California State Polytechnic University, Pomona
Master Plan Update

MP Advisory Committee Update

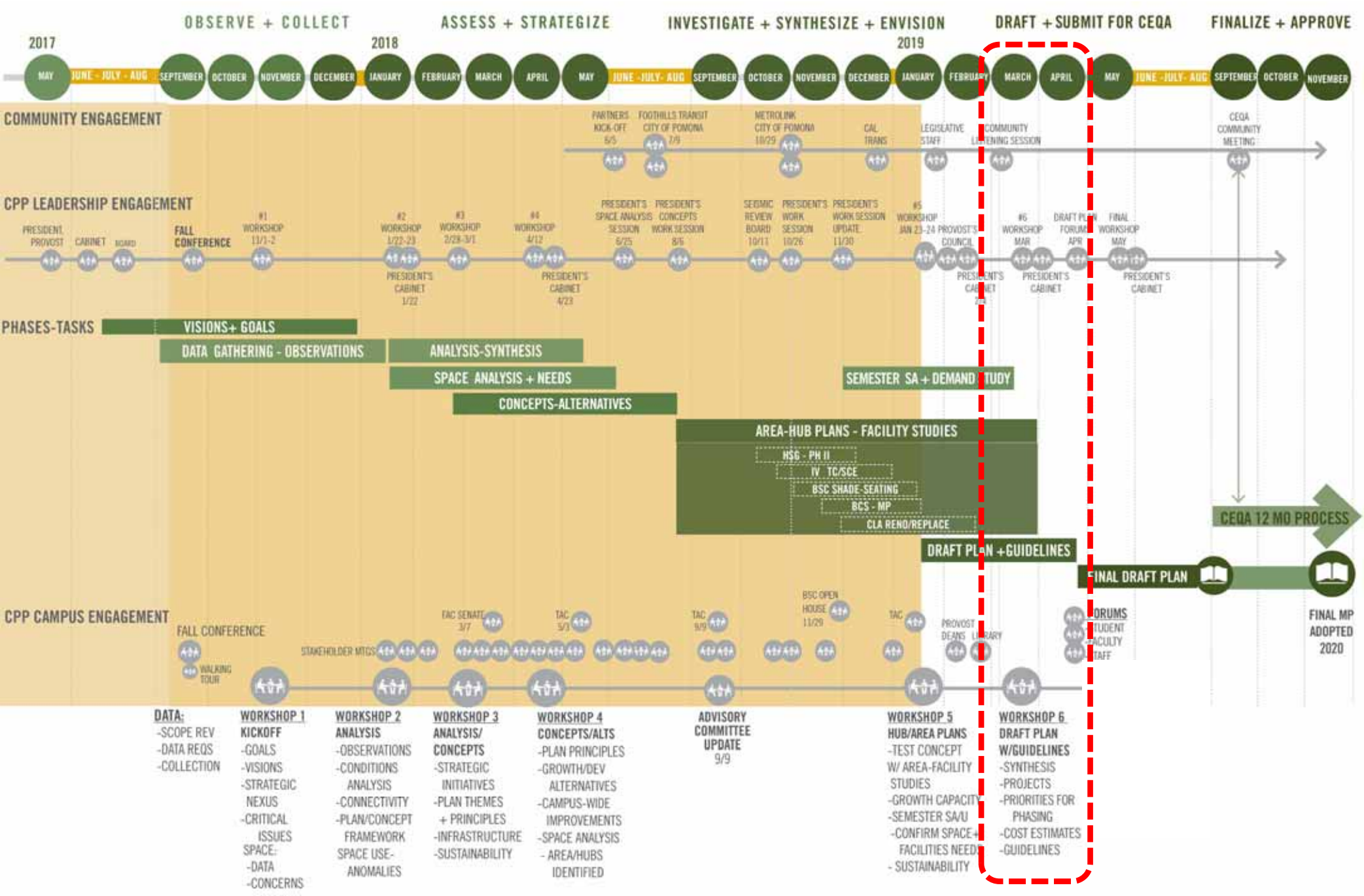
1 May 2019

AYERS SAINT GROSS

AGENDA

1 May 2019

1) Master planning schedule
2) Area-Hub Studies In-Progress *(towards a preliminary draft plan)*
    a. specific area + facility studies towards CIP
    b. campus wide improvement concepts
3) Space Utilization Analysis
4) Next Steps


OBSERVE + COLLECT
ASSESS + STRATEGIZE
INVESTIGATE + SYNTHESIZE + ENVISION
DRAFT + SUBMIT FOR CEQA
FINALIZE + APPROVE
2017
2018
2019
MAY
JUNE - JULY - AUG
SEPTEMBER
OCTOBER
NOVEMBER
DECEMBER
JANUARY
FEBRUARY
MARCH
APRIL
MAY
JUNE - JULY- AUG
SEPTEMBER
OCTOBER
NOVEMBER
DECEMBER
JANUARY
FEBRUARY
MARCH
APRIL
MAY
JUNE - JULY- AUG
SEPTEMBER
OCTOBER
NOVEMBER
COMMUNITY ENGAGEMENT
PARTNERS KICK-OFF 6/5
FOOTHILLS TRANSIT CITY OF POMONA 7/9
METROLINK CITY OF POMONA 10/29
CAL TRANS
LEGISLATIVE STAFF
COMMUNITY LISTENING SESSION
CEQA COMMUNITY MEETING
CPP LEADERSHIP ENGAGEMENT
PRESIDENT, PROVOST
CABINET
BOARD
FALL CONFERENCE
#1 WORKSHOP 11/1-2
#2 WORKSHOP 1/22-23
PRESIDENT'S CABINET 1/22
#3 WORKSHOP 2/28-3/1
#4 WORKSHOP 4/12
PRESIDENT'S CABINET 4/23
PRESIDENT'S SPACE ANALYSIS SESSION 6/25
PRESIDENT'S CONCEPTS WORK SESSION 8/6
SEISMIC REVIEW BOARD 10/11
PRESIDENT'S WORK SESSION 10/26
PRESIDENT'S WORK SESSION UPDATE 11/30
#5 WORKSHOP JAN 23-24
PROVOST'S COUNCIL
PRESIDENT'S CABINET 2/6
#6 WORKSHOP MAR
PRESIDENT'S CABINET
DRAFT PLAN FORUM APR
FINAL WORKSHOP MAY
PRESIDENT'S CABINET
PHASES-TASKS
VISIONS+ GOALS
DATA GATHERING - OBSERVATIONS
ANALYSIS-SYNTHESIS
SPACE ANALYSIS + NEEDS
SEMESTER SA + DEMAND STUDY
CONCEPTS-ALTERNATIVES
AREA-HUB PLANS - FACILITY STUDIES
HSS - PH II
IV TC/SCE
BSC SHADE-SEATING
BCS - MP
CLA RENO/REPLACE
CEQA 12 MO PROCESS
DRAFT PLAN +GUIDELINES
FINAL DRAFT PLAN
FINAL MP ADOPTED 2020
CPP CAMPUS ENGAGEMENT
FALL CONFERENCE
WALKING TOUR
STAKEHOLDER MTGS
FAC SENATE 3/7
TAC 5/3
TAC 9/9
BSC OPEN HOUSE 11/20
TAC
PROVOST DEANS
LIBRARY
FORUMS STUDENT FACULTY STAFF
DATA:
-SCOPE REV
-DATA REQS
-COLLECTION
WORKSHOP 1
KICKOFF
-GOALS
-VISIONS
-STRATEGIC NEXUS
-CRITICAL ISSUES
SPACE:
-DATA
-CONCERNS
WORKSHOP 2
ANALYSIS
-OBSERVATIONS
-CONDITIONS ANALYSIS
-CONNECTIVITY
-PLAN/CONCEPT FRAMEWORK
SPACE USE-ANOMALIES
WORKSHOP 3
ANALYSIS/ CONCEPTS
-STRATEGIC INITIATIVES
-PLAN THEMES + PRINCIPLES
-INFRASTRUCTURE
-SUSTAINABILITY
WORKSHOP 4
CONCEPTS/ALTS
-PLAN PRINCIPLES
-GROWTH/DEV ALTERNATIVES
-CAMPUS-WIDE IMPROVEMENTS
-SPACE ANALYSIS - AREA/HUBS IDENTIFIED
ADVISORY COMMITTEE UPDATE 9/9
WORKSHOP 5
HUB/AREA PLANS
-TEST CONCEPT W/ AREA-FACILITY STUDIES
-GROWTH CAPACITY
-SEMESTER SA/U
-CONFIRM SPACE+ FACILITIES NEEDS
- SUSTAINABILITY
WORKSHOP 6
DRAFT PLAN W/GUIDELINES
-SYNTHESIS
-PROJECTS
-PRIORITIES FOR PHASING
-COST ESTIMATES
-GUIDELINES

Master Plan - Facility | Area Studies

Facility Needs + CIP Priorities

Five Themes

emerged from stakeholder engagement + CPP Strategic Academic plans

1 Student Experience Above All

All decisions put student experience at the forefront, from physical facilities and accessibility *(including the online environment)* to Cal Poly Pomona programs and policies.

2 Polytechnic Approach

The campus is a laboratory which supports teaching and learning by doing, inside and outside of the traditional educational settings.

3 Connectivity is Key

Connectivity is key to orientation/wayfinding and ease of circulation for a safe, inclusive and universally accessible campus.

4 Pedestrian Campus in a Commuter Reality

Campus has to be safe, accessible and convenient *(by multiple modes of transportation)*, and walkable - bikeable for all students, faculty, staff and visitors.

5 Sustainable in All Aspects

Decisions must be sustainable environmentally, economically, socially and consistent with Cal Poly's values, commitments, goals.

CAPITAL IMPROVEMENT PROJECTS

Decision-making Matrix

Cal Poly Pomona Master Plan

Matrix for Strategic Decision-Making on Capital Investment & Funding Priorities

Strategic Plan

Values	1	Student Learning + Success	educational experience, student well-being, safety, growth
	2	Academic Excellence	teaching/learning/activities + faculty scholarship
	3	Experiential Learning	integrative, collaboration, learning-by-doing
	4	Inclusive	welcoming, reflecting community, value diversity
	5	Community Engagement	nurture partnerships, relationships, stakeholders
	6	Social + Environmental Responsibility	commitment to each other, society, environment

VALUES provide the vetting process for capital decisions

- Does this improve student experience (safety, well-being), learning and success (retention, persistence, completion)?
- Does this advance excellence in teaching or scholarship?
- Does this support integrative, collaborative experiential learning?
- Does this advance inclusivity goals (including affordability)?
- Is there a project partner (foundation, industry, community) or a potential to attract or expand relationships and engagement?
- Does this contribute to CPP Goals (Graduation Initiative, Climate Action Plan, etc.)?

				policy	programs	physical		Master Plan impact:	primary	secondary	tertiary	Rank for meeting physical need **Physical Needs:** *(to drive new projects, also see building conditions ratings)*
Initiatives + Goals	1	Quality programs that promote Integrative Learning	experiential applied learning for all students, all disciplines		■	■		*all instructional space capable of applied/active learning*	■			upgrade instructional space (AV/IT, SMART bds, white bds, FFE)
			expand opportunities for integrative learning, creativity		■	■		*expand instructional space types + quantity*	■			apply new space type-standards (experiential classroom, project studio, etc.)
			centers of excellence + identity, synergies, innovation	■	■	■		*is a physical expression desirable? Should be flexible*		■		provide locations to 'showcase' identity, excellence; near main entrances, 1st fl
			reimagine Gen Ed in polytechnic context		■	■		*more active learning classrooms, increase avg sf/seat*	■			add/convert classrooms to active-learning lecture rms, incl large lecture rms
	2	Enhance student Learning, Development + Success	re-envision co-curricular experience		■	■		*identify + improve co-curricular spaces*	■			improve BSC meeting space, add flex studios, project labs
			optimize student retention, persistence from HUC		■	■		*raise visibility of "learning-by-doing" activities*		■		ground floor locations (+ outdoor space) for project labs, flex studios
			strategies to increase graduation rates									
			expand digital student experience, support services		■	■		*provide hardware for student use, enhance IT infrastructure*		■		expand 24 hr study computer lab, laptop loaner stations in library, BSC
			encourage student engagement experiences		■	■		*greater capacity for ASI, BSC, BRIC, open space, fields*	■	■		BSC upgrade mtg rms + expansion; ext shade/seating
			create culture of wellbeing + resiliency	■	■	■		*improve facilities, move closer to student housing + activity space (BRIC, BSC)*	■	■		replace Health-Wellness Center w/new building on the Commons (across from the BRIC) adjacent to the new Dining Hall
	3	Prepare Students for Future of Work + Civic Engagement	student success plan (pre-admit to post-grad)		■	■						
			career readiness model w/engagement		■	■		*support w/conf, seminar, incubator, maker spaces*		■		career center? Conference + sandbox, innovation lab (flex project space)
			i-Lab for civic engagement		■	■		*ILAB opened, expand quantity + quality*		■		ILAB expansion/, more locations?; expand CTTI space (instruction, lab, incubator)
	4	Strengthen Economic Vitality + Impact	elevate reputation, showcase polytechnic	■								
			diversify revenue streams		■	■		*new development opportunities?*	■	■		expand CTTI space (instruction, lab, incubator); IV development, Lanterman?
			connect to local, national partners							■		CEIS Community Reading Clinic; conf space, maker space, incubator/start-up
			long-range strategies to optimize physical resources	■	■	■		*Taskforce, Sustainability Plan+ Regeneration strategies*		■		Lyle Center + pilot projects-models (wind, solar, water projects)
	5	Advance Organizational Development + Employee Excellence	great place to work		■	■		*workspace modernization, SSB as example*		■	■	new faculty suite standard (more FFE, less construction)
			recognize/reward									
			increase retention									
			expand prof dev opportunities		■	■		*support w/conf/seminar space, Prof Dev sandbox*	■	■		faculty center w/conference, sandbox-PD-training + video/recording studio
			improve infrastructure + processes		■	■		*improve IT infrastructure*	■	■		upgrade system capacity, distribution infrastructure?
			model sustainability		■	■		*Operational strategies -use existing bldgs w/LEED standards; reinstate Sustainability Taskforce to develop a full Sustainability Plan*	■	■		Sustainability Coordinator in President's office?

Academic Plan

application of knowledge	Inclusive Polytechnic University		■	■		*co-curricular, experiential, collaborative, flexible space*	■	■		add/convert classrooms to active-learning lecture rms, incl large lecture rms
critical thinking + problem solving	Experiential Learning by Doing		■	■		*learning-doing classrooms-labs, student project space*	■	■		flex faculty or student project/research/exploratory space
creativity, discovery, innovation	Support to Exemplify Inclusive Polytechnic Identity			■		*improve/add faculty suites, interdisciplinary prof dev space*	■	■		Improve faculty suites + student-faculty engagement space; interdisciplinary PD 'sandbox'
diverse multi-disciplinary perspectives	Inclusive Student Success	■	■	■		*broader sustainability plan-policies (equity, social justice)*		■		HVAC for summer sessions; space for SEES, MEP, EOP
integration of technology	Degree Program Creation and Growth		■	■		*IT infrastructure, digital dev/training sandboxes*		■	■	online course development facilities, training sandbox
collaborative learning	Shaping the Undergraduate Student Population		■	■		*capacity for growth, esp transfer, international students*	■			add instructional capacity -- classroom demand study?
community + global engagement	Role + Growth of Graduate Programs		■	■		*new graduate programs (polytechnic, workforce)*		■	■	grad support + research space; space to interact w/community-industry partners
career + professional readiness	Enhancement-Development of Space Supporting Polytechnic		■	■		*outreach space, incubators, research space*	■	■	■	21st C, flexible, collaborative, interdisciplinary, start-up, pop-up, sticky SPACE
												from Academic Plan Action Steps

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			optimize student retention, persistence from HUC
			strategies to increase graduation rates
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	5	Advance Organizational Development + Employee Excellence	great place to work
			recognize/reward
			increase retention
			expand prof dev opportunities
			improve infrastructure + processes
			model sustainability

Projects grow out of the campus needs, guided by Strategic Plan, Academic Plan & Master Plan

Strategic Plan 2017-21

Values Questions

All major projects are vetted by how they address these questions.

1 Student Learning + Success

Does this project improve student experience (safety, well-being), learning and success (retention, persistence, completion)?

2 Academic Excellence

Does this project advance excellence in teaching or scholarship?

3 Experiential Learning

Does this project support integrative, collaborative experiential learning?

4 Inclusive

Does this project advance inclusivity goals (including affordability)?

5 Community Engagement

Does this project have a project partner (foundation, industry, community) or a potential to attract or expand relationships and engagement?

6 Social & Environmental Responsibility

Does this project contribute to our goals (Graduation Initiative, Climate Action Plan, etc.)?

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policy | program | physical

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Master Plan impact:

- *all instructional space capable of applied/active learning*
- *expand instructional space types + quantity*
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- *workspace modernization, SSB as example*
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- *Operational strategies -use existing bldgs w/LEED standards; reinstate Sustainability Taskforce to develop a full Sustainability Plan*

primary | secondary | tertiary

Rank for meeting physical need

Physical Needs: *(to drive new projects, also see building conditions ratings)*

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collaborative learning	Shaping the Undergraduate Student Population	*capacity for growth, esp transfer, international students*
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career + professional readiness	Enhancement-Development of Space Supporting Polytechnic	*outreach space, incubators, research space*

from Academic Plan Action Steps

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- 21st C, flexible, collaborative, interdisciplinary, start-up, pop-up, sticky SPACE

from Academic Plan Action Steps

CAPITAL IMPROVEMENT PROJECTS

Decision-making Matrix

Initiative + Goals: master plan impact

- Policy? Programs? Physical?
- Physical needs + implementation steps

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Rank for meeting physical need: primary / secondary / tertiary

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community + global engagement	Role + Growth of Graduate Programs
career + professional readiness	Enhancement-Development of Space Supporting Polytechnic

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- *broader sustainability plan-policies (equity, social justice)*
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from Academic Plan Action Steps

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from Academic Plan Action Steps

Implementation Decision Questions

- Planning: *master plan addresses current needs + future needs and provides a plan for implementation*
- Facility conditions: *existing space resources have to be maintained/upgraded periodically to remain functional*
- Infrastructure:
    - *services, utilities and distributing systems have to have capacity or be expanded to support new space*
    - *campus systems (roads, walkways, transportation, etc.) have to be maintained or expanded as needed*
- Sustainability: *most sustainable building is the one you don't build, evaluate re-purposing feasibility*
- Existing buildings-sites: *is an existing use displaced? Is there a new location, surge space, or temp facilities?*
- Temporary space cost vs Permanent space: *new building may be more cost effective*
- Sequence: *what has to be done before starting construction Phasing Major projects take 4-5 years*
- Construction logistics: *plan access for materials, equipment, workers; staging area, security and safety*
- Migration Planning: *after moving-in the vacated space may need renovation before back-filling*
- Project Type: *non-State or self-funding projects have different funding options, delivery options (P3, D/B); and timing may relate to market demand or projected revenues;*
- Funding Sources: *multiple funding sources increase likelihood of getting it done*

Master Plan - Facility | Area Studies

Facilities Conditions + Needs Assessments

SEISMIC CONSTRAINTS

Seismic Priority List:

Priority 1:

- 98 CLA
- 76 Kellogg West

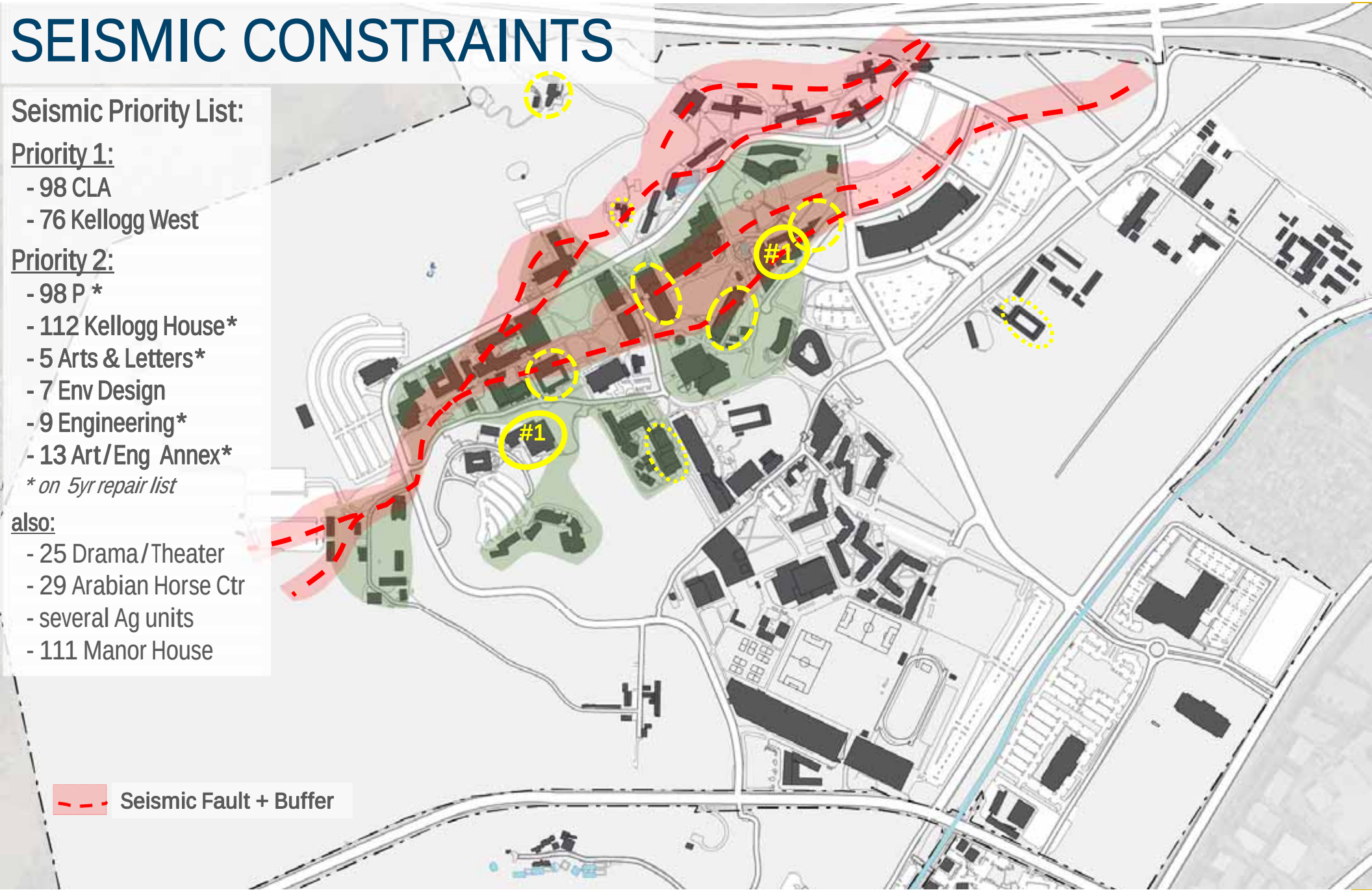
Priority 2:

- 98 P *
- 112 Kellogg House*
- 5 Arts & Letters*
- 7 Env Design
- 9 Engineering*
- 13 Art/Eng Annex*

** on 5yr repair list*

also:

