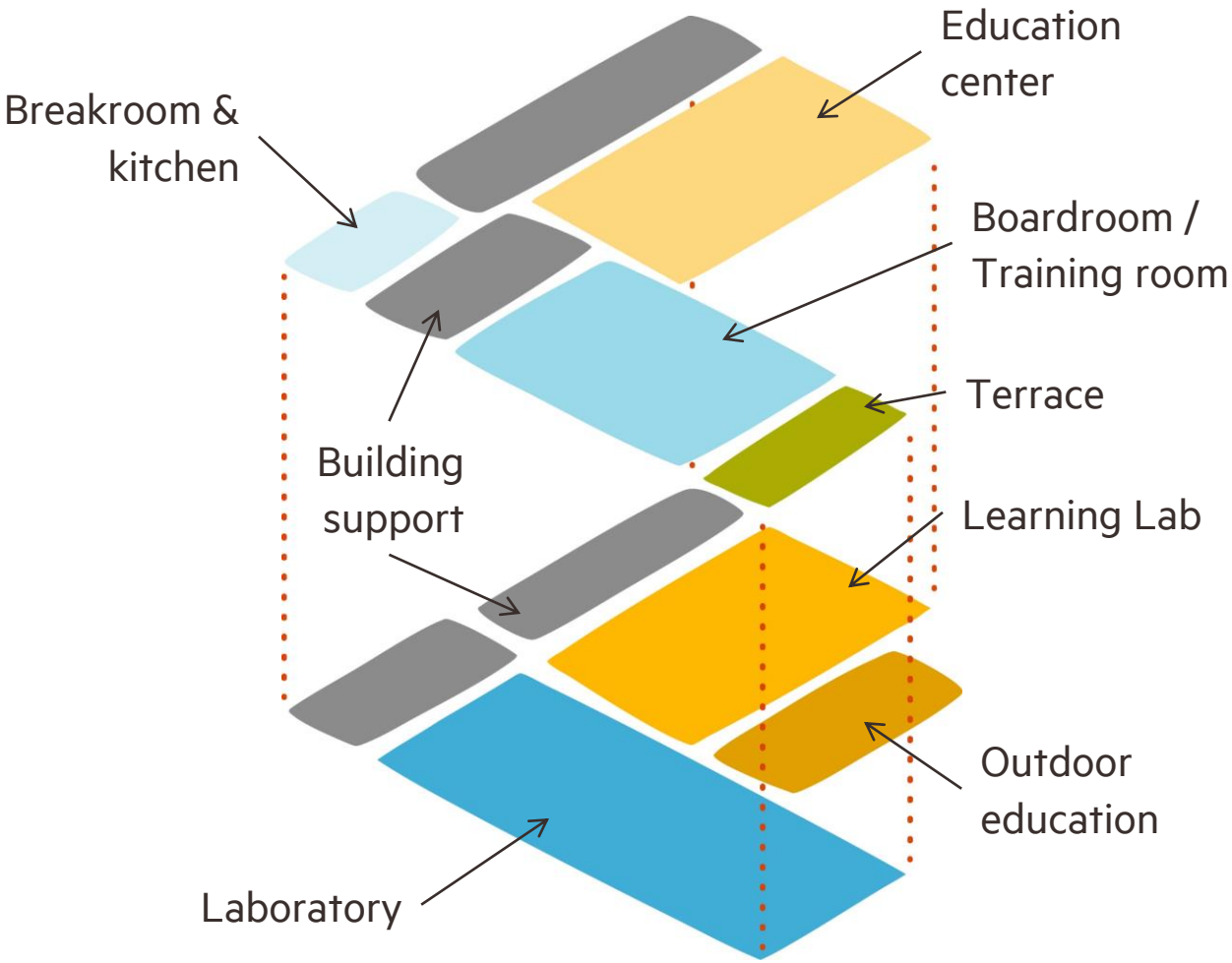
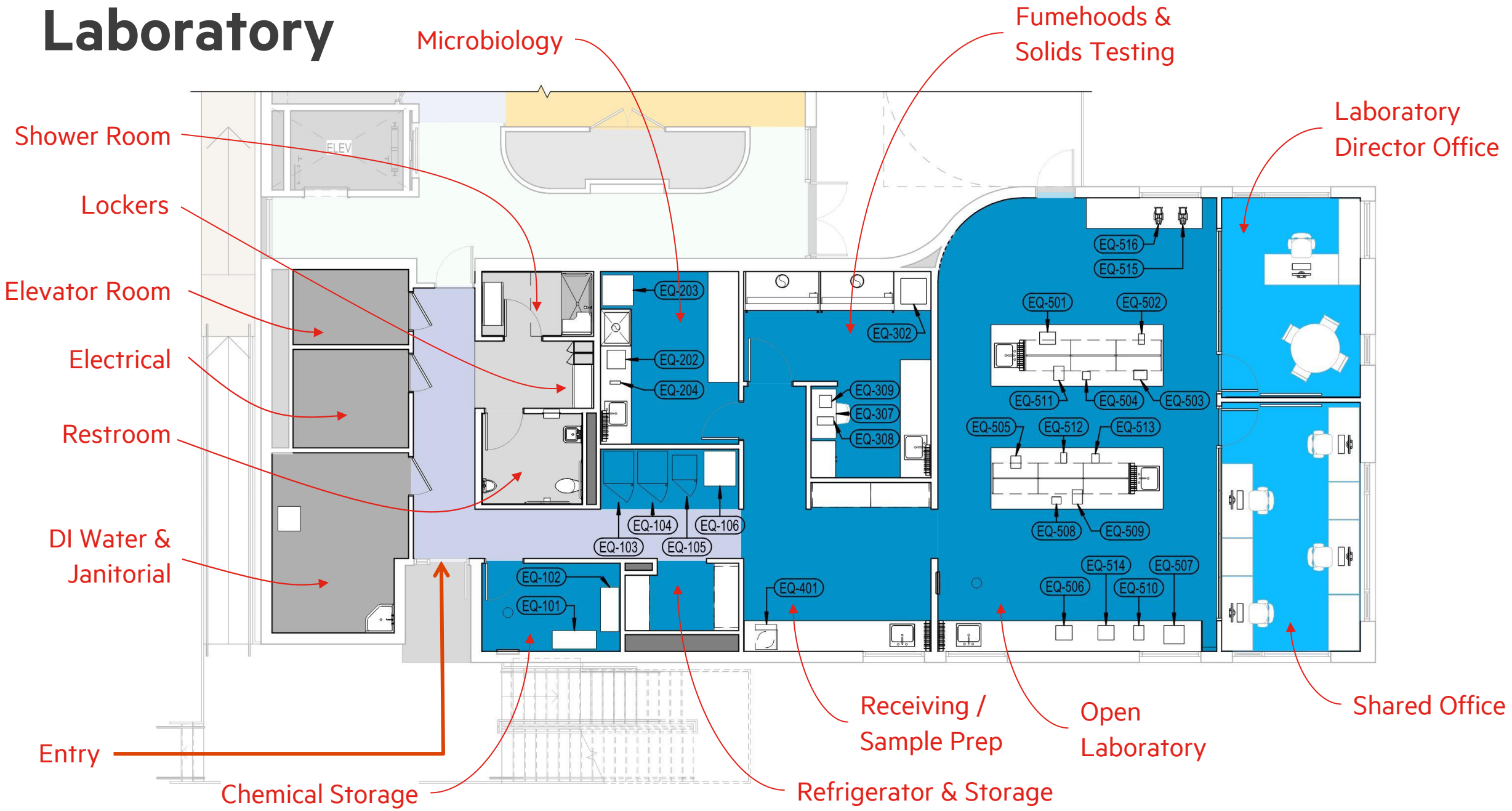


Laboratory


Microbiology
Fumehoods &
Solids Testing
Laboratory
Director Office
Shower Room
Lockers
Elevator Room
Electrical
Restroom
DI Water &
Janitorial
Entry
Chemical Storage
Refrigerator & Storage
Receiving /
Sample Prep
Open
Laboratory
Shared Office
ELEV
EQ-203
EQ-202
EQ-204
EQ-302
EQ-309
EQ-307
EQ-308
EQ-104
EQ-106
EQ-103
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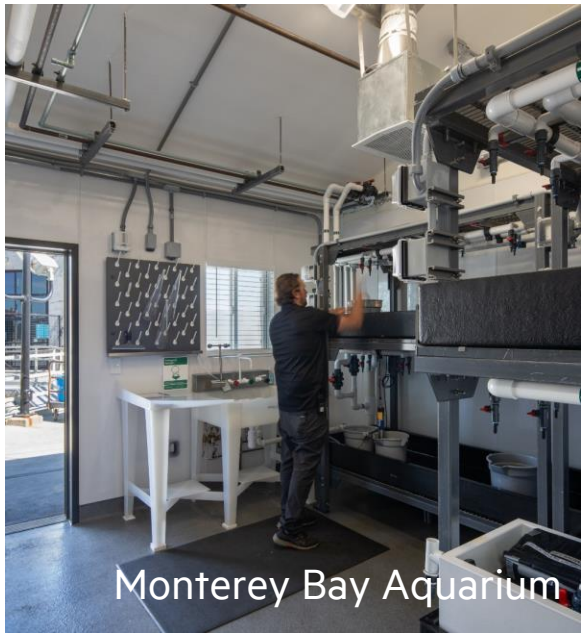
Laboratory


