

# **CHABOT-LAS POSITAS COMMUNITY COLLEGE DISTRICT**

## **REQUEST FOR PROPOSAL (RFP)**

**Commissioning Services  
B26/27-04 College Center Project**

**Proposal Due:  
September 30, 2026 at 2:00 P.M.**



**Return Proposals to:**

**Chabot-Las Positas Community College District  
Marie Hampton, Purchasing and Warehouse Manager  
7600 Dublin Blvd., 3<sup>rd</sup> Floor  
Dublin, CA 94541**

**REQUEST FOR PROPOSAL  
COMMISSIONING AGENT SERVICES  
For  
B26/27-04 College Center Project at Chabot Campus**

**INTRODUCTION**

The District is soliciting Commissioning Services from qualified persons, firms, partnerships, corporations, associations, or professional organizations to provide comprehensive Commissioning services for the College Center project at the Chabot College Campus, located at 25555 Hesperian Blvd. Hayward, California 94545.

**PROJECT DESCRIPTION**

Constructing a 3-story College Center building, approximately 65,000 sq. ft., that will connect to Parking Lot A and B. It will include conference rooms, event spaces, recreational spaces, and informal areas for student groups. This building will be designed around meeting students' daily needs and activities. The project will include the demolition of existing Building 200.

The program for the new College Center Building, can be found in **Attachment A**.

**Submittal Due Date: September 30, 2026 at 2PM**

**Last Day for Submission for Request for Information: September 18, 2026 at 2PM**

**Addenda Issuance: September 23, 2026**

**Notice of Intent to Award: October 14, 2026**

**Board Approval: November 17, 2026**

**Notice of Contract Award: November 20, 2026**

**Start Date: November 30, 2026**

The District reserves the right to reject any or all quote and to waive any irregularities or informalities in the RFP process.

**CONSULTING SERVICES TO BE PROVIDED**

The Consultant shall provide comprehensive Commissioning services as fully described in the Scope of Services; see **Attachment B**.

**SUBMITTAL AND SELECTION PROCEDURE**

**A. SUBMITTAL REQUIREMENTS**

Applicants must follow the required Proposal Format.

**B. SELECTION PROCESS**

The District shall review the qualifications of the Commissioning Services Firm to determine their competency to perform the Commissioning services required. The qualification review shall include a review of resumes with an assessment of the candidate's education, similar project experience, and project successes.

To be considered by the Selection Committee, Respondents must submit a written response(s) to this RFP which addresses each and all of the requirements of this RFP for

the services to which they are submitting. It is mandatory that responses to this RFP be submitted to the following no later than

**2:00 PM (Pacific Daylight Time), on Wednesday, September 30, 2026**

Chabot- Las Positas Community College District  
7600 Dublin Boulevard, 3<sup>rd</sup> Floor Dublin CA 94568  
Attention: Marie Hampton, Purchasing and Warehouse Manager  
Email: MHampton@clpssd.org

Proposal submittals must be submitted in a sealed envelope including three (3) original hard copies and a complete electronic copy on a thumb drive. The total volume of the proposal may be no longer than Twenty (20), single sided 8 ½ X 11 pages, excluding covers and tabs. In a separate envelope, respondents should place the Not-to-Exceed Fee proposal and hourly rate schedules for the firm; this is not part of the 20-page limit.

No other collateral or reference materials should be submitted. Respondents are solely responsible for timely submission of RFP responses to the designated location prior to the latest time for submission.

The District will reject summarily as Non-Responsive any RFP response which is submitted after the date/time set forth above or which is considered by the District, in sole and absolute discretion, as Non-Responsive to the material requirements of the RFP.

The District reserves the right to cancel or amend this RFP by issuance of written addenda. If addenda(s) to this RFP are issued, respondents must acknowledge receipt of addenda in their RFP responses and RFP responses must address materials/requirements relating to this RFP as described in addenda(s) issued by the District. Failure to acknowledge and respond to any addenda(s) issued by the District may render the Respondent's RFP submittal to be deemed Non-Responsive and it may be rejected.

There is no guarantee expressed or implied that the District will provide work to all or any of the Respondents that submit a response to this RFP.

The District retains the sole discretion to determine issues of compliance and to determine whether a submittal to this RFP is responsive, responsible and qualified, and waive any irregularities in any response received to this RFP.

### **C. PROPOSAL FORMAT**

The purpose of this quote is for Consultants to submit resumes and concise cost proposals, appropriate to the scale and duration of the Program and/or Project and only include items that are relevant to this specific RFP.

A qualifying proposal must include all of the following points:

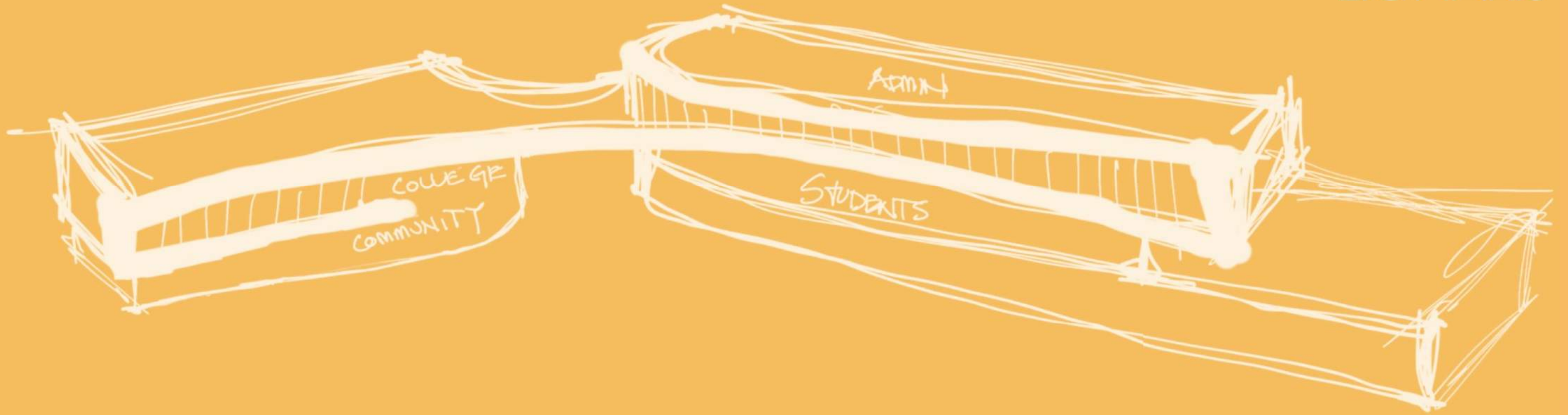
1. **Cover Letter** - Respondents should include a letter of interest and firm introduction, signed by the appropriate managing executive, of not more than one (1) page. The letter must include the physical address of the office in which this project will be managed.
2. **Desired Knowledge and Relevant Experience of Commissioning Firm** – Provide at a minimum (3) three similar sized projects for which your firm served as the Commissioning Agent. The Project information should include Owners Name, address and contact information, project description, construction type, year started and completed or construction status, project and construction cost.

3. **Project Team** – Provide an organization chart identifying key firm individuals who will be assigned to this project. Provide a brief (one page or less) resume for key Commissioning team members, indicating the individual’s education, experience, and a description of responsibilities.
4. **Business Terms** – The District intends to award a Commissioning Services Contract based “Best Value” to provide the required services. Responder must state in the cover letter that your firm has thoroughly reviewed the District’s standard Professional Service Agreement, see **Attachment C** and accepts all terms and conditions, if responder has any comments or exceptions, Responder must include these in your response to this Request for quote within the established page limits.
5. **Fee** - Provide Firms Not to Exceed Fee, along with hourly rates for additional services, if required.
6. Non-Collusion Affidavit, **Attachment D**

**7. FORM OF AGREEMENT FOR PROFESSIONAL SERVICES:**

The District will then enter into contract for services using the standard form of Professional Services Agreement (PSA), collectively referred to hereinafter as “the Agreement”, which includes Drug-Free Workplace Certification and Workers’ Compensation Form. The scope of services will depend upon available funding, the services required, and the preparation of any other related elements necessary to complete the services.

- a. Respondents must thoroughly review the Draft form of “the Agreement” prior to submitting their response to this RFP.
- b. Pursuant to Public Contract Code §20103.6 all Respondents are advised that “the Agreement” includes provisions which obligate the firm(s) to indemnify and hold harmless the District. Respondents are referred generally to “the Agreement” and specifically referred to the indemnification provisions set forth in **Attachment C**, Item 11.



## CHABOT COLLEGE CENTER

Chabot-Las Positas Community College District

Schematic Design Update – May 16, 2026



## AGENDA

1. Project Overview
2. Design Process
3. Design Progress

# 1. PROJECT OVERVIEW

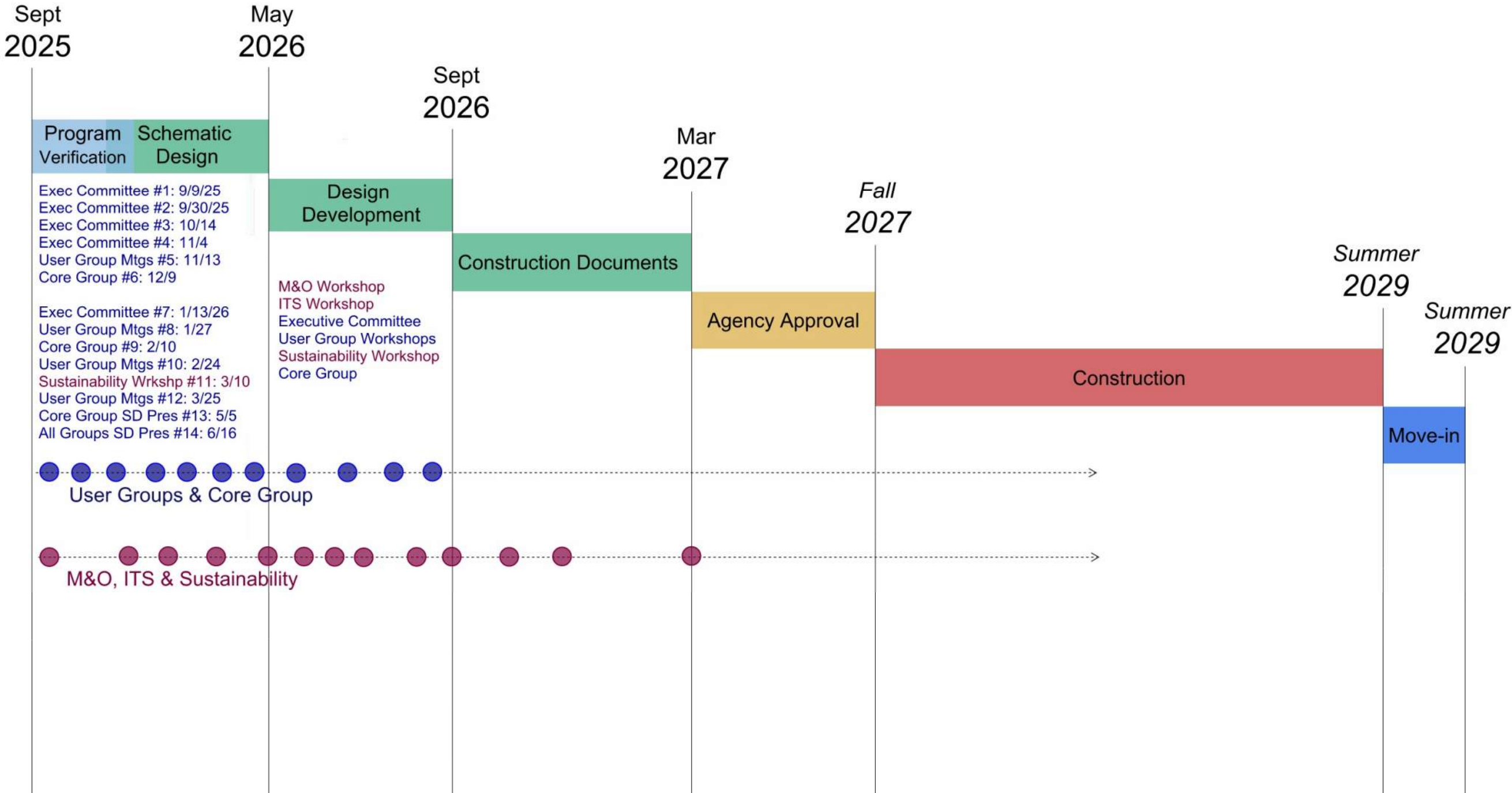


## Why?

### Create a welcoming front door to campus:

- Connect Parking Lots A & B to a new drop-off and future Campus Quad
- Provide clear wayfinding onto campus and key destinations
- Bring student-focused programs from across campus into a new vibrant campus hub

# CONCEPTUAL PROJECT SCHEDULE





## 2. DESIGN PROCESS



# User Engagement

## CO-CREATING THE NEW CHABOT COLLEGE CENTER

A great building isn't designed for the campus;  
**it's designed with the campus.**

User feedback ensures we can accurately  
balance program needs with budget.

# USER GROUP TASKS



## Step 1: Goal Setting

Defining "Critical Success Factors" to establish guiding principles.



## Step 2: Space Programming

Translating daily operations into functional spatial requirements.



## Step 3: Adjacency Diagrams

Shaping how the building feels and functions through floor plan iterations.



## Step 4: Design Review & Endorsement

Validating the architectural vision against the shared aspirations of the college community.



# Inside the Workshops

## CO-CREATING THE NEW CHABOT COLLEGE CENTER

### The Effort

**30** dedicated user workshops (to date) were held between November and March.

### The Strategy

Translate daily campus, facility, and educational needs into intelligent, future-proof architectural solutions.

### Goal-focused

Define the project through a success-driven lens—ensuring the new Chabot College Center has a lasting impact.

### 3. DESIGN PROGRESS

? Veterans

CSF.

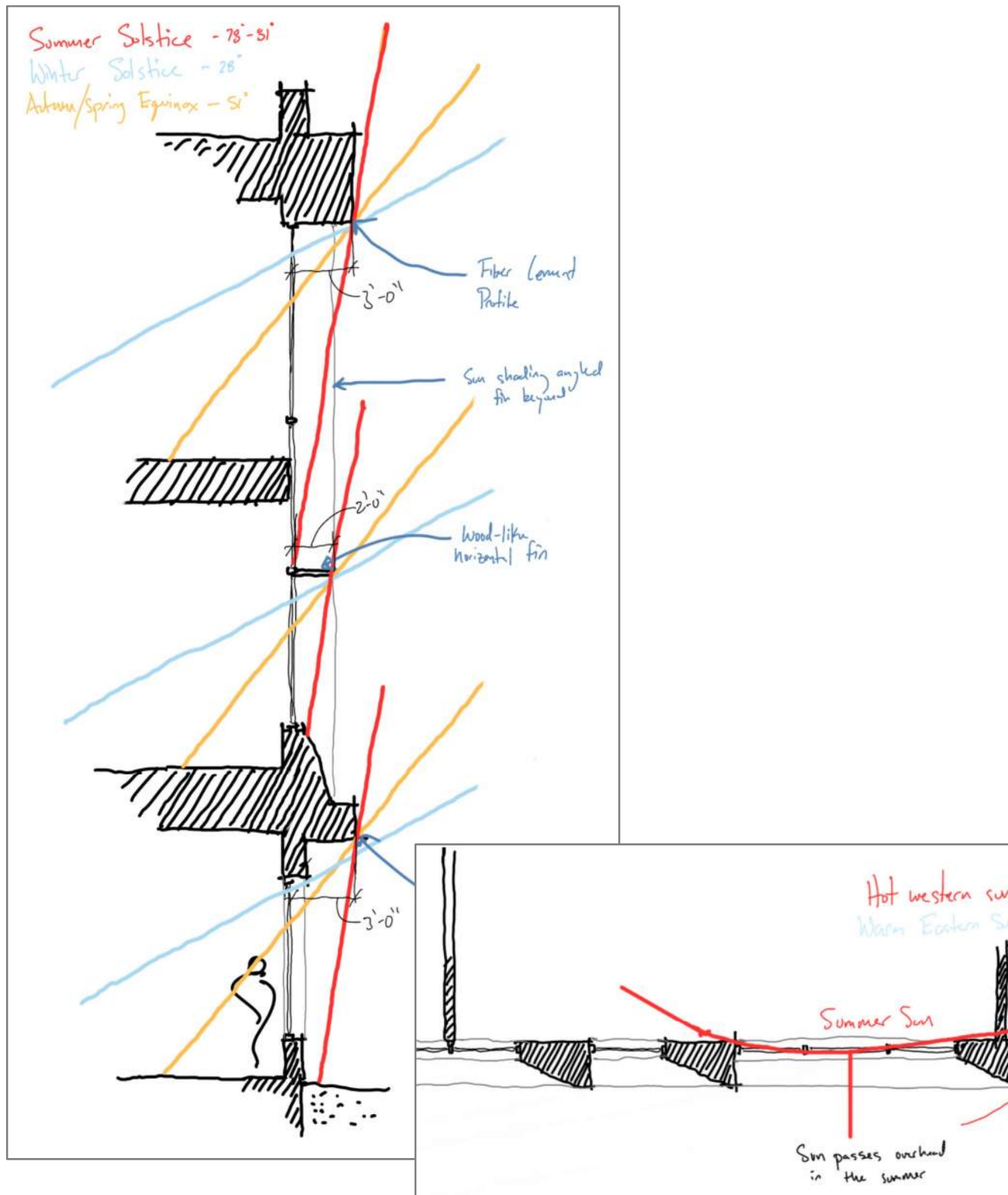
- USABLE / SERVES THE STUDENTS  
(+ BUDGET!).
- ON TIME / SCHEDULE.
- WELCOMING FRONT DOOR OF CAMPUS.
- A FEELING OF "WELCOME"  
MORE SOCIAL. → "HOME"  
WELCOMING / ENGAGING / COMFORTABLE.
- ACTIVE COMMUNITY FEELING,  
"VIBRANT ENERGY".



# Critical Success Factors

## DEFINING DESIGN DRIVERS

1. Student-Centered / Educational Impact
2. Community & Campus Engagement
3. Events & Multi-Functional Spaces
4. Welcoming & Aesthetic Design
5. Sustainability & Resilience
6. Project Performance & Process
7. Safety & Comfort
8. Technology & Innovation
9. Experiential & Emotional Impact



# Environmental Variables

## DEFINING DESIGN DRIVERS

### Passive Design Principles

Treat the façade in a way to create optimal room daylighting and reduce heat gain.

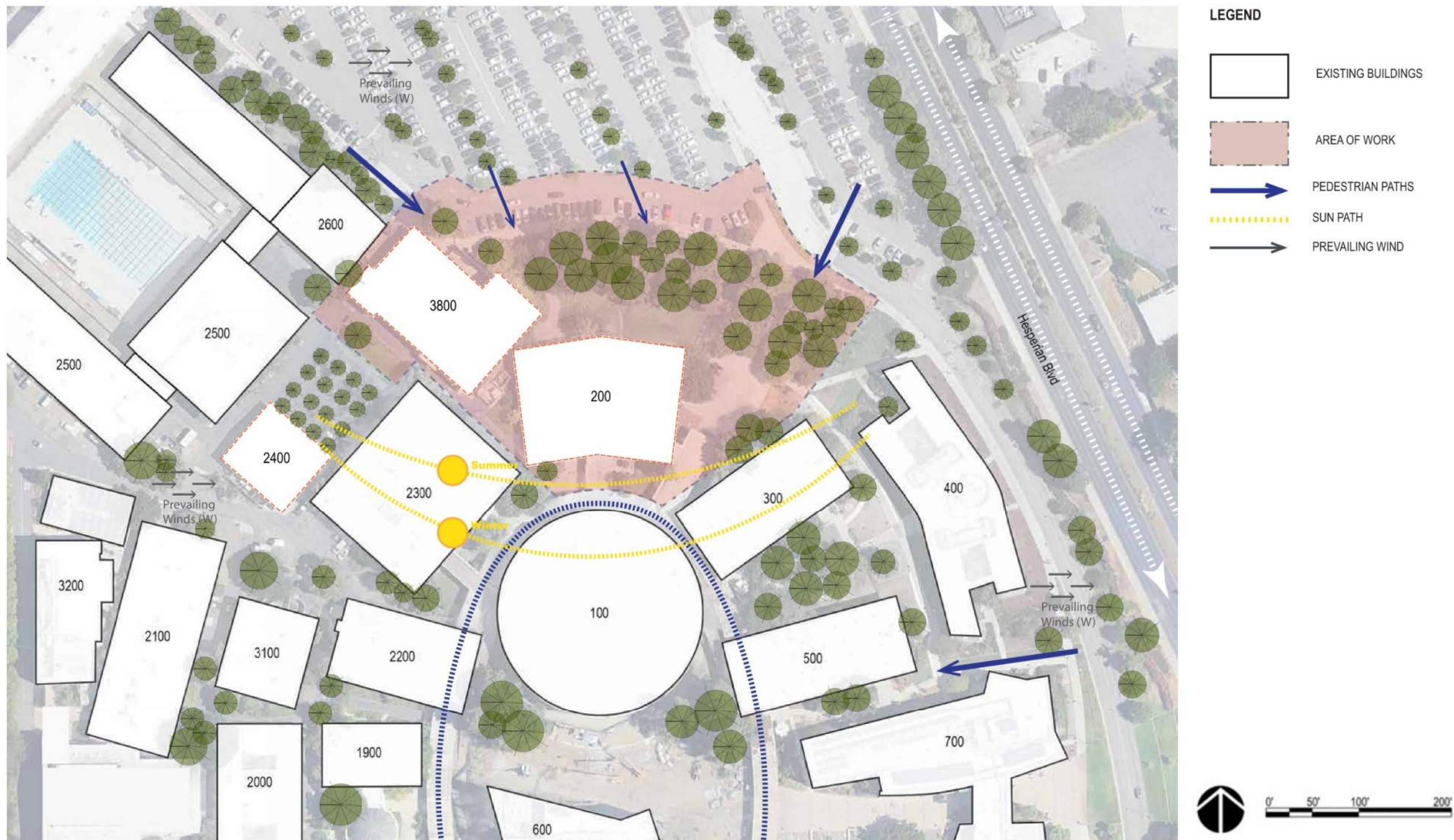
### Strategic Shading

Use overhangs to protect building from harsh solar exposure and provide covered space for outdoor use.

