

Seattle Daily Journal of Commerce

HIGHER EDUCATION +STUDENT HOUSING



October 26, 2023

COOPERATIVE PURCHASING



Wayne's Roofing, Inc. "E&I Regional Partner of the Year 2022"

With nearly \$20 Million in school roof projects a year and over 50 years experience, knowledge and expertise,

Wayne's Roofing, Inc. will get Your project done!

Our Cooperative Purchasing Agreement allows Schools to contract directly with Wayne's Roofing. We combine the use of proven materials and skilled expertise, with experienced and reliable project managers, working together with You and Your Design Team.

Benefits to Cooperative Purchasing

- ✓ Access to a local, best-in-class, roofing contractor
- ✓ Savings of time and money, satisfying agency bid requirements
- ✓ Preorder material to address supply chain issues
- ✓ Flexibility to work with major manufacturers, and a wide selection of products to choose from
- ✓ Streamlined procurement process resulting in fast and timely delivery of projects
- ✓ No membership fees
- ✓ We work with your Design Team
- ✓ Involved from conception to completion

YOUR PROJECT YOUR DESIGN TEAM



E&I Cooperative
Services

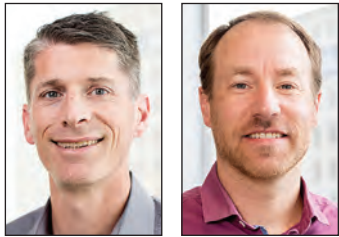
Sourcing. Strategy. Savings.®



Call Now to Connect the Pieces: (253) 863-4455 EANDI@WaynesRoofing.com

INNOVATING STUDENT HOUSING WITH MASS TIMBER AND RAIN GARDENS

Intentional design and conscientious engineering that respects student involvement and community building can produce impressive tangible impacts.



BY CORY HITZEMANN & KEITH KRUGER
COUGHLIN PORTER LUNDEEN

Higher education institutions have always needed to intentionally create community, and even more so after the pandemic. Student housing is vital to this effort, and we see innovations championed by design-construction teams and students as beneficial to the evolving role that campus housing can play.

MASS TIMBER COMES TO STUDENT HOUSING

Designed by Mahlum Architects, the 400-bed Alma Clark Glass Hall is named for the first Black woman to study at Western Washington University who eventually became a founding member of the Seattle chapter of the National Association for the Advancement of Colored People and a librarian for the Seattle Public Library system. Her namesake is a 117,340-square-foot building featuring a central main floor hub with a community kitchen and lounge, a large multipurpose room, and a reflection space, in addition to student housing levels above.

For a building of this size, the simplest way to design the first level is with concrete columns, shear walls, and a transfer slab overhead to support the four levels of light wood-framed units above. However, knowing the many benefits of mass timber, we leveraged the progressive design-build delivery model with Lydig Construction and Mahlum to devise an innovative mass timber transfer level instead. We eliminated all traditional concrete elements, replacing them with glulam columns and beams, a CLT diaphragm, and steel braced frames.

However, while mass tim-



Students at Bellevue College funded an extensive rain garden system that includes cascading bioswales designed to provide a visual demonstration of sustainability, and educational and therapeutic benefits to students.

PHOTO BY LARA SWIMMER

ber markedly improves student living experiences, integrating it requires expertise and coordination. We worked closely with Mahlum to design needed fire resistance ratings for all mass timber elements and their connections. Knowing that some of these elements require more lead time, we provided an early procurement package to help Lydig avoid potential schedule impacts. These steps created a win for students and the university: the aesthetic and biophilic benefits of exposed wood, and significant embodied carbon reductions, all without exceeding project funding.

TREATING STUDENTS WHILE IMPROVING SUSTAINABILITY

Bellevue College's Residence Hall is their first on-campus living option in a LEED Platinum building. The 350-bed residential community emphasizes student experience and sustainability, featuring a public main

level lounge with a café and multi-purpose meeting space, private study areas and lounges on floors above, and a one-of-a-kind, accessible courtyard with an amphitheater and extensive rain gardens.

The residence hall represented an opportunity for our civil team to align the design for this project with the college's plans for future development: an access drive including pedestrian-friendly improvements to connect north campus to the main campus, a sewer main positioned to link sewer connections from future buildings, and incorporation of an existing high-capacity stormwater system to mitigate runoff from this and future developments.

Students led the innovation by lobbying for a sustainability fund that would add impressive rain gardens in the courtyard. Rather than follow the conventional choice of standard landscape

INSIDE

- INNOVATING STUDENT HOUSING WITH MASS TIMBER AND RAIN GARDENS ----- 3
- DESIGNING FOR URBAN STUDENT LIVING ----- 4
- COMMUNITY COLLEGES PROVIDE ESSENTIAL STUDENT SUPPORT ----- 6
- COMING TOGETHER TO BUILD A CATALYST PROJECT FOR WSU----- 8
- ENHANCING THE STUDENT EXPERIENCE THROUGH LIVING DESIGN ----- 10
- FINDING THE BALANCE IN HOUSING DENSITY AND STUDENT WELL-BEING----- 12
- CREATING INCLUSIVE RESTROOMS THROUGH DESIGN ----- 14
- INNOVATION HALL BREAKS NEW GROUND IN PARTNERSHIPS AND PROCESSES --- 16
- GOING UP: SEATTLE'S TOWERING NEW VISION FOR STUDENT HOUSING----- 18

ON THE COVER

TRAILSIDE STUDENT LIVING ACROSS FROM UNIVERSITY VILLAGE PROVIDES INCLUSIVE PUBLIC ACCESS TO THE BURKE-GILMAN TRAIL.

PHOTO BY MEGHAN MONTGOMERY, COURTESY OF WEBER THOMPSON

DJC TEAM

SECTION EDITOR: SHAWNA GAMACHE • SECTION DESIGN: JEFFREY MILLER
WEB DESIGN: LISA LANNIGAN • ADVERTISING: MATT BROWN

DESIGNING FOR URBAN STUDENT LIVING

Access to amenities and common areas are shifting from all-exclusive to more connected to the greater community and its resources.

Where is student housing headed after a global pandemic, and what are the emerging trends to consider? Thinking ahead to what's next for this evolving market sector, we should consider the context of the student environment, look for opportunities to connect students with the broader community, center student needs, and diversify spaces.



BY SKYE BREDBERG
WEBER THOMPSON

Considering the context

The first considerations in designing student housing are understanding the student demographic and mindset, parent concerns, and the community setting. Most students are entering a new stage of life, leaving home for the first time, and embarking on the first steps of independence. This can be a shock mentally, environmentally, and culturally, even with the excitement of starting adult life.

Considering all of that we ask, will this project be on-campus, adjacent to or within an urban or suburban setting? How does that setting influence the design perspective while taking the psychological shock into account?

Connecting to a broader community and resources

A trend we are seeing is a different approach to historical archetypes in order to better support student life transitions. In the past, students were often segregated with other students, and instead we want to provide a more inclusive and diverse environment. This means creating spaces where students are exposed to the broader community and its resources, versus spaces that are solely "dorm-life" centric. The goal is to provide exposure to a diverse group of people and perspectives, and to create spaces that support more opportunities for growth.

One way to provide a more inclusive, communal setting is to open up amenities to the

broader public, where students can mingle with other students and the larger community. This can be a tricky prospect, considering that safety and security are paramount in student housing. But it is an exciting design challenge. Working with the local community during the design process can lead to more inclusive spaces that reflect the community's culture.

Opening the ground floor to create more porosity between the retail spaces, student amenities, and outside is something that more project teams are starting to explore. How can this be achieved while maintaining security? One option is secure or separate lobbies, and highly secure access points (exterior doors) that are heavily monitored, while other spaces are active and open during business hours.

An elevated front porch that abuts the sidewalk, like at the recently completed project The Accolade in the U-District, is an example of providing a secured, yet interactive space at ground level. Coffee shops, grab-and-go food/sundries, yoga studios, or co-working spaces are prime examples of where the design can be pushed even further. At Trailside Student Living across from U-Village, the ground-level retail was designed to open up to a public courtyard with direct access to the Burke-Gilman Trail. Students and the surrounding neighborhood can rest along the trail, mingle in the inclusive courtyard, or grab a bite to eat at Dough Zone.