Monterey Bay Aquarium

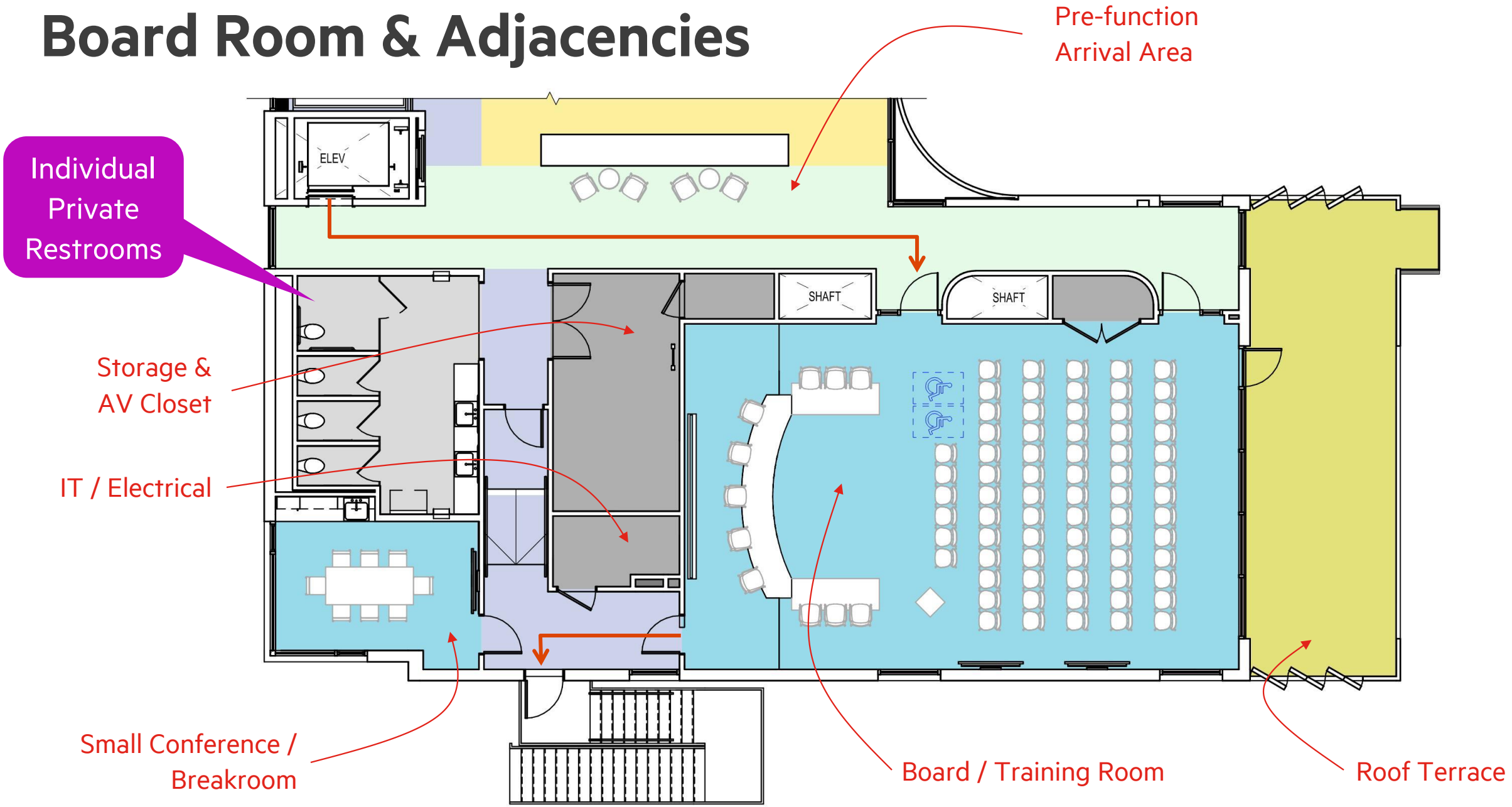

Monterey Bay Aquarium


North Marin Water District


UCSF HSIR

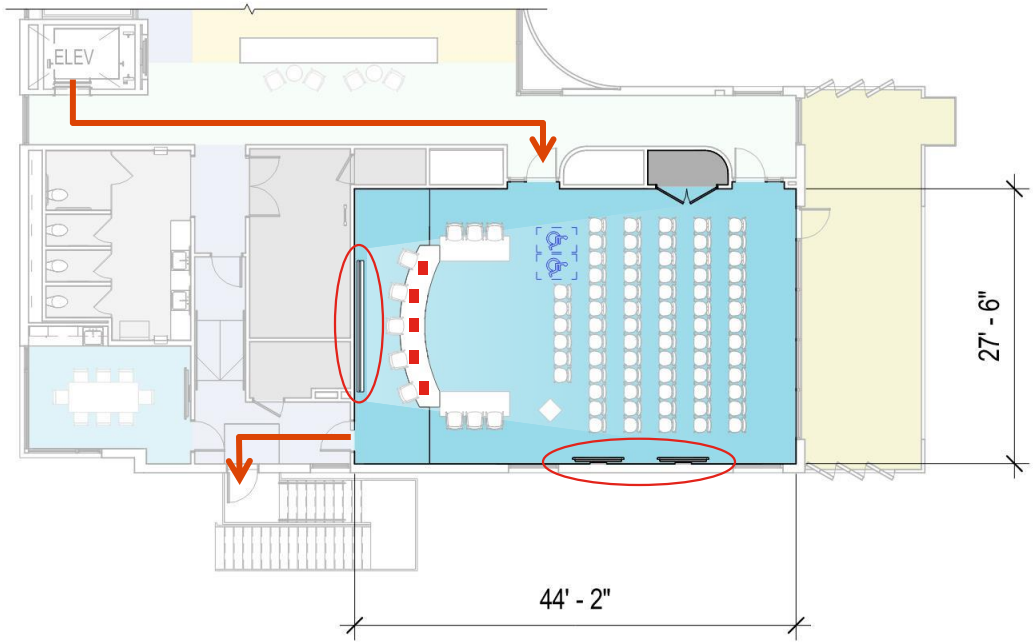

UCSF HSIR

Board Room & Adjacencies

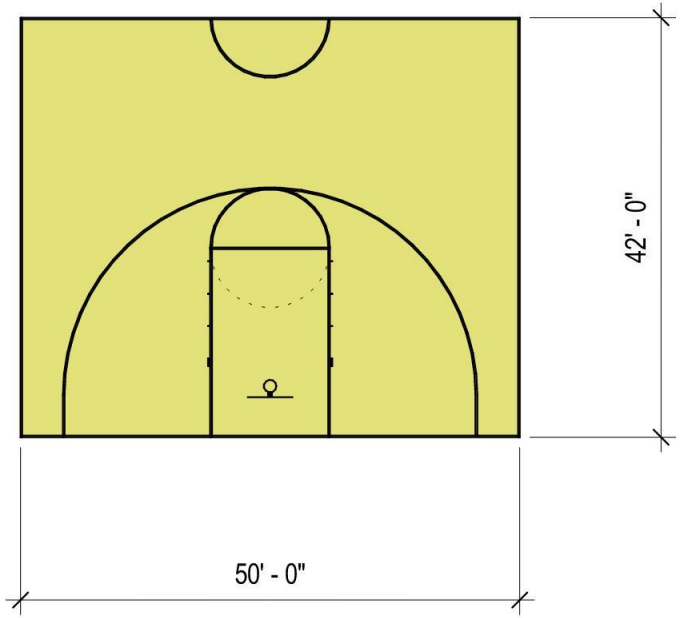


Board Room AV

- (1) Projection Screen
- (2) Display Monitors
- (5) Built-in display connection ports at each Dais seat