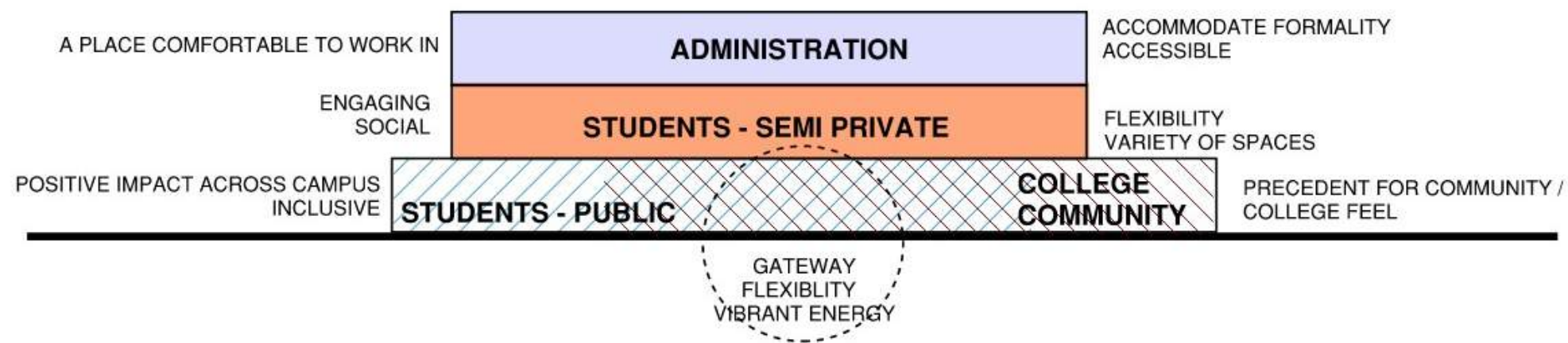
### Target Environmental Certifications

Targeting LEED Silver +

# SITE ANALYSIS

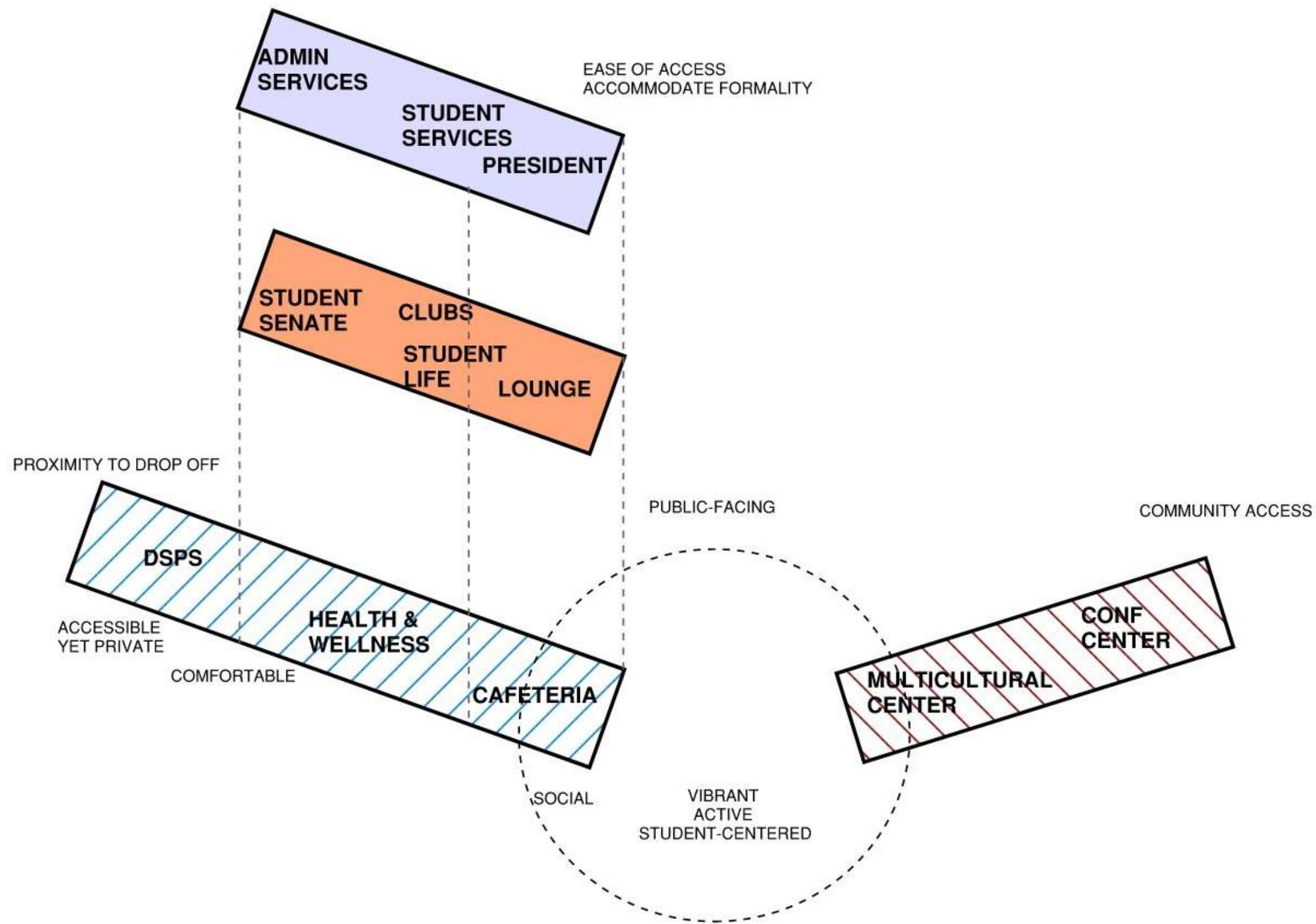


# BUILDING DIAGRAM 1



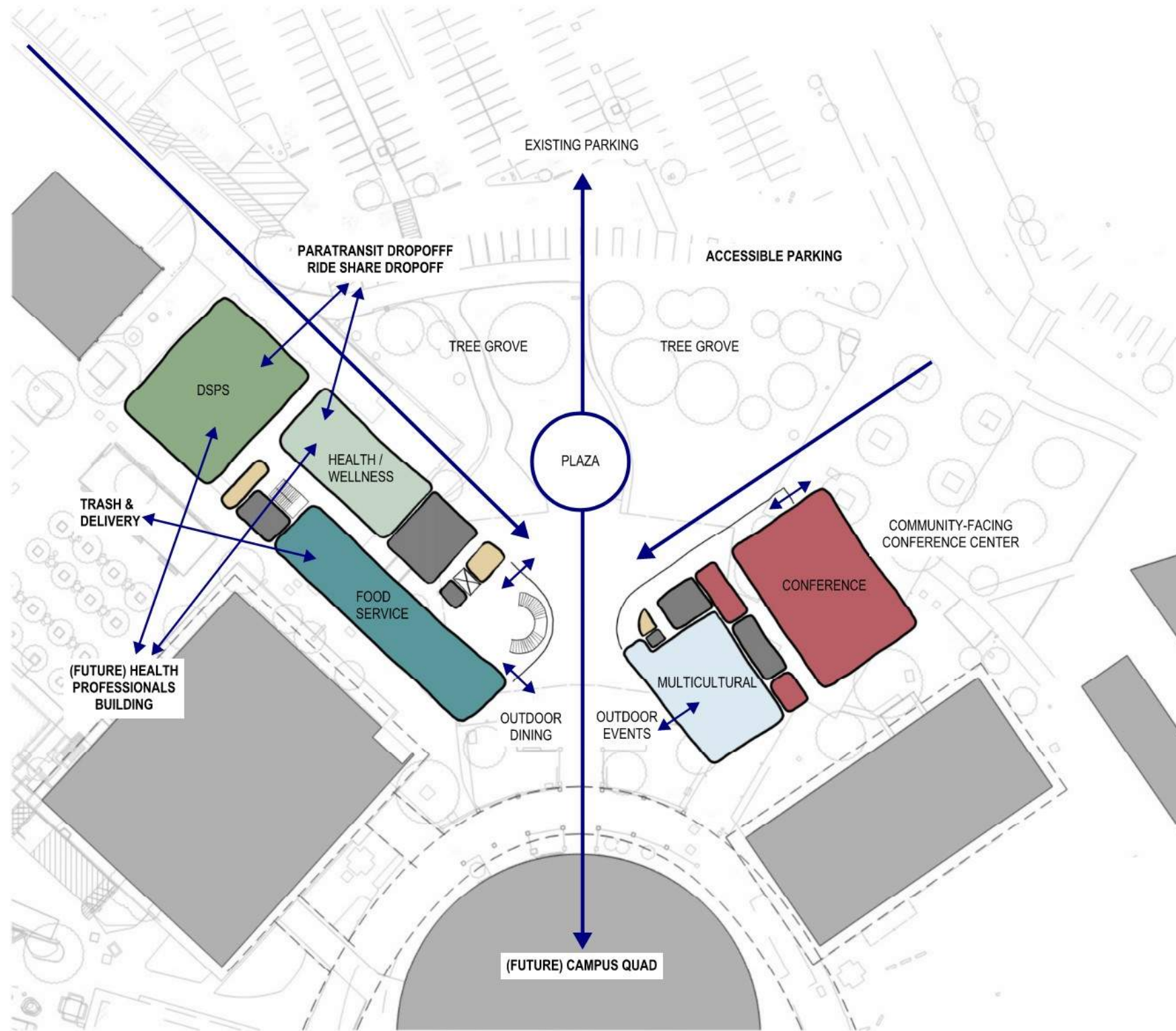
**DIAGRAM #1**  
DISTRIBUTION OF FUNCTIONS ON  
THREE FLOORS

# BUILDING DIAGRAM 2



**DIAGRAM #2**  
DISTRIBUTION OF PROGRAMS IN  
RELATION TO CORE

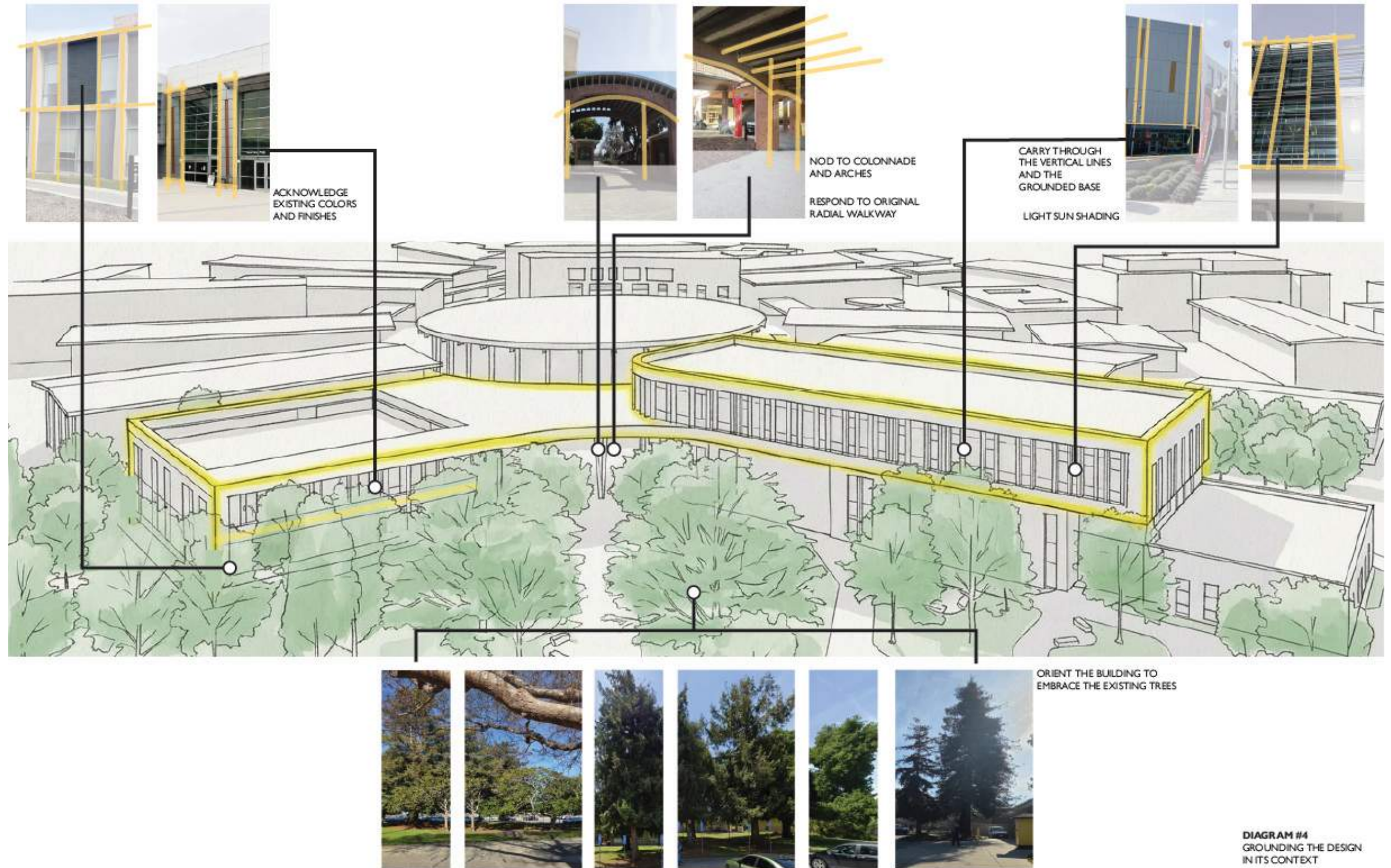
# SITE ADJACENCY DIAGRAM



## • Themes & Key Words

- Integrated building design that complements the campus context
- Strong connection to the Central Plaza
- Efficient and flexible use of space, with an emphasis on multi-purpose functionality
- Maximized access to daylight and well-lit interior environments
- Open balconies and transparent spaces that promote visibility and connection
- An accessible and approachable VP Suite with enhanced visibility and engagement

# CAMPUS CONTEXT



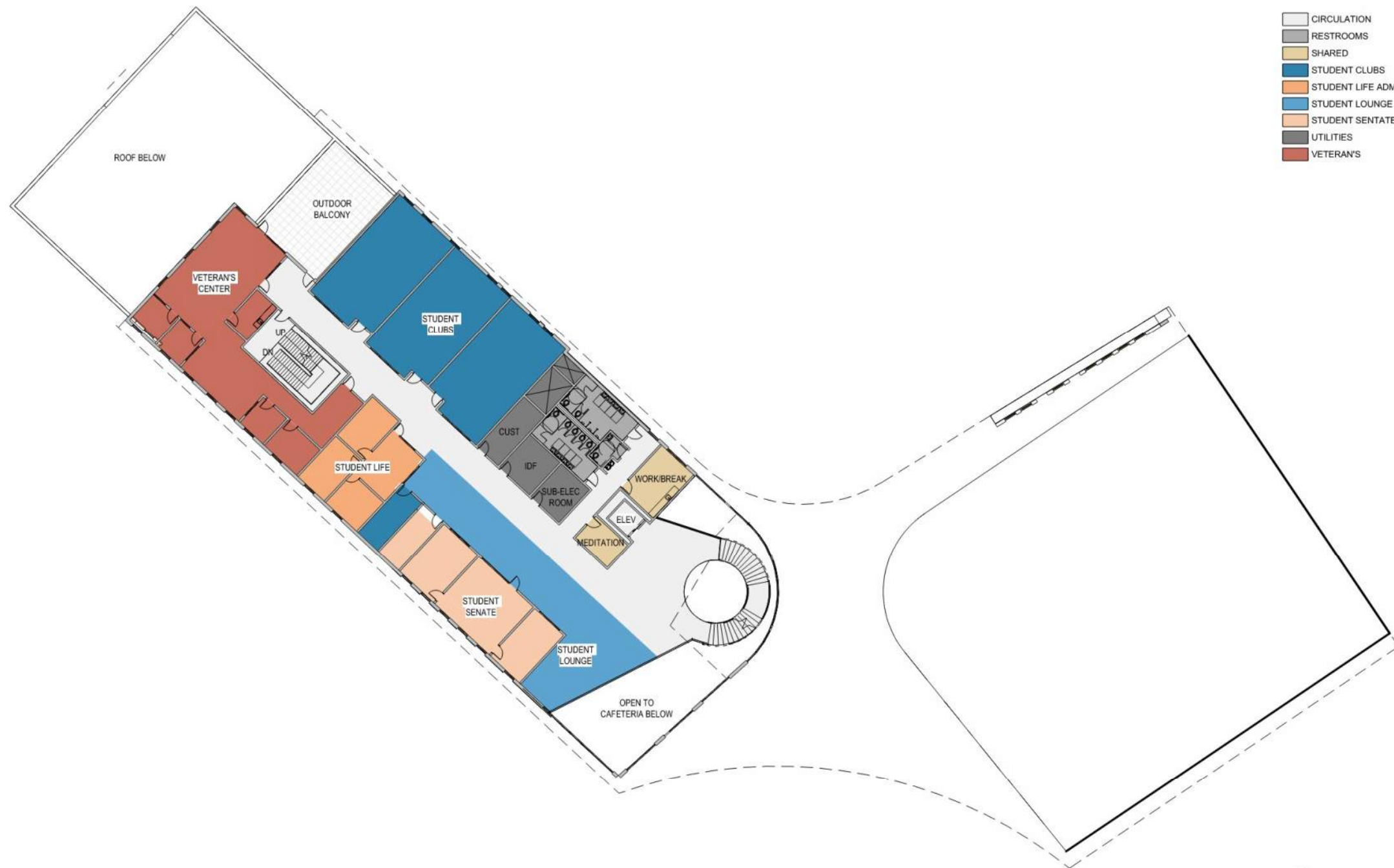
# SITE DESIGN



# OVERALL PLAN - LEVEL 1



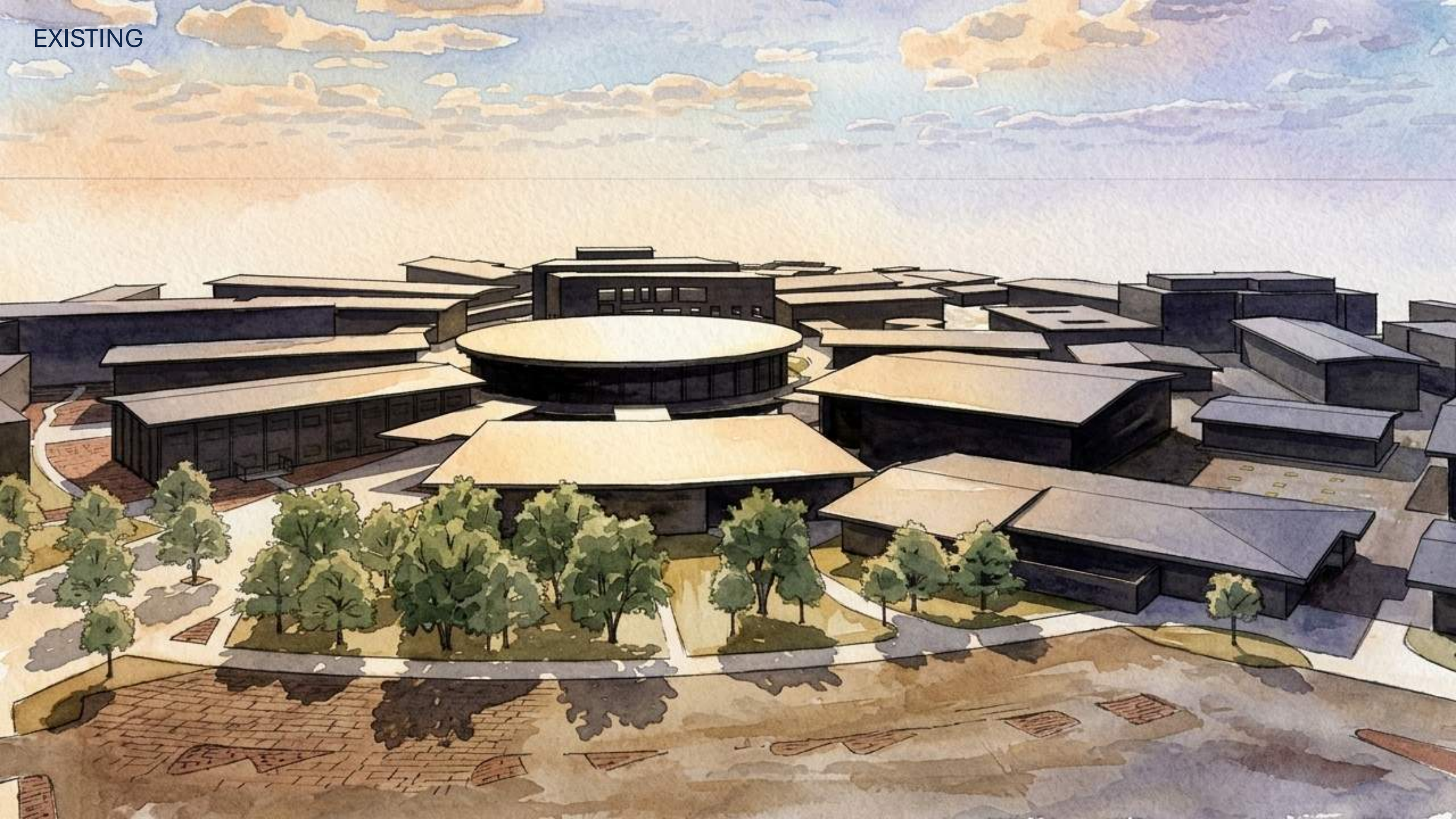
# OVERALL PLAN - LEVEL 2



# OVERALL PLAN - LEVEL 3



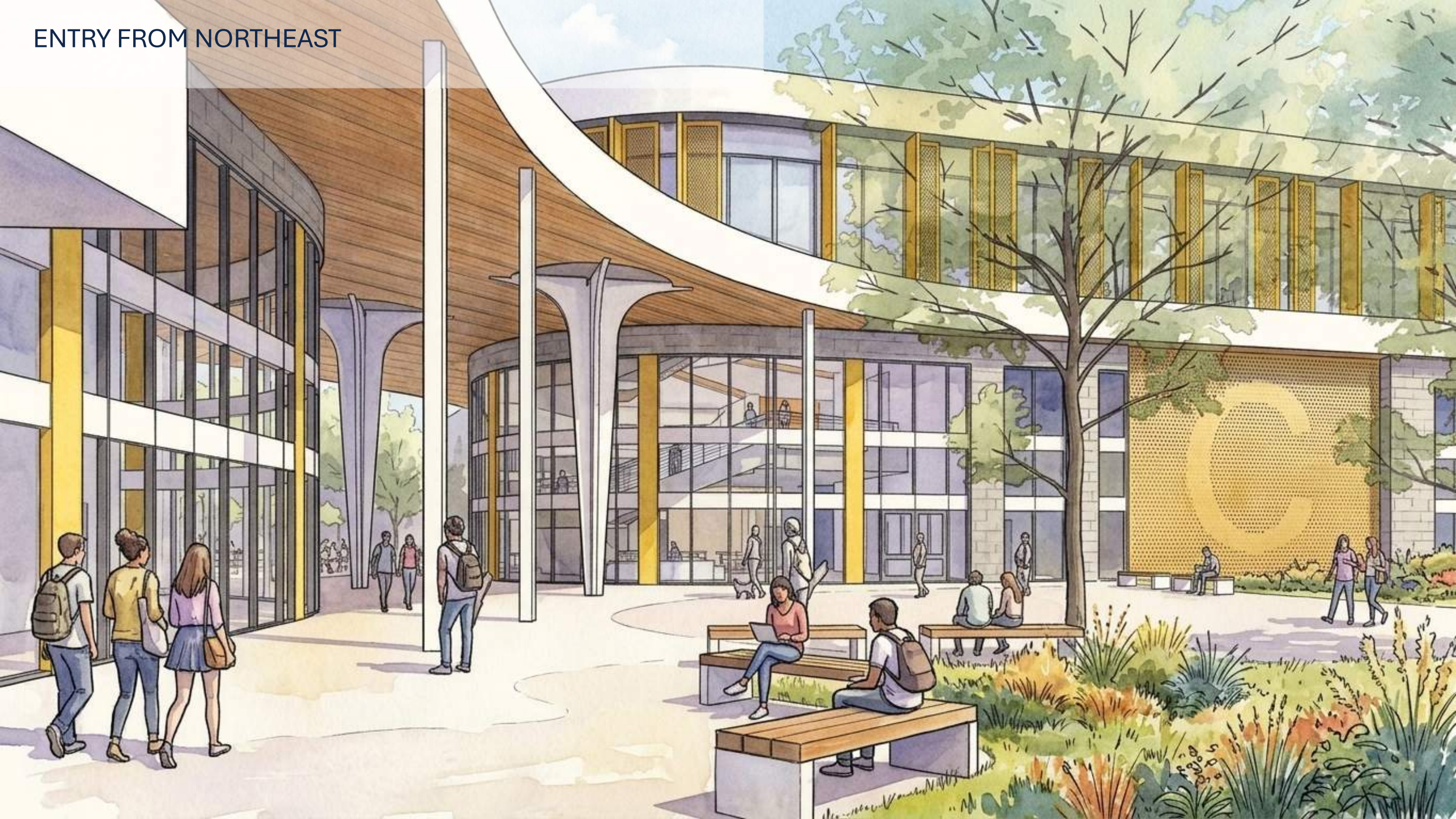
EXISTING



## FRONT ENTRY PERSPECTIVE



ENTRY FROM NORTHEAST



# VIEW FROM CAMPUS



# VIEW FROM CAMPUS



## STUDENT LOUNGE – LEVEL 2



## LARGE CONFERENCE ROOM – LEVEL 3





LIONAKIS



## Conference Center

The Conference Center is a multipurpose event space that serves the Chabot College campus and may provide space for community events.