Another option is allowing for public events where factors like day, timeframe, and access can be monitored closely. For example, an indoor/outdoor market, or spaces for community meetings and public lectures. It's exciting to think about how these spaces might evolve or be more akin to hotel-like lobbies, where ground-floor spaces become more public, while upper-level spaces stay more private and easily secured.

Centering student needs

In addition to exploring more community-focused spaces, amenities and wellness continue to trend as necessary elements to a successful student housing

Trailside Student Living, across from University Village and alongside the popular Burke-Gilman Trail, provides a public courtyard for shared use between students, residents, and the surrounding community.



PHOTO BY MEGHAN MONTGOMERY, COURTESY OF WEBER THOMPSON

project. Fitness spaces and a wide array of study spaces are critical, while bed/bath parity continues to help projects stay competitive. Bed/bath parity is not new, but also helps support a culture of inclusivity and equity, allowing students to have more privacy when being paired with other students for the first time or to support cultural differences.

Glitzy amenities, like golf simulators and game rooms, help with lease-up but are often underused compared to fitness and study spaces. Lisa Hale-Meindl, senior director with Greystar Collegiate Housing, said flexibility of spaces is key, and not all spaces need specificity of use. Student needs change, and a game room may need to become another study space or vice versa. The demand for multi-purpose spaces is something we continue to hear again and again; areas that can pivot depending on the need for private study, group study, small gatherings, and/or group projects. And providing visual connectivity between these spaces can create a welcoming atmosphere where students can see and be seen.

Diversifying spaces

With some of these emerging trends, what's

The Accolade's vibrant front porch allows residents to gather, see friends and neighbors, and feel connected to the larger U-District community.



PHOTO BY MORIS MORENO, COURTESY OF WEBER THOMPSON

next for student housing? In our minds, it is continuing to push the envelope with multi-purpose spaces, understanding new technology, and creating more opportunities for cross-collaboration and convergence of activities, all while keeping student safety at the forefront.

Be nimble to stay competitive with the newest trends as the project comes to market. Know the market, continually reassess, and be

ready to pivot! By designing a diversity of spaces, projects can become more inclusive living environments for students, all while keeping students and parents feeling safe.

Skye Bredberg is a senior associate at Weber Thompson in Seattle, a member of the AIA code committee, and senior project manager on the Accolade and Trailside Student Living.

FOR LEASE

Located across from
downtown ferry terminal
Five minute walk to sports
stadiums

Journal of Commerce Building

83 COLUMBIA STREET, SEATTLE, WA



Property Details

±4,700 SF available on first floor
RENTAL RATE \$20.00/SF/yr, gross
ABUNDANT natural light

QUIET open space with mezzanine
20' HIGH CEILINGS with exposed
brick and wood beams

For more information,
contact:

PHIL BROWN
206-622-8272
phil.brown@djc.com

MATT BROWN
206-622-8272
matt.brown@djc.com



New on-campus housing at Bellevue College allows better access to campus resources, proximity to classes, and on-campus jobs.

PHOTO BY LARA SWIMMER

COMMUNITY COLLEGES PROVIDE ESSENTIAL STUDENT SUPPORT WITH AFFORDABLE ON-CAMPUS HOUSING

Amidst skyrocketing rents, prohibitive commutes, and resource scarcity, community college housing gives a more diverse and potentially at-risk group of students access to a bed they can afford, closer to campus services and jobs.



BY KATE
MCLEAN

SAIF
VAGH

&
NAC

Community college students are facing multiple challenges including increasing housing and living costs, and a lack of housing options. The unfortunate result is that students are often forced to suspend their educational pursuits. NAC has worked with several community colleges to counter these trends. By offering affordable on-campus housing, community colleges are providing more opportunities for at-risk students and strengthening their academic communities.

HOUSING AND FOOD INSECURITY

The #RealCollege survey is the nation's largest, lon-

gest-running annual assessment of basic needs security among college students. According to a survey of Washington community and technical colleges by #RealCollege for the Hope Center in 2019, colleges seek to address students' basic needs because housing and food insecurity undermines academic success.

More than 50% of survey respondents were housing insecure in the previous year, 40% had experienced food insecurity in the prior 30 days, and 19% were homeless in the previous year.

Marginalized students are at an even greater risk of basic needs insecurity. These groups include American Indian or Alaskan Native students, Black or Indigenous students, students who identify as nonbinary or transgender, and students who are former foster youth or returning citizens.

These numbers are mirrored in other western states. According to a survey of California community colleges by #RealCollege for the Hope Center in 2021, 60%

of respondents had experienced housing insecurity in the previous year.

At the same time, there is clear evidence that students living on campus are more likely to stay in school, succeed and graduate. In 2021, ACUHO-I published "The Case for Campus Housing: Results from a National Study." The brief finds that "living on campus has a clear and profound impact on student persistence and engagement."

THOUGHTFUL PLANNING AND DESIGN

Additionally, community colleges are drivers of economic mobility and are inherently far more diverse than four-year institutions. Their mission deserves the benefit of innovative and far-reaching design thinking that works to provide comprehensive solutions for marginalized and at-risk students. By offering housing to their students, community colleges have the opportunity to better support this diverse and potentially at-risk group

of individuals.

On-campus housing, including integrated design strategies, can strengthen a web of administrative and infrastructural tactics suited to the institution's particular requirements. Adding elements of residential life and providing a "third space" that invites residents and non-residents alike helps to free up students' mental energy and level the academic playing field.

Planning and design are important factors in tailoring housing solutions to best fit each campus' specific issues, location, and demographics. The following projects show what can be done in urban, suburban, and rural environments to overcome skyrocketing rents, prohibitive commutes, and scarcity of resources—giving students access to a bed that they can afford and a location closer to on campus services and jobs.

FROM COMMUTER CAMPUS TO "COMMUNITY OF SCHOLARS"

Bellevue College is in one of the most expensive cit-

ies in the U.S. According to payscale.com, the cost of housing in Bellevue is 158% higher than the national average, which results in struggle, housing insecurity and increased hardship for many of the college's 14,000 students.

In response to a lack of housing options, NAC designed the first on-campus student housing complex for Bellevue College. The dramatic transition from a commuter campus to a 24/7 live/learn pedestrian environment began with a 1,100-bed student life master plan. Collaborating closely with the college, the concept for the entire precinct was to develop a lively, sustainable "community of scholars."

The project features apartment-style rooms with private kitchens, bathrooms, and living spaces. The new on-campus housing allows better access to campus resources, proximity to classes, and on-campus jobs. A variety of public spaces act as "third-places" providing social and academic support such as dining, public loung-

es, outdoor gathering areas, and distributed study spaces on each floor.

“Our new residence hall represents a monumental opportunity to shift our student experience from a commuter to a 24/7 living-learning community,” says Mike Kaptik, Dean of Student Life and Leadership at Bellevue College. “This project provides more than just beds; it is our first step in creating a thriving educational and social experience for our students.”

The residence hall has created a hub to bring campus residents and commuter students together. The community-oriented ground floor acts as a living room where the entire campus community can connect, unwind, and grow. Bellevue College provides not only housing but also third-place spaces for all students, and a growing network of support spaces to bolster student success.

Affordable housing with access to career and student support

NAC, in collaboration with Opsis Architecture, also assisted Columbia Gorge Community College with its transition from a commuter-based campus to a live/learn residential campus with economical housing options for its students to address affordability and availability of housing. The dual-component project includes a new two-story, 50-bed residence hall and skills center featuring career-technical programs.

“We knew our students were struggling to find affordable places to live, but it wasn’t until 2018, when we conducted a formal survey, that we recognized the extent of the challenge,” said Dr. Marta Yera Cronin, former CGCC president. “Many students were couch-surfing, staying temporarily with friends. Several were homeless, relying on shelters or living in their cars.”

Chinook Residence Hall is located in the heart of campus, situating students in the center of classes, including on-site career-technical programs and support services. Open lounges and spaces for informal learning are infused with natural light and dramatic views to encourage gathering of residents and non-residents alike.