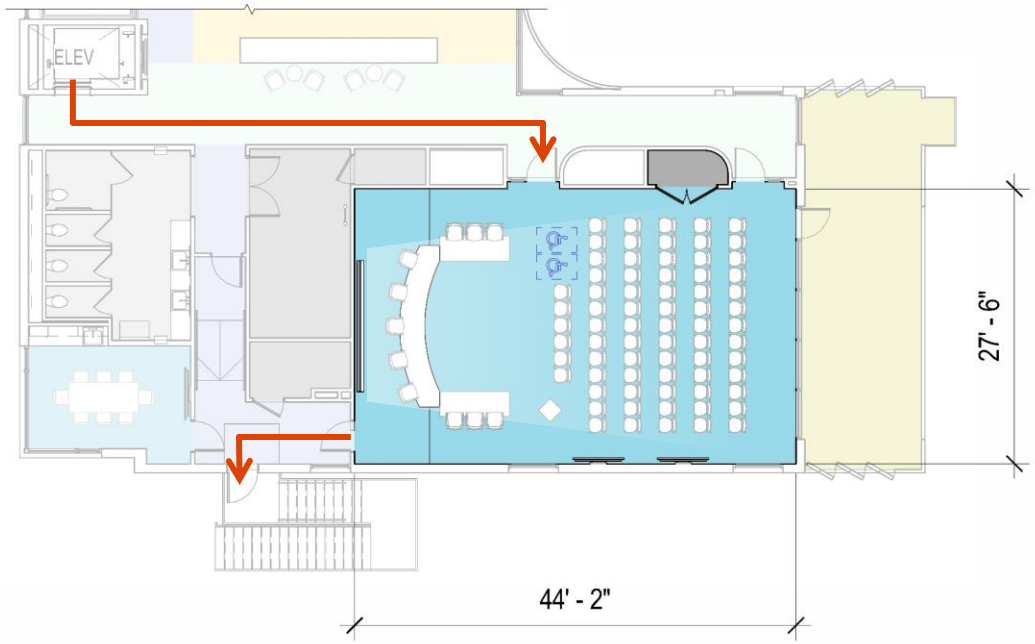


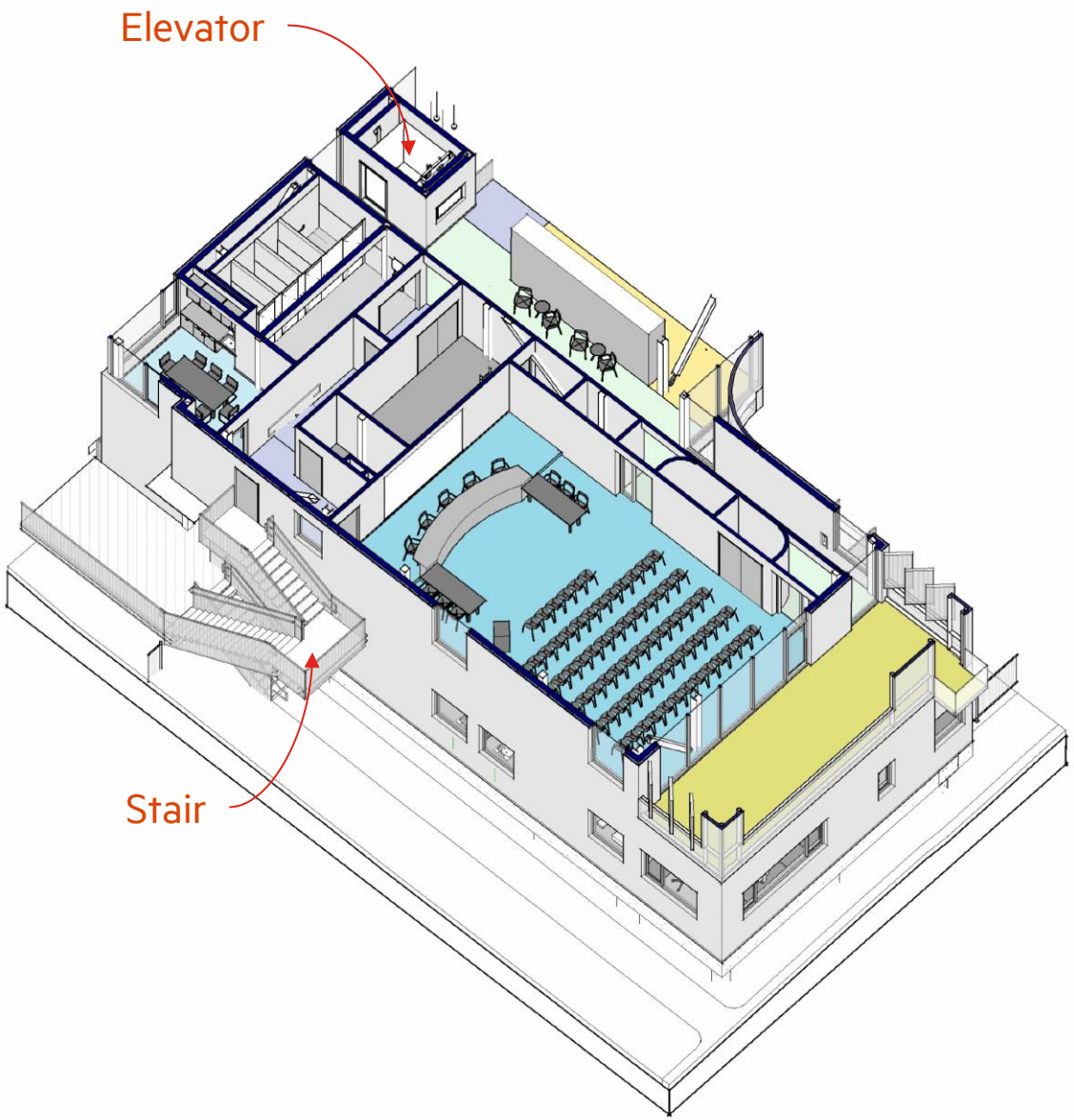
High School Basketball Halfcourt



Board Meeting

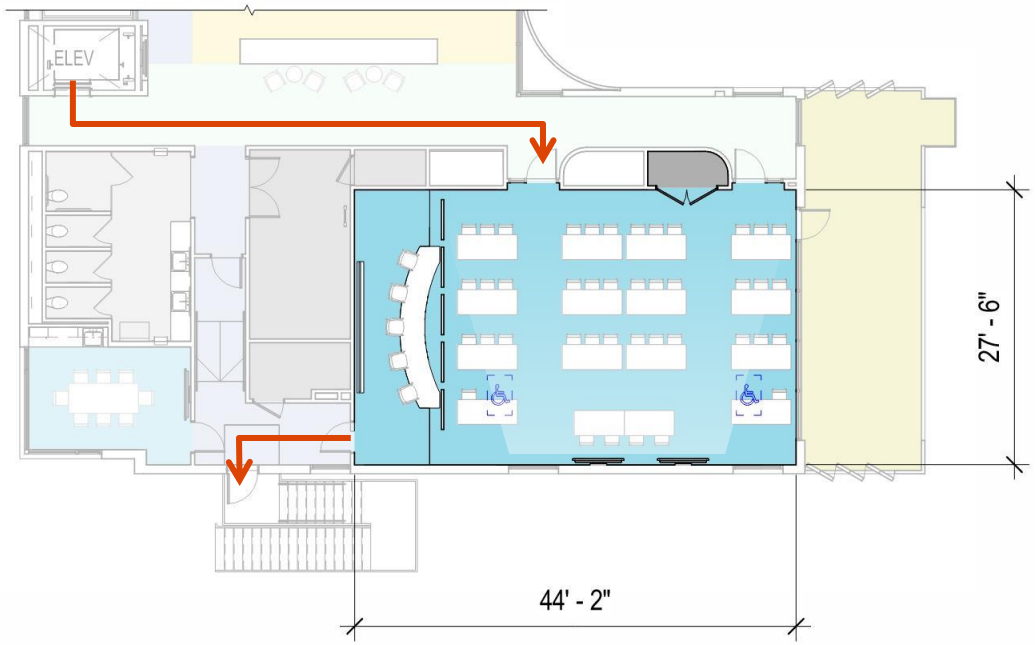
- (5) Fixed Board Member seats
- (6) Counsel seats at tables
- (73) Public seats
- (1) Lectern

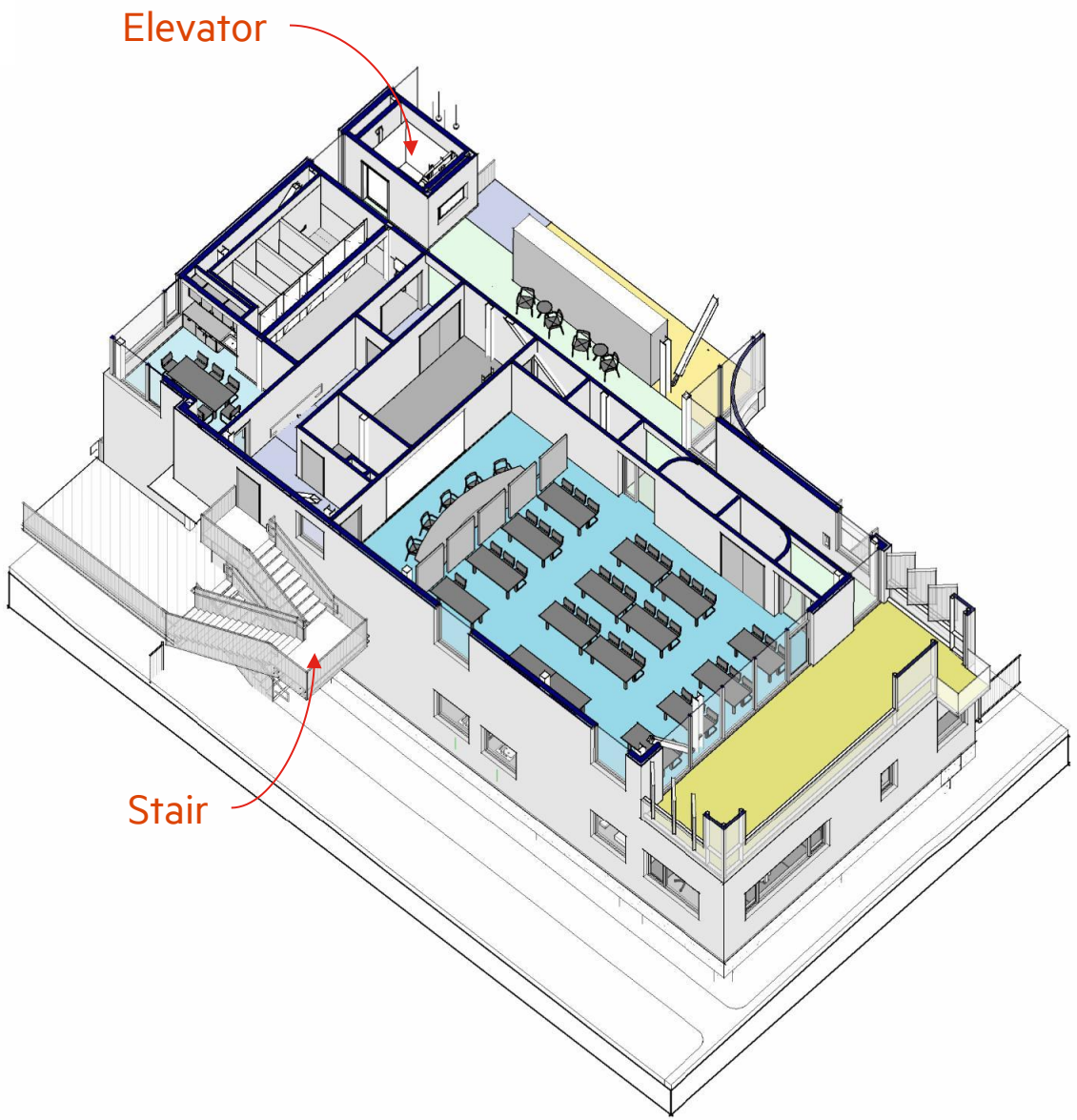




All-Staff Training

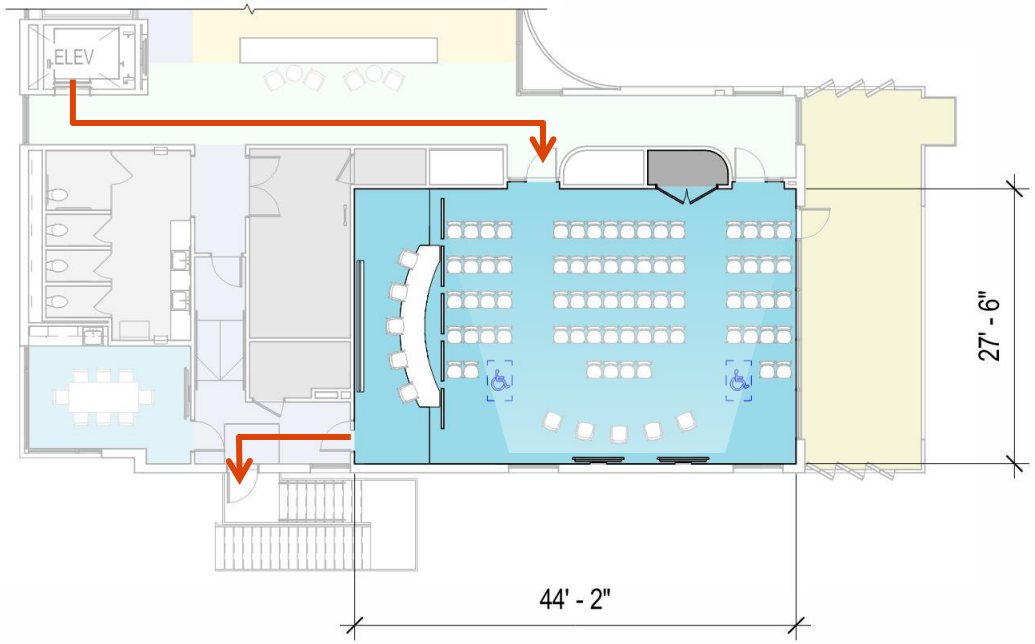
- (4) Presenters with tables
- (40) Audience seats at (14) tables

