



RESEARCH  
**Libraries**  
THE PRACTICE OF BNIM

**bnim**

## ABOUT BNIM

BNIM is an innovative leader in designing high performance environments. BNIM's instrumental development of the USGBC, LEED, and the Living Building concept, combined with projects, methods, and research, shaped the direction of the sustainable movement. Through this involvement, the firm has redefined design excellence to elevate human experience together with aesthetics and building performance. In practice, this multifaceted approach to design excellence has yielded national acclaim, including the AIA National Architecture Firm Award, and consistent design recognition nationally and internationally. BNIM is **Building Positive**, a notion that describes how our practice leverages its collective capacity for design thinking to solve issues at every scale in a way that is focused on building the positive attributes of community and the built environment. Through an integrated process of collaborative discovery, BNIM creates transformative, living designs that lead to vital and healthy organizations and communities.



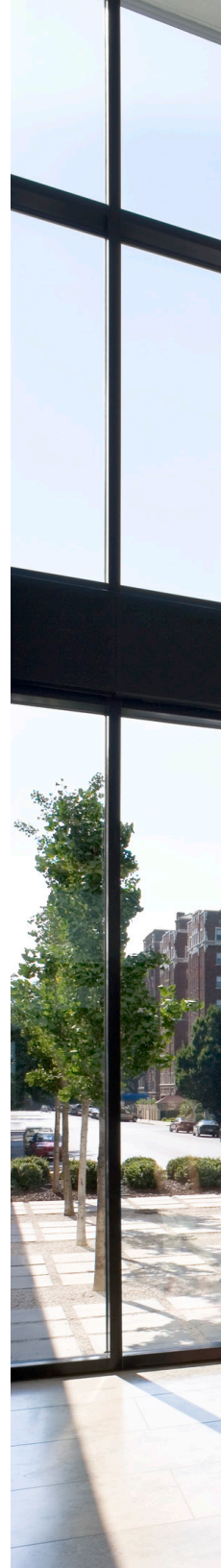
RESEARCH  
**Libraries**  
THE PRACTICE OF BNIM

# Reimagining the Library of the Future

Two seemingly opposing trends about the use of college libraries have recently emerged. First, gate counts have never been higher; more students are using the library than ever before. Second, the use of books and printed material — what many have assumed is the original purpose of the library — has never been lower.

These ideas are further elaborated and supported by additional trends identified in the evolution of libraries, the people they employ, and their role on campuses:

- A growing trend has seen institutions consolidate and merge their physical collections, often in an offsite, purpose-built storage facility. The benefits of this strategy are long-term preservation and the opening up of valuable square footage previously occupied by collections.
- The contemporary research library is positioning itself as a network hub of scholarly knowledge, which requires not only a physical presence, but a digital one as well. Digital networks also encourage cross-institute partnerships: Within the current climate of shrinking budgets and increased focus on digital collections, collaborations enable libraries to improve access to scholarly materials and engage in mission-driven cooperative projects.
- The role of the librarian is evolving, increasingly being defined as that of a guide. Curation still matters, and finding the right resource in a sea of content is more challenging now than ever before. As stated in the white paper *"Reimagining the Georgia Tech Library:" As our patrons grapple with new media, digital repositories, massive data sets, and open access, the Library is there to guide them with instruction, tools, experience, and vision.*
- There is an increasing need for "shallow end" services — checking out a VR headset from the library's trove of gadgets, for example, or using a virtual classroom to practice instruction techniques. These needs are met by a cadre of individuals who have more in common with sales associates at the Apple Store than they do with traditional librarians.
- At the same time, the library remains a bastion of quiet reflection, and the generation of new knowledge requires both active exchanges and periods of individual study. A spectrum of space activity levels — noisy to quiet — is necessary to meet these varied modes of learning.





These trends challenge academic and research libraries at universities and institutions around the country to transform themselves into entities far more vital than storehouses for books, returning to their original purpose as a space for cultivating scholarly communities. Many opportunities for innovation may be found in the architectural response to these trends. The following areas comprise that response:

### **Long Life, Loose Fit**

Change is a variable that can be accounted for in design. When spaces are configured with this in mind, they can more easily adapt to future needs. At the Robert E. Kennedy Library at Cal Poly in San Luis Obispo, California, the five-story Brutalist structure will undergo a significant renovation to enhance overall functionality for the 21st-century student experience. The programming process revealed opportunities to consolidate spaces for books, reorganize an indiscriminate network of study rooms, and provide open areas for interaction, all of which allow for future flexibility as needs continue to evolve.





## Spaces for People

Light and volume are the basic building blocks for people space. At the Price Gilbert – Crosland Tower Library at the Georgia Institute of Technology (*above*), creating generous volumes in a low, robust former stacks building has been central to that building's transformation. These volumes have been placed on the north side of the building, near a new clear glass curtain wall, providing diffuse solar illumination, as well as views toward the campus and surrounding city.



## Connection and Porosity

As the research library becomes more integrated with its surrounding network of scholarly knowledge, the library building can become a connected, visible, and porous venue for the sharing of knowledge. This implies multiple points of entry and exit rather than a singular point of control. It also means revealing the work that's going on inside the building from the outside, and seeing the context of the interconnected outside world from within.

## Integration of the Physical and Digital

The digital ether is ever-present, ubiquitous, and utterly invisible. A library is a place to reveal and to make the invisible visible. Doing so is sometimes pragmatic (as in virtual browsing) and sometimes artistic (as in an abstract installation).

As historian Shelby Foote put it, "A University is just a group of buildings gathered around a Library." On most campuses, you'll find the library near the geographical center, and this strategic physical location makes it an asset to the institution. Furthermore, the academic research library is a neutral space. These two qualities — centrality and neutrality — make the library the ideal venue for cross-disciplinary collaboration. A range of spaces can be provided to facilitate this productive interaction: places to gather, create, visualize, and share ideas. Identifying a readily available source of food and caffeine certainly helps, too.







## New California Landscapes

When Robert Rauschenberg and John Baldessari first began their collaborative work, they were exploring the possibilities of light, color, and form. The two artists, working independently, had both been influenced by the abstract expressionism of the 1950s and 1960s. Rauschenberg's work was characterized by its vibrant, layered colors, while Baldessari's was more focused on the play of light and shadow.

As the two artists continued to work together, their styles began to converge. Rauschenberg's layered colors and Baldessari's play of light and shadow became a central theme in their collaborative work.

Over time, the two artists' styles became more and more integrated. Rauschenberg's vibrant colors and Baldessari's play of light and shadow became a central theme in their collaborative work.

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## Design for Performance

The definition of “library” has evolved significantly in the last two decades, and institutions are mobilizing to adapt library facilities for future generations. The timing of this trend coincides with another evolution in the building design industry related to building performance. Phrases like sustainable design, smart buildings, intelligent buildings, and high-performance design are all rooted in the concept of optimizing buildings and systems to do more. Buildings today can integrate strategies and technologies that dramatically reduce energy and water usage. User data and building sensors can inform the design of interior spaces and building systems. Automated systems can be programmed to respond to environmental changes like temperature shifts and sun angle changes. New building technology is being developed regularly to accommodate almost any imaginable user need, and monitoring technology can provide real-time performance feedback.

These evolutions in building design and technology advance the vision for the “library of the future” to one that delivers a high level of performance for owners and users.

The renovation of Price Gilbert – Crosland Tower doubles the number of people in the building – increasing seats from 1,250 to 2,360 – total energy consumption will be reduced by about a third, and energy consumption per capita will decrease by 80%.

- 65% energy consumption reduction annually (121 kbtu/sf/year before renovation, 42 kbtu/sf/year after renovation)
- 80% energy consumption reduction per capita (96.8 btu/SF/person before renovation, 19.9 btu/SF/person after renovation)
- 91% water use reduction (1,031k gallons/year before renovation, 97,000 gallons/year after renovation)
- 56% mechanical/energy reduction from ASHRAE 90.1 baseline

In CalPoly Kennedy Library (*left*) integrated systems and materials will decrease energy and water usage, utilize renewable resources, and elevate human health and wellbeing. Combined, these strategies are anticipated to reduce energy usage by 65% and water usage by 20%.

Students will benefit from 15,000 square feet of recaptured space, allowing for:

- 52% increase in user space
- Increase in seating from 2,400 to 3,500 seats
- 107 study rooms, a 65% increase



# Price Gilbert – Crosland Tower Library Renewal

GEORGIA INSTITUTE OF TECHNOLOGY  
ATLANTA, GEORGIA







The adaptive reuse of Price Gilbert Memorial Library and Crosland Tower at Georgia Institute of Technology will transform the two campus buildings into the *Research Library of the 21<sup>st</sup> Century*. The project is a critical initiative of the institute's strategic plan and vision for transforming the campus into a knowledge-based community. The transformation is founded on changes in the way that students and faculty currently use the library, as well as future trends in library utilization found on peer campuses across the country. Georgia Tech has conceived of a place where knowledge is not simply stored, but generated.

230,000 SF

Est. Completion in 2018 (Phase 1), 2020 (Phase 2)

Original Building



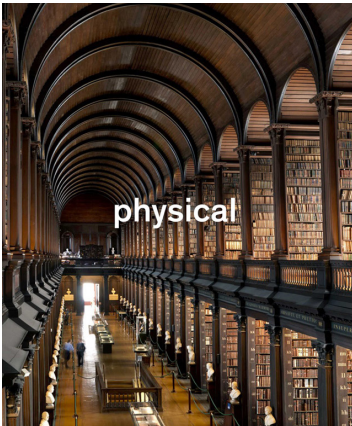


**The Library, Future Tense: A Vision for Georgia Tech's Research Library of the Twenty First Century**

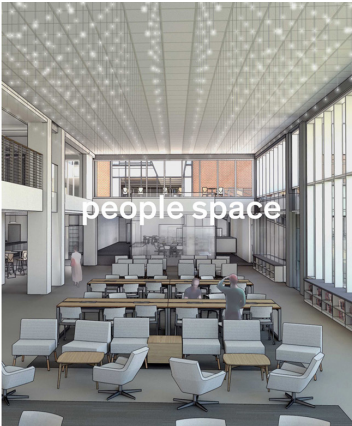
Price Gilbert Memorial Library and Crosland Tower on the Georgia Institute of Technology Campus will be transformed into Georgia Tech's vision for the Research Library of the Twenty First Century. These before/after pairs illustrate the big ideas of the transformation.



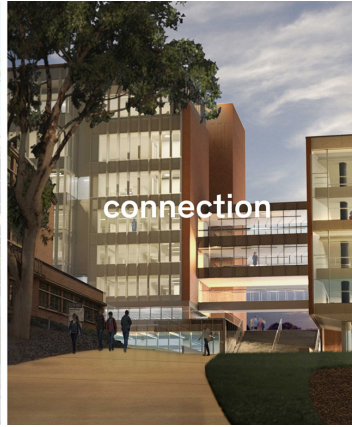
Price Gilbert and Crosland Tower have great value to Georgia Tech as physical assets. The buildings occupy prime real estate at the heart of Georgia Tech's campus. They comprise 230,000 square feet of non-departmental Institute space. And in the case of Price Gilbert, the midcentury modern design is historically significant. Continuing to invest in the relevance of these buildings means first focusing on renewing core, shell, and building systems. The envelopes of the buildings will be rehabilitated and opened up to daylight wherever possible. The core elements will be upgraded to meet contemporary codes and will provide room for future expansions or modifications. The systems that heat, cool, move water, and light the buildings will be entirely new and very efficient. Taken together, these strategies will drive energy use dramatically downward even as the user population doubles, so that the energy use intensity per person reduces by a factor of almost five.