Common kitchens offer students an affordable way to prepare meals as well as a great way to foster social bonds with other students with an outdoor terrace overlooking the main campus. An enclosed study room, two laundry rooms, and bike parking complete the amenities allowing students to

Chinook Residence Hall is a new two-story, 50-bed residence hall and skills center at Columbia Gorge Community College featuring career-technical programs.



PHOTO BY JOSH PARTEE ARCHITECTURAL PHOTOGRAPHER

focus on studies while learning and growing away from home. Housing on community college campuses not only addresses the need for affordable housing but also has the opportunity to bolster the existing network of on-campus support services.

INNOVATION CREATES NEW SOLUTIONS

NAC is constantly looking for new ways to deliver innovative solutions to their clients, and its leaders are often inspired by smart thinking in other markets. Although not developed for a Community College, the Hilda L. Solis Care First Village in Los Angeles is a housing project that can inspire future thinking.

Faced with a homelessness crisis in Los Angeles, the challenge was to deliver a cost-effective project on a very tight timeline. The answer? Modular construction. Taking only five months to complete, the modular construction team delivered 232 full-service dwelling units made from repurposed factory-fabricated shipping containers. The final project cost was less than half of traditional construction cost while delivering the project in a quarter of the time of traditional construction.

The success of this project was grounded in a true collaboration between the own-

er, the Los Angeles County Board of Supervisors, and an integrated modular construction team. NAC believes that the processes and lessons learned at Hilda L. Solis can serve as a repeatable model for providing affordable housing for various markets nationwide and sees opportunity to bring this type of innovative thinking to community colleges student housing solutions.



PHOTO BY PAUL VU

er, the Los Angeles County Board of Supervisors, and an integrated modular construction team. NAC believes that the processes and lessons learned at Hilda L. Solis can serve as a repeatable model for providing affordable housing for various markets nationwide and sees opportunity to bring this type of innovative thinking to community colleges student housing solutions.

Community colleges can play a crucial role in addressing the housing shortage and supporting at-risk students by implementing a holistic approach that encompasses housing solutions, financial support, and community engagement. By addressing these challenges, community colleges can contribute to creating stronger, more inclusive communities, and improving the overall educational experience for their

students, resulting in both higher student retention rates as well as increased transfer to four-year institutions.

Kate McLean is a senior associate and digital practice specialist in NAC's Seattle office. Saif Vagh is an associate principal in NAC's Los Angeles office, and a leader in the higher education practice.

COMING TOGETHER TO BUILD A CATALYST PROJECT FOR WSU'S NEW ENGINEERING AND ARCHITECTURE DISTRICT

The progressive design-build team got off on the right foot with StrengthsFinder assessments, joint consultant selection and a project governance structure.



BY JOSHUA
THOMSON



SARA
HOWELL

SPECIAL TO THE JOURNAL

Washington State University is set to welcome a new engineering and architecture district to its Pullman campus. From a hillside south of Carpenter Hall, Schweitzer Engineering Hall will serve as the district's first project when it opens in the fall of 2026. As the future home for the university's engineering and design students, the building is envisioned as a center for

academic excellence, experiential learning and cross-disciplinary collaboration.

Nearly \$80 million has been raised for this project so far, including \$40 million from the Washington State Legislature, and donations and sponsorships from more than 70 individuals and corporations. The funding has kickstarted the project, and WSU's wider push to meet the growing demand for engineering, construction and design graduates.

COMING TOGETHER AS A TEAM

As the first building in the planned precinct, it's important that Schweitzer Engineering Hall sets a great precedent for what comes next.

To do that, the progressive design-build team, led by Lease Crutcher Lewis (Lewis) and ZGF Architects, also needed to get off on

the right foot. At the outset, team members were encouraged to take a StrengthsFinder assessment to better understand the unique qualities everyone would bring to the project.

Then we went through a joint exercise to select consultants and trade partners.

We've since established a project governance structure. Leaders from ZGF, Lewis, and WSU facilities stay closely aligned in a weekly Big Room— in-person or hybrid meetings with project leaders — to work through challenges, make decisions, and communicate back to our respective teams. This environment supports interdisciplinary engagement and fosters a whole-team approach to developing design and problem solving.

Between ZGF and Lewis, we've agreed to a few ground rules, like only presenting

options to the client when aligned on the implications for the budget. While iterating on the design, we are working out of the same digital design model, ensuring everyone has the same information.

MORE BUILDING FOR THE MONEY

WSU's facilities and capital projects group has embraced a progressive design-build delivery model to get the most building for the money, and faster.

Before starting design, we went through a project confirmation period to ensure we sized the building appropriately for the target cost and the building's programming and design requirements. A key aspect of this has been applying the principles of Target Value Design. This means using benchmarks for comparable buildings and

building systems to target cost-per-square-foot values. Elements of the building are being designed to that value, using real-time market-informed estimating as the design progresses. Design and estimating are continual rather than iterative, reducing rework.

These efforts can help mitigate risks and avoid spending contingency funds that would otherwise help us meaningfully reinvest into the project during construction.

We also established a list of betterments, or desired design features, in addition to the project requirements. These can be implemented as risk is reduced and as budget allows.

DESIGN AND PROGRAMMING VISION

As a 63,000-square-foot student-success hub, this facility is poised to propel genera-



Solution-based designs built on 54 years experience

Higher Education Services:

- Civil Engineering
- Structural Engineering
- Community Planning
- Landscape Architecture
- Land Survey

Project Delivery Methods:

GC/CM, D/B/B, Progressive D/B



Wenatchee Valley College Wells Hall, Wenatchee



Pierce College Fort Steilcoom Glacier Building, Steilcoom



University of Washington Milgard Hall, Tacoma • Photo: JBSA



Seattle University Connolly Hall, Seattle • Photo: Ye-H

www.ahbl.com

Tacoma • Seattle • Spokane • Tri-Cities

tions of problem-solvers.

For our project teams, the guiding principles set out by the university community and project donors encompass a wide range of considerations. They emphasize that the building should be viewed as a tool for educating the next generation of engineering and design professionals — not just through classes, but by putting the engineering behind the project on display.

The design should actively engage students in both learning and social connections. And it should provide a window into the district's complete development.

Among its many features, Schweitzer Engineering Hall will co-locate academic advisors to offer a more accessible and comprehensive advising experience. Additionally, it will provide students with functional meeting and collaboration spaces, as well as maker spaces, designed to engage students with future career opportunities.

The building will also house classrooms equipped to support distance education, catering to students in Bremerton, Everett, Tri-Cities, and Vancouver.

The project aims to inspire students from the moment



WSU's 63,000-square-foot Voiland College of Engineering and Architecture is using a progressive design-build delivery model to get the most building for the money, and faster.

IMAGE COURTESY OF WASHINGTON STATE UNIVERSITY

they first visit campus, to their time as WSU undergraduate and graduate students, to helping them connect with prospective employers. Ultimately as alumni, the hope is that they will return and inspire the next generation and help take part in career placement.

LOOKING AHEAD

On a drizzly September day, the WSU community

gathered for a ceremonial groundbreaking event, three years before the building's anticipated opening, and with construction on the horizon.

Marielibeth Vanessa Moran, a computer engineering major, was among the speakers. She may well have expressed the collective hopes for the building best.

"Every student has expe-

rienced moments where we wonder if we were even cut out for this, questioning whether our all-nighters will ever pay off," she told a crowd of more than 200. "Schweitzer Engineering Hall represents a safe harbor that acknowledges these struggles. This building is being designed to ensure that we have our spaces where we can find our people, collaborate with our peers, seek

guidance from our professors and find inspiration in each other's determination."

Joshua Thomson is the WSU Schweitzer Engineering Hall project manager at Lease Crutcher Lewis, and is the DBIA regional chair for student engagement. Sara Howell is a principal at ZGF, serving as project manager for WSU Schweitzer Engineering Hall.

INTEGRUS

A COLLABORATION OF YGH & INTEGRUS ARCHITECTURE

DESIGN FOR THE COMMONS.

