

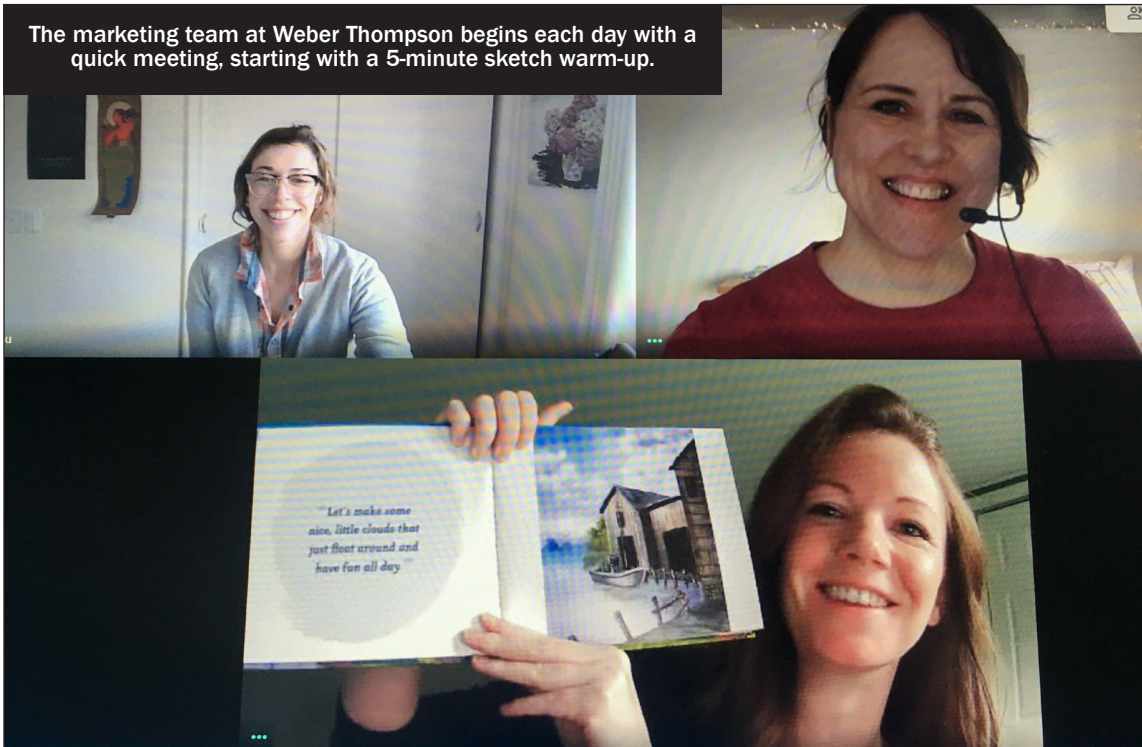
**A&E**

*Perspectives*

# HOW TO KEEP THE CREATIVE SPARK IN A VIRTUAL WORLD

COVID created a loneliness problem and a lack of authentic human connection.

The marketing team at Weber Thompson begins each day with a quick meeting, starting with a 5-minute sketch warm-up.



IMAGES COURTESY OF WEBER THOMPSON

As COVID-19 continues to rage on, it's clear that many of us will continue to work in some sort of remote fashion for the foreseeable future. Many companies have even announced



BY ERIN HATCH  
WEBER THOMPSON

plans to allow their employees to work remotely indefinitely. Perhaps what's more surprising is that although we have a year of experience under our belts, we're still discovering just how much we have to learn about working from home. During 2020 I was faced with helping my team at Weber Thompson find ways to modify our collaborative approach to design while working remotely. In June, I sent a survey to AEC and adjacent industry professionals to gather feedback about

how our industry has adapted to remote work. After sharing the results with my colleagues last fall, we hosted a series of firm-wide discussions about what's working and what's not. It turns out there's still plenty of room for improvement.

Through this research, my own experiences over the past year, and our recent discussion series, I've compiled six considerations for maintaining a firm culture that promotes growth, collaboration, and communication while maximizing creative output.

• **Take time to connect.** You heard it throughout 2020: We have a loneliness problem. One of the many impacts of COVID-19 has been a lack of authentic human connection. It is critical to take time at the start of your virtual meetings to connect with your colleagues. Spend a few minutes doing some stretching (seriously!), sharing recommendations for great movies, or talking about what you made for

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dinner last night. Sharing experiences that aren't strictly about work can help your team feel connected. There's a positive impact on creative output too: many of my survey participants noted that warm-up exercises help prepare their brains for creative work.

At Weber Thompson, my marketing team has 15- to 30-minute "stand-up" meetings to start each day while working remotely. We share what we're watching on Netflix or discuss the latest news, but also talk through our workload and priorities for the day. Sometimes we even use the time to brainstorm ideas for our next project.

● **Plant creative seeds.** Cross-pollination between teams provides an essential spark for creative ideas and unfortunately, it is nearly impossible to replicate in a remote work environment. If you care about nurturing a creative workplace, you will have to be intentional. Consider hosting all-office design charrettes, share thought-provoking emails with your team, make time for "fun" creative exercises, or simply invite someone on another project team to join your Zoom brainstorm session to provide a fresh perspective. After all, variety is the spice of life and I've found most people are happy to jump into a Zoom call to share their ideas with a different team when asked to do so.

Here is an easy idea: At those daily meetings I mentioned, we start with a 5-minute sketch session. It's simple: we pick a prompt, someone plays a song, and our markers and pencils get moving. It's a kind of creative meditation that grounds each day and prepares us to use

all the parts of our brain. As a bonus, it's fun! For one of my team members, it was the most beloved part of 2020.

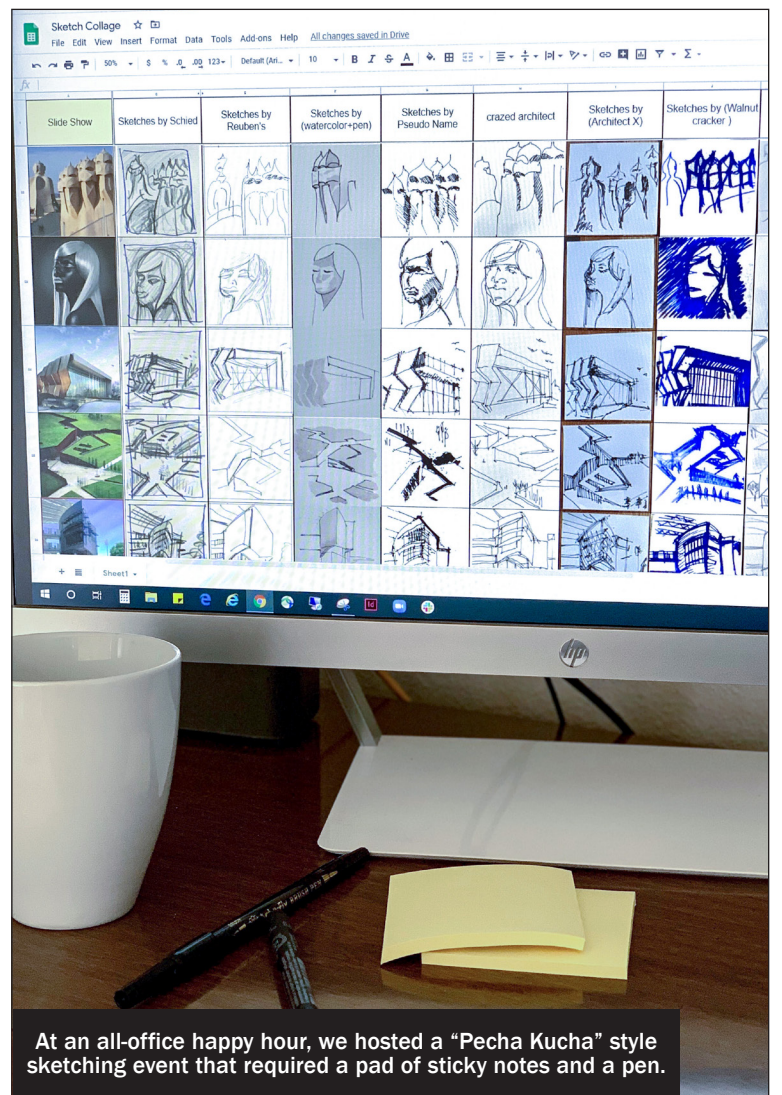
● **Invest in tools for collaboration.** I heard pleas for better project management and clarity of communication in many survey responses. Managing a fully remote team is much different than sitting together in an open-office pod, so project managers must be intentional about new processes and methods.

It can be tempting to think that creative work results from an organic process. While this is sometimes true, in our industry we are ruled by deadlines, budgets and stakeholder approval processes. A complex web of conversations, emails and phone calls are necessary to make our projects possible. Teams need a system to make sense of it all and PM's are at the center of this work. Ask around, test out tools, and when you find something that works, invest the time and money into configuring it for your team. Slack, Asana, Trello, Teams, Miro, Mural, Monday – countless tools for task management and creative collaboration were mentioned in my survey responses. Even after we return to whatever the new 'normal' is, online tools will continue to contribute to our work lives in the future, and investments made now will certainly pay off later.

On the flip side – don't shy away from low-tech tools. Sketching on sticky notes and holding them up to your camera can work just as well as an online whiteboard tool. Tailor your tool to your audience and the needs of your team and remember the KISS mnemonic: keep it simple, silly.

● **Productivity doesn't equal creativity.** While many survey participants noted an increase in productivity due to fewer daily interruptions, many also indicated a drop in creativity. While we're maintaining our work output, we're not maximizing creativity. If you manage creatives, find out what they need to generate their best ideas from home. You might just find out that your star designer works alongside a roommate who has Zoom meetings all day which impedes her ability to focus, so she prefers to design at night. Or perhaps her internet connection has slowed her workflow to a crawl. Find out what might be affecting your team and make adjustments accordingly.

● **Embrace flexibility and provide structure.** I received countless survey responses praising the benefits of flexibility. Everyone has a slightly different cocktail of at-home factors: kids trying to learn remotely, pets, roommates, spouses, parents who need caretaking, small spaces, shared spaces, technology issues, bad internet connections...the list goes on and on. If we have learned anything over the last year, it's to have empathy. We're all doing our best to get our work done while making



At an all-office happy hour, we hosted a "Pecha Kucha" style sketching event that required a pad of sticky notes and a pen.

CREATIVE SPARK — PAGE 7

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## ON THE COVER

This new entrance to Pacific Place was designed to open the indoor mall to outside passersby. Turn to page 20 to learn how "de-malling" and rethinking shopping centers could help strengthen the retail industry. PHOTO BY HEYWOOD CHAN/YE-H PHOTOGRAPHY, COURTESY OF GENSLER

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# A CHANGED WORKFORCE AND THE IMPLICATIONS FOR WORKPLACES AND CITIES

Many workers desire a hybrid work model in the future, coming to the office one to four days of a given week.

The all-but-complete inability to work in the office to stem the transmission of COVID-19 has been the most significant driver of change in workforce expectations in decades. Initially led by large technology companies, long the guide for the future workplaces, becoming a home-based workforce required quick action to maintain business continuity.



BY RYAN HAINES  
GENSLER SEATTLE

Significant investment in scaling cloud infrastructure, providing accommodations for employees' productivity, attention to sustaining team effectiveness and employee engagement have all been accelerated by necessity.

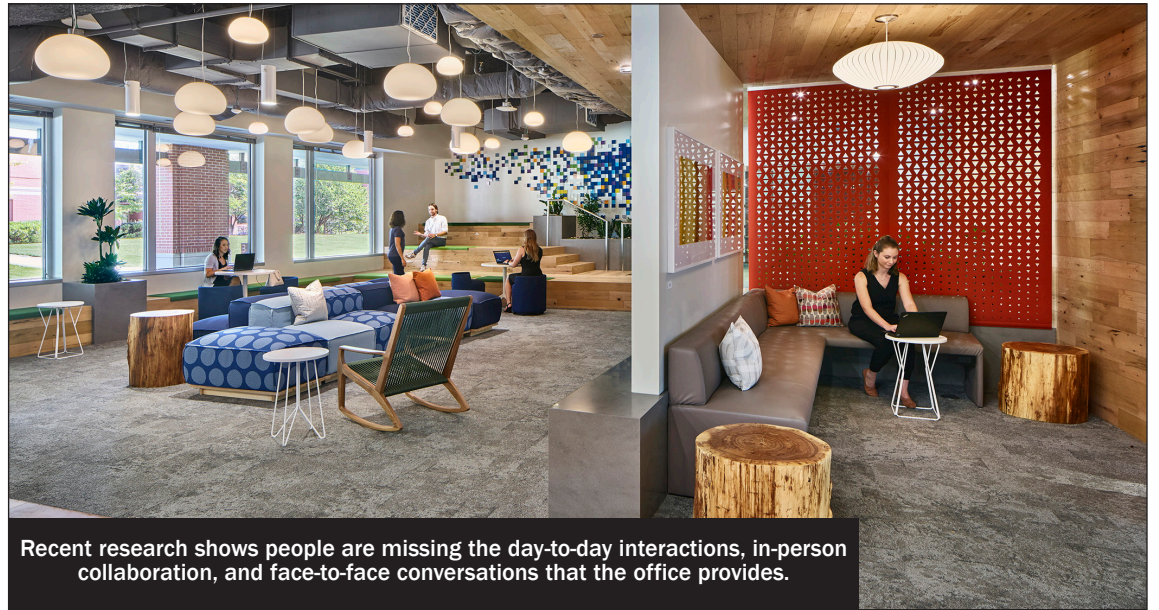
Impacting teams, managers, and executives alike, this shift

has been more comprehensive than past disruptions to workplace norms. COVID-19 inspired the change that proved many long-held beliefs about more flexible work cultures to be false. We learned we can work effectively in some of our responsibilities from remote locations – transcending the stereotypes about trust, productivity, value and commitment to a company.

We discovered we could be productive and have time for ourselves, our families, and other activities that give us joy – a work/life balance that had increasingly seemed unachievable. Top of mind is which of our newfound abilities will stick versus revert and the implications on our workplaces and the cities in which they are based.

## WORKFORCE PREFERENCE

While we have learned to come together virtually, our research clearly shows we're missing



Recent research shows people are missing the day-to-day interactions, in-person collaboration, and face-to-face conversations that the office provides.

PHOTO FROM GENSLER

the day-to-day interactions, in-person collaboration, and face-to-face conversations that the office provides. Gensler's

Research Institute's 2020 Workplace Survey shows only 19% want to work from home full-time, representing a minority many businesses will be better able to accommodate now. Conversely, only 29% prefer to be in the office full-time.

Therefore, more than half of respondents desire a hybrid work model in the future, coming to the office one to four days of a given week. The influence of commute durations is significant with each 15 minutes contributing to approximately 15% reduction in preference for full-time work in the office. Importantly for employers, surveys of teams already working in a hybrid model suggest improvements in many key indicators.

As we transition to a post-vaccine environment, what will attract employees to come to the office? The experience must be worth it.

## EXPERIENTIAL WORKPLACE

Many have foretold of a dramatic reduction in workspace demand; however, a closer look suggests the workplace still matters for building community, supporting collaboration, and reinforcing culture. As such, the office designed for the hybrid model is less about shedding space but rather using it better. Resilience in new workplaces will emerge due to a reduction in assigned desks with more places for collaboration and team productivity, removing the linear relationship between population and square footage. Fewer future requests for more space may be the longer-term effect for landlords.