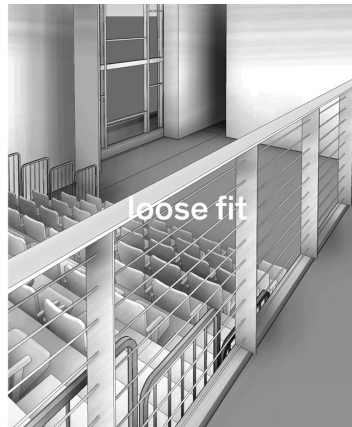
With circulation of physical library materials trending downward, knowledge is now recorded, stored, and disseminated by digital means. The digital cloud of shared knowledge is overwhelmingly vast. The Library of the 21st Century is a place to make sense of it all. There remains a human desire for the Library to be a physical, tactile, and serendipitous experience that inspires awe. The future Library will do this by taking these digital, invisible resources and manifesting their presence through means that are sometimes pragmatic (as in virtual browsing) and sometimes artistic (as in an abstract installation). Despite demand for digital resources over physical books, the importance of a place to study, collaborate, and explore new learning methods is increasing among students and faculty. The role of the future research library is unique and necessary. It is neutral ground uniting the campus and community that provides global connectedness for collaborative, interdisciplinary and individual learning in ways that no other department or school can provide.



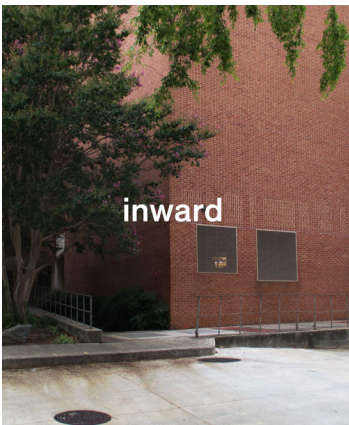
Crosland Tower was purpose built as a stacks building, originally called the annex. Well-suited to house books, it is a robust structure with low floor-to-floor heights and very few windows. With the renewal, the vast majority of books are leaving this facility and being relocated to the Library Services Center, a joint venture between Georgia Tech and Emory University. The resulting void will be transformed into people space. But the characteristics that make Crosland Tower a good storehouse for books need to be turned inside out in order to do so. People require daylight and views; volumetric spaces; and a variety of different space types for different uses, and the renewal will create these spaces.



The two buildings are technically separate structures, but the separation is not so distinct when inside them. A connecting structure obscures the independence of each building and congests an important pedestrian thoroughfare, Cherry Street. The design will reintroduce this artery's importance as a north/south campus connection by opening up the space between the buildings, connecting them with a light, transparent bridge. Inside the building, the main hub of activity will move one level down from where it currently is. This change will allow Price Gilbert to retain its pristine historic character on the upper levels, and down below will also permit a contiguous, accessible internal connection through Crosland Tower, Price Gilbert, and the recently completed Clough Undergraduate Learning Commons.




Long Life, Loose Fit, as found in AIA COTE's measure nine, has become one of the strongest principles guiding the design of this project. BNIM's design intent for the Library Renewal is to create good spaces for people that remain relevant far into the future. Daylight and volume are the basic building blocks that existing Price Gilbert possesses, and are exactly what will be created in Crosland Tower. Crosland Tower floor plates are designed for adaptability as office and user space needs wax and wane. A variety of spaces will be provided — small to large, grand to private. Georgia Tech is continuing to pilot new concepts for delivering service this fall and next spring. And the building design is flexible enough to react to and incorporate the findings of these pilot programs.



The next generation library becomes a place where knowledge is both produced and consumed. Crosland Tower was purposefully designed as an introverted building. The renewal will transform it into an extroverted building — a better reflection of the functions taking place within and of Georgia Tech's relationship to the knowledge community beyond its walls. The north and south facades of the tower will be removed and replaced with highly transparent, low-iron glass to provide controllable south light and diffuse north light. The east and west facades will be left opaque in response to the harsh east and west sun. New entry points will be created where blank walls exist currently. And Crosland Tower will be crowned at its top level by a large reading room and event space with expansive views of the surrounding city.