Supporting architectures of care & belonging	Sustaining environments of stewardship & innovation	Shaping spaces of community & resilience
--	---	--

www.integrusarch.com

ENHANCING THE STUDENT EXPERIENCE THROUGH LIVING DESIGN

The University of Washington's 207,000-square-foot Life Sciences Building includes a public cafe and a 20,000-square-foot greenhouse along the Burke-Gilman Trail to increase interactions between students and the broader community.



IMAGE BY KEVIN SCOTT

Two new Washington projects aim to establish healthier learning environments that improve student performance and morale, and foster feelings of belonging and well-being.



BY DEVIN KLEINER & MYER HARRELL
PERKINS&WILL

the unprecedented stresses young people already faced.” To improve student performance and morale, and foster feelings of belonging and well-being on campus, higher education institutions are partnering with design firms to establish healthier learning environments.

APPLYING LIVING DESIGN TO WASHINGTON CAMPUSES

Despite its near-endemic status, COVID-19 left its mark on the academic community. As evidenced by steep declines in high school grades and college enrollment, many students are struggling to overcome hardships spawned by the pandemic and, in some cases, adapt to a new reality of hybrid learning. According to the Surgeon General, the pandemic “exacerbated

Whether it’s a building, campus, neighborhood or entire city, Living Design is a philosophy that guides the work to maximize potential by exploring synergies between systems that are mutually beneficial. Inspired by symbiotic relationships commonly found in nature, projects are carefully evaluated through seven drivers which are interconnected for a holistic approach to design, and generate previously



COUGHLIN
PORTER
LUNDEEN

Image © Chris J. Roberts Photography, LLC

A home away from home.

Residential halls and off-campus student housing projects embrace alignment of multiple instructional strategies and deliveries – exploration, discovery, collaboration – with adaptable structures and learning zones that extend outside the classroom. These safe and resilient facilities enhance livability and create comfortable environments where students thrive.

/// cplinc.com

unforeseen opportunities to meet client aspirations.

Two new regional developments have implemented this Living Design Framework: University of Washington's Life Sciences Building and Western Washington University's electrical engineering and computer science building, Kaiser Borsari Hall.

EMBRACING BIOLOGY AT UW'S CAMPUS GATEWAY

Completed in 2018, the University of Washington's Life Sciences Building serves the Department of Biology with technical teaching and research spaces designed with multiple Living Design Framework drivers in mind. Its prominent location frames a gateway to the main campus, serving as a hub for students to socialize and collaborate, addressing community & inclusion. The 207,000-square-foot lab and office building includes a public cafe and 20,000-square-foot greenhouse along the Burke-Gilman Trail, a popular biking and pedestrian artery through the city, to increase interactions between students and the broader community.

Students were actively involved in the design process of the University of Washington Life Sciences Building with UW Solar, securing over \$400,000 for the building's solar panels and cistern. They collaborated with the design team to write grants for funding, present findings to the client, and continue their involvement by leading building tours to educate the community and celebrate the fruits of their labor.

Consideration of the goal for both **resilience & regeneration** and **technology & tectonics** inspired the first-of-its-kind installation of photovoltaics – solar cells on a thin film are laminated within vertical glass fins and integrated into a glass curtain wall. In addition to shading the building to reduce unwanted heat gain, the solar fins generate enough electricity to light all four floors of offices while preserving expansive views of campus. A prime example of **research & innovation** and **poetics & beauty**, the design not only powers the building, but also transforms the appearance of the façade as the sun and clouds arc through the sky.

At the building's core, the elevator is aptly wrapped with eight full-height tree trunks spanning six floors to celebrate biology at the heart of the building. Its carbon sequestering, live-



Western Washington University's Kaiser Borsari Hall is the first publicly funded zero-energy and zero-carbon academic building on a university campus in Washington.

RENDERING BY MOTIV STUDIO

edge wood echoes the drivers for **health & well-being** and **conceptual clarity** by forming an indoor-outdoor room with the grand Deodar Cedars located just outside the floor-to-ceiling windows, creating a warm and welcoming environment for students to study. In the evening the gaps between the trees glow with back-lit frosted glass, resembling the silhouette of the trees in a forest with the setting sun behind.

In parallel with the Living Design approach at the University of Washington's Life Sciences Building, student health and wellness were priorities for the design of Western Washington University's Kaiser Borsari Hall.

ZERO ENERGY AND ZERO CARBON

Western Washington University's Kaiser Borsari Hall will serve electrical engineering, computer science, energy science and technology programs when completed in 2025.

As the first publicly funded zero-energy and zero-carbon academic building on a university campus in Washington State, Kaiser Borsari Hall will exceed LEED standards for energy use, embodied and operational carbon and use solar panels to power the facility, aligning with the Living Design Framework drivers **technology & tectonics** and **resilience & regeneration**.

In line with **community & inclusion**, the building will also provide physically and culturally accessible classrooms, labs and collabora-

tive spaces for students with diverse abilities and learning styles.

Additionally, through **health & well-being**, natural materials, ample daylight and framed views of the outdoors were implemented, all of which are proven to reduce stress, lower blood pressure and heart rates, and promote positive effects on human immune functioning, according to scientific research compiled in 14 Patterns of Biophilic Design by Terrapin Bright Green.

The building creates a biophilic extension of the adjacent hillside nature trails, with a mass timber structure and wood cladding that continues the student's experience walking through the arboretum (one of the prized amenities on Western's campus). Within the building, students discover a framed view looking back

to the arboretum, reconnecting with the campus landmark. This "biophilic bridge" between the natural and built environments aligns with Living Design Framework drivers for **conceptual clarity** and **poetics & beauty**.

THE BIGGER PICTURE

With intention and purpose during design, every project team can improve the lives of end users. Both the University of Washington's Life Sciences Building and Western Washington University's Kaiser Borsari Hall demonstrate how Living Design can enhance the student experience at higher education institutions.

"It was incredibly rewarding to work on this as a student and to see this project actively being constructed on campus," said one University of Washington stu-

dent. "This is the crowning achievement of my collegiate career."

For universities, high-performing learning environments will have secondary benefits as well. Campus projects like these can work toward broader goals around climate mitigation, equity, and community engagement. Universities are massive drivers of change for good, and the Living Design framework can guide their meaningful and lasting transformations for generations to come, and leave us all feeling a bit healthier and more inspired.

Devin Kleiner is an associate principal and the director of regenerative design, leading sustainability in Perkins&Will's Seattle office. Myer Harrell is a senior regenerative design advisor and senior project manager in Perkins&Will's Seattle office.

SEVEN DRIVERS OF LIVING DESIGN

- **Resilience & regeneration:** Solutions that rehabilitate and regenerate entire ecosystems—a must in a rapidly changing world with finite resources.

- **Health & well-being:** Design that promotes physical, mental, emotional, and social vitality for life, resulting in a thriving and diverse ecosystem.

- **Community & inclusion:** Design that addresses the fundamental human need for inclusion by fostering a sense of belonging.

- **Poetics & beauty:** Design that is beautiful to look at and fills people with a sense of wonder and joy.

- **Technology & tectonics:** The seamless assembly of the many disparate parts of a built environment into a unified, elegant, and well-crafted place.

- **Research & innovation:** Exploration and discovery that lead to knowledge, pushing beyond the limitations to solve the most complex problems.

- **Conceptual clarity:** A clear, coherent, and recognizable concept that anchors the creative expression of a project.

FINDING THE BALANCE IN HOUSING DENSITY AND STUDENT WELL-BEING

Evidence-based design strategies like access to natural light, exposure to nature, and increased social connections counteract negative impacts that can be associated with high-density living.



BY BRYAN CROENI, RENAE MANTOOTH AND AGUSTIN MAURO

HKS

College and university enrollment figures are skyrocketing nationwide, prompting administrators to find creative approaches to housing students, especially in markets like Seattle where rental rates are also climbing. Student housing administrators are employing temporary strategies such as tapping into the local hospitality industry, and putting three students in rooms designed for two.