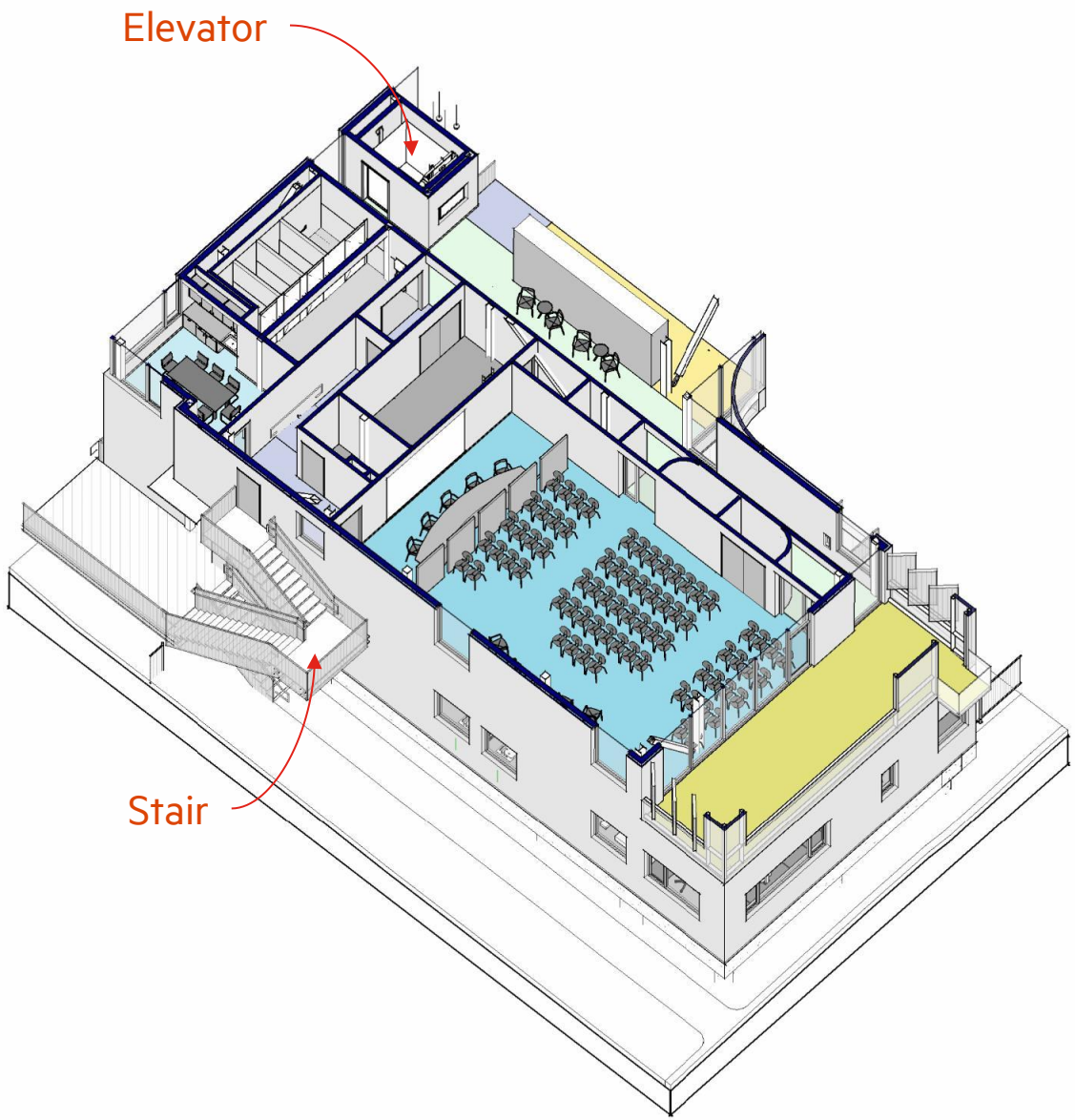




Seminar

- (5) Presenter seats
- (74) Audience seats





Project Overview

Exterior Design

Site Plan

1. Existing bridge
2. Miller Creek
3. SF Bay Trail
4. Outfall Box
5. Pond Diversion Box

Site Access

1. Public Parking
   (5) spaces
2. Staff Parking & Delivery/Pick-up
   (7) spaces
3. Van Accessible Parking
   (1) space
4. PV canopy above
5. Main building entry
6. Laboratory entry
7. SF Bay Trail connection