The campus currently hosts events in the Event Center (holds 200), Stage 1 (200), and PAC (1,400). This new conference center provides a space sized between the larger and smaller gathering areas on campus.

This Conference Center is oriented to Hesperian way, providing a visual connection between the campus and the community.

### Spaces

#### Gallery/Entry

The Gallery is located at the north entrance to the building off the main plaza. Staging for events occurs in this area. It also provides display area for campus use.

#### Large Meeting Room

The space can be used as one large room or divided into three spaces. Its maximum capacity is approximately 680.

The room can be divided into three spaces with two overhead folding doors.

#### Kitchen

The kitchen is a staging area for catered events. Food preparation is completed in a separate facility, often the main foodservice area located on the west side of the building. The cleaning of dishware is also in a separate facility.

#### AV

The AV Support Room supports all AV for the Conference Room. See AV technical narrative for additional information.

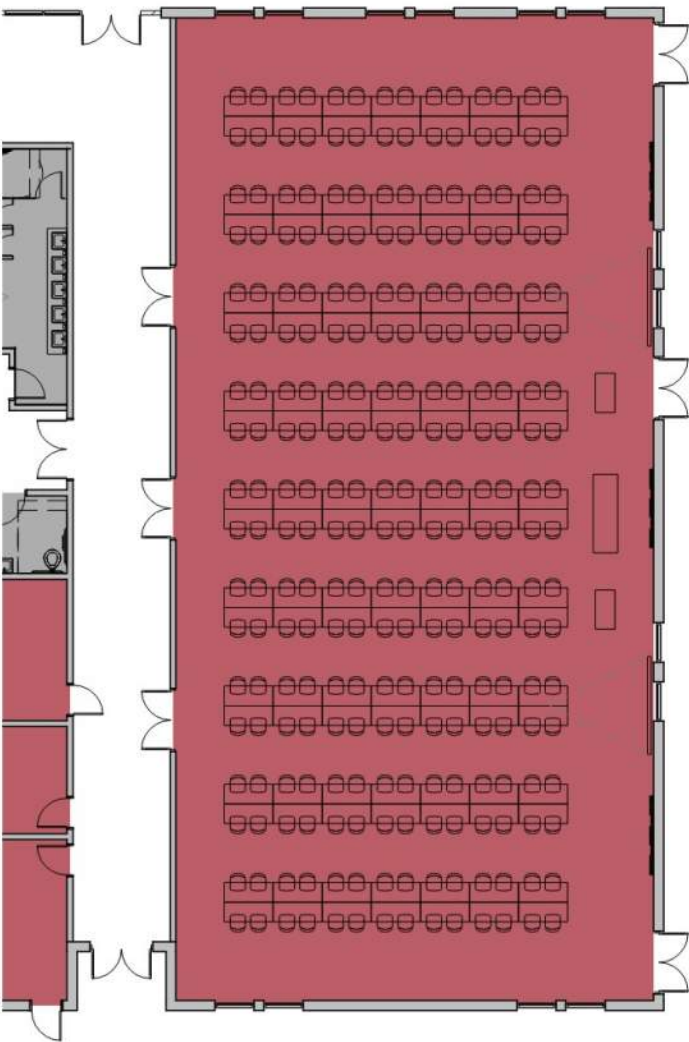
#### Storage

The dedicated storage area provides storage for items used for events in the Conference Center including tables, chairs, podiums, and a stage.

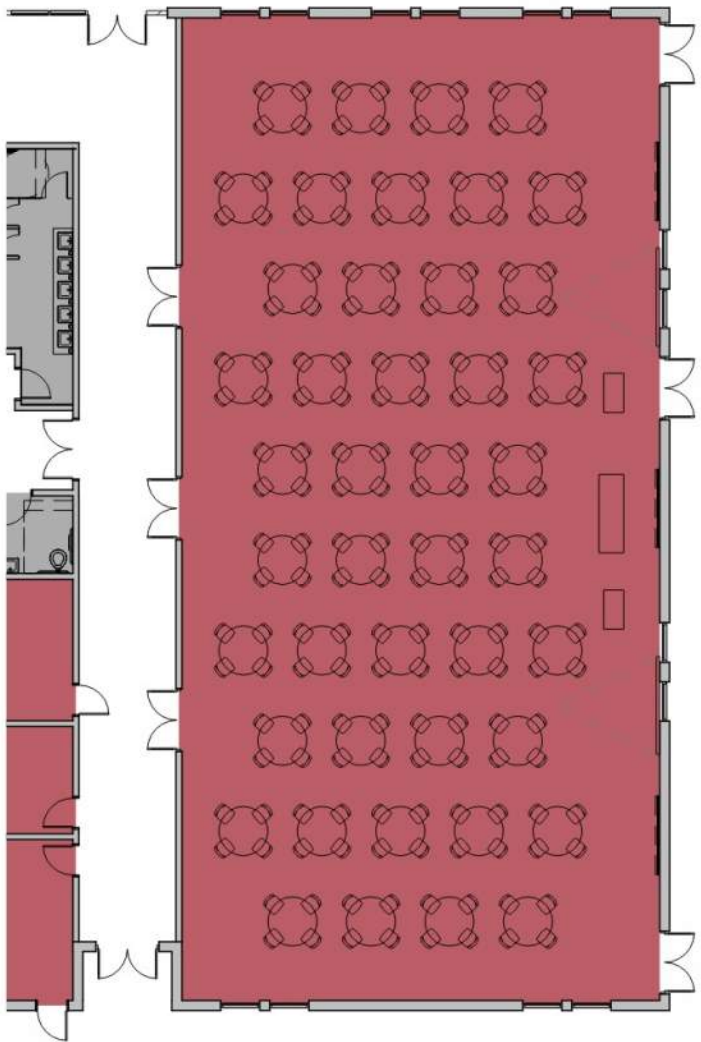
#### Restroom

Restrooms are shared with the Multicultural Center, accessed off a shared vestibule. The east doors are locked when the conference center is not being utilized. When the conference center is in use, the west doors into the Multicultural Center are locked.

Layout A: Seats 252



Layout B: Seats 176



### Adjacencies

The Conference Center is located at the east side of the building, the most visible portion of the building from Hesperian Way and the parking lot. The building also opens up to the north plaza so events may spill from the plaza in/out of the Conference Center.



## CONFERENCE ROOMS

### FLOORING

- CARPET - BASIS OF DESIGN: MOHAWK

### WALLS

- WHITE PAINTED GYP BOARD WITH ONE ACCENT COLOR
- FABRIC WRAPPED ACOUSTICAL PANELS
- ACOUSTICAL WOOD WALL PANEL ACCENT WALL
- OPERABLE PARTITION - BASIS OF DESIGN: MODERNFOLD ACOUSTI-SEAL

### CEILINGS

- SPECIALTY ACOUSTICAL CEILING SYSTEM

### AUDIO VISUAL EQUIPMENT

- SEE AUDIO VISUAL NARRATIVE FOR ADDITIONAL INFORMATION

## CIRCULATION/PRE-FUNCTION

### FLOORING

- LARGE FORMAT PORCELAIN TILE
- RECESSED WALK-OFF GRILLES

### WALLS

- WHITE PAINTED GYP BOARD WITH ONE ACCENT COLOR
- RIGID WALLCOVERING WITH CUSTOM GRAPHIC
- SPECIALTY BRANDING SIGNAGE WITH WOOD FINISH

### CEILINGS

- ACOUSTICAL BAFFLE SYSTEM
- SPECIALTY LIGHTING

### AUDIO VISUAL EQUIPMENT

- DIGITAL DISPLAY MONITORS
- SEE AUDIO VISUAL NARRATIVE FOR ADDITIONAL INFORMATION

## KITCHEN

### FLOORING

- PORCELAIN TILE

### WALLS

- WHITE PAINTED GYP BOARD
- RIGID WALL PROTECTION - BASIS OF DESIGN: ACROVYN

### CEILINGS

- WIPEABLE CEILING PANELS

### CASEWORK

- PLASTIC LAMINATE CABINETS WITH SOLID SURFACE COUNTERTOPS

## RESTROOMS

### FLOORING

- PORCELAIN TILE

### WALLS

- PORCELAIN TILE (PATTERN OF 3 COLORS)

### CASEWORK

- SOLID SURFACE COUNTERTOP WITH UNDER-MOUNT SINKS

### CEILINGS

- PAINTED GYP BOARD



# Multicultural Center

The new Multicultural Center provides a welcoming, inclusive shared space for multiple groups currently located in different areas across campus.

## Groups

### Black Cultural Resource Center (BCRC)

BCRC is an established group on campus that supports the needs of students who identify as Black, African American, Afro-Latinx, and all other students of the African diaspora. Mental wellness counseling, academic and career counseling, transfer resources, and basic needs support are some of the provided services. BCRC hosts workshops and events throughout the year.

### Asian American

Currently services are provided in collaboration with APIEA and MOVEMENT for academic counseling & transfer support, scholarship & wellness workshops, community events, campus visits, and mentorship, networking, and leadership opportunities.

### El Centro

El Centro is a bilingual resource center dedicated to Chicana/Latina and low income students. Services provided include bilingual support, academic counseling, career counseling, personal counseling, financial aid advising, and assistance with applications, registration, and technical support. Visibility and wayfinding for new, bilingual students to El Centro is very important. El Centro would like space to display a canvas mural.

### Pacific Islander (Nesians Unite)

Nesians Unite raises awareness of the Pacific Islander population on campus and aims to increase retention and transfer of Nesians. Nesians include the islands of Melanesia, Micronesia, and Polynesia. Currently services are provided in collaboration with APIEA and MOVEMENT for academic counseling & transfer support, scholarship & wellness workshops, community events, campus visits, and mentorship, networking, and leadership opportunities.

### Indigenous People

This group includes Indigenous People Education Association (IPEA) and provides academic and career support to students of any indigenous heritage.

### Pride Center

The Pride Center provides a private, supportive space for LGBTQ+ students. Services provided include academic counseling, mental counseling, and private group mental health sessions.

### Dream Center

The Dream Center is a safe environment that provides private support, resources, information and referrals to Dreamers, undocumented, AB540, and DACA students and their allies.

### One additional program room for growth

One additional room is included. It may be held for an unnamed group or assigned later.

## Spaces

### Common Space

The Common Space is a flexible space accommodating many activities including studying, arts, music, tutoring, small groups, on-boarding, academic/transfer counseling, and career events. Large spaces and smaller gathering nooks provide a variety. Computer stations (5-10), comfortable seating, tables and chairs, and a projector or monitor (for workshops) are included. Workstations for the program coordinators are positioned in the space to welcome students into the center.

### Program Coordinator

The Program Coordinator has a private, enclosed office. This office is centrally located with visibility to the center entrance and Common Space.

### Program Rooms

Each program has an assigned Program Room. Each room provides a private small meeting area and storage cabinets.

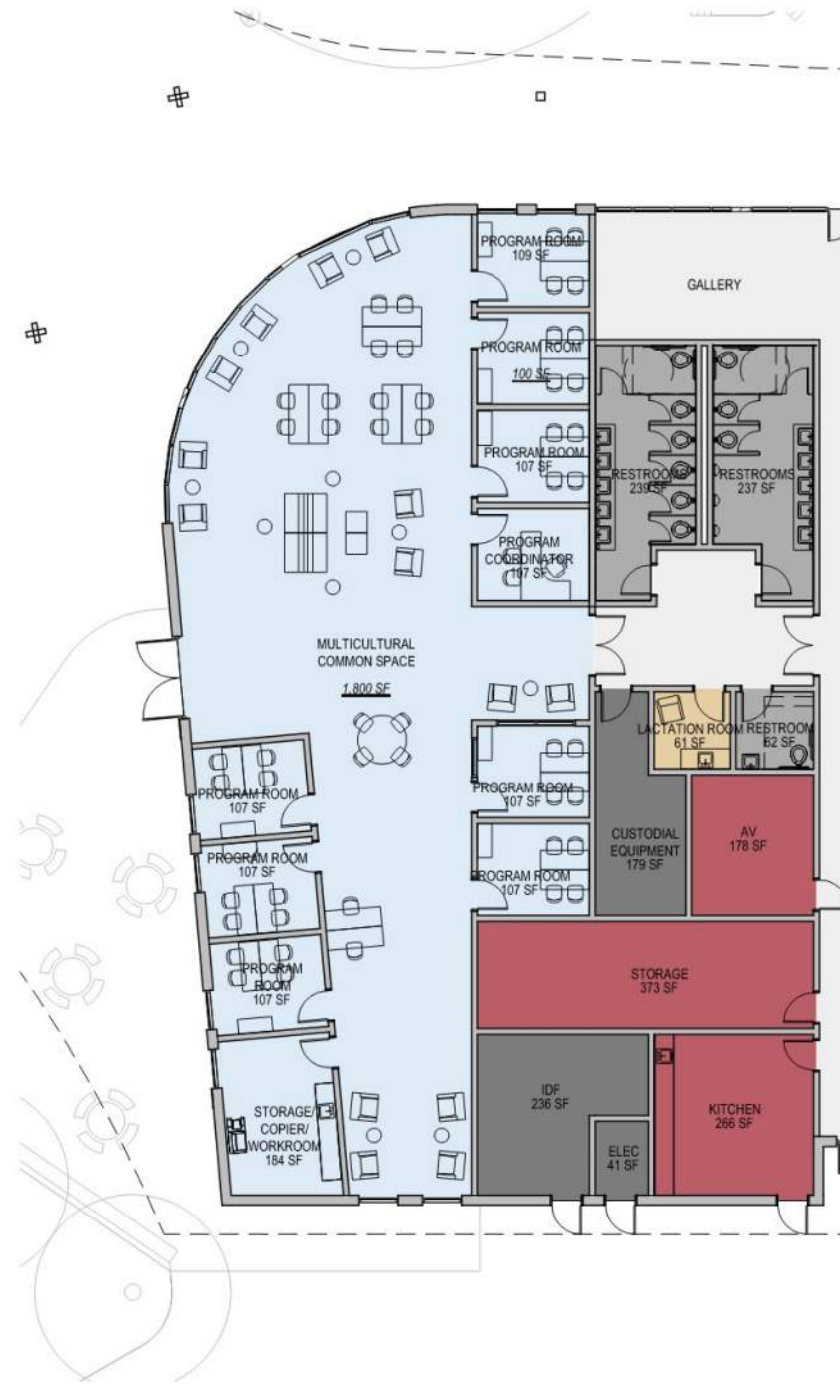
### Workroom / Storage

This room includes a large printer/copier, a kitchenette, and shared general storage.

Private meeting rooms, Lactation Room, Meditation Room, and Staff Break Room / Work Room are shared with other programs in the building.

## Adjacencies

The Multicultural Center is located on level one, visible to new and daily visitors to campus. It is connected to outdoor gathering spaces for the multiple outdoor events hosted throughout the year.



## MULTICULTURAL COMMON SPACE

### FLOORING

- CARPET TILE - BASIS OF DESIGN: MOHAWK

### WALLS

- WHITE PAINTED GYP BOARD WITH ONE ACCENT COLOR
- RIGID WALLCOVERING WITH CUSTOM GRAPHIC
- FABRIC WRAPPED ACOUSTICAL PANELS

### CEILINGS

- 2X4 ACOUSTIC CEILING TILE
- LINEAR METAL CEILING WITH RECESSED LINEAR LIGHTING

### EQUIPMENT

- DIGITAL DISPLAY MONITORS
- LARGE COPIER/PRINTER
- SEE A/V NARRATIVE FOR ADDITIONAL INFORMATION

## PROGRAM ROOMS

### FLOORING

- CARPET TILE - BASIS OF DESIGN: MOHAWK

### WALLS

- WHITE PAINTED GYP BOARD WITH ONE ACCENT COLOR
- GLASS WHITEBOARD
- FABRIC WRAPPED TACKABLE PANELS

### CEILINGS

- 2X4 ACOUSTIC CEILING TILE

### EQUIPMENT

- DIGITAL DISPLAY MONITOR

## RESTROOMS

### FLOORING

- PORCELAIN TILE

### WALLS

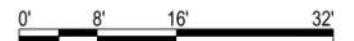
- PORCELAIN TILE (PATTERN OF 3 COLORS)

### CEILINGS

- PAINTED GYP BOARD

### CASEWORK

- SOLID SURFACE COUNTER WITH PLASTIC LAMINATE SINK SKIRT AND UNDERMOUNT SINKS



## Foodservice / Cafeteria

The Foodservice/Cafeteria is a quick-service facility with a variety of dining and grab-and-go options. The kitchen and production area provides capacity for campus catering. Fresh & Natural is the current vendor.

### Spaces

#### Food Preparation & Storage

This area includes all of the back-of-house areas for foodservice, including receiving, storage, staff restroom & lockers, dish washing, and food preparation including space for catering. Exterior access is provided.

#### Food Service

The Food Service area is the public-facing portion of foodservice and hosts the Grill, Deli, Taqueria, Asian, and Grab & Go dining options. It also includes a beverage station, coffee station, market, and pickup order area. There is a double-sided cashier station plus (1) mobile point of sale.

During off hours the Food Service is separated from the Cafeteria Seating by an overhead door for security.

Vending machines and microwaves are located outside the Food Service area and are operated by a different vendor than currently operates foodservice.

#### Cafeteria Seating

The Cafeteria Seating is adjacent to the Food Service and open to the main building circulation. At the building core, it is also adjacent to main pedestrian circulation onto campus. Additional seating is located at the outdoor tables directly outside the Cafeteria Seating, and in the Student Lounge on Level 2.

The Cafeteria Seating area is also used for events.

#### Outdoor Support Spaces

A new trash enclosure accommodates 2 cu ft of compost, 6 cu ft trash, and 6 cu ft of recycling.

Foodservice expects large deliveries (semi trucks) 1x per week, box truck deliveries 2-3x per week. A loading dock is not provided.

A can wash and grease interceptor are located adjacent to the delivery / trash enclosure area.

### Adjacencies

The Foodservice/Cafeteria is located along the southwest side of the building. It is adjacent to the active pedestrian walkway and hub at the center of the building. The service entry to the south faces the new trash and delivery area, connected to the southern vehicular service route.

See the Foodservice technical narrative for additional information.



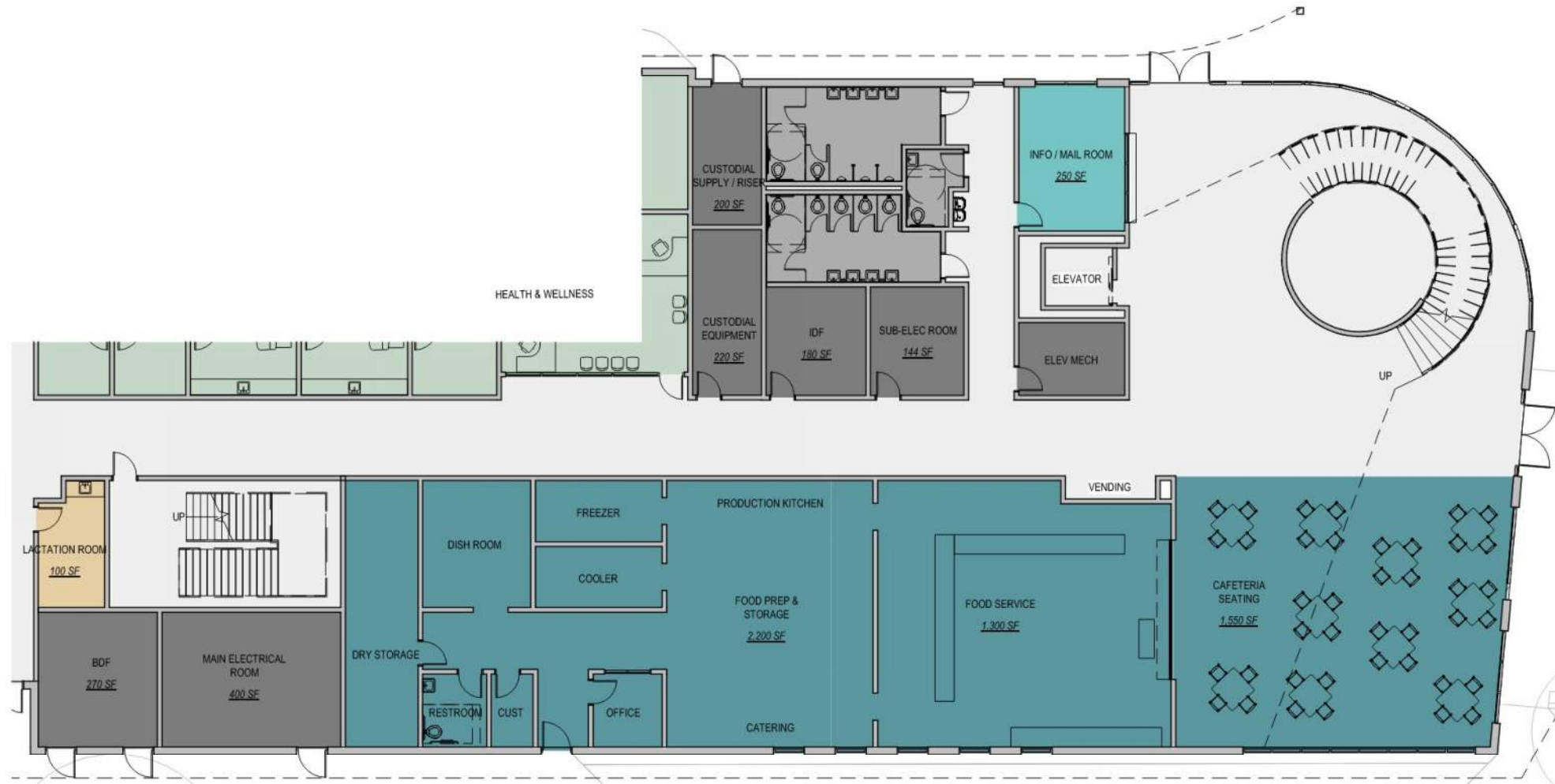
Existing Cafeteria Seating, Building 2300

Existing Vending, Building 2300



Existing Foodservice, Building 2300





## LOBBY AND CAFETERIA SEATING

### FLOORING

- LARGE FORMAT PORCELAIN TILE
- RECESSED WALK OFF GRILLES

### WALLS

- WHITE PAINTED GYP BOARD WITH ACCENT PAINT IN SEVERAL LOCATIONS
- GYP BOARD REVEALS WITH INTEGRAL RECESSED LIGHTING
- RIGID WALLCOVERING WITH CUSTOM GRAPHIC

### CEILINGS

- LINEAR METAL CEILING
- SPECIALTY LIGHTING

### STAIR

- PERFORATED METAL PANEL RAILING SYSTEM

### CASEWORK

- BUILT-IN BENCH SEATING WITH SOLID SURFACE FINISH

### EQUIPMENT

- DIGITAL DISPLAY MONITORS

## FOOD SERVICE AREAS

### FLOORING

- EPOXY WITH INTEGRAL BASE

### WALLS

- WHITE PAINTED GYP BOARD
- RIGID WALL PROTECTION - BASIS OF DESIGN: ACROVYN
- RIGID WALLCOVERING WITH CUSTOM GRAPHIC
- STAINLESS STEEL WALL PANELS IN PREP AND DISHWASHING SPACES

### CEILINGS

- WIPEABLE CEILING PANELS

### EQUIPMENT

- SEE FOOD SERVICE DESIGN NARRATIVE
- DIGITAL DISPLAY MONITORS



## Health / Wellness Center

The Health Center and Wellness Center combine Health and Wellness services into one space easily accessible to students on campus. The Health Center provides free and low-cost health services to Chabot students. Tiburcio Vasquez Health Center (TVHC) is the medical provider for the Health Center. The Chabot CARES program includes personal counseling services/ mental health services

### Spaces

#### Reception

The reception area is shared by the Health Center and Wellness Center. The waiting area accommodates 5 people. Entry is off the corridor to provide easy access and privacy from the main lobby space.