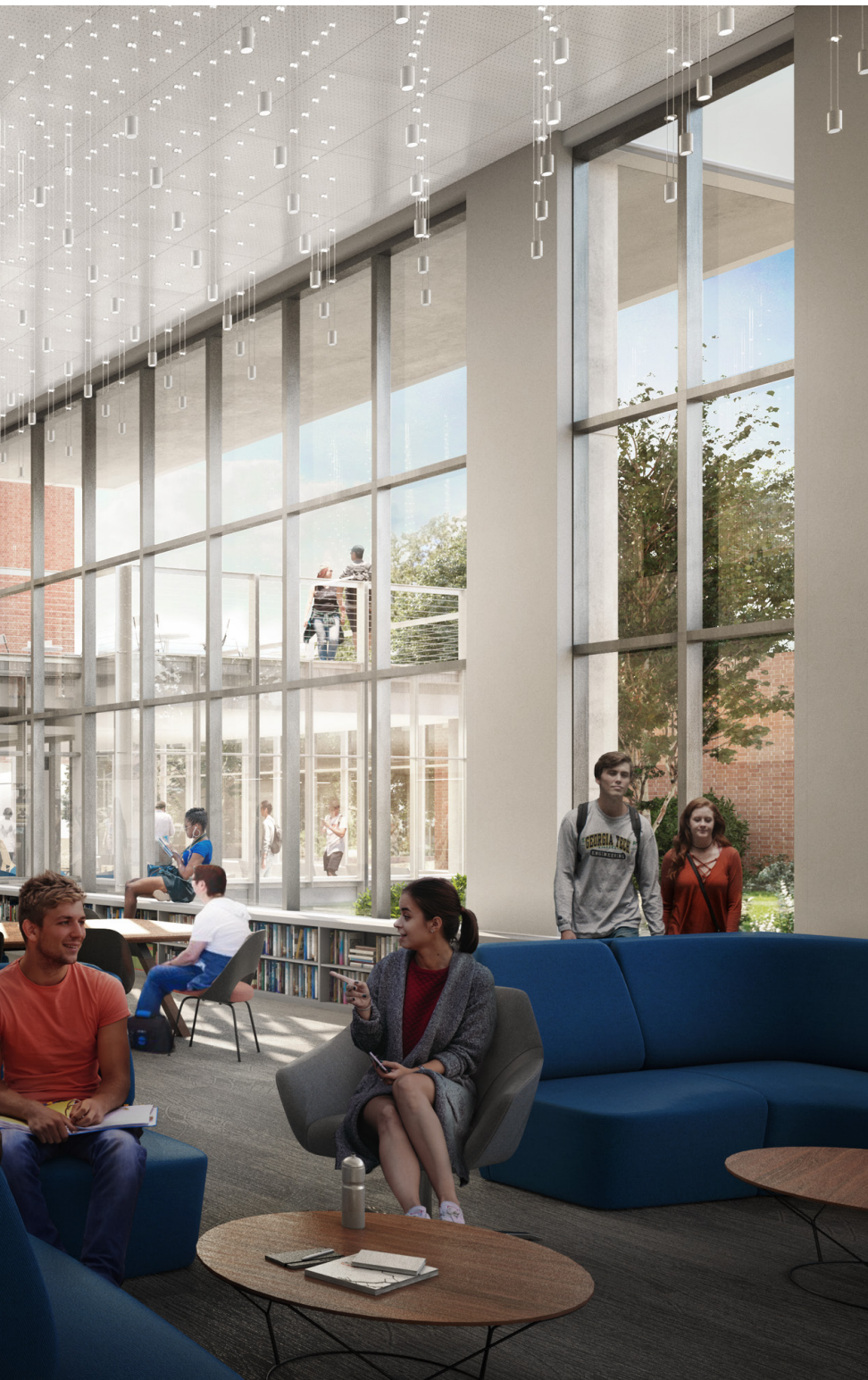


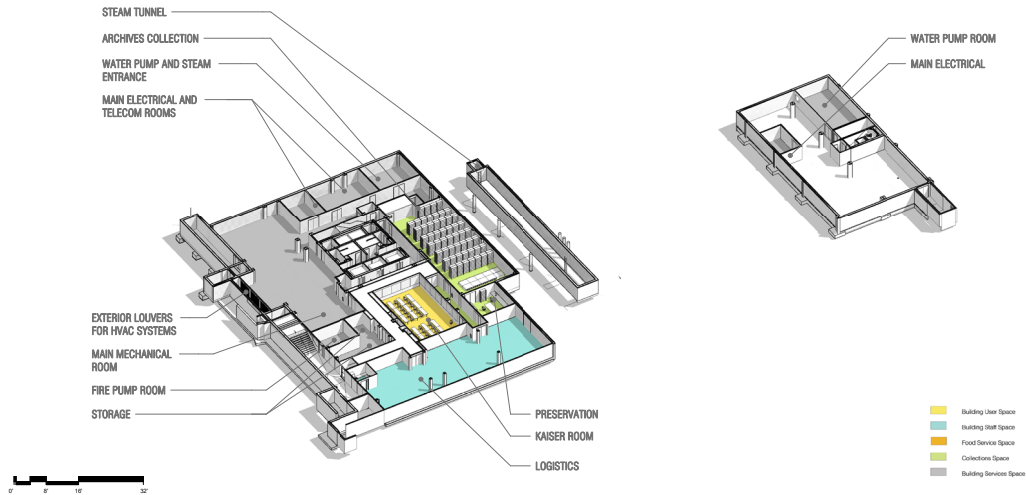


MECHANICAL/ENERGY

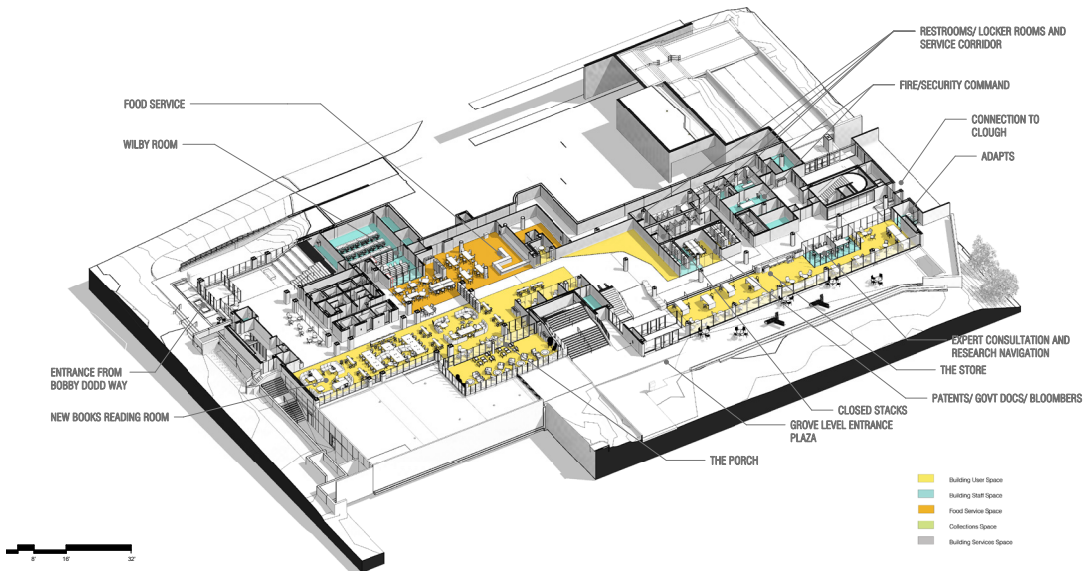
**36%**  
REDUCTION  
FROM ASHRAE



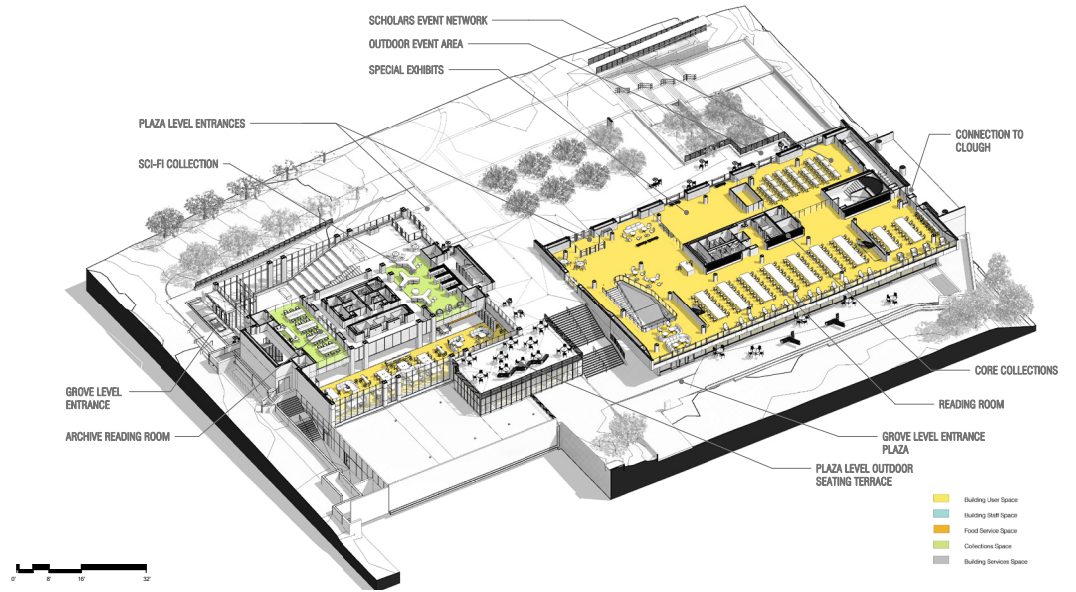




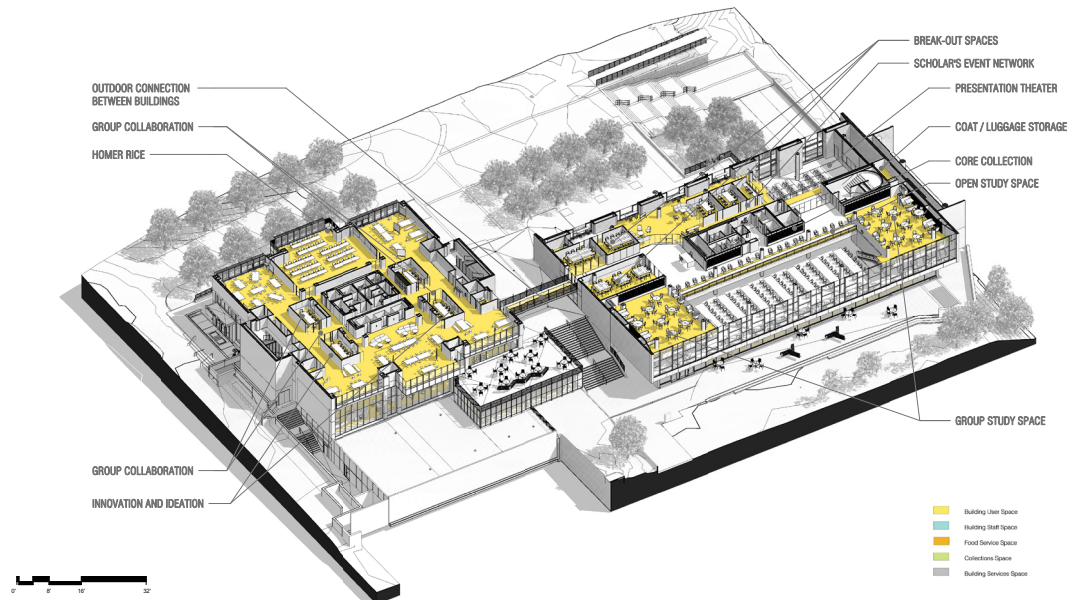
**BASEMENT LEVEL**



**GROUND LEVEL**

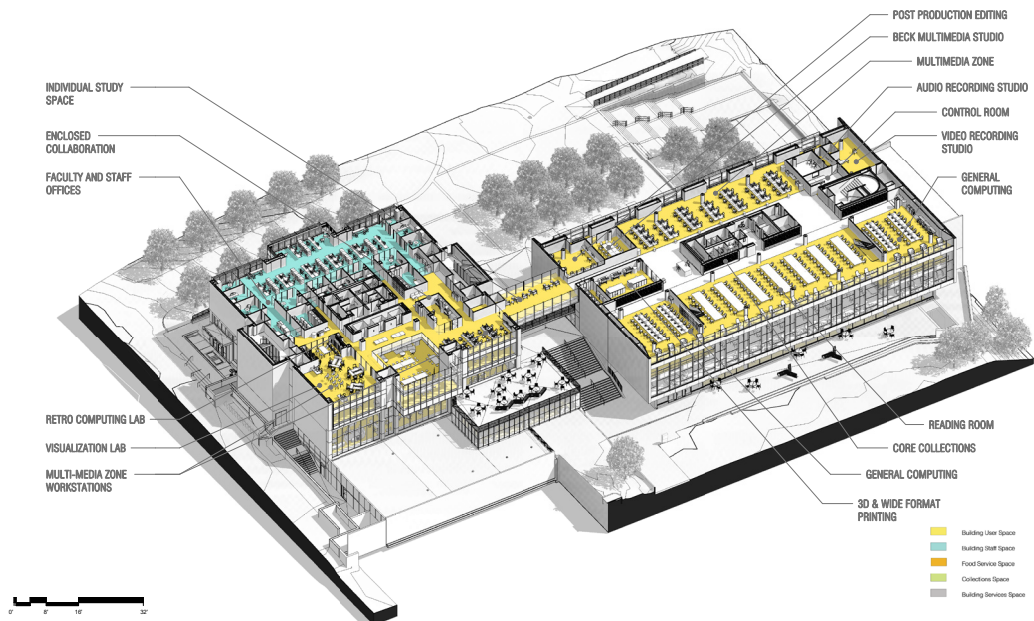


LEVEL 1

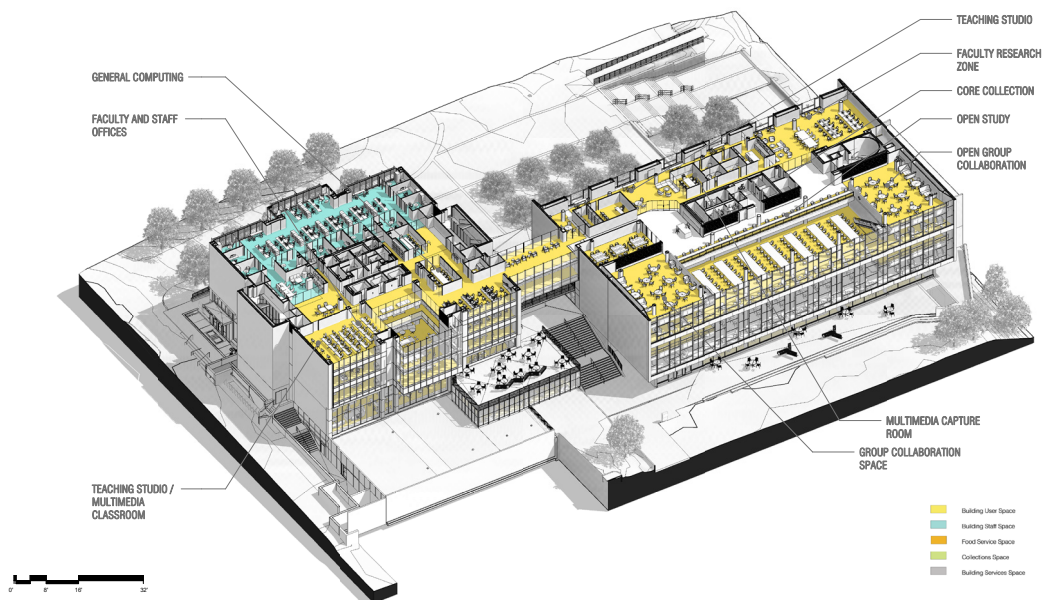


LEVEL 2

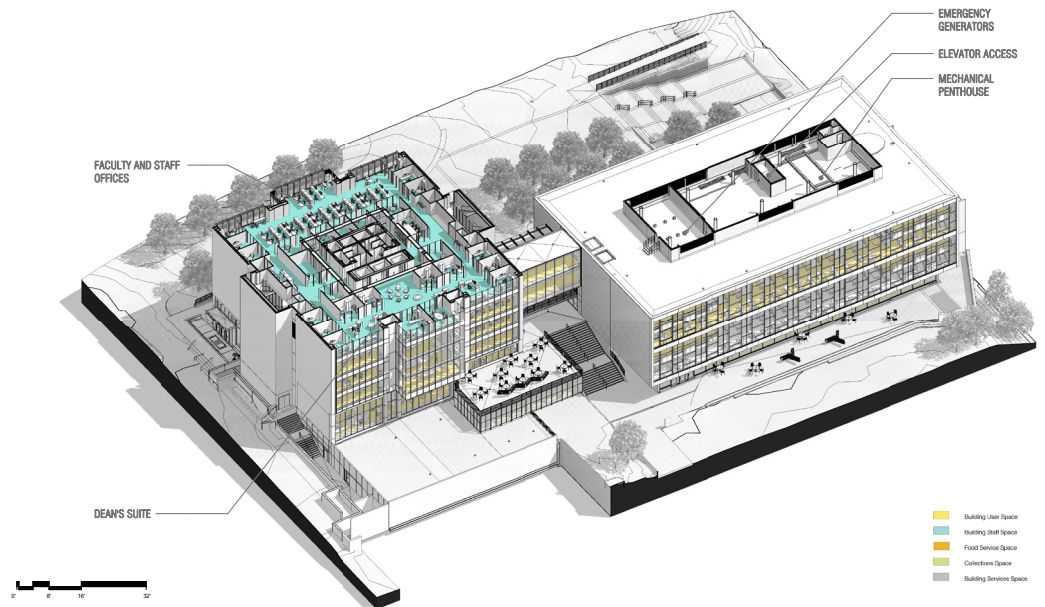




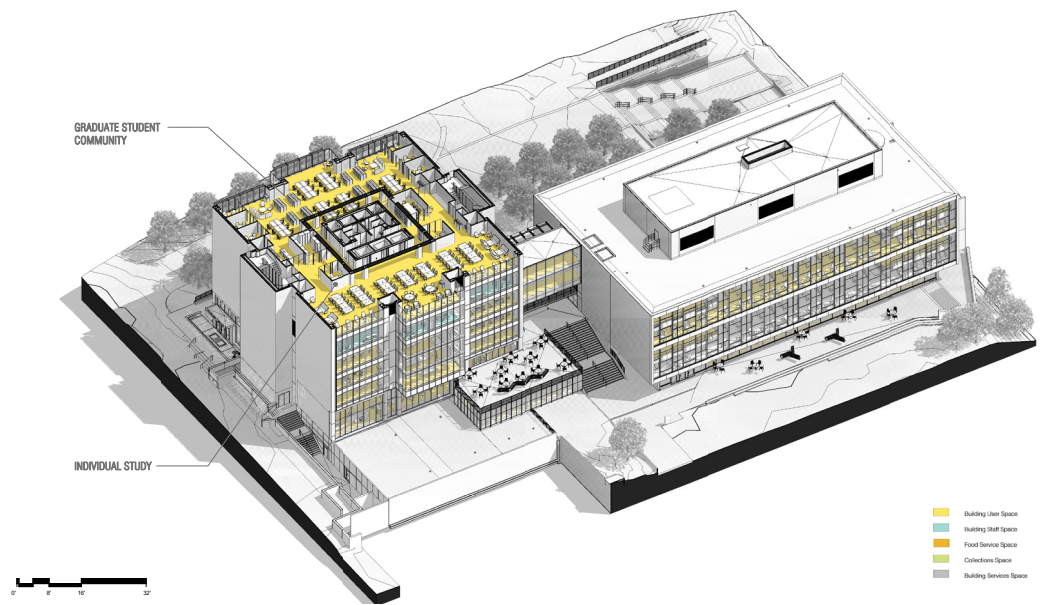
LEVEL 3



LEVEL 4



LEVEL 5



LEVEL 6



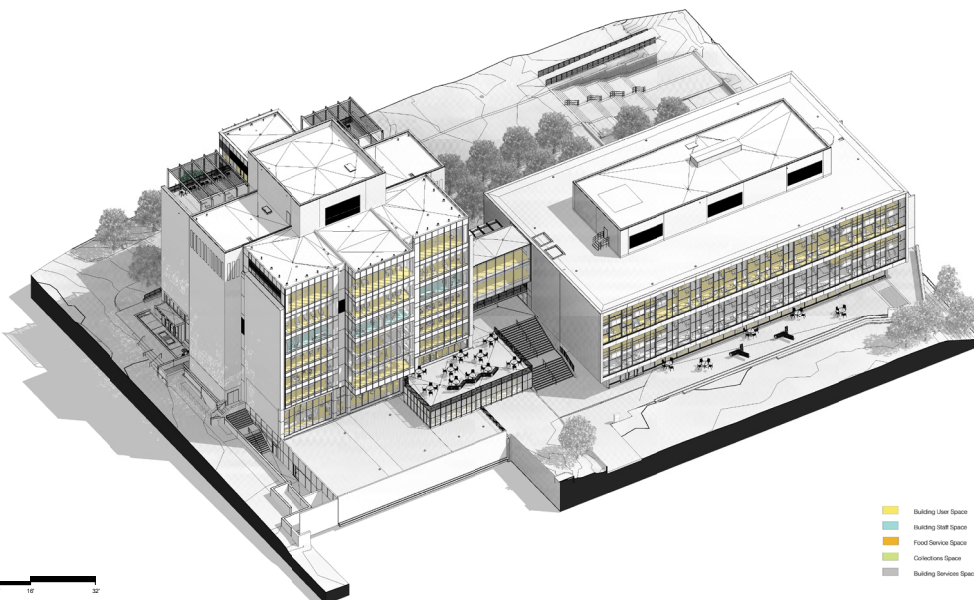
MEETING ROOM

READING ROOM AND  
EVENT SPACE



LEVEL 7

- Building User Space
- Building Staff Space
- Food Service Space
- Collections Space
- Building Services Space



ROOF LEVEL

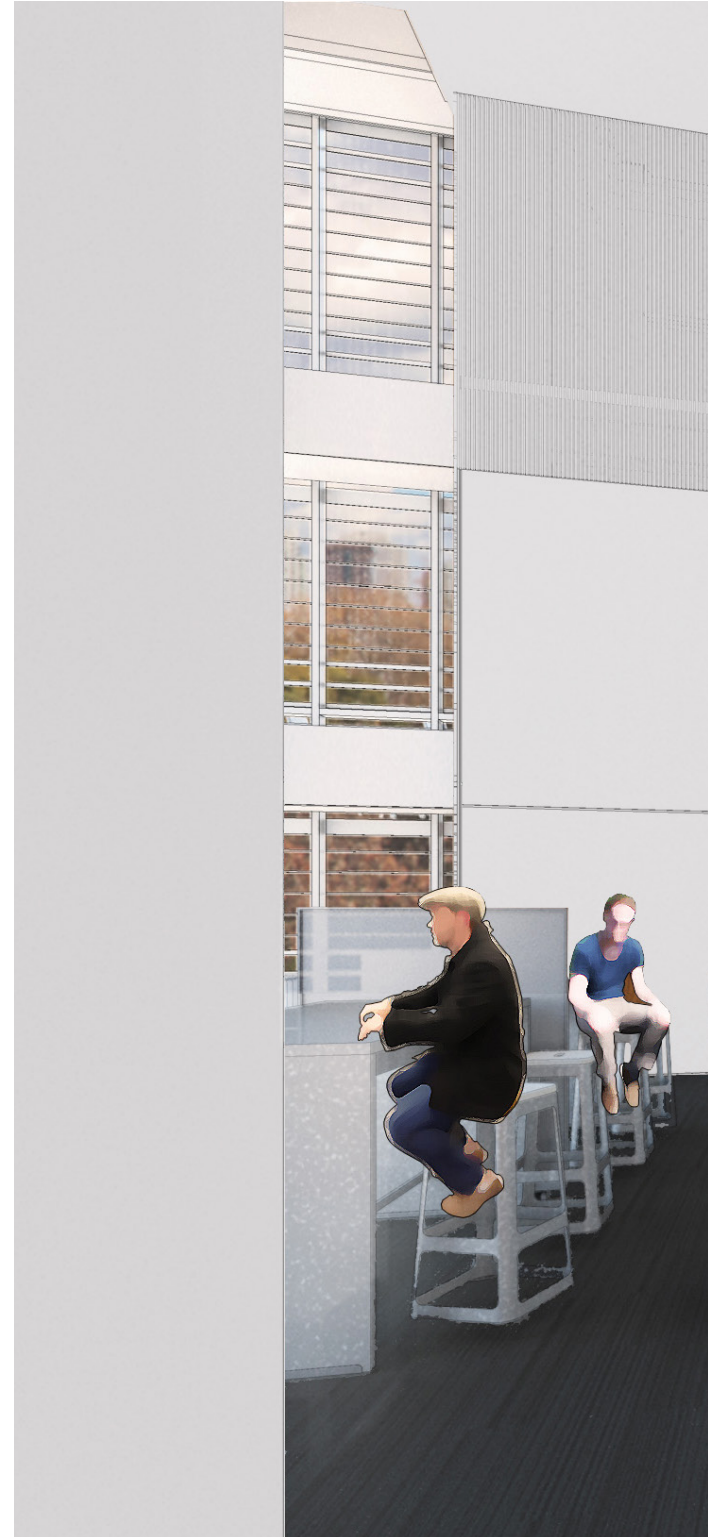
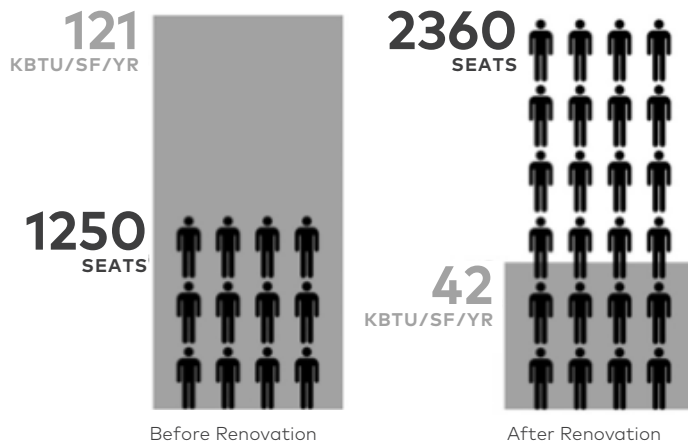
- Building User Space
- Building Staff Space
- Food Service Space
- Collections Space
- Building Services Space







Price Gilbert Library is a memorable 1953 landmark. Crosland Tower, completed in 1968, is a building originally intended to store books with limited space for students or faculty. In order to accomplish the vision and be respectful of the buildings' landmark importance, the two buildings were approached differently in terms of architectural design and similarly in terms of human purposed integrated design. The interventions strive to maintain the clarity of the form while connecting the building to the campus and nature where the building touches the landscape, interacting with the sun through the envelope changes and at the roof with the introduction of a new reading room and roof gardens.











PRICE GILBERT LIBRARY





WATER USE  
REDUCTIONS  
(GALLONS PER YEAR)

**1,031K**  
BEFORE RENEWAL

**97K**  
AFTER RENEWAL