Approach

Exterior color exploration

Main Entry

Exterior color exploration

Laboratory Entry

Exterior color exploration

View from the Marsh

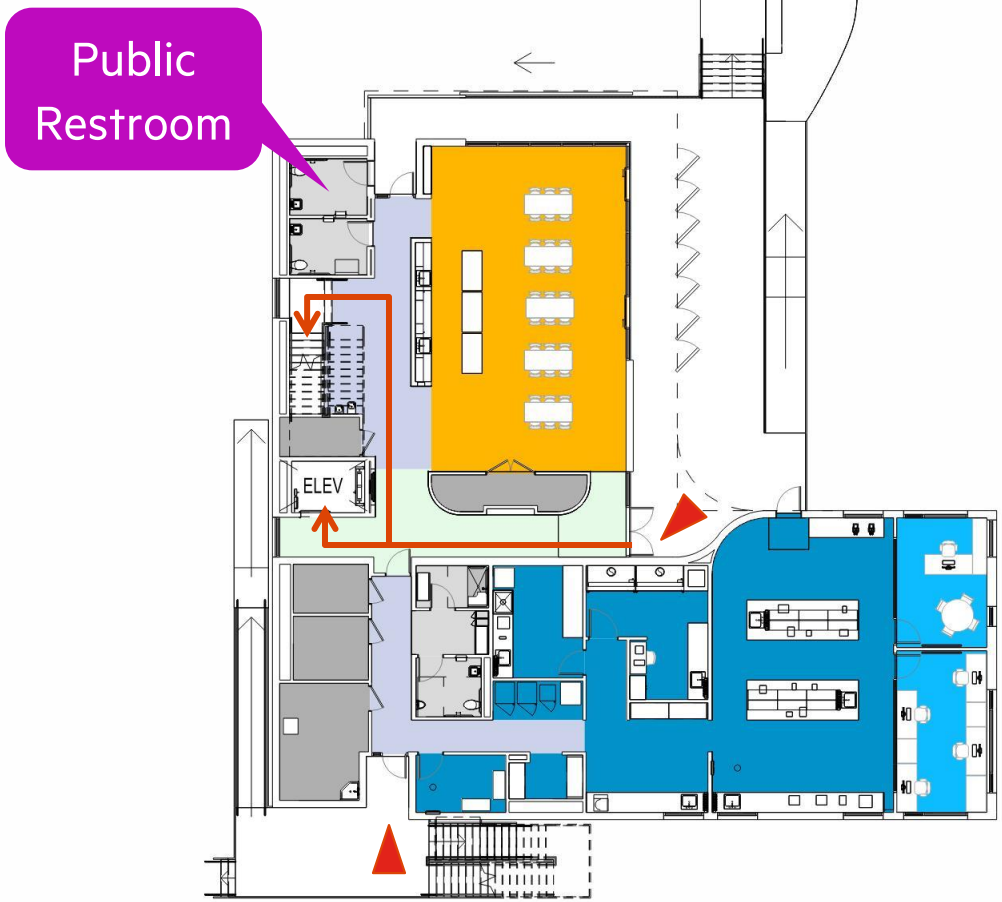
Exterior color exploration

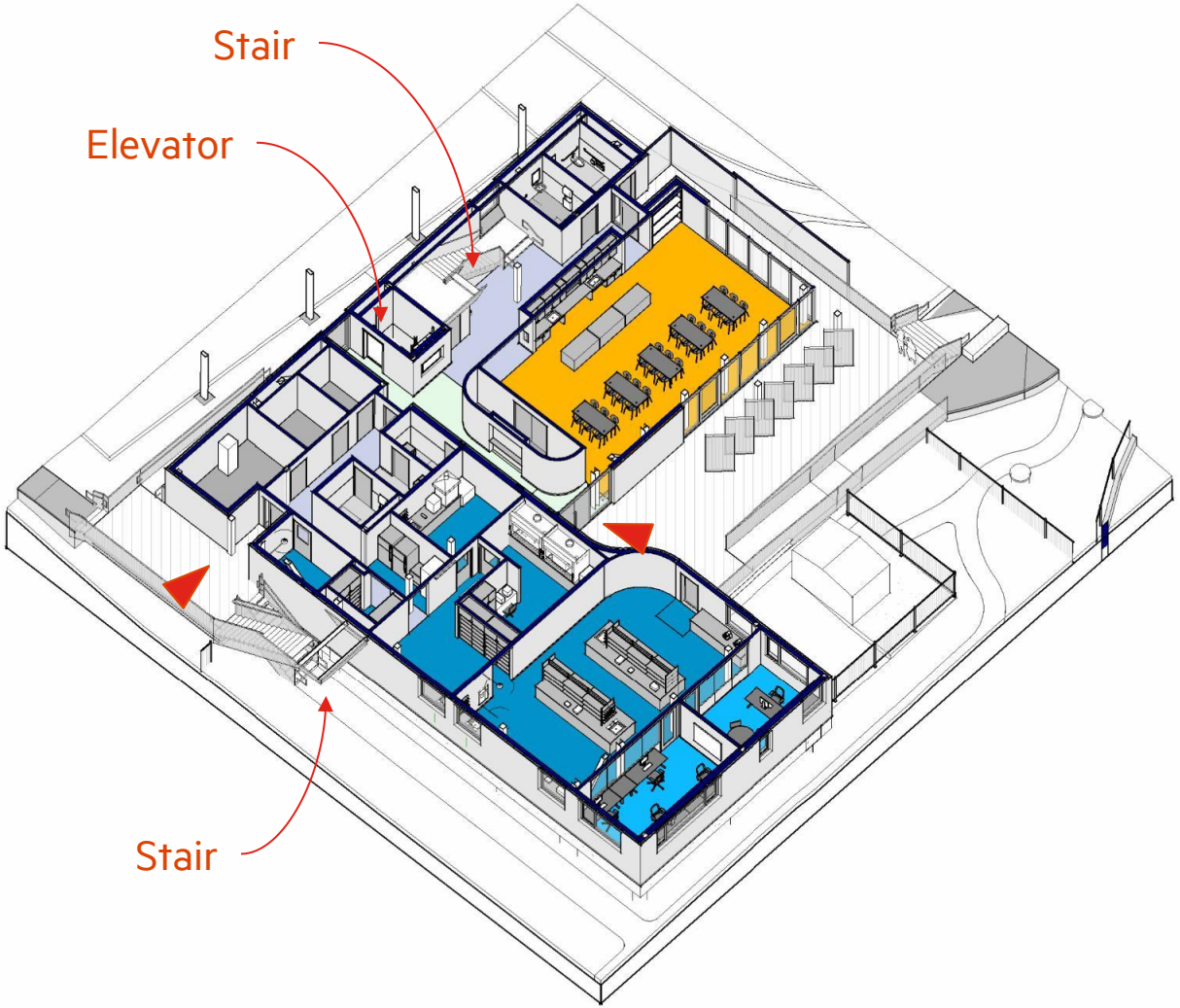
Inviting Interaction

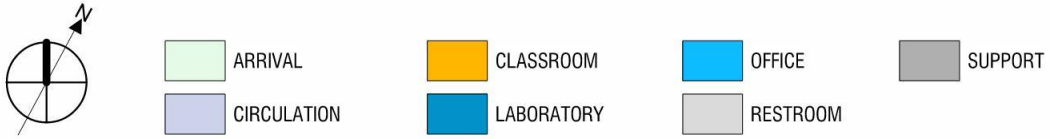
Project Overview

Interior Design

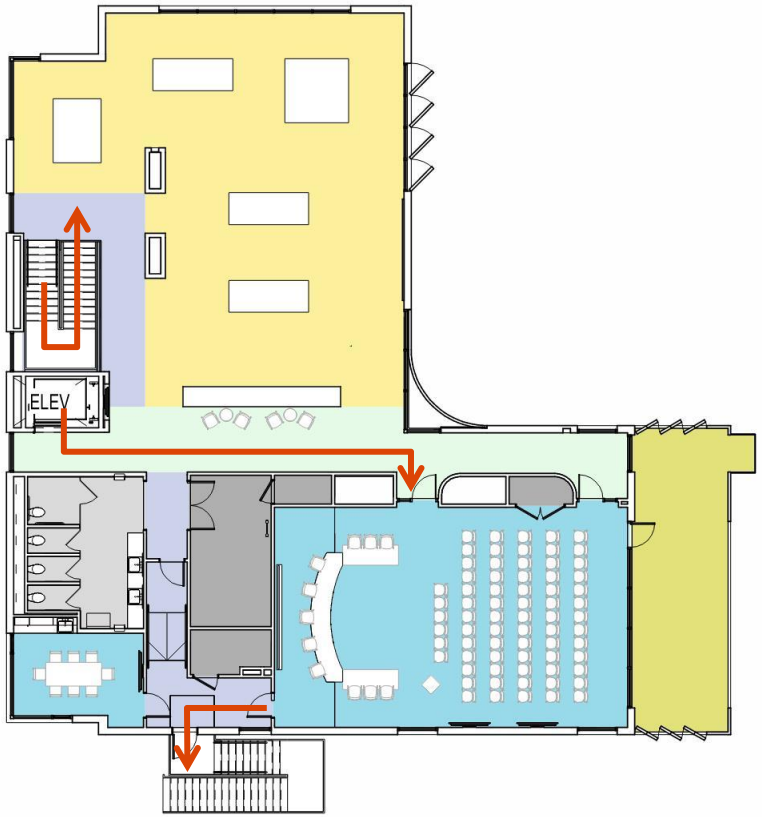
First Floor

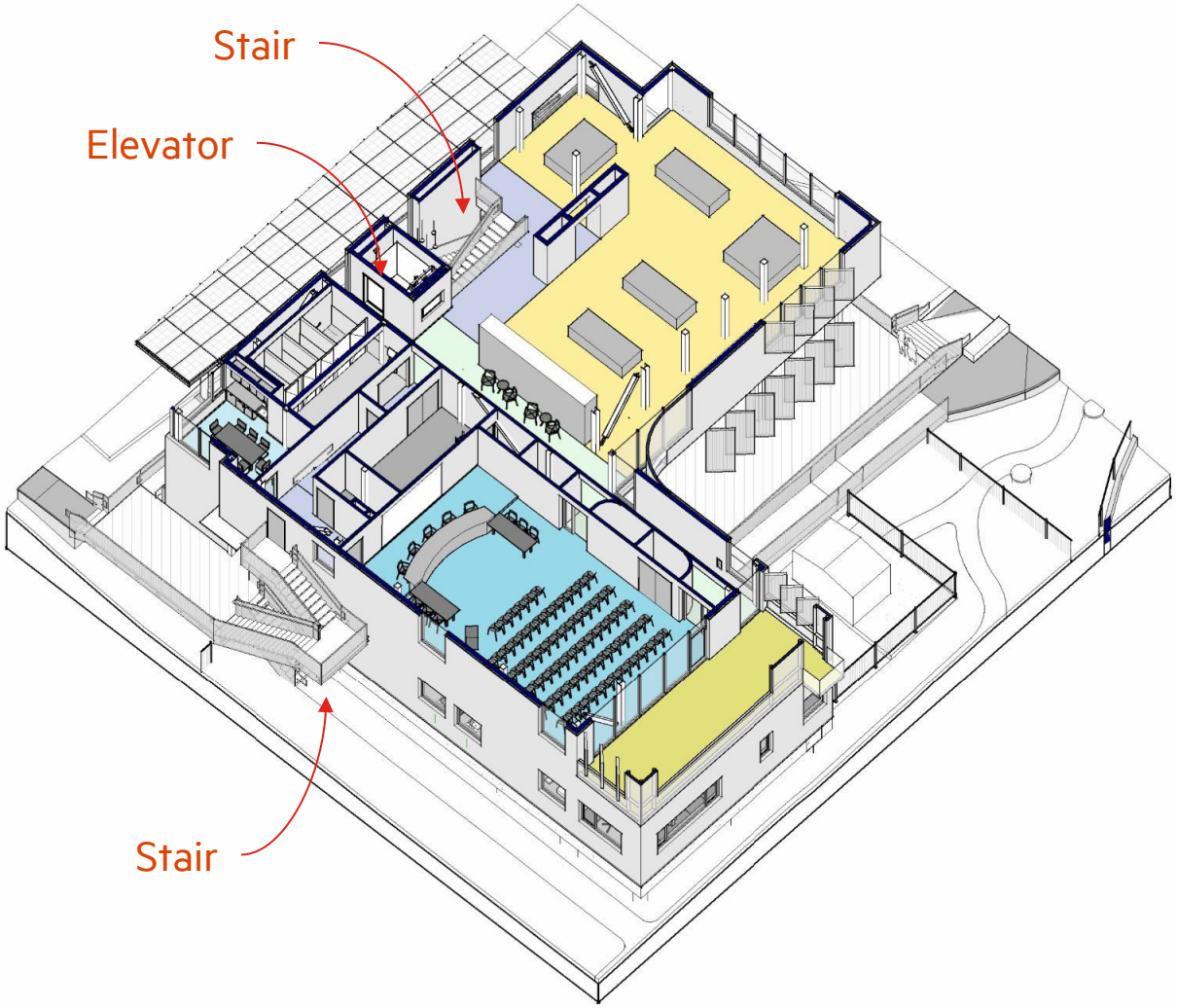

Public Restroom
ELEV


Stair
Elevator
Stair


N
ARRIVAL
CIRCULATION
CLASSROOM
LABORATORY
OFFICE
RESTROOM
SUPPORT

Second Floor

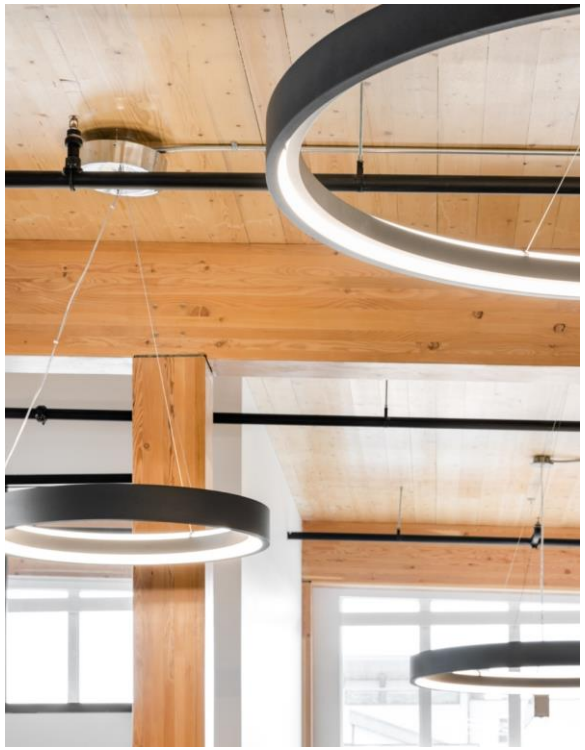




ARRIVAL
CIRCULATION
EXHIBITS
MEETING
RESTROOM
SUPPORT
TERRACE

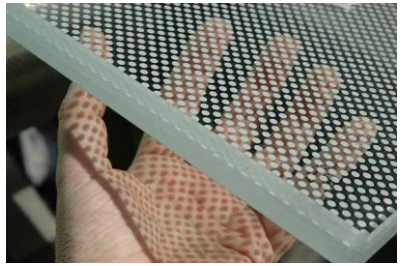
Look & Feel

Exposed Structure



Flexibility

Durability



Comfort

Project Overview

Site Design

Site Landscaping

1 Seating

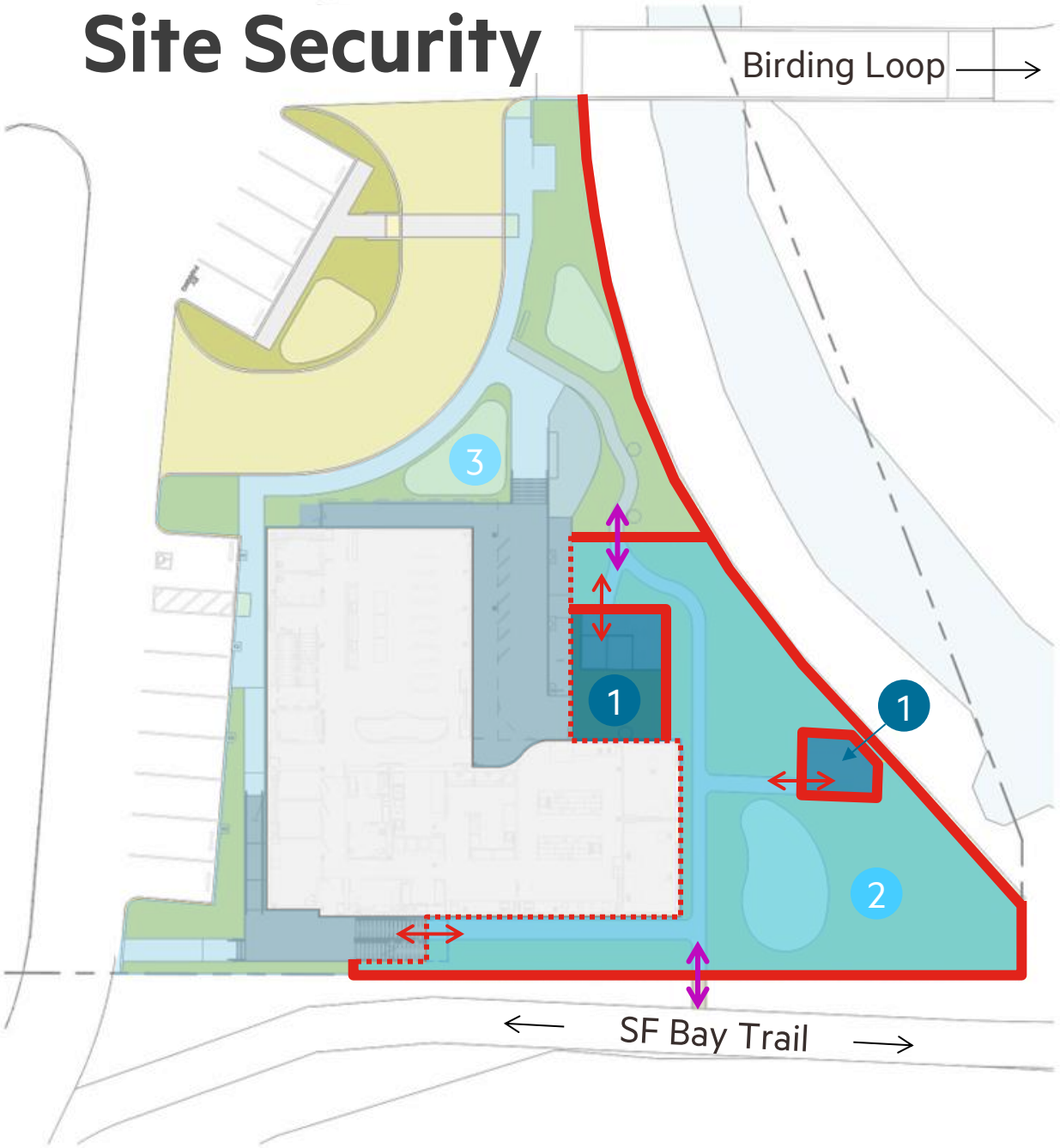
2 Bioretention

3 Drivable path

4 Elevated ramps & deck

5 Low maintenance habitat

Site Security



Fence

Secure building edge

Gate – District access only

Gate – Public access

1 Always secure

2 Managed security, some public access

3 Always open to the public during District hours

Managed access, or always open?