In designing the new hybrid workplace, "we" spaces must truly focus on the inclusion of a broader population. Remote attendees will demand parity for in-person and remote attendees. This will require a focus on analog and digital components and attendee soft skills. With video pervasive, an even greater focus on the experience for attendees will drive A/V integration to the core of room designs.

Desks may be fewer, providing spaces for individuals or small teams to focus. While we have learned that home can provide a controllable environment for focused work, not all have ideal conditions. Focused activity spaces, which had seen diminishing satisfaction in 2019 surveys, will be needed during visits to the office for more collaborative sessions.

Social spaces are also going to make a resurgence, enabling the creation of culture, team bonding, extending to hosting community organizations who can benefit from great spaces that support shared missions and discourse. In what we at Gensler refer to as a workplace with heart – leading with empathy and supporting people's ability to be creative, successful and connected wherever they are.

## THE CITY CORE

Many ask, if fewer people will come downtown each day, will there be a resurgence in the service industry, and will street fronts be revitalized? I choose to take an optimistic view for



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# FOUNDATIONS FOR HEALTHY AND SUSTAINABLE URBAN PLACES

It is easier than ever to forget about the most important aspect of our work: the people who will occupy the spaces we design.

Amid a global pandemic, a swelling social justice movement and the growing threat of climate change, urban designers are responding to renewed calls for shaping urban environments that are more accessible, equitable, healthy, sustainable and resilient. No small task.



BY AMY TRISCOLI  
ZGF

Urban design sits at the intersection of design, sociology and science. The physical design of our environment impacts a city's everyday functioning and the interaction of people, driven by a process that is part art, part science. Recently, urban design strategies including 15-minute cities, eco-districts, innovation districts, smart cities, and regen-

erative cities have addressed some of these issues, each in different ways.

But even with the proliferation of data and adoption of evidence-based design, urban designers are faced with the challenge of making sense of the ever-growing streams of data now available to us. Nor can we overlook the component most crucial to our work: the people served by the spaces we shape.

## GOALS KEY METRICS BASELINES

The first stage of the urban design process is to define the goals for the project, the key metrics that will be used to evaluate potential solutions against the project goals and the baseline values for those metrics.

A common initial step to get an understanding of site conditions is mapping. Although mapping is a historical tool, datasets and visualization methods are con-

stantly evolving. Data is changing, not only in the sheer amount available and the increased accessibility due to open source tools, but also in the ability to collect dynamic, real-time data.

For example, there are now tools that use anonymous cell phone data to represent the movement of people (e.g., vehicular, pedestrian or bicycle movement) through an area. Collecting data real-time allows for increased frequency of updates to the dataset to understand patterns more clearly.

In terms of visualization, there is a greater variety of tools that assist in aggregating, visualizing, and interpreting these large datasets. There are platforms that aggregate everything from parcel and environmental information to transportation and demographics for a given geography and help customize the resulting visualizations. These tools help us analyze com-

plex data and distill them into easy-to-understand, actionable insights for our clients.

But given these recent developments in how we collect, visualize and analyze data, it is easier than ever to forget about the most important aspect of our work: the people who will occupy the spaces we design. Ground truthing, through community engagement, is a critical piece of the process. It's important to cross-correlate the qualitative information (experiences, anecdotes, and thoughts) from users and occupants of the spaces with the quantitative information analyzed. This makes it possible to create a bigger picture of the existing conditions of a site or urban area.

With in-person interaction still limited due to the pandemic, it's increasingly important to leverage tools and technologies that allow remote community engagement. Online surveys, live

polling, and interactive design and documentation platforms for live sketching, Post-it notes and annotation, back-and-forth commenting, and other forms of virtual collaboration, have proven to be effective.

## IDEATION, PROTOTYPING

The second stage is to develop potential solutions and to evaluate and compare their metrics. Parametric design can help us quickly understand how changing just one parameter can impact the overall design — something that advances in computational design tools have made widely available to designers in recent years.

For example, when designing a new office development, one input parameter may be the parking ratio or open space ratio. By altering either of these ratios,

URBAN PLACES — PAGE 7

## Preserving history. Building the future.

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Congratulations to the entire project team!



photography: Ben Benschneider

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# WHAT IF YOU CAN'T DIG YOUR WAY OUT OF A BROWNFIELD CLEANUP?

There are ways to successfully tackle a more complicated cleanup.



BY ADAM GRIFFIN & DOUG HILLMAN  
ASPECT CONSULTING

Months matter for commercial real estate. Transaction timelines, construction schedules and operational changes all favor swift and certain schedules. Inserting an environmental cleanup into the equation complicates everything. Are you only dealing with accessible soil contamination? Get ready to dig. In Puget Sound soils deposited by glaciers, excavation is the cleanup scenario that provides the most certainty allowing for smooth construction and development — and one that may only take a few months to execute from planning to completion. Problem managed; crisis averted.

But what if cleanup via excavation isn't enough to deliver your project? This is typically the case when environmental impacts extend to soil in inaccessible areas, or even more challenging, to groundwater. Instead of months, cleanups could potentially extend to years. However, there are ways to successfully tackle a more complicated cleanup in parallel with commercial and real estate activities.

Successful remediation beyond a straightforward dig requires a nuanced understanding of both the subsurface and, critically, cleanup regulations. Prior to deploying a remediation strategy, the remediation practitioner must identify what endpoint is required by regulation, and what is achievable with remediation technologies at the site. This remediation "due diligence" is essential for setting expectations for all project stakeholders.

## INCREMENTAL STEPS

In Washington state, "No further action" letters from regulators are the widely accepted environmental cleanup endpoint to appease concerns and enable deals to move forward. Only focusing on the NFA milestone may work when you can



BEFORE



AFTER

### Mount Baker affordable housing redevelopment

**GOAL:** Cleanup to facilitate affordable housing redevelopment  
**CULPRIT:** Dry cleaning solvents  
**CAN'T DIG:** Contamination extends off-property

beyond shoring limits  
**CLEANUP SOLUTION:** In situ chemical treatment adjacent to shoring and prior to foundation construction

**KEYS TO SUCCESS:** Coordinating treatment with construction to reduce long-term groundwater management



### Tacoma-area former dry cleaner

**GOAL:** Cleanup while active retail continues  
**CULPRIT:** Dry cleaning solvents  
**CAN'T DIG:** Fully developed and active shopping center and deep groundwater contamination  
**CLEANUP SOLUTION:** In situ treatment beneath dry cleaner, injection-based treatment on adjacent parcels  
**KEYS TO SUCCESS:** Use parcel-specific NFAs to enable series of sales

actions that range in scale from source control to property footprint cleanup in conjunction with construction.

- Agreement on the final cleanup action as early as possible. Early alignment with the regulator on the selected cleanup is required to meet development timelines and culminates in the approval of a final cleanup action plan.

- Confirmation that exposure pathways (e.g., vapor intrusion) are protected as work proceeds.

place or "in situ" remediation.

Addressing the source of contamination is the first step, and excavation/removal from the site is the default method. However, for contaminated soils that are infeasible to physically remove through excavation — in situ stabilization/solidification (ISS) and thermal (i.e., heating the subsurface to break down contaminants) are two alternative remediation technologies. ISS prevents the leaching of contaminants from soils to groundwater



### Art Brass Plating in South Seattle

**GOAL:** Cleanup while continuing operations  
**CULPRIT:** Degreasing solvents  
**CAN'T DIG:** Groundwater plume extends beneath more than a dozen properties  
**CLEANUP SOLUTION:** In situ treatment beneath plant, injection treatment in rights of way  
**KEYS TO SUCCESS:** Investigate subsurface early; regulatory buy-in before implementation

through physical solidification or chemical stabilization. ISS can also provide ground improvement and achieve geotechnical objectives for redevelopment.

Thermal remediation is a broad class of remediation technologies that can be applied to volatile contaminants (e.g., dry cleaning solvents and fuel compounds) and provide a high degree of performance certainty but typically requires one year or more of operation for treatment. As an alternative to excavation, thermal remediation technolo-

gies can provide economy in scale on larger cleanups.

Contaminated groundwater greatly increases cleanup complexity and the potential for third party liability as it can migrate off property. Because groundwater remediation requires more time, it is often important that cleanup can proceed without disrupting commercial operations. Think creatively about how and where to access the plume — such as street rights of way or opportunistically from the excavation subgrade during construction.

The use of in situ remediation techniques are essential for groundwater remediation. Keep in mind realistic in situ strategies that include initial construction as well as routine monitoring and operations and maintenance plans. Promising technologies are available, including:

- **Bioremediation.** Microbiological communities that are naturally occurring to a site can be used to degrade contaminants in groundwater under aerobic and anaerobic conditions. These communities are often relied on for monitored natural attenuation (MNA) remedies but can also be engineered and activated through the addition of food-

grade or commercially available reagents. Bioremediation treats contaminants in situ and can represent a viable remediation technology for sites with minimal disruptions above grade.

- **Chemical remediation.** These technologies generally represent a “heavier hammer” for remediation — implementation costs are higher but treatment timeframes are shorter. Chemical oxidation is a staple remediation technology capable of directly treating contaminants. The applicability of chemical oxidation has a small “strike zone” but is still a unique and effective technology in the toolbox. Chemical reduction is a remediation technology

that has also been developed as an alternative to bioremediation for solvents and reduces the generation of degradation products that can dictate cleanup timeframes.

All biological and chemical technologies require the successful delivery and distribution of reagents in the subsurface, which reiterates the importance of site characterization and establishment of regulatory endpoints for cleanup early in the project.

## THE CLEANUP GOAL

When digging isn’t an option, these above steps set developers, the community, and project

stakeholders up for successful realization of end goals — whether it’s keeping current business operations going or delivering a “clean” site so construction teams can achieve built construction on time and budget. The common theme in our experience — particularly in the project stories above — is thor-

ough site characterization and early and often regulatory communication leads to successful cleanup and project outcomes.

*Adam Griffin is an associate engineer at Aspect Consulting. Doug Hillman is an owner and principal hydrogeologist at Aspect.*

## URBAN PLACES

CONTINUED FROM PAGE 5

the design output may vary in building massing, lot coverage, or overall square footage. Most importantly, parametric design has made it feasible to explore hundreds of design alternatives at the touch of a button, and identify which alternatives best achieve the project goals.

Alongside parametric design, predictive modeling is another tool to support the evaluation of design solutions and prototypes. Predictive modeling uses existing data to create a trained statistical model that can be used to predict outcomes based on chosen variables. For example, a predictive model can analyze future traffic patterns, crime patterns, or economic trends. If one of the project goals is to reduce car traffic in an area and increase bicycle traffic, applying a traffic pattern predictive model to each design alternative allows you to compare the predicted car and bicycle traffic patterns to the baseline traffic patterns identified in the first design stage. This comparison helps the design team identify which design alternatives best fit the project goals.

Of course, design alternatives need to be tested by users and occupants to gain qualitative, experiential feedback on the design. We are seeing the ways in which we help immerse communities in prototypes is evolving with augmented reality and virtual reality. Augmented reality overlays digital images over your real surroundings, while virtual reality creates a completely digital experience. Although the technology required for each varies, a person could virtually “walk around” or zoom around a model of a new development, experiencing it at different scales.

## MONITORING, CONTINUOUS IMPROVEMENT

Designing resilient and adaptive places requires one final stage: continual monitoring and improvement, creating a closed loop system. A continuous feedback loop enables quicker design response to undesirable metric levels and provides a complete picture of how the design is functioning.

We’re starting to see smart technologies integrated into design to do just this — such as sensors, cameras, smart meters that monitor energy and water use, traffic patterns, and more — creating more dynamic datasets and helping us benchmark results over time. For example, dynamic data collection in traffic and parking has resulted in dynamic congestion pricing and parking pricing. Each are generating an adaptive response to attain an adequate metric level to achieve goals such as lowering CO2 emissions or increasing active transportation methods.

In general, collecting data post-design, whether quantitative or qualitative, gives us an understanding of the success of a project, but also supports innovation for new projects.

Even with new data streams that allow us to ideate faster than ever before, people cannot be lost in this process. Engagement and ground truthing are key parts of the feedback system as well. No matter how much data we have at our disposal, we need the thoughts and feedback of people experiencing the design firsthand to fully measure success and design functionality.

*Amy Triscoli is an urban designer with ZGF Architects. Her work is informed by a passion for studying the intersection of design, data and health.*

## WORKFORCE

CONTINUED FROM PAGE 4

the future — one of intention. The adoption of the hybrid workplace and leveraged space could drive higher downtown daily populations each day, though perhaps for less hours per person. The same craving to connect in the workplace will also support coffee shops, restaurants, and retail zones.

The difference I believe is the level of expectation for a great experience will be dramatically higher seeking to make time in the city “count.” Many of us have gone out of our way to support favorite small businesses, due in large part to past great experiences. Downtown will be no different and those that deliver on it will be rewarded.

Those who deliver diverse experiences throughout the day will likely fare better, extending their operating hours per square foot. There’s no arguing vacancy is a near term reality and it will take time and support, but I believe the central business district could see more activity by reimagining the ground floor of our cities — to celebrate culture and diversity through multi-use spaces and enabling buildings to become a more integral part of the community at large.

We must hold onto what we’ve learned and embrace this new ecosystem of a work/life balance. And as we continue to navigate how exactly our new work model will look, one thing is certain; we need to stop focusing on getting “back to work” versus “advancing” our workplaces to exceed these new expectations.

*Ryan Haines is an architect, principal, the co-managing director of Gensler’s Seattle office, and leader of the consulting practice in the Northwest region.*

## CREATIVE SPARK

CONTINUED FROM PAGE 3

time for the other things in our lives that make us whole humans. However, many of us also need deadlines, team meetings, and managers to hold us accountable. If you manage creatives, they are counting on you to set the structure so they can do what they do best: creative output.

- **Foster mentorship.** As firms have adapted organically to remote work, many internal programs have fallen by the wayside. Professional development and mentorship of junior staff has taken a back burner to the myriad pressing concerns senior staff face each day. Unfortunately, this oversight can result in stunted professional growth and may ultimately cause some young professionals to leave the industry. Investing in your staff now will pay dividends well into the future.

If your firm does not have the resources to create a mentorship program, look for outside resources. For example, through the Seattle chapter of the Society for Marketing Professional Services, I have been mentoring a fellow marketer for the past year. We have monthly one-hour phone calls to talk through challenges and share advice. Recently she told me that the program has been so valuable, she’s not sure she could have survived the past year without it.

While we can’t necessarily verbalize exactly why, we know that seeing our coworkers in a three by four grid on our laptop just doesn’t spark our imaginations the way an in-person meeting would. We’re forging ahead, but we’re not necessarily optimizing our creative potential. With some care and attention to your company and team’s creative culture, you just might be able to generate as many fantastic ideas over Zoom as you can in person. In fact, the future of our industry just might depend on it.