Central to the long-term success of Price Gilbert and Crosland Tower is the concept of "long life, loose fit" — that the ability to address future, unanticipated needs is something that can be designed. Price Gilbert, with its open plan and high-ceilinged reading rooms, is already an exemplar of this mentality; the goal is to capitalize on and retain its adaptable nature while providing for the same at Crosland Tower. The renovation will create spaces that are functional, flexible, and have plentiful daylight and views.

The design team incorporated many sustainable strategies into the design, including chilled beams for cooling and LED lighting throughout the buildings. **After the renovation, the population using the buildings will have doubled—the 1,250 seats currently in the buildings will grow to 2,360—yet total energy consumption will be reduced by about a third**, and energy consumption per capita will be 80% less than what it is currently.











ENERGY  
USE  
PER PERSON  
(BTU/SF/PERSON)

**96.8**

BEFORE RENEWAL

**19.9**

AFTER RENEWAL

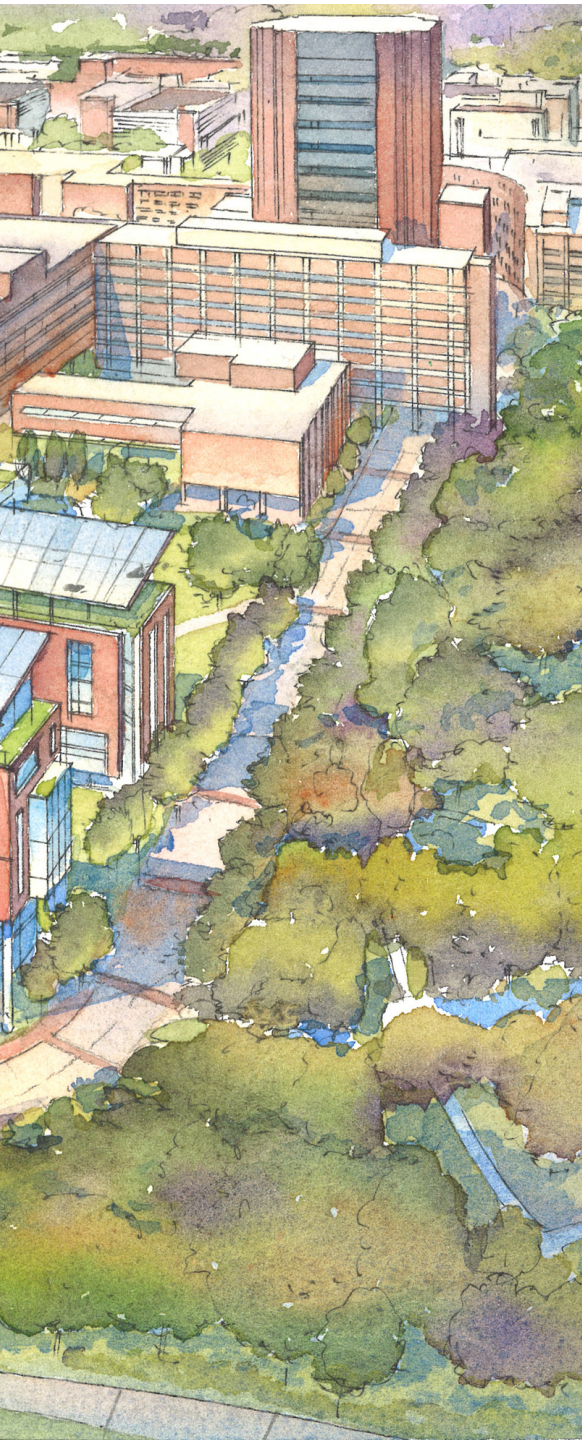




# Medical Education and Biomedical Library Study

THE UNIVERSITY OF CALIFORNIA, LOS ANGELES  
LOS ANGELES, CA





BNIM led a comprehensive design team to develop a new building for the David Geffen School of Medicine at UCLA, which will establish a new gateway for the Health Sciences campus, create a front door for the School of Medicine (SOM), and integrate the new building with existing facilities to provide greater campus connectivity and new outdoor spaces. The team developed a Design Brief that includes a space program for the School of Medicine and Library functions, a master plan for the Health Sciences campus precinct, and a conceptual design for a new building in conjunction with the repurposing of an adjacent, existing structure for the Biomedical Library, which will serve the entire campus.