- 25 Drama/Theater
- 29 Arabian Horse Ctr
- several Ag units
- 111 Manor House



FACILITIES CONDITION (FCI) - ALL

FACILITIES CONDITION (FCI) - POOR

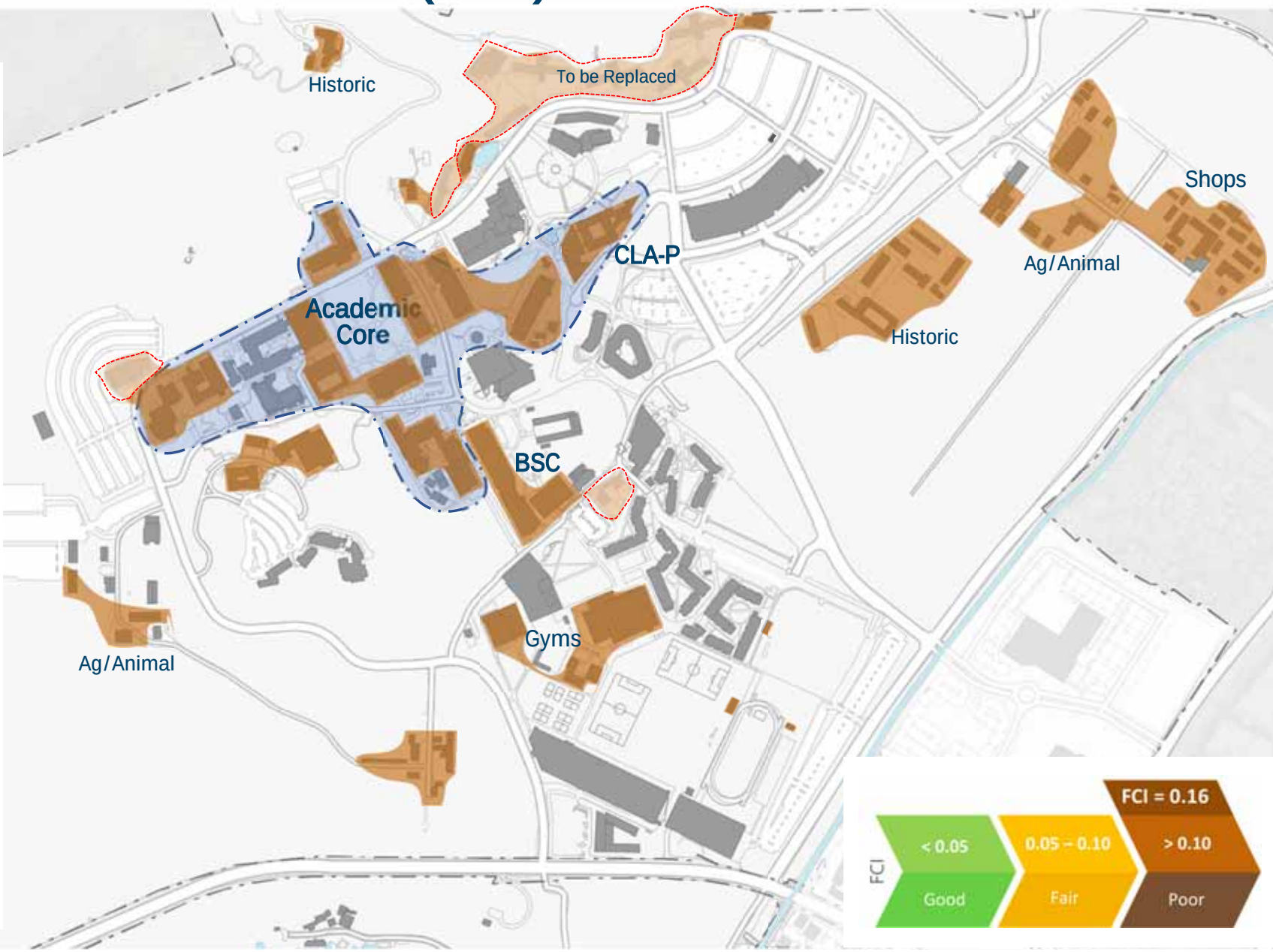
Academic
- Building 1
- Science
- Agriculture Classrms
- Letters, Arts &SS
- Environmental Design
- University Office Bldg
- Engineering
- Art-Engineering Annex
- CLA-P
- Music
- Drama/Theater
- English Language Inst
- Gyms – May, Kellogg
- AG + Animal Facilities*
- FM + Support/Shops*

**multiple buildings*

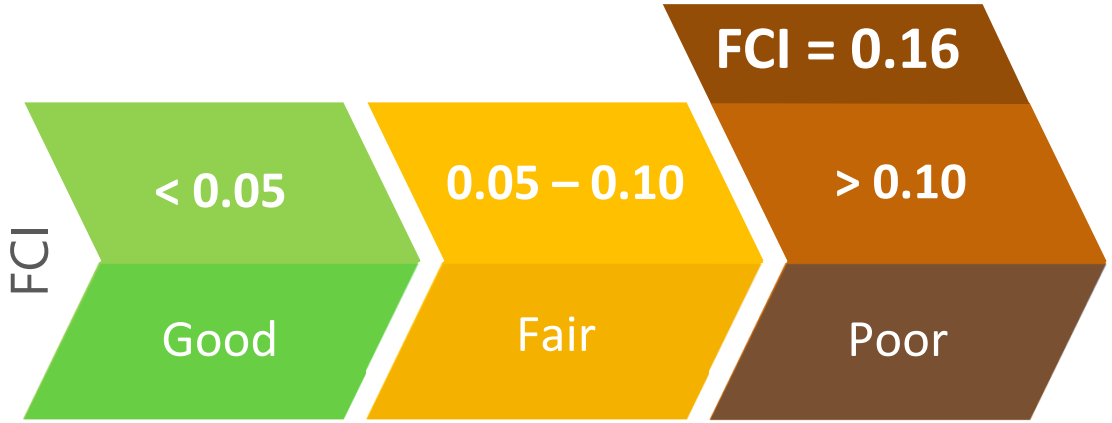
Student Life
- BSC + Bookstore
- Campus Center
- Health-Wellness Center
- Childcare Center
- Kellogg West

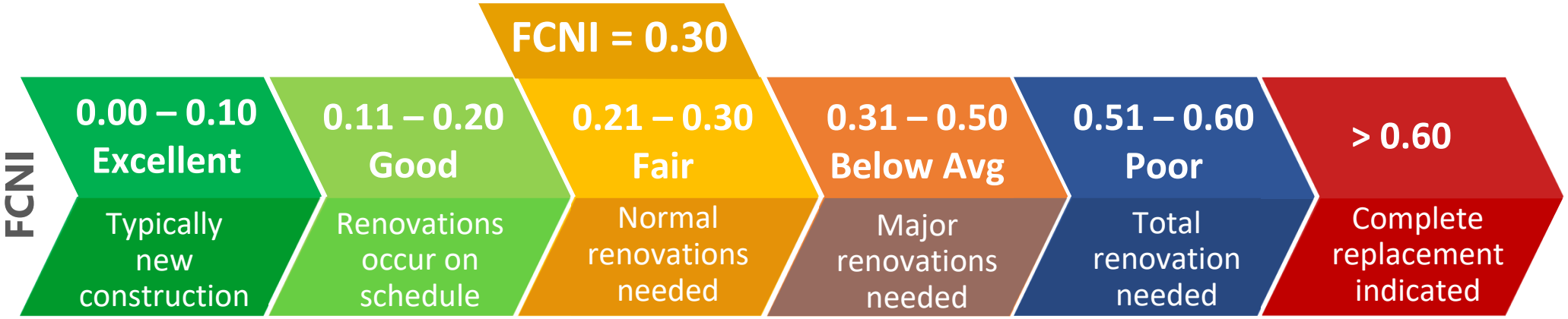
Historic
- Manor House
- La Cienega Center
- Arabian Horse Center

To be Replaced
- Res Hall *(greys, reds)*
- Los Olivos



FACILITIES CONDITION NEEDS INDEX

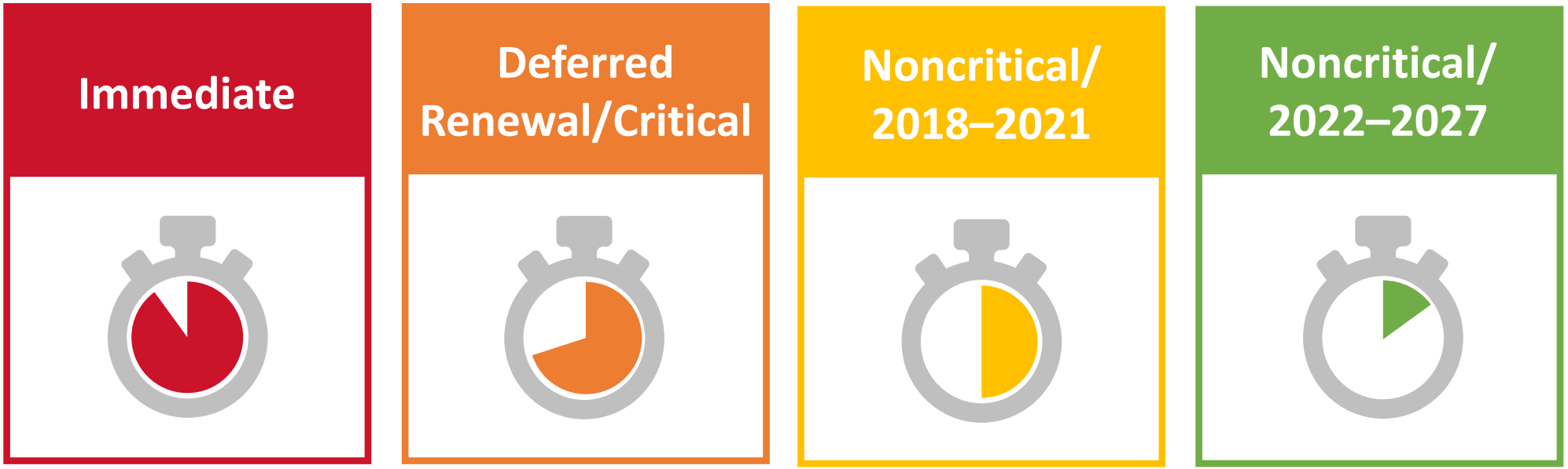




Ratio of 10-Year Needs *(incl deferred renewal)* to Current Replacement Value

FACILITIES CONDITION NEEDS INDEX

FCNI includes Renewal Needs by Priority



DEFERRED RENEWAL/MAINTENANCE

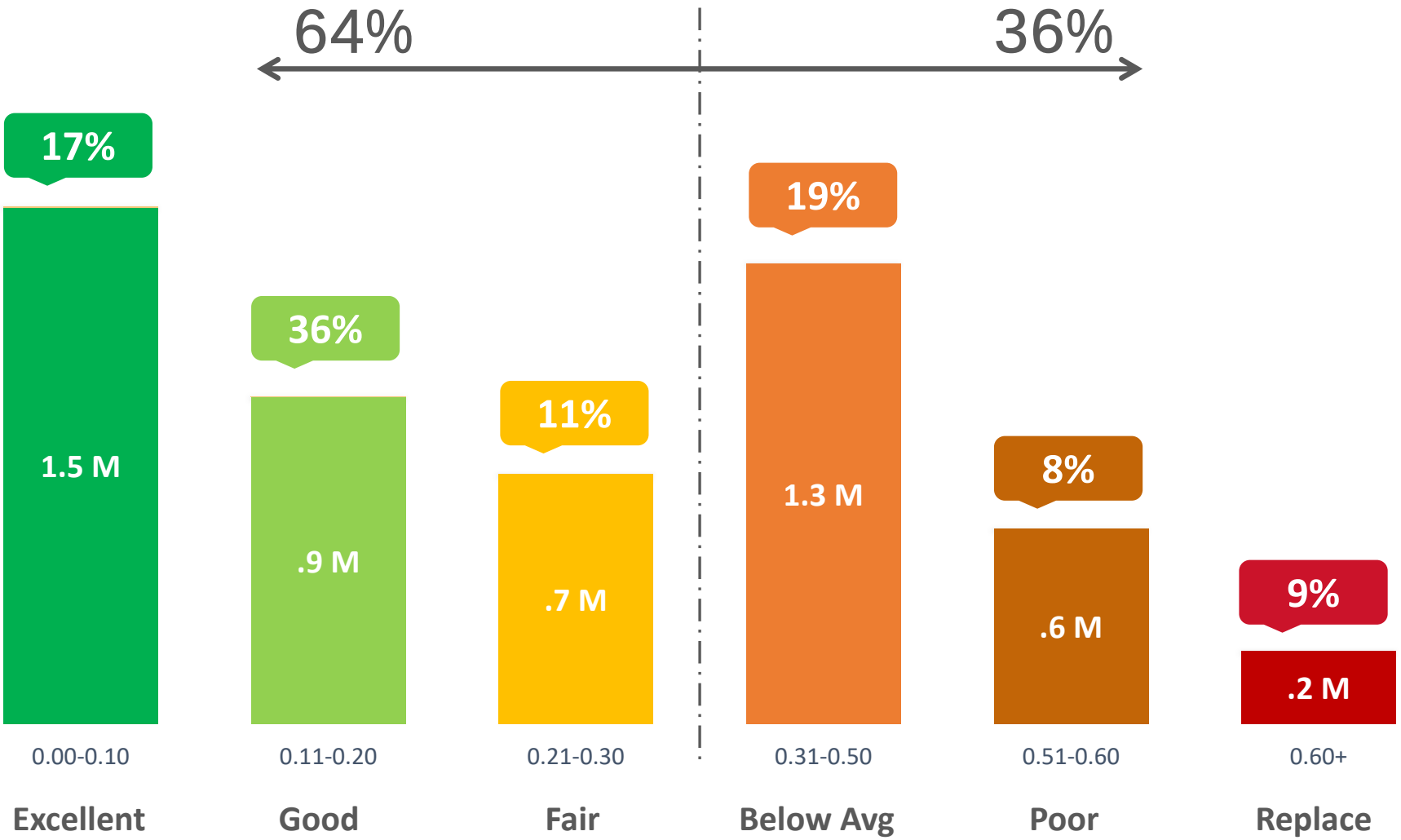
Priority Projects:

Pomona Campus Deferred Maintenance - Campus Funded Project List

December 13, 2018

Category	Description	Bldg Name	Bldg No.	Budget Projection	Scope
SAFETY	Concrete Sidewalks and walkways	Campus	--	$ 300,000	Replace/repair concrete sidewalks throughout campus - trip hazards, uneven surfaces
	Roads	Campus	--	$ 300,000	Replace/repair various roads thoughout campus - pot holes, cracked ashalt
	Fire Prevention Maintenance	Campus	--	$ 50,000	Provide fire break clearance on campus
CONVEYANCES	Elevators	Univ Office Bldg	94	$ 250,000	Replace and/or repair elevators in bldg 94
	Elevators	Science	4	$ 800,000	Replace and/or repair elevators in bldg 4
ROOFS	Roofs	Science	3	$ 600,000	Replace/Repair roof
	Roofs	Engineering	9	$ 400,000	Replace/Repair roof
	Roofs	Univ Office Bldg	94	$ 400,000	Replace/Repair roof
	Roofs	Health Center	46	$ 400,000	Replace/Repair roof
EMERGENCY POWER	Generator	Music	24	$ 150,000	For egress only, replace the existing emergency generator
	Generator	Letters, Arts & Social Science	5	$ 150,000	For egress only, replace the existing emergency generator
	Generator	Science	8	$ 150,000	For egress only, replace the existing emergency generator
HVAC	Building Controls	Science	4	$ 175,000	Replace various building controls that are connected to the building automation system
	Pump Redundancy	All Bldgs	--	$ 250,000	Install redundant pumping systems connected to the Central Plant
MAINTENANCE	Bldg Entry/Exit Doors	Old Admin	1	$ 150,000	Replace aged building entry and exit doors
	Bldg Entry/Exit Doors	Engineering	9	$ 150,000	Replace aged building entry and exit doors
	Exterior Windows	Engineering	9	$ 400,000	Replace aged and weather worn exterior windows
				$ 5,075,000	**Total**

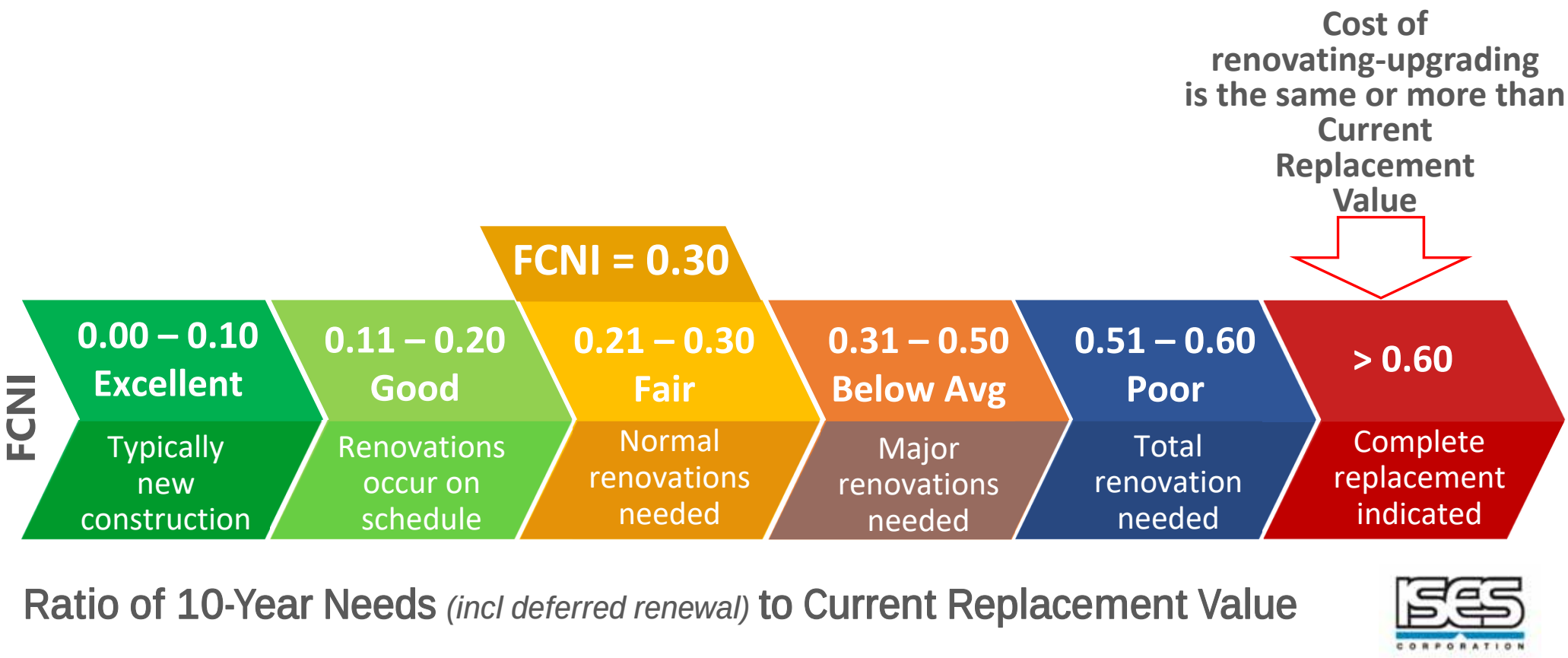
FACILITIES CONDITION NEEDS INDEX



Building FCNI Ranges (based on Building SF)

FACILITIES CONDITION NEEDS INDEX

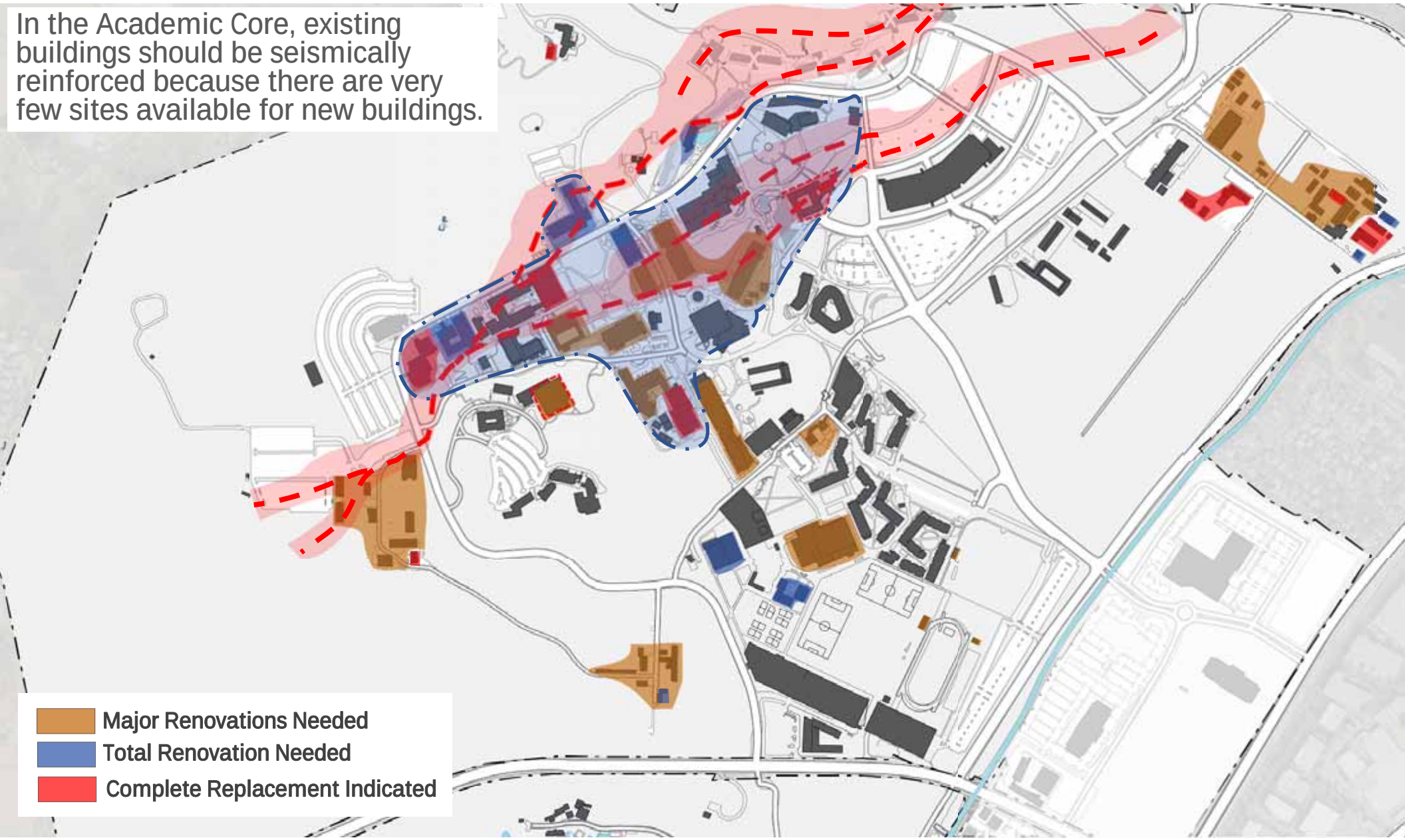
NOTE:
FCNI evaluation does not include any consideration of historic value or feasibility of replacement, such as available land/sites, infrastructure, or construction timeline and sequencing



Ratio of 10-Year Needs *(incl deferred renewal)* to Current Replacement Value

FCNI PRIORITIES + SEISMIC CONSTRAINTS

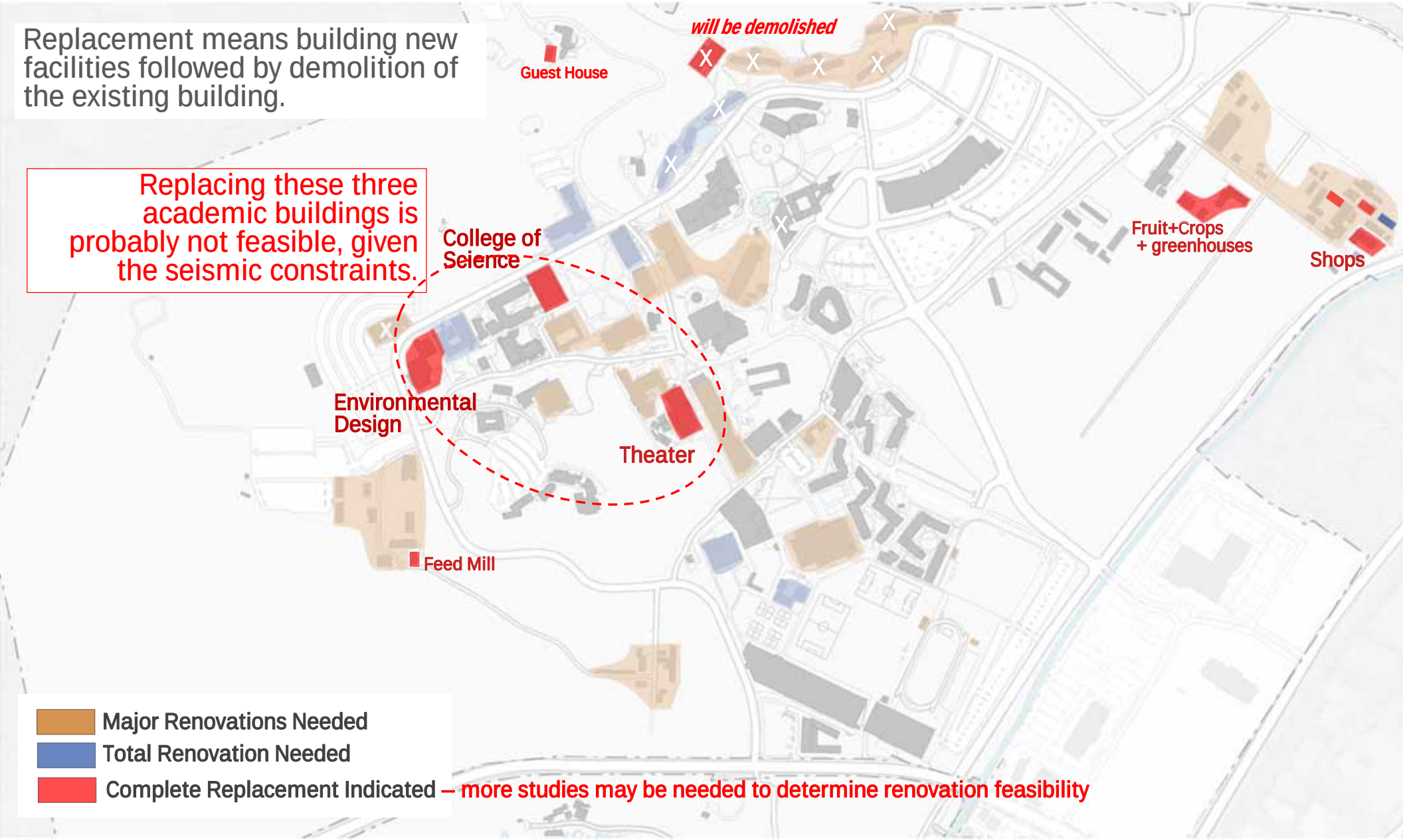
In the Academic Core, existing buildings should be seismically reinforced because there are very few sites available for new buildings.