*Erin Hatch is senior associate and marketing director at Weber Thompson.*

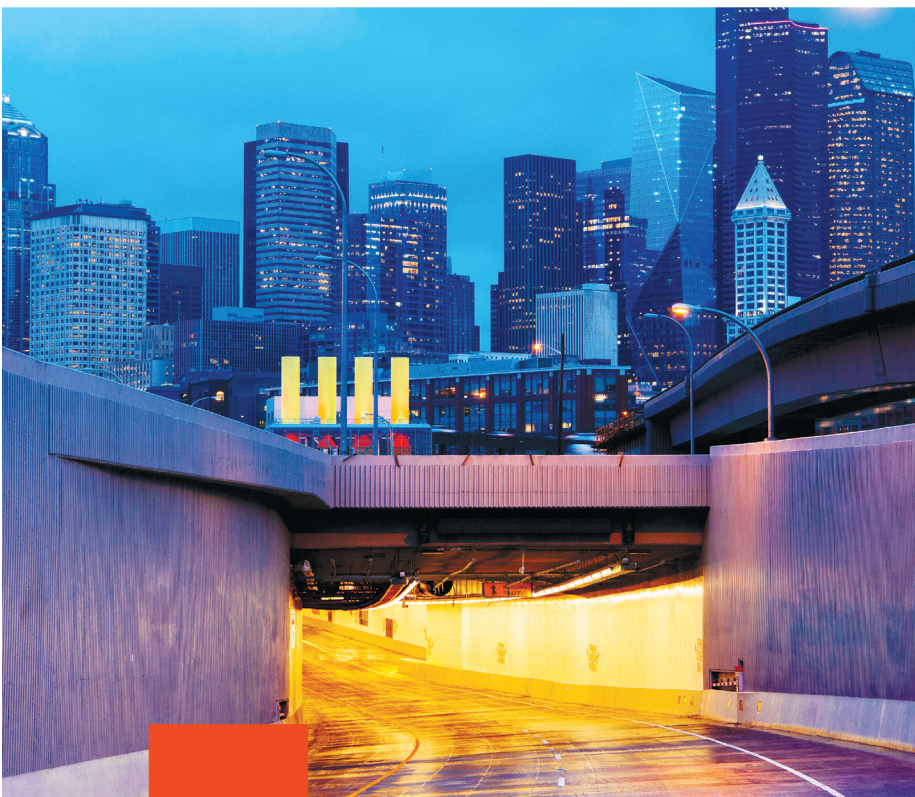
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# WORKPLACE WELLNESS THROUGH TECHNOLOGY

A successful environment will be healthy and safe and provide customization, comfort and activity.



BY KEN BAYERN



& DENA YAMAGUCHI

CALLISONRTKL

lights at home to tracking our health with a single swipe or voice command. Our workplaces can perform in the same way. With wellness top of mind, successful office environments can seamlessly integrate technology to help create an impact on our physical, cognitive, and emotional wellbeing. A successful environment will be healthy and safe and provide customization, comfort and activity.

## HEALTH

There are billions of connected devices installed throughout the world, enabling buildings to communicate with their owners and occupants. This data exchange gives buildings a voice and can provide a human-centric philosophy for personalized well-being experiences. The constant evolution of IoT (internet of things) is enabling buildings and their environments to interact with their occupants, learn from them and adapt to their changing needs.

Technology is widely being used as a personal assistant — ranging from turning on the

Smart buildings are constantly monitoring a whole host of systems using sensors. Good indoor air quality is more important than ever to keep productivity high and prevent building-related sickness, and systems can be programmed to monitor indoor air quality and adjust airflow based on occupancy.

To ensure workspaces are healthy for employees, sensors and software can monitor and manage the indoor environment such as temperature, humidity, carbon dioxide (CO2) and volatile organic compounds (VOC). Digital buildings can detect and



The LED Video Wall in CallisonRTKL's Experience Center in Seattle.

PHOTO BY CALLISONRTKL/ANN NELSON

ventilate spaces in real time autonomously from a personal mobile device or by means of machine learning and artificial intelligence to optimize air quality.

Displaying real-time data on a highly visible dashboard or pushing this information to a personal device provides employees with important information and eases any COVID-related concerns.

## SAFETY

Smart buildings can also offer considerable advantages in terms of safety. In emergencies, technologies can guide the occupants by voice, lights, and digital signage to the safest escape routes. Detailed information can be provided to first responders. Occupants in the building can be tracked to ensure that everyone

successfully evacuates without harm.

In the event of a security breach, the building can not only shut down access to specific spaces, but also provide first responders with up-to-date, accurate information on who is in the building and, importantly,

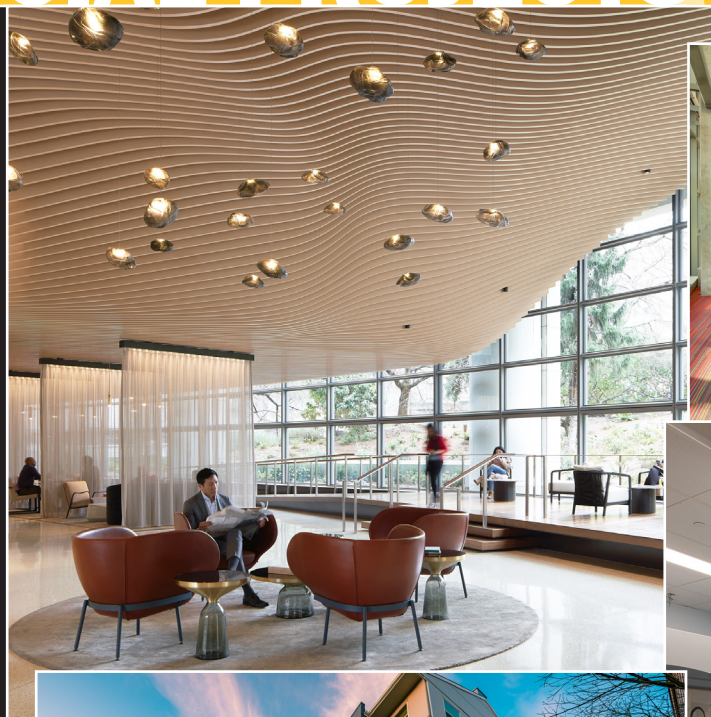
WORKPLACE WELLNESS — PAGE 15

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CLOCKWISE FROM TOP LEFT: TWO UNION SQUARE © CHRIS ROBERTS | SMAS CUB © LARA SWIMMER | NOVO NORDISK | UW STEVENS COURT

# GREEN LAKE COMMUNITY CENTER AIMS FOR INCLUSIVITY

Community input and sustainable methodology are at the forefront of Miller Hull's design.



BY MAAÏKE  
POST & RUTH  
BALEIKO  
MILLER HULL

A conceptual design for the Green Lake Community Center was recently released by the Seattle Parks and Recreation department, highlighting the work of architecture firm Miller Hull, as the result of considerable community engagement and feedback.

Tasked to design a replacement of the existing center and pool in one of the busiest parks in Seattle and all of Washington state, Miller Hull spent extensive time considering what an inclusive community center of the future would look like, as well as picturing how it would be integrated into the notable Olmsted park.

The unveiled design supports research concerning the benefits of social infrastructure, with emphasis placed on addressing the needs of all community members, including those without home, indigenous, and underserved populations. In addition, Miller Hull worked closely in partnership with landscape architect, Berger Partnership, and an environmental historian, Jennifer Ott, to ensure building and landscape proposals were sensitive to the history of the park.

## COMMUNITY PROCESS

In 2020, communications firm Stepherson and Associates was hired by Seattle Parks and Recreation to join the project team in facilitating three open houses to gather community feedback and encourage public engagement. To begin dialect and gain valuable input, community members were asked a series of questions surrounding site locations and programmatic elements. Feedback directly influenced material presented at following sessions and eventually led to the completed, collaborative design. In the final session, Miller Hull demonstrated their process of taking the best attributes from each building concept to create one holistic solution; a new building design to replace the existing center.

Due to COVID, open houses

were held virtually, including a dedicated website directing visitors to community surveys and project information made available prior to them sitting in on the digital presentations and interactive Q&A's. All three presentations were recorded for digital access anytime afterward.

With more than 11,000 visitors and 5,700 survey respondents over three open houses, elements of this virtual community engagement process may become the way of the future, as the methodology reached a far greater audience than a typical in-person open house that the Parks department have historically held. With an average 80- to 100-person audience count for in-person events, this virtual method was able to capture a magnitude of people visiting the websites and participating in surveys or presentations. In addition to an increase in participants, this multi-pronged approach allowed for a more inclusive process and gave people varying ways to participate.

While this virtual strategy required more time and preparation than a typical community meeting, teams across the board agreed that going forward, and post COVID, some of these new strategies would need to be incorporated after seeing the sheer number of people who were able to, and wanted to participate. Discussions have also been held about ways to make the virtual outreach more inclusive, such as adding closed captioning software to assist hearing challenged participants.

## EQUITY

The Seattle Parks and Recreation's mission for this project to serve the entire city began with outreach to initiate the pre-design phase around site selection and other project needs. This outreach was successful in reaching many new target audiences. By continuing these efforts into the design phases, Miller Hull will ensure development of a facility that serves critical needs for a large portion of the population.

The design has taken into consideration universal facilities for restrooms and locker rooms open to all genders, ages, and abilities, hygiene stations for free and accessible showers, and that a large portion of community center programming will be free and available to all, including a toddler play area, gym, and exercise and fitness rooms.

## WATER & ENERGY

Miller Hull spent extensive time considering what an inclusive community center of the future would look like.



IMAGES PROVIDED BY THE MILLER HULL PARTNERSHIP

Seattle Parks and Recreation's mission for this project is to serve the entire city.



Due to the large energy and water needs typical of swimming pool facilities, there is great potential for reducing resource consumption and long-term operating costs for the building. Design plans include implementing super-efficient systems to reduce demands, and development of alternative sources to further reduce dependence on utility systems. Swimming Pools are proven energy hogs, which is a primary reason energy strategies are gaining a large chunk of the attention on this project.

The current goal is making the Community Center portion of the program function at net zero energy while also taking a big chunk out of the pool energy use. As a result, a series of technology boxes will be checked such as high-efficiency ground source heat pumps, a building envelope designed to reduce energy loss, insulated pools and floors with radiant heating, and

more photovoltaic panels on the roof and canopies than the amount strictly required to meet its LEED Gold target.

Innovative solutions for water conservation and re-use include cleaning and filtering pool water with regenerative filtration systems, reusing rainwater and treated greywater for flushing, irrigation, and pool make-up, and techniques for fully treating stormwater making its way into Green Lake.

## CLIMATE

Development of the center comes at a critical time in addressing the climate crisis and in supporting the City's approach to carbon-neutral operations. The project will serve as an example for best practices in driving down carbon emissions resulting from energy and water use, as well as embodied carbon emissions resulting from building construction. The building will operate only using electric-

ity, a first for an SPR swimming pool, in order to target low-carbon operation. The Miller Hull design team has also run analyses using Tally, and have begun implementing design decisions in order to reduce embodied carbon.

## HEALTH

Outside of a sustainable focused design, the project has an overarching mission to promote community health by providing recreation opportunities, social meeting space, and other services. Implementing strategies that lead to more healthy buildings and environments is critical to this success. The design team has created models to study air quality, developed a method for eliminating the most important and easily avoided red list materials, and included natural ventilation in the concept design, which can be used to

# HOW A/E FIRMS CAN INCREASE PROPOSAL SUCCESS IN 2021

You must clearly understand the client's budget for the project before pursuing.

For many architecture and engineering consulting firms working in the public sector, 2021 will include more responses to requests for proposals (RFPs) and requests for qualifications (RFQs) in an increasingly competitive market. With the time, energy and expense required to respond to RFPs and RFQs, taking steps to increase your chances of winning is a prudent approach to make the most of your marketing budget.



BY MELISSA  
ENGLISH  
MIDDLE OF SIX

Before deciding to respond to the next RFP, pause and reflect on what your firm wants out of its business relationships this year, because winning projects through the proposal process requires more than simply being able to perform the scope of work.

## ASSESS THE FIT

When contracting with a public sector client for architecture and engineering services, the contract period frequently spans a year or longer. Given this, it is wise to consider what type of client your firm and your staff would like to collaborate with over the next few years.

First, spend time defining what an ideal client looks like for your firm. Beyond the size and makeup of the client's capital projects budget, examining the potential client in terms of shared values and culture alignment with the firm is more likely to result in a pleasurable working relationship for all parties.

If you don't know what's important to your potential client, and just as critically, what's important to your team who will deliver design services, take the time to find out. Because, with certainty, there is another consultant who has invested that time.

As your marketing department's capacity begins to stretch and competition increases for every project pursuit, protecting

the financial well-being of your company becomes even more significant. That is why you must clearly understand the client's budget for the project before pursuing. While there are times to pursue a passion project, or to go after a loss-leader to break into a new market, these should be the exception, not the rule. Before you invest the time and resources towards a pursuit, assess if you can be profitable doing the work, because the longevity of your company depends on it.

## DECISION-MAKING PROCESS

Once a clear financial justification for moving forward has been established, it is time for a more granular examination of the project pursuit to inform your go/no-go process. Answering some key questions backed by an established scoring criteria will help you take some of the emotion out of the process and provide data to inform your decision making. While there are many versions of go/no-go questionnaires in the architec-

ture, engineering and construction industry, below is a swift and actionable assessment your firm can start using today.

Five-question go/no-go template:

- Were you tracking this project before the RFP/RFQ was issued? Yes = 1; No = 0

- Do you have a positive existing client relationship? Yes = 1; No = 0

- Do you have sufficient time and resources to actively complete the pursuit process? Yes = 1; No = 0

- Do you have at least three recent, relevant projects to feature? Yes = 1; No = 0

- What is the anticipated gross profit margin?\* 0-7 % = 0; 8-15% = 1; Greater than 15% = 2

(\* Adjust profit margin percentages to match the profit expectations applicable to your firm.)

**Scoring: 0 to 3 = no-go; 4 = possibly\*\*; 5 to 6 = go**

(\*\* Consider additional factors to confirm if this is a worthwhile effort, such as competition, project funding and other opportunities your firm is pursuing.)

## RESOURCE PLAN- NING

Once your firm's decision makers have given the go/no-go questionnaire an honest assessment, consideration of the time and resources required to put forth a competitive pursuit effort should be analyzed. Beyond the capacity of the marketing department to prepare the proposal or statement of qualifications, there is also the time that may be required of a firm principal or project manager to write a compelling project approach and draft a project schedule. It is prudent to verify that the whole of the pursuit efforts fit into the billable work commitments of the firm.

The firm's proposal development process may also require input from other parties. That may include content and approvals from other staff in the firm, or collaboration with subconsultants for scopes of work outside of the firm's service offerings. By verifying that these contributors

PROPOSAL SUCCESS — PAGE 16



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# NOT ALL FEASIBILITY STUDIES ARE CREATED EQUAL

Get the right kind of assessment for your site, because, yes, there are different kinds.

Feasibility studies are a necessary part of any property acquisition and are often the centerpiece of a sale. If you're a developer or an architect then you're likely very familiar with what goes into a typical study: yield, height, stories, areas, parking, unit counts, etc., but how aware are you of the components that impact a study's reliability? If you're not sure, don't worry, you're not alone.



BY BILL BARTON  
TISCARENO  
ASSOCIATES

Not all studies are created equal, so we try to structure feasibility studies into three tiers; each tier, or level of service, provides valuable information but delivers varying degrees of reliability. We help our clients choose right tier for their site so they have the confidence to make the best decision. The following is a quick explanation of each tier. Afterward, I'll

discuss which kind of site/study should be in each tier and end with some tips for creating better studies in general.