3

Sustainability Mission

Sustainability Mission

High Performance Building

Current building design

- Regulatory
  - California Energy Code
  - City of San Rafael
- Water and Energy Conservation
  - Low maintenance native habitat landscaping
  - Recycled water for irrigation
  - All-electric building
  - High efficiency heat pump & heat recovery systems
  - Appropriate window-wall ratio
- Embodied Carbon
  - Wood construction
- Health and Wellness
  - Indoor air quality
  - Reduce/eliminate vinyl, petro-chemical products

Include?

More ways to conserve water

- Recycled water for toilet fixtures
- Rainwater barrels for irrigation
- Capture condensate from air conditioning system, possible evaporative cooling for HVAC equipment
- Water metering for domestic and recycled water

More ways to conserve energy

- Building and site energy metering
- Assess on-site energy production to use
- Advanced system commissioning

Sustainability Mission

To pursue or not pursue?

LEED Certification

What does LEED Certification entail?

- Additional documentation
  - Additional assessment, calculations, simulations
  - Enhanced energy performance modeling
  - Enhanced commissioning
  - Additional documentation during construction
- Additional cost
  - Some added cost and time needed to confirm building design meets specific LEED requirements

Should we pursue LEED Certification?

- Sister agencies
  - What are others doing?
- Value
  - District mission, communications, and community

Points		Category
Yes	Maybe	
1	3	Location and Transportation
4	4	Sustainable Sites
6	4	Water Efficiency
22	8	Energy and Atmosphere
6	5	Materials and Resources
10	6	Indoor Environmental Quality
3	3	Innovation
4	0	Regional Priority
56	33	TOTALS

Certified: 40-49 points

Silver: 50-59 points

Gold: 60-79 points

Platinum: 80-110 points

4

Education Outreach and Exhibit Design

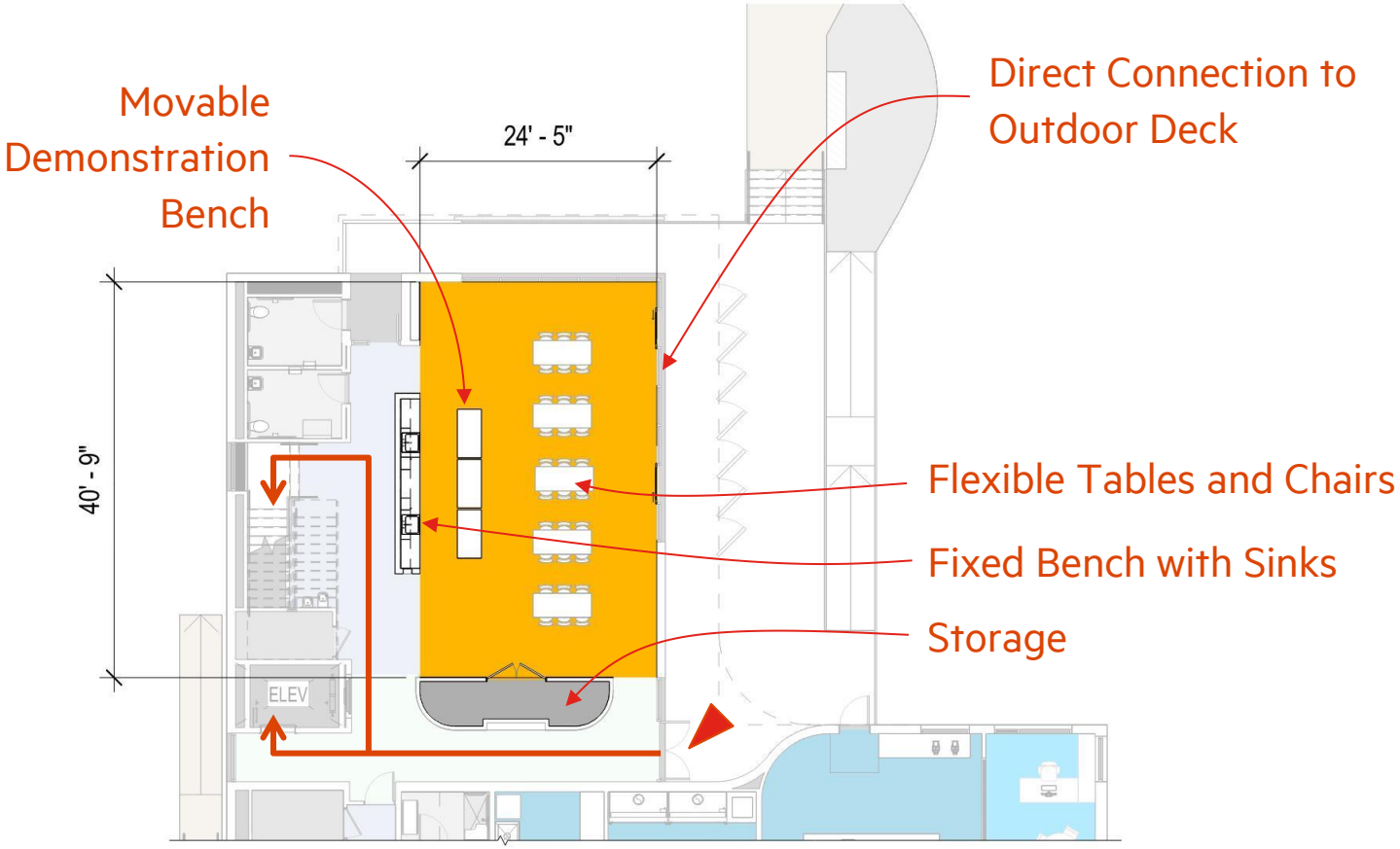
How do we learn?

passive *active* *interactive*

Education Outreach

Learning Lab

- (30) students & teachers



High School Basketball Halfcourt

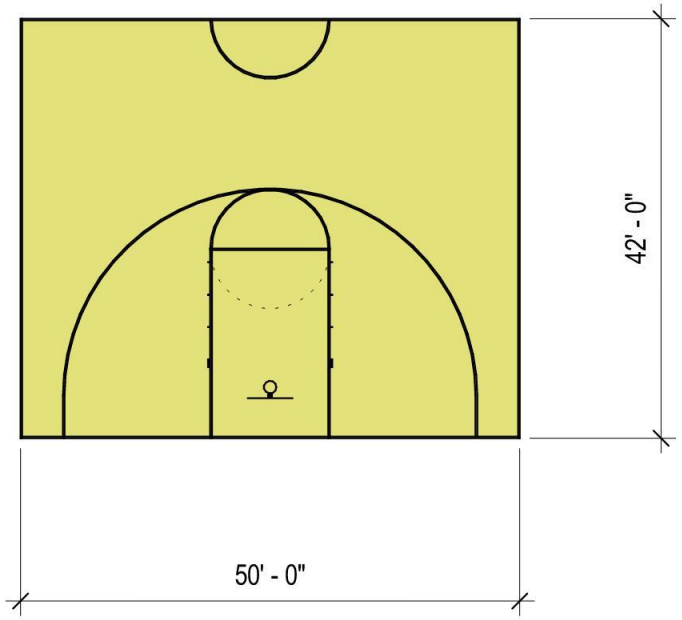
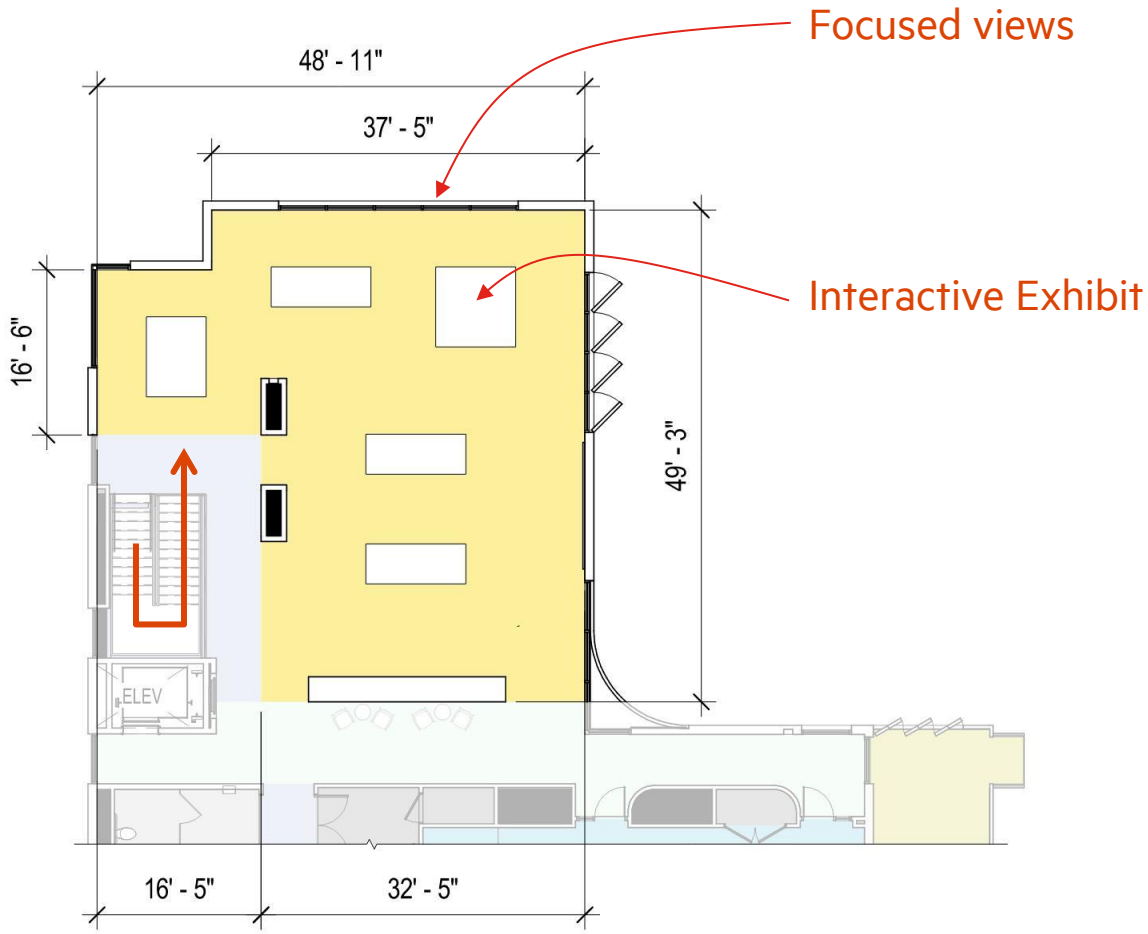