FCNI: INDICATES COMPLETE REPLACEMENT

Replacement means building new facilities followed by demolition of the existing building.

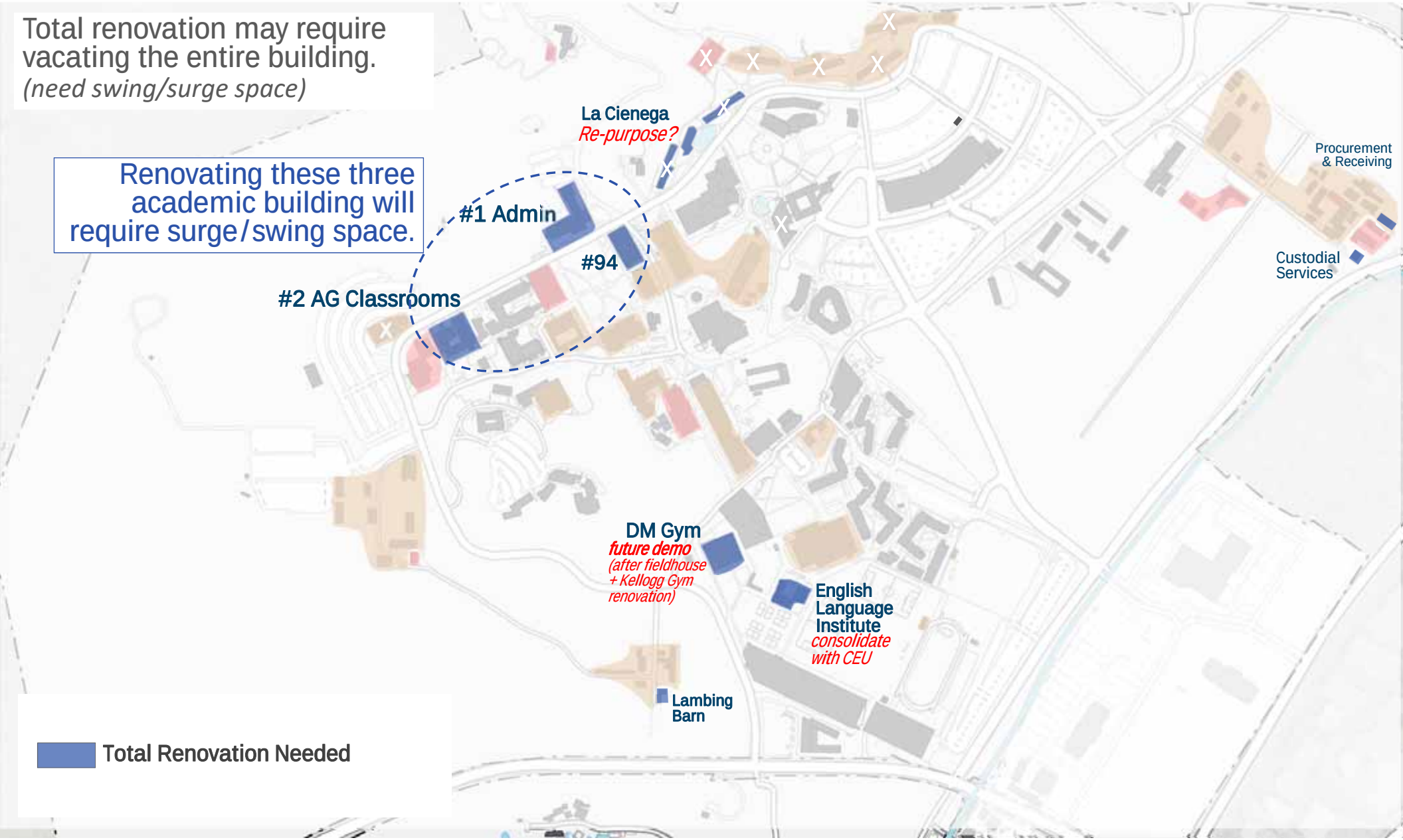
Replacing these three academic buildings is probably not feasible, given the seismic constraints.



FCNI POOR – TOTAL RENOVATION

Total renovation may require vacating the entire building.
(need swing/surge space)

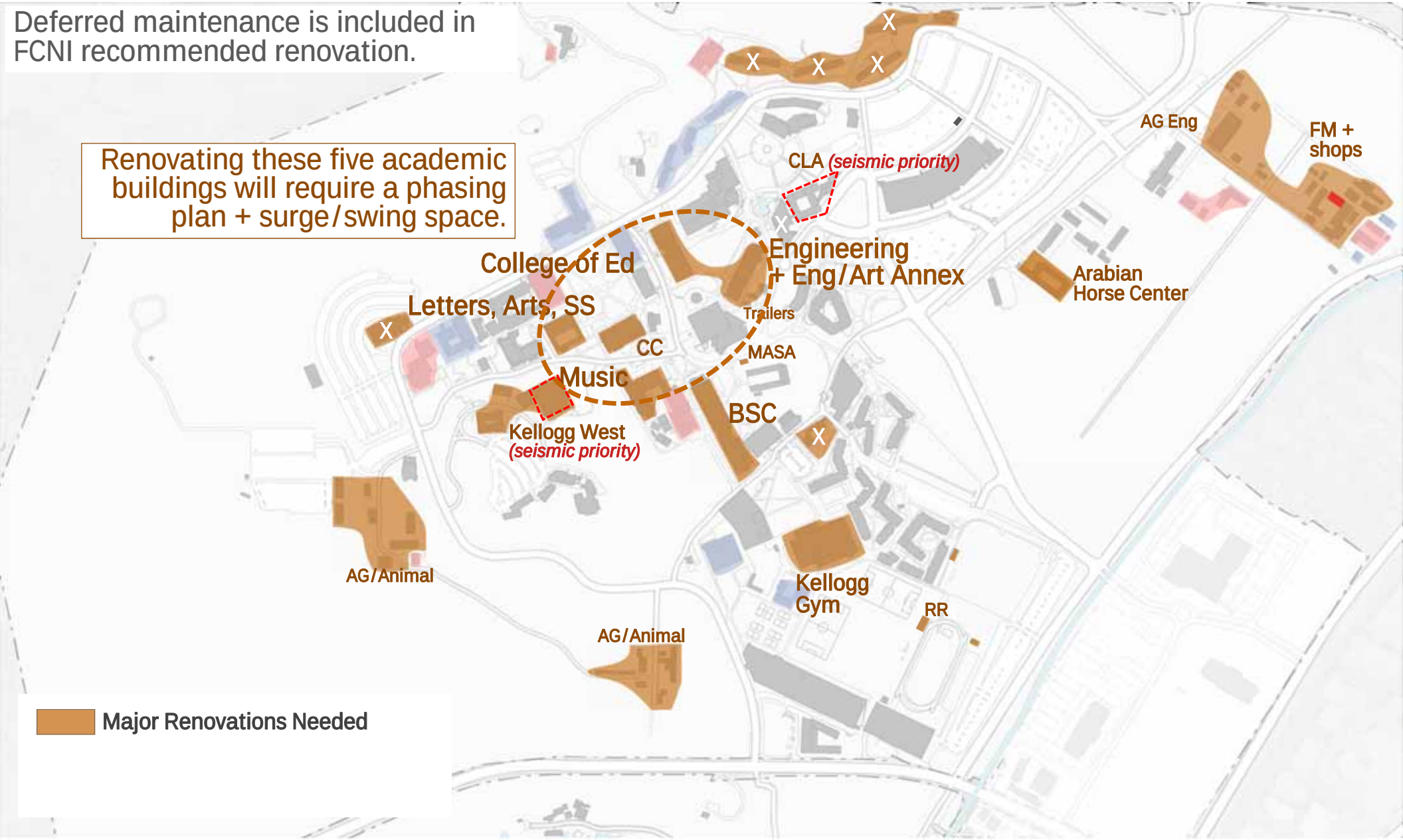
Renovating these three academic building will require surge/swing space.



FCNI BELOW AVERAGE - MAJOR RENOVATION

Deferred maintenance is included in FCNI recommended renovation.

Renovating these five academic buildings will require a phasing plan + surge/swing space.



Master Plan - Facility|Area Studies

CIP Track: CLA Bldg 98 Seismic Priority #1

Plan to transform the most prominent building complex on campus, which also has the highest priority for seismic remediation (removal or reinforcing). The transformed facility is envisioned as academic student-centric space for project-based learning, shared by multiple programs and colleges and providing opportunities explore the future of work with businesses and industries.

- Two of the four structures have been vacated, but completing the project requires classrooms and 50-60,000 sf or surge space (could be off campus)
- Reflects Facilities Conditions Assessment and incorporates seismic priorities and recommendations from multiple analyses

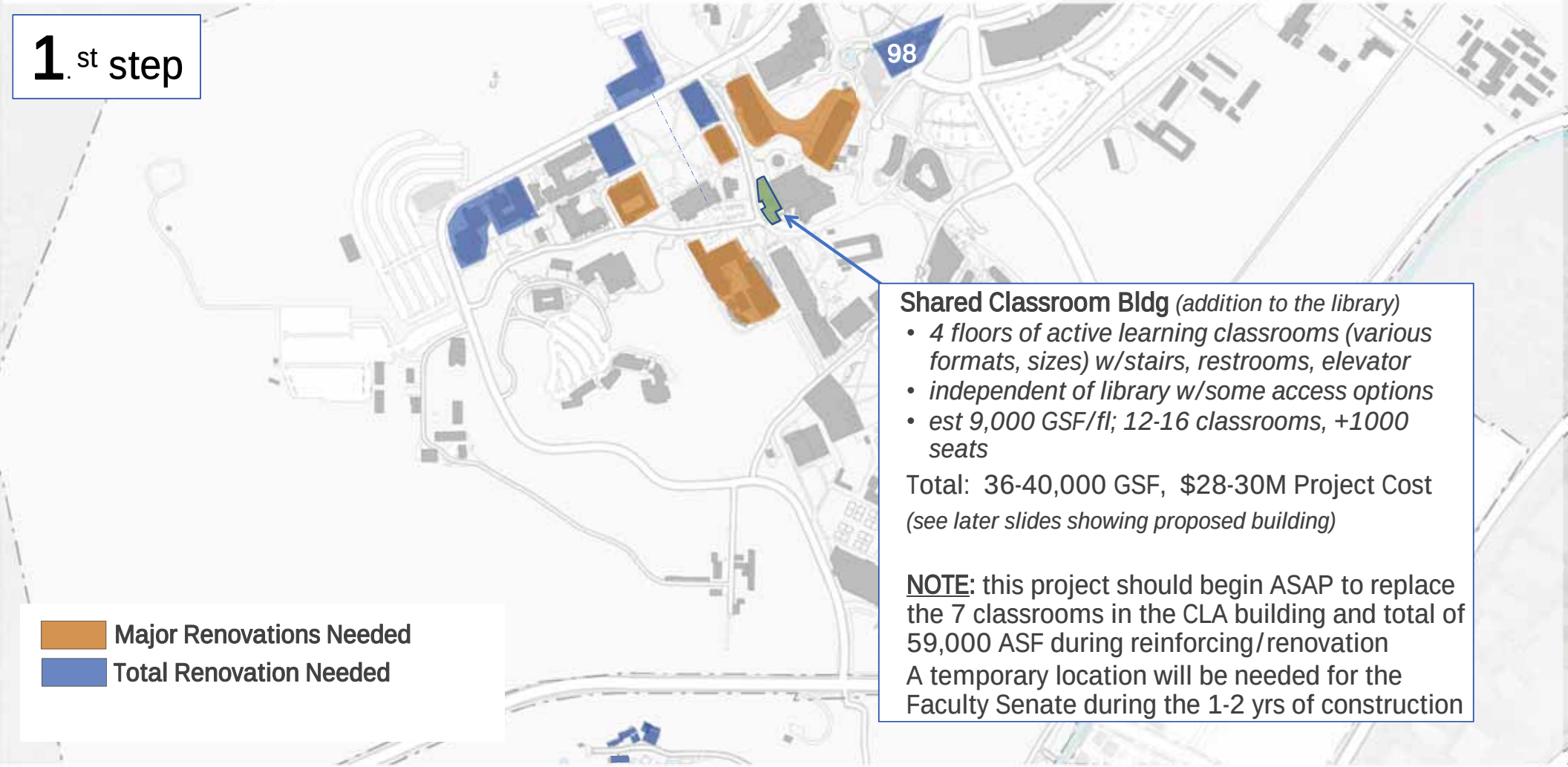
SYNTHESIS: CLA SEISMIC TRACK

Recommendation:

Build or lease **surge space** to facilitate seismic reinforcing + renovation of existing academic buildings (incl 98-CLA)

- Build new shared classroom space in the academic core
- Lease space near the campus for admin/support space (incl IT offices in 98-CLA)

1st step



Shared Classroom Bldg *(addition to the library)*

- *4 floors of active learning classrooms (various formats, sizes) w/stairs, restrooms, elevator*
- *independent of library w/some access options*
- *est 9,000 GSF/fl; 12-16 classrooms, +1000 seats*

Total: 36-40,000 GSF, $28-30M Project Cost

(see later slides showing proposed building)

NOTE: this project should begin ASAP to replace the 7 classrooms in the CLA building and total of 59,000 ASF during reinforcing/renovation

A temporary location will be needed for the Faculty Senate during the 1-2 yrs of construction

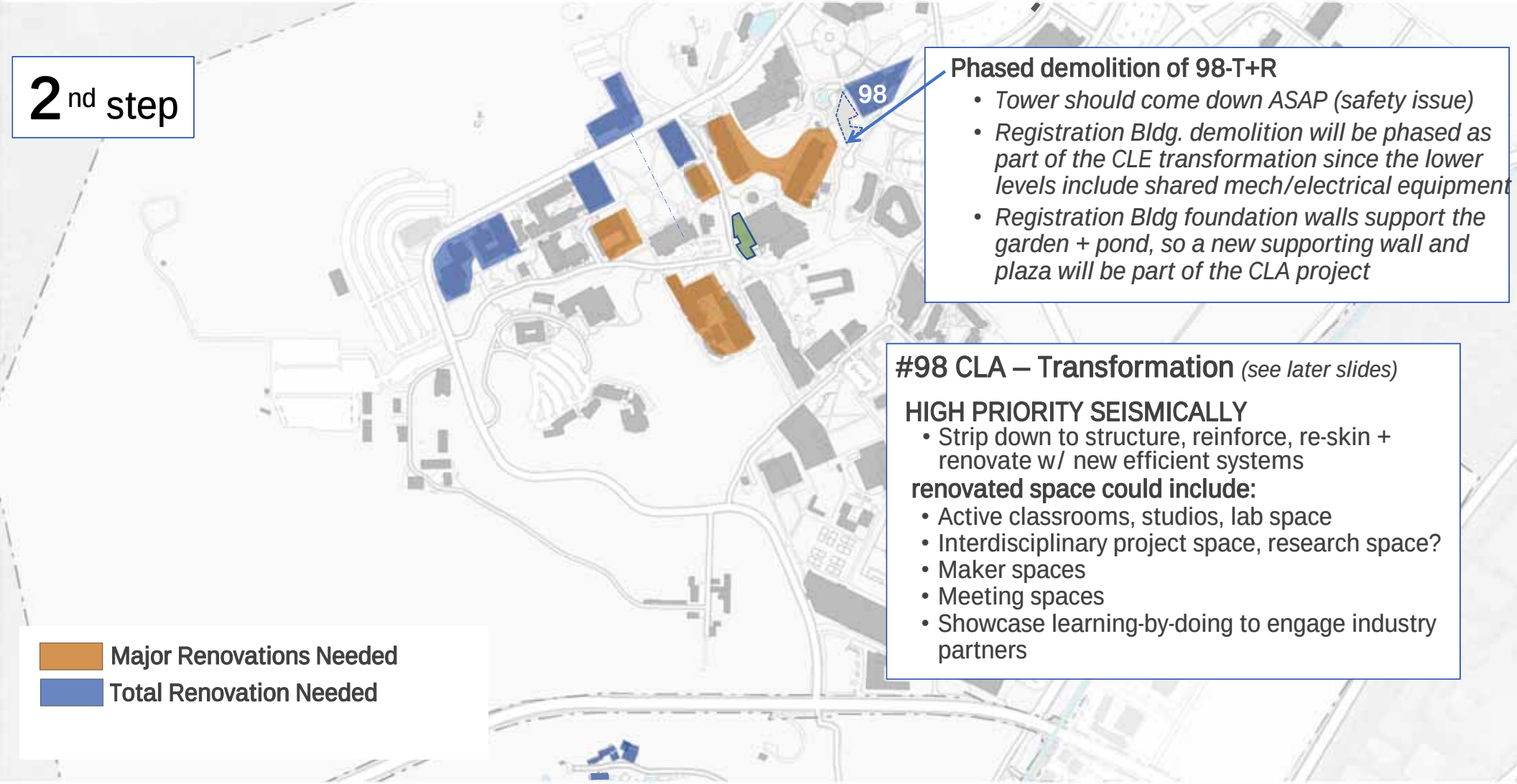
SYNTHESIS: CLA SEISMIC TRACK

Recommendation:

Empty Bldg #98 CLA+P to facilitate Bldg 98 replacement OR seismic reinforcing + renovation as #1 seismic priority

(see later slides for analysis of CLA replacement options and transformation studies)

2nd step



Phased demolition of 98-T+R

- *Tower should come down ASAP (safety issue)*
- *Registration Bldg. demolition will be phased as part of the CLE transformation since the lower levels include shared mech/electrical equipment*
- *Registration Bldg foundation walls support the garden + pond, so a new supporting wall and plaza will be part of the CLA project*

#98 CLA – Transformation *(see later slides)*

HIGH PRIORITY SEISMICALLY

- Strip down to structure, reinforce, re-skin + renovate w/ new efficient systems

renovated space could include:

- Active classrooms, studios, lab space
- Interdisciplinary project space, research space?
- Maker spaces
- Meeting spaces
- Showcase learning-by-doing to engage industry partners

Major Renovations Needed

Total Renovation Needed

Master Plan - Facility|Area Studies

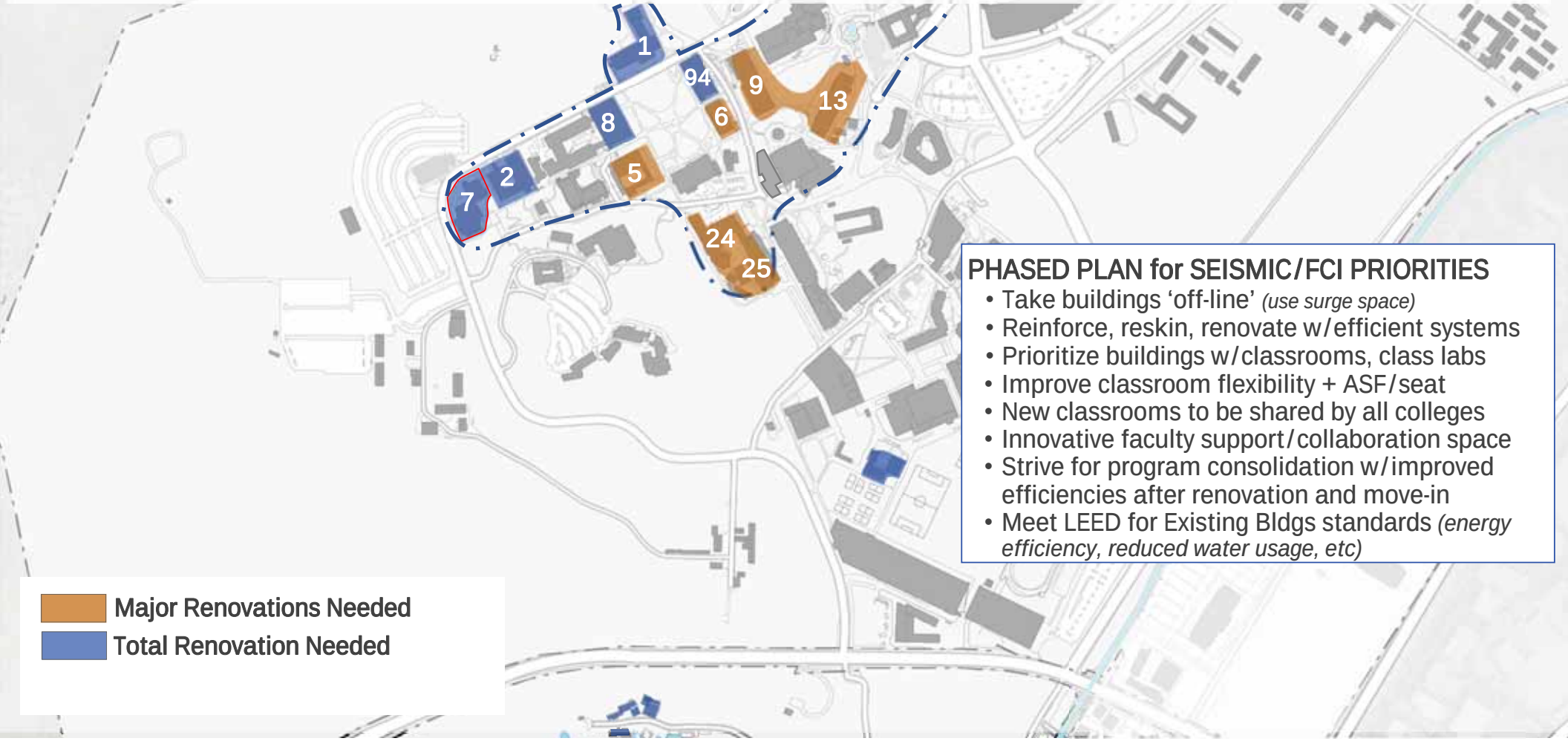
CIP Track: Academic Core Seismic/Renewal

Creates new academic space (classrooms+ faculty workspace) in the academic heart of the campus to enable seismic reinforcing and major renovation of multiple buildings in the original campus core. These improvements will benefit six of the nine Colleges.

- Reflects Facilities Conditions Assessment and Facilities Conditions Needs Index (FCNI)
- Incorporates seismic priorities and recommendations, and required deferred maintenance
- Sequencing based on supporting academic activities for the greatest number of students and faculty

SYNTHESIS: CLA /ACADEMIC CORE SEISMIC TRACK

Recommendation:
Phased plan for seismic upgrading + total renovation of Bldgs 1, 2, 7, 8 (9-13 need further study)
Requires creation of academic 'surge space' sufficient to decommission a College building
Renovate to meet academic needs for active classrooms, labs, studios space for project based 'learning-by-doing'
Phased upgrading all of the academic buildings, if done one at a time, will require a +20 year plan'



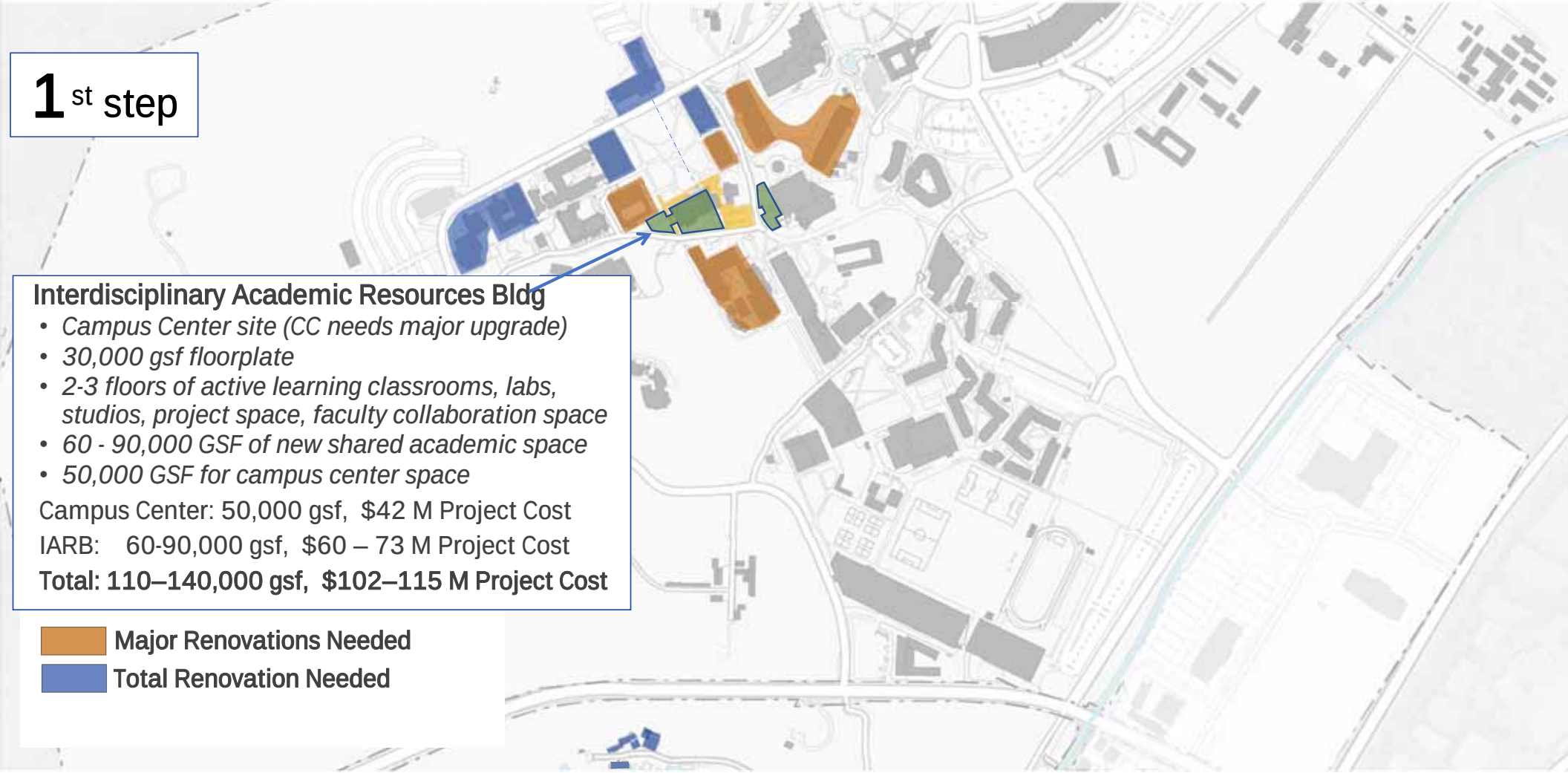
PHASED PLAN for SEISMIC/FCI PRIORITIES

- Take buildings 'off-line' *(use surge space)*
- Reinforce, reskin, renovate w/efficient systems
- Prioritize buildings w/classrooms, class labs
- Improve classroom flexibility + ASF/seat
- New classrooms to be shared by all colleges
- Innovative faculty support/collaboration space
- Strive for program consolidation w/improved efficiencies after renovation and move-in
- Meet LEED for Existing Bldgs standards *(energy efficiency, reduced water usage, etc)*

SYNTHESIS: ACADEMIC CORE TRACK

Recommendation:
Build new academic 'surge space' in the academic core, to facilitate renovation/seismic reinforcing of existing bldgs
The Foundation will demo the existing Campus Center; new building will be a partnership of self-funding + state funds
The new academic space will be a shared resource and will also accommodate future growth.