## FIRST TIER (ENVELOPE STUDY)

### What we do:

- Establish factors that determine the buildable envelope.
- Site plan: A general diagram that shows the buildable envelope and assumed access points.
- Area estimates: gross square feet, net rentable square feet (NRSF), and any other data points that can be estimated using a spreadsheet and the buildable envelope.

### What we need:

- Location of easements, powerlines and utilities that must remain.
- Assumptions for zoning incentives that affect the buildable envelope.
- Client's general program goals.

## SECOND TIER (MASSING STUDY)

### What we do:

- Everything included in the first tier.
- Complete zoning analysis and check of any design guidelines and comprehensive planning as well as estimated street dedications.
- Floor plans, sections and one or two 3D massing views. Floor plans should show feasible egress, preliminary service areas, elevators and parking modules.
- Area estimates: Measurements of rentable/leasable space. Calculated average unit sizes.

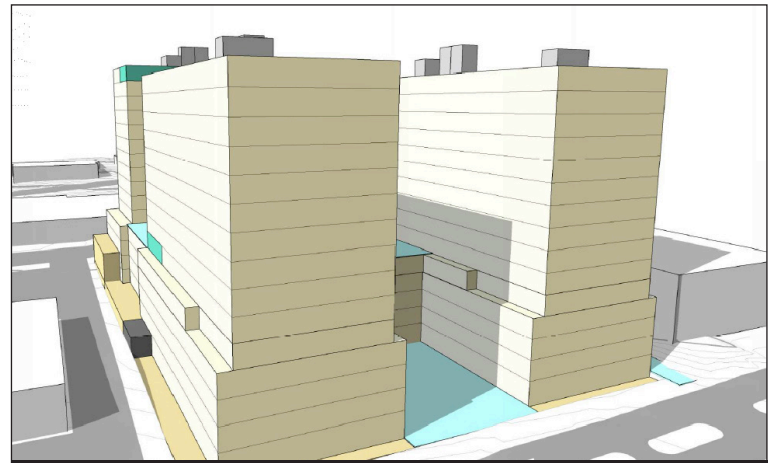
### What we need:

- Survey, topography.

## THIRD TIER (COMPREHENSIVE STUDY)

### What we do:

- Everything included in the second tier.
- Demising walls, unit count and mix, individual parking spaces.
- Functional service areas for trash, loading, mechanical —



Tiscareno structures feasibility studies into three tiers and each tier, or level of service, provides valuable information. This is a 3D massing from a Tier 2 study for a large high-rise.

IMAGE COURTESY OF TISCARENO ASSOCIATES

especially electrical services.

### What we need:

- Client's detailed program goals such as amenities, unit count and mix.

So, let's say you're looking at a 7,000-square-foot multifamily site in Kirkland. While the envelope of a 1st Tier study might present the area for seven units per floor, the first attempt to actually fit seven, viable units is likely to fail. This might be due to an irregular or narrow site that doesn't support a normal apartment chassis or because you can't front a bedroom two feet from a side property line. As a result, the unit count in your proforma drops 30% and you have to start over with another site. This brings us to Rule #1:

*The smaller the site, the less reliable the information in a feasibility study will be.*

Why? Because there's little to no tolerance on small sites. Being just a few feet off during feasibility can turn a stack of two studios into a stack of single one-bedrooms. The same can occur with site grading. Parking garage entries can be setback on large sites and only lose 1% of parking. That same setback on a small site might result in a 20% loss.

An office study for 1.5 acres in Federal Way, in contrast to the first site, has a flexible project type on a large, flat site and therefore a higher degree of tolerance. If elements have to move around later on because of things like a large detention vault, there's room to do so and so the numbers in your proforma can remain stable. In this case, a 1st Tier study is useful. Now, instead of a flat site, let's add a 30-foot grade change and we find that a 1st Tier study would no longer be

useful. So, Rule #2:

*The more complicated the site, the less reliable the information in a feasibility study will be.*

Why? Variables tend to compound. A building on a flat site has one floor meeting grade. A building on a sloping site has two or three floors meeting different grades, so maintaining a decent ceiling height in an office product means that we need to plan on a lot of ramps to get in and out of the building, which requires more site area, etc. A 2nd Tier study would be the baseline to produce reliable information.

So, sites that can rely on a first tier study are moderate to large and uncomplicated. Sites that can rely on a second tier study are those that are small (but not tiny) and uncomplicated, and those that are moderate and somewhat complicated, and larger sites.

High-rises generally follow the same rules, but often the complexity comes from the building code and the program and not just the physical site.

## OTHER CONSIDERATIONS

Besides a discussion about what Tier best suits your site, there are some other rarely mentioned aspects about feasibility studies that you should be aware of.

A feasibility study is an estimate: This might sound like stating the obvious, but a feasibility study does not contain hard numbers. It would be better to present the information in a range, but architects rarely do so. As such, clients should be aware that the information in a feasibility study is almost always

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# THE FUTURE OF RESILIENT COMMERCIAL REAL ESTATE

After the pandemic, cities will still have a future.



BY DOUG DEMERS & PHIL GREANY  
SPECIAL TO THE JOURNAL

The fate of our downtowns is firmly in the spotlight lately. The optimists believe they will bounce back, the pessimists have already pronounced them dead and are eyeing island real estate. Most questions revolve around imagining a new “normal.” Will employees go back to the office, will working from home become the norm, how much office space will we need, what about hotels, events, conventions?

While we cannot be certain about the square footage, we can be confident that life will return. Human beings are resilient; they will continue to work, learn, live, dine out and seek entertainment. Our downtowns have a future.

However, it would be irresponsible to assume we know what the future looks like. What the pandemic has both disguised and accelerated are the inevitable changes that were already reshaping life as we know it. Digitization, globalization, automation, and AI are all untethering us from our familiar locales and destinations and creating new pathways and opportunities across the world.

The past is no longer predictive of the future. That’s why a group of like-minded architects, builders and engineers that includes B+H Architects, Mortenson, Coffman Engineers and Robert Bird Group is designing a resilient tower typology for the future. This new generation of buildings will be truly use and program neutral — easily modified for multiple uses.

B+H architect Matthias Olt describes the design concept, which is defined by a ring shape as being inspired by “organic structures like bamboo — a ring or tube is the most material-efficient and structurally effective building form. Equally relevant, every space module, window, and duct on this ring configuration can be identical, rotated, and replicated.”

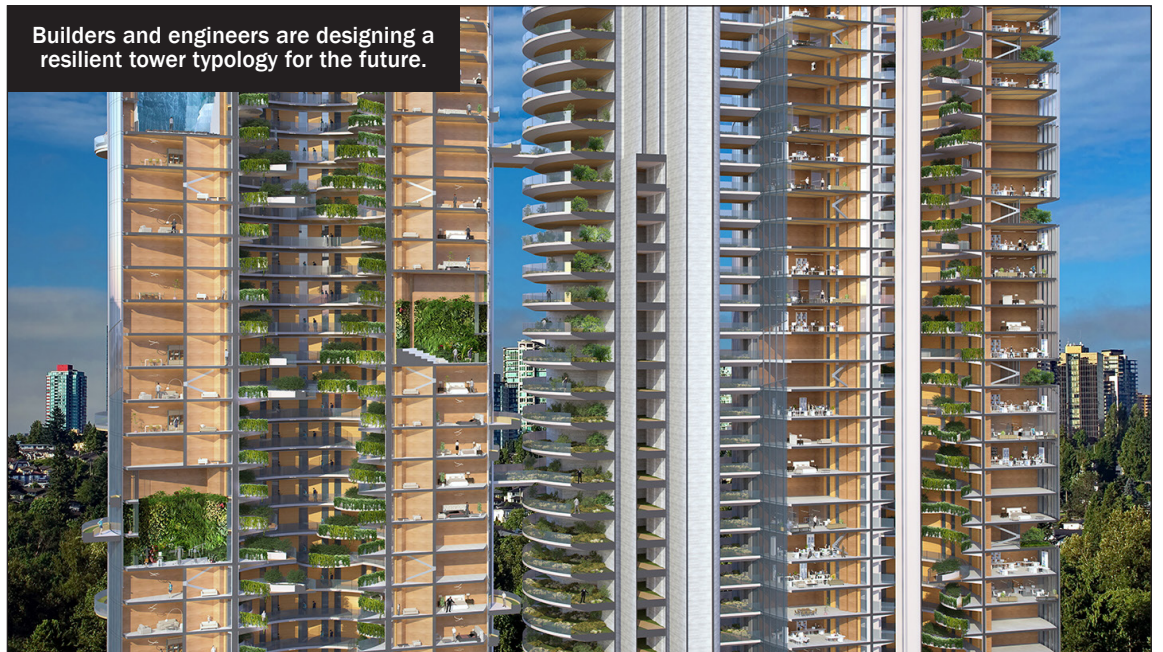
The tower is inspired by five key characteristics that will allow it to adapt and evolve over time:

**1 Health & wellness**  
Tech companies and others who compete fiercely for the best talent in the world are realizing that workplace wellness is one of the most important decision points for many employees, pushing companies to create mandates about net zero footprints, carbon neutrality and prioritizing spaces that enhance employee well-being and contribute to corporate environmental performance goals. Mass timber, a replenishable product offers many of these benefits, the challenge has been how does it scale and how does it become more resilient?

**2 Financial sustainability**  
Single-use buildings are vulnerable to major economic shifts or world catastrophes. A building that is designed to quickly and easily reposition to accommodate new, diverse uses is inherently more valuable than those designed for a singular use. Working together, the team developed a proprietary method that creates towers that can be delivered faster, are more environmentally friendly, and can be “use and program” neutral — easily modified from office product to senior housing, to mixed-use, residential, hospitality or a mix of each — according to need.

**3 Hybridization**  
How is this possible? By thinking literally outside the commercial box and pushing back on the limitations of yesterday’s product. Our team realized that the operations and functionality of a building are mainly driven by the elevator core and its large floor area — office towers need several elevators, residential towers need fewer, hotels may need public elevators for amenity space and private elevators for hotel rooms, etc. If you’ve ever watched a building being built, it is almost always the elevator cores that are built first, because they generally dictate the rest of the design. We realized that by moving the elevator core out of the main building, we could create a neutral use tower.

**4 Componentization & prefabrication**  
The tower is made of highly componentized and prefabricated ring formations comprised of a hybrid and integrated mix of mass timber, concrete and steel, which is then stacked and assembled on site. By integrating mass timber with concrete slabs and steel, we are able to scale the buildings to any size. Smaller buildings can be made of all mass timber. Assembling the components on site versus traditional construction techniques minimizes disruption to the neighborhood, delivers a higher quality product that is made in a controlled environment and most importantly increases speed to market. Its flexibility makes it attractive to financial markets, REITs, investors, users, etc.



Builders and engineers are designing a resilient tower typology for the future.

RENDERING COURTESY OF B+H ARCHITECTS

bling the components on site versus traditional construction techniques minimizes disruption to the neighborhood, delivers a higher quality product that is made in a controlled environment and most importantly increases speed to market. Its

flexibility makes it attractive to financial markets, REITs, investors, users, etc.

**5 Biophilia**  
The elevator core is assembled alongside the tower and is as tall as the building, efficiently

serving one or multiple towers. The elevator core and the towers offer an outside garden for every floor, access to air, nature, and outdoor space — a biophilic approach to architecture that

RESILIENT — PAGE 15



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# HERE ARE THE 3 PRINCIPLES OF RENOVATION

Renovation projects can offer great locations, cost savings and unique building features.

Thanks to pandemic-fueled changes to work and home life, including new economic pressures in a region already challenged by steep living costs, we foresee more remodels, renovations and adaptive re-use projects coming down the pike, particularly in the retail and office realms.



BY KEVIN J. CLEARY  
BAYLIS ARCHITECTS

That's a good thing. The environmental benefits of re-using property are well-documented; in addition, renovations often offer the chance to occupy a great location, save costs, celebrate unique features, preserve character and enhance, or even revive, whole neighborhoods.

From an architect's point of view, such projects present just the kind of tricky problem-solving engagements we love to take on, a point that counts as both blessing and curse. For all their benefits, reclaiming a site for a new use is inherently complicated, in part because we don't know what we're going to encounter as you uncover the building, and also because we're dealing with more constraints than a new-build situation presents; there are just a lot more gray area to negotiate.

Challenges to schedule, budget and aspirations of a renovation project are practically built-in, but so too is the opportunity to pull off a unique and productive project that rewards owners, users and neighbors alike. Over decades of adapting millions of square feet of existing properties, we have found that there are three basic principles keep in mind as you wade into the renovation waters.

## DREAM BIG

Yes, that's a contradictory statement. The point is to maintain a spirit of compromise throughout the project, since things that feel perfect and necessary in the design phase may prove prohibitive in permitting or construction. So yes, go ahead and pick out deluxe fabric — just remember you need to buy the whole suit; ultimately you might be better served with a different cut of cloth.

Case in point: We've been working with a luxury auto dealer undertaking the conversion of another dealership site to accommodate sales of four brands with distinct requirements regarding space, features

and finishes. We had great plans for grand spaces. Then we discovered that a culverted salmon stream limited expansion of the building's footprint. And, we would need to build an exterior ramp due to limited accessibility of existing building, which also came with outdated mechanical, lighting, phone and data infrastructure. The combination of site constraints and the cost of upgrades led to an extensive value-engineering process that threatened to derail the project.

The client saw the potential of the building, but the reality of the costs kept them from proceeding. However, once the team unraveled the program and helped the client identify their "must haves," the scale of the project was dramatically reduced. This meant we could stay within the building footprint and focus attention on key cosmetic upgrades and as many other preferred goals as feasible to achieve the striking environment the client envisioned.

## EXPECT SURPRISES

There's no point in sugar coating this. There will be conditions both with the building and the jurisdiction that will require more attention and/or cost more than anticipated. The salmon stream mentioned above, for example. Or you might encounter older systems that do not mesh with new technology, and non-conforming items requiring upgrades due to newer codes (stormwater, energy or even land-use upgrades, such as sidewalks.) These will unfold in all phases, and while the team tries to uncover them during design and anticipate issues that could arise during permitting and construction, unhappy surprises are all but inevitable — along with the occasional happy ones! Beautiful timbers revealed for example, or in the case of the car dealership the reorganization of space that allowed great daylighting in a showroom.

We met a range of such "opportunities" in the design and permitting of the dealership project, among them the need to upgrade the storefront based on current energy code, and a complete overhaul of the sidewalk and planting due to the scale of the project — both of which, it must be said, will result in a better project. The building's stairs must be rebuilt and, as is often the case when occupancy changes, additional toilets and accessibility upgrades are required.

We encounter similar issues often at Gilman Village, an ever-evolving retail center we've been



B-Bar — a cafe, restaurant and piano lounge in Old Bellevue — is the new branch for Realogics Sotheby's. Design Studio 15 was the interior designer and Goudy Construction the general contractor.

PHOTO FROM REALOGICS SOTHEBY'S INTERNATIONAL REALTY — BELLEVUE



Gilman Village is home to many small businesses including Masa Mexican Kitchen & Cantina.