Exhibit Design

Water Ecology Center

- (30) students & teachers



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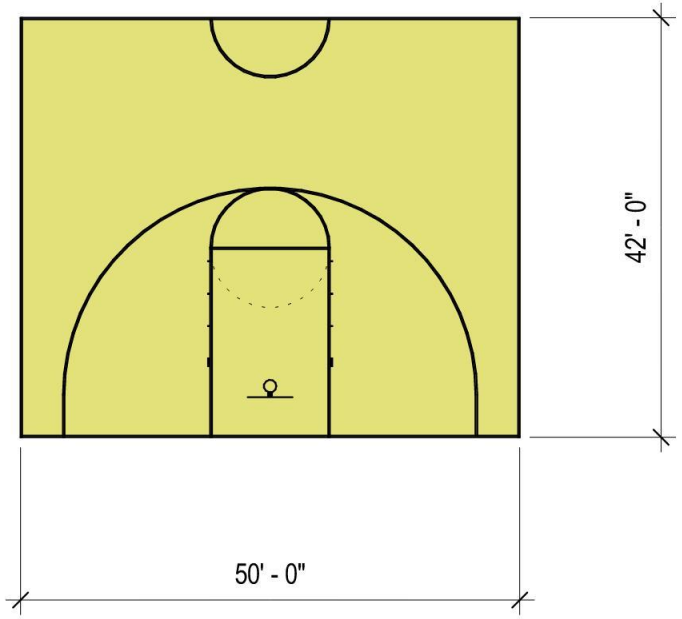
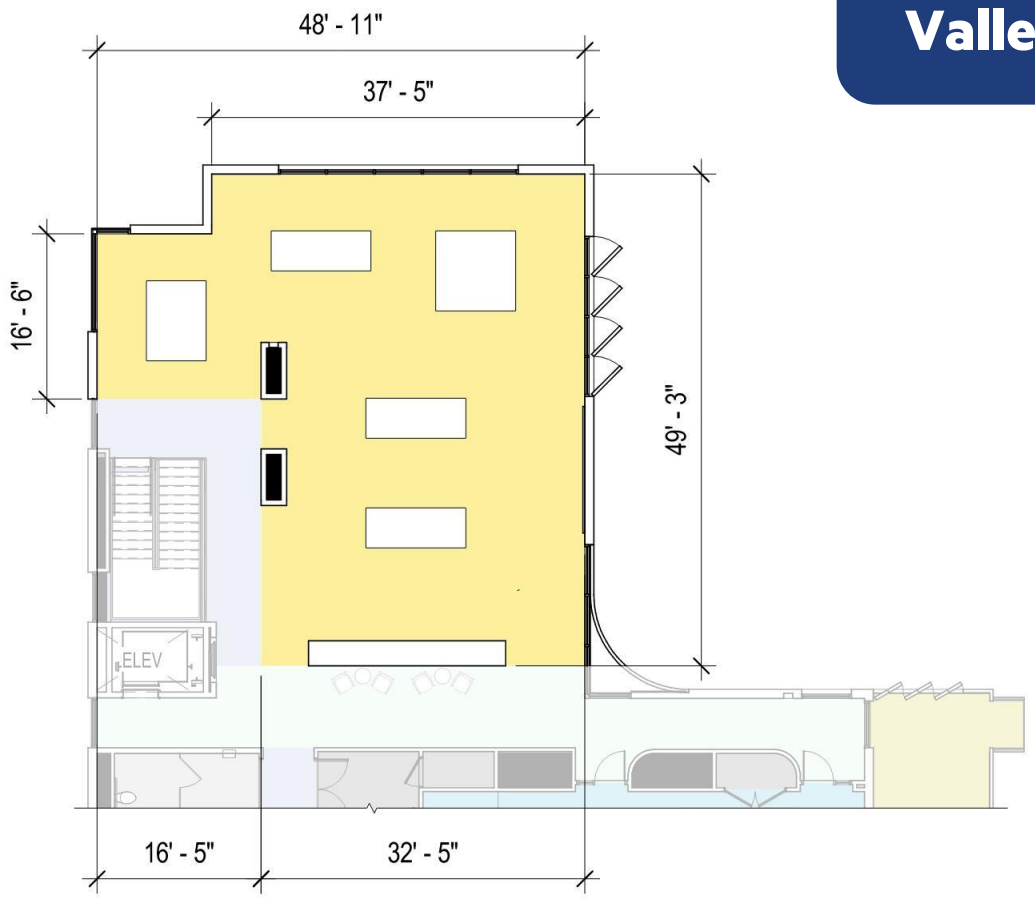


Exhibit Design



Interactive Exhibits

Intro to Las Gallinas Valley Sanitary District

Wastewater Treatment

Living in a Watershed

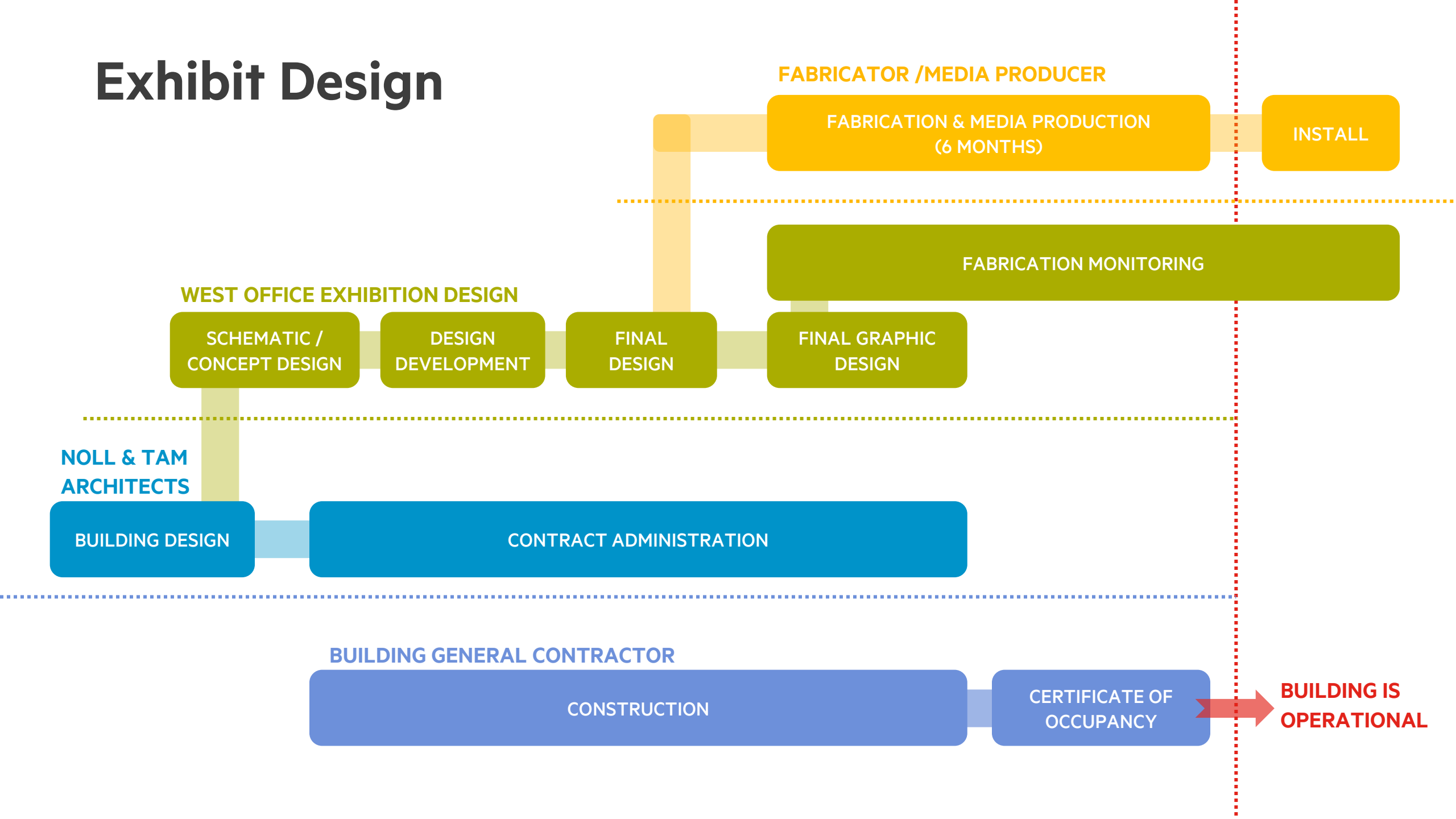
Recycled Water & You

Innovation, Industry & Careers

Exhibit Design

west office
EXHIBITION DESIGN

Exhibit Design

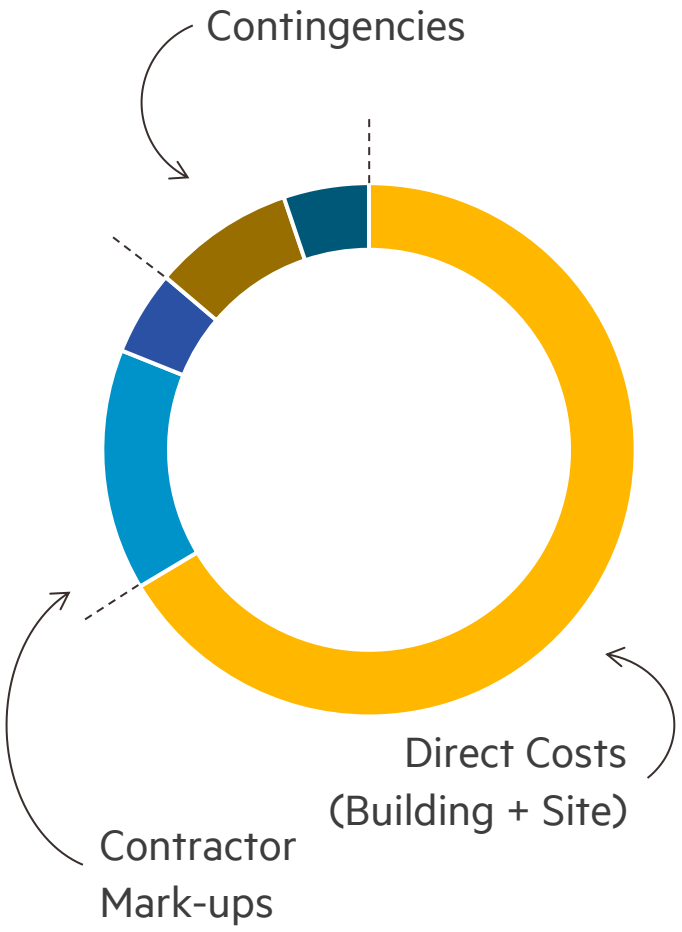


4

Cost Estimate Summary

Cost Estimate Summary

Design Development Phase



Total	%	Section	$ / SF
$13.34 m		Direct Costs (11,408 GSF)	$1,169.44
$2.94 m		Contractor Job Costs	
$1.03 m		Contractor Insurance & Fee	
$1.73 m	10%	Scope Refinement & Design Contingency	
$1.04 m	5.49%	Escalation (approx. 4.5% per year)	
$20.08 m	**Estimate total**		

- 16 months Construction Period
  - Construction start date: June, 2025
  - Mid-date of Construction: February 2026
  - Construction end date: October, 2026
- 15 month Escalation Period
  - Escalation end date: Construction Mid-Point
  - Calculation does not account for adverse bidding conditions. A separate Bid Contingency should be carried if there are limited qualified bidders or if a market research study indicates.