1st step



Interdisciplinary Academic Resources Bldg

- *Campus Center site (CC needs major upgrade)*
- *30,000 gsf floorplate*
- *2-3 floors of active learning classrooms, labs, studios, project space, faculty collaboration space*
- *60 - 90,000 GSF of new shared academic space*
- *50,000 GSF for campus center space*

Campus Center: 50,000 gsf, $42 M Project Cost
IARB: 60-90,000 gsf, $60 – 73 M Project Cost
Total: 110–140,000 gsf, $102–115 M Project Cost

Major Renovations Needed
Total Renovation Needed

SYNTHESIS: ACADEMIC CORE TRACK

Recommendation:
Prioritize the buildings with the highest # classrooms/class labs for TOTAL/MAJOR building renovations.

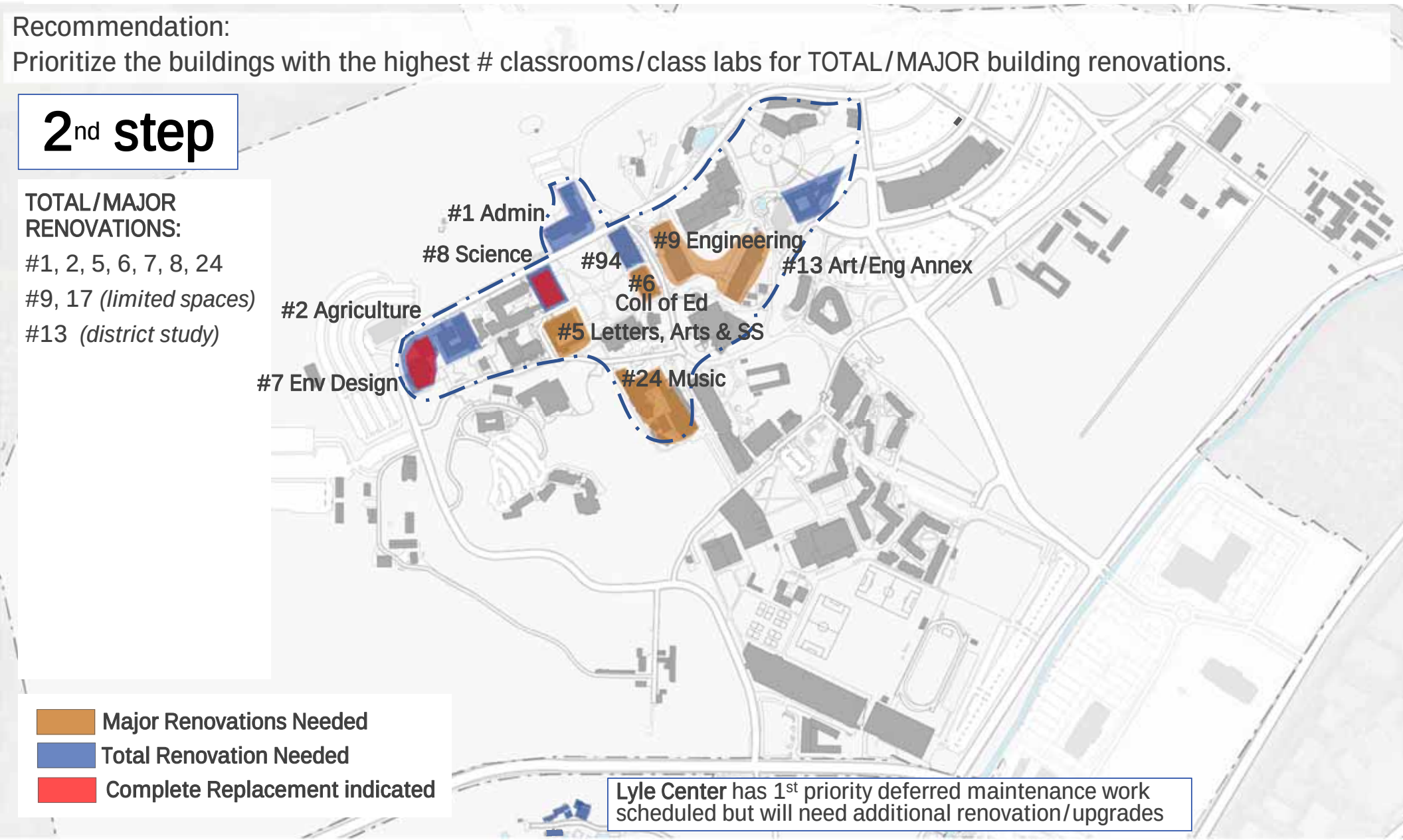
2nd step

TOTAL/MAJOR RENOVATIONS:

#1, 2, 5, 6, 7, 8, 24

#9, 17 *(limited spaces)*

#13 *(district study)*



Major Renovations Needed
Total Renovation Needed
Complete Replacement indicated

Lyle Center has 1st priority deferred maintenance work scheduled but will need additional renovation/upgrades

SYNTHESIS: ACADEMIC CORE TRACK

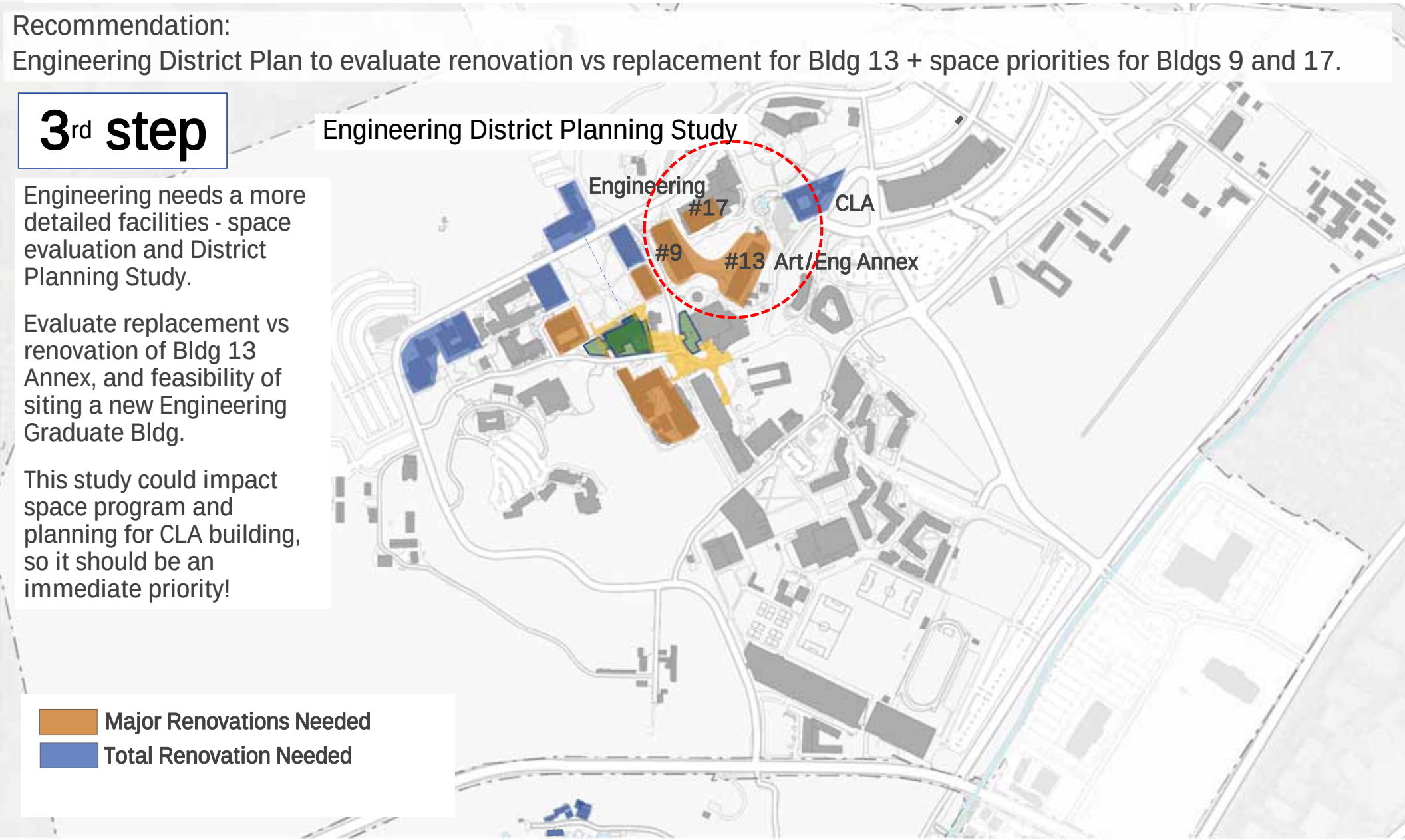
Recommendation:
Engineering District Plan to evaluate renovation vs replacement for Bldg 13 + space priorities for Bldgs 9 and 17.

3rd step

Engineering needs a more detailed facilities - space evaluation and District Planning Study.

Evaluate replacement vs renovation of Bldg 13 Annex, and feasibility of siting a new Engineering Graduate Bldg.

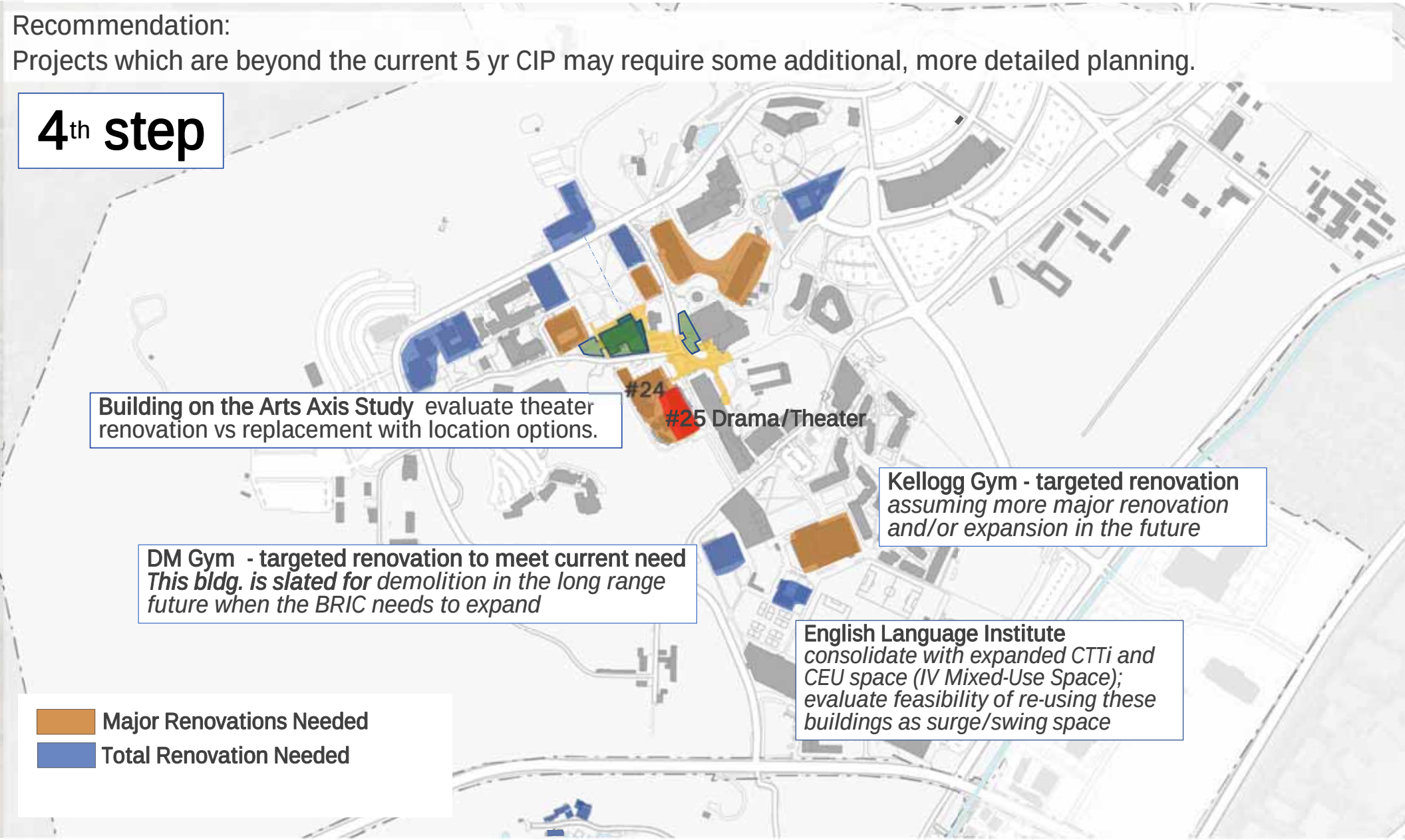
This study could impact space program and planning for CLA building, so it should be an immediate priority!



SYNTHESIS: ACADEMIC CORE TRACK

Recommendation:
Projects which are beyond the current 5 yr CIP may require some additional, more detailed planning.

4th step



Building on the Arts Axis Study evaluate theater renovation vs replacement with location options.

Kellogg Gym - targeted renovation
assuming more major renovation and/or expansion in the future

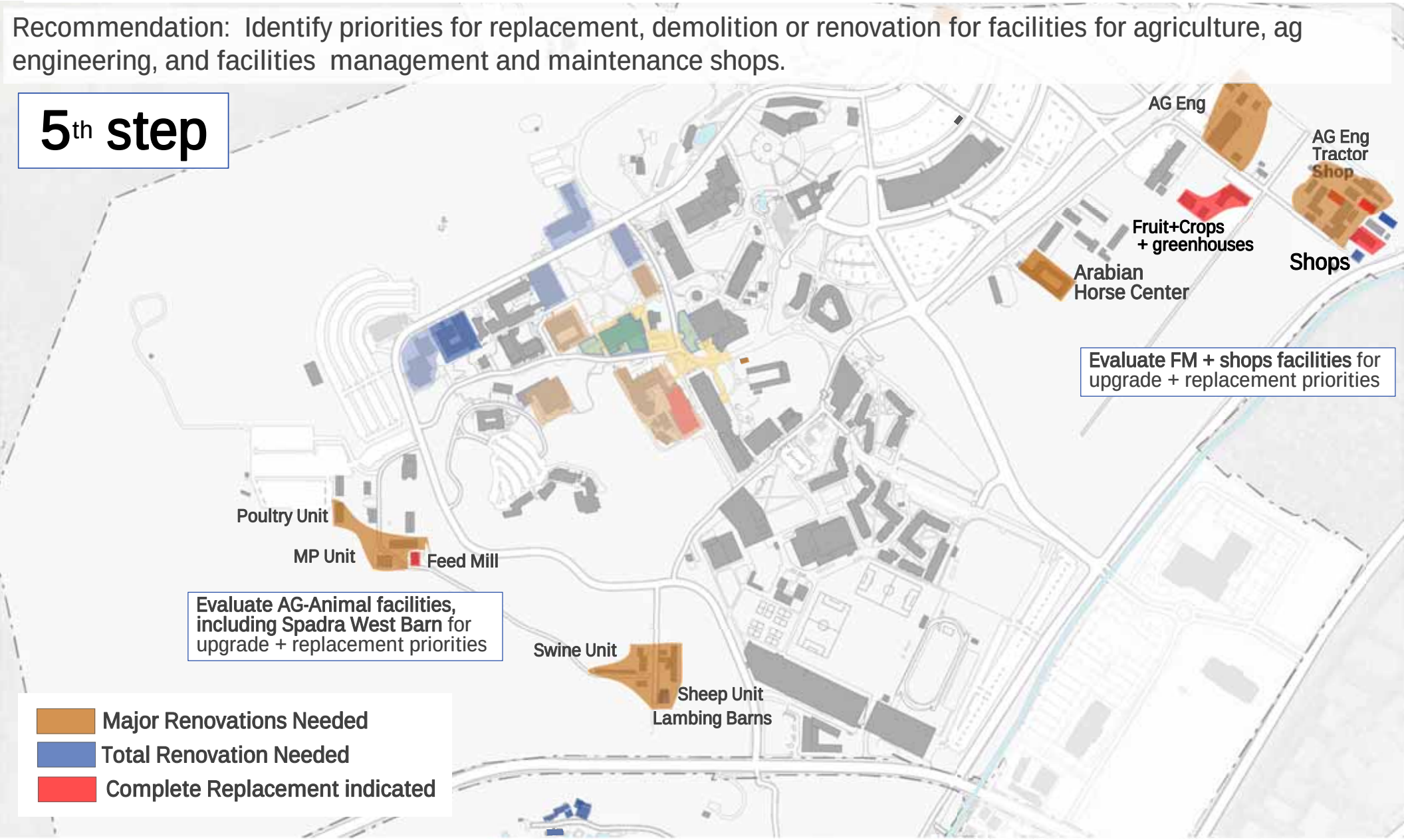
DM Gym - targeted renovation to meet current need
This bldg. is slated for *demolition in the long range future when the BRIC needs to expand*

English Language Institute
consolidate with expanded CTTi and CEU space (IV Mixed-Use Space); evaluate feasibility of re-using these buildings as surge/swing space

Major Renovations Needed
Total Renovation Needed

SYNTHESIS: ACADEMIC CORE TRACK

Recommendation: Identify priorities for replacement, demolition or renovation for facilities for agriculture, ag engineering, and facilities management and maintenance shops.



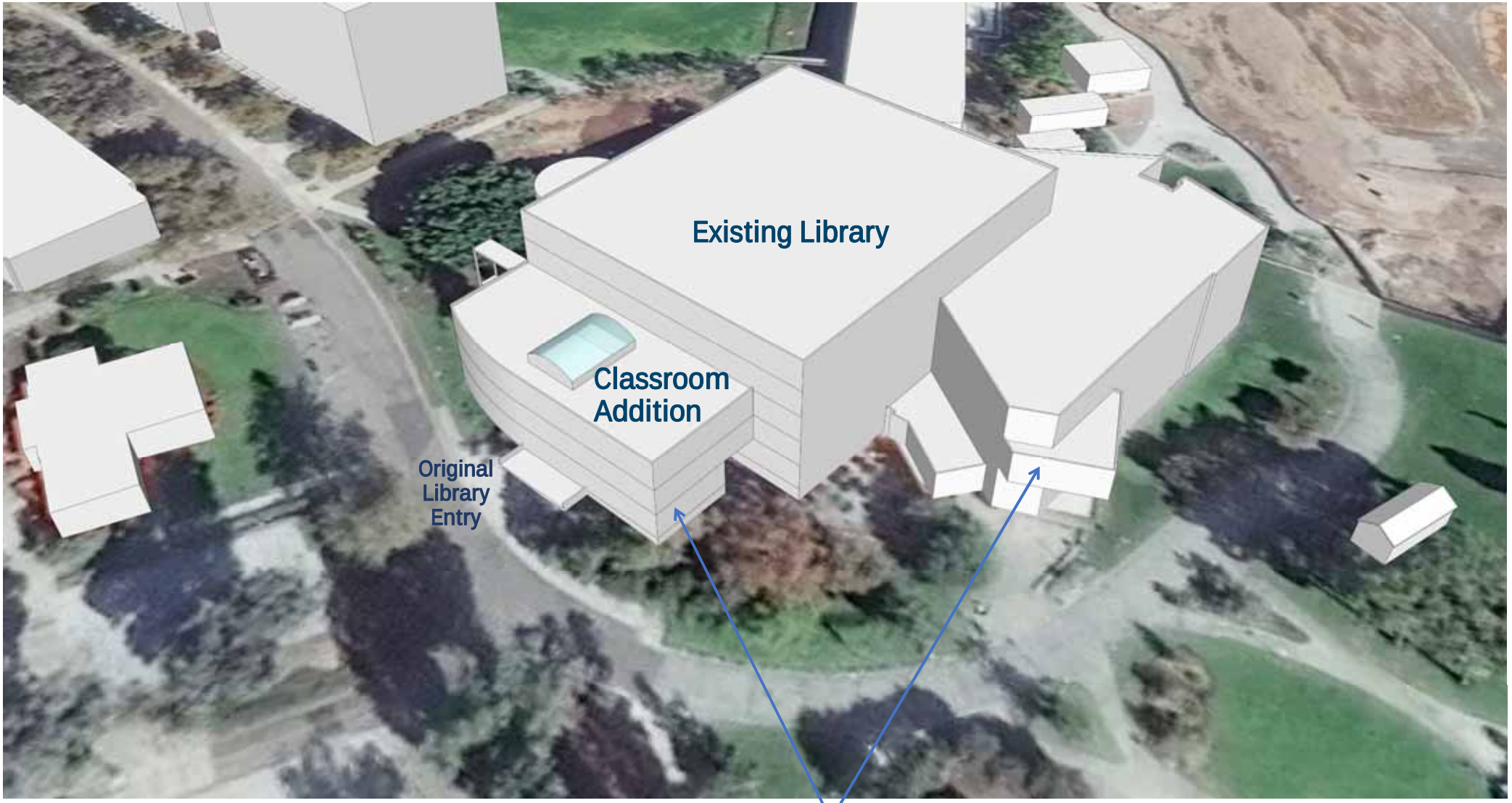
Master Plan - Facility | Area Studies

CIP Track: CLA Bldg 98 Seismic Priority #1

Classroom Resource Building

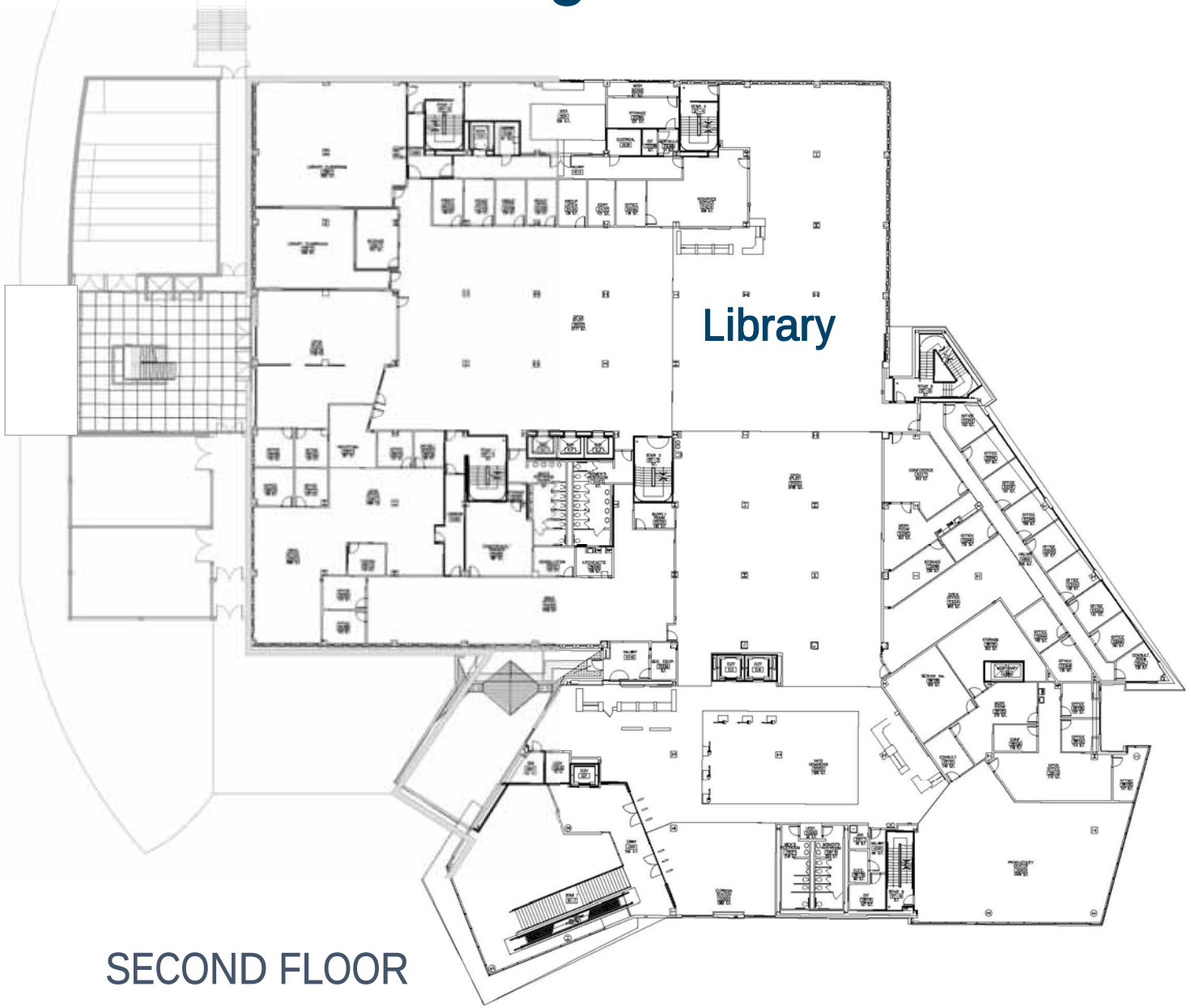
(surge classroom space)