PHOTO BY KEVIN FRY PHOTOGRAPHY

involved with for the last 30 years. Its buildings and spaces are continually repurposed to meet market demands. Keeping up with code changes also means fire and structural issues often yield new wrinkles. Such essential, if not glamorous factors can affect the desired outcome at times, especially for small businesses whose big dreams don't always square with tight budgets. All the more opportunity for the design team: remember, we are creative prob-

lem solvers; our mission is to make lemons out of lemonade. Which brings us to the next point.

## TRUST THE PROCESS

The process is second nature to us but might take twists and turns that, even for an experienced team, can be difficult, and for an inexperienced owner, gut wrenching. Never forget that your team wants success for you;

we want to perform brilliantly and deliver the best possible project. If everyone keeps cool and stays focused, we'll figure out which way is up, and start climbing that way.

We recently completed a project in the Old Main area of Bellevue called B-Bar. It's a fun, flexible concept that mixes retail and other uses in an older building in a unique and active part of the city. Due to the shared uses and open plan that underpins the concept, building code offi-

cials had concerns. We worked diligently with city officials to identify and address each one. It took longer than anticipated to resolve the city's issues while maintaining the spirit of the design, but persistence, focus and collaboration yielded a project that is thriving, even in the midst of a pandemic.

An experienced contractor has a good sense of what kind of contingency funds owners should hold. An owner-designer-builder team with a "work together/compromise" mindset can design its way out of many of surprises and capitalize on constraints. There will be things that take longer or simply cost more, but we'll find places to save money, or increase revenue opportunities and we will emerge with a great project. Never fails!

**IT'S ALL GOOD**

Whether taking on new construction or a renovation, project teams face similar processes and issues. The team brings a wealth of experience and it is never a surprise when an owner's goals exceed their budget, or that an existing space comes with constraints that create both unique opportunities and challenges.

That said, we move so fast, on such tightly scheduled project phases that we all often need the simple reminder of this fact, especially if the client is dealing with conditions that interrupts their vision. The auto dealer has seen his space evolve more than he ever imagined it could or would. And yet, to his immense credit, with each new situation

This will be the largest supercar dealership in Pacific Northwest and home to four ultra-luxury brands. Foushee will build it.



RENDERING BY BAYLIS

that arises he is the first to remind the team of what new interesting aspect has been drawn out and state, "You know, this is gonna be great!"

And he's right.

Kevin J. Cleary is a principal at Baylis Architects and is active in commercial and urban mixed-use projects.

## WORKPLACE WELLNESS

CONTINUED FROM PAGE 9

where. Systems integrated wayfinding can open or close elevators, entries, and exits. Heatmapping can locate people in case of fire, active shooter, or hostage emergencies. Both wayfinding and heatmapping resources can help push out emergency communications, sending the right information to the right people in the quickest way possible.

### CUSTOMIZATION

While many building systems are automated, smart technology allows users the ability to customize aspects of their personal space from their mobile devices. Customizing light levels and automating window shades can offer a sense of empowerment, leading to better collaboration and higher productivity levels. Natural light and access to views play an important role when it comes to health and wellbeing. Studies have shown that daylight and a connection to nature increase alertness and promotes a healthy sleep cycle.

Customizing light levels and automating window shades can offer a sense of empowerment, leading to better collaboration and higher productivity levels. If access to natural daylight is not available, electric lighting systems can be programmed to mimic the brightness and color of daylight throughout the day, keeping our circadian rhythms in check.

### ACTIVITY

Encouraging activity into the sedentary workday is imperative. Technology can help. Research has proven that environments that promote mobility and social interaction improve mental and physical health, which in turn can help prevent disease. Smart desks can warn of sitting too long and encourage a break. Wearable tech reminds us to reach our step goal.

Feature staircases not only serve as a major design element but also promote walking rather than taking the elevator. Access

to outdoor terraces, green spaces or nearby trails creates an opportunity for walking meetings or a welcome respite from a stressful day.

### COMFORT

The pandemic forced many of us into a work-from-home experiment and thanks to technology, it worked. Many employees delighted in commuting down the hallway and working from their couch. In the post-COVID world, surveys show that many employers will embrace a flexible, hybrid approach of returning to the office and working from home.

Based on this paradigm shift, workplaces are trending toward a residential aesthetic, blurring the lines between the remote workplace with the onsite office and offering the comforts of home. Conference rooms may now mimic your living room with a sofa and coffee table facing a large monitor. Virtual meetings will start to feel more like

in-person meetings with video cameras that can swivel to the speaker by detecting sound and gestures. Connected whiteboard devices will be used for in-person and remote collaboration. Just as your home became an office these last many months, the office, with the proper technology, will be more like your home.

The way we work is constantly changing and technology plays a pivotal role in that evolution. The workplace of the future, whatever that may ultimately look like, will inevitably be driven by people and fueled by technology. The workspaces of today

and tomorrow must be designed around a user-centric approach — one that prioritizes health and wellness and enables individual productivity and efficiency. With people spending an estimated 90 percent of their lives indoors, buildings that do their part in keeping our population safe and healthy is more important than ever.

Ken Bayern is CallisonRTKL vice president and Dena Yamaguchi is CallisonRTKL associate vice president.

## RESILIENT

CONTINUED FROM PAGE 13

seeks to connect building occupants more closely to nature by incorporating elements like natural lighting and ventilation, natural landscape features, wood and other components to create a more productive and healthy built environment for people to work and live in. The rings also offer efficient surface areas, the curving aspect efficiently manages the heat load, and the interior atrium provides air flow to each floor. In addition, curved buildings have been strongly linked to a reduction in human stress levels.

### Proof of concept

Our team is engaged with several investors and developers locally and internationally in testing multiple sites for specific building types and uses. Each team member — B+H Architects, Mortenson, Coffman Engineers and Robert Bird Group — brings critical expertise to these projects which call for a high degree of collaboration throughout pre-planning, shop fabrication, cost estimating, analysis of environmental factors (such as wind, seismic and code requirements).

This new product blurs boundaries and demands a similarly interactive, non-linear approach from its design team. We could not be more excited to be leaders in the next revolution of neutral tower design. We're so inspired to be revolutionizing urban real estate design and creating a sense of confidence and stability in times of exponential change.

Doug Demers is managing principal, Seattle, at B+H Architects. Phil Greany is director of business development at Mortenson.

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## FEASIBILITY

CONTINUED FROM PAGE 12

on the ideal end. Case in point: parking. I've got a 200-foot-long site and 8-foot-wide parking stalls, so I show 25 stalls. Zoning requires one stall per unit so the site yield is 25 apartments, which is the client's target. Woo. Oh, but wait, I didn't leave room for shoring, or columns, walls, stairs, fire-pumps, etc. Etc., so by the end of the Design Development phase, there are only 20 stalls and the project is in a pickle. A feasibility study isn't going to have columns laid out, but it should leave space for them.

Architects can be too optimistic: Why would I show 25 parking stalls? Easy, I want my client to be happy. If I don't get the numbers you want, you might think that I'm not very clever and go to some other firm, so if you give me a target, I'm going to try and hit it. To do so, I may consciously or unconsciously push the envelope (literally) further than I should, and that's not what you want. So when you review a study, ask your architect what the conservative numbers are, or better yet, direct them to

list them on the study, then discuss feasible ways to increase the yield.

Buying or selling? Whether you are looking to buy or sell the property makes a difference. Sellers typically want their Architects to be optimistic and want the study to be pretty (which costs more). Buyers often don't care what the study looks like visually, they just want it to be reliable. Communicating your goals clearly can help us tailor the deliverable to your exact needs.

A feasibility study is an investment in an investment. The time and money required to produce a reliable, informative study is a drop in the bucket compared to losing yield down the road. In a competitive real estate market like Western Washington where more and more buyers are purchasing land up front, it is all the more important to get a good study.

*Bill Barton is a senior associate at Tiscareno Associates.*

## GREEN LAKE

CONTINUED FROM PAGE 10

improve air quality and save energy when outdoor conditions are beneficial.

## LOOKING AHEAD

The construction for this project is not funded, and the design will likely be reconsidered and scaled to meet the fiscal realities of Seattle Parks and Recreation capital budget that has been greatly impacted by

the pandemic.

*Ruth Baleiko, a design partner at Miller Hull, creates spaces that bring people together to share intellectual and cultural capital in new, unexpected ways. Maaïke Post, an associate at Miller Hull, gravitates toward public work and the chance to design projects available to all, including libraries and other community-centered projects.*

## PROPOSAL SUCCESS

CONTINUED FROM PAGE 11

have capacity to effectively support the pursuit response, a last-minute scramble before the proposal deadline can be avoided.

With most selection processes for publicly funded projects, it is common to anticipate a shortlist interview following the initial scoring of the proposal, so an accounting for that time commitment is necessary. An effective interview presentation requires preparation time. This may include two to four meetings to plan and practice the presentation in addition to time to prepare visuals to support the presentation such as a slide deck, conceptual renderings or virtual models.

It takes a strong commitment, focus and energy to win work, so remember to consider the entirety of the pursuit process and all parties involved in the effort as you assess your firm's resources.

## OPPORTUNITY COSTS

"We forget that while proposals are at the heart of an A/E/C marketing department's 'engine' this core service is surrounded by four key foundational functions: marketing administration, client and partner outreach, communications and events," wrote Allison Tivnon in "Marketing at Low Tide: How to Recession-proof Your Marketing Department"

Another point of caution, because this justification has been stated

many times in the AEC industry: "I just want to submit a proposal to get our name in front of the client." This approach usually signals that a critical examination of the investment to submit a proposal was not conducted.

Whether you have an in-house marketing department or use a consultant to prepare your response, there are costs beyond labor and materials — opportunity costs. Areas such as business development, client care or billable work may be compromised when resources are allocated to poorly vetted project pursuits.

Consider if your marketing and business development team could be working to preposition the firm for the next pursuit instead of toiling away on a proposal with a low probability of success and the potential to leave a poor impression with the client.

## STRONG IMPRESSION

In the current market, competition for public work is fierce, with public clients seeing increasing numbers of proposals. Remember that your firm's proposal is an extension of your brand and consider go/no-go decisions with purpose.

*Melissa English is principal marketing strategist at Middle of Six, a marketing consultancy.*

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# INFLUENCING HUMAN SCALE, CREATING A SENSE OF PLACE

Johnston Architects marks 30 years of designing for Seattle's ever changing landscape.

In 1991, Ray and Mary Johnston set up shop at their kitchen table, starting their namesake architecture practice at the scale of their own block, remodeling numerous homes



BY MEGAN MCKAY  
JOHNSTON  
ARCHITECTS

in their Northeast Seattle neighborhood. Simultaneously, they designed new and renovated libraries around the region. These divergent project typologies informed one another: the grand gestures of public work emboldened the design of intimate residential spaces, while the provision of human-scale niches turned the voluminous common gathering spaces of public work into pleasant community living rooms.

The work gradually expanded to include townhomes and apartments, animal welfare facilities, offices and public utility facilities. Continuing to shape spaces on scales both personal and communal, JA thrived on the dichotomy of large and small. While many firms swiftly pivoted to a focus on larger-scale projects only, single-family homes and public works remain a core component of the practice, continuing to influence the human scale and creation of a sense of place for JA's intentional foray into other project typologies like commercial and multifamily.

The diversity of projects is mirrored by the diversity of its team, infusing varied expertise and backgrounds into the practice — its designs all the stronger for it. The majority of JA's team and leaders are women, an integral component of a culture of curiosity and shared goal of progression and collaboration, instead of competition.

The firm participates in the International Living Future Institute's JUST program, placing heavy emphasis on equity and the cultivation of a rich personal life for each employee. Today, JA's size — 30 people — allows open dialogue alongside growth and innovation; designers share ideas freely and new technology is embraced. Work on a range of project types allows unprecedented openness, encouraging a nimbleness that is the enemy of stagnation. The eclectic, work-at-all-scales culture survived the firm's first 30 years and sets a foundation for the next.

JA's work matured alongside repeat clients whose common-held values influenced its

growth. We collaborated on numerous occasions with developer William Parks, who has a soft spot for properties that show the promise of a special view or nascent sense of place, but are troubled with steep terrain, abrupt zoning transitions, or tough proximities. Importantly, client and architect shared a vision for bringing people together and creating community. The team's third collaboration was Boulders at Green Lake, which carefully sited nine single-family homes on a parcel meant for two. Despite the density, the homes are surprisingly private, a result of JA's creative and strategic placement on steep terrain around a central, shared open space celebrating an existing pine tree.

Soon after, the Parks-JA team collaborated for their fifth time on the much larger Ballard Public, a 96-unit multifamily community arranged around a midblock courtyard, open to the sidewalk with street-fronting retail. The design began on a single parcel at the most abrupt zoning transition in the city, then expanded three times as adjacent properties were purchased and added to the project. The completed building is a mix of flats and soaring lofts with large windows evocative of an "Old Ballard" warehouse but with intimacy and community at its heart through a focus on common open spaces. It was honored as one of nine finalists for a 2017 People's Choice Urban Design Award by Seattle's Design Review Program staff.

While JA's multifamily experience broadened, the richness of its single-family practice deepened, serving as an ideal engine for exploration and experimentation and paving the way for the application of novel technology.

In one of its most compact designs — a mere 860 square feet — JA carefully nestled a two-bedroom cabin with great room in the Methow Valley's shrub steppe landscape above the town of Twisp. Inviting the outside into the double-height volume through soaring windows, the cabin leans into spectacular views of its surroundings, feeling much larger than it looks on paper. The Twisp cabin's design combines intimate and expansive spaces, industrial and more finished materials, representing JA's body of work writ large.

While conceived with the most analog considerations of human comfort and delight, the home set the stage for the launch of JA's new DADU (detached accessory dwelling unit) technology platform that allows homeown-

The Twisp cabin laid the groundwork for Johnston Architects' DADU designs.



PHOTO BY WILL AUSTIN

ers to modularly design and produce documents to take the step of building their own backyard cottage.

The last 30 years have made clear that memorable projects happen because of — not in spite

of — the sites and programs that are challenging and stymie a one-size-fits-all solution. Whether maneuvering around existing trees, weaving communal space into a site with little space to spare, provisioning each unit

with a slice of privacy and a special view, or puzzling into an irregularly shaped site, getting creative is the culture of JA.

It is vital to maintain open-

HUMAN SCALE — PAGE 24

  
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# 4 LIVING BUILDINGS: COLLABORATIVE, COURAGEOUS, OPEN-MINDED LEARNING

We cannot thrive or survive without one another, and that extends to the way we design and construct smart buildings.

Last year, humans were reminded of the fragile ecosystem we live in with each other, our interdependency and how isolation can have significant, negative impact.

Nothing in nature thrives or even survives in isolation. Trees in a forest rely on a complex fungi system beneath the surface of the soil, known as mycorrhizas, to transfer nutrients, carbon, water, and even to alert one another of a nearby illness or trouble. Some species of clown fish and sea anemone have a mutually beneficial relationship where they depend on one another for survival. The clown fish takes refuge in the sea anemone and the sea anemone benefits from the clown fish cleaning it and providing it with nutrients from its waste. This is possible because the clown fish has a stronger mucus layer than most fish which protects it against the sea anemone's viscous stingers, its nematocysts, allowing it to hide happily from its predators.