Cost Estimate Summary

Owner/Vendor Soft Costs

1. District Construction Contingency
2. Hazardous materials testing and abatement (if applicable)
3. Owner and vendor provided items
    - Furniture, fixtures, and equipment (FF&E) ~$90k ($30/SF)
    - Laboratory shelving and equipment
    - Vendor provided DI water equipment, lab equipment support
    - Vendor provided Security
4. PV Canopy ~$250k - $350k
5. Interactive exhibit fabrication, installation, and interpretive signage

Bidding Process

Considerations for Project Bidding and GC performance:

Drilled deep foundations, heavy-wood construction, Laboratory Specialty, Active site

Traditional Low Bid:

Lowest responsible bidder, meet the minimum criteria to bid

Prequalification or Qualified Bidders:

Establish a group of qualified bidders based on project criteria and experience

Best Value Bidding:

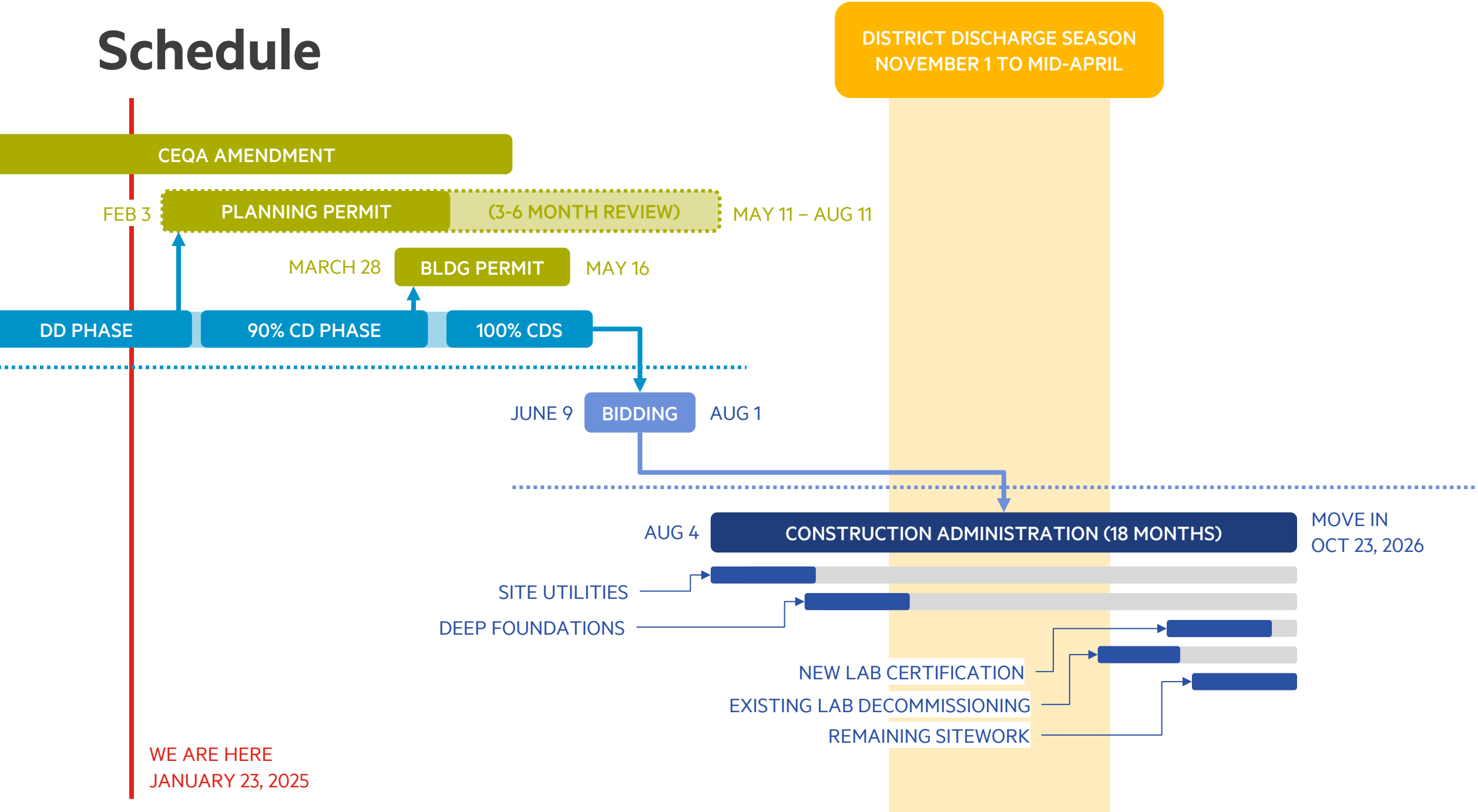
Scoring General Contractors based on a set criteria:

Bid Amount, GC Experience, Interview, Team experience

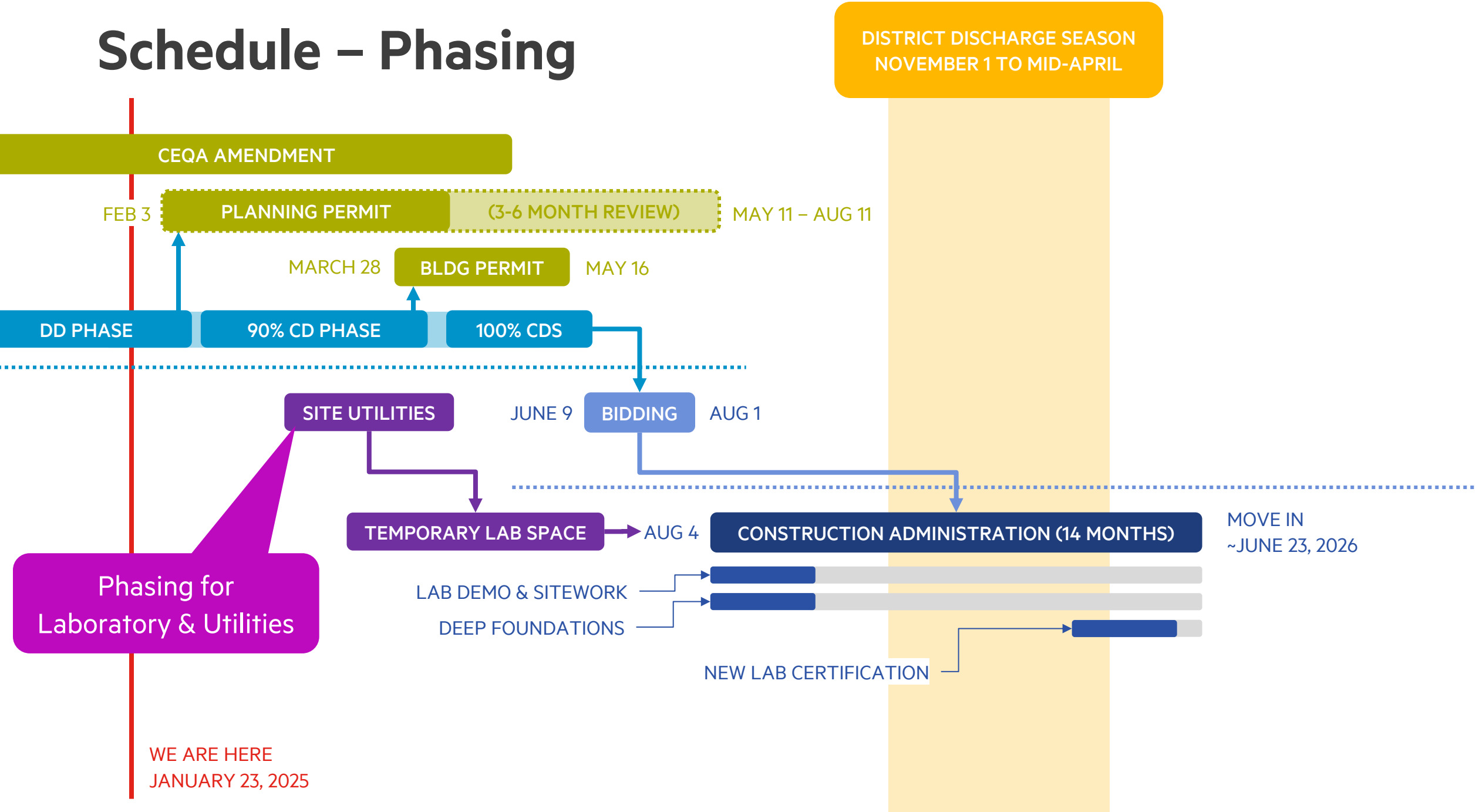
5

Schedule & Next Steps

Schedule


DISTRICT DISCHARGE SEASON
NOVEMBER 1 TO MID-APRIL
CEQA AMENDMENT
FEB 3
PLANNING PERMIT
(3-6 MONTH REVIEW)
MAY 11 – AUG 11
MARCH 28
BLDG PERMIT
MAY 16
DD PHASE
90% CD PHASE
100% CDS
JUNE 9
BIDDING
AUG 1
AUG 4
CONSTRUCTION ADMINISTRATION (18 MONTHS)
MOVE IN
OCT 23, 2026
SITE UTILITIES
DEEP FOUNDATIONS
NEW LAB CERTIFICATION
EXISTING LAB DECOMMISSIONING
REMAINING SITEWORK
WE ARE HERE
JANUARY 23, 2025

Schedule – Phasing



Next Steps

1. Board Decisions & Direction
    - Restrooms: Individual Private Restrooms; Public Restroom
    - Site Security & SF Bay Trail Connection
    - Recycled Water
    - LEED Certification
    - Phasing for Laboratory & Site Utilities
2. Design & Approvals
    - Planning
    - Building Permit
    - CEQA Amendment
3. Bidding & Award
4. Site & Building Construction
5. Move-in and Project Close out

Thank you