To meet the growing need for student housing, more new construction of student residence facilities is underway at colleges and universities around the country. Financial success in student housing projects is often measured by spatial efficiency, or reducing the amount of square footage per bed.

At HKS, we believe student housing can deliver more than a bed count. By balancing efficiency with concern for student welfare in the design of residence halls, we believe we can enhance students' health and well-being.

EVIDENCE-BASED APPROACH TO VALUE AND QUALITY

Density and crowding within the context of housing are related issues that can affect student health and well-being. Density is an objective measure of how many people occupy a space. Crowding is a subjective perception of too many people within a space.

Crowding in housing has been shown to have negative impacts on mental health, physical health and social interactions. Design strategies – specifically those that promote health and well-being – can counteract negative impacts that can be associated with high-density living. To provide high-densi-

Exposure to natural light aims to reduce perceptions of crowding at the HKS-designed North Torrey Pines Living and Learning Neighborhood at UC San Diego.



PHOTO BY TOM HARRIS

ty student housing facilities that don't sacrifice quality, HKS uses an evidence-based approach to designing student housing.

To maximize spatial efficiency in student housing, HKS' general rule of thumb is to provide approximately 100 square feet per student within each unit, or primary sleeping space. Student housing units often provide options for occupancy, from single rooms to suites.

Student housing spatial efficiency is associated with two factors: the square footage dedicated to each student within a private or shared dwelling unit, and the gross square footage of the overall housing facility. Restrooms, gathering spaces and various shared amenities such as laundry, kitchens or game rooms are critical to the spatial efficiency calculation. These support spaces serve a large population in a relatively small footprint, providing greater value to residents than off-campus housing.

NATURAL LIGHT AND CONNECTION TO NATURE

Access to natural light and the natural world is important to health and well-being. Studies have shown that



Learning environments that engage and inspire.

Seattle | Tacoma | Portland
pcs-structural.com



© Janette Ryan

exposure to natural daylight affects sleep quality, sleep duration and mental health. Further research demonstrates that in addition to helping regulate sleep patterns and other body processes, natural light reduces perceptions of crowding.

Beyond providing natural light, windows also allow views of natural settings. Expansive views can offset the negative impacts of crowding. Visual and physical access to nature is important to the design of healthy student housing facilities.

HKS is using multiple strategies to supply abundant daylight and views to nature for interior rooms at Blanco Hall, a student housing space currently in design for the University of Texas at San Antonio. The form of the building is porous, arranging the structure to open the ends of the wings and the courtyard to natural light. Centralized shared amenity spaces further enhance access to daylight in the Blanco Hall design.

Similar design strategies could be used on Seattle campuses to maximize students' exposure to natural light during the region's rainy weather.

Blanco Hall at the University of Texas at San Antonio is arranged with open wings and a courtyard to increase natural light. Centralized shared amenity spaces further enhance access to daylight.



IMAGE COURTESY OF HKS

PRIVACY AND PERSONALIZATION

Privacy and personal space are additional considerations for student health and well-being. Nooks located off corridors, full-height partitions in all-gender restrooms and staggered bed layouts within rooms can provide privacy in a communal living environment. Well-placed furniture systems can partition spaces for privacy and personal storage. Physical barriers at the head of the bed can prevent personal lighting from disrupting roommates' sleep. According to research, features that support students' ability to regulate privacy can increase students' autonomy, positive emotions and sense of self.

Opportunities for personalization give students agency within their living arrangements. Studies show that positive social interactions happen when students feel that they "own" their sleeping space. HKS-designed Shasta Hall at University of California, Davis incorporates surfaces at each sleeping space that students can personalize within their shared rooms.

To enhance personalization and privacy, this residence hall is comprised of mini-suites with private bathrooms shared only by suitemates. When all rooms are tripled the mini-suite configuration at Shasta Hall adds only four square-feet per bed

when compared to a similar residence hall on campus that has communal cluster style bathrooms located off the corridors.

SCALED FOR BELONGING

Students often find the transition to campus life jarring. Student housing designs based on "nested scales" can help students feel comfortable progressively moving from smaller personal interactions at the individual room, suite and residence facility level to broader interactions at the classroom and campus community scale.

Designing for nested scales provides students with micro to macro social connections within their campus community. This design also avoids long corridors, which can exacerbate perceptions of crowding.

North Torrey Pines Living and Learning Neighborhood (NTPLL) is an on-campus community that can house up to 2,000 students at UC San Diego. HKS' design for NTPLL subdivides the residence facilities into 2-story "houses" that provide nested scales of social interaction. The NTPLL houses are composed of shared rooms, suites or apartments that share a living room on two levels, to facilitate social connections and engender feelings of belonging.

Connections to nature support student health and well-being at the HKS-designed North Torrey Pines Living and Learning Neighborhood at UC San Diego.



PHOTO BY TOM HARRIS

A longitudinal study conducted by a coalition organized by the Center for Advanced Design Research and Evaluation showed that the move to NTPLL resulted in a reduction in student self-reported depression and an increase in satisfaction with overall residential spaces, among other positive impacts on student health and well-being.

Here in Seattle, the lines between academia and

industry are blurring, making novel approaches to housing students and the workforce paramount. Synergies between Seattle-area flagship academic institutions and global tech companies will have a ripple effect on the local housing market. By centering the student experience and making evidence-based design decisions, we can provide more housing while

enhancing well-being.

Bryan Croeni is a principal in HKS's Seattle office, working in the advisory services group. Renae Mantooth is a senior design researcher at HKS, where she integrates research efforts within the education practice area. Agustin Mauro is a design professional at HKS, where he is involved in higher education projects.

CREATING INCLUSIVE RESTROOMS THROUGH DESIGN

When designed with intentionality, these spaces can have a great impact on care and belonging on campus.



Students at Central Washington University want inclusive restrooms right off main building entrances to mark the space as a beacon of inclusivity.

PHOTO BY LARA SWIMMER



BY KANDIS LARSEN & TINA CAMPANELLA
INTEGRUS

with bathroom design central to society's evolution toward inclusivity. Recently, attention has been given to the role public restrooms have in addressing this basic construct within our communities, especially higher education campuses.

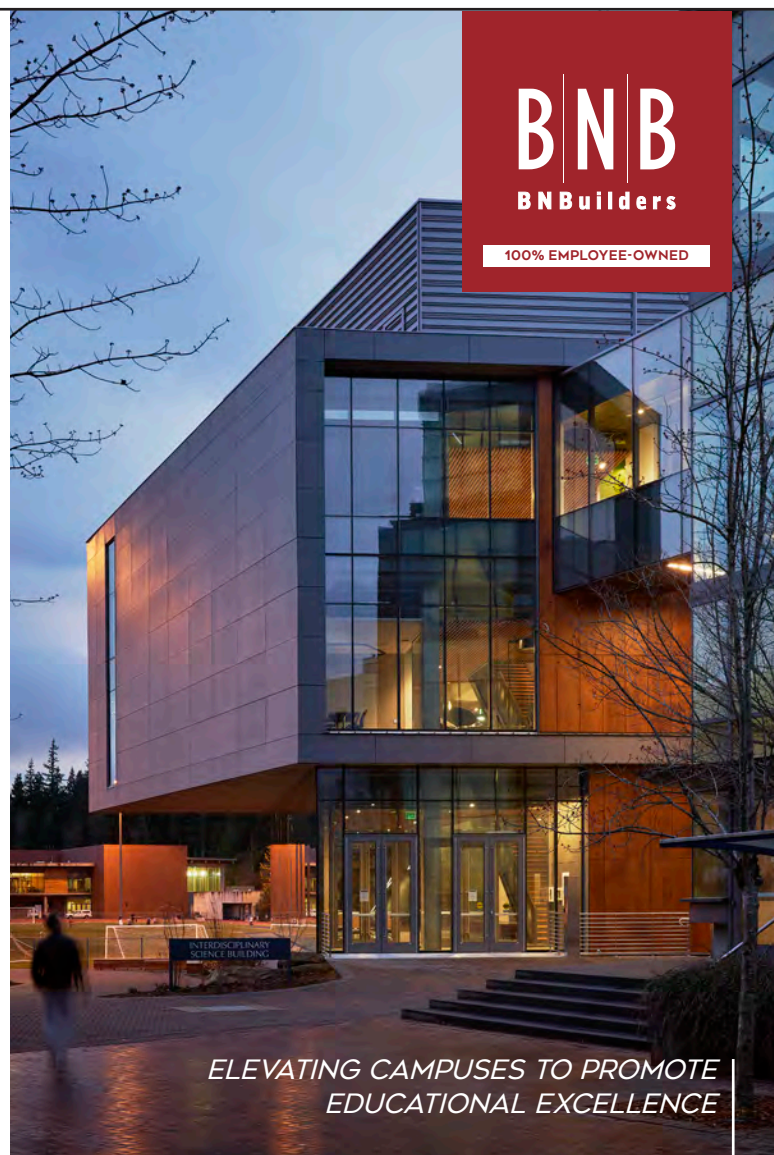
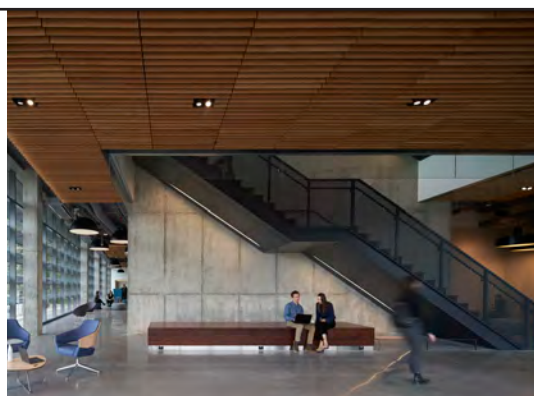
When designed with intentionality, these spaces can have a great impact on care and belonging. It's worth setting aside preconceptions to look at restrooms a bit differently — and to get comfortable with being uncomfortable.