The Wellness center has one reception desk and the Health Center has two receptions desks, one with a Chabot computer and one with a different computer. Privacy dividers between desks are required. Space is provided for a large Chabot printer shared by Health & Wellness.

#### HEALTH CENTER

##### Exam Room

Two private exam rooms are provided. One is used as an isolation room when needed.

##### Triage

The Triage room is located adjacent to Reception. It can be used for quick visits as well as triage.

##### Lab Room / Clean Utility

A refrigerator/freezer is provided in this room to hold vaccines. Pass-through cabinets provide secure sample transfer from both restrooms to the Lab Room.

##### Nurse Office

Two private nurse offices are provided.

##### Supply/Storage Area

The storage area holds medical supplies and bandages. Casework with a copier/ printer and work area is provided.

#### WELLNESS CENTER

##### Offices

Offices are provided for the Mental Health Coordinator, Behavioral Health Coordinator, and Therapy. Windows are desired for natural light, with a landscape buffer for privacy.

A one-way mirror between one set of therapy rooms is provided for training.

An outdoor cool-down space is provided for after therapy sessions.

##### Conference Room / Group Therapy

This space is a flexible space for trainings, gatherings, and group sessions. It seats 10-15 people in a circle.

This space also accommodates the Wellness Ambassadors program, which host many activities through the week and a summer training program.

Dedicated storage is needed to support the Wellness Center

Private meeting rooms, Lactation Room, Meditation Room, and Staff Break Room / Work Room are shared with other programs in the building.

### Additional Considerations

A landscape buffer is provided outside the windows for privacy and noise.

A secure secondary entrance/exit to the Health Center is provided for access to/ from the vehicular dropoff area. The door size will accommodate a gurney. This exit is also used for sick patients.

Two layout options are provided on the following page.

### Adjacencies

The Health/Wellness Center is located on Level 1 for accessibility. It is next to DSPS and one level below the Veteran's Center. It is near the new vehicular and paratransit dropoff area, and adjacent to the future Health Professionals Building.



Option A



Option B

## RECEPTION

### FLOORING

- CARPET TILE - BASIS OF DESIGN: MOHAWK

### WALLS

- WHITE PAINTED GYP BOARD WITH ONE ACCENT COLOR
- RIGID WALLCOVERING WITH CUSTOM GRAPHIC

### CEILINGS

- 2X4 ACOUSTIC CEILING TILE

### CASEWORK

- CUSTOM RECEPTION DESK, PLASTIC LAMINATE WITH SOLID SURFACE COUNTERTOP

### EQUIPMENT

- DIGITAL DISPLAY MONITOR

## GROUP ROOM/WELLNESS

### FLOORING

- LUXURY VINYL TILE

### WALLS

- WHITE PAINTED GYP BOARD WITH ONE ACCENT COLOR
- FABRIC WRAPPED ACOUSTICAL PANELS
- WHITE BOARDS

### CEILINGS

- 2X4 ACOUSTIC CEILING TILE

### EQUIPMENT

- DIGITAL DISPLAY MONITOR

## COORDINATOR, THERAPY AND NURSE OFFICES

### FLOORING

- CARPET TILE - BASIS OF DESIGN: MOHAWK

### WALLS

- WHITE PAINTED GYP BOARD WITH ONE ACCENT COLOR
- COMBINATION TACK/MARKERBOARD

### CEILINGS

- 2X4 ACOUSTIC CEILING TILE

## EXAM ROOMS, TRIAGE AND LAB ROOMS

### FLOORING

- RESILIENT SHEET FLOORING WITH INTEGRAL COVE BASE

### WALLS

- WHITE PAINTED GYP BOARD WITH ONE ACCENT COLOR
- COMBINATION TACK/MARKERBOARD

### CEILINGS

- 2X4 ACOUSTIC CEILING TILE

### CASEWORK

- PLASTIC LAMINATE CABINETS
- SOLID SURFACE COUNTERTOPS

## RESTROOMS

### FLOORING

- RESILIENT SHEET FLOORING WITH INTEGRAL BASE

### WALLS

- FRL WAINSCOT WITH PAINT ABOVE

### CEILINGS

- PAINTED GYP BOARD



# Disabled Students Programs & Services

The Disabled Students Programs & Services (DSPS) is a growing program that provides students with specialized support, tools, tech, and counseling to support them in their journey at Chabot College. This new DSPS space aims to exceed ADA requirements and incorporate universal design to facilitate their work and create an improved experience for all visitors.

## Spaces

### Main Office / Reception

The main office provides a space to welcome and intake students. It has a small waiting area with four chairs. The reception area shall have two sections for check-in; privacy is provided with privacy panels. A student seating area with TV is past the check-in area.

A designated space for a student assistant and cart driver is provided. All circulation and/or spaces are accessed off this main office. A security/panic button is provided for emergencies.

### Quiet Study Room

This room provides a quiet place for study. Cameras are provided.

### Computer Lab Room

The computer lab will provide 15-20 computers with a screen and projector. This space can double as a classroom.

### Alternate Testing Room

Cameras are provided in the ceiling.

### Testing Office

This office is located next to the Alternate Testing Room. Windows are provided for visibility into the Alternate Testing Room and towards the Restroom door.

### Group Study Room / Private Testing

This room shall accommodate small study groups or private testing. When used for private testing, this room accommodates (1) person taking a test and (1) scribe.

### Offices

Office space is sufficient to meet with students and their advocates, and large enough to accommodate maneuvering oversized powered wheelchairs. Offices are provided for the DSPS Director, Counselors, DHH Services, Alternative Testing, and Alternate Media. The Alternative Media office requires acoustical separation from the other spaces due to loud activities within the space, including

brailling. A landscape buffer is provided outside the Counseling Offices for privacy and noise. A secure secondary entrance/exit to the offices is provided for privacy and security.

### Storage

Storage space shall accommodate student files.

### Restroom

A restroom is provided off the main office to meet the needs of students for an adjacent, private restroom. An adult changing table is provided. The restroom entrance is visible from the Testing office.

### Cart Storage

An exterior secure corral for carts is provided adjacent to the Main Office. A workspace is provided for the cart driver within the Main Office.

## Additional Considerations

**Doors** are carefully placed to maximize access. All doors shall provide 36" clear to accommodate 34" wide power chairs. Side sliding doors are provided at the DSPS front entry and adjacent building entrance. Power assist is preferred at most doors. Full-height power assist buttons are provided at both the inside and outside of restrooms.

Electrical receptacles are located higher than typical throughout, still meeting code requirements.

Private meeting rooms, Lactation Room, Meditation Room, and Staff Break Room / Work Room are shared with other programs in the building.

## Adjacencies

DSPS is located next to the Health/Wellness Center and just below the Veteran's Center. It is near the new vehicular and para-transit drop-off area, and adjacent to the future Health Professionals Building.



## MAIN OFFICE

### FLOORING

- CARPET - BASIS OF DESIGN: MOHAWK

### WALLS

- WHITE PAINTED GYP BOARD WITH ONE ACCENT COLOR
- RIDGID WALLCOVERING WITH CUSTOM GRAPIC

### CEILINGS

- 2X4 ACOUSTIC CEILING TILE

### CASEWORK

- CUSTOM RECEPTION DESK, PLASTIC LAMINATE WITH SOLID SURFACE COUNTERTOP

### EQUIPMENT

- DIGITAL DISPLAY MONITOR
- LARGE COPIER/PRINTER

## OFFICES

### FLOORING

- CARPET - BASIS OF DESIGN: MOHAWK

### WALLS

- WHITE PAINTED GYP BOARD WITH ONE ACCENT COLOR
- COMBINATION TACK/MARKERBOARD

### CEILINGS

- 2X4 ACOUSTIC CEILING TILE

## QUIET STUDY/TESTING ROOMS

### FLOORING

- CARPET - BASIS OF DESIGN: MOHAWK

### WALLS

- WHITE PAINTED GYP BOARD WITH ONE ACCENT COLOR
- FABRIC WRAPPED ACOUSTICAL PANELS

### CEILINGS

- 2X4 ACOUSTIC CEILING TILE

## COMPUTER LAB

### FLOORING

- CARPET - BASIS OF DESIGN: MOHAWK

### WALLS

- WHITE PAINTED GYP BOARD WITH ONE ACCENT COLOR
- WHITE BOARDS
- FABRIC WRAPPED TACKABLE PANELS

### CEILINGS

- 2X4 ACOUSTIC CEILING TILE

### EQUIPMENT

- DIGITAL DISPLAY MONITOR

## BREAK/LACTATION ROOM

### FLOORING

- LUXURY VINYL TILE

### WALLS

- WHITE PAINTED GYP BOARD WITH ONE ACCENT COLOR

### CEILINGS

- 2X4 ACOUSTIC CEILING TILE

### CASEWORK

- PLASTIC LAMINATE CABINETS AND COUNTERTOPS



## Student Life / Student Senate / Student Clubs / Student Lounge

Located on level 2, these program areas are focused on student activities. The spaces are connected through a wide, active corridor and open to the central circulation and Cafeteria Seating below.

### Spaces

#### Student Life Administration

The main office is the reception area including the Student Life Admin Assistant, the Flea Market Coordinator, a welcome desk, and a printer/copier. A window provides the Student Life Administrative Assistant with a clear line of sight into the Student Lounge.

The Director's Office and Meeting Room are accessed off the Main Office. Significant storage needed for events is provided in the storage room. Stored items include plastic bins with table cloths, banners, (20) A-Frame signs, photo backdrops, popcorn machine, and files. Wagons and dollies are also stored to transport items to events. A small staging area is provided within the storage room.

#### Student Senate

This suite houses the Student Senate of Chabot College (SSCC). Glass walls between the main office and hallway provide visibility to welcome in students. The main office has small reception area and (6) open office workspaces for the offices and the SSCC President. A second open office provides space for the 14 representatives who share (7-8) workspaces. The Meeting Room hosts small meetings and the Senate meetings utilize the Large Conference Room on Level 3.

#### Student Lounge

The Student Lounge is an open area along the level 2 corridor, circulation core, and overlooking Cafeteria Seating below. The open space invites students in and enlivens the core of the building with activity. Groupings of furniture provide space for eating, study, casual gathering, and an E-sports lounge. The E-Sports lounge will include 3-4 TVs and a lockable cabinet or lockers for gaming consoles. Air hockey is also popular.

#### Student Clubs

Chabot College has approximately 40-50 clubs on campus that share the three club rooms as well as other spaces on campus. Wardrobe-sized lockers are provided for the Clubs. A storage room for chairs, tables, and other items is located across the corridor.

Private meeting rooms, Lactation Room, Meditation Room, and Staff Break Room / Work Room are shared with other programs in the building.

### Adjacencies

Student Life, Student Senate, Student Clubs, and Student Lounge are all located on the second level with a visual connection to the active pedestrian walkway and hub at the center of the building. The lounge overlooks the Cafeteria Seating. The Level 3 President's Office Suite is easily accessible from these areas as well via the adjacent main vertical circulation.

Existing Student Lounge





## STUDENT LOUNGE

### FLOORING

- LUXURY VINYL TILE - WOOD LOOK
- CARPET TILE - BASIS OF DESIGN: MOHAWK

### WALLS

- WHITE PAINTED GYP BOARD WITH ONE ACCENT COLOR
- GLASS WHITE BOARDS
- FABRIC WRAPPED TACKABLE PANELS

### CEILINGS

- ACOUSTICAL DRYWALL CEILING
- WOOD-LOOK METAL SPECIALTY CEILING
- SPECIALTY LIGHT FIXTURES

### EQUIPMENT

- DIGITAL DISPLAY MONITORS

## STUDENT CLUBS

### FLOORING

- LUXURY VINYL TILE

### WALLS

- WHITE PAINTED GYP BOARD WITH ONE ACCENT COLOR
- RIGID WALLCOVERING WITH CUSTOM GRAPHIC
- GLASS MARKERBOARDS
- FABRIC WRAPPED TACKABLE PANELS

### CEILINGS

- 2X4 ACOUSTIC CEILING TILE

### EQUIPMENT

- DIGITAL DISPLAY MONITOR

## OFFICES

### FLOORING

- CARPET TILE - BASIS OF DESIGN: MOHAWK

### WALLS

- WHITE PAINTED GYP BOARD WITH ONE ACCENT COLOR
- COMBINATION TACK/MARKERBOARD

### CEILINGS

- 2X4 ACOUSTIC CEILING TILE

## MEETING ROOMS

### FLOORING

- CARPET TILE - BASIS OF DESIGN: MOHAWK

### WALLS

- WHITE PAINTED GYP BOARD WITH ONE ACCENT COLOR
- GLASS WHITE BOARDS
- FABRIC WRAPPED TACKABLE PANELS

### CEILINGS

- 2X4 ACOUSTIC CEILING TILE

### EQUIPMENT

- DIGITAL DISPLAY MONITOR

## RESTROOMS

### FLOORING

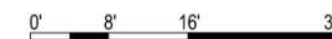
- PORCELAIN TILE

### WALLS

- PORCELAIN TILE (PATTERN OF 3 COLORS)

### CEILINGS

- PAINTED GYP BOARD



# Veteran's Center

The Veteran's Resource Center supports Veterans, Active Duty Service Members, and their eligible dependents transitioning to life at Chabot College. Approximately 380 veterans utilize the Center. The Center is designed to be sensitive to the needs of all Veterans including the able-bodied and those with disabilities and/or PTSD.

## Spaces

### Entry

Clear signage and flag display space is provided in the corridor outside the entry for wayfinding and program identity. Glass at the entry is limited to provide a comfortable, secure setting within the Center.

### Resource Center

The Resource Center is a large, multipurpose area accommodating reception, waiting, lounge, computer stations, library, and group study.

The reception desk is located inside the main entry and typically monitored by a student assistant. Some privacy is needed for intake, as benefits and services may be discussed.

The computer area includes computer stations with small privacy partitions.

The library nook includes bookshelves with textbooks for borrowing and an adjacent quiet space.

The outdoor balcony can be accessed from the Resource Center.

### Offices

The Program Coordinator office is visually & audibly connected to reception desk and lounge.

The Benefits office is adjacent to the Program Coordinator.

The two counseling offices are shared with tutors for tutoring sessions.

### Storage / Kitchenette

The storage space is an enclosed room that includes a kitchenette with microwave for student use. Snacks and supplies are stored here.

### Outdoor Balcony

An exterior covered balcony is accessed from the Resource Center. Its location on the north side of the building provides a quiet space with views towards the tree grove. The balcony is commonly used by the Veterans for lunch and study, and sometimes used for Veteran's Center events like barbecues.

The outdoor space is shared with other users of the building and can be accessed from the corridor outside the Veteran's Center.

### Display Area

Flag display is provided in the corridor. It includes 8-9 Official flags on an official flag pole. Additional display is provided to showcase uniforms, medals, memorabilia, and a mannequin in uniform.

Private meeting rooms, Lactation Room, Meditation Room, and Staff Break Room / Work Room are shared with other programs in the building.

### Additional Needs

A second exit from the Center is included outside of the main Resource Center space.

All doors have a sidelite.

### Adjacencies

The Veteran's Center is located above DSPS, near the student-serving spaces on the second level. Circulation and storage spaces provide a buffer between the active Student Lounge and Veteran's Center.



Existing Uniform Display



Existing Lounge/Reception



## LOUNGE/WAITING

### FLOORING

- LUXURY VINYL TILE

### WALLS

- WHITE PAINTED GYP BOARD WITH ONE ACCENT COLOR
- FABRIC WRAPPED TACKABLE PANELS

### CEILINGS

- 2X4 ACOUSTIC CEILING TILE

### CASEWORK

- PLASTIC LAMINATE CABINETS
- SOLID SURFACE COUNTERTOPS

### EQUIPMENT

- DIGITAL DISPLAY MONITOR

## STUDY AREA

### FLOORING

- CARPET TILE - BASIS OF DESIGN: MOHAWK

### WALLS

- WHITE PAINTED GYP BOARD WITH ONE ACCENT COLOR

### CEILINGS

- 2X4 ACOUSTIC CEILING TILE

## OFFICES

### FLOORING

- CARPET TILE - BASIS OF DESIGN: MOHAWK

### WALLS

- WHITE PAINTED GYP BOARD WITH ONE ACCENT COLOR
- COMBINATION TACK/MARKERBOARD

### CEILINGS

- 2X4 ACOUSTIC CEILING TILE



## ORPIE / OIA / Marketing / Webmaster

This suite houses the Office of Research, Planning, and Institutional Effectiveness (ORPIE), the Office of Institutional Advancement (OIA), Marketing, and Webmaster. OIA oversees the Grant Development Office and The Friends of Chabot College Foundation.

### Spaces

#### Main Office

The main office contains a waiting room and a welcome desk for OIA. A printer/copier is provided in the main office area.

#### Offices

The OIA offices include Executive Director, Senior Administrative Assistant, and OIA Grants Developer / Writer. The Administrative Assistant office has a filing cabinet in their office and utilize additional file cabinets in the storage room. The door to this office needs a sidelite for view towards the suite entry.

The ORPIE offices include the Director, Senior Analyst, Analyst, and the Coordinator of Institutional Research.

Offices for the Director of Marketing and Webmaster are also located in the suite.

#### Workstations

Student workstations are provided adjacent to the ORPIE offices for the students to assist. An additional workstation is located at the main office entry that can serve as a welcome desk.

#### Storage

The suite has a dedicated storage space to accommodate file cabinets, swag, gift baskets, buckets, and other large items.

The shared work/break room on this floor includes a large printer/copier, refrigerator, sink, and counter.

Meeting spaces are shared and include the shared meeting room near the VP suites, President's Suite Conference Room, and the Large Conference Room.

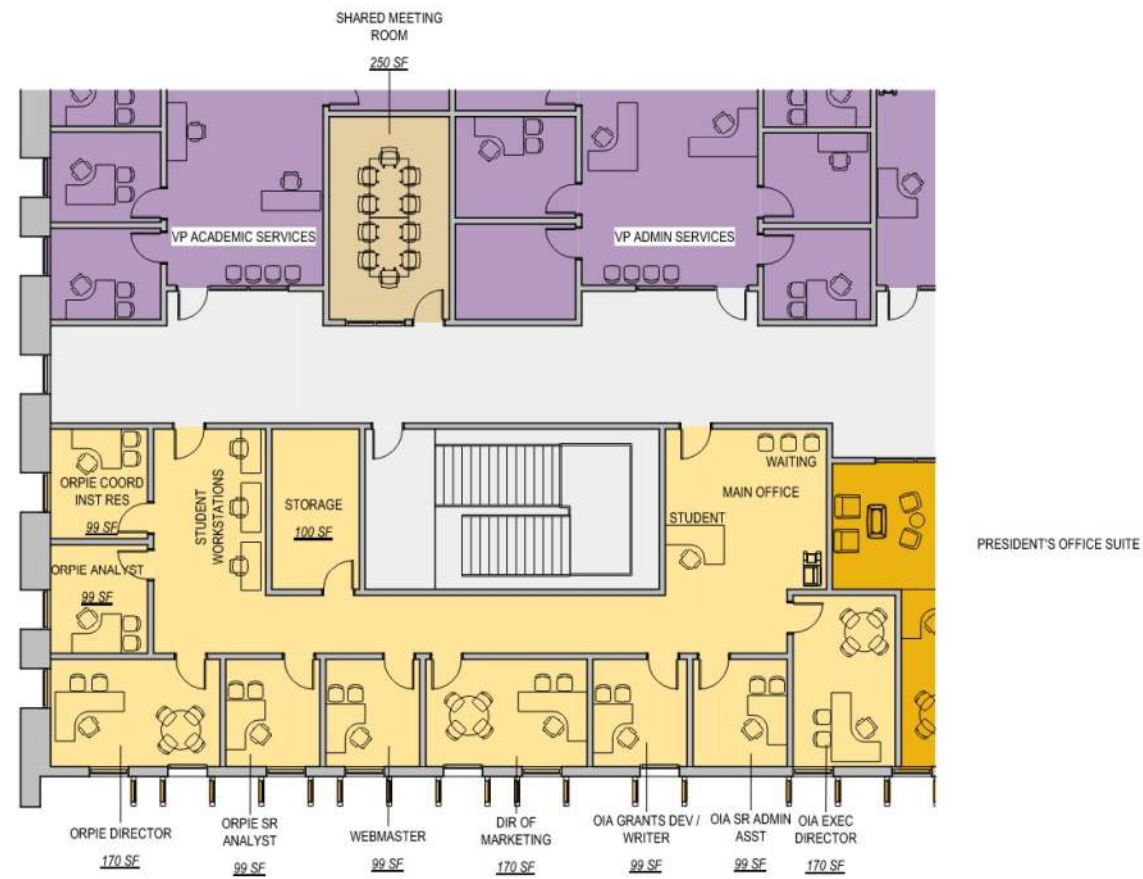
Additional private meeting rooms, Lactation Room, Meditation Room, and Staff Break Room / Work Room are shared with other programs in the building.

### Additional Needs

Access control (fob entry) is used for access to this Suite.

### Adjacencies

The ORPIE / OIA / Marketing / Webmaster suite is adjacent to the President's Suite and the VP Suites on Level 2.



**MAIN OFFICES**

- FLOORING
- CARPET - BASIS OF DESIGN: MOHAWK
- WALLS
- WHITE PAINTED GYP BOARD WITH ONE ACCENT COLOR
  - GLASS WHITE BOARDS
  - FABRIC WRAPPED TACKABLE PANELS
- CEILINGS
- 2X4 ACOUSTIC CEILING TILE
- CASEWORK
- PLASTIC LAMINATE VERTICALS WITH LINEAR DIRECTIONAL PATTERN
  - QUARTZ COUNTERTOPS
- EQUIPMENT
- DIGITAL DISPLAY MONITOR
  - LARGE COPIER/PRINTER

**TYPICAL PRIVATE OFFICES**

- FLOORING
- CARPET - BASIS OF DESIGN: MOHAWK
- WALLS
- WHITE PAINTED GYP BOARD WITH ONE ACCENT COLOR
  - COMBINATION TACK/MARKERBOARD
- CEILINGS
- 2X4 ACOUSTIC CEILING TILE



## VP Suites

The Vice President suites in the building include the Vice President of Academic Services, Vice President of Administrative Services, and the Vice President of Student Support Services. Each has their own suite with individual amenities and shared spaces on in the building.

### Spaces

#### **Vice President of Academic Services**

This suite is located on the west end of the building, farthest from the main circulation and President's Suite. Student assistants are the first point of contact upon entry into the suite. The offices are private due to the handling of confidential information. Storage space is shared. The Executive Assistant Office has a clear view to the main entry door.