Concept: Shared Classroom Building *(addition to Library)*

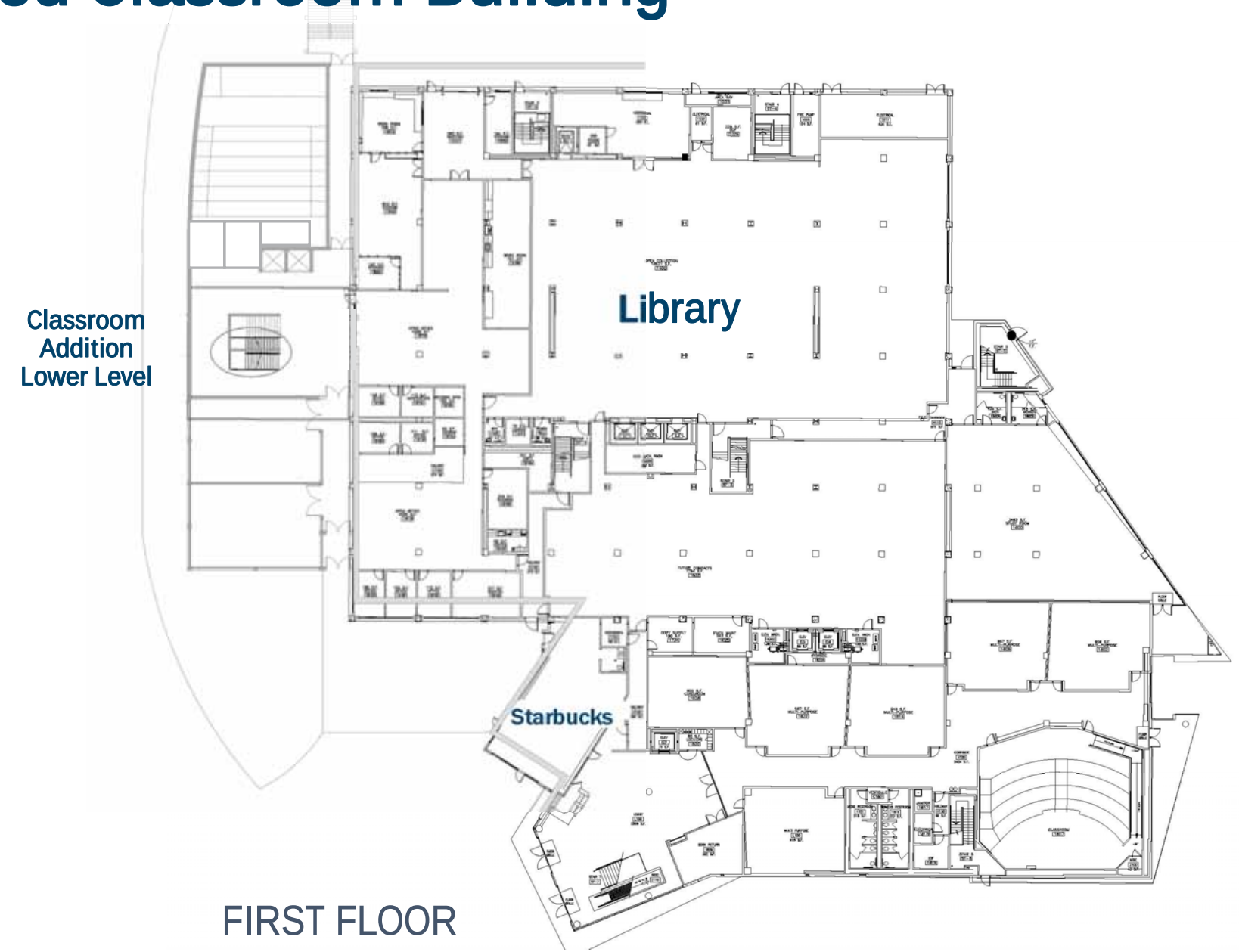


These two sites were investigated previously for library expansions, and confirmed as 'buildable' and are not in the fault line buffer areas

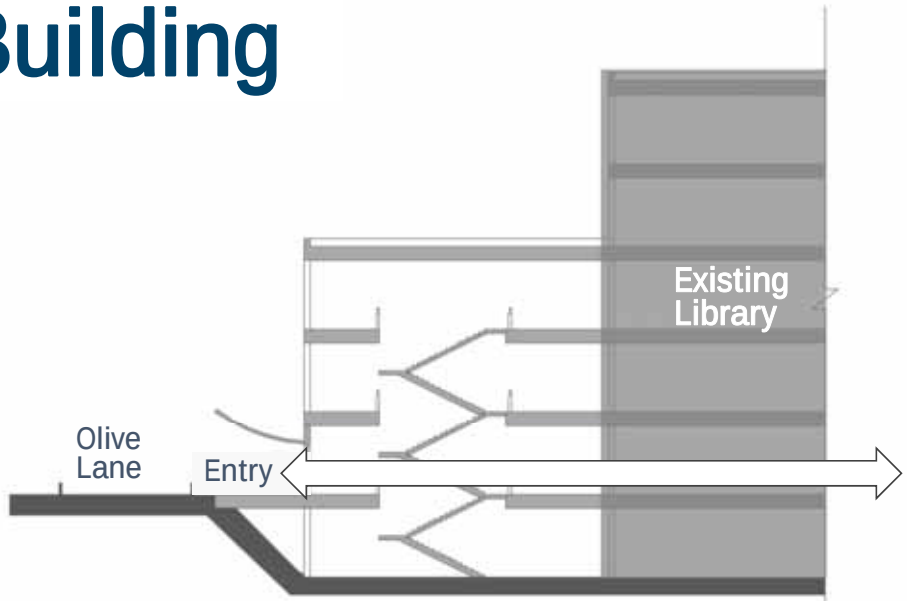
Shared Classroom Building



Shared Classroom Building

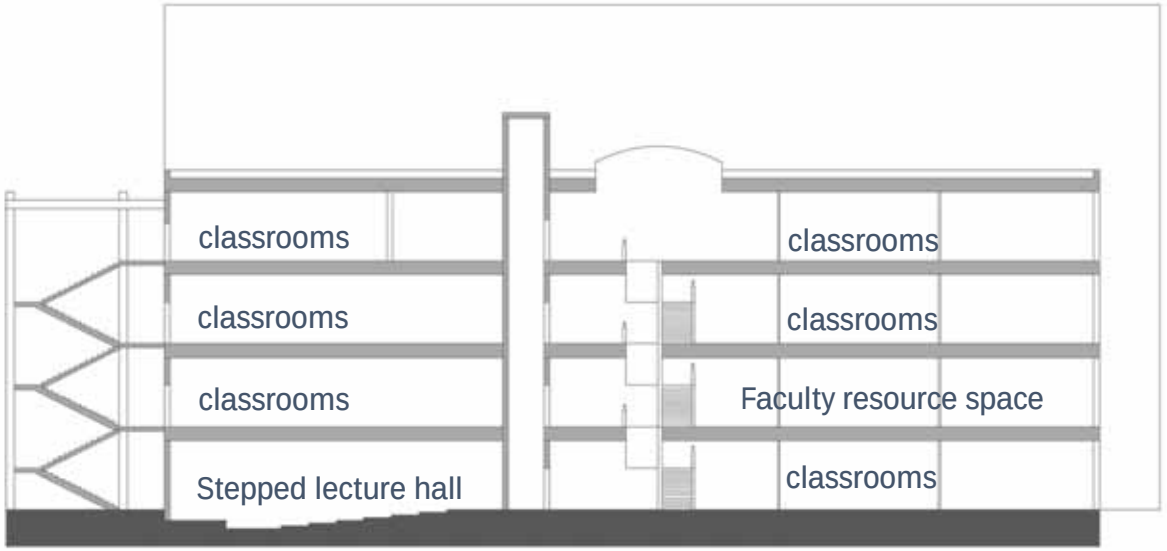


Shared Classroom Building



SECTION E-W

Study potential for access into the library at 2nd floor level. May require relocating Learning and Writing Centers



SECTION N-S

Shared Classroom Building

Shared Classroom Resources

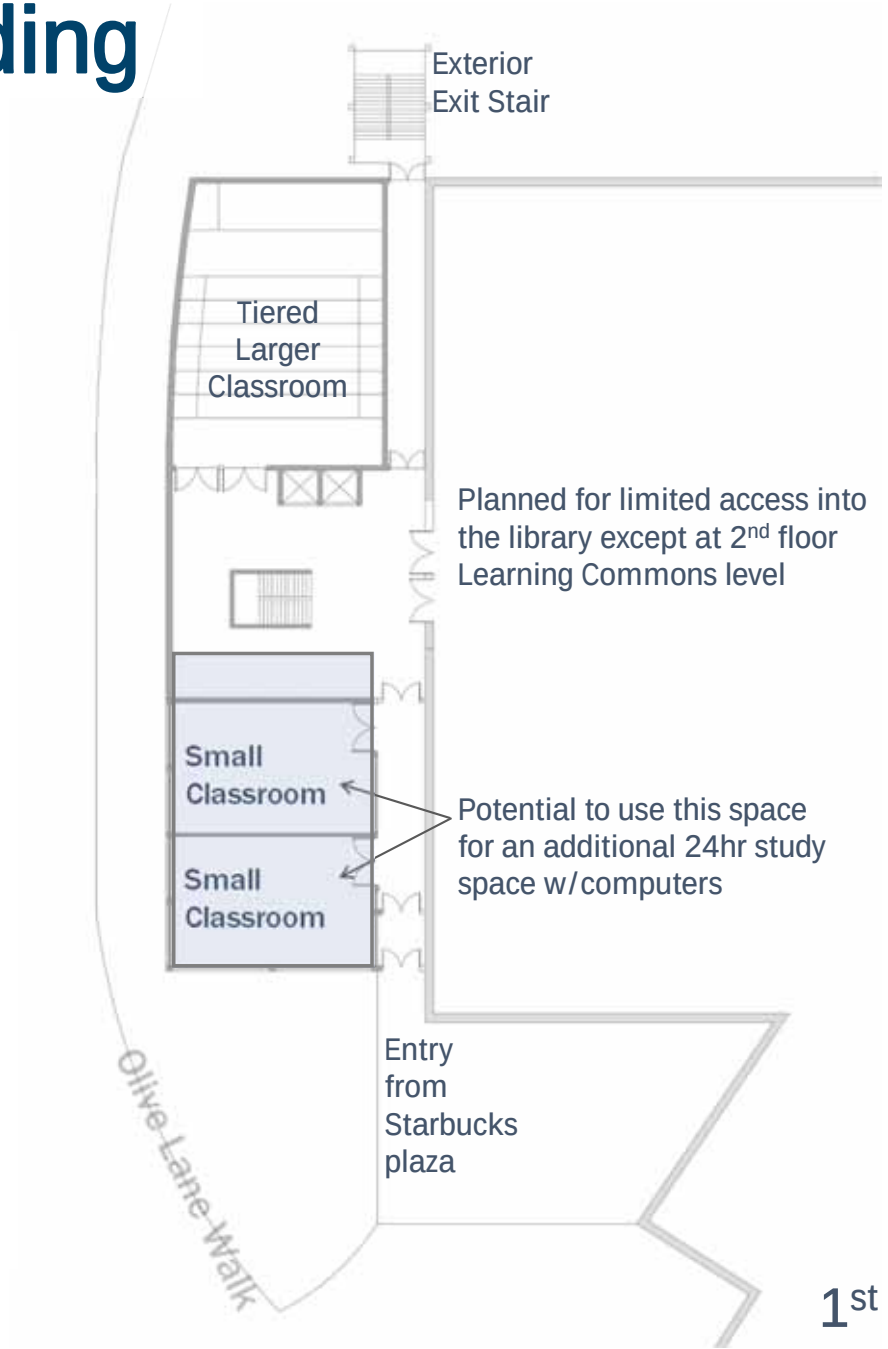
est 9,000 gsf/floor
4-5 floors
36,000 -45,000 gsf total

12-20 classrooms, est 800-1100 seats

Could include:

- resource space for faculty
- informal study space
- connections to learning commons

est $28 - 36 M Cost



Master Plan - Facility | Area Studies

CIP Track: Bldg 98 Seismic Priority #1

CLA Studies

California State Polytechnic University, Pomona

Master Plan Study: Bldg 98 *(incl T, R, CLA, P)*

18 April 2019

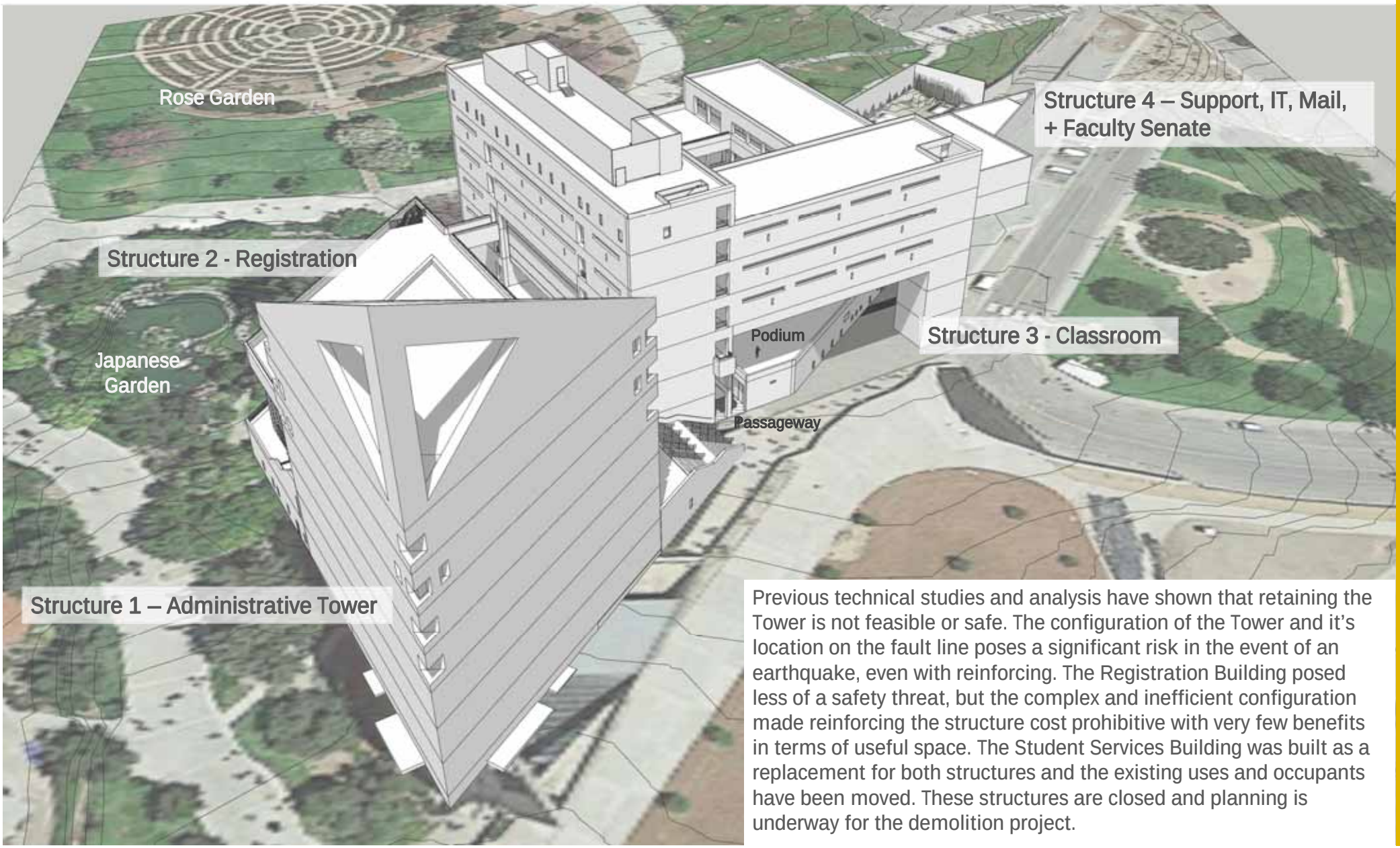
AYERS SAINT GROSS

CalPoly Pomona

Bldg 98 STUDY

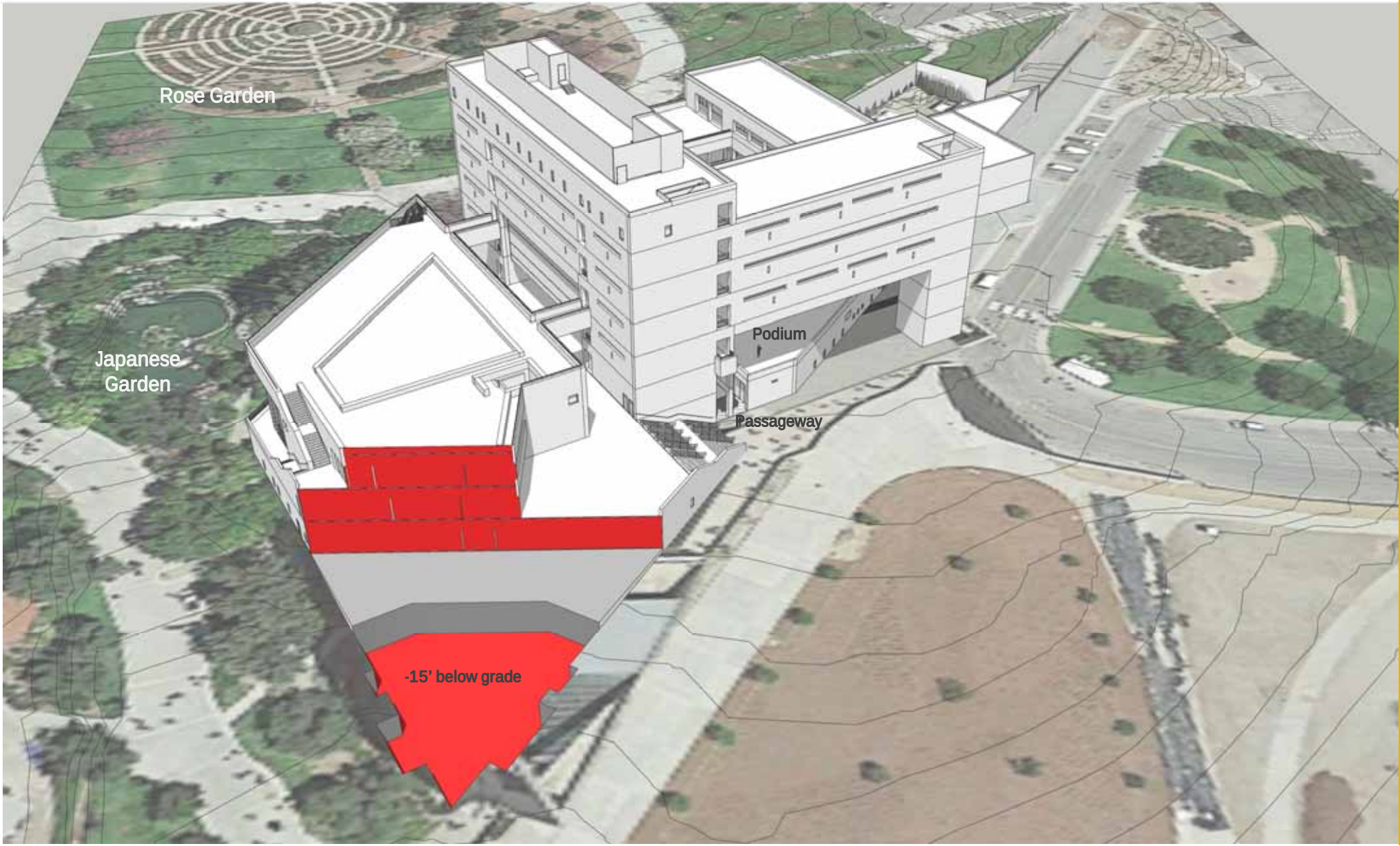
1) Demolition of 98-Tower + Registration buildings
   - *What does it look like and how much will it cost?*
   - *Issues to consider: reimagining this site incl protection of the Japanese Garden*
2) What are the options for 98-CLA (P)? What's the cost? Time?
   - ➢ Replace with a new building
   - ➢ Reinforce-reconstruct existing building
3) Can a case be made for 98-CLA transformation?
4) Evaluation Considerations:
   - *cost, relocation logistics, time-sequence to completion*
   - *campus impact, limited uses for a central seismic zone site*

BLDG 98-CLA STUDIES: EXISTING

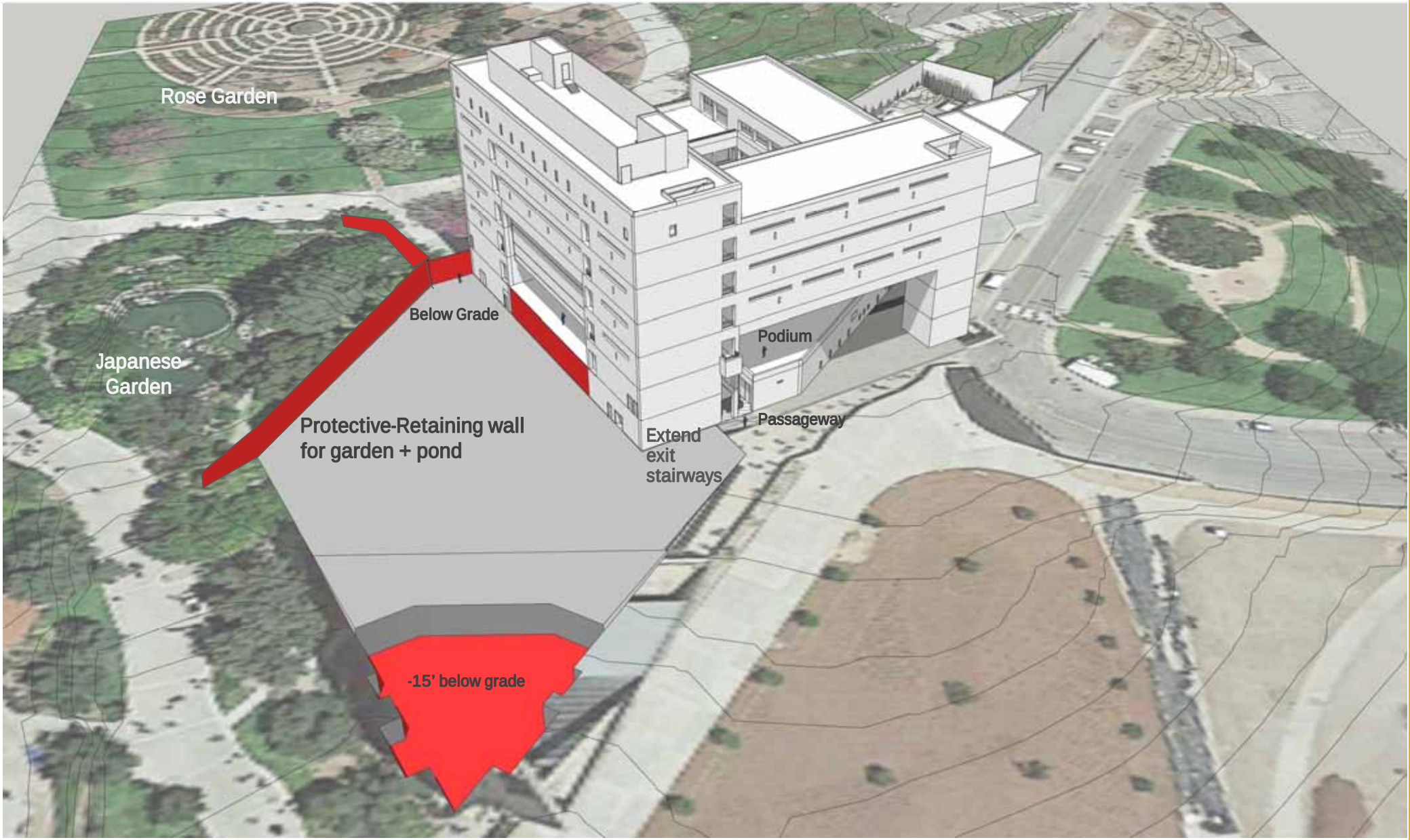


Previous technical studies and analysis have shown that retaining the Tower is not feasible or safe. The configuration of the Tower and it's location on the fault line poses a significant risk in the event of an earthquake, even with reinforcing. The Registration Building posed less of a safety threat, but the complex and inefficient configuration made reinforcing the structure cost prohibitive with very few benefits in terms of useful space. The Student Services Building was built as a replacement for both structures and the existing uses and occupants have been moved. These structures are closed and planning is underway for the demolition project.