SHIFTING SOCIETAL NORMS REFLECTED IN PUBLIC RESTROOMS

Looking back, it appears as if the public restroom has long marked cultural shifts in society's history. The Romans had male-only communal latrines. Increased understanding of hygiene and the need for drainage led to infrastructure surrounding sewage removal.

A fully inclusive community welcomes people regardless of age, ability, income, or ethnic background. Architecture plays a foundational role in the spatial framework that either facilitates or inhibits inclusion. And the work of designers of public spaces encompasses all facets of a building— from overall aesthetics to space planning and even utilitarian functions like restrooms.

Public restrooms have long played a role in the gravitational shift of societal norms,



BNB
BNBuilders

100% EMPLOYEE-OWNED

ELEVATING CAMPUSES TO PROMOTE EDUCATIONAL EXCELLENCE

IF YOU CAN IMAGINE IT
WE CAN BUILD IT

COMMUNITY

DIVERSITY

INNOVATION

KNOWLEDGE

SAFETY

SUSTAINABILITY

The 1851 Great Exhibition in London featured single-use, male-only 'monkey closets' introducing the notion of privacy. Women entering the industrial factory workforce in the late 1880's compelled the addition of 'Ladies Rooms.'

The fight to remove segregated bathrooms was heightened during the 1960's Civil Rights movement, and the demand for accessible restrooms resulted in the 1990 Americans with Disabilities Act. Understanding these markers helps us to realize how far we have come.

ADDRESSING DISPARATE USER NEEDS THROUGH DESIGN

What comes to mind when hearing the term 'inclusive restroom?' Diverse cultural and demographic backgrounds are often not fully considered when visualizing and contextualizing these spaces, and achieving this becomes increasingly complex with diverse user groups. It's easy to be hyper-focused on one lens of the conversation.

Despite efforts to simplify approaches, the design of these spaces remains complex and multi-faceted. The danger is skewing needs toward one affinity group, thereby creating unintentional inequities, and excluding others' needs. We are only just beginning to understand that restroom considerations are more than just male and female, black or white, able or disabled.

We have inevitably bumped into our probable next societal shift, with restrooms once again marking the times. Regardless of strong feelings surrounding the choice to provide (or not provide) inclusive restrooms, architects are positioned to address user needs through design, and to educate decision makers with more understanding integrated into our processes.

When designed with empathy, inclusive restrooms address disparate needs and impart a sense of belonging in meeting the needs of all, improve efficiency, reduce wait times, tackle safety concerns, gracefully address religious and social constructs.

BROADENING THE CONCEPT OF ACCESSIBILITY

While the initial point of reference with restrooms is historically gender-based, inclusive design centers on universal acceptance and inclusiveness for ALL. This necessary shift in thinking must conclude inclusive restrooms are more than gender related, or a gender identity

issue.

Inclusive restrooms are without gender designation, accessible to everyone, designed for privacy, safe and welcoming where people do not face discrimination or harassment. They feature inclusive amenities including both types of 'receptacles' and family-friendly assists like nursing areas and changing tables.

Stepping outside traditional views to explore the experience of restrooms through diverse lenses enables a deeper understanding of how different restroom models are experienced. Strategies to develop empathy include stepping out of one's comfort zone to examine biases, walk in other's shoes and maintain respect.

Inclusive restroom design extends to actual physical space when addressing inherent inefficiencies, disparity in locations, differences in wait times, variation of stall configurations, and the idea people around us don't feel comfortable entering a public restroom for fear of ostracization, or lack of safety. Related considerations include cost, maintenance, adaptability, safety, and privacy.

This clearly comes with a cost, primarily a cost to retrofit and replace. This can include more individualized ventilation for each stall, more walls as opposed to connected stalls. In turn, it may streamline daily maintenance for economies of scale providing long term savings.

Currently, international plumbing codes are not yet mandated, although amendments to the International Plumbing Code allows for installation of all-gender, multiuser restrooms in public buildings, and requires single-user restrooms display signage indicating they are available to all users.

MAINTAINING ADAPTABILITY AND INCREASING AWARENESS

There are tools to aid in discussions around restrooms. A community-based process of empathy can be applied to build awareness around disparate perspectives and needs. These include an interactive process to develop increased empathy, identifying perspectives that drive restroom design, and common process bar-

riers hindering a sense of belonging while understanding opportunities and constraints impacting the design, construction, maintenance, and operations.

As Jeremy Sutton says in Positive Psychology, "If we are to solve problems at an individual level and gain a

greater understanding of the issues humanity faces, we must develop compassion and empathy to make decisions that meet the need of everyone, not just ourselves."

Not only is legislation and adoption for restrooms teetering on a shift, but acceptance by those utilizing these new forms of restroom is still evolving and in a constant feedback loop of what is and isn't working.

The key is to stay adaptable so facilities can remain current to code, but equally important, meet the needs

of those using the restrooms in the most appropriate and meaningful ways possible.

As the character of restrooms transition away from models that are decades old, it is important that new restroom conditions are clear and obvious. Change is hard and restrooms are a private space where the unknown can cause great discomfort and even fear. Creating consistent conditions across different buildings or restroom pods, when possible, removes the guesswork.

IMPROVING THE HUMAN EXPERIENCE ON CAMPUS

There is no one solution or restroom typology that will meet the needs of everyone in public buildings. With diverse stakeholders in ability, age, culture, gender, and more it is critical to provide choices wherever possible for the perceived and real benefits that different restrooms offer.

In our work at Central Washington University, preliminary design was rooted in empathy and understanding human needs when crafting inclusive restroom concepts for their Center for Cultural Innovation.

Typically, restrooms are a hidden feature, but after extensive engagement sessions, students unequivocally wanted inclusive restrooms off the main building entrance to make this functional space a beacon of inclusivity. They wanted people to know loud and clear, that this was a place where ALL are welcomed.

At Lewis & Clark College in Portland, Ore., our design for diversity and more ADA accessibility in the redesign of the backstage theater dressing rooms included creating inclusive restrooms that improve the human experience for everyone.

It seems students are on the leading edge of how we can best approach society's next cultural shift through architecture, and we look forward to our role in advancing a sense of belonging in all spaces.

Kandis Larsen is a principal at Integrus working on projects in the public realm, emphasizing higher education. Tina Campanella is a senior associate and marketing specialist leading higher education-focused business development at Integrus.