#### **Vice President of Administrative Services**

This suite is located between the VP of Academic Services and VP of Student Support Services, adjacent to a building exit stair. The Counting Room provides a place for counting cash and a storage vault. Storage space accommodates files for one fiscal year. The Executive Assistant Office has a clear view to the main entry door.

#### **Vice President of Student Support Services**

This suite is located closest to the main circulation and President's Suite for easy student access. A file cabinet is located in the storage room for hard copies of student records.

All the VP suites have an entrance off the main corridor and a reception/waiting area. A printer/copier is provided in each main office area.

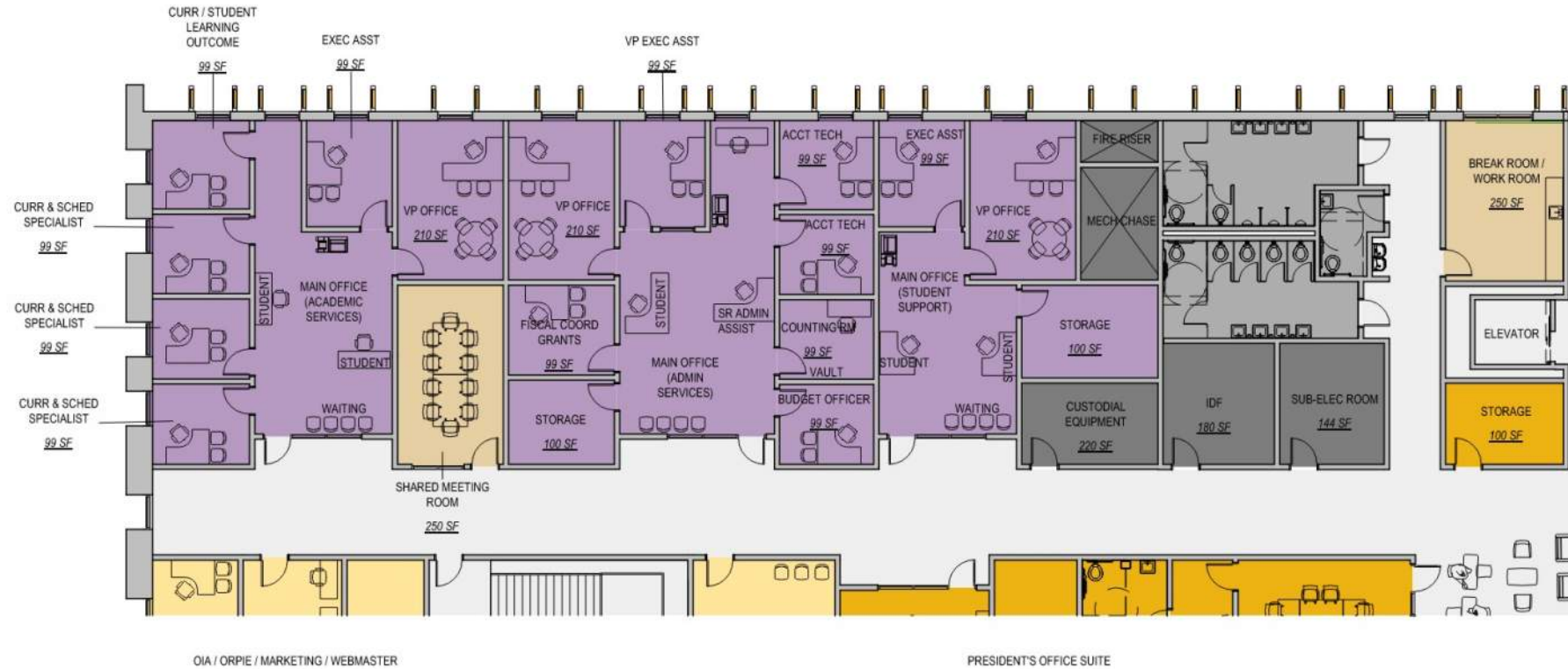
The shared work/break room on this floor includes a large printer/copier, refrigerator, sink, and counter.

Meeting spaces are shared and include the shared meeting room near the VP suites, President's Suite Conference Room, and the Large Conference Room.

Additional private meeting rooms, Lactation Room, Meditation Room, and Staff Break Room / Work Room are shared with other programs in the building.

### Adjacencies

The VP suites are adjacent to the ORPIE / OIA / Marketing / Webmaster suite and the President's Suite on Level 3. They are also proximate to two exits and benefit from views of the trees to the north.



#### MAIN OFFICES

##### FLOORING

- CARPET - BASIS OF DESIGN: MOHAWK

##### WALLS

- WHITE PAINTED GYP BOARD WITH ONE ACCENT COLOR
- GLASS WHITE BOARDS
- FABRIC WRAPPED TACKABLE PANELS

##### CEILINGS

- 2X4 ACOUSTIC CEILING TILE

##### CASEWORK

- PLASTIC LAMINATE VERTICALS WITH LINEAR DIRECTIONAL PATTERN
- QUARTZ COUNTERTOPS

##### EQUIPMENT

- DIGITAL DISPLAY MONITOR
- LARGE COPIER/PRINTER

#### TYPICAL PRIVATE OFFICES

##### FLOORING

- CARPET - BASIS OF DESIGN: MOHAWK

##### WALLS

- WHITE PAINTED GYP BOARD WITH ONE ACCENT COLOR
- COMBINATION TACK/MARKERBOARD

##### CEILINGS

- 2X4 ACOUSTIC CEILING TILE

#### VP OFFICES

##### FLOORING

- CARPET - BASIS OF DESIGN: MOHAWK

##### WALLS

- WHITE PAINTED GYP BOARD WITH ONE ACCENT COLOR
- GLASS WHITE BOARDS
- FABRIC WRAPPED TACKABLE PANELS

##### CEILINGS

- 2X4 ACOUSTIC CEILING TILE

##### EQUIPMENT

- DIGITAL DISPLAY MONITOR



## President's Office Suite & Large Conference Room

The President's Office and Large Conference room are located on the third level of the building, at the central circulation for visibility and accessibility for students. These areas plus the adjacent pre-function space and outdoor balcony will both serve the students and provide an indoor/outdoor space for gathering, daily meetings, board meetings, fundraising, and community events.

### Spaces

#### Main Office

The main office serves as a reception and waiting area for visitors to the President. The Senior Administrative Assistant has an open workstation closest to the main office entry door to greet visitors; their desk will be a visual barrier between the waiting area and the President's Office. There is space in the main office for small gatherings.

#### Executive Assistant's Office

The Executive Assistant is in a private office adjacent to the President's Office.

#### Work Room

The workroom provides storage and work area dedicated to the President's Office Suite.

#### President's Office

The entrance into the President's Office is buffered by the main office and Senior Administrative Assistant. It is adjacent to the Executive Assistant's office. This office has direct access to the outdoor balcony, and access to the private restroom and medium sized Conference Room through a vestibule. The office has views south towards the campus and campus quad.

#### Restroom

A private restroom is located off a vestibule accessed from both the President's Office and medium sized Conference Room.

#### Conference Room

This medium sized Conference Room provides a closed session meeting space for Board meetings. It is shared by other programs on the floor and has direct access to the pre-function space and outdoor balcony.

#### Outdoor Balcony

This covered outdoor balcony is accessed off the President's Office, Conference

Room, Large Conference Room, and pre-function space outside the Large Conference Room. It provides a space for casual and formal gatherings. The outdoor space is shared with other users of the building. The balcony has views south towards the campus and campus quad.

#### Large Conference Room (Chabot Room)

This Conference Room, commonly referred to as the "Chabot Room", is used for Board meetings and daily meetings on Level 3. It also accommodates many other events including Student Senate meetings and can host community events. A minimum of two doors are provided for circulation of audience and presenters. The room has views south towards the campus and campus quad.

A pre-function space (queuing area) is provided outside the Large Conference Room for audience waiting. It also hosts gatherings that can extend into the outdoor balcony.

#### Storage

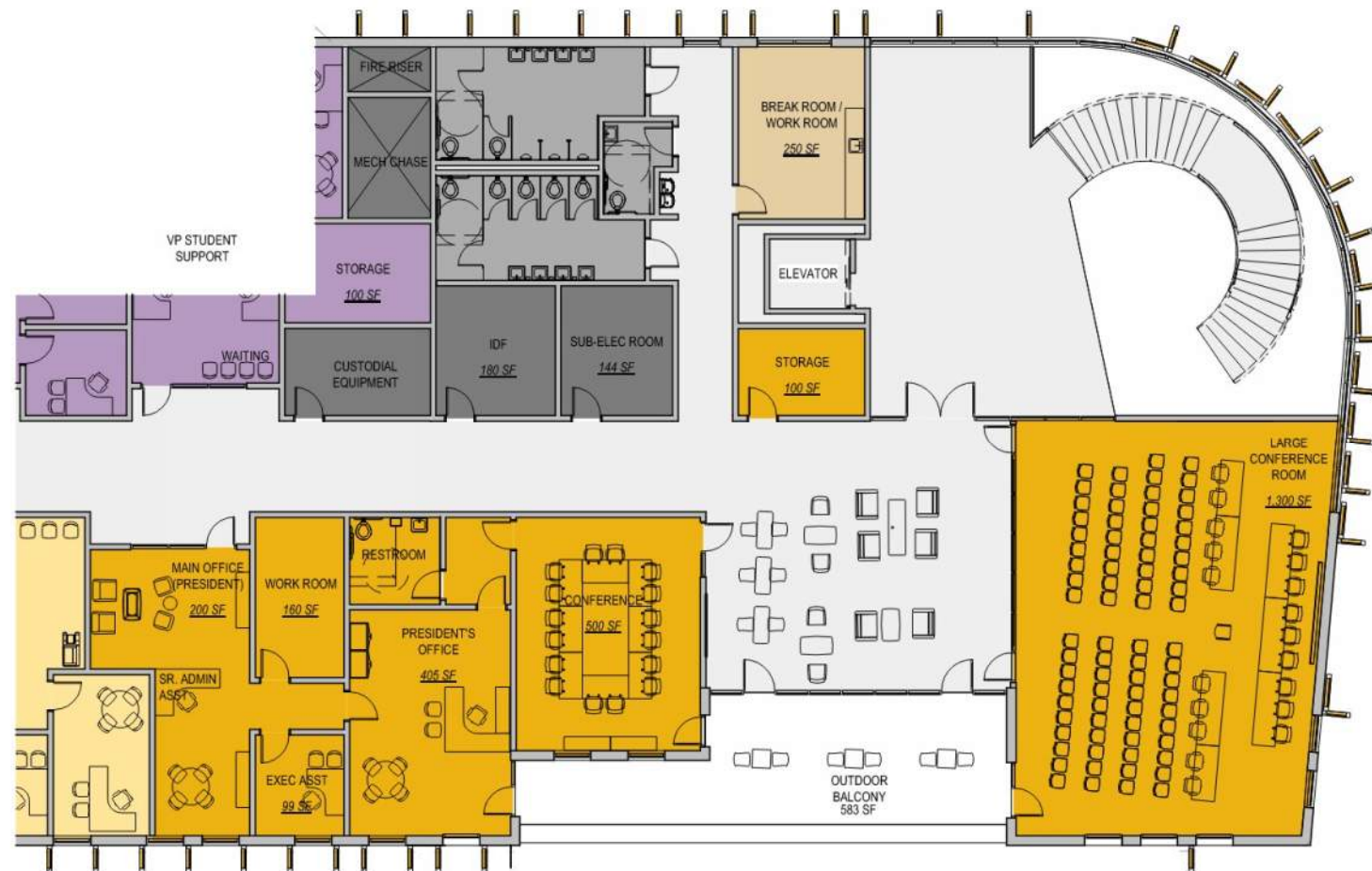
Storage is located outside the pre-function space to serve both conference rooms and the President's Suite.

The shared work/break room on this floor includes a large printer/copier, refrigerator, sink, and counter.

### Adjacencies

The President's Office Suite and Large Conference Room are adjacent to the ORPIE / OIA / Marketing / Webmaster suite and the VP suites on Level 3. They are also proximate to the main vertical circulation. The spaces are positioned for southern views towards the campus core.

# PRESIDENT'S OFFICE SUITE & LARGE CONFERENCE ROOM



## CONFERENCE ROOMS

### FLOORING

- CARPET - BASIS OF DESIGN: MOHAWK
- PORCELAIN TILE (PRE-FUNCTION SPACE)

### WALLS

- WHITE PAINTED GYP BOARD WITH ONE ACCENT COLOR
- WHITE BOARDS
- FABRIC WRAPPED TACKABLE PANELS
- ACOUSTICAL WOOD WALL PANEL ACCENT WALL WITH BRANDING SIGNAGE

### CEILINGS

- 2X4 ACOUSTIC CEILING TILE
- LINEAR METAL CEILING SYSTEM

### CASEWORK

- PLASTIC LAMINATE VERTICALS WITH LINEAR DIRECTIONAL PATTERN
- QUARTZ COUNTERTOPS

### AUDIO VISUAL EQUIPMENT

- SEE AUDIO VISUAL NARRATIVE

## OFFICES

### FLOORING

- CARPET - BASIS OF DESIGN: MOHAWK

### WALLS

- WHITE PAINTED GYP BOARD WITH ONE ACCENT COLOR
- GLASS WHITE BOARDS
- FABRIC WRAPPED TACKABLE PANELS

### CEILINGS

- 2X4 ACOUSTIC CEILING TILE

### CASEWORK

- PLASTIC LAMINATE VERTICALS WITH LINEAR DIRECTIONAL PATTERN
- QUARTZ COUNTERTOPS

### EQUIPMENT

- DIGITAL DISPLAY MONITOR

## BREAK/WORK ROOMS

### FLOORING

- LUXURY VINYL TILE - BASIS OF DESIGN: MOHAWK

### WALLS

- WHITE PAINTED GYP BOARD WITH ONE ACCENT COLOR
- WHITE BOARDS
- FABRIC WRAPPED TACKABLE PANELS

### CEILINGS

- 2X4 ACOUSTIC CEILING TILE

### CASEWORK

- PLASTIC LAMINATE VERTICALS WITH LINEAR DIRECTIONAL PATTERN
- PLASTIC LAMINATE COUNTERTOPS

## RESTROOMS

### FLOORING

- PORCELAIN TILE

### WALLS

- PORCELAIN TILE (PATTERN OF 3 COLORS)

### CEILINGS

- PAINTED GYP BOARD



## **Attachment B**

### **SCOPE OF REQUIRED COMMISSIONING SERVICES**

Although the full scope of work shall be negotiated in the Professional Services Agreement, the Commissioning Agent will be expected to be capable of fulfilling, at a minimum the following:

The Commissioning Agent will assume the role of the Commissioning Agent and provide commissioning services as required to comply with Title 24. The Commissioning agent shall have knowledge of and apply the following:

- Fundamental and Enhanced Commissioning - Refer to Reference Material
- LEED Principles – Targeting LEED Silver - Refer to Reference Material

Commissioning Agent shall be responsible for commissioning the following systems when applicable:

1. Electrical Systems
  - a. Lighting Systems, lighting fixtures and Lighting Controls
  - b. On Site Renewable Solar Electric or Wind Systems
  - c. Electrical systems consisting of switchboards, automatic transfer switches, and distribution panels.
  - d. Metering Systems
2. Mechanical Systems
  - a. HVAC Systems including but not limited to, rooftop ac units, chilled water plants, boiler/heating hot water systems, and air handling systems.
  - b. Domestic Hot Water Systems
  - c. Energy Management Systems & BAS Controls
  - d. Renewable Energy Heating Systems
  - e. Metering Systems
3. Plumbing Systems
  - a. Flow Control Devices
  - b. Pumping Systems
  - c. Special Waste Treatment Systems
  - d. Domestic Hot Water Systems
  - e. Graywater Systems
  - f. Metering Systems
4. Data Logging
5. Water Reuse Systems
6. Landscape Irrigation Systems and Controls
7. Electric Power Metering Systems
8. Other MEP Systems as directed
9. Building Envelope

The Commissioning Agent “Scope of Services” will vary depending on the size and complexity of the project but may include the following tasks:

#### **During Design**

1. Assume the role of the commissioning agent.
2. Assist in the development and prepare the “Owner’s Project Requirements”

3. Verify the Basis of Design documents in regard to the Owner's Project Requirements.
4. Conduct a Cx design review kick off meeting with design team and owner (Title 24 requirement)
5. Site visit throughout design, when applicable.
6. Be involved in design workshops, design reviews, and value engineering discussions as needed prior to the start of the construction documents phase of work.
7. Review the design prior to the Construction Documents phase. Provide comments in writing to the owner and A/E team.
8. Conduct a thorough commissioning design review of the Construction Documents at the end of the 50% CD design phase. Provide comments in writing to the owner and A/E team.
9. Develop and incorporate full commissioning specifications into the Construction Documents for all commissioned equipment. Coordinate this with the A/E team and integrate the commissioning specifications into the overall project specification package. The commissioning specification will include a detailed description of the responsibilities of all parties, commissioning process, reporting and documentation requirements (including formats), alerts to coordination issues, deficiency resolution, construction checklist, and startup requirements, the functional testing process, and specific functional test requirement including testing conditions and acceptance criteria for each piece of equipment being commissioned.
10. Develop and utilize a commissioning plan.
11. Document and complete the Title 24 commissioning requirements

#### **During Construction**

1. Conduct a pre-construction meeting where the commissioning process requirements are reviewed with the commissioning team.
2. Site visits throughout construction when applicable, with adequate time built in for problem solving visits as needed.
3. Coordinate and direct commissioning activities in a logical and efficient manner using consistent protocols, frequently updated timelines, schedules, and technical expertise.
4. Review all factory acceptance testing reports for compliance with the Owner's Project Requirements and Basis of Design.
5. Perform site visits, as necessary, to observe component and system installations. Accomplish a statistical review of construction focusing on owner's design intent and quality process.
6. Attend selected planning and job-site meetings to obtain information on construction progress. Assist in resolving any discrepancies.
7. Organize, conduct, and compose meeting agenda and minutes for commissioning team meetings necessary to plan, develop the scope, coordinate, schedule activities, and resolve problems.
8. Review submittals and RFIs concurrent with the design professional's review.
9. Approve systems startup by reviewing startup reports and by selected site observation.
10. Verify functional performance testing.
11. Review trend data.
12. Provide a deficiency list and coordinate retesting as necessary until satisfactory performance is achieved. Provide iterations of equipment operation and trend review, including updates to issues log, contractor response and retesting, and validation of successfully resolved issues.
13. Review testing and balancing plan and results.

14. Review the Operations and Maintenance Manuals to ensure that they meet Owner's Project Requirements and Basis of Design.
15. Participate in training of facility staff in accordance with the training plan.
16. Complete the final Commissioning Report.

**During Occupancy**

1. Schedule and verify deferred and seasonal testing by the contractor.
2. Return to the site on the 11th month of the warranty period and after systems are built out and fully operating. Review current building trend data, operation and the condition of outstanding issues related to the original and seasonal commissioning. Interview facility staff and occupants and identify problems or concerns that they have with the operation and comfort of the building as originally intended. Make suggestions for improvements and provide recommended changes in writing to the Facilities and Maintenance team, if necessary. Identify areas that may come under warranty or under the original construction contract.

# Reference Material

## LEED Commissioning

### Step-by-Step Guidance

#### Step 1. Develop owner's project requirements

The owner, with the help of the design team and other stakeholders, should develop the initial owner's project requirements (OPR) in the predesign stage (see [Integrative Process Credit](#) and [Further Explanation, Owner's Project Requirements](#)).

- This document establishes the owner's goals and the building's intended function and operation.
- The owner will use this document as the foundation for all design, construction, acceptance, and operational decisions.
- The OPR must include all systems to be commissioned plus the building envelope, even if full envelope commissioning is not pursued.

#### Step 2. Develop basis of design

Create a basis of design (BOD) to provide clear technical guidance for the project. Start this in the schematic design phase and update it throughout the design and construction process (see [Further Explanation, Basis of Design](#)).

- The BOD is the project team's interpretation of the OPR.
- Any revisions to the OPR should also be reflected in the BOD so that both documents align.
- The BOD must include all systems to be commissioned plus the building envelope, even if full envelope commissioning is not pursued. The project engineer, architect, structural engineer, and other team members must work together to document building envelope thermal performance, load-bearing capabilities, and construction.

#### Step 3. Engage commissioning authority

Identify a CxA with the proper experience and credentials to develop and implement effective commissioning. Though the CxA must be engaged by the design development phase, earlier engagement allows the CxA to be involved in the development of the OPR and BOD and see the design intent through to completion.

- The CxA should have direct experience with at least two similar projects and must have been involved from the early design phase through at least 10 months after occupancy begins (see [Further Explanation, Commissioning Authority Qualifications](#)).
- CxA requirements differ depending on the scope and size of the project. The project team should engage a CxA that has appropriate qualifications for the goals of the program.
- The CxA will lead, review, and oversee the Cx process for all systems to be commissioned, including both Fundamental and Enhanced commissioning activities if Enhanced Commissioning is pursued (see [Further Explanation, Systems to Be Commissioned](#)).
- Work with the CxA to determine the systems that need to be commissioned for compliance with the OPR and the credit requirements.

*Exception:* For projects pursuing Enhanced Commissioning Option 2, envelope commissioning, the building envelope commissioning agent (BeCxA) may be completely independent of the lead CxA, and oversight of envelope commissioning activities by the lead CxA is not required as long as the BeCxA meets all of the enhanced commissioning credit requirements for the Commissioning Authority relative to the envelope systems that will be commissioned. The use of the phrase “lead, review and oversee” defines a high level of participation while providing some flexibility for fitting the process to the project. Therefore, at a minimum, the lead commissioning agent should be participating in ALL commissioning activities including BOTH fundamental and enhanced commissioning activities. The exact level of leading, reviewing, and overseeing can vary based on individual project scenarios. However, for enhanced commissioning, the entity selected as the lead CxA must complete the following tasks at a minimum: Fundamental commissioning tasks to be performed by lead CxA:

- Review owner’s project requirements and basis of design during the early design phase.
- Conduct commissioning design review prior to mid-construction documents.
- Confirm incorporation of Cx requirements into construction documents.
- Develop or approve construction checklists.
- Develop or approve system test procedures.
- Witness at least a portion of the mechanical, electrical, plumbing, and (if applicable) renewable system functional testing that verifies installation and performance of commissioned systems. Refer to ASHRAE Guideline 0 for additional guidance.
- Review an issues log throughout the Cx process. If the CxA does not directly update the log, the CxA must approve all updates to the log on a continuous basis.
- Report findings directly to the owner throughout the process.
- Develop or approve the summary commissioning report.

Enhanced Commissioning Tasks to be performed by lead CxA:

- Review contractor submittals applicable to systems being commissioned.
- Develop or approve systems manual updates and delivery.
- Verify operator and occupant training delivery and effectiveness.
- Perform seasonal testing.
- Develop or approve an ongoing commissioning plan.
- Develop or approve a monitoring-based commissioning plan.
- Review building operation within 10 months after substantial completion.

#### **Step 4. Develop preliminary commissioning plan**

Establish a preliminary plan for the Cx to outline the scope of commissioning and systems to be tested (see [Further Explanation, Cx Plan](#) ).

- Project roles and responsibilities, the commissioning team's project directory, and schedule of commissioning activities should all be included in the Cx plan.
- The Cx plan is a living document that is updated throughout the life of the project and will become the basis for the final commissioning report.

#### **Step 5. Review OPR, BOD, and design documents**

The CxA completes a review of the OPR, BOD, and design documents to verify that the program's goals are properly included in the design documents.