BLDG 98-CLA STUDIES: DEMO TOWER



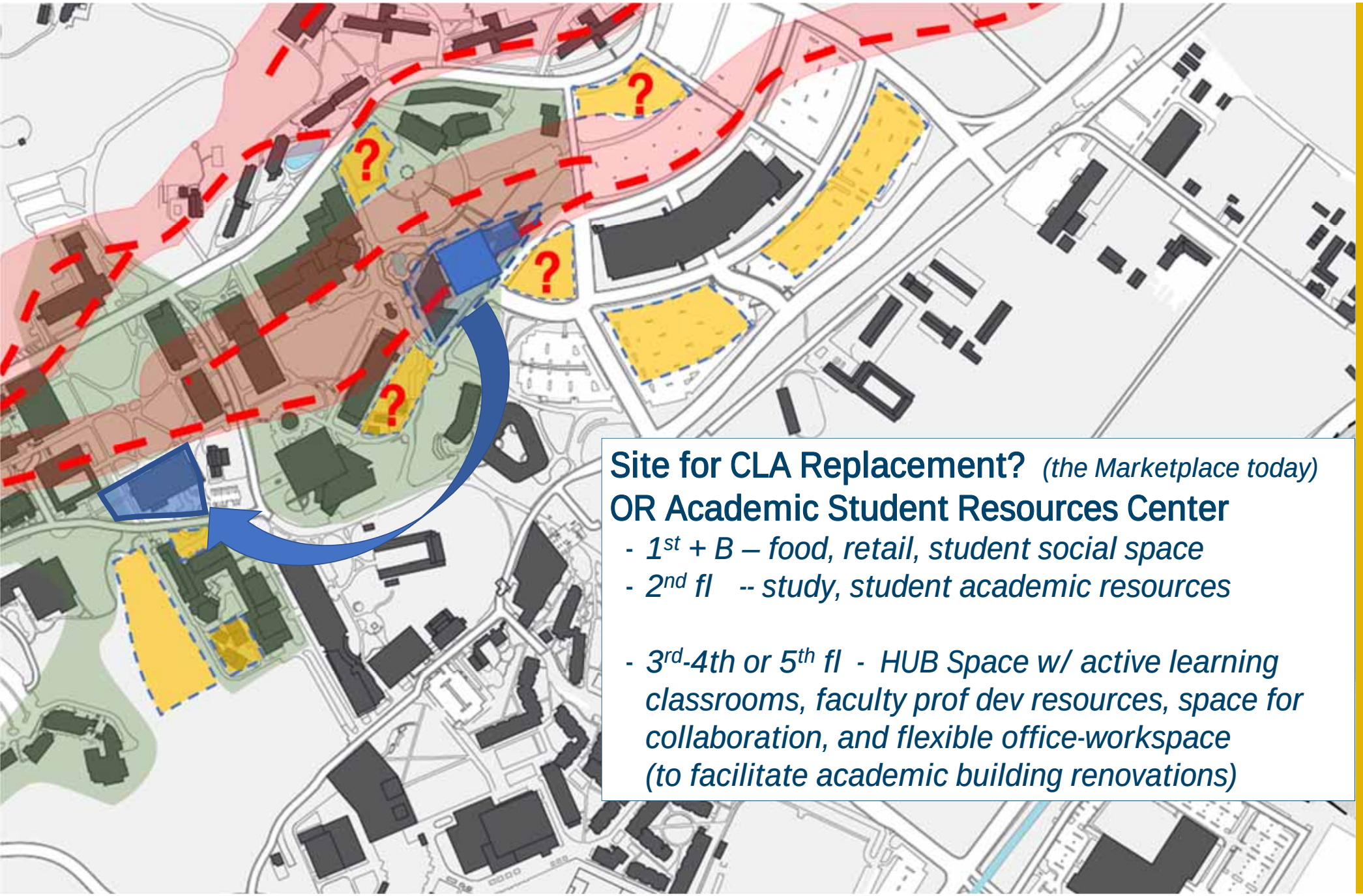
BLDG 98-CLA STUDIES: DEMO REG BLDG



CIP-BLDG 98 Studies + Cost Analysis

2) What are the options for 98-CLA (P)? What's the cost? Time?

- Replace with a new building – 125,000 GSF
  - Option 1: low building *(seismic zone, lower cost, hard to site)*
  - Option 2: taller building *(easier to fit on small sites, higher cost)*
- Reinforce-reconstruct existing building
  - Option 1: enclose atrium *(less exterior, less energy, less cost)*
  - Option 2: enclose more *(same as 1 + more usable space)*



Site for CLA Replacement? *(the Marketplace today)*
OR Academic Student Resources Center

- *1st + B – food, retail, student social space*
- *2nd fl -- study, student academic resources*

- *3rd-4th or 5th fl - HUB Space w/ active learning classrooms, faculty prof dev resources, space for collaboration, and flexible office-workspace (to facilitate academic building renovations)*

DESIGN FOR HUBS + COMMONS

Meet me in the Middle

- Interdisciplinary space
- Visible ground floor spaces
- Small study +gathering areas
- Large incubator or collaboration space
- Flexible, open areas
- Consolidated resources for faculty + students
- Can eliminate redundancies
- Can improve utilization

CIP-BLDG 98 Strategies - Cost Analysis

Replace with a new building - *125,000 GSF*

- Option 1: 2 story building, 50-65,000 GSF footprint – *no sites this size identified*
  $105 M Building Project Cost
  $ 16 M Bldg 98 CLA-P Demo/Site Restoration
  $ 121 M Total Project Cost

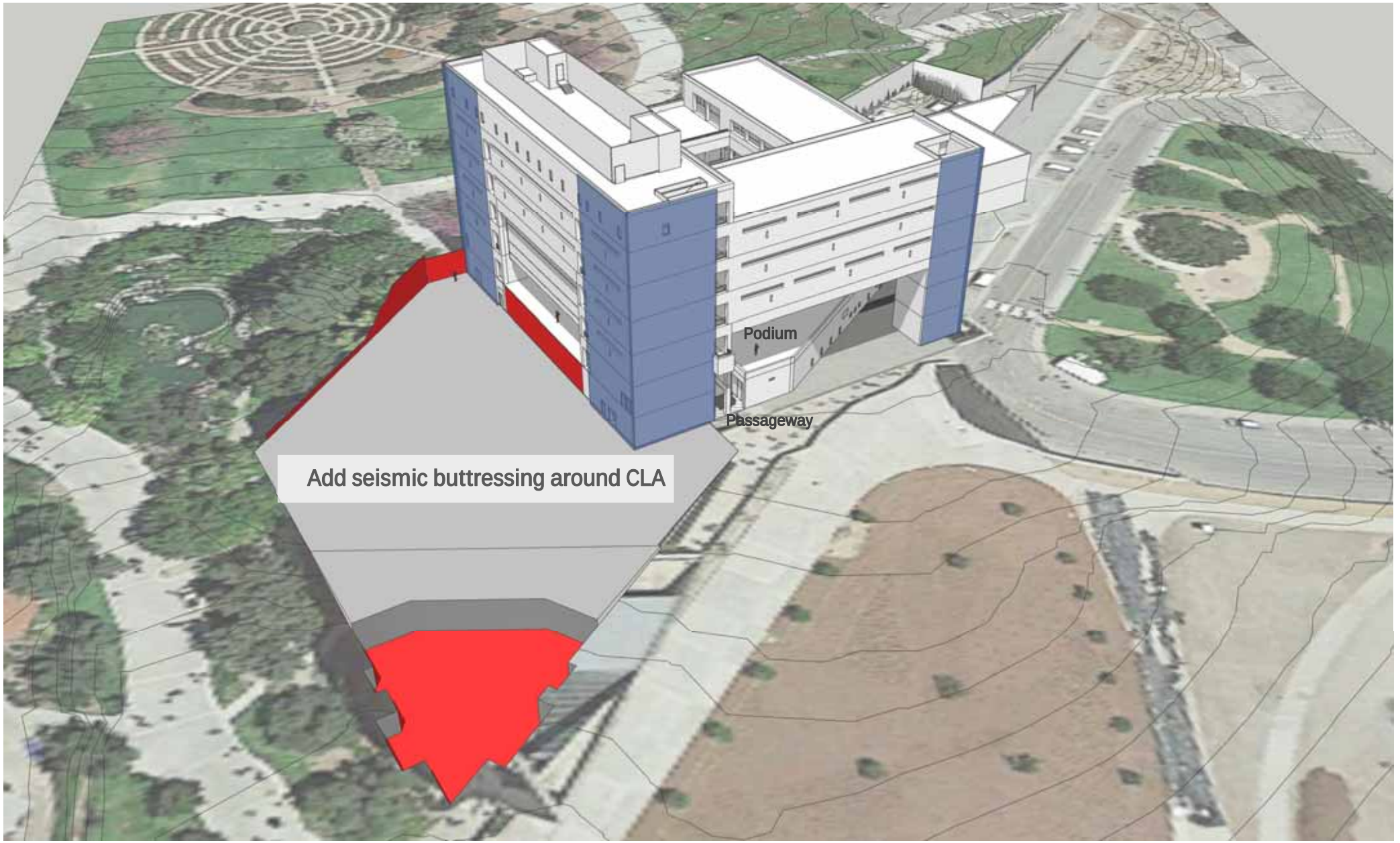
- Option 2: 5 story building, 25-30,000 GSF footprint – *Marketplace site*
  $104.4 M Building Project Cost
  $ 16 M Bldg 98 CLA-P Demo/Site Restoration
  $ 120.4 M Total Project Cost

CIP-BLDG 98 STRATEGIES

- Reinforce + Reconstruct the exist building
  - Option 1: roof + enclose the atrium
    143,000 GSF = 126,600 GSF 98CLA + 16, 300 GSF 98P
  - Option 2: larger roof + enclose the whole podium to add ASF studio-lab space
    168,300 GSF = 152,000 GSF 98CLA + 16, 300 GSF 98P

** add cost of any temporary facilities or relocations*

BLDG 98-CLA STUDIES: SEISMIC REINFORCING



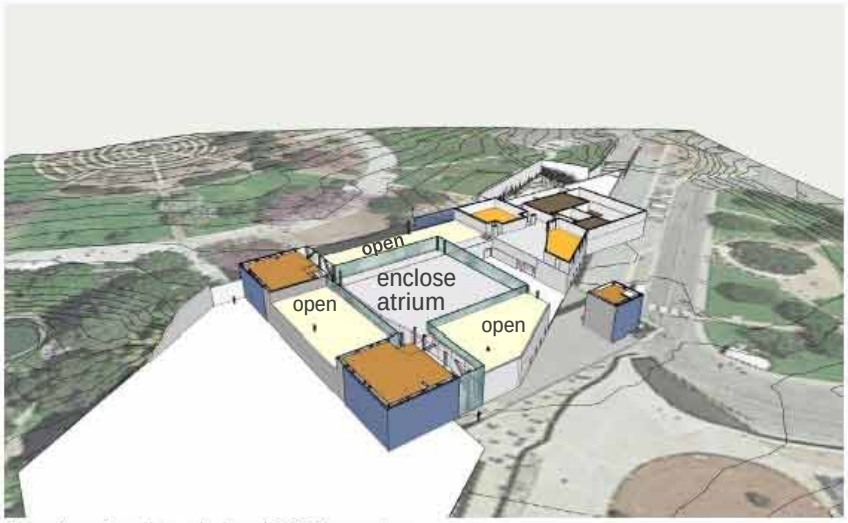
BLDG 98-CLA STUDIES: STRUCTURE

BLDG 98-CLA STUDIES: Option 1 – Enclose Atrium

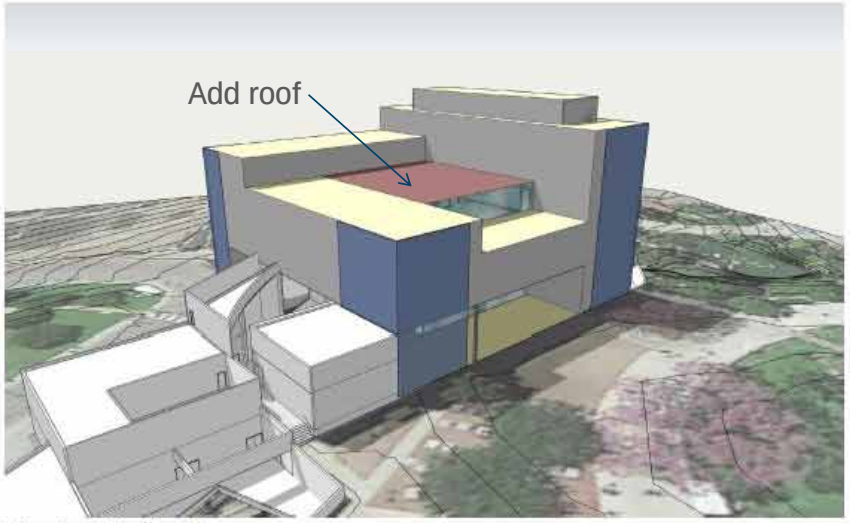
View from Southwest

OPTION 1

142,000	SF	Gross Area (110,480 SF existing)
60,100	SF	New exterior walls/fenestration
9,860	SF	New exterior walls/fenestration w/ add. Structure
23,500	SF	Structural shear wall reinforcement
21,950	SF	Re-roofing
6,800	SF	New roof with structure
15,800	SF	Exterior soffit
7,427	SF	Exterior plaza/courtyard
58,390	SF	Assignable Area (58,390 SF existing)



View from Southwest - level 2 3D floor plan



View from Northeast

CAL POLY POMONA

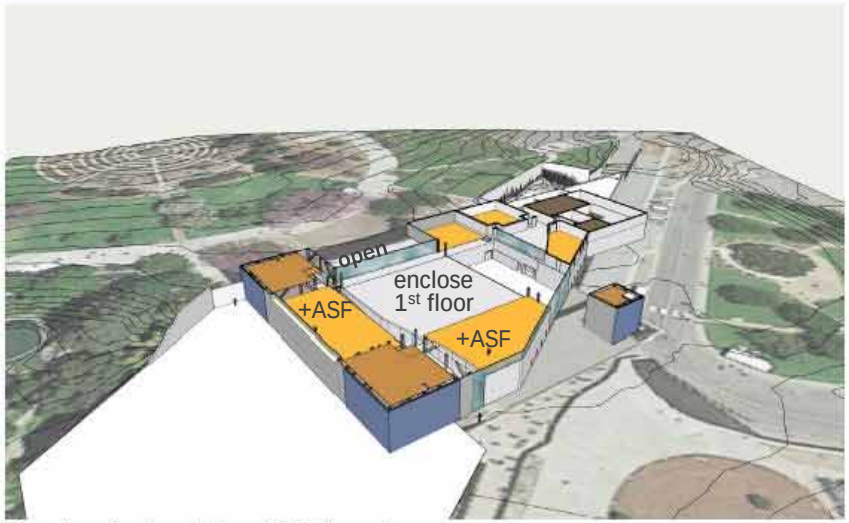
CLA BUILDING 098 - ENCLOSURE STUDIES

BLDG 98-CLA STUDIES: Option 2

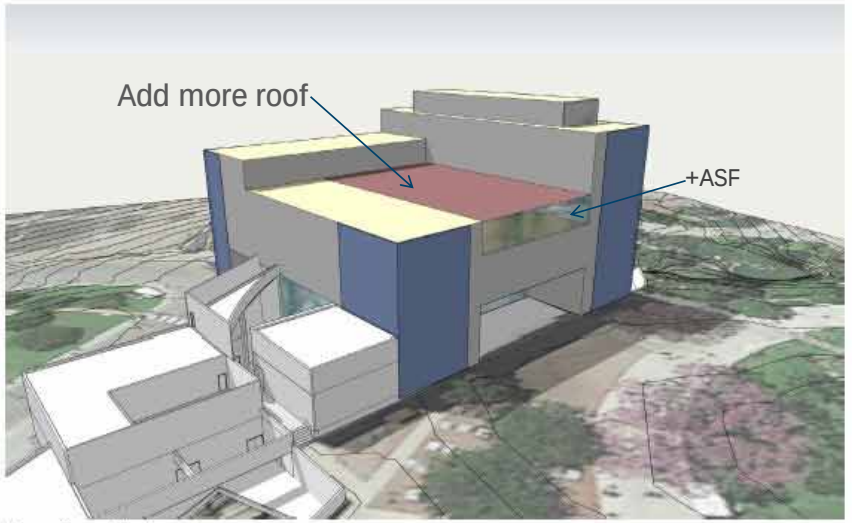
View from Southwest

OPTION 2

165,000 SF		Gross Area (110,480 SF existing)
61,700 SF		New exterior walls/fenestration
8,430 SF		New exterior walls/fenestration w/ add. Structure
23,500 SF		Structural shear wall reinforcement
19,400 SF		Re-roofing
9,550 SF		New roof with structure
5,000 SF		Exterior soffit
2,800 SF		Exterior plaza/courtyard
72,000 SF		Assignable Area (58,390 SF existing)
		10,000 SF Level 1 added ASF
		3,000 SF Level 6 added ASF



View from Southwest - level 2 3D floor plan

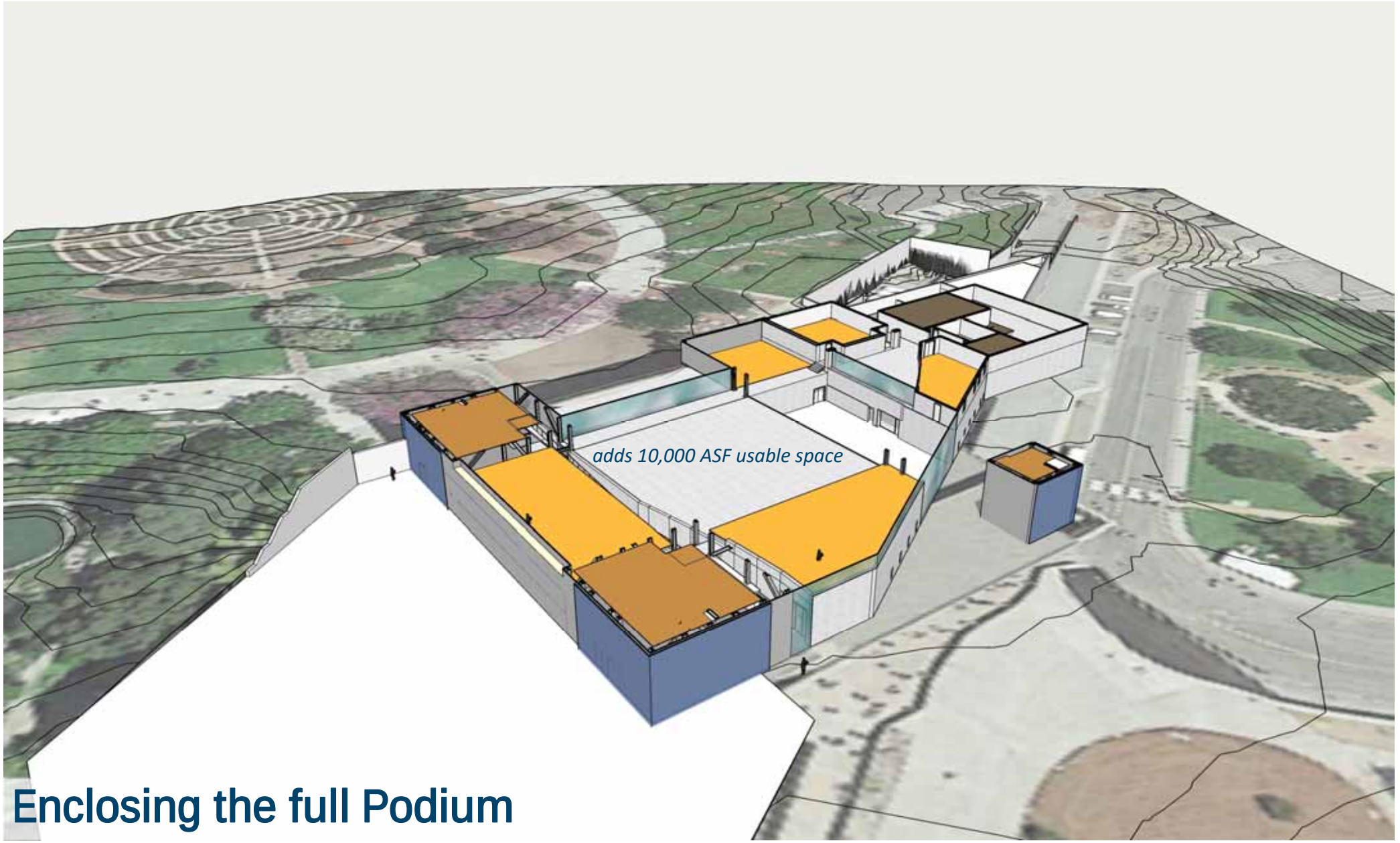


View from Northeast

CAL POLY POMONA

CLA BUILDING 098 - ENCLOSURE STUDIES

BLDG 98-CLA STUDIES: Option 2 – *preferred option*



Enclosing the full Podium

CIP-BLDG 98 STRATEGIES

➢ Reinforce + Reconstruct the exist building

- ➢ Option 1: roof + enclose the atrium

  143,000 GSF = 126,600 GSF 98CLA + 16, 300 GSF 98P

  $ 104.5 M Total Project Cost

- ➢ Option 2: larger roof + enclose the whole podium to add ASF studio-lab space

  168,300 GSF = 152,000 GSF 98CLA + 16, 300 GSF 98P

  $ 120.4 M Total Project Cost

** add cost of any temporary facilities or relocations*

Can a Case be made for 98-CLA transformation?

Yes!