SEATTLE/TACOMA

PORTLAND

TRI-CITIES

SPOKANE



The Property Management and Multi-Family Flooring Professionals



WWW.ALLIANCEFLOORING.COM

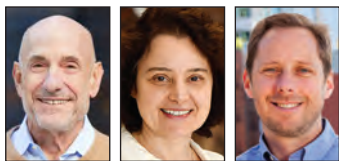
Public spaces at Innovation Hall are designed to bring Cascadia College and the University of Washington Bothell together as a community of learners.



IMAGES BY MITHUN

INNOVATION HALL BREAKS NEW GROUND IN PARTNERSHIPS AND PROCESSES

A new shared STEM facility for Cascadia College and the University of Washington Bothell uses a progressive design-build approach and transparency to achieve their community and environmental vision.



BY WALTER SCHACHT, LANA LISITSA
AND BRIAN ASKE

SPECIAL TO THE JOURNAL

Innovation Hall is located on Cascadia College's and the University of Washington Bothell's co-located campus in Bothell. It is the first academic building in the nation shared by a community college and a university. It is also the first project procured under the university's approach to assembling progressive design-build teams for major projects by selecting the builder first and the design team following.

The new, four-story, 80,000 square-foot building contains labs and classrooms

for chemistry, biology, physics, computer science, and mechanical and electrical engineering as well as study areas and faculty offices. The building was substantially complete in September, and classes will start there in winter quarter.

NEW PARTNERS

In 2019, the college and the university each received about \$40 million in state funding to build separate STEM buildings. But escalation in construction costs and an interest in reducing site impacts led them to join forces on a single, shared-use facility. The opportunity allowed the two schools to take a step back and consider how to align organizational and operational differences.

To make sure the door was open to the broadest group of builders and archi-

itects, the owners released a builder-only RFQ in May 2019. Separating the selection of builder and architect created nationwide competition for both roles. Lease Crutcher Lewis was selected to lead the design build team. Subsequently, the institutions and Lewis conducted the architect selection process and awarded the contract to Mithun. The designer and builder would be working together for the first time, and it would be the first project leveraging Mithun's recent merger with Schacht Aslani Architects.

COMING TOGETHER

Innovation Hall demonstrates the potential of design and construction to bring people together around shared goals for project success. The institutions, designers and builders came to the table with a

commitment to transparency and open dialogue. They created an environment of trust based on an appreciation for others' skills and experiences, a willingness to challenge convention and take calculated risks, patience, and a sense of humor. The institutions found new ways to connect their faculty, staff, students and programs. Designers and builders developed long-term bonds.

The organizational model facilitated teamwork. Project managers met weekly to coordinate the effort. Working teams brought the college and university together with designers, engineers and trade partners to consider programmatic, technical and site development issues. Leaders from Cascadia College and the University of Washington Bothell formed a project executive committee, meeting with

Lewis and Mithun monthly to set the overall direction for the project.

MISSION-ORIENTED DESIGN

Innovation Hall reflects the institutions' key objectives for the project: maximizing space for instruction and research; creating environments to support collaboration; fostering active and inclusive learning; strengthening interaction between the college and university; and displaying a commitment to environmental sustainability.

MAXIMIZING SPACE FOR INSTRUCTION AND RESEARCH

A project definition phase to establish project scope began in January of 2020. It was immediately apparent the budget was not adequate to deliver the college's and the

university's program goals. Given the objective to maximize space, the project executive committee, Lewis and Mithun decided to target a facility 10,000 square feet larger than indicated by the preliminary analysis of completed, comparable benchmark projects with an understanding the additional space might be left unfinished. The team called this stretch goal "overbooking the flight."

Unforeseen circumstances, including the pandemic and a four-month concrete strike in King County, made the task more difficult than originally conceived. But the collective knowledge of designers, builders and trade partners led to efficiencies in site and building systems. Risks were managed so budget contingencies could be used for the interiors. In the end, the goal was achieved. All the spaces in the building are finished and ready for use.

CREATING LEARNING ENVIRONMENTS, BUILDING COMMUNITY

Innovation Hall extends its arms out to embrace an entry plaza at the threshold between the university and college, inviting the campus community in to participate in STEM learning and research. Floor to ceiling glass at the ground floor provides views into the University of Washington Bothell's engineering capstone labs, aimed at stimulating all students' interest in advanced programs and career pathways.

An open stair at the main entry rises through the four-story building underneath a large skylight. Together with an atrium at the west end, it brings daylight into the public spaces, anchoring an accessible route from the ground level to the fourth floor that allows people to navigate the steep slope by going through the building. The stair and atrium are surrounded by informal student spaces that provide a range of social and study environments, inviting students from both institutions to come together. Diverse, non-traditional students were engaged in the design process, raising awareness of stakeholder preferences for study spaces.

Each institution has its own labs, classrooms and offices. They are distributed across floors bringing programs close to one another, fostering collaboration between the institutions and creating opportunities for cross-disciplinary studies. The flow connects structured study, hands-on work, research, prototyping and the exchange of ideas. The institutions share breakrooms which encourages faculty engagement.

A SHARED COMMITMENT TO THE ENVIRONMENT

Innovation Hall is targeting LEED Gold and maintains the campus' Salmon Safe and Bee



Campus USA certifications. The experience of the building in the landscape reinforces the two institutions' commitment to environmental stewardship. Innovation Hall knits into a forested hillside that is central to the character of the Bothell campus.

The building footprint was informed by hydrological, arborist, infrastructure, and construction logistics studies focused on reducing environmental impacts and minimizing costs. Restoration of the hillside nurtures the long-term health of the surrounding forest. New trees and plantings are native species selected to thrive in a changing global climate. Terraces along the south side of the building connect program spaces to the hillside environment, and provide places for outdoor instruction. Visible stormwater features include bio-filtration planters at the upper and lower-level entries to the building.

Walter Schacht is a partner at Mithun and 2020 recipient of the AIA Seattle Gold Medal in recognition of his design achievements and advocacy for architects and architecture. Lana Lisitsa is a partner and project manager at Mithun, where she has managed complex higher education projects including Innovation Hall and the Seattle University Sinegal Center for Science and Innovation. Brian Aske is an operations director at Lease Crutcher Lewis, where he leads design-build projects, and serves on the DBIA NW regional board and the national DBIA progressive design-build best practices education committee.

INNOVATION HALL TEAM

Design builder

Lease Crutcher Lewis + Mithun

CONSULTANTS

Landscape architecture Mithun	Envelope 4EA	Accessibility Studio Pacifica
Interior design Mithun	Acoustics A3	Environmental graphics RMB Vivid
Civil engineer Otak	LEED O'Brien360	Wind study CPP
Structural engineer KPFF	Codes Holmes / Robert Pielow	Irrigation WBLA
Lab planner RFD		Elevator ECS

TRADE PARTNERS

Mechanical/plumbing Apollo / Glumac	Framing and partitions PCI
Electrical/telecom/AV Cochran / Hargis / AEI	Windows and skylights Sargent Construction
Lab equipment and casework ISEC	Fire protection Shin Mechanical
Elevators Kone Elevators	

GOING UP: SEATTLE'S TOWERING NEW VISION FOR STUDENT HOUSING

City leaders, UW and other neighborhood stakeholders work to balance growth in high-rise student living with neighborhood character and small business affordability in the U District.

With the opening of a new light rail station, and the promise of an eight-minute downtown commute, the Seattle



BY SCOTT SURDYKE
SPECIAL TO THE JOURNAL

City Council made a big, bold decision in 2017 to substantially upzone the University District, allowing for towers of up to 320 feet.

The University of Washington joined efforts to increase building heights in the neighborhood, updating its master plan in 2019 to expand its West Campus with up to 3 million square feet of potential new development.

Today, the new light rail station is open, the U District is booming, and a brand-new skyline is growing above the Lake Washington Ship Canal.



Legend:
Recently Completed
Under Construction
Proposed
Estimated Missing
© David Boynton

At least 19 towers have been proposed for the U District, ranging from 12 to 32 stories. Most of these are student housing.