BY ALEXANDRA RAMSDEN RUSHING

We humans, as part of nature, are no different — we cannot thrive or survive without one another. This extends to the way we design and construct smart, efficient, sustainable, even restorative, buildings.

## LIVING BUILDING PILOT

Four projects currently pursuing the city of Seattle's Living Building Pilot Program (LBPP) illustrate this humanity and deep collaboration across design teams. The LBPP provides height and floor area incentives (up to 25% more floor area and 12.5-30 feet of additional height, depending on zone limits) for buildings in exchange for meeting high-performance sustainable design, construction, and operations requirements. While there are multiple requirements for the LBPP, the advanced energy efficiency strategies alone showcase the need for deep collaboration, trust, curious problem solving, open-minded learning, and courageous transparency to design and construct buildings which acknowledge our future.



A birds-eye view of the Magnolia Safeway courtyard, designed as a community gathering space.

IMAGE BY BUMGARDNER

## STORIES OF COLLABORATION

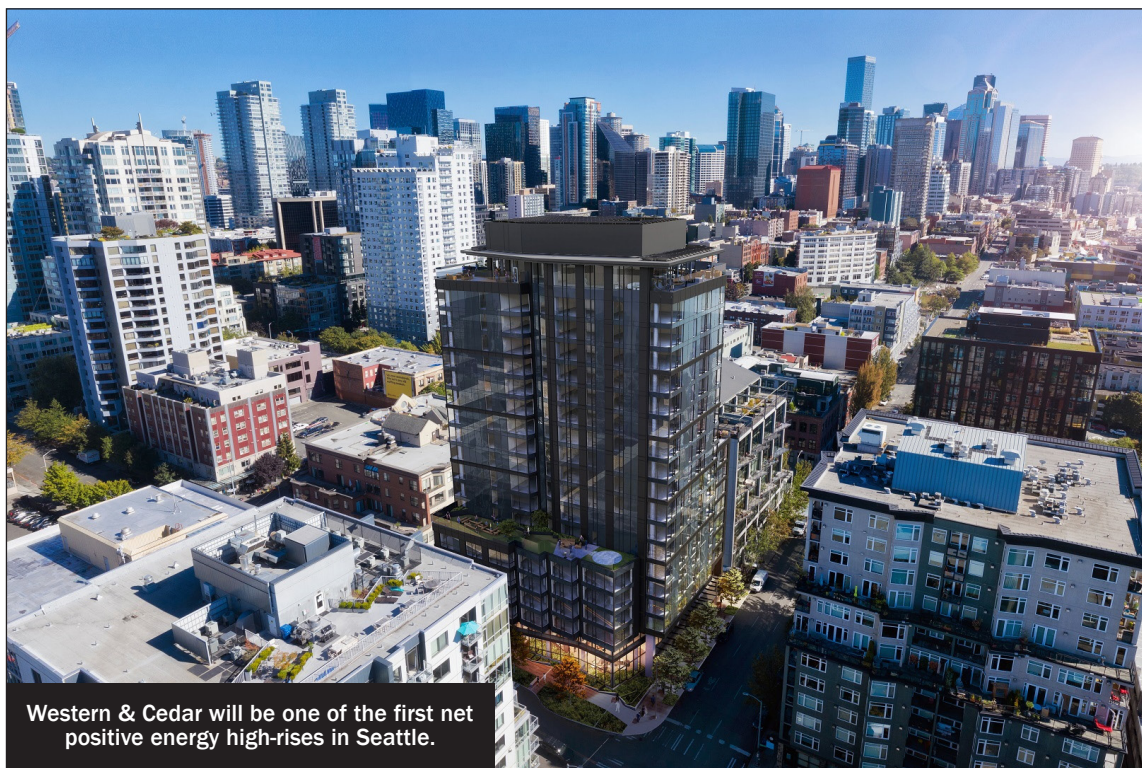
Liza apartments, Western & Cedar apartments, Magnolia Safeway condominiums and the 570 Mercer office building are all pursuing the LBPP. Each striving for distinctly different LBPP compliance paths, Rushing is aligning with each of these project teams to identify LBPP energy and water efficiency strategies, as well as providing mechanical, electrical, plumbing engineering (MEP), lighting design, and living building/sustainability consulting.

In the evolution of these projects so far, there are common threads of integrated team behavior which are bringing innovative solutions to the table:

- Listening attentively, with curiosity of the needs, varying perspectives, and drivers of ownership, all disciplines, and occupants.
- Seeking out learning beyond that project, including gathering data and lessons learned from previous LBPP projects.
- Striking a careful balance between multiple, potentially conflicting, goals, for example minimizing energy use and optimizing human health.

### Liza apartments

Liza apartments at 2517 Eastlake — a six-story, 185-unit residential building in the Eastlake neighborhood of Seattle — is going beyond net-zero energy, targeting net-positive energy in compliance with the Living



Western & Cedar will be one of the first net positive energy high-rises in Seattle.

IMAGE BY GGLO

Building Challenge (LBC) Energy Petal Certification. This requires the building to generate more energy than it uses. The project is also pursuing the city of Seattle's water requirement of no potable water use for irrigation, toilet flushing, and a few other uses, as well as the LBC Beauty and Place Petals. This endeavor began with the developer team's proactive investigation into the LBPP as an option for enhancing the project's bottom line and

environmental impact, all in one. Washington Holdings and Polard Entities began by seeking collaboration not only within the project team but beyond as well. They connected with previous LBPP project teams to learn from their experiences and toured Insight and Bullitt Center.

Given the target to generate more energy than will be used in the building, the team did a deep dive into how to engage occupants in the building's ener-

gy efficiency target. This led to exploration, by multiple disciplines, of energy-saving strategies well beyond what is typically explored for a code compliant building, including: a tenant utility data sharing program; feedback systems to create energy use awareness and prompt behavior change, e.g. smart thermostats, energy-use light displays, and energy dashboards; clotheslines to reduce the use of driers; and signage in and

around the building to share the energy story to prompt behavior change beyond the building footprint. This project team includes Washington Holdings and Pollard Entities, Hewitt, Navix, Rushing, and Exxel Pacific.

#### Western & Cedar

Western & Cedar is an 18-story, 185-unit, residential apartment building in the Belltown neighborhood of Seattle, also pursuing net-positive energy as part of LBC's Energy, Health & Happiness, and Beauty Petals Certification, as well as the reduced potable water use requirement. This project tells a strong story of team collaboration to determine a smart balance of potentially conflicting ownership goals, specifically (1) energy efficiency and human health (air quality) and (2) energy efficiency and greenhouse gas (GHG) emissions (i.e. future-proofing of removing refrigerant). Regarding enhanced air quality and energy efficiency, ERVs (energy recovery ventilators) will be installed in each unit. The negative air quality impacts of using gas appliances is another related exploration on this balance of health and energy use. Preliminary findings are showing gas stovetops result in air quality that could be below the levels prescribed in the LBC Health & Happiness Petal.

Inclusion of refrigerant was debated among the team given its negative GHG impacts and predictions of it being outlawed in coming years. Mechanical systems evaluated were VRF (variant refrigerant flow), which includes long lines of refrigerant, and hydronic heat pumps, among others. The hydronic system illustrated lower efficiency than VRF, when designed such that it wouldn't require amounts of water which would jeopardize the LBPP water requirement (non-potable water use required for this). VRF was selected for the project.

This project team includes Saratoga Capital, GGLO, KPFF, Rushing and Exxel Pacific.

#### Magnolia Safeway

Magnolia Safeway is a seven-story, 180-unit residential condominium project with ground floor grocery space in the Magnolia neighborhood of Seattle. The project team is pursuing the city of Seattle's LBPP reduced potable water use requirement, energy target of 25% improvement beyond Seattle Energy Code (SEC), and the LBC Materials, Health & Happiness, and Beauty Petals.

The building is being designed with a shared energy system where heat given off by the grocery store refrigerator cases is being harnessed to offset the heating for the condo spaces, grocery space, and hot water. Both Security Properties and Safeway have been instrumental in supporting this approach from



Across from Rogers Playground park in Eastlake, Liza apartments will integrate with the thoroughfare through the neighborhood.

IMAGE BY HEWITT

day one, seeing this brilliant pairing: why would we reject heat when it can be used elsewhere in the building? Not only has each team member contributed to implement this design concept, data from previous projects was gathered to inform right sizing and energy performance. Safeway provided valuable data from other stores, and the team harnessed lessons learned from other LBC projects, such as the PCC in Ballard.

To start off on the right path, a biophilic design workshop was conducted by Rushing, early in design, in which team members explored their own connections to nature, how nature could be woven into the building design, and the health benefits of doing so. Tears were shed, vulnerable stories were told, and open-minded learning, courageous communication, and team connection was fostered. It is the establishment of this dynamic which led to investigation of innovative solutions such as dynamic, sculptural elements which mimic flocks of birds, use of groundwater to flush toilets, strategic use of daylight in order to minimize electric lighting, green building education opportunities for the school across the street, and expressions of water and energy use at the street level.

Key Magnolia Safeway team members include Security Properties, Safeway, Bumgardner, KPFF, Rushing, Exxel Pacific, Communita Atelier, and Michela Communications.

#### 570 Mercer

570 Mercer, an eight-story, 114,294-square-foot office building at the boundary of SLU

and Lower Queen Anne neighborhoods in Seattle, is also targeting the city of Seattle's LBPP reduced potable water use requirement, energy target of 25% improvement beyond SEC and the LBC Materials, Place, and Beauty Petals.

The identification of a strong water-use strategy has demanded a full team endeavor examining predicted number of occupants, toilet flush flow rates, performance, maintenance, plant types for irrigation needs, available roof collection area, and climate patterns over the past 20-plus years. This exercise required all contributors to bring their relevant data to the table to weigh carefully together and determine the ideal recipe of factors to meet the project's needs.

Also wanting to create a building beneficial for human health, Schnitzer and the team are looking at strategies to contribute to potential reduction of transmission of viruses, i.e. COVID-19, specifically bi-polar ionization which creates ions that attach to virus particles and other VOCs, increasing their weight to cause them to be more easily captured by filters or fall to the floor more quickly.

The 570 Mercer project team includes Schnitzer West LLC, Weber Thompson, Navix, Rushing, and PCL, among others.

#### HUMANITY AND LIVING BUILDINGS

None of these design explorations can be done in silos. Together, we can do this though. If entire ecosystems can come back to life by sharing resources

and working together, we can build cities which restore and give back, rather than deplete our resources and natural systems. We can create a healthy future by continuing the momentum of respectful, transparent, open collaboration, exemplified in these and all deep green and LBPP projects. Let us ask ourselves each day what we can do to bring this deeply woven collab-

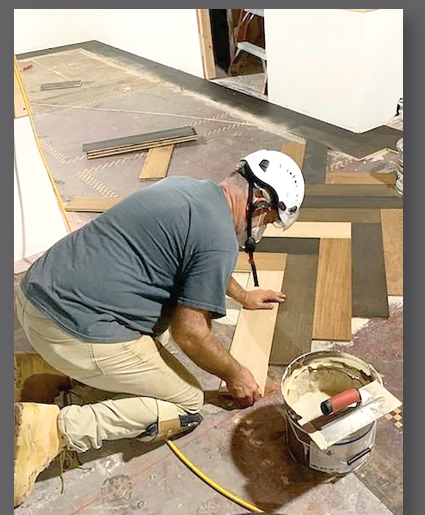
oration, ears open for learning, egos checked at the door, and utmost respect for one another's perspectives and expertise into all our design and construction efforts.

*Alexandra Ramsden is a principal and director of sustainability, energy and commissioning at Rushing Co.*

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# ARE AMERICAN SHOPPING MALLS BOXED-IN?

“De-malling” and rethinking shopping centers could help strengthen the retail industry sector.

It comes as no surprise that America’s retail sector is experiencing a host of profound challenges — from the ongoing and increasing shift from in-person to online shopping, to the simple fact that America is “over-retailed.” While the COVID-19 pandemic’s economic impact also has proved challenging, malls were struggling prior to the pandemic’s onset; the



BY SHELLEY R. CLARK  
MKA

pandemic just forced property owners to consider new development strategies sooner.

Hundreds of department stores — once anchor tenants at shopping malls across the country —

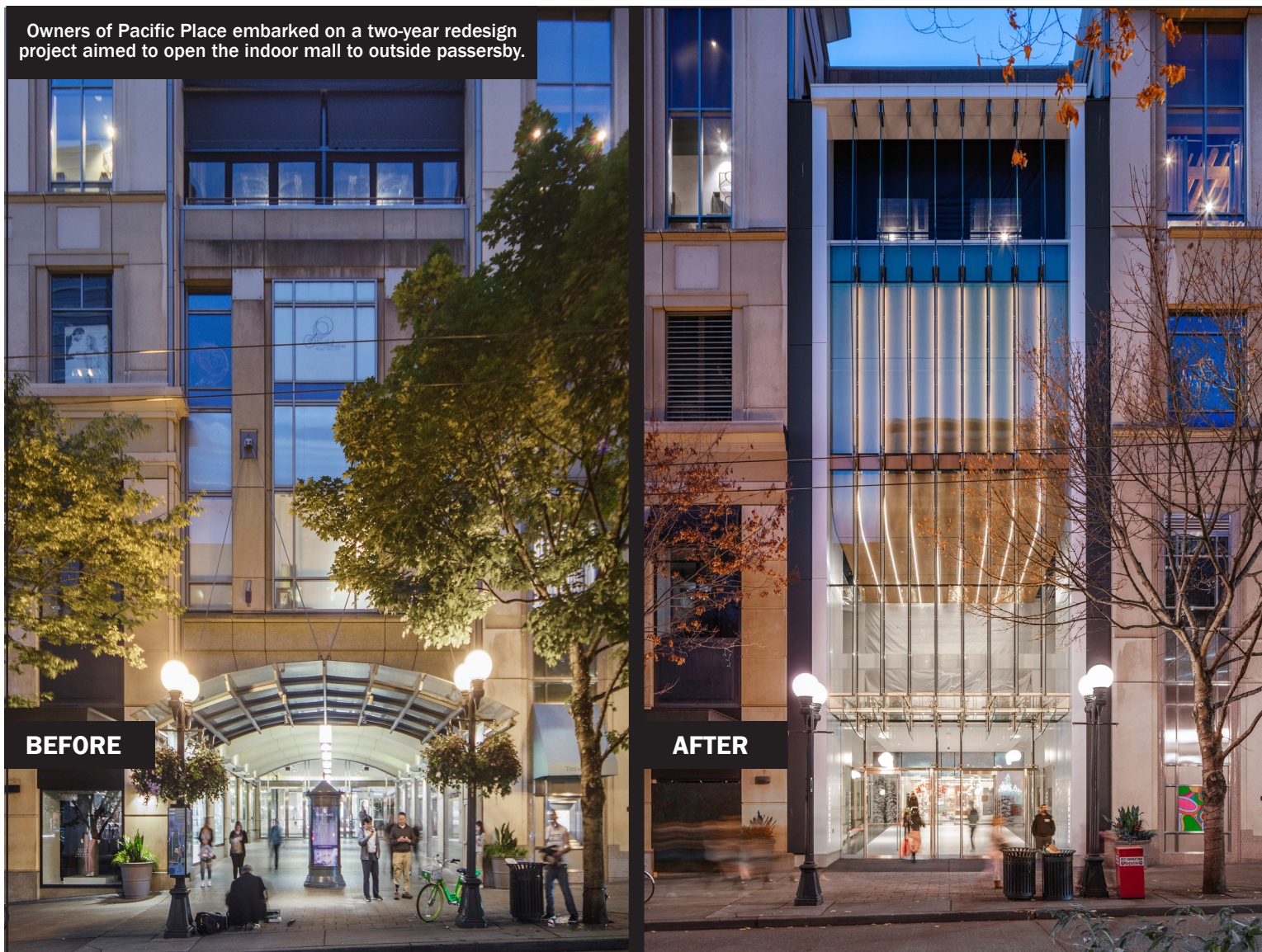
have closed their doors forever. Typically, large anchor stores account for as much as 30% of a mall’s square footage, and more than half of all mall-based department stores are estimated to close by the end of 2021. Across the United States, this demise of the anchor store is having a large impact on the health of mall properties. A quarter of the 1,000-odd remaining U.S. malls now look likely to close in the next three to five years, according to Coresight Research.