- The intent of the review is to have a third party, acting as an advocate for the owner, ensure that the BOD reflects the OPR and that the design documents reflect the BOD and the OPR.
- The review should be conducted on middesign documents so that the project team has time to make any necessary changes.
- Earlier and additional reviews at other project milestones are advisable and often beneficial to project performance but are not required.
- Record the review comments in an issues log that details the drawing set or document version that was used for performing the review (see [Further Explanation, Issues Log](#) ).

#### **Step 6. Develop Cx requirements and incorporate into construction documents**

Before construction begins, develop commissioning requirements based on the systems included in the design and incorporate them into the construction documents.

- Cx specifications inform the contractors of their roles and responsibilities throughout the commissioning process.

- ASHRAE Guideline 0–2005, Table L-1, identifies titles, contents, and scopes for each commissioning-related specification section and may be used as guidance (see [Further Explanation, Issues Log](#)).

### **Step 7. Update OPR, BOD, and Cx plan**

If necessary, the owner should update the OPR, the design team should update the BOD, and the CxA should update the Cx plan. Items such as design changes, value engineering modifications, new or reassigned team members, or updated operating conditions would warrant an update.

### **Step 8. Conduct Cx kickoff meeting**

Assemble the team of stakeholders and hold a kickoff meeting to introduce the team members, review roles and responsibilities, and review all remaining Cx activities. The CxA should provide information on the process and requirements for the following:

- Installation verification (construction) checklists
- Functional performance tests
- Issues log
- Team meetings
- Contractors' and subcontractors' participation on the Cx team
- Schedule

The CxA should update and redistribute the Cx plan as necessary. The CxA is also responsible for setting up periodic Cx meetings, developing a communication protocol, and managing the schedule for all Cx-related activities.

### **Step 9. Develop construction checklists**

The CxA, the design team, or the contractor prepares construction checklists (also known as installation verification checklists and prefunctional checklists) for the project.

- Checklists provide confirmation to the CxA that the systems have been installed, started up, programmed, tested, and balanced, and that the team is ready to proceed with functional testing.
- In general, contractors are responsible for filling out the checklists and returning them to the CxA.
- Construction checklists must be completed for all equipment, assemblies, and systems included in Cx scope. Sampling strategies are not permitted.

## Step 10. Conduct prefunctional inspections

Communicate with the contractors to determine the exact schedule for prefunctional inspections to verify proper installation and handling of systems to be commissioned. Several activities that can be considered prefunctional inspections include site visits, field observations, and review of start-up forms, construction checklists, and complete test-and-balance reports.

- The CxA may conduct site visits as necessary to inspect the installation of individual systems and components. Site visits are an important opportunity to observe equipment installation and identify issues before a system becomes difficult to access or change.
- It is good practice to document the site visit findings in a field observation report that is distributed to the relevant parties. The CxA should report any noncompliance to the owner and project team for them to help resolve.
- The number of site inspections depends on the project's size and scope.

## Step 11. Develop functional test scripts

The CxA, with the design team or contractor, must write and develop the functional test scripts for the project.

- Functional testing scripts typically follow the sequence of operations developed by the engineer. If a controls contractor created the sequence of operations, the design engineer must approve the controls submittal to ensure it adheres to the BOD.
- Provide contractors and design engineers with the functional tests before testing to allow them the opportunity to review the scripts, verify proper operating modes, and comment on any modifications to match actual operation (see [Further Explanation, Functional Performance Tests](#)).

## Step 12. Execute functional testing

Perform functional performance testing once all system components are installed, energized, programmed, balanced, and otherwise ready for operation under part- and full-load conditions.

- Some systems may require deferred or seasonal testing or verification for proper operation in each mode.
- The systems or modes that require seasonal or deferred testing must be noted in the Cx report. A report addendum discussing the deferred testing results can then be issued.

- The functional performance testing follows the functional performance test scripts developed by the CxA in Step 11.
- The CxA generally oversees the testing; the contractors execute the testing.
- Sampling strategies may be implemented for functional testing. An acceptable sampling rate is “10 or 10%,” meaning that for multiple units of the same type with the same components and sequences (e.g., fan coil units or variable air volume systems), the commissioning team may test only 10 units or 10% of the units, whichever is greater.
- When possible, include the building engineer or owner in the testing execution to provide training for future operation of the systems.

### **Step 13. Document findings**

Use the issues log to track any deficiencies discovered and any benefits identified through functional testing.

- The CxA is responsible for documenting the test results and maintaining the issues log.
- Documentation should include the status and responsible party for the correction or improvement actions.

### **Step 14. Prepare Cx report**

The CxA should write the Cx report after installation inspections and functional performance test verification. The report covers all components of the commissioning process, including the following:

- Executive summary of commissioning process and results, system deficiencies identified and resolution, and outstanding issues
- Project directory
- Cx process overview
- Owner’s project requirements
- Basis of design
- Submittals
- Design review log
- Cx specifications
- List of systems commissioned
- Installation verification checklists
- Functional performance tests
- Issues log, detailing open and closed issues

## **Step 15. Compile current facility requirements and operations and maintenance plan**

Prepare and maintain a current facility requirements (CFR) and operations and maintenance (O&M) plan that contains the information necessary to operate the building efficiently. This information is covered in the OPR, BOD, and functional test scripts, but more information may be taken from specific submittals or equipment operations and maintenance manuals. The plan must include the following:

- Sequences of operation for the building
- Building occupancy schedule
- Equipment run-time schedules
- Setpoints for all HVAC equipment
- Lighting levels throughout the building
- Minimum outside air requirements
- Changes in schedules or setpoints for different seasons, days of the week, and times of day
- Systems narrative describing the mechanical and electrical systems and equipment
- Preventive maintenance plan for building equipment described in the systems narrative
- Cx program that includes periodic Cx requirements, Cx tasks, and continuous tasks for critical facilities

## **Step 16. Develop and Conduct Occupant Training**

Training requirements include the following:

- List of those who should receive operational training, by position or name
- List of systems that require operator training
- Level of instruction required for each system
- Determination of whether the training provided by the equipment manufacturer is acceptable
- Tracking method to ensure that all required positions or persons receive training

## **Step 17. Develop Ongoing Cx Plan**

The plan must include the following:

- Definition of the ongoing commissioning process
- Defined roles and responsibilities
- Recommended schedule for recommissioning as-built systems

- Continuous documentation and updating of building operating plan and current facility requirements throughout the building's lifetime
- Blank testing materials, including functional performance tests for all commissioned as-built systems in the building, as well as an issues log
- Direction for testing new and retrofitted equipment



## ENERGY AND ATMOSPHERE CREDIT

# Enhanced Commissioning

This credit applies to:

**New Construction (2-6 points)**  
**Core and Shell (2-6 points)**  
**Schools (2-6 points)**  
**Retail (2-6 points)**

**Data Centers (2-6 points)**  
**Warehouses and Distribution Centers (2-6 points)**  
**Hospitality (2-6 points)**  
**Healthcare (2-6 points)**

## INTENT

To further support the design, construction, and eventual operation of a project that meets the owner's project requirements for energy, water, indoor environmental quality, and durability.

## REQUIREMENTS

Implement, or have in place a contract to implement, the following commissioning process activities in addition to those required under EA Prerequisite Fundamental Commissioning and Verification.

### Commissioning Authority

- The CxA must have documented commissioning process experience on at least two building projects with a similar scope of work. The experience must extend from early design phase through at least 10 months of occupancy;
- The CxA may be a qualified employee of the owner, an independent consultant, or a disinterested subcontractor of the design team.

### OPTION 1. ENHANCED SYSTEMS COMMISSIONING (3-4 POINTS)

#### Path 1: Enhanced Commissioning (3 points)

Complete the following commissioning process (CxP) activities for mechanical, electrical, plumbing, and renewable energy systems and assemblies in accordance with ASHRAE Guideline 0-2005 and ASHRAE Guideline 1.1-2007 for HVAC&R systems, as they relate to energy, water, indoor environmental quality, and durability.

The commissioning authority must do the following:

- Review contractor submittals.
- Verify inclusion of systems manual requirements in construction documents.
- Verify inclusion of operator and occupant training requirements in construction documents.
- Verify systems manual updates and delivery.
- Verify operator and occupant training delivery and effectiveness.
- Verify seasonal testing.
- Review building operations 10 months after substantial completion.
- Develop an on-going commissioning plan.

Include all enhanced commissioning tasks in the OPR and BOD.

**OR**

#### **Path 2: Enhanced and Monitoring-Based Commissioning (4 points)**

Achieve Path 1.

**AND**

Develop monitoring-based procedures and identify points to be measured and evaluated to assess performance of energy- and water-consuming systems.

Include the procedures and measurement points in the commissioning plan. Address the following:

- roles and responsibilities;
- measurement requirements (meters, points, metering systems, data access);
- the points to be tracked, with frequency and duration for trend monitoring;
- the limits of acceptable values for tracked points and metered values (where appropriate, predictive algorithms may be used to compare ideal values with actual values);
- the elements used to evaluate performance, including conflict between systems, out-of-sequence operation of systems components, and energy and water usage profiles;
- an action plan for identifying and correcting operational errors and deficiencies;
- training to prevent errors;
- planning for repairs needed to maintain performance; and
- the frequency of analyses in the first year of occupancy (at least quarterly).

Update the systems manual with any modifications or new settings, and give the reason for any modifications from the original design.

**AND/OR**

#### **OPTION 2. ENVELOPE COMMISSIONING (2 POINTS)**

Fulfill the requirements in EA Prerequisite Fundamental Commissioning and Verification as they apply to the building's thermal envelope in addition to mechanical and electrical systems and assemblies.

Complete the following commissioning process (CxP) activities for the building's thermal envelope in accordance with ASHRAE Guideline 0-2005 and the National Institute of Building Sciences (NIBS) Guideline 3-2012, Exterior Enclosure Technical Requirements for the Commissioning Process, as they relate to energy, water, indoor environmental quality, and durability.

Commissioning authority must complete the following:

- Review contractor submittals.
- Verify inclusion of systems manual requirements in construction documents.
- Verify inclusion of operator and occupant training requirements in construction documents.

- Verify systems manual updates and delivery.
- Verify operator and occupant training delivery and effectiveness.
- Verify seasonal testing.
- Review building operations 10 months after substantial completion.
- Develop an on-going commissioning plan.

#### **DATA CENTERS ONLY**

Projects that select Option 1 must complete the following commissioning process.

For small projects with peak cooling loads less than 2,000,000 Btu/h (600 kW), or a total computer room peak cooling load less than 600,000 Btu/h (175 kW), the CxA must perform the following activities:

- conduct at least one commissioning verification review of the owner's project requirements, basis of design, and design documents before mid-construction documents development;
- back-check the review comments in all subsequent design submissions; and
- conduct an additional full verification review at 95% completion of the design documents and basis of design.

For projects with peak cooling loads 2,000,000 Btu/h (600 kW) or more, or a total computer room peak cooling load 600,000 Btu/h (175 kW) or more, the CxA must conduct at least three verification reviews of the basis of design:

- one verification review of design documents before the start of design development;
- one verification review of design documents before midconstruction documents; and
- one final verification review of 100% complete design documents, verifying achievement of the owner's project requirements and adjudication of previous review comments.

## BEHIND THE INTENT

Enhanced commissioning is a natural extension of the fundamental commissioning (Cx) process. It provides owners, via the commissioning authority (CxA), further oversight and verification that the building will meet their expectations and requirements beyond the first day of occupancy. Enhanced commissioning gives the CxA the power to act as the owner's advocate by conducting in-depth reviews of the basis of design, design documents, and construction submittals. Training and a postconstruction verification visit are some of the enhancements that contribute to ongoing quality building control and operations.

The CxA may make additions to the Cx plan to verify that the building operators will have the proper tools to manage the building's equipment efficiently and effectively. Monitoring-based commissioning (MBCx) gives the building owner, operators, and the CxA a continual stream of information that helps them identify operational issues as they occur, thereby saving time, money, and energy consumption over the lifetime of the building.

A second option in this prerequisite is building envelope commissioning (BECx) to test and verify the building's thermal envelope, achieving better building performance and less energy expenditure over its lifetime. Adding envelope commissioning ensures not only that active energy-consuming systems are considered but also that passive load-defining envelope systems are understood and verified. Early introduction of BECx helps meet an owner's requirements for envelope performance through the review of design documents and contractor submittals. Such actions can help prevent problems with envelope design and construction that would be costly or impossible to address after construction. Additional benefits of BECx include improving occupants' comfort through glare control, infiltration testing, and reduced solar heat gain.

## STEP-BY-STEP GUIDANCE

### STEP 1. SELECT ONE OR BOTH OPTIONS

Use input from the CxA and the project team and select one or both options. Review the building type, the assumed occupancy type, and the project goals and scope. The team should be familiar with the credit requirements so that any gaps in scope or skill can be addressed (see *Further Explanation, Planning the Cx Process* and *Choosing an Appropriate CxA*). ➤

- Option 1 has two compliance paths.
  - Path 1, Enhanced Commissioning
  - Path 2, Enhanced and Monitoring-Based Commissioning. This is often appropriate for projects that are energy-intensive and will benefit from real-time data and the ability to track trends. The additional first costs may be offset by maintaining the proper energy usage over time.
- Option 2 is beneficial for most projects but especially for those that are envelope dominated, located in an extreme climate or microclimate, or subject to potential leakage or infiltration of contaminants.

### STEP 2. UPDATE DOCUMENTS TO INCLUDE ENHANCED CX ACTIVITIES

Project documents should reflect the enhanced commissioning activities included in the project scope.

- Update the owner's project requirements (OPR), basis of design (BOD), and Cx plan (see *Further Explanation, Enhanced Commissioning Plan*). ➤
- The CxA must ensure that the OPR, the BOD, and the Cx plan include all additional commissioning activities that will be conducted throughout the design and construction phases of the project.

## Option 1, Path 1. Enhanced Systems Commissioning

### STEP 1. DEVELOP SYSTEMS MANUAL SCOPE AND FORMAT

During the design development phase, outline the scope and format for the project systems manual to include all the information necessary to operate, maintain, and recommission all energy-consuming systems within the building.

- The CxA is responsible for working with the owner to develop and outline the requirements of the systems manual. Include operating staff in preparing the manual if the team is in place during design.
- Information for the systems manual is generally collected during construction and after completion of a project.

The basic scope and format of a systems manual are outlined in ASHRAE Guideline 0–2005, Annex O; the manual usually includes the following:

- Executive summary
- Owner's project requirements
- Basis of design
- System single-line diagrams
- Construction record documents and specifications
- Approved submittals
- As-built drawings
- As-built sequence of operation
- Original setpoints for all systems commissioned
- Recommended schedule for recommissioning
- Recommended schedule for sensor recalibration
- Equipment operations and maintenance manuals
- Equipment preventive maintenance schedules
- Confirmation of completed training for the owner and occupants
- Ongoing system optimization procedures
- Final commissioning report

## STEP 2. DEVELOP TRAINING REQUIREMENTS

Create training requirements. Verify that they meet the scope of the owners' requirement for the operator training.

- Training requirements must be completed before the bid documents are final.
- Integrate requirements into the commissioning specifications, to be issued as part of the bid package during the construction document phase.

Training requirements include the following:

- List of those who should receive operational training, by position or name
- List of systems that require operator training
- Level of instruction required for each system
- Determination of whether the training provided by the equipment manufacturer is acceptable
- Tracking method to ensure that all required positions or persons receive training

## STEP 3. ENSURE ENHANCED CX SCOPE ITEMS ARE INCLUDED IN CONSTRUCTION DOCUMENTS

Confirm that the following items are included in the construction documents to be issued for bid:

- System manual requirements
- Operator and occupant training requirements

## STEP 4. REVIEW CONTRACTOR'S SUBMITTALS

Ensure ongoing compliance with the OPR, BOD, and Cx requirements by reviewing the HVAC&R contractor's submittals.

- Conduct a submittal review by the CxA concurrently with the design team's review or, at the latest, before final acceptance by the engineer or architect of record.
- The CxA must document all issues discovered during the review process in a log, to be distributed to the project's design and construction teams (see *Further Explanation, Examples, Table 4*). ➔
- The CxA must also confirm that all issues recorded in the log are addressed or resolved by the owner, design, or construction teams.
- Establish the submittal review process at the commissioning kickoff meeting included in the fundamental commissioning steps.

## STEP 5. VERIFY TRAINING

Confirm that the training program has been completed according to the owner's requirements for all commissioned equipment.

- Training is required to ensure that the building's operating staff is fully knowledgeable about operating the equipment and systems. Typically, it is provided by the equipment manufacturer, general contractor, or subcontractors.
- A good training program covers all new HVAC&R equipment and associated controls as well as monitoring equipment and software (if Option 1, Path 2 is pursued).
- It is recommended that the training cover all operating scenarios to help the building engineering team understand the most effective and efficient way to operate the building.

As outlined in ASHRAE Guideline 0-2005, a robust training program will address the following:

- Emergency instructions and procedures
- Operation instructions and procedures
- Troubleshooting procedures
- Maintenance and inspection procedures
- Repair procedures
- Upkeep of the systems manual and associated maintenance documentation logs

#### STEP 6. DELIVER POSTCONSTRUCTION DOCUMENTS

Complete and deliver the necessary operating documents and reports to the owner before building occupancy to ensure a smooth transition from construction to operation. The project CxA must confirm delivery, and the final package must include the following:

- Up-to-date systems manual, including operations and maintenance manuals for all commissioned equipment
- Documentation of operator training on all commissioned systems
- Completed functional performance test reports
- Up-to-date issues log detailing closed and open issues
- Updated Cx plan that outlines commissioning completed to date, plan for seasonal testing, plan for 10-month operational review, and plan for addressing open issues identified after the initial round of commissioning.

#### STEP 7. PERFORM SEASONAL TESTING, IF REQUIRED

Determine whether seasonal testing will be necessary, based on the project schedule.

- Both projects that reach substantial completion during peak heating or cooling months and projects that are occupied and operational before all equipment has been installed must create Cx plans and complete all necessary tests.
- The project CxA must be involved in seasonal testing, even if it occurs after the project is completed.

The results of seasonal testing and the issues log must be included in the final commissioning report (preferred) or issued as an addendum to the owner.

#### STEP 8. REVIEW BUILDING OPERATIONS 10 MONTHS AFTER SUBSTANTIAL COMPLETION

Perform the 10-month review of building operations after substantial completion to ensure that the building is being operated according to the owners' requirements. The 10-month review may include the following:

- Interviews with the operations and maintenance staff
- Interviews with occupants
- Status of outstanding commissioning-related issues
- Comparison of current operations with the operations and maintenance plan that was documented as part of EA Prerequisite Fundamental Commissioning
- Follow-up functional performance testing, when required
- Trends in building operations, as indicated by the building automation system, system submeters, or whole-building utility meters

#### STEP 9. DEVELOP ONGOING CX PLAN

Before or as part of the 10-month review of building operations, the CxA must issue an ongoing commissioning plan. The plan should provide the building's operating staff with procedures, blank test scripts, and a schedule for ongoing Cx activities. It may be executed either by the building operators, in addition to their normal preventive maintenance activities, or by an independent CxA (see *Further Explanation, Ongoing Commissioning Basics*). ➔

The plan must include the following:

- Definition of the ongoing commissioning process

- Defined roles and responsibilities
- Recommended schedule for recommissioning as-built systems
- Continuous documentation and updating of building operating plan and current facility requirements throughout the building's lifetime
- Blank testing materials, including functional performance tests for all commissioned as-built systems in the building, as well as an issues log
- Direction for testing new and retrofitted equipment

## Option 1, Path 2. Enhanced and Monitoring-Based Commissioning

### STEP 1. ACHIEVE OPTION 1, PATH 1

Ensure that the requirements for Path 1 have been met.

### STEP 2. UPDATE CX PLAN TO INCLUDE MONITORING-BASED COMMISSIONING (MBCX) REQUIREMENTS

During the design development phase, incorporate the MBCx requirements and activities into the project's Cx plan (see *Further Explanation, Monitoring-Based Commissioning Basics*). ➤

- Define analysis procedures, including frequency during year one.
- Outline the evaluation process and determine the procedure for handling system conflicts, usage profiles, and out-of-sequence operations.
- Include preventive planning and maintenance procedures necessary to meet performance goals.
- Determine measurement requirements and decide whether predictive algorithms can be used in conjunction with metered points.

### STEP 3. CONFIRM THAT MBCX IS FULLY INCORPORATED INTO ENHANCED CX

Ensure that requirements for MBCx are included in all commissioning documents. Items to look for may include the following:

- Owner's requirements, such as specific trends to track, reflected accurately in the engineer's BOD
- Metering and monitoring required for MBCx, included in the BOD
- Single-line or riser diagrams for location of building and system meters
- Controls sequences for specification of appropriate monitoring points
- Cx specifications for contractors and building operators
- Submittal reviews of meters, energy analysis software, and drawings of controls for compliance with the owner's MBCx metering and monitoring requirements
- Creation and completion of prefunctional tests for MBCx-related equipment, such as meters and energy analysis software programs, by the CxA and contractors
- MBCx operator education regarding measurement techniques, energy analysis software tools, fault detection and fault resolution, all incorporated into training requirements

### STEP 4. IMPLEMENT MBCX PLAN

Execute, concurrently whenever possible, MBCx monitoring and analysis with the functional performance testing completed for EA Prerequisite Fundamental Commissioning.

The equipment and tools required for MBCx must be installed, and the electrical and controls contractor should submit construction checklists for review by the CxA. The benefits of implementing MBCx functional testing after construction but before occupancy include the following:

- More robust documentation of functional performance tests
- Verification that the energy meters and monitoring points have been properly installed and programmed
- CxA oversight of monitoring procedures and energy analysis, to ensure that the owner's requirements for ongoing monitoring are executed correctly
- Verification that energy analysis software tools, if installed, are appropriately identifying faults and producing the correct reports

It is recommended that the CxA confirm execution of the MBCx commissioning plan during the 10-month review. Confirmation of execution includes the following:

- Review of metering and trend logs

- Review of the issues log showing results of the MBCx
- Confirmation of issue resolution
- Confirmation of ongoing operator training
- Updating of the systems manual with any modifications or new settings that differ from design, with explanations for the changes
- See *Further Explanation, Bridging the Gap between LEED BD+C and LEED O+M*. ➤

## Option 2. Envelope Commissioning

Incorporate envelope commissioning into the Cx plan by extending the requirements of EA Prerequisite Fundamental Commissioning and Verification to cover the building's thermal envelope and completing EA Credit Enhanced Commissioning (Option 1, Path 1) as it relates to the building envelope. It is not necessary to complete the enhanced commissioning for building systems to meet the requirements of this option. However, doing so will help to ensure a better-performing building.