The space program for the new SOM facility includes classrooms and seminar rooms, multi-purpose teaching laboratory space, study and amenity space for students, administrative offices and related building support space.

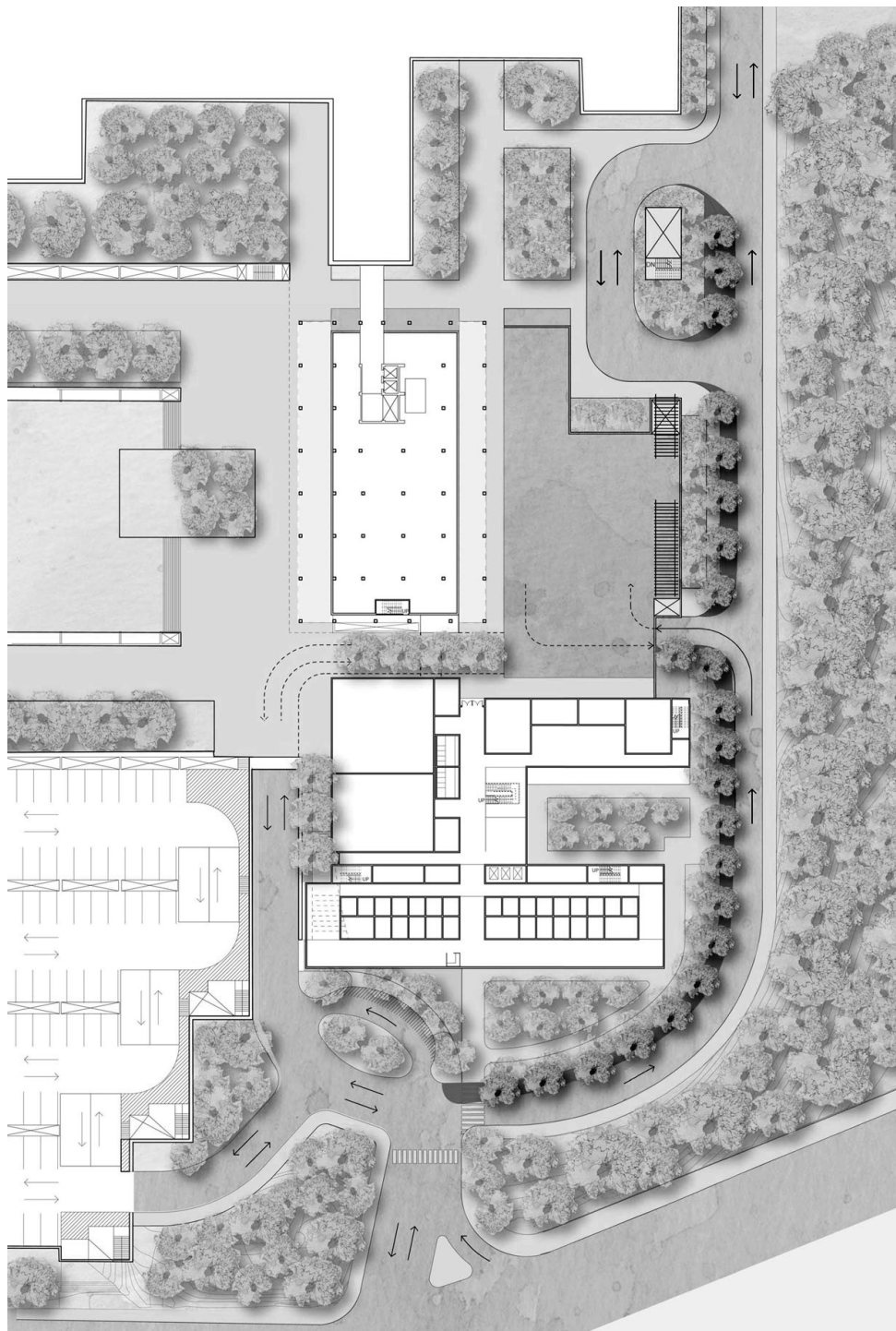
The plan creates new outdoor spaces to promote campus community and interprofessional activities, including a future Tiverton Health Sciences Commons, planned as a largely pedestrian outdoor space adjacent to the Botanic Garden, which will connect the front doors of the Schools of Medicine, Dentistry, Public Health and Nursing. The new commons relates directly to the newly renovated Court of Sciences due north in the heart of the main campus. The master plan includes a second new outdoor, public space north of the new building and east of the new library

Size	157,223 SF
Completion	2011





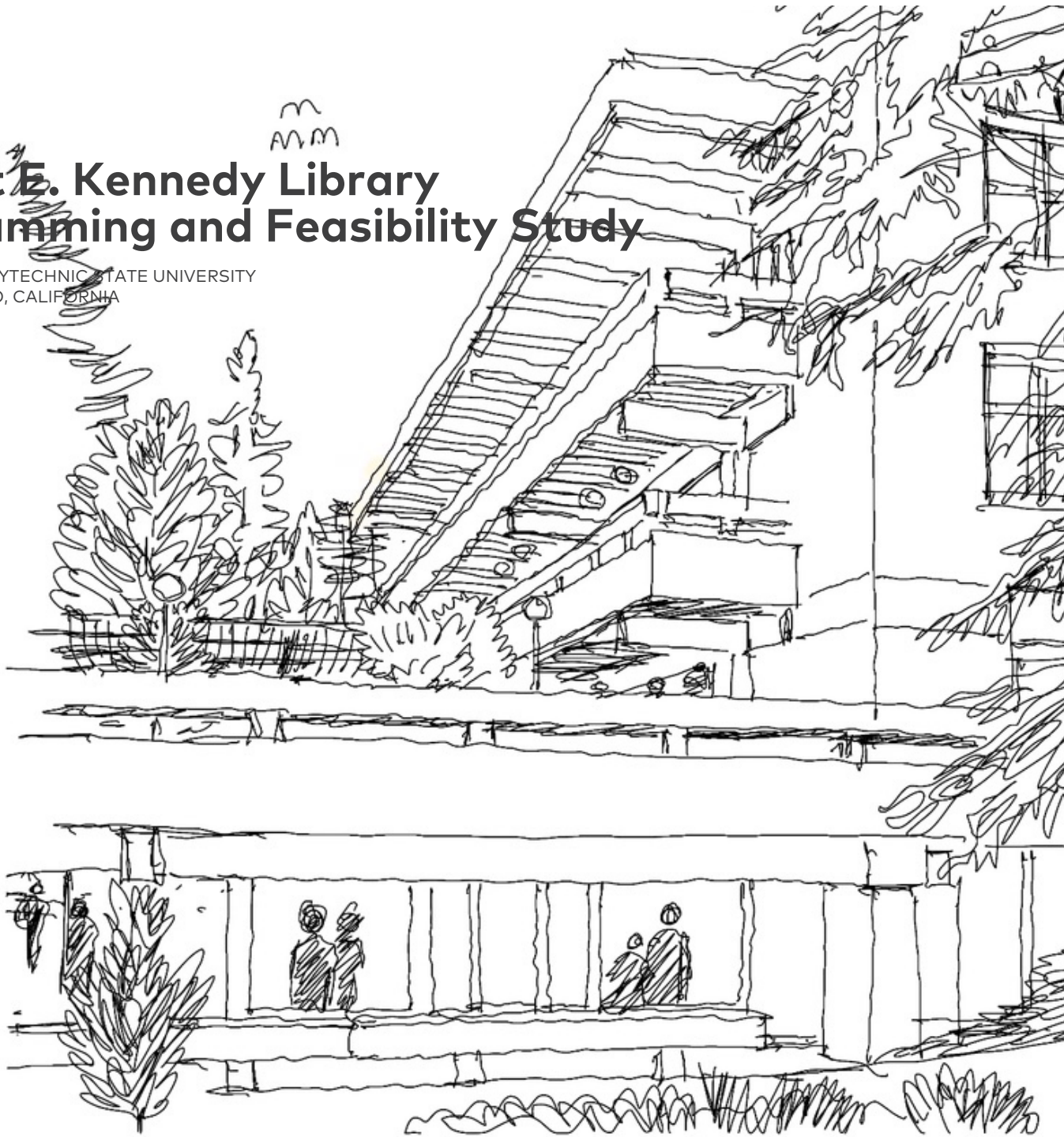






# Robert E. Kennedy Library Programming and Feasibility Study

CALIFORNIA POLYTECHNIC STATE UNIVERSITY  
SAN LUIS OBISPO, CALIFORNIA

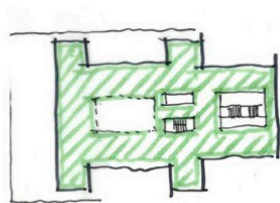




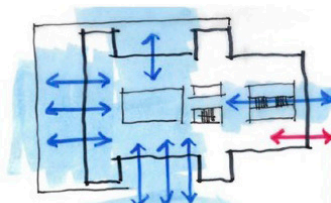
BNIM is working with the University of California, Berkeley to create a project program for the initial phase of a full renovation of the first through third floors of Moffitt Library. UC Berkeley's 32 constituent and affiliated libraries together make Moffitt the fourth largest university library by number of volumes in the United States — surpassed only by the libraries of Harvard, Yale, and the University of Illinois at Urbana-Champaign. Opened in 1970 as a cutting-edge library for undergraduates, Moffitt Library rejected the neoclassical tradition of most campus buildings. At five-stories and constructed of cast-in-place concrete, Moffitt Library is uniquely situated within memorial glade, partially below grade with building entry points at the third floor. In 1994, Gardner Stacks, a four-story underground addition connecting Moffitt to the historic Doe Library was completed, where more than 2.5 million volumes are stored within four acres of space.

In 2016, the University began re-envisioning Moffitt Library with the renovation of floors 4 and 5, comprising approximately 38,000 SF. This initiated the transformation of the library to interactive and dynamic modes of learning and research. A stated goal of the University is that the renovation of floors 1, 2, and 3, comprising of approximately 100,000 SF, should "both capitalize and improve on the foundations presented by the work on floors 4 and 5 toward the creation of a flexible yet culturally and aesthetically harmonized facility." Through our current work on major library renovations at both Georgia Tech and Cal Poly San Luis Obispo, we are seeing a reinvention of the library system that focuses on the revitalization of historic structures to reposition libraries as contemporary centers for discovery and innovation. gy come together in an experiential learning environment.