But all is not lost. The retail sector has finally awakened to this reality and is beginning to think critically about the future of the shopping mall’s purpose and potential. This transformation started with a movement to redevelop and repurpose department stores like Macy’s, Sears, JCPenney, Neiman Marcus, and other “big boxes” that permanently closed and were left “dark” and vacant.

Repurposing one vacant big-box store in a shopping mall is doable, and Magnusson Klemencic Associates has engineered many of these projects over the past five years. However, when two or three anchor stores — and even a host of smaller shops — at a single shopping center all close at once, it is time for property owners and developers to reconsider the approach.

One approach that retail architects and owners evaluate is full-scale “de-malling” and repurposing: broadening the functions of malls to include space for offices and residential apartments; reconfiguring store entrances to face the street or add open spaces providing large areas for community gatherings

Owners of Pacific Place embarked on a two-year redesign project aimed to open the indoor mall to outside passersby.



PHOTOS BY HEYWOOD CHAN/YE-H PHOTOGRAPHY, COURTESY OF GENSLER

and events; and possibly even taking some of the large, empty spaces and turning them into distribution hubs, community centers, libraries, or indoor farming operations. Shopping centers can become destinations themselves, with shopping being the secondary attraction.

At MKA, we have seen demand for this kind of retail reimagining, and this trend has the potential to reposition and strengthen traditional shopping malls while reshaping entire neighborhoods.

Northgate Mall is one example of this trend. Deemed one of America’s first modern shopping centers when it opened in 1950, the 55-acre mall is located just 13 miles north of downtown Seattle along the Interstate 5 corridor. For nearly 25 years, it was an open-air shopping center before it was enclosed in the early 1970s. In 2019, three anchor tenants — JCPenney, Macy’s and Nordstrom — all closed their stores.

Recognizing the change in the market and influences by other development in the neighborhood (including new Link light

rail transit connections to downtown), Northgate’s owner, Simon Properties, embarked on a “reimagining” strategy. A phased redevelopment is underway to transform Northgate Mall and its surrounding parking lots into a mixed-use center with nearly 1 million square feet of office space, more than 900 residential units, and a hotel with more than 300 rooms. In addition, the development will include the NHL Seattle Kraken’s new 172,000-square-foot practice facility and community skating rink, becoming an anchor tenant no one could have envisioned when Northgate Mall opened 70 years ago. But don’t worry. Northgate will still have a substantial amount of retail offerings sprinkled within this new mixed-use oasis.

Not all mall properties need such massive redevelopment to stay valid. Stonestown Galleria in San Francisco is an example of repurposing and re-using the existing structures to achieve the same result. At Stonestown, the property owner, Brookfield Properties, transformed a three-

story, 1950s-era, concrete building that was once home to a Macy’s department store into a vibrant, mixed-use building with Regal Cinemas, Whole Foods Market, and City Sports Club fitness center. Plans have also been considered to add residential units to outer parking lots at the property.

Similarly, at Tysons Galleria in McLean, Virginia, a former Macy’s department store building is being repurposed to house a movie theater, a bowling venue, and multiple retail shops and restaurants.

At Pacific Place, which opened in 1998 in downtown Seattle, the mall’s owner embarked on a two-year redesign project aimed to open the indoor mall to outside passersby, create public gathering places, and attract customers from large corporate campuses nearby. To achieve this, the project included two new entrances, an extension of the central atrium, a grand staircase, and a four-story glass facade to allow in natural light.

Redeveloping former anchor stores and retail properties that

are in trouble is not an easy task. These retrofit projects can be complex and costly. But if the new plans mostly work within the existing structure, they are generally faster and more sustainable than the tear-down-and-rebuild alternative.

Most retail centers exist in strategic urban locations: near population centers, transit hubs, and busy transportation corridors. These properties are too valuable to sit vacant for long. Rethinking the purpose and potential of these shopping malls — including their vast parking lots and vacant anchor spaces — just might be the key to their long-term viability. Retail centers of the future will transform themselves to include mixed-use spaces for offices, apartments, public gatherings, and yes, even retail stores. This transformation will allow the retail sector to thrive for another 50 years, at which point, I imagine, it will need to transform once again.

*Shelley R. Clark is a senior principal at Magnusson Klemencic Associates.*

# IT'S THE END OF THE GROCERY STORE (AS WE KNOW IT)

Grocery stores are becoming "the third place," and it's time for something better.

With millions of Americans now stuck at home, cooking their own meals instead of going out to restaurants, it's hardly surprising that the grocery industry is having an exceptionally profitable year.



BY NICHOLAS  
BOWER SIMPSON  
BUMGARDNER  
ARCHITECTS

So why, then, did QFC announce earlier this month that it plans to close two supermarkets in Seattle's Wedgwood and Capitol Hill neighborhoods? And what of the University District Safeway that was recently bulldozed, or the Albertson's in Magnolia that is slated to be demolished later this year?

For the most part, the reason for this spate of closures lies not with the stores themselves, but the buildings and land they occupy. These older squat, single-story structures, along with their massive parking lots, occupy acres of land that has skyrocketed in value over the last decade, particularly in the red-hot Seattle area.

And most of these older stores were designed for another era, with an almost singular focus on shoppers arriving by car. They sit far from the street, behind sprawling parking lots, and make little effort to accommodate pedestrians or bicyclists. The goal, when they were originally designed, was to get shoppers into the store and back out to their car as quickly and conveniently as possible.

What QFC, Safeway and other grocers already know is that these car-centric suburban-style grocery stores no longer make sense in an increasingly dense, multi-modal urban area like Seattle, where shoppers are increasingly likely to arrive by bike or foot rather than by car.

It's time for something better.

## GROCERY STORES AS A "THIRD PLACE"

Consider, if you will, the Angeline mixed-use project in Columbia City.

In 2014, developer Security Properties tore down a derelict former grocery store that had sat at the back of a large parking lot and replaced it with a mixed-use building that put five stories of housing above a 25,000-square-foot PCC grocery with two levels of parking beneath. The grocery store is oriented toward an adjacent park, instead of turning its

back on it like its predecessor and opens out onto an outdoor dining area and covered bicycle parking. Instead of being rushed back to their cars, customers arriving at the new store were invited to gather and linger in this new semi-public space. And it worked: The outdoor seating area at the Columbia City PCC has become so popular that the grocery store has had to put out signs encouraging shoppers to limit their time at the tables to 30 minutes or less.

Similarly popular semi-public spaces can be found outside the QFC in Ballard and PCC in Fremont — both of which sit below several floors of housing — and have been incorporated into plans for the redevelopment of the U District Safeway and Magnolia Albertson's. Many of these spaces are further enhanced by public art, like the glass canopy at the Ballard QFC that empties rainwater into a glass bowl sculpted by local artist Rodman Miller.

Having housing above also returns grocery stores to their rightful place at the commercial heart of a neighborhood, rather than a far-flung destination. Neighbors are more likely to cross paths, increased foot traffic draws in more small retailers and urban centers become more lively, attractive places.

Thinking about grocery stores like this, as a community asset rather than just a business, creates an opportunity to use development as a tool to truly improve a neighborhood. Much like the mom-and-pop grocers that preceded modern supermarkets, these stores can become the "third place" that sociologists talk about: A shared space outside the work and home that anchors community life and serves as a catalyst for broader interaction.

In this way, grocery stores are among the most public of places, in that they offer a common space that almost everyone enters at least weekly, perhaps several times a week — far more often than we visit libraries, parks and other truly public spaces.

## A MORE RESPONSIBLE, SUSTAINABLE MODEL

The decline of the traditional suburban-style grocery store is also an opportunity to build more sustainability into our food systems. Supermarkets, by their nature, are energy-hungry beasts, sucking up huge amounts of electricity to keep food at the right temperature so

Ballard QFC after redevelopment. The store has a glass canopy that empties rain water into a glass bowl sculpted by local artist Rodman Miller.

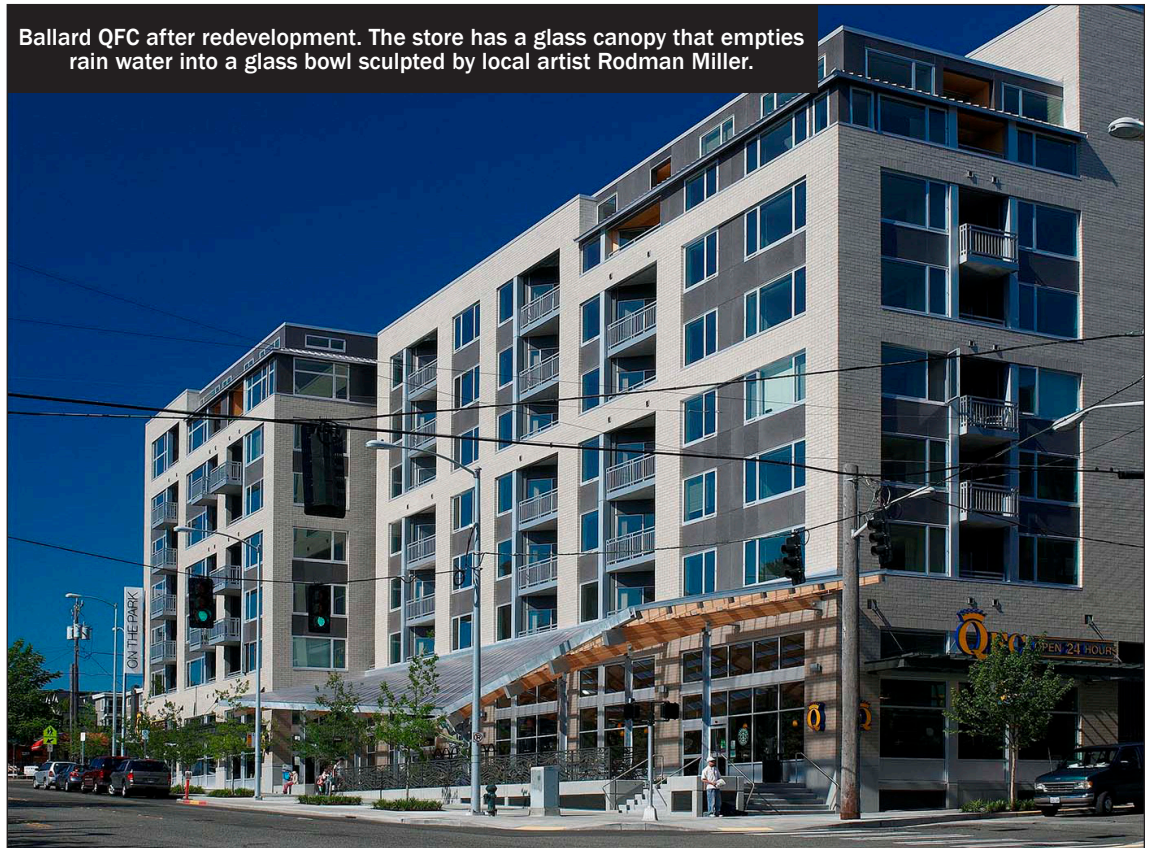


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GROCERY STORES — PAGE 24

# THE ROLE OF VENTILATION AND HEALTHY AIR

Here's how building systems can bring us back together.

After months of physical distancing and restrictions on public gatherings, people have a renewed appreciation of the value of coming together. Notwithstanding a new appreciation of work-life balance and closeness with our families and significant others, most of us are longing to get back together with others for work, leisure, and learning. Recent work by a Seattle consulting firm has focused on ways to facilitate business openings and operations despite the continuing risk of COVID-19 exposure.



BY MARK CHUBB  
CODE UNLIMITED

Seattle was among the first metropolitan areas in the U.S. to experience COVID-19, and its effects quickly became clear. Major employers and public officials acted swiftly to curtail the potential for spread by imposing or adopting restrictions on public gatherings and workplace operations. Those who can work remotely have been for months now. Those who could not work from home have been forced to adopt severe limitations on their operations to balance worker safety and health with the need to maintain critical services and facilitate commerce, often at subsistence levels.

Limiting the number of people allowed in shops and restaurants, following physical distancing guidelines, erecting barriers, screening visitors, and mandating mask-wearing are among many precautions workplaces have implemented with varying degrees of success to control exposure and infection. In a few instances, public gathering places have moved their customer service and seating operations outside to take advantage of natural ventilation to limit exposure.

The influence of ventilation on limiting occupants' exposure to unhealthy conditions is well-established in building regulations and occupational safety and health guidelines. Ventilation requirements focus on limiting the concentrations of hazardous substances, unpleasant odors, temperature and humidity to maintain a comfortable working or living environment.

Other than health care facilities and certain industrial occupancies that produce products for human consumption, heating, ventilation, and air conditioning design practices have not placed much emphasis on understanding or controlling the spread of infectious agents. And the measures mandated in those particular occupancies are not always well-suited to conventional office buildings and other types of workplaces.

At the request of a health care provider, Code Unlimited — a local engineering consultancy — studied the influence of ventilation on the spread of viral droplets from a single cough or sneeze within and beyond an operating room. Using a model known as FaTIMA for Fate and Transport of Indoor Microbiological Aerosols, developed by the National

Institute of Standards and Technology, this study helped to understand how conditions in this environment can be applied elsewhere. The findings of these studies suggest we can do more within existing buildings to manage exposures, especially when we understand how droplets and viral particles spread in air within a room or space.

Code Unlimited's simulation considered a typical 530-square-foot (23 by 23 feet) operating room with 13-foot-high ceilings with an exhaust ventilation rate of 2,800 cubic feet per minute. Viral particles encased in droplets varying in size from 74 to 380 microns remained suspended in the air for just a few minutes until removed by the ventilation system, while some of the larger droplets settled on horizontal surfaces. These simulations suggested that the location and volume of exhaust can make a big difference in reducing human exposures, especially in conjunction with physical distancing, mask-wearing, and other precautions.