Ensure that the building envelope is fully accounted for in all commissioning documents and testing procedures (see *Further Explanation, Building Envelope Commissioning Basics*). ➤

## FURTHER EXPLANATION

### ➤ PLANNING THE COMMISSIONING PROCESS

Table 1 outlines the tasks required to meet the intent of EA Prerequisite Fundamental Commissioning and Verification, EA Credit Enhanced Commissioning, Option 1 Path 1, Option 1 Path 2, and Option 2, as well as suggested timing.

| TABLE 1. Commissioning activities |                                                                 |                         |    |             |      |      |
|-----------------------------------|-----------------------------------------------------------------|-------------------------|----|-------------|------|------|
| Phase                             | Cx task                                                         | Responsible party       | Cx | Enhanced Cx | MBCx | BECx |
| <b>Predesign</b>                  | Develop OPR                                                     | Owner                   | X  | X           | X    | X    |
| <b>Schematic design</b>           | Develop BOD, including envelope requirements                    | Design team             | X  | X           | X    | X    |
|                                   | Include general monitoring, metering, and trending requirements | Design team             |    |             | X    |      |
| <b>Design</b>                     | Engage CxA                                                      | Owner                   | X  | X           | X    | X    |
| <b>Documents</b>                  | Develop initial commissioning plan                              | CxA                     | X  | X           | X    | X    |
|                                   | Include monitoring requirements, equipment                      | CxA                     |    |             | X    |      |
|                                   | Include envelope requirements                                   | CxA                     |    |             |      | X    |
|                                   | Conduct OPR, BOD, and design document review                    | CxA, owner, design team | X  | X           | X    | X    |

**TABLE 1. (CONTINUED)** Commissioning activities

| Phase                         | Cx task                                                                          | Responsible party       | Cx | Enhanced Cx | MBCx | BECx |
|-------------------------------|----------------------------------------------------------------------------------|-------------------------|----|-------------|------|------|
| <b>Documents</b>              | Prepare systems manual outline                                                   | CxA, owner              |    | X           | X    | X    |
|                               | Include monitoring requirements, equipment                                       | CxA, owner              |    |             | X    |      |
|                               | Include envelope requirements                                                    | CxA, owner              |    |             |      | X    |
|                               | Document training requirements                                                   | CxA, owner              |    | X           | X    | X    |
|                               | Update OPR and BOD as necessary                                                  | CxA, owner, design team | X  | X           | X    | X    |
| <b>Construction Documents</b> | Issue Cx specifications for inclusion in bid/permit documents                    | CxA                     | X  | X           | X    | X    |
|                               | Include enhanced Cx requirements                                                 | CxA                     |    | X           | X    | X    |
|                               | Include monitoring-based Cx requirements                                         | CxA                     |    |             | X    |      |
|                               | Include envelope based Cx requirements                                           | CxA                     |    |             |      | X    |
|                               | Update OPR and BOD as necessary                                                  | CxA, owner, design team | X  | X           | X    | X    |
|                               | Conduct design review (recommended)                                              | CxA, design team        | X  | X           | X    | X    |
| <b>Construction</b>           | Update OPR and BOD as necessary                                                  | CxA, owner, design team | X  | X           | X    | X    |
|                               | Perform prefunctional inspections                                                | CxA                     | X  | X           | X    | X    |
|                               | Complete submittal reviews concurrently with or before acceptance by design team | CxA                     |    | X           | X    | X    |
|                               | Update OPR, BOD, Cx plan and systems manual as necessary                         | CxA                     | X  | X           | X    | X    |
|                               | Issue owner's training requirements                                              | CxA to contractor       |    | X           | X    | X    |
|                               | Issue construction checklists                                                    | CxA                     | X  | X           | X    | X    |
|                               | Issue functional performance test scripts for contractor review                  | CxA, contractor         | X  | X           | X    | X    |
|                               | Issue/review verified TAB report                                                 | Contractor, CxA         | X  | X           | X    | X    |
|                               | Issue/review completed construction checklists                                   | Contractor, CxA         | X  | X           | X    | X    |
|                               | Execute functional performance tests                                             | CxA, contractor         | X  | X           | X    | X    |
|                               | Document issues in issues log                                                    | CxA                     | X  | X           | X    | X    |
|                               | Compile final systems manual                                                     | CxA                     |    | X           | X    | X    |

**TABLE 1. (CONTINUED)** Commissioning activities

| Phase                           | Cx task                                   | Responsible party                   | Cx | Enhanced Cx | MBCx | BECx |
|---------------------------------|-------------------------------------------|-------------------------------------|----|-------------|------|------|
| <b>Construction</b>             | Complete final commissioning report       | CxA                                 | X  | X           | X    | X    |
|                                 | Verify training plan has been implemented | CxA, contractor, building operators |    | X           | X    | X    |
| <b>Occupancy and operations</b> | Complete Cx report                        | CxA                                 | X  | X           | X    | X    |
|                                 | Compile operations and maintenance plan   | CxA                                 | X  | X           | X    | X    |
|                                 | Compile final systems manual              | CxA                                 |    | X           | X    | X    |
|                                 | Perform seasonal testing                  | CxA, contractor, building operators |    | X           | X    | X    |
|                                 | Perform 10-month review                   | CxA, contractor, building operators |    | X           | X    | X    |
|                                 | Develop ongoing Cx plan                   | CxA, building operators             |    | X           | X    | X    |

BECx = building envelope commissioning process

BOD = basis of design

Cx = commissioning process

CxA = commissioning authority

MBCx = monitoring-based commissioning process

OPR = owner's project requirements

### CHOOSING AN APPROPRIATE CXA

Review the guidance on qualifications for commissioning authorities in EA Prerequisite Fundamental Commissioning, including Table 1, Who can be the CxA? The following points also apply:

- Different CXAs can be engaged to complete the fundamental, enhanced, monitoring, or envelope portions of the commissioning scope. However, one CxA must oversee and coordinate all activities and deliverables provided by the commissioning team.
- The CXAs can be employees of the same company or employees of separate firms, provided they all meet the basic requirements for the task to which they are assigned.
- Not all CXAs are qualified to perform all aspects and types of commissioning activities. For example, HVAC&R commissioning specialists may not have the experience or equipment to commission building envelopes in accordance with the NIBS guideline. The owner and the design team must carefully review the qualifications of all potential CXAs.

### ENHANCED COMMISSIONING PLAN

The CxA develops the commissioning plan with input from the project team. Updates during the design and construction process are the primary responsibility of the CxA. A sample table of contents for the enhanced commissioning plan is provided in ASHRAE Guideline 0-2005, Informative Annex G, Commissioning Plan. The recommended components of the commissioning plan are the following:

- Commissioning program overview
  - Goals and objectives
  - General project information
  - Scope of commissioning
    - » Systems (Option 1, Path 1)
    - » Monitoring, which may include points, meters, and trending logs (Option 1, Path 2)
    - » Envelope (Option 2)
    - » Commissioning team

- Team members, roles, and responsibilities
- Communication protocol, coordination, meetings, and management
- Commissioning process activities
  - Reviewing the OPR
  - Reviewing the BOD
  - Documenting the systems commissioning review process (Option 1, Path 1)
  - Documenting the monitoring-based commissioning review process (Option 1, Path 2)
  - Documenting the envelope commissioning review process (Option 2)
  - Developing the systems manual
  - Developing systems functional test procedures documentation
  - Verifying system performance via functional performance testing
  - Reporting deficiencies and the resolution process: monitoring system analysis (Option 1, Path 2) must be conducted at least quarterly on an ongoing basis during occupancy.
  - Verifying the training of operations personnel: monitoring system training (Option 1, Path 2) must be conducted on an ongoing during building occupancy.
  - Reviewing building operation after 10 months of operations

### ➤ ONGOING COMMISSIONING BASICS

Ongoing Cx, an extension of enhanced Cx process, is essentially a repetition of the functional performance testing and reporting procedures that occurred immediately after construction, during the initial occupancy and operations phase. Ongoing testing is required to ensure that the building continues to perform according to the OPR, BOD, and approved design and construction documents. The commissioning activities should occur approximately twice a year, to correspond with the summer and winter seasons. Those who conduct the Cx activities should use the functional performance tests and issues log templates provided as part of the original Cx report.

Ongoing Cx activities can be conducted either by in-house operating staff (in addition to their normal preventive maintenance activities) or by a third-party CxA who is responsible for all testing and issues reporting. Using the operating staff to perform the functional performance tests may be beneficial to their understanding of the building operations. However, as the facility requirements change or as systems are retrofitted over the lifetime of the building, a CxA may need to be retained to ensure all test scripts and procedures are up to date and properly documented.

### ➤ MONITORING-BASED COMMISSIONING BASICS

Monitoring-based commissioning is the integration of three components: permanent energy monitoring systems, real-time energy analysis, and ongoing commissioning. Ongoing Cx is a component of MBCx but should not be confused with it. When executed independently or without MBCx capabilities, ongoing Cx is a process of discrete functional performance testing and reporting over the lifetime of a building. In comparison, MBCx is an ongoing performance analysis of an operational building that provides real-time equipment performance information to the building operators. In other words, MBCx allows the user to track energy consumption, detect faulty equipment operations, and identify unusual energy or power consumption patterns as they occur.

MBCx can be accomplished via systems submetering, operational points trending, and real-time analyses, such as fault detection and sequence verification. The real-time analyses can be performed by either a service provider or an on-site energy manager who uses software to monitor data from building meters and the building automation system.

Additions to the commissioning plan may include the following:

- Roles and responsibilities for maintaining an MBCx plan throughout the first year of occupancy
- Monitoring requirements
  - Meters and meter locations
  - Points to be tracked
  - Frequency and duration of trend monitoring
  - Software
  - Hardware
  - Data access

- Limits of acceptable values for tracked points and metered values
- Specification of fault diagnostics or predictive algorithms for tracked points and metered values, if appropriate
- Elements used to evaluate performance, including the following:
  - Conflict between systems, such as simultaneous heating and cooling
  - Out-of-sequence operation of systems components
  - Unexpected energy and water usage profiles
- Action plan for identifying and correcting operational errors and deficiencies, including the ongoing documentation of an issues log
- Ongoing operator and occupant training to prevent errors
- Planning ongoing monitoring device calibration to maintain performance
- Frequency of analyses in the first year of occupancy (at least quarterly)

MBCx is most cost-effective when the metering and energy analysis software are integrated into the initial design of a building.

### BRIDGING THE GAP BETWEEN LEED BD+C AND LEED O+M

Much of the documentation created for EA Prerequisite Fundamental Commissioning, EA Credit Enhanced Commissioning, and the LEED certification process in general can be the basis for documenting compliance for LEED O+M, particularly EA Prerequisite Existing Building Best Management Practices, EA Credit Existing Building Commissioning, Analysis, EA Credit Existing Building Commissioning, Implementation, and EA Credit Ongoing Commissioning.

Table 2 identifies which documents created during a building's design and construction phases can be adapted and integrated into an ongoing building management plan.

| LEED BD+C document                  | LEED O+M document               | Example components                                                                                                                                                                                                                |
|-------------------------------------|---------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Owner's project requirements</b> | Current facility requirements   | <ul style="list-style-type: none"> <li>• Building occupancy schedule</li> <li>• Lighting level requirements</li> <li>• Space use requirements</li> </ul>                                                                          |
| <b>Systems manual</b>               | Operations and maintenance plan | <ul style="list-style-type: none"> <li>• Sequence of operation</li> <li>• Preventive maintenance plan</li> <li>• HVAC equipment setpoints</li> <li>• Equipment run-times</li> <li>• Operations and maintenance manuals</li> </ul> |
| <b>Basis of design</b>              | Systems narrative               | Descriptions of the mechanical, electrical, plumbing and envelope systems and equipment                                                                                                                                           |

If MBCx is implemented during initial operations and occupancy, project teams that apply for LEED O+M certification will find it easier to achieve the energy conservation tracking and measurement requirements of EA Credit Existing Building Commissioning, Implementation, and EA Credit Ongoing Commissioning.

### BUILDING ENVELOPE COMMISSIONING BASICS

Building envelope commissioning (BECx) is used to validate that the design and performance of materials, components, assemblies and systems achieve the objectives and requirements of the owner. The process comprises modeling, observing, testing, documenting, and verifying materials, components, assemblies, and systems to validate that both their use and installation meet the owner's requirements. It uses performance-oriented practices and procedures to verify that the project is achieving the owner's project requirements.

To complete BECx, the CxA should have access to the equipment required for completing all envelope-testing

activities, including the following:

- Infrared camera
- Tracer smoke
- Water bottle
- Calibrated water hose
- Moisture meter
- Field mock-up
- Blower door assembly

Examples of envelope systems tests include the following:

- Air infiltration
- Water infiltration
- Exhaust reentrainment
- Thermal performance
- Building envelope pressure
- Building envelope air leakage
- Daylighting glare control

Ideally, the CxA should have experience working with different envelope types and buildings of various sizes. The type of envelope and size of building will determine what tests are conducted and the equipment required.

For example, performing a blower door test to determine the air-tightness of an envelope may be appropriate for a 20,000-square-foot (1 860-square-meter) facility with brick façade and recessed windows. However, this type of test would be impractical for a 500,000-square-foot (46 450-square meter) commercial building with a curtain wall façade. For large structures, field mock-up or thermal imaging of the installed façade may better prevent or detect envelope leaks.

See NIBS Guideline 3–2006 2012 Building Enclosure Commissioning Process BECx, Annex U for additional guidance regarding envelope systems testing equipment and procedures.

## EXAMPLES

**TABLE 3.** Example training plan

| System, subsystem             | Spec Section | Hours per class | Training date(s) | Theory of operation | Hands-on demo | Remarks                                                                                                                                       |
|-------------------------------|--------------|-----------------|------------------|---------------------|---------------|-----------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Rooftop unit</b>           | 01783 - O&M  | 2               | 4/5/2011         | YES                 | YES           | Engage factory-authorized service representative to train maintenance personnel to adjust, operate, and maintain rooftop units                |
| <b>Makeup air unit</b>        | 01783 - O&M  | 1               | 4/5/2011         | YES                 | YES           | Engage factory-authorized service representative to train maintenance personnel to adjust, operate, and maintain the makeup air unit          |
| <b>Kitchen exhaust fans</b>   | 01783 - O&M  | 0.5             | 4/5/2011         | YES                 | YES           | Engage factory-authorized service representative to train maintenance personnel to adjust, operate, and maintain kitchen exhaust fans         |
| <b>General exhaust fans</b>   | 01783 - O&M  | 0.5             | 4/5/2011         | YES                 | YES           | Engage factory-authorized service representative to train maintenance personnel to adjust, operate, and maintain general in-line exhaust fans |
| <b>Packaged booster pumps</b> | 01783 - O&M  | 0.5             | 4/26/2011        | YES                 | YES           | Engage factory-authorized service representative to train maintenance personnel to adjust, operate, and maintain controls and pumps           |

| TABLE 4. Example submittal review log |       |                                                                                                                                                                                                                                                                    |                                |                                 |
|---------------------------------------|-------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|---------------------------------|
| Comment                               | Sheet | Comment                                                                                                                                                                                                                                                            | Design team comments, response | Final review comment, status    |
| 1                                     | M2-1  | FF 1C and 2C call for 30 kBtu/h at 3 gpm with 180°F entering and 160°F leaving and 300 cfm. Transmittal 312037-0031 states 34.8 kBtu/h at 3 gpm with 180°F and 156.82°F leaving, and 320 cfm. Designer to comment if slight deviation in parameters is acceptable. | Acceptable to engineer         | Item closed                     |
| 2                                     | M2-1  | FC 1F and CU 1F specified as 12 mbh at 95°F entering air temperature to the condenser. Transmittal 312037-0026 shows 11.9 kBtu/h at AHRI standard conditions. Design to comment if rating is acceptable.                                                           | Acceptable to engineer         | Item closed                     |
| 3                                     | M1-1C | AV 1 minimum cfm specified as 600, heating as 4,000. Transmittal 312037-0022 lists each as 800 cfm. Designer to check cfm discrepancy.                                                                                                                             | Noted by engineer on submittal | Final approved submittal needed |
| 4                                     | M1-1C | AV 2 minimum cfm specified as 360, heating as 2,400. Transmittal 312037-0022 lists each as 800 cfm. Designer to check cfm discrepancy.                                                                                                                             | Noted by engineer on submittal | Final approved submittal needed |
| 5                                     | M1-1C | TB-CO3 minimum cooling cfm specified as 100 on M1-1c. Transmittal 312037-0022 states as 250 cfm. Designer to confirm fm discrepancy.                                                                                                                               | Noted by engineer on submittal | Final approved submittal needed |

 **RATING SYSTEM VARIATIONS**

**Core and Shell**

Systems to be commissioned include only those that are included in the design team’s scope of work.

**Data Centers**

For small projects with computer room peak cooling loads of less than 2,000,000 Btu/h (600 kW), or a total computer room peak cooling load of less than 600,000 Btu/h (175 kW), the CxA must perform the following activities:

- During the design development or early construction documents phase, review the OPR, BOD, and design documents.
- Review the design documents and the BOD at 95% completion of the design documents.
- From construction documents through construction, back-check the review comments to ensure that they were addressed.

For projects with peak cooling loads of 2,000,000 Btu/h (600 kW) or more, or a total computer room peak cooling load of 600,000 Btu/h (175 kW) or more, the CxA must conduct at least three verification reviews of the BOD:

- During schematic design, conduct one verification review of design documents.
- During the design documents or early construction documents phase, complete one verification review of design documents.
- At the end of the construction documents phase, conduct one final verification review of 100% complete design documents, verifying achievement of the OPR and adjudication of previous review comments.

Functional testing for data centers often includes rigorous failure mode testing, including prime power backup, also known as mission-critical functional testing. The requirements of this type of commissioning often exceed the requirements of this credit.

The CxA should work with the owner to ensure that the requirements of the mission critical testing are appropriately addressed in the OPR. Additionally, the CxA should be aware of the mission-critical component of commissioning a data center and account for those differences in the contract with the owner.

Mission-critical testing for a data center can be completed by a CxA other than the CxA who completes the fundamental and enhanced commissioning.

## Healthcare

Health care facilities may have additional testing requirements for life safety equipment, including prime power backup that would not be addressed under the LEED fundamental and enhanced commissioning scope of work.

The CxA should work with the owner to ensure that the requirements of the life safety testing are appropriately addressed in the OPR. Additionally, the CxA should be aware of the life safety component of commissioning a health care facility and account for those differences in the contract with the owner.

Life safety testing for a health care facility can be completed by a CxA other than the CxA who completes the fundamental and enhanced commissioning.

## ➤ PROJECT TYPE VARIATIONS

### District Energy Systems (DES)

All downstream equipment is included in the scope of this credit. Such equipment includes heat exchangers, steam pressure reduction stations, pumps, valves, pipes, building electrical services, and controls.

All upstream equipment associated with serving the building is included in the scope if the project is taking credit for the efficiency of the DES under EA Credit Optimize Energy Performance using Option 1 (Path 2 or 3); if not, upstream equipment is excluded from the scope of this credit.

Commissioning applies only to the DES services used by the project building. For example, if the building is using only the heating services of a district heating and cooling plant, only the heating systems of the DES must be included in the scope. However, commissioning of upstream equipment applies to that entire portion of the DES, including both the central plant and the transmission and distribution systems.

All upstream DES equipment associated with serving the project building subject to EA Credit Enhanced Commissioning requirements may show compliance using either of the following approaches, depending on whether the DES is “new” or “preexisting.”

**New DES.** If the DES is new, being substantially upgraded, or has new additions, show that commissioning or recommissioning of all relevant DES equipment has taken place within three years of the date of the project building’s substantial completion.

A DES that is three years old or less at the date of the project building’s substantial completion is considered “new” construction and should be commissioned in accordance with the requirements of EA Credit Enhanced Commissioning. Similarly, any new equipment additions to an existing plant along with any controls or plant distribution equipment that have changed as a result of the additions must be commissioned in accordance with the requirements of EA Credit Enhanced Commissioning.

**Preexisting DES.** If the DES is in operation, show that preventive maintenance, corrective maintenance, and efficiency monitoring programs have been in place for all relevant DES equipment, ensuring that its energy efficiency meets or exceeds the DES design intent. Show that DES performance has been tested, recorded, and improved as needed under those programs within the past three years. Any reasonable efficiency metric may be used for this purpose, such as overall system coefficient of performance or kW/ton.

A DES more than three years old with no substantial new equipment additions is considered “preexisting.” Show proof that it was commissioned in accordance with the requirements of LEED O+M EA Credit Existing Building Commissioning—Implementation within the past three years or that the requirements of LEED O+M EA Credit Existing Building Commissioning—Ongoing Commissioning have been applied.

## ➤ CAMPUS

### Group Approach

All buildings in the group may be documented as one.

### Campus Approach

Ineligible. Each LEED project may pursue the credit individually.

## REQUIRED DOCUMENTATION

| Documentation                                                                       | Option 1, Path 1 | Option 1, Path 2 | Option 2 |
|-------------------------------------------------------------------------------------|------------------|------------------|----------|
| List of all tasks completed as part of Cx activities                                | X                | X                | X        |
| Training outline and participation list                                             | X                | X                | X        |
| Confirmation of systems manual delivery                                             | X                | X                | X        |
| Ongoing Cx plan                                                                     | X                | X                | X        |
| Inclusion of monitoring and tracking in Cx plan                                     |                  | X                |          |
| Inclusion of envelope in Cx plan                                                    |                  |                  | X        |
| Verification of additional reviews per Data Center requirements (data centers only) | X                | X                |          |

## RELATED CREDIT TIPS

**EA Prerequisite Fundamental Commissioning and Verification.** Enhanced commissioning is an extension of fundamental commissioning and cannot be completed if the scope of fundamental commissioning is not fulfilled.

**EA Credit Renewable Energy Production.** Renewable energy systems installed on site must be commissioned under this credit.

**EA Credit Demand Response.** Meeting the requirements for demand response will help project teams achieve the ongoing commissioning portions of this credit.

**EA Credit Advanced Energy Metering.** Although not a requirement of this credit, achievement of the related credit will ease the execution of the MBCx plan. Conversely, if a project is pursuing the related credit, MBCx is a powerful tool for extracting additional value from the existing advanced metering system.

## CHANGES FROM LEED 2009

This credit now includes monitoring-based commissioning and building envelope commissioning options.

## REFERENCED STANDARDS

ASHRAE Guideline 0–2005, *The Commissioning Process*: [ashrae.org](http://ashrae.org)

ASHRAE Guideline 1.1–2007, *HVAC&R Technical Requirements for the Commissioning Process*: [ashrae.org](http://ashrae.org)

NIBS Guideline 3–2012, *Exterior Enclosure Technical Requirements for the Commissioning Process*: [nibs.org](http://nibs.org)

## EXEMPLARY PERFORMANCE

Not available.

## DEFINITIONS

**basis of design (BOD)** the information necessary to accomplish the owner's project requirements, including system descriptions, indoor environmental quality criteria, design assumptions, and references to applicable codes, standards, regulations, and guidelines

**commissioning (Cx)** the process of verifying and documenting that a building and all of its systems and assemblies are planned, designed, installed, tested, operated, and maintained to meet the owner's project requirements

**commissioning authority (CxA)** the individual designated to organize, lead, and review the completion of commissioning process activities. The CxA facilitates communication among the owner, designer, and contractor to ensure that complex systems are installed and function in accordance with the owner's project requirements.

**district energy system (DES)** a central energy conversion plant and transmission and distribution system that provides thermal energy to a group of buildings (e.g., a central cooling plant on a university campus). It does not include central energy systems that provide only electricity.

**downstream equipment** the heating and cooling systems, equipment, and controls located in the project building or on the project site and associated with transporting the thermal energy of the district energy system (DES) into heated and cooled spaces. Downstream equipment includes the thermal connection or interface with the DES, secondary distribution systems in the building, and terminal units.

**operations and maintenance (O&M)** plan a plan that specifies major system operating parameters and limits, maintenance procedures and schedules, and documentation methods necessary to demonstrate proper operation and maintenance of an approved emissions control device or system

**owner's project requirements (OPR)** a written document that details the ideas, concepts, and criteria determined by the owner to be important to the success of the project

**systems manual** provides the information needed to understand, operate, and maintain the systems and assemblies within a building. It expands the scope of the traditional operating and maintenance documentation and is compiled of multiple documents developed during the commissioning process, such as the owner's project requirements, operation and maintenance manuals, and sequences of operation.

**upstream equipment** a heating or cooling system or control associated with the district energy system (DES) but not part of the thermal connection or interface with the DES. Upstream equipment includes the thermal energy conversion plant and all the transmission and distribution equipment associated with transporting the thermal energy to the project building or site.