IMAGE BY DAVID BOYNTON

CAPITALIZING ON TRANSIT

The City of Seattle hasn't always been known for bold transit-oriented planning.

Several stations, including Rainier Beach and Sodo, have seen minimal or no zoning changes, and there has been comparatively little

investment near those stations.

However, with cities such as Vancouver, Burnaby, and Surrey, B.C., providing

examples of how to capitalize off transit investments with high-rise zoning, the City of Seattle and U District stakeholders agreed this was the



UW Art Building Advanced Concepts Lab | © Sean Airhart



UW Information School | © Rafael Soldi



UW Tateuchi East Asia Library | © Rafael Soldi

HIGHER EDUCATION

Pathways to Possibility

GLY's responsive Interiors + Special Projects team helps uncover innovative solutions to meet the ever changing needs of higher education. Whether working within an occupied campus or building new facilities, ISP is transforming learning, one space at a time.



vision to pursue.

“We were thrilled when the city made the decision to commit to increase the zoning,” said Matt Roewe, an architecture and development consultant who worked for many months with the University District Citizen Advisory Committee while serving on the Seattle Planning Commission.

Roewe said the city initially considered heights of 125 to 160 feet.

“When we shared with them examples of livable transit-oriented high-rise communities, everyone agreed that taller buildings with public benefit incentives was the most effective way to achieve the city’s and neighborhood stakeholders’ goals.”

The area was among the first to incorporate Seattle’s new Mandatory Housing Affordability (MHA) program. Roewe said going to 240 to 320 feet of height also comes with bulk and scale controls such as limits on podium heights, tower spacing and setbacks. “The new projects are enriching the neighborhood with on-site pocket parks and including or funding affordable housing.”

UW’S HIGH-RISE VISION FOR WEST CAMPUS

The expansion of West Campus, an area largely located between 15th Avenue Northeast, the University Bridge and Portage Bay, may include up to 12 towers ranging from 120 to 240 feet in height.

Known as Portage Bay Crossing, the West Campus redevelopment is envisioned as a high-density, pedestrian-oriented “innovation district” where students and experts can gather across multiple disciplines, including public health, social work, life sciences, humanities and environmental studies.

Including a combination of public and private buildings and mixed uses, the expansion aims to connect the main campus with the growing U District neighborhood. Portage Bay Crossing will be “a lively urban environment with a robust mixture of arts and culture, retail and gathering spaces to promote interaction between students, researchers and partners.”

SAVING “THE AVE”

When planning for the U District rezone began in 2012, one of most important goals was to preserve the scale and character of University Way — “The Ave.”

Considered one of the most diverse and eclectic neigh-



The Standard, a new two-towered 25-story student housing project with a rock-climbing wall and rooftop pool and study lounges, looms over the U District.

PHOTO BY SCOTT SURDYKE

borhood streets in Seattle, The Ave includes a vibrant mix of affordable, student-oriented cafes and restaurants, pubs, coffee and boba tea shops and bookstores. There was substantial support for maintaining and preserving the scale and existing character of The Ave, and consequently University Way was not included in the upzone.

“Our ground-floor economy is a major success story in the U-District,” said Don Blakeney, Executive Director for the U District Partnership. “Small businesses are thriving, and we have a long line of local entrepreneurs looking to set up their first, second or third business here.” Blakeney recently oversaw the distribution of \$4.9 million in federal funds to help businesses on The Ave spruce up their exteriors with paint, signage, awnings and outdoor seating.

“The Ave has unique retail spaces that are much smaller and more affordable than what you find in newly-developed neighborhoods such as South Lake Union,” Blakeney said. “The human-scale rhythm of the streetscape, unique and colorful treatment of the storefronts, and

diversity of the small businesses have created a lively and thriving neighborhood that is unique to Seattle.”

Building on the character of the U District and The Ave, planners and local stakeholders worked hard to develop a set of design guidelines to help direct growth and promote a livable, sustainable, vibrant and inclusive neighborhood.

GROWING THE SKYLINE

There are now over 19 towers proposed, completed or under construction in the U District, ranging in size from 12 to 32 stories. Most of these are student housing, though with close proximity to downtown and the large employment base at UW, there is speculation some of the new towers may include units that appeal to university and downtown workers.

These new student housing projects offer amenities that are more common in South Lake Union’s luxury high-rises, providing a leap forward for student living. The new towers are quite varied in scale and design, reflecting the neighborhood design guidelines, which encourage buildings that are

playful, unique, and complement the eclectic nature of the neighborhood.

One of the first and largest projects to take advantage of the new zoning is The Standard. Designed by Ankrom Moisan Architects and developed by Landmark Properties of Atlanta, this massive student housing project just completed construction.

The two-towered, 25-story complex includes 412 units (1455 beds) and 7,600 square feet of retail. Amenities include a rooftop pool and hot tubs, fitness center with rock-climbing wall, virtual sports room and rooftop study lounges. The complex also includes a mid-rise building on Brooklyn, which is connected by a through-block pedestrian walkway. The building is pursuing LEED Gold.

One of the most notable new towers planned for the U District is a 27-story, 365-unit tower located at 1013 NE 45th. Designed by Hewitt Architects, the tower, known as OneU, features a pair of “social greenways,” dynamic open spaces connecting to multiple floors, providing opportunities for neighbors to gather.

These unique linear open

spaces are widely visible on the building exterior and are inspired from the urban experiences found in neighborhood parks, streets and campus plazas. They also pay homage to the district’s topography, which steps down approximately 245 feet to Portage Bay. Located on floors 7-9 and 16-18, the social greenways also help to break up the vertical nature of the tower. Developed by OneLin, the building is targeting LEED Gold and will be set back from 45th, allowing for public greenspace and relief from the busy arterial.

The U District rezone represents a bold new model for high-density student housing, and a big step forward for Seattle. As the district develops it may well serve as a model for encouraging responsible high-rise growth while maintaining a cherished neighborhood’s character.

Scott Surdyke is a development manager and planning consultant specializing in transit-oriented and mixed-use development.



Western Washington University's first progressive design-build project eliminated traditional concrete elements, using a variety of mass timber applications instead. Each section of the complex features a different framing system that creatively responds to different programming needs.

PHOTO BY BENJAMIN BENSCHNEIDER

INNOVATING

CONTINUED FROM PAGE 3

areas and plantings and recognizing the students' desire for the rain garden feature, this initiative became one of our engineering goals, too.

We intentionally designed a comprehensive rainwater management system with the student-led initiative's success in mind. Knowing it would require additional funding, we also formulated a contingency plan of standard plantings in case funding was unavailable.

Ultimately, the students were successful and funded seven rain gardens. In partnership with the landscape architect Communita Atelier, the sloped plaza incorporates specific soil mixtures, local and edible plants, drought- and wet-tolerant plantings, site walls to create ponding areas for the rain gardens, and pipes and drains that fulfill expanded stormwater system requirements.

Roof and plaza runoff discharge to the top rain garden, then cascade to lower gardens. This plaza enhancement was realized thanks to extraordinary student initiative and coordination between our civil team and the college, the architect NAC, the GC/CM partner Walsh Construction Co., and Communita Atelier.

Intentional design and conscientious engineering not

only respect student involvement and community building but also produce impressive tangible impacts.

At Bellevue College, a sustainable landscape area captures rainwater to feed a lush environment and in turn enhances the living experience in the residential courtyard. This also beautified the ADA ramps and stairs needed to provide equitable access to all while enhancing the ground-level perspective of the building.

At Western Washington University, mass timber design elements respond to the university's high sustainability goals and elegantly echo the naturally forested campus landscape. Proud partners of these project teams, we hope both will support their communities for years to come as we continue to look for ways to innovate in future higher education projects.

Cory Hitzemann is a principal at Coughlin Porter Lundeen, leading structural design in many markets, including higher education. Keith Kruger is a civil associate principal at Coughlin Porter Lundeen, and his work includes complex stormwater management for large campus projects in the Pacific Northwest.



CREATING ADAPTIVE, RESILIENT, COMMUNITY-CENTERED ENVIRONMENTS FORA.LAND