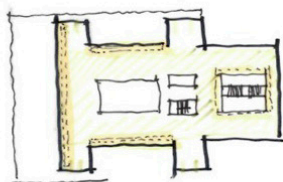
TRANSFORMED 21ST  
CENTURY LIBRARY



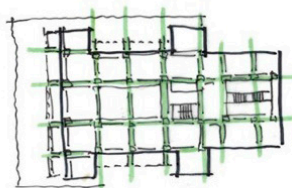
POROUS CAMPUS  
CONNECTION



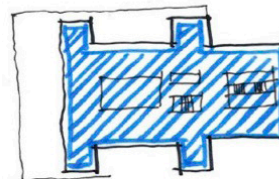
CONNECTION TO  
NATURE



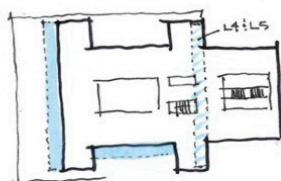
ACCESS TO  
DAYLIGHT



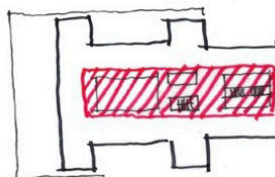
CELEBRATE STRUCTURE &  
DESIGN INTEGRITY



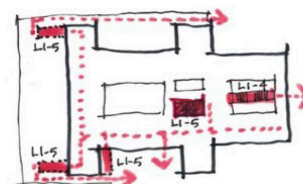
THERMAL COMFORT



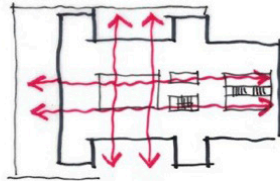
OUTWARD /  
EXTROVERTED



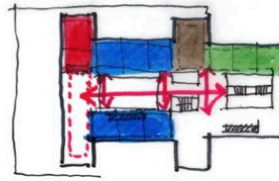
CONNECTED PROGRAM



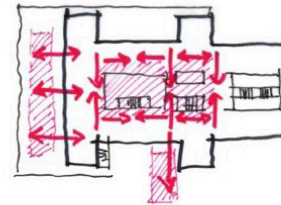
EGRESS



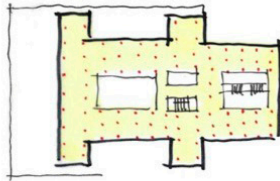
VISUAL  
TRANSPARENCY



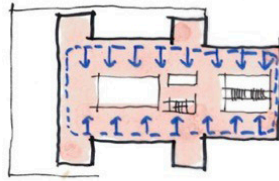
INTUITIVE  
ORGANIZATION



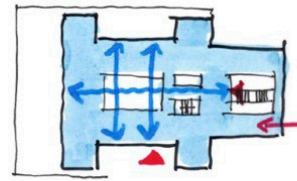
COLLIDER SPACE



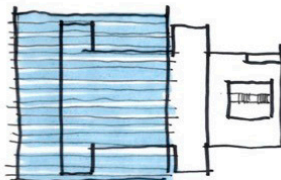
POWER/TECH



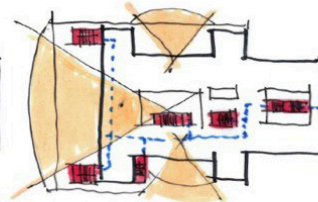
THERMAL MASS /  
RADIANT COMFORT



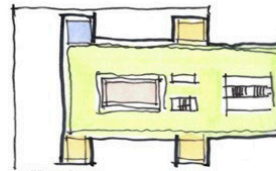
SAFETY, TRANSPARENCY  
MULTIPLE ENTRIES



PV SOLAR  
ENERGY GENERATION



HEALTH +  
WELLBEING



LONG LIFE  
LOOSE FIT





















# Robert E. Kennedy Library Programming and Feasibility Study

CALIFORNIA POLYTECHNIC STATE UNIVERSITY  
SAN LUIS OBISPO, CALIFORNIA





The Robert E. Kennedy Library at California Polytechnic State University (Cal Poly) in San Luis Obispo, originally completed in 1980, is heavily utilized by students, faculty, and the surrounding community. In 2016-217, the library received more than 1.5 million visitors, including researchers from around the world who traveled for its archival collections of manuscripts, rare books, architectural drawings, and photographs.

The five-story, 208,433 GSF Brutalist structure is in need of renovation to repair degrading infrastructure, accommodate current and future technology, increase energy and water conservation, and enhance overall functionality and flexibility for the 21st-century student experience.

Working with brightspot, BNIM is reimagining the library to achieve its 2015–2022 Strategic Plan — as a place where expertise, scholarly content, and technology come together in an experiential learning environment.

208,433 SF  
Completion May 2018 (Feasibility Study)



## CONTEXT

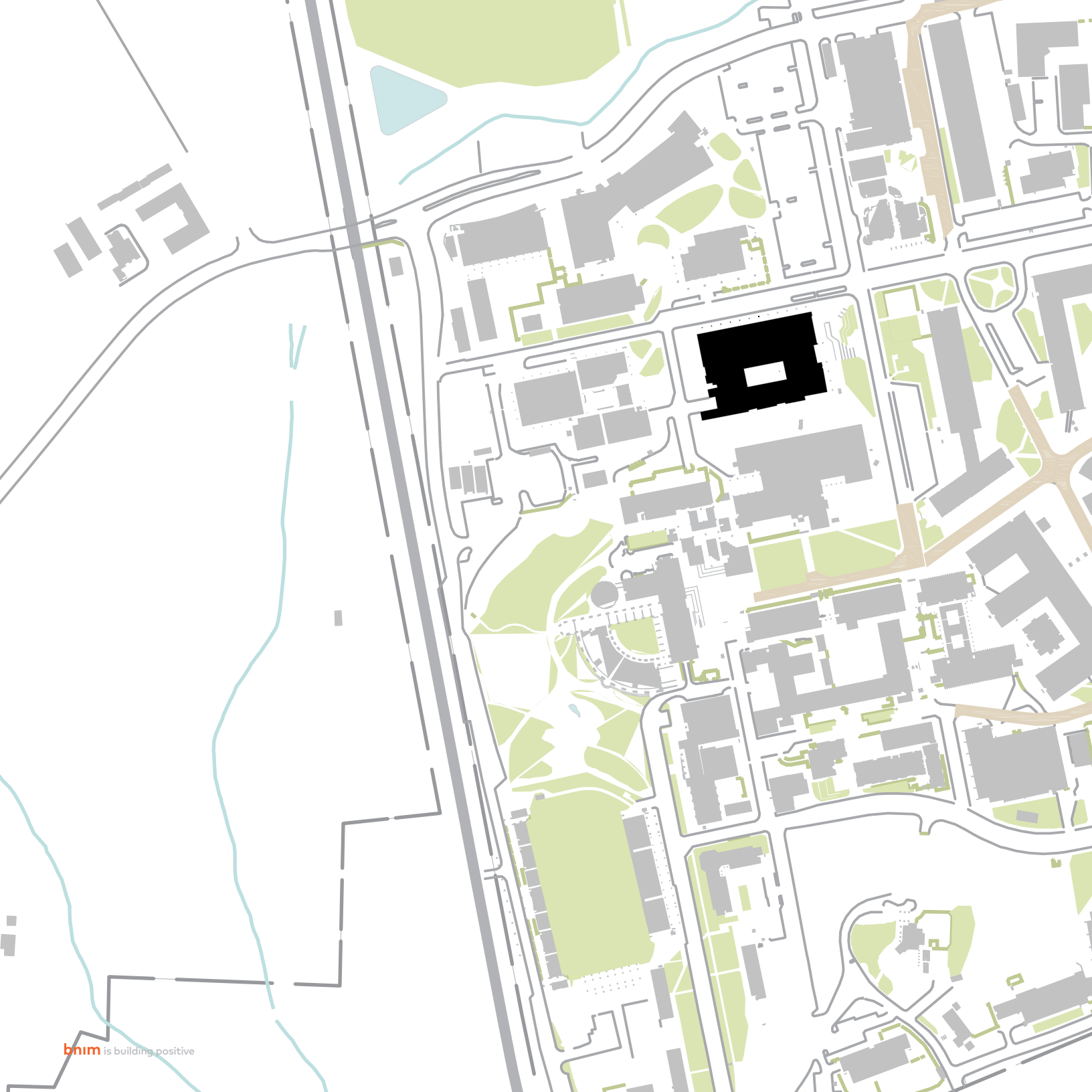
The design team aims to capitalize on the facility's existing, intrinsic human-purposed design characteristics, including a central courtyard and views to the surrounding mountains. The project's temperate, coastal siting also provides opportunities for natural ventilation and daylighting, optimizing passive design strategies to achieve high-performance results and meet Cal Poly's LEED Gold design standard.





Connection to Nature - The stepped building form pays homage to the neighboring Nine Sisters mountain range.









**20,000+**  
STUDENTS

**243**  
ADDITIONAL  
CLASSROOM SEATS

**1,100**  
ADDITIONAL CLASSROOM  
& STUDY SEATS

**3,500**  
TOTAL SEATS

## CHALLENGES AND NEEDS

THE BUILDING WAS COMPLETED IN 1980, AND SINCE THAT TIME, THERE HAD BEEN NO SIGNIFICANT RENOVATIONS. INSTEAD, THERE WERE SEVERAL INTERIOR IMPROVEMENTS MADE OVER TIME, BUT THEY DID NOT ADDRESS ISSUES THAT WERE BEGINNING TO APPEAR AS THE BUILDING AGED, INCLUDING:

### TEMPERATURE CONTROL

THE WINDOWS ARE MANUALLY OPERATED, BUT THERE ARE NO CONTROLS AND NO HUMIDITY MONITORING. STUDENTS WERE OFTEN UNCOMFORTABLY HOT INSIDE THE BUILDING, EVEN ON MILD DAYS OUTSIDE.

### BUILDING SYSTEMS

THE ELEVATORS WERE TOO SMALL AND UNRELIABLE, AND ACOUSTICS ON THE EXPOSED CONCRETE DECK WERE POOR. ADDITIONALLY, THERE WERE NOT ENOUGH OUTLETS FOR STUDENTS TO PLUG IN THEIR LAPTOPS AND MOBILE DEVICES.

### INEFFICIENT USE OF SPACE

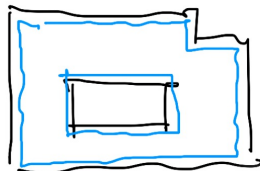
AS THE LIBRARY MOVED A PORTION OF ITS COLLECTIONS TO AN ADJACENT CAMPUS BUILDING, SPACE UTILIZATION BECAME A GROWING PROBLEM. THERE WERE MANY EMPTY POCKETS OF SHELVES, AND CERTAIN FACULTY DEPARTMENTS HAD MORE SPACE THAN THEY NEEDED WHILE STUDENTS WERE NOT PROVIDED WITH ADEQUATE STUDY SPACE.

### SECURITY

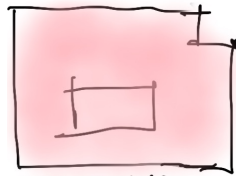
SECURITY GATES WERE REMOVED OVER TIME AND VISITOR CHECK-IN OCCURS AT THE EXISTING CIRCULATION DESK ADJACENT TO THE ENTRY.

### SUSTAINABILITY

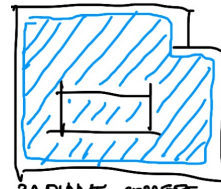
AS AN INSTITUTION, CAL POLY ALSO PRIORITIZED



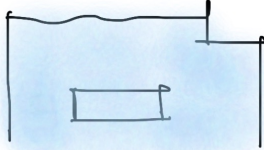
IMPROVED/ACTIVE GLAZING



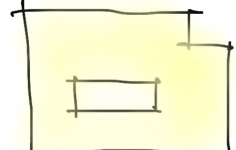
THERMAL MASS



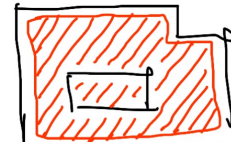
RADIANT COMFORT



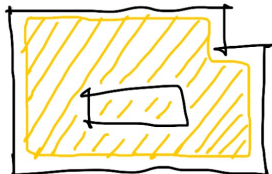
DE COUPLED VENTILATION



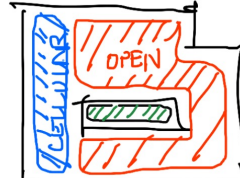
TUNABLE LED LIGHTING



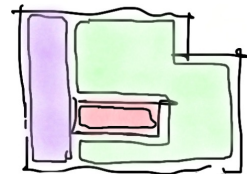
DC MICROGRID DIST



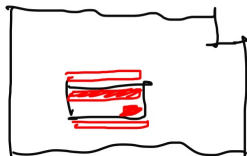
PV SOLAR ENERGY HARVEST



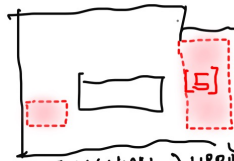
SPACE SPECIFICS



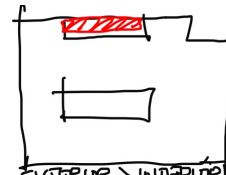
LONG LIFE NOISE FIT



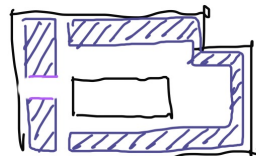
INTERIOR → EXTERIOR



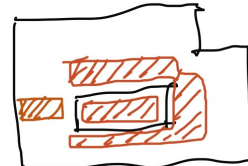
MECHANICAL → LIBRARY



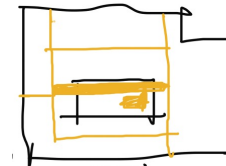
EXTERIOR → INTERIOR [S]