## Attachment C

### **PROFESSIONAL SERVICES AGREEMENT**

THIS AGREEMENT is made and entered into this November 18, 2026, in the City of Dublin, County of Alameda, State of California, by and between CHABOT-LAS POSITAS COMMUNITY COLLEGE DISTRICT, a California Community College District, (hereinafter referred to as "DISTRICT") and **Consultant Name Here**, Consultants (hereinafter referred to as "CONSULTANT") having its principal place of business at **Consultant Address Here**.

#### **WITNESSETH:**

WHEREAS, DISTRICT desires to engage CONSULTANT to perform certain of the professional services, and

WHEREAS, CONSULTANT represents that it is fully qualified and willing to perform the services required hereunder, professional services for the "Commissioning Services for College Center Project at Chabot College", and

NOW THEREFORE, for and in consideration of the covenants and conditions hereinafter set forth, the parties do mutually agree as follows:

#### I. **STATEMENT OF SERVICES**

CONSULTANT hereby agrees to perform the tasks and services set forth in Exhibit "A", entitled "Statement of Services", attached hereto and made a part hereof, in accordance with the terms and conditions, sequence, time, and manner expressed herein.

#### II. **COMPENSATION AND PAYMENT**

For and in consideration of the services performed by CONSULTANT hereunder, DISTRICT agrees to pay CONSULTANT the sums set forth under Exhibit "B" entitled, "Cost of Work," attached hereto and made a part hereof.

#### III. **TERMS AND CONDITIONS**

CONSULTANT agrees to be bound by the "General Provisions for Professional Services Agreement" identified as Exhibit "C", also attached hereto and made a part hereof.

#### IV. **TERM**

The initial term of this Professional Services Agreement shall expire (9) weeks after the date upon which the DISTRICT and the CONSULTANT each execute the initial "Statement of Services" as identified in Exhibit "A", a counterpart copy hereof, deliver an executed counterpart copy hereof to the other. The Term of this Agreement may be renewed annually at the sole option and discretion of the DISTRICT ("the Compensation and Payment Terms"). Notwithstanding expiration of the Initial Term, if at such time, there are remaining Services to be performed by the CONSULTANT in connection with task assigned the CONSULTANT under this Agreement prior to expiration of the Term or Renewal Term, as applicable of this Agreement, the CONSULTANT shall continue to diligently perform and complete all such remaining services; notwithstanding expiration of the Term or Renewal Term of this Agreement, the DISTRICT will continue to make payment for the services performed in connection with such assigned tasks in accordance with the terms of the Project Assignment. If the DISTRICT elects to renew the Term for any Renewal Terms, the terms and conditions set forth herein shall be applicable and govern during the Renewal Term(s).

IN WITNESS WHEREOF, the authorized representatives of the parties hereto have executed this Agreement effective on the date first written above.

**"DISTRICT"**  
**CHABOT-LAS POSITAS**  
**COMMUNITY COLLEGE DISTRICT**

**"CONSULTANT"**  
**TBD**

By: \_\_\_\_\_

Date

Vice Chancellor, Business Services

By: \_\_\_\_\_

Date

Print Name: \_\_\_\_\_

Title: \_\_\_\_\_

**EXHIBIT "A"**  
**STATEMENT OF SERVICES**

1. CONSULTANT represents that it has the expertise, experience, personnel, and resources to perform the desired services. The CONSULTANT further represents that CONSULTANT and all personnel engaged to provide/perform services hereunder are and shall remain fully qualified and authorized, permitted and/or licensed under applicable law or regulations to perform such services. None of the work or services shall be subcontracted without the prior written approval of DISTRICT.
2. CONSULTANT will perform or cause to be performed those services described below in accordance with all laws, regulations, and applicable codes and with the provisions of this agreement. CONSULTANT shall use its best efforts to conduct the services in an expeditious and timely manner. All services hereunder shall be provided/performed in accordance with the standard of care for consultants providing/performing similar services.
3. A written definition of the Services to be performed by the CONSULTANT is set forth below and Scope of Services as defined in **Attachment 1** – dated ***“Enter Date Here”*** herein by this reference made a part of this Agreement.
4. No other terms and conditions shall apply other than as specified in Exhibit “C”, Section 17, “Extent of Agreement.”

**EXHIBIT "B"**  
**COMPENSATION AND PAYMENT**

1. For and in consideration of the performance and completion of the services hereunder, DISTRICT agrees to pay CONSULTANT for a LUMP SUM fee of ***Enter Fee Here*** Dollars (\$00,000.00) as referenced in the "Proposal for Materials Testing and Special Inspection Services" as defined in Attachment 1.
2. A written definition of the compensation to be paid to the CONSULTANT will be as stipulated in those subsequent Consulting Assignment(s) issued by the District to the Consultant, pursuant to Paragraph 3, of Exhibit "A", above. Subject to the specific terms and conditions of any subsequent Consulting Assignment(s)/Task Order issued to the CONSULTANT, payment of fees will be on a Time and Materials/Fixed Price basis, inclusive of all related expenses.

Once each month, CONSULTANT shall submit an invoice for services rendered during the previous month. Consultant invoice is to include the District Purchase Order number which will be provided independently by the District. Within thirty (30) days DISTRICT shall promptly pay CONSULTANT the amount due. If the consultant fails to timely and fully perform material obligations of the Consultant hereunder, notwithstanding any provision of the Agreement to the contrary, the DISTRICT may withhold from any amount due the CONSULTANT, with the withheld amounts being disbursed to the CONSULTANT after the CONSULTANT has fully cured such failure to performance, less costs, expenses, losses or damages sustained by the DISTRICT as a result of such failure to performance.

3. CONSULTANT shall not perform any additional service, or incur any additional expense in the performance of this Agreement without the prior written approval of DISTRICT.
4. DISTRICT shall not be responsible for payment or reimbursement of monies for additional services performed without the prior written approval of DISTRICT.
5. Should a change of scope or additional services be required, payment for such services will be determined at the time of DISTRICT's written approval, and such shall be amended to this Agreement.
6. DISTRICT will not be responsible for reimbursement for costs invoiced more than 90 days after the costs were incurred.

**EXHIBIT "C"**  
**GENERAL PROVISIONS FOR**  
**PROFESSIONAL SERVICES AGREEMENT**

1. Responsibility

CONSULTANT shall be solely responsible for the professional quality, technical accuracy and the coordination of all designs, drawings, specifications, calculations, data, reports or other Services to be provided hereunder, and shall, without any additional compensation, correct or revise any errors or deficiencies promptly upon notice or discovery thereof, provided that the CONSULTANT'S obligation to correct or revise errors/discrepancies in the services provided is in addition to and not in lieu of the consultant's liability to the DISTRICT for losses, costs, expenses or damages sustained by the DISTRICT as a result of such errors/deficiencies. Neither a review, approval or acceptance of, nor payment for, any of the Services required hereunder shall be construed as a waiver of any rights under this Agreement by DISTRICT or of any cause of action arising out of the performance of this Agreement, and CONSULTANT shall be liable for all damages caused by or arising out of CONSULTANT'S negligent performance of any Services provided or required hereunder.

2. Changes

DISTRICT may, upon ten (10) days written notice, make changes in the Scope of Services to be provided hereunder. If such changes result in an increase or a decrease in Services, the time required to performance thereof, or the compensation thereof, this Agreement shall be modified accordingly in writing in order for such changes to be valid.

3. Termination

A. Performance of the work and Services hereunder may be terminated by DISTRICT at any time, in whole or in part:

- (1) Whenever CONSULTANT shall default in its obligations hereunder or fails to make progress in the prosecution of the work or Services; or
- (2) For the convenience of DISTRICT.

B. Termination shall be effected by delivery to CONSULTANT of the Notice of Termination, specifying whether said termination is for default of CONSULTANT or for the convenience of DISTRICT, the extent to which performance of the work and Services is terminated; and the date upon which said termination is to become effective. If, after Notice of Termination for default, it is determined that CONSULTANT was not in default, or that CONSULTANT 's failure to fulfill its obligations was due to causes beyond its

control and without its fault or negligence, the Notice of Termination shall be deemed to have been issued for the convenience of DISTRICT.

- C. Following receipt of Notice of Termination, CONSULTANT shall discontinue performance on the date and to the extent specified therein, and deliver to DISTRICT the completed or partially completed plans, information, data, reports, estimates, summaries, materials, or other documents which, if performance had been completed, would be furnished to DISTRICT. CONSULTANT shall continue performance of such part of the work and Services which are not terminated by the Notice of Termination. CONSULTANT shall prepare and submit a termination claim for services satisfactorily performed, which shall include costs and expenses, reimbursable in accordance with the Terms of this Agreement, not previously paid to CONSULTANT, incurred prior to the effective date specified in the Notice of Termination, and DISTRICT may agree upon the whole or any part of the amount(s) claimed by CONSULTANT on account of the termination or partial termination.
- D. In the event of termination for default, DISTRICT shall be entitled to complete the work and Services hereunder or engage others to do so and in addition to whatever remedies it may have at law if the expense of completing said work and Services is greater than the amount CONSULTANT was to receive as compensation therefore, DISTRICT shall be entitled to recover the difference from CONSULTANT.

4. Confidentiality

CONSULTANT hereby agrees that all information provided by DISTRICT relating to the Services hereunder shall be considered confidential and proprietary, and shall not be reproduced, transmitted, used or disclosed by the CONSULTANT without the written consent of DISTRICT, except as may be necessary for the non-disclosing party to fulfill its obligations hereunder; provided that the limitation shall not apply to any information or portion thereof, which is within the public domain at the time of its disclosure. The requirements of this provision shall survive the term of this Agreement.

5. Ownership and Reuse of Documents

All non-proprietary data, information, reports, drawings, renderings, or other documents or materials prepared by CONSULTANT hereunder shall become the property of DISTRICT whether or not the work covered thereby is executed; provided that CONSULTANT may at the CONSULTANT'S cost and expense reproduce such items to retain as a record copy for its files.

6. Relationship

The legal relationship of CONSULTANT to DISTRICT hereunder shall be that of an independent contractor and not that of an agent or employee.

7. Examination of Records

If the Services performed by CONSULTANT hereunder are in support of any government contract or program, or under a cost reimbursable type agreement, or for any authorized additional service or reimbursable expense, CONSULTANT shall until the expiration of six (6) years after final payment hereunder, maintain such books and records under generally recognized accounting methods and permit inspection by DISTRICT or any of its authorized representatives.

8. Compliance with Laws

CONSULTANT shall comply with all applicable federal, state, and local laws, ordinances, rules, regulations, and orders in effect throughout the term of this Agreement, including, but not limited to Executive Order No. 11246 of September 24, 1965, as amended (regarding Equal Employment Opportunity), and the orders of the Secretary of Labor pursuant thereto.

9. Insurance

Prior to commencing work, the CONSULTANT shall procure and maintain at CONSULTANT'S own cost and expense for the duration of this Agreement the following insurance against claims which may arise from or in connection with the performance of the work or services hereunder by the CONSULTANT, its agents, representatives, employees or sub consultants.

A. Minimum Limits of Insurance.

CONSULTANT shall maintain limits of no less than:

(1) Commercial General Liability

Two Million Dollars (\$2,000,000) combined single limit per occurrence for bodily injury and property damage. Coverage shall be provided on an "occurrence" basis.

(2) Comprehensive Automobile Liability Insurance:

One Million Dollars (\$1,000,000) combined single limit per accident for bodily injury or property damage. The following coverages shall be included:

(a) Owned Automobiles.

(b) Hired Automobiles.

(c) Non-Owned Automobiles.

(3) Professional Liability Errors and Omissions Insurance: With a limit of not less than One Million Dollars (\$1,000,000).

(4) Workers' Compensation and Employer's Liability: Workers' compensation limits as required by the Labor Code of the State of California and Employer's Liability limits of One Million Dollars (\$1,000,000) per accident.

- B. Deductibles and Self-insured Retentions. Any deductibles or self-insured retentions must be declared to and approved by the DISTRICT. At the option of the DISTRICT, the insurer shall reduce or eliminate such deductibles (limited to general and automobile liability insurance only) or self-insured retentions with respect to the DISTRICT, its officials and employees, or the CONSULTANT shall procure a bond guaranteeing payment of losses and related investigation, claim administration, and defense expenses.
- C. Other Insurance Provisions
- (1) General Liability and Automobile Liability Coverages Only:
- (a) The DISTRICT, members of its boards and commissions, officers, and employees are to be covered as insureds as respects: liability arising out of activities performed by or on behalf of the CONSULTANT; premises owned, leased, or used by the CONSULTANT; and premises on which CONSULTANT is performing services on behalf of the DISTRICT. The coverage shall contain no special limitations on the scope of protection afforded to the DISTRICT, members of its boards and commissions, officers, and employees.
  - (b) The CONSULTANT'S insurance coverage shall be primary insurance as respects the DISTRICT, members of its boards and commissions, officers, and employees. Any insurance or self-insurance maintained by the DISTRICT, its officials, and employees, shall be in excess of Consultant's insurance and shall not contribute with it.
  - (c) Any failure to comply with reporting provisions of the policies shall not affect coverage provided to the DISTRICT, members of its boards and commissions, officers, or employees.
  - d) Coverage shall state that CONSULTANT'S insurance shall apply separately to each insured against whom a claim is made or suit is brought, except with respect to the limits of the insurer's liability.
- (2) Workers' Compensation and Employer's Liability Coverages:  
The insurer shall agree to waive all rights of subrogation against the DISTRICT, members of its boards and commissions, officers, and employees for losses arising from work performed by CONSULTANT for the DISTRICT.
- (3) All Coverages.
- (a) Each insurance policy required by this Agreement shall be endorsed to state that coverage shall not be suspended, voided, canceled, or reduced in coverage limits except after thirty (30) days prior written notice has been given to the DISTRICT.

- (b) If CONSULTANT, for any reason, fails to maintain insurance coverage which is required pursuant to this Agreement, such failure shall be deemed a material breach of this Agreement. The DISTRICT, at its sole option, may terminate this Agreement in accordance with Provision Number 14, Termination. Alternatively, the DISTRICT may purchase such required insurance and may deduct that cost from sums owed to Consultant provided CONSULTANT does not obtain the insurance itself within five (5) days of receipt of the DISTRICT'S notice of intent.
- (c) CONSULTANT agrees to add designated agents of the DISTRICT as additional insured under the above policies as mutually agreed.

D. Acceptability of Insurers.

Insurance is to be placed with insurers rated A: 6 or better by A.M. Best's rating-service.

E. Verification of Coverage.

CONSULTANT shall furnish the DISTRICT with written evidence acceptable to the DISTRICT of insurance and minimum coverage amounts required by this Agreement.

F. Sub-consultants.

Prior to authorizing work by a Sub-consultant to proceed, CONSULTANT shall provide to the DISTRICT evidence acceptable to the DISTRICT of insurance demonstrating satisfactory compliance by each Sub-consultant with the insurance requirements stated herein.

10. Indemnity

To the fullest extent permitted by law, the CONSULTANT shall indemnify, defend and hold harmless the District and its employees, officers, Board of Trustee, Trustees, agents and representatives from any and all claims, demands, losses, responsibilities or liabilities for: (i) injury or death of persons; (ii) damage to property or: (iii) other costs or charges, directly or indirectly arising out of or attributable, in whole or in part, to the negligent or willful acts, omissions, errors and/or other conduct of CONSULTANT, its Design Consultants or the employees, agents and representatives of CONSULTANT or any of its Design Consultants in the performance of obligations or services or in providing work product under this Agreement. The foregoing shall include without limitation, attorney's fees and costs incurred by the District. The provisions hereof shall apply during the period of CONSULTANT'S performance under this Agreement and shall survive the termination of this Agreement until any such claim, demand, loss, responsibility or liability covered by the provisions hereof is barred by the applicable Statue of Limitations.

11. Remedies.

The rights and remedies set forth herein shall be in addition to any other remedies provided by law, and waiver by DISTRICT of any provision hereunder or a breach thereof by DISTRICT shall not be deemed a waiver of future compliance thereof and such provision shall continue in full force and effect.

12. Severability.

In the event that any term or provision of this Agreement is held to be illegal, invalid, or unenforceable under the laws, regulations or ordinances of any federal, state, or other government to which this Agreement is subject, such term or provision shall be deemed severed from this Agreement and the remaining terms and provisions shall remain unaffected thereby and continue in full force.

13. Notices.

All notices required or permitted under this Agreement shall be considered as duly given to any party for all purposes hereof only if given in writing and hand delivered; or sent by registered or certified mail, postage prepaid and return receipt requested; or sent by electronic email; with confirming receipt; telex, or telegram, and also confirmed by registered mail, postage prepaid and return receipt requested, addressed as set forth below, or to such other address as may be designated by notice given as provided above. All notices shall be effective upon first receipt, unless otherwise specified herein.

DISTRICT:

Chabot-Las Positas Community College  
District 7600 Dublin Blvd., 3<sup>rd</sup> Floor  
Dublin, CA 94568  
Attention: Owen Letcher, Vice Chancellor Facilities/Bond  
Program & Operations  
Cc to Ann Kroll, Project Planner, Manager  
Facilities/Bond Program  
Phone # (925) 424-1863

CONSULTANT:

Consultant Name  
Address 1  
Address 2  
Contact Name  
Phone #  
Email

14. Modification.

This Agreement may only be modified by a written amendment hereto, duly executed by both parties.

15. Successors and Assignment.

CONSULTANT binds itself, its successors, assigns, and legal representatives to DISTRICT with respect to all of the covenants of this Agreement and further agrees that it shall not sell, assign, transfer, mortgage, pledge or in any manner encumber its interests in this Agreement or in any proceeds from this Agreement without the prior written consent of DISTRICT. In the event that CONSULTANT violates the foregoing prohibition, or in the event that CONSULTANT without the prior written consent of DISTRICT, which consent shall not be unreasonably withheld, sells, assigns, transfers, mortgages, pledges or in any manner encumbers, except as security for credit agreements, all or substantially all of its corporate assets, or directly or indirectly undergoes a change in control of its ownership, DISTRICT shall be entitled, at its sole option:

- A. To require the CONSULTANT'S successor to continue to perform under this Agreement and to continue to satisfactorily fulfill CONSULTANT'S obligations under this Agreement; or
- B. To terminate this Agreement. In such case CONSULTANT shall be responsible for any and all liabilities arising from such termination. In the event that DISTRICT replaces CONSULTANT with another consultant after such termination, CONSULTANT shall be responsible for any and all costs, expenses and liabilities arising from such substitution. In any event, CONSULTANT shall remain liable for any and all work product or services provided by it prior to the termination.

This Agreement and the terms hereof are binding upon and inure to the benefit of the successors and assigns of both the District and the CONSULTANT.

16. Disputes.

- A. Continuation of Consultant Assignment. Except in the event of the District's failure to make undisputed payment of the Contract Price due the Consultant, notwithstanding any disputes between District and Consultant hereunder, Consultant and District shall each continue to perform their respective obligations hereunder; including the obligation of the Consultant to continue to provide and perform services hereunder pending a subsequent resolution of such disputes.
- B. Mandatory Mediation. All claims, disputes and other matters in controversy between the Consultant and the District arising out of or pertaining to this Agreement shall be submitted for resolution by non-binding mediation conducted under the auspices of the American Arbitration Association ("AAA") and the Construction Mediation Rules of the AAA in effect at the time that a Demand For Mediation is filed. The commencement and

completion of mediation proceedings pursuant to the foregoing is a condition precedent to either the District or the Consultant commencing arbitration proceedings.

- C. Binding Arbitration. Claims, disputes or other matters in question between the parties to this Agreement arising out of or relating to this Agreement or breach thereof which are not resolved through the mandatory mediation procedures set forth above shall be resolved by binding arbitration conducted in accordance with the Construction Industry Arbitration Rules of the American Arbitration Association in effect at the time of the filing of a Demand for Arbitration, provided that the Parties may by mutual agreement modify such Rules or adopt other rules governing the conduct of arbitration proceedings.
  - D. Demand for arbitration shall be filed in writing with the other party to this Agreement and with the American Arbitration Association. A demand for arbitration shall be made within a reasonable time after the claim; dispute or other matter in question has arisen. In no event shall the demand for arbitration be made after the date when institution of legal or equitable proceedings based on such claim, dispute or other matter in question would be barred by the applicable statutes of limitations.
  - E. No arbitration arising out of or relating to this Agreement shall include, by consolidation, joinder or in any other manner, an additional person or entity not a party to this Agreement, except by written consent containing a specific reference to the Agreement signed by the District, CONSULTANT and any other person or entity sought to be joined. Consent to arbitration involving an additional person or entity shall not constitute consent to arbitration of any claim, dispute or other matter in question not described in the written consent or with a person or entity not named or described therein. The foregoing agreement to arbitrate and other agreements to arbitrate with an additional person or entity duly consented to by the parties to this Agreement shall be specifically enforceable in accordance with applicable law in any court having jurisdiction thereof.
  - F. The award rendered by the arbitrator or arbitrators shall be final, and judgment may be entered upon it in accordance with applicable law in any court having jurisdiction thereof.
17. Extent of Agreement.  
The Agreement and Exhibit A "Statement of Services," Exhibit B "Compensation and Payment," and Exhibit C," General Provisions for Professional Services Agreement," contain all of the promises, representations and understandings of the parties hereto and supersedes any previous understandings, commitments,

proposals or agreements, whether oral or written, and may only be modified as hereinbefore provided.

18. Governing Laws.

Unless otherwise specified herein, this Agreement shall be governed by the law of the State of California.

19. Professional Registration.

If the CONSULTANT's Services under this Agreement involve the production of documents or drawings that require signing or sealing by a registered professional, CONSULTANT warrants that it has such qualified person assigned to this Project who is registered in the State(s) of California.

20. Time.

Time is of the essence in the performance and completion of the CONSULTANT'S obligations under the Agreement.

END OF PAGE

## ATTACHMENT D

**NON-COLLUSION AFFIDAVIT**

STATE OF CALIFORNIA )  
COUNTY OF \_\_\_\_\_ )

**PROJECT: COMMISSIONING SERVICES**

I, \_\_\_\_\_, being first duly sworn, deposes and says that I am  
(Typed or Printed Name)  
the \_\_\_\_\_ of \_\_\_\_\_, the party submitting  
(Title) (Bidder Name)  
the foregoing Bid Proposal ("the Bidder"). In connection with the foregoing Bid Proposal, the undersigned declares, states and certifies that:

1. The Bid Proposal is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization or corporation.
2. The Bid Proposal is genuine and not collusive or sham.
3. The bidder has not directly or indirectly induced or solicited any other bidder to put in a false or sham bid, and has not directly or indirectly colluded, conspired, connived, or agreed with any other bidder or anyone else to put in sham bid, or to refrain from bidding.
4. The bidder has not in any manner, directly or indirectly, sought by agreement, communication, or conference with anyone to fix the bid price, or that of any other bidder, or to fix any overhead, profit or cost element of the bid price or that of any other bidder, or to secure any advantage against the public body awarding the contract or of anyone interested in the proposed contract.
5. All statements contained in the Bid Proposal and related documents are true.
6. The bidder has not, directly or indirectly, submitted the bid price or any breakdown thereof, or the contents thereof, or divulged information or data relative thereto, or paid, and will not pay, any fee to any person, corporation, partnership, company, association, organization, bid depository, or to any member or agent thereof to effectuate a collusive or sham bid.

Executed this \_\_\_\_ day of \_\_\_\_\_, 20\_\_ at \_\_\_\_\_.  
(City, County and State)

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct.

\_\_\_\_\_  
Signature

\_\_\_\_\_  
(Address)

\_\_\_\_\_  
Name Printed or Typed

\_\_\_\_\_  
(City, County and State)

(\_\_\_\_\_) \_\_\_\_\_  
(Area Code and Telephone Number)