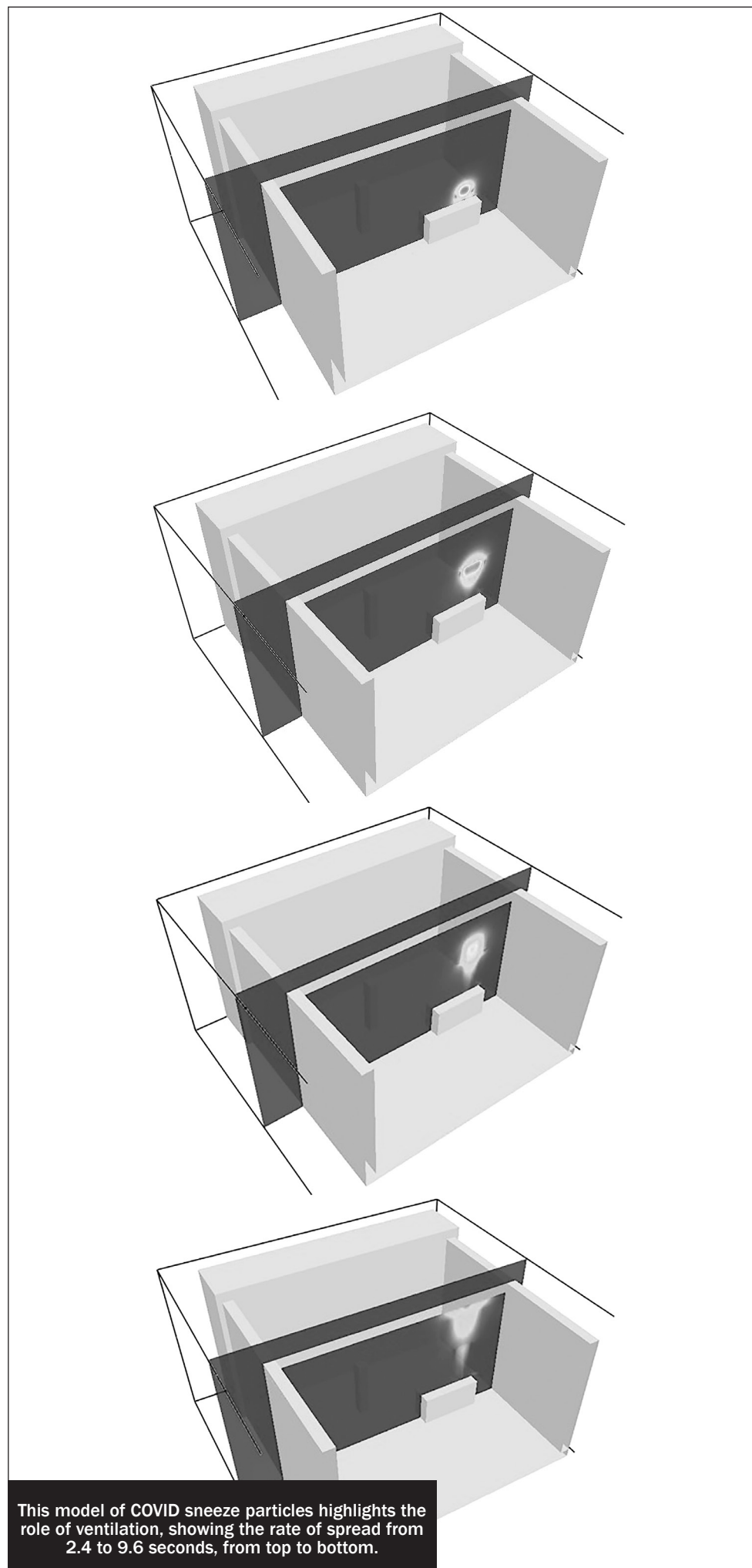
To apply these findings to conventional offices and workplace environments, Code Unlimited studied room configurations with lower ventilation rates and different HVAC injection and exhaust points. Most workplace exhaust ventilation rates are about 10% of those in the operating room. Simulations of these environments showed potentially infectious particles remained airborne for much longer periods, sometimes hours rather than minutes.

Air-handling system designs that inject air near the ceiling, exhaust it near the floor, and allow for circulation throughout the space perform much better than systems that inject and exhaust only at the floor or inject near the floor and exhaust near the ceiling. Local filtration systems, such as high-efficiency particulate air (HEPA) filters also mitigate the migration of infectious particles throughout a space.

HVAC designs based on current codes and engineering design principles emphasize comfort and reduce risks that can injure or kill building occupants. Although some of the United States' earliest building regulations sought to promote hygiene, prevent illness, and improve public health in densely populated urban areas, this emphasis is not so clearly articulated in current code requirements governing HVAC systems when it comes to reducing the transmission of common microbiological agents.

Understanding how HVAC system designs influence the dispersion, condensation, and spread of airborne particles containing infectious agents will help designers, contractors, and building owners create healthier environments for workers and the public. Along with other public health practices these changes can bring us closer to a day when we can gather again with confidence that the risk of infectious disease is manageable.

Mark Chubb is a principal building code and fire analyst at Code Unlimited in Seattle.



This model of COVID sneeze particles highlights the role of ventilation, showing the rate of spread from 2.4 to 9.6 seconds, from top to bottom.

IMAGES COURTESY OF CODE UNLIMITED

# PARKING GARAGES: RETHINKING YOUR FRONT DOOR

PCS offers a guide to designing your patron's first impression.

A patron's first experience with your building is when they enter the garage. How can you make this experience more inviting? Your challenge is to create a parking garage that is more than just a utilitarian structure, but also an inviting and welcoming extension of your building entrance. Focus your parking structure design on user experience — efficiency, functionality, and aesthetics.



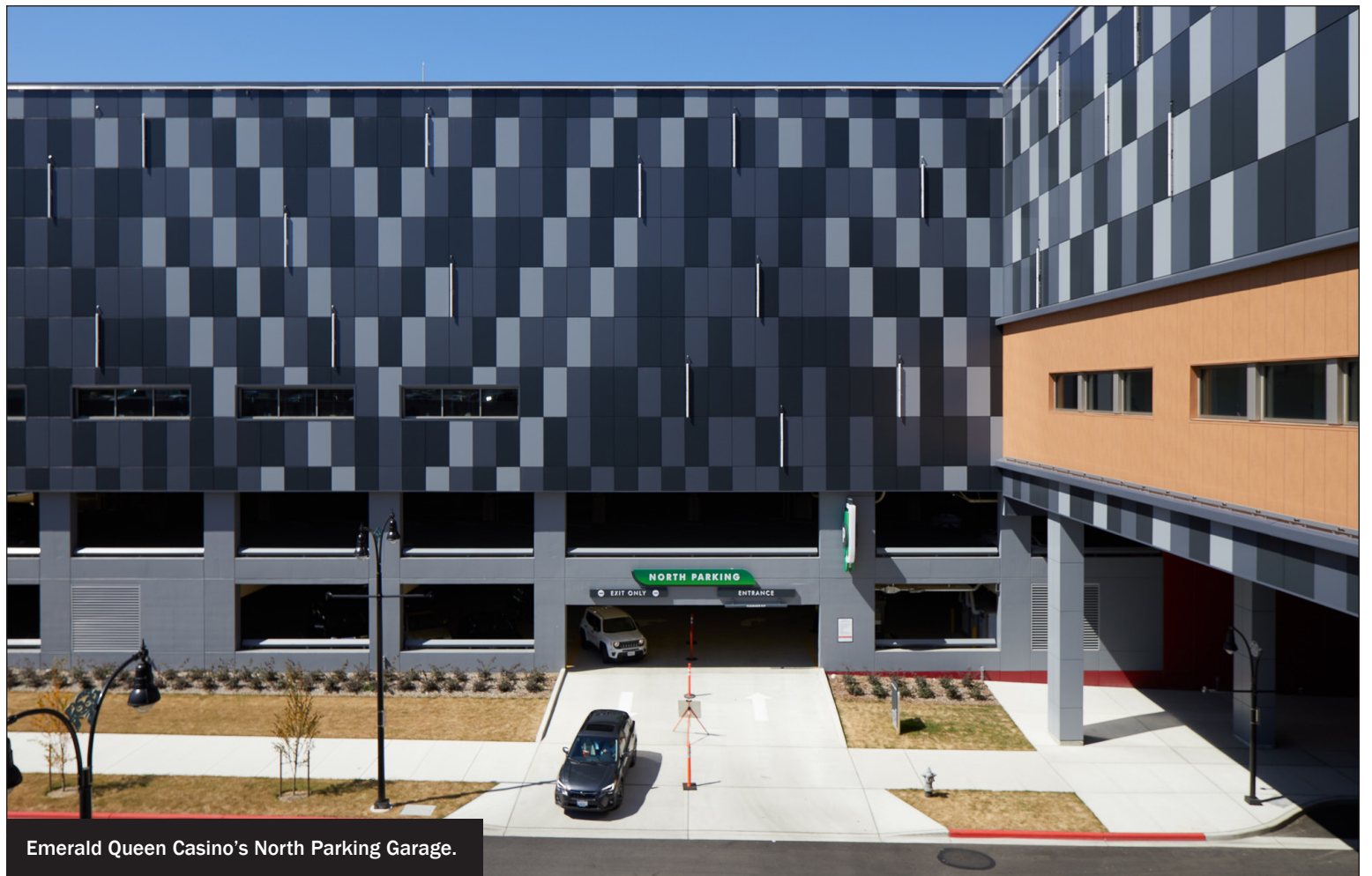
BY JARED PLANK  
PCS STRUCTURAL  
SOLUTIONS

The appearance of the parking garage facade will be one of the first impressions patrons will have as they enter. Ensure that the design visually aligns with adjoining structures and is aesthetically pleasing. Your structural engineer can assist the architect in finding ways to express the structure directly or provide facade support to efficiently screen unfavorable elements. Two points to always keep in mind: Blocking off the exterior affects the interior openness and may require additional fire protection and ventilation. Secondly, enclosing the facade may have a negative effect on your guests' safety perception, especially at stairs and elevators.

Let your signage be the first glimpse into the user's overall experience. It can be panic-inducing for a first-time parker to enter a garage. Designing a clear path to open parking spaces and then lobbies is key to ensuring guest comfort. Level and location indicators help guide individuals to and from their vehicles. User-friendly ramping systems help guests easily find their way through the garage and back to their vehicles.

Lobbies need to be bright, obvious, clean, and unobstructed so patrons can feel safe approaching and leaving. Working with the structural engineer and parking functional designer to locate stairs and elevators is imperative to ensure efficiency and structural simplicity. Stair and elevator access points are ideally situated in the corners of the parking structure or offset from the structure. These locations offer the potential of increased parking efficiency and lower construction cost.

Skybridges and at-grade pedes-



Emerald Queen Casino's North Parking Garage.

PHOTO BY DOUG WALKER

trian connectors should be well thought out and placed in ideal travel path areas. Since the cost for skybridges may be north of \$10,000 per lineal feet, it's important to find efficient and direct paths to cut down on costs and unnecessary pedestrian travel. Your users will appreciate it too!

Your design team can assist in a multitude of structural options for both skybridges and at-grade pedestrian connectors. At-grade connectors should be well aligned with main entrances to avoid zig-zags and hiding places. Straight and short segments are ideal for occupant safety.

Adequate lighting helps patrons feel safe and see tripping objects. Parking structures generally have higher light level requirements than surface lots. In the book *Parking Structures*, by Anthony Chrest, Mary Smith, et al., the minimum recommended illuminance inside a structure is 1 foot-candle (fc) with an average of 4 fc. For the highest level of service, provide a minimum of 4 fc and an average of 10 fc.

A taller space will generally feel more open and accommodating. Select a structural system that conforms to the site and makes the most of the available height. The most common systems for stand-alone garages are cast-in-

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PARKING GARAGES — PAGE 24

## GROCERY STORES

CONTINUED FROM PAGE 21

it doesn't spoil. Under the first law of thermodynamics, all that refrigeration means that supermarkets put off tons of heat, which then goes up into the atmosphere.

It doesn't have to be this way. A new mixed-use development planned for the site of the existing Magnolia Albertson's will be among the first buildings constructed under Seattle's Living Building Pilot Program, meeting the highest standards of sustainability and carbon neutrality. Instead of dumping heat into the atmosphere, a new Safeway on the ground floor will send its heat up into the residential floors above, where it will be used to regulate temperature. As a result, its energy use is expected to be 25% below code requirements, and no fossil fuels will be used for heating water and interior space.

New grocery stores are also being designed to take greater advantage of natural light

from large windows — a break from the nearly windowless designs of older stores — as well as high-efficiency LED fixtures. Low-flow fixtures can be used to conserve water, and non-potable "greywater" can be treated on site and reused for toilets, cooling towers and irrigation. Angeline in Columbia City takes sustainability another step. The mixed-use project was designed with space for urban farming, allowing food to be grown, sold and eaten in the same space — with literally zero carbon emissions from transportation.

Can your grocery store do that?

*Nicholas Simpson is a principal at Bumgardner Architects and is leading the redevelopment of the Magnolia Albertson's as a Living Building Pilot Project with 138 units of housing over a new 29,500-square-foot Safeway.*

## HUMAN SCALE

CONTINUED FROM PAGE 17

ness and flexibility, as the future will bring more infill housing in denser areas on more challenging sites. From backyard cottages (DADUs) to boutique apartments snuck in between existing buildings, finding usable land to add housing in Seattle requires creativity and unorthodox

thinking, as undeveloped sites are increasingly rare.

Looking ahead to the next 30 years, project typology will continue to vary, but JA's values and approach will not: celebration of place, imbued with intimate, human-scaled spaces that draw people in. When applied, the urban fab-

ric will be stronger for it, as idiosyncratic urban elements create the sense of place that communities crave.

*Megan McKay joined Johnston Architects in 2006 and was promoted to partner at the women-owned firm in 2017.*

## PARKING GARAGES

CONTINUED FROM PAGE 23

place concrete with post-tensioning and precast/prestressed concrete. Each have their pros and cons, but the spacing of the beams greatly affects the perception of floor height. The more spaced out the beams, the higher the floor-to-floor height feels.

Below-grade parking is an excellent choice in dense urban areas or on steep sites. However, parking below grade generally comes at a higher cost due to excavation, fire sprinklers, ventilation, and waterproofing. The cost of parking below grade exponentially increases with depth. When parking is needed and ideal for a site, make sure column layout functions well with above-grade uses for best efficiency. When columns from spaces above can't align with parking layout below, consider using transfer beams to allow flexibility between uses. If more than two levels of parking can benefit from using a transfer beam and a significant number of spaces can be gained, the transfer may pay for itself.

As ride-sharing becomes more prevalent, drop-off/pickup signs are increasingly important. They need to be functional, clearly marked and close to lobbies. Relegating these locations to back corners should be avoided for safety and perception of users.

Placement of reserved spaces should be well thought out to ensure

that visitors are given preference. Reserving all spaces on the first floor for VIP, for example, should be avoided to limit visitors passing multiple open, but unusable spaces.

In addition, the need for electric vehicle parking continues to increase. Clear signage is important so that users can find the proper stall.

Structural costs for parking structures range from 70% to 80%. For some other types of construction, this number may be as low as 10%. Thus, structural system layout, span, orientation, size, and ramping are all critical to keeping costs low and quality high. Experienced structural engineer and parking functional designer involvement early in design is critical for project success.

While parking structures serve a simple, practical purpose, they provide an important opportunity to make an impression with your guests. Your customer service begins the moment they enter your structure. Providing a clear, clean path to the front door will make the experience positive and prepare users for good outcomes in your facility.

*Jared Plank is a structural engineer with PCS Structural Solutions and a market leader in hospitality and private development.*

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