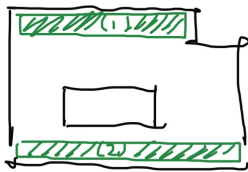
QUIET ZONES



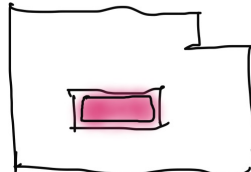
ACTIVE ZONES



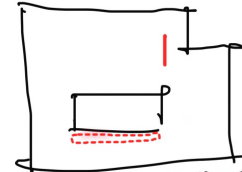
CIRCULATION  
[HORIZONTAL]



EXTERIOR STUDY SPACE



MULTI PURPOSE SPACE



SEISMIC UPGRADE



## PROCESS

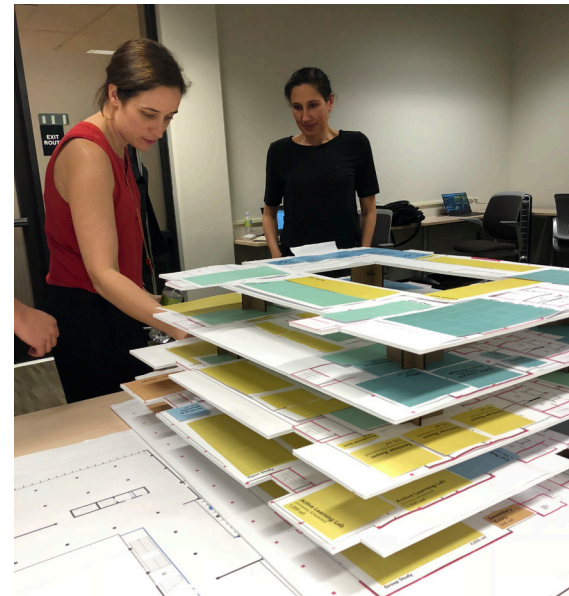
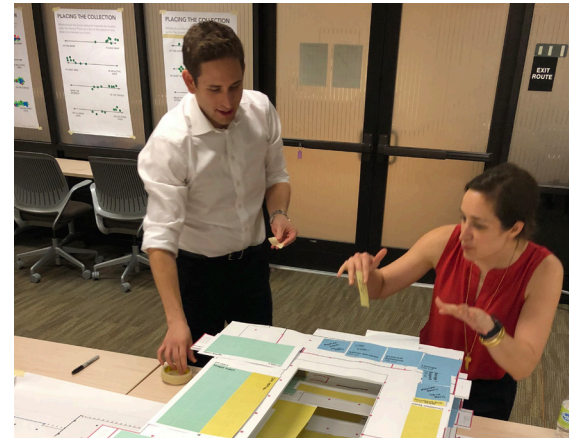
THE PROCESS BEGAN WITH VISIONING SESSIONS AND IDENTIFYING METRICS FOR SUCCESS. THE TEAM THEN MOVED INTO THE NEEDS ASSESSMENT AND CREATING THE PROGRAM, WHILE ALSO DEVELOPING ALTERNATIVE STRATEGIES. TO DETERMINE THE VISION FOR THE FUTURE OF KENNEDY LIBRARY, THE TEAM HELD FREQUENT ENGAGEMENT SESSIONS WITH STUDENTS, STAFF AND FACULTY, INCLUDING TOWN HALLS, WORKSHOPS WITH STAFF AND STAKEHOLDERS, AND STUDENT FEEDBACK FAIRS. IN EVERY FORUM, LIBRARY PATRONS HAVE BEEN





ENCOURAGED TO IMAGINE THE POSSIBILITIES FOR KENNEDY LIBRARY, FROM THE SERVICES IT PROVIDES TO THE SPACES WITHIN THE BUILDING.

FOLLOWING THESE SESSIONS, BNIM AND BRIGHTSPOT DEVELOPED THREE DESIGN CONCEPTS, ALL OF WHICH INVOLVE UPDATING THE CENTRAL COURTYARD, REMOVING THE MAIN STAIRS, AND INTRODUCING A NEW SET OF STAIRS TO THE COURTYARD. THIS WILL MAXIMIZE THE AMOUNT OF USABLE SPACE FOR LIBRARY SERVICES. EACH CONCEPT ESTABLISHES A STRONG IDENTITY FOR KENNEDY LIBRARY AND ACHIEVES THE GOALS OUTLINED IN THE





## DESIGN RESPONSES

THE THREE DISTINCT DESIGN CONCEPTS ARE GROUNDED IN SEVERAL COMMON ELEMENTS THAT WERE DERIVED FROM THE WORKSHOPS:

**ESTABLISH CONNECTIONS TO NATURE** THROUGH INCREASED DAYLIGHTING, NATURAL VENTILATION, AND CLEAR CONNECTIONS BETWEEN INTERIOR AND EXTERIOR ENVIRONMENTS.

**PROVIDE STUDENTS WITH A DIVERSITY OF STUDY SPACE OPTIONS AND ADDITIONAL SEATS AND CHOICES** TO SUPPORT QUIET, FOCUSED STUDY PERIODS AND COLLABORATIVE GROUP WORK.

**IDENTIFY A STAFF HOME BASE**, WHICH IS A SINGLE, CONSOLIDATED AREA WHERE STAFF CAN INTERACT AND COLLABORATE.

**ADDRESS THERMAL COMFORT** TO SUPPORT NATURAL VENTILATION AND INTEGRATE ADDITIONAL SYSTEMS AS NEEDED.

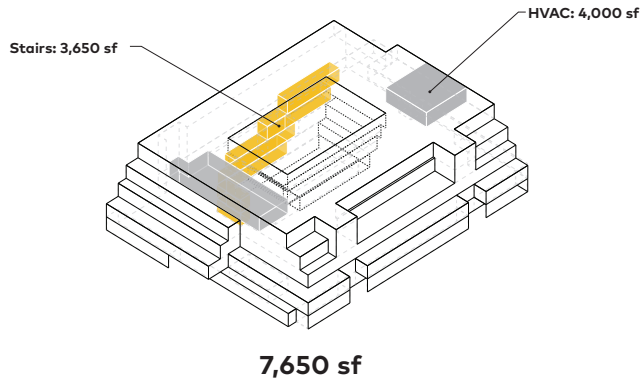
**USE LONG LIFE, LOOSE FIT PRINCIPLES** TO INCORPORATE FLEXIBLE SPACES AND PROLONG THE USEFUL LIFE OF THE BUILDING.

**INCREASE POROSITY AT THE GROUND LEVEL AND CREATE A STRONGER CONNECTION TO THE SURROUNDING CAMPUS** BY INCLUDING MULTIPLE POINTS OF ENTRY AND LOCATING PUBLIC PROGRAMS ADJACENT TO AREAS OF HIGH PEDESTRIAN AND TRANSIT ACTIVITY.

PROMOTE THE LIBRARY'S SPECIAL COLLECTIONS THROUGH A **GLOBAL GALLERY**, WHERE

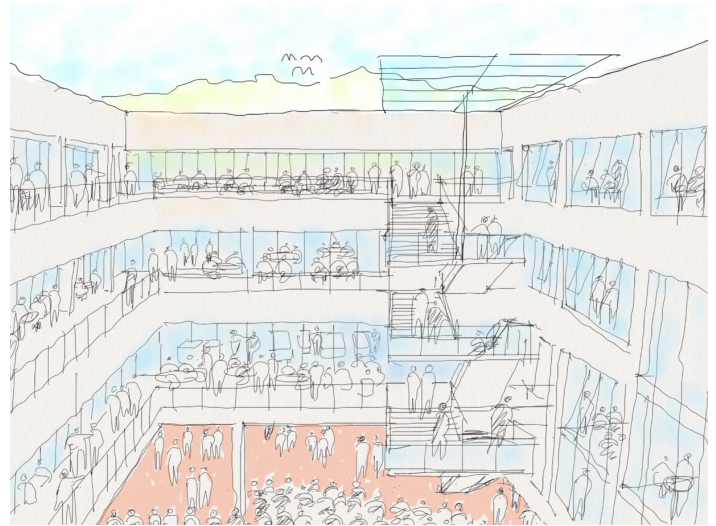
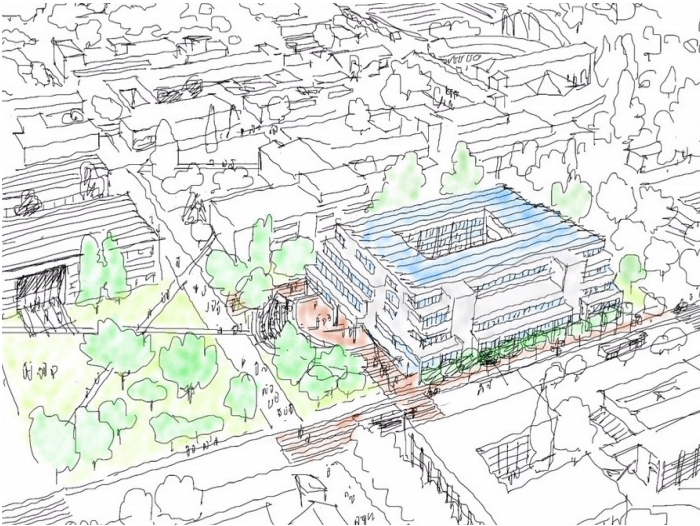