Renovation transformation ASG Case Studies

Bryan Hall – Engineering (BEFORE)
Washington University St. Louis

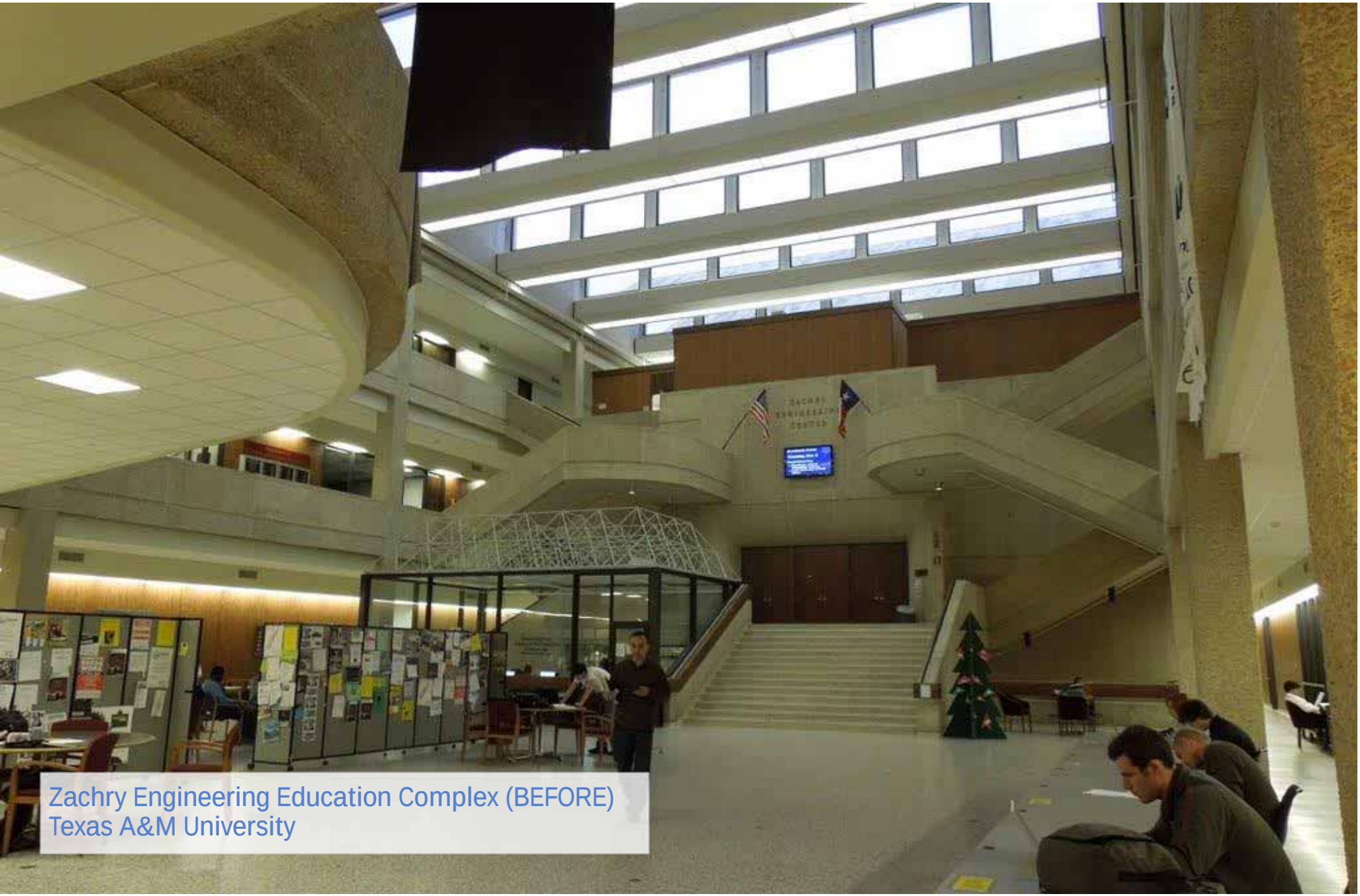
Bryan Hall – Engineering (AFTER)
Washington University St. Louis

Science Mall (BEFORE)
Kent State University

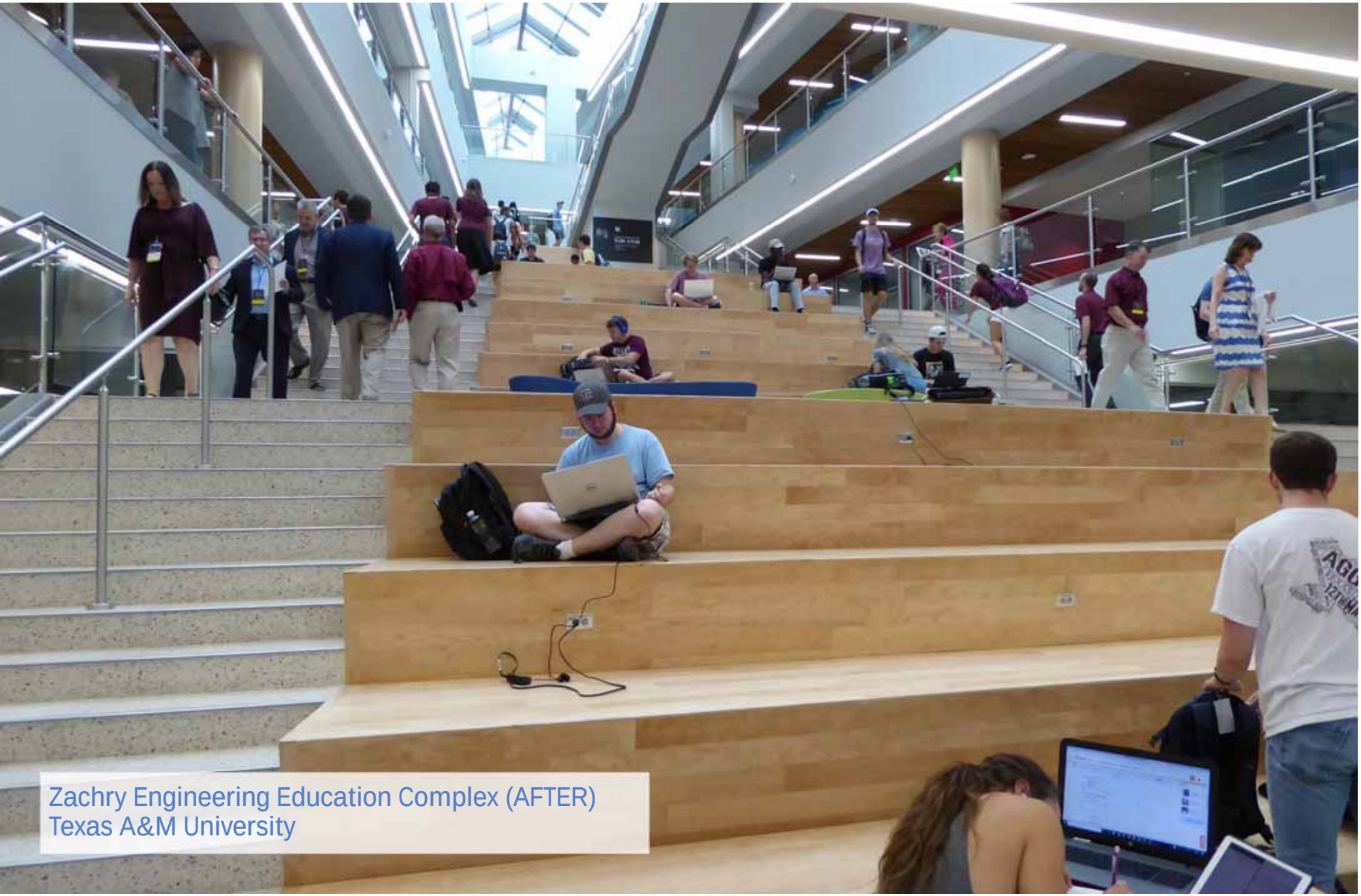
Science Mall (AFTER)
Kent State University

Zachry Engineering Education Complex (BEFORE)
Texas A&M University

Zachry Engineering Education Complex (BEFORE)
Texas A&M University

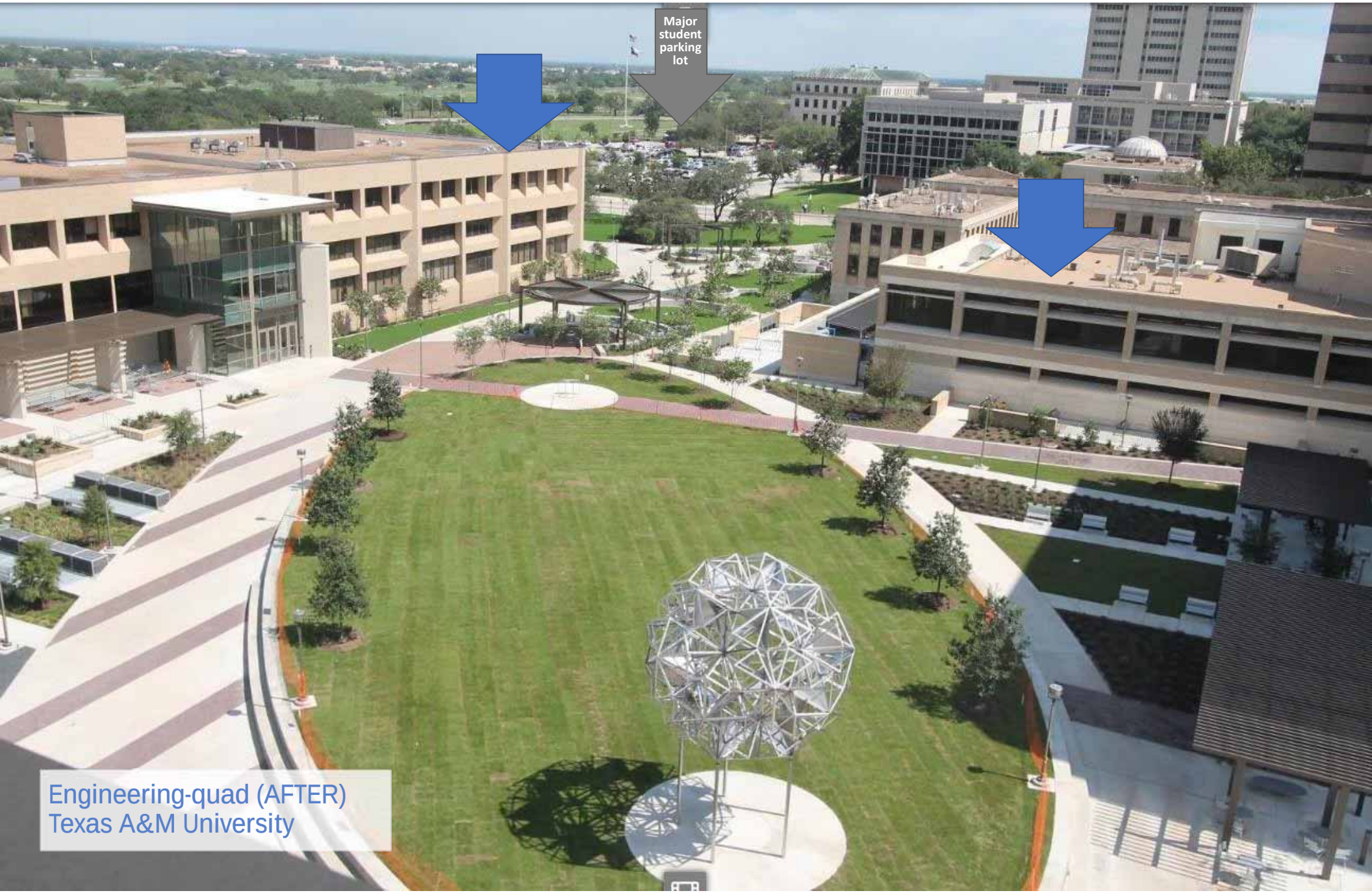


Zachry Engineering Education Complex (BEFORE)
Texas A&M University



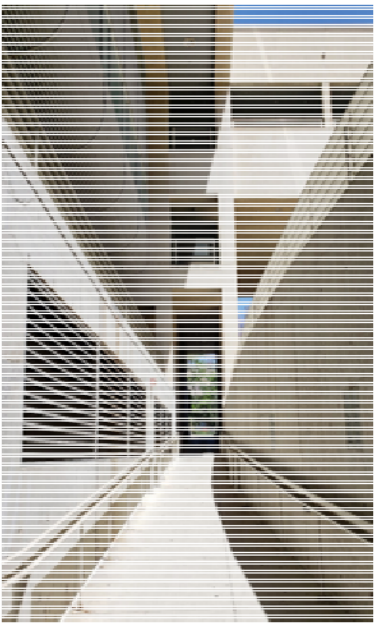
Zachry Engineering Education Complex (AFTER)
Texas A&M University

Engineering-quad (BEFORE)
Texas A&M University

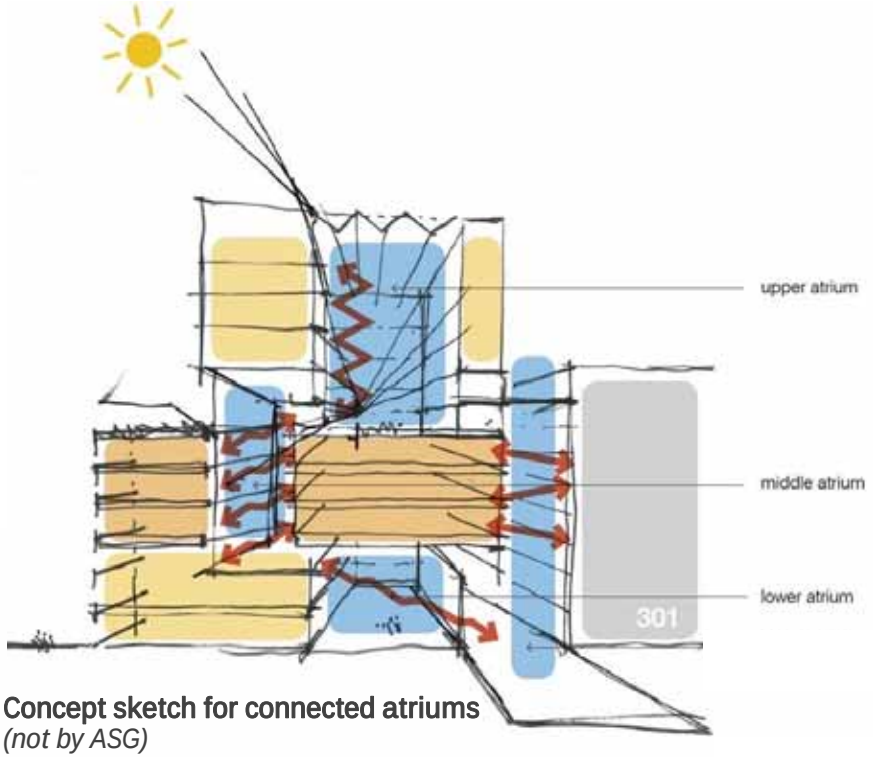


Engineering-quad (AFTER)
Texas A&M University

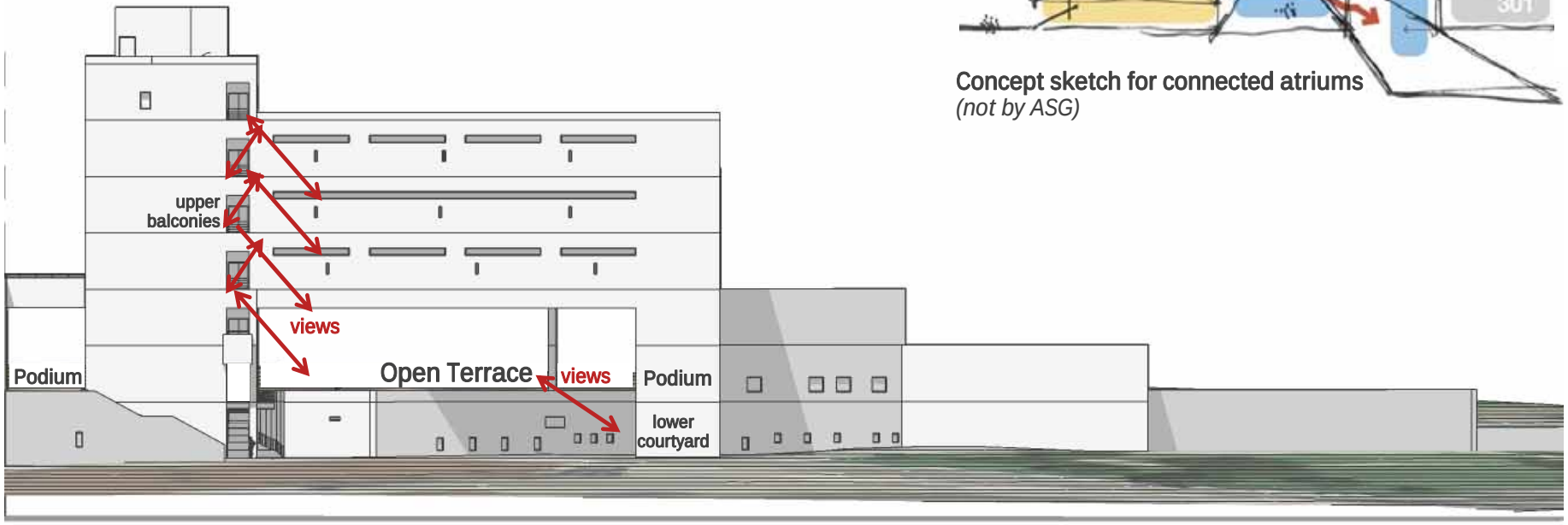
BLDG 98-CLA EXISTING: ATRIUM, COURTYARD



Precedent – Atrium Spaces



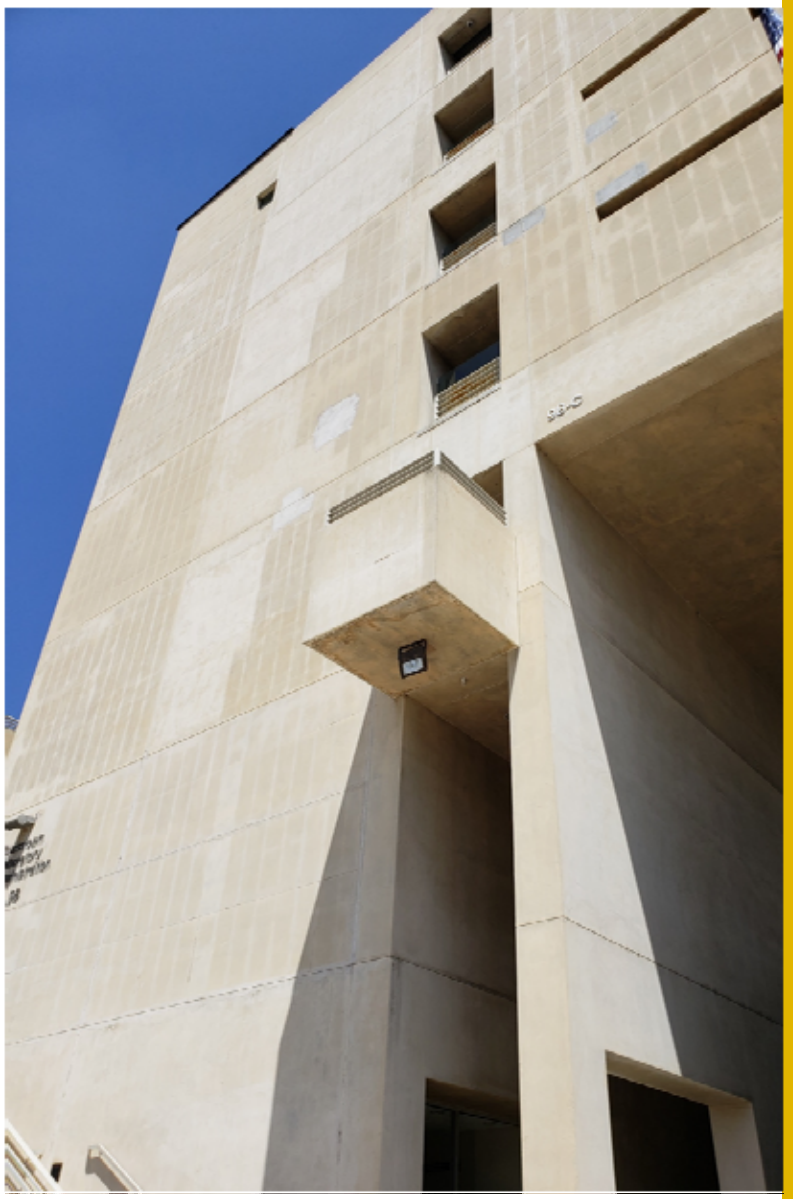
Concept sketch for connected atriums
(not by ASG)



Existing

Precedent – Atrium Spaces

BLDG 98-CLA STUDIES: EXTERIOR ENCLOSURE



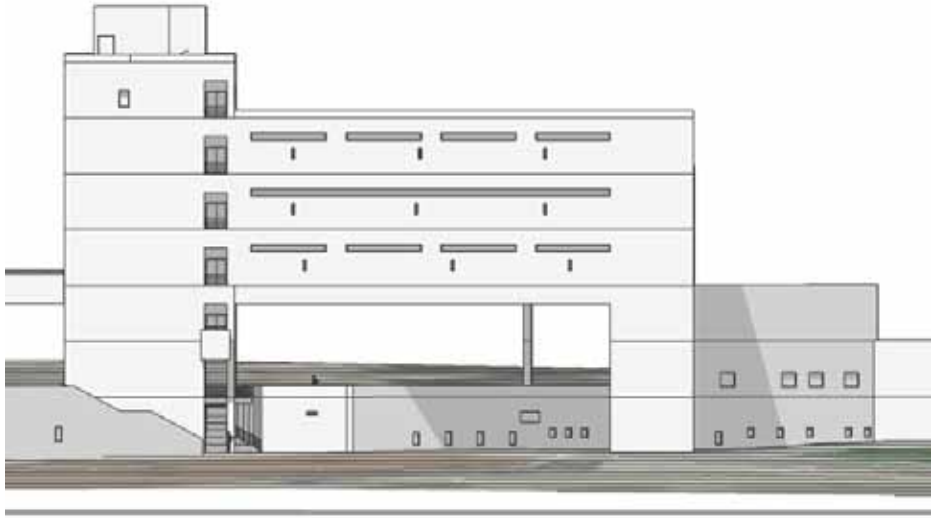
Precedent – Exterior Enclosure

Precedent – Exterior Enclosure

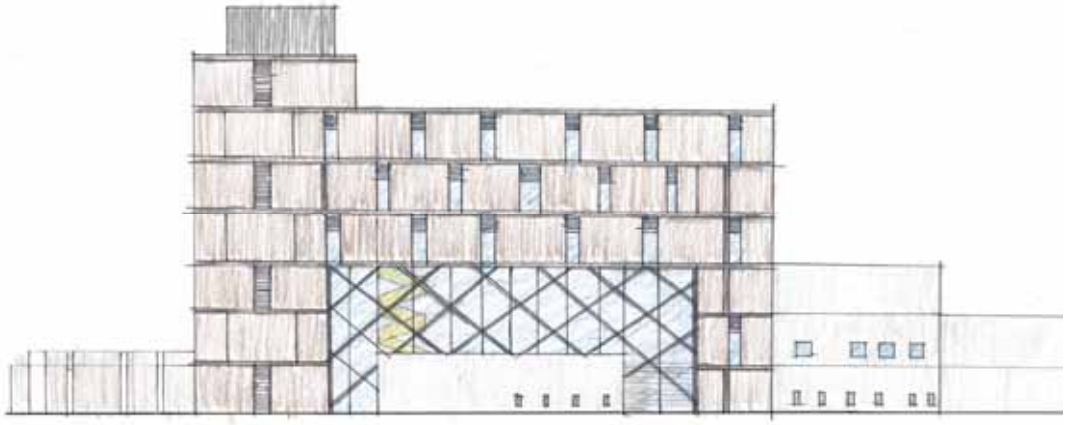
Precedent – Exterior Enclosure

BLDG 98-CLA STUDIES: GET DOWN TO STRUCTURE

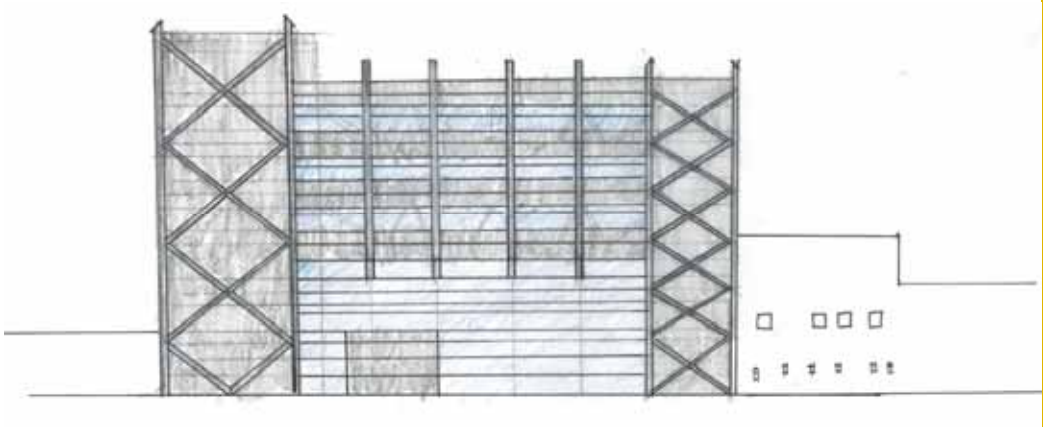
Facade Concepts - Existing



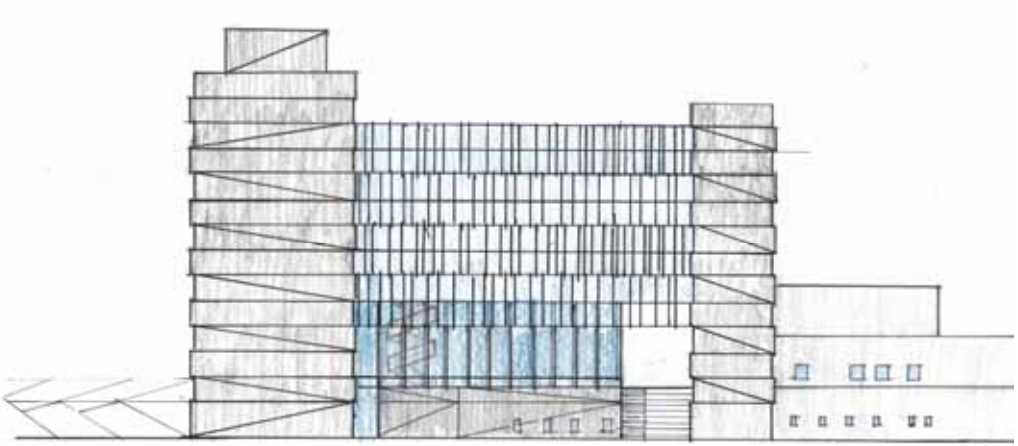
Facade Transformation Concept Study A



Facade Transformation Concept Study B

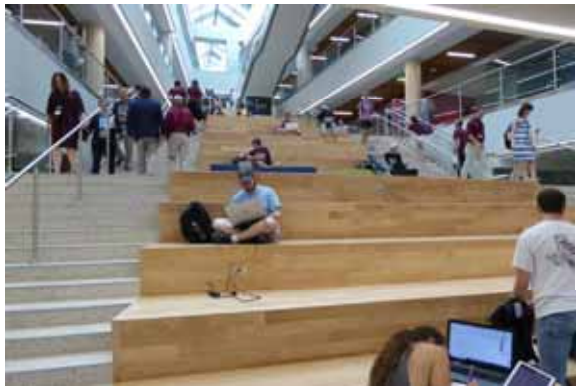


Facade Transformation Concept Study C



Programmatic options for new uses

- CLA should model new space types/standards for ‘learning-by-doing’
- Classrooms, studios or labs for project-based instruction
- Programs could include architecture, art, industrial design, engineering, sciences (not wet lab)
- Project + group study space, various room sizes as well as informal work areas
- Instructional ‘sandbox’ for faculty development of ‘best practices’ for new apps, tech/AV, etc.
- Consider options for flex space to accommodate project-based research
- Model a new approach to faculty work space - flexible, collaborative (similar to industry)
- Main floor could include flex space for reviews/juries, for student group presentation, for showcasing work, and for hosting ‘industry + university’ partnering events; could provide maker spaces for shared use


CIP-BLDG 98 Studies + Analysis

4) Evaluation Considerations:
   - *cost, relocation logistics, time-sequence to completion*
   - *campus impacts, limited uses for a seismic zone site*

CIP-BLDG 98 STRATEGIES COMPARED

➢ New building

5 yrs until 98-CLA/P is vacated, 6 yrs to completion

- ➢ Option 1: 2 story, 125,000 GSF
  $121 M Total Project Cost

- ➢ Option 2: 5 story, 125,000 GSF
  $120.4 M Total Project Cost

➢ Reinforce-reconstruct exist bldg.