## DESIGN CONCEPT 1

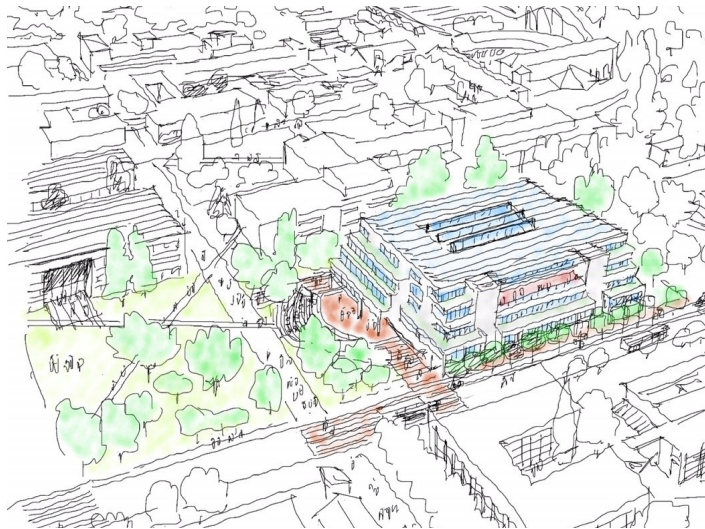
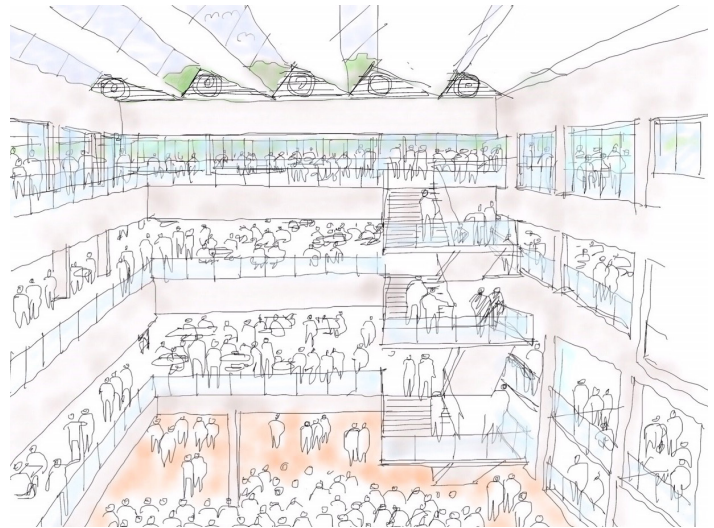
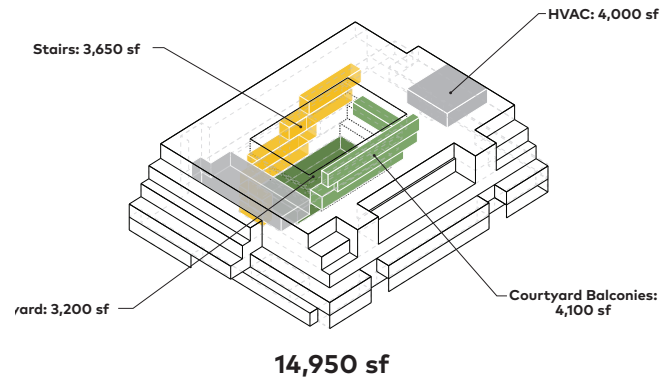
- UPDATES TO THE EXISTING OPEN COURTYARD
- REMOVES EXISTING MAIN STAIR AND INTRODUCES A NEW MAIN STAIR AT THE COURTYARD
- PLACE A STAFF 'HOME BASE' ON LEVELS 3-5
- INCLUDE AREAS ON LEVELS 4 AND 5 WITH HIGH DENSITY SHELVING LOCATED ON LEVEL 1 FOR SPECIAL COLLECTIONS
- STACK CLASSROOMS VERTICALLY ON LEVELS 2-4
- NON-LIBRARY PARTNERS WILL BE LOCATED TOWARDS THE SOUTHEAST OF THE BUILDING ON LEVELS 2-3, ADJACENT TO CLASSROOMS
- STACKS ARE DISPERSED WITH QUIET STUDY ON LEVELS 2-5 ON THE NORTH SIDE OF THE BUILDING





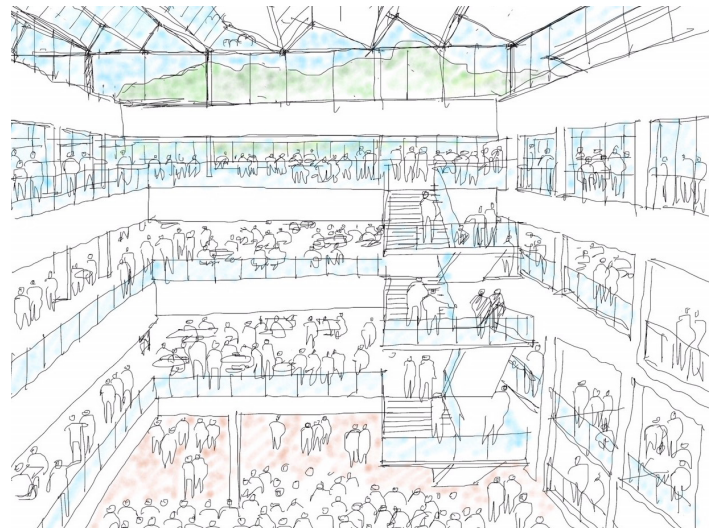
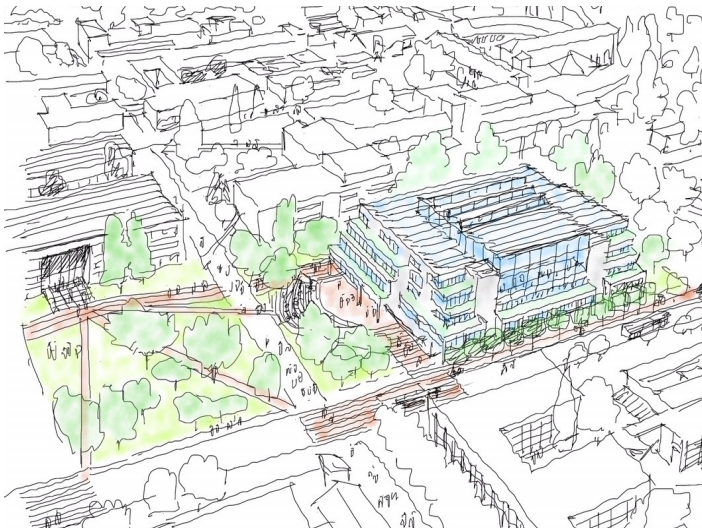
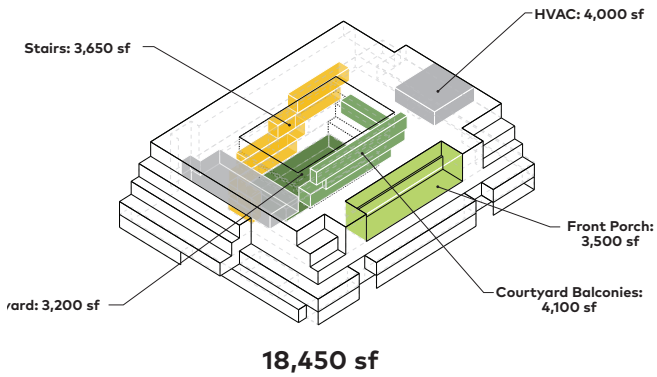
## DESIGN CONCEPT 2

- UPDATES TO THE EXISTING OPEN COURTYARD
- REMOVES EXISTING MAIN STAIR AND INTRODUCES A NEW MAIN STAIR AT THE COURTYARD
- PLACE A STAFF 'HOME BASE' ON LEVELS 2-3
- INCLUDE AREAS ON LEVELS 1 AND 4 WITH HIGH DENSITY SHELVING ON LEVEL 1 FOR SPECIAL COLLECTIONS
- CONSOLIDATE CLASSROOMS ON LEVELS 1-2
- LOCATE NON-LIBRARY PARTNERS ON LEVEL 2, ADJACENT TO THE CLASSROOMS
- STACKS ARE DISTRIBUTED ON LEVELS 2-5 WITH BOOKS VISIBLE TO ATRIUM

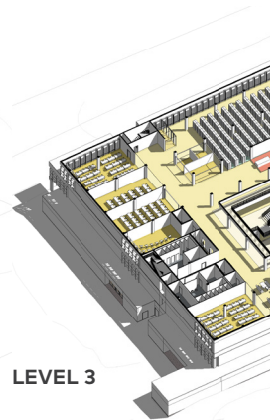
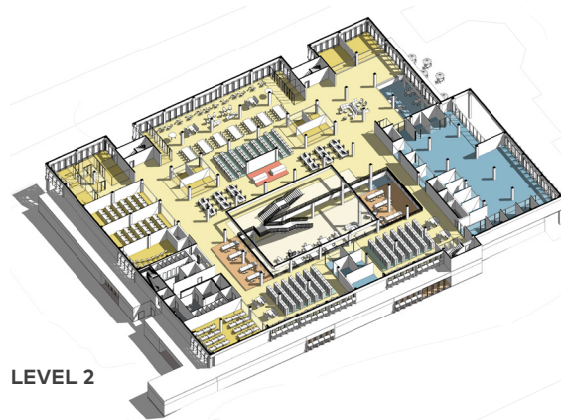
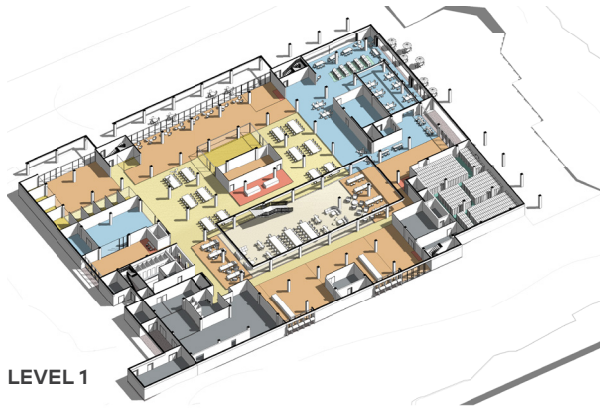


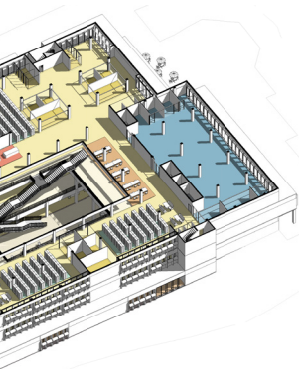
### DESIGN CONCEPT 3

- UPDATES TO THE EXISTING OPEN COURTYARD
- REMOVES EXISTING MAIN STAIR AND INTRODUCES A NEW MAIN STAIR AT THE COURTYARD
- PLACE A STAFF 'HOME BASE' ON LEVELS 2-4
- INCLUDE AREAS ON LEVELS 1 AND 3 WITH HIGH DENSITY SHELVING ON LEVEL 1 FOR SPECIAL COLLECTIONS
- CONSOLIDATE CLASSROOMS ON LEVEL 5
- NON-LIBRARY PARTNERS WILL BE ADJACENT TO CLASSROOMS ON LEVEL 5
- CONSOLIDATE STACKS ON LEVEL 3, QUIET STUDY ON LEVEL 4, ACTIVE STUDY ON LEVEL 2

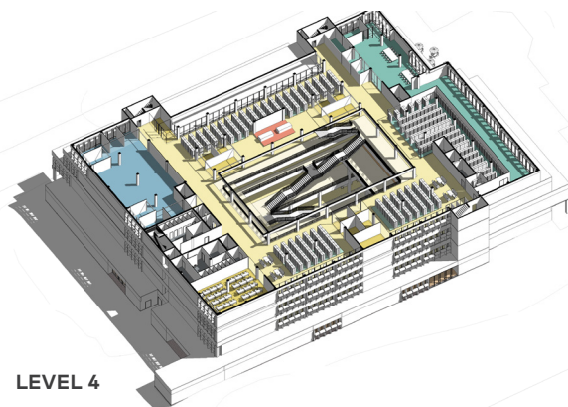




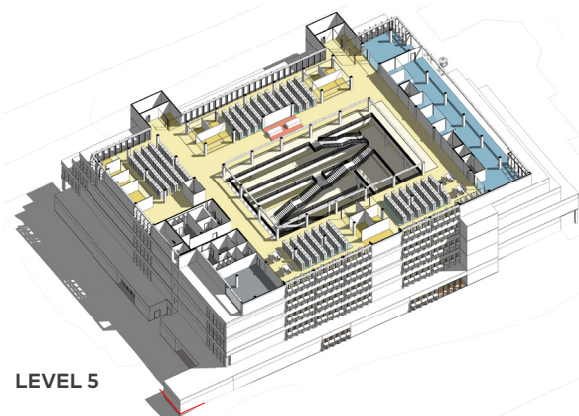





















LEVEL 4



LEVEL 5



- |   |                                   |   |   |
|---|-----------------------------------|---|---|
|  | Public space                      |  | New walls   |
|  | Service point                     |  | Existing walls  |
|  | User space                        |  | Line of existing glazing                                  |
|  | Classrooms + enclosed study space |  | Workstations  |
|  | Library workspace                 |  | Edge of slab overhead                                     |
|  | Cal Poly Corporation              |  | 9,200 sf site - Baseline recommendation (incl. courtyard) |
|  | Collections                       |  | 42,000 sf site - Additional recommendation                |
|  | Special collections               |  | 2,100 sf site - Cal Poly Corporation                      |
|  | Building support                  |   |   |

Note: Potential recaptured space with enclosed courtyard option

















































**bnim** is building positive

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