+4 yrs until 98-CLA/P is completed + reoccupied

- ➢ Option 1: 126,000 GSF
  $104.5 M Total Project Cost*

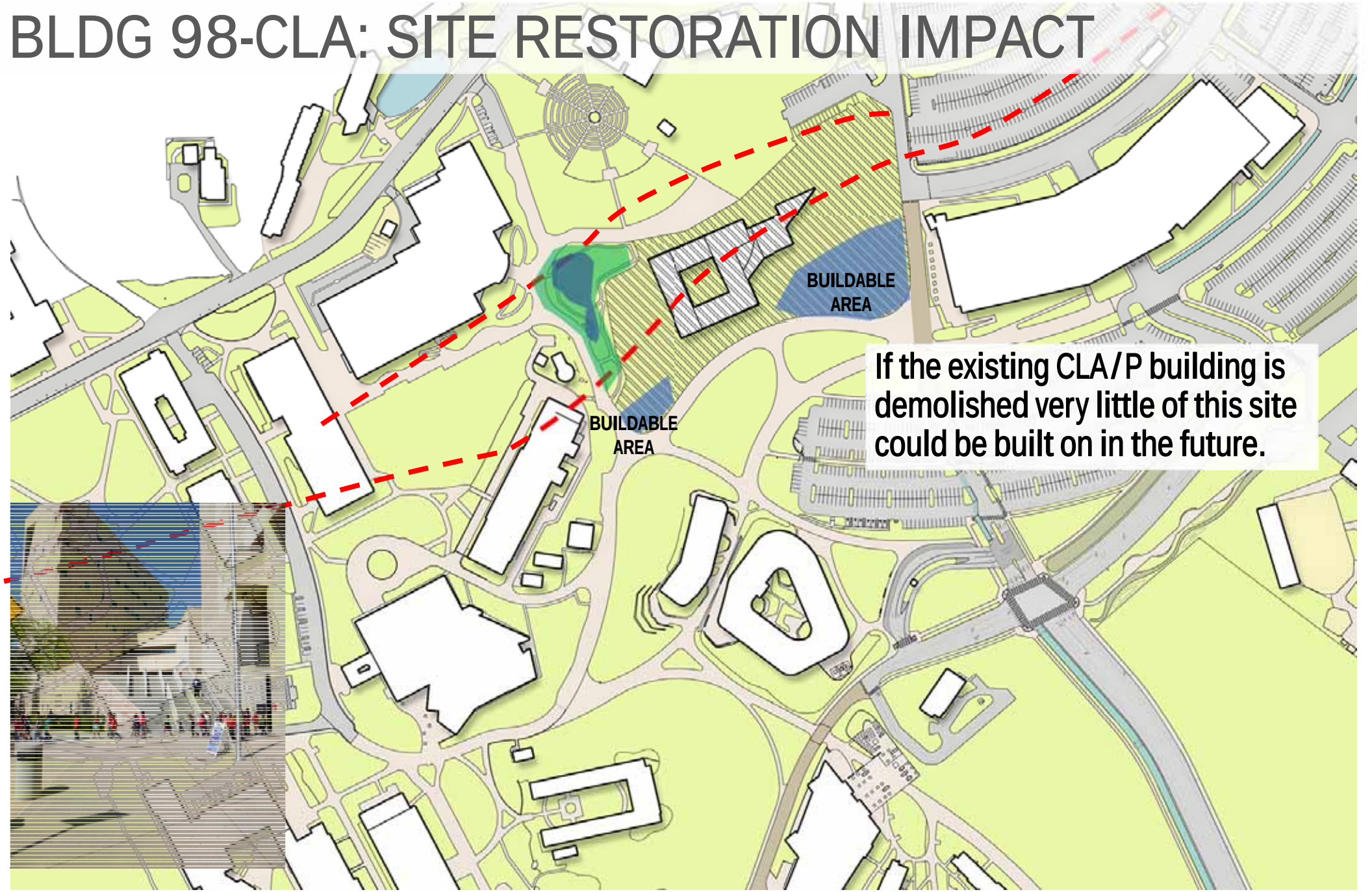
COST is LESS

- ➢ Option 2: 168,300 GSF
  $120.4 M Total Project Cost*

SAME COST - MORE AREA

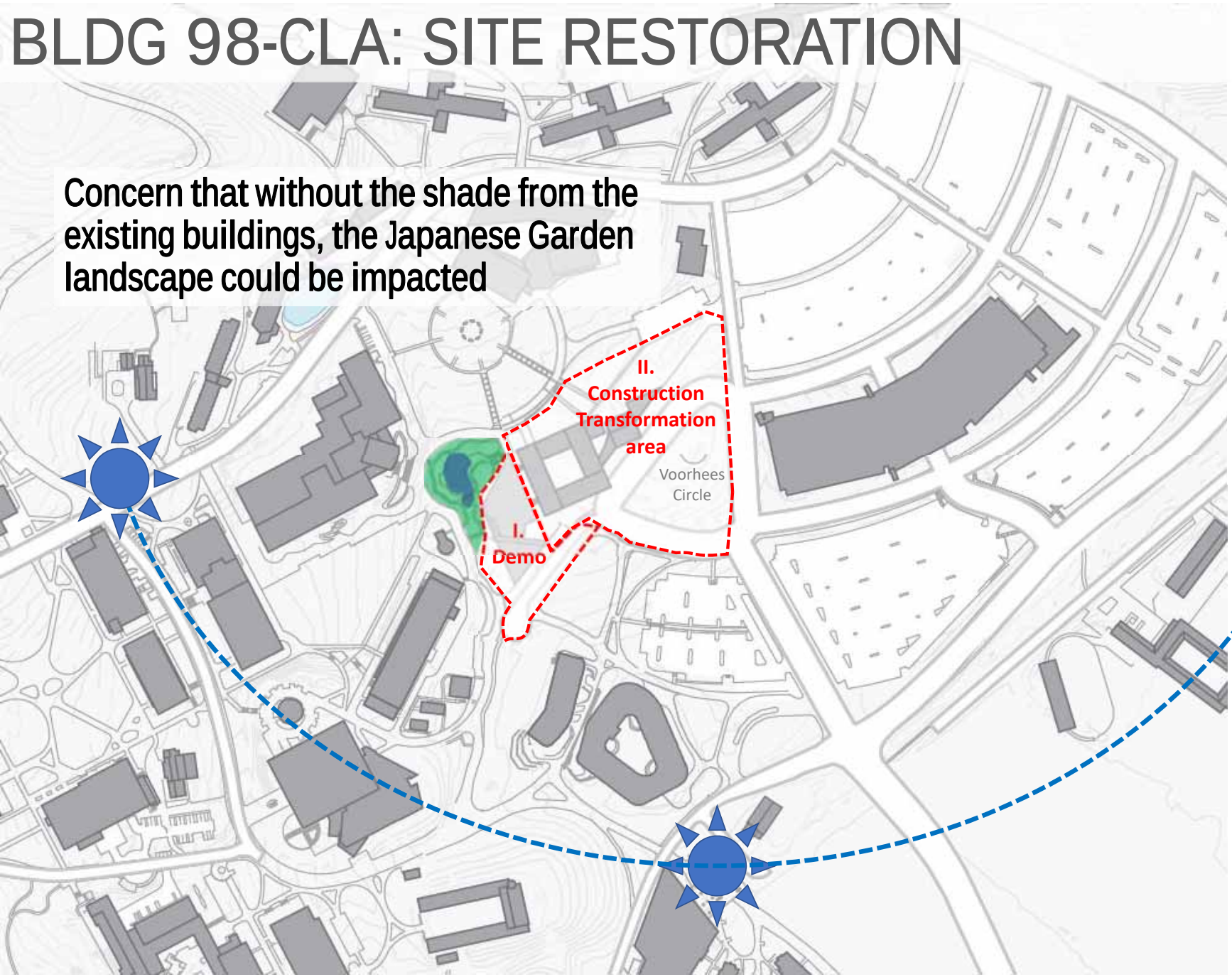
** add cost of any temporary facilities, relocations*

BLDG 98-CLA: SITE RESTORATION IMPACT



JAPANESE GARDEN

BLDG 98-CLA: SITE RESTORATION



CIP-BLDG 98 Studies + Cost Analysis

Summary of Findings:

- *Cost of Reinforce-Repurpose-Renovate is less than replacement*
- *Timeline is similar to occupy buildings, but w/new building adds 1yr demo/site restoration*
- *Relocation logistics – 50-60 people, 7-8 classrooms, about 50-60,000 ASF?*
- *Campus character-connectivity impact + limited uses for a central site on fault line*

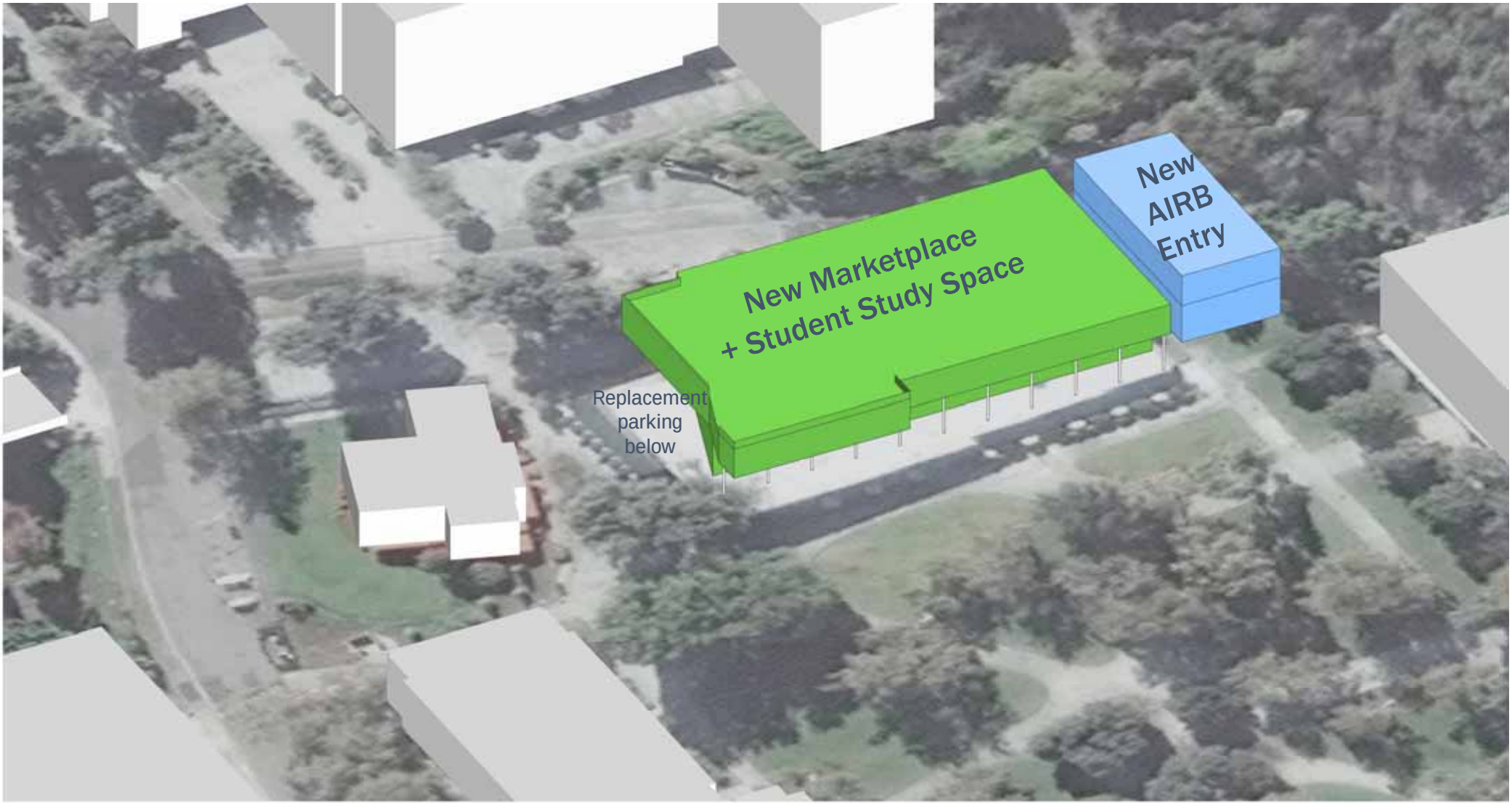

Transforming 98CLA
has the power to
transform the character
of the center of campus.

BSC Area Studies

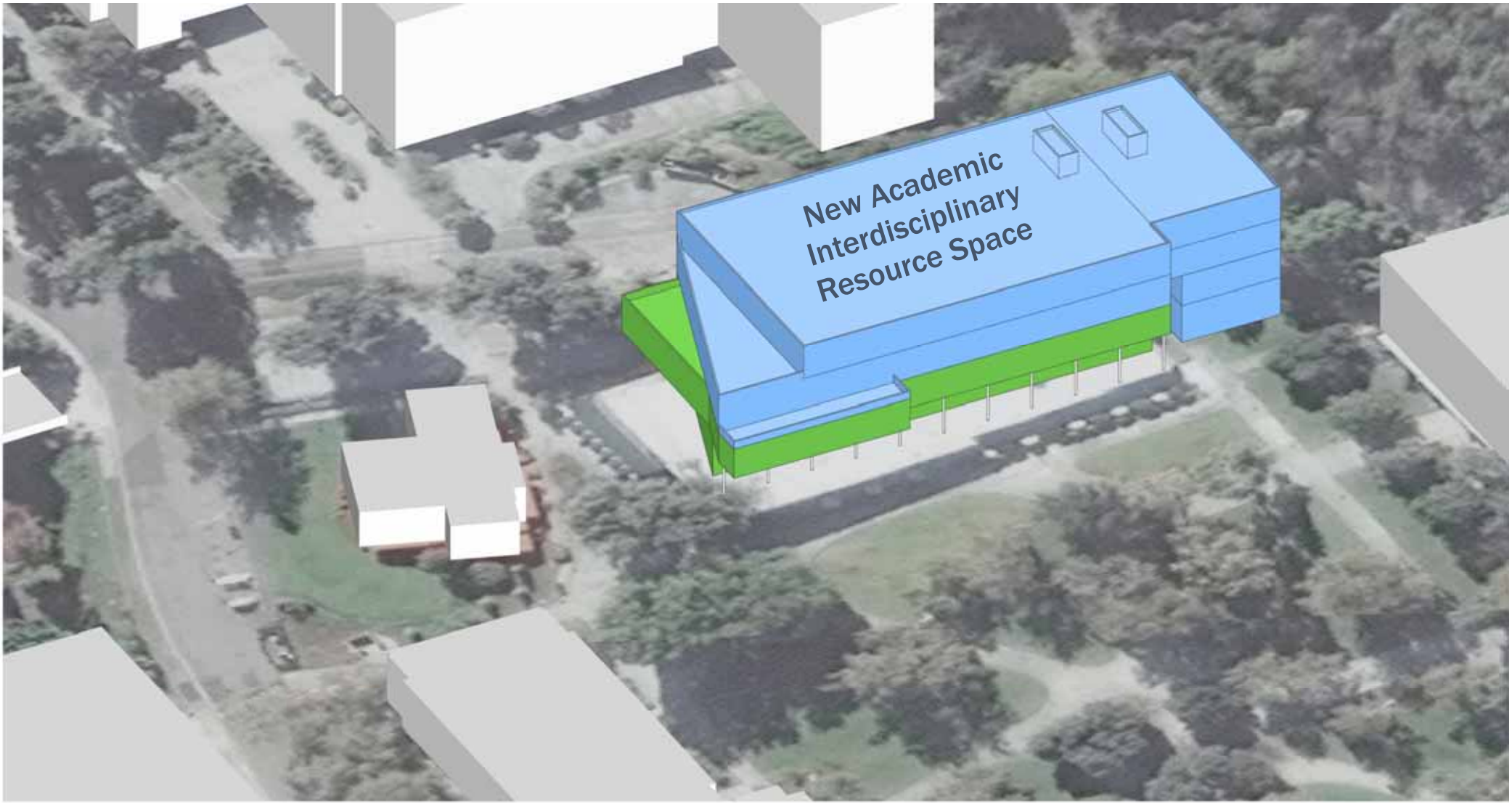
Campus Center +
Academic Interdisciplinary Resources Building

Campus Center Building - Existing

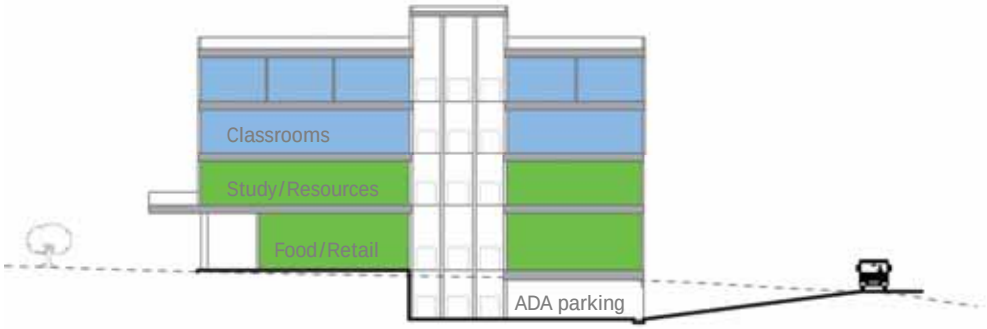
Campus Center Replacement + AIRB



Campus Center Replacement + AIRB



Campus Center Replacement + AIRB

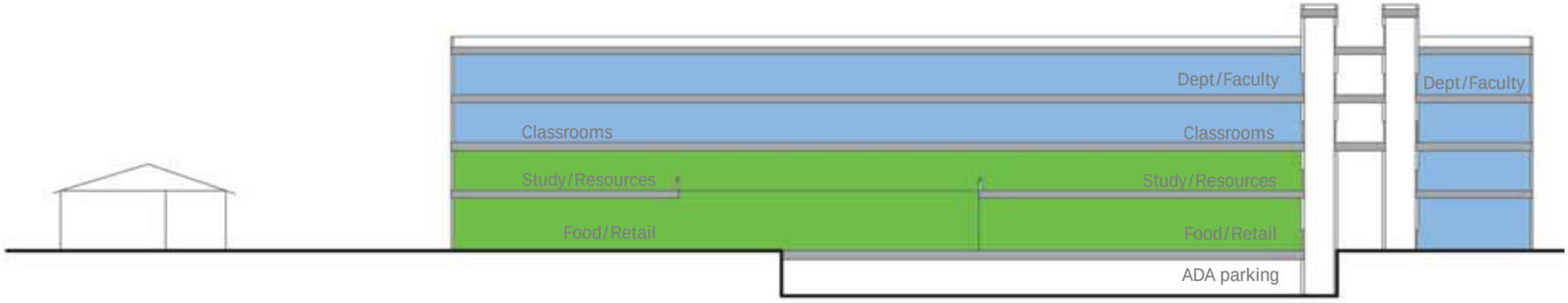


SECTION N-S

Area per floor:

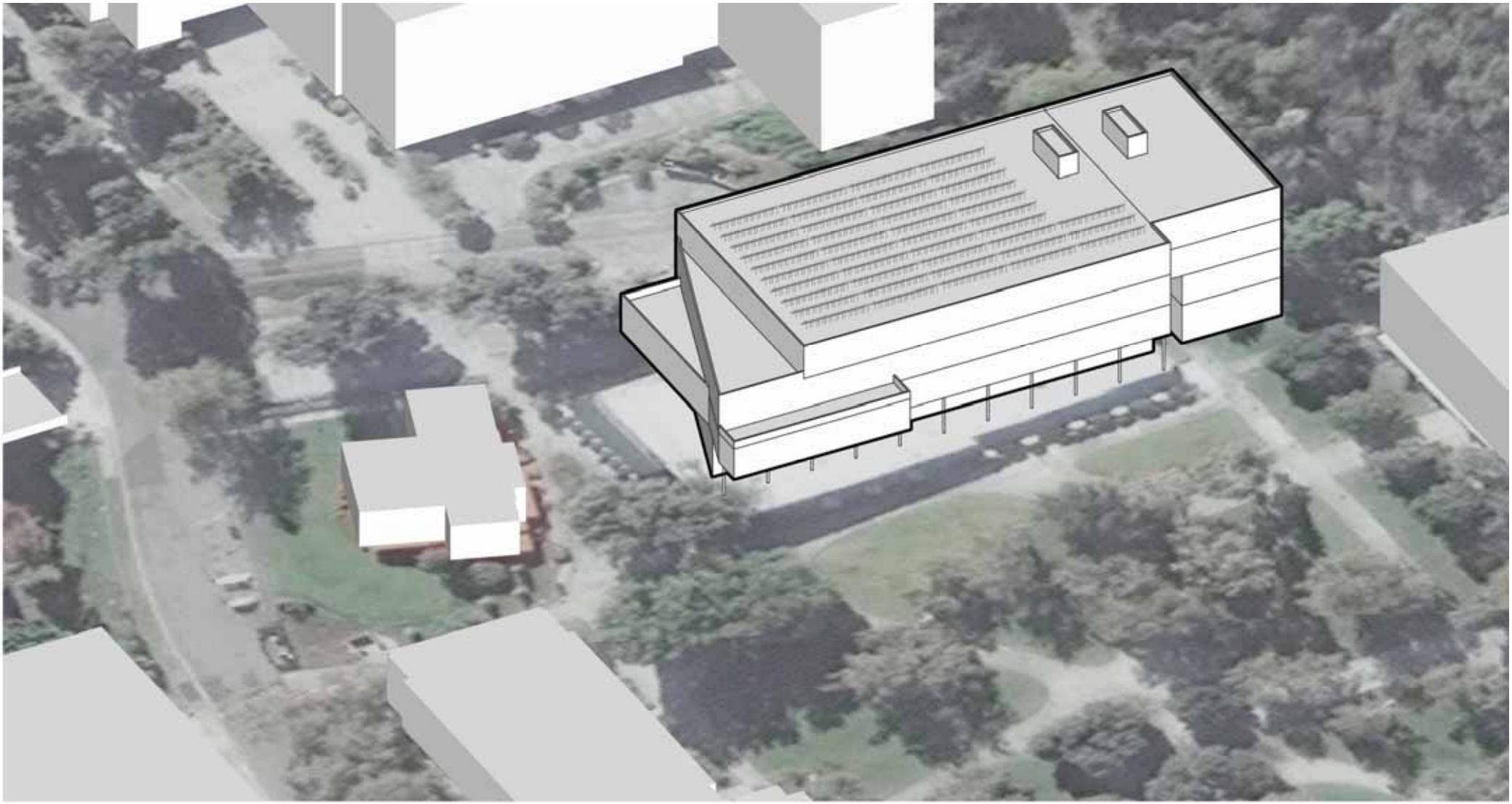
- 1st floor– 25,000 GSF
- 2nd floor– 31,000 GSF
- 3rd floor – 30,000 GSF
- 4th floor – 29,000 GSF

Area for Student Activity Space – 46,000 GSF
Area for Academic Space – 69,000 GSF



SECTION E-W

Campus Center Replacement + AIRB



Campus Center Replacement + AIRB