

# 10 THINGS TO KNOW ABOUT NONPROFIT HOUSING DEVELOPERS

Affordable housing projects have more complex legal and financial structures than traditional developments.



PHOTO BY MICHAEL WALMSLEY





LOO MAGULA
BELLWETHER HOUSING

here are many misconceptions about nonprofit, affordable housing developers and the homes that we produce. From the myth that we are overly reliant on public funds to the false belief that our buildings are costly and unattractive, developers of income-restricted homes face a never-ending battle

of dispelling misconceptions and stereotypes.

To set the record straight, we've identified 10 key points you should understand about mission-driven housing development

### 1 Public funding generates private funding.

The cornerstone to most affordable housing development is securing city, county, state and federal resources. But that's not where funding ends. Public dollars are leveraged to secure private financing, such as traditional bank debt and Low-Income Housing Tax Credits. For every dollar of public funding received, we generate approximately two or more dollars from private funding.



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PHOTO BY ROBERT WADE

#### We're innovative.

Nonprofit developers constantly look for smarter, better ways to build. That's how we stretch public financing to build as many homes as possible. Bellwether Housing's recent innovations include dramatically increasing building scale, using green building techniques to reduce operating costs, and designing building layouts that reduce construction costs.

#### 3 We compete with market-rate developers for land, labor and general contractors.

Just like market-rate developers, nonprofits are impacted by the region's high land costs and construction labor shortage. Free or reduced-cost land - surplus public land or land from philanthropically minded sellers may offset development cost, but public funding is critical in the Puget Sound's high-cost construction market.

We're cost efficient. Nonprofit developers must make the best use of financial resources. We develop apartments for the same or lower cost as market-rate developers. We also operate our buildings efficiently. Just like a for-profit owner, many nonprofits pay debt service and operating expenses on their buildings. Any cash flow received is reinvested in maintaining our buildings or developing more homes.

#### We develop homes the mar-A ket is not providing.

Most new market-rate apartments lean heavily towards studios and one-bedroom units geared for smaller households. Larger families often struggle in the housing market, frequently squeezing into too-small homes, living in substandard conditions, or leaving the region all together due to a lack of suitable housing options.

Nonprofits develop two-, threeand even four-bedroom permanently affordable apartments to serve larger families. Bellwether plans for 40 percent of the



PHOTO BY ROBERT WADE

homes we build in the next five years to have two-plus bedrooms to meet the overwhelming need for affordable, family-friendly housing in Puget Sound.

#### 6 We build long-lasting, attractive and high-quality homes.

Nonprofits are in it for the longhaul, so we build homes to last for generations. We pick durable building materials that stand up to heavy usage. We choose sustainable building features that will reduce operating costs and energy consumption.

Our buildings are beautiful and complement the neighborhoods in which they are built. Our buildings meet the same design standards as market-rate buildings. We design homes our residents feel proud of, because everyone deserves a dignified place to live, regardless of income.

#### We value partnership.

Arbora Court residents use this gathering space for celebrations, after-school tutoring and community events.

Working jointly with other mission-driven nonprofits lets us tackle larger, bolder and more innovative developments. Bellwether Housing and Mercy Housing Northwest have partnered to build 244 homes next to the future Roosevelt light rail station.

Bellwether and Plymouth Housing have teamed up to develop

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Should you save that building or scrape the site bare and start anew? For Bellevue Club, the decision was to save. To learn more, turn to

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# IS MODULAR THE ANSWER TO AFFORDABLE HOUSING?

Developers must view modular construction as the sum of many parts that add value.

odular design and construction are having a moment, with increased interest in their potential for efficient and affordable housing.

As with any new technology, expectations are high that modular will solve problems that plague the construction and development industry. Many companies and venture capitalists are spending millions trying to disrupt all parts of the development spectrum, attempting to reform design, construction, lending and municipal practices.



BY JOHN A. Morefield Jackson | Main Architecture

Faced with affordan able housing crunch, the city of Seattle, King County and other jurisdictions hope that new solutions such modular quickly remedy а growing problem. While there have

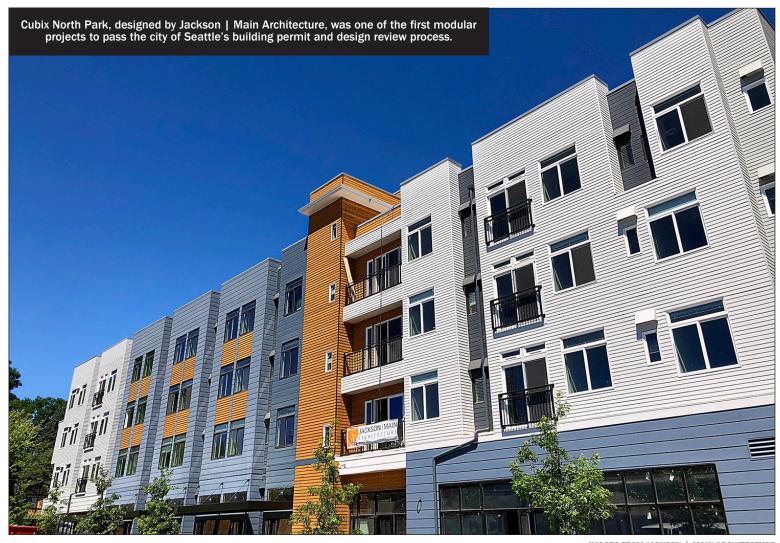
been a few modular housing projects in Seattle, the numbers are not as anticipated. Many are left wondering why developers haven't taken advantage.

The answer lies in further education on how to realize the value of modular, which can only come from direct experience. Because there haven't been many modular projects in the region, the body of knowledge is limited to those who have had a part in putting boxes on site.

With a significantly decreased time to market, and the ability to control quality and lock in labor costs (often in cheaper markets), modular adds value to the entire chain of development, but its success relies on the sum of its parts. To fulfill its promise as the paradigm shift needed to reform the industry, modular design and construction must be reimagined as a highly cooperative and coordinated system.

When considering modular, the first questions typically asked are: "Can I save money with modular?" and "What is the cost per square foot?" The answer is yes, modular construction does save money. Instead of asking about cost per square foot, a more telling question is: "Where can modular construction add value to my project?"

The nature of modular is to build a substantial portion of a project in finished pieces in a factory-controlled environment. Modules are typically 15-by-65-by-12-foot finished boxes that are shipped to the jobsite and assembled in place with a crane.



IMAGES FROM JACKSON | MAIN ARCHITECTURE

Modules can contain everything from completed studio apartments, hotel rooms, or even hospital treatment rooms. Multiple boxes can be assembled together to create larger living spaces and multiple bedroom units or even community amenity spaces.

The units arrive on site with tile backsplashes, cabinetry and fixtures already installed. Setting the units is a matter of days, offering significant savings in time and labor.

During design, careful consideration is made to bring all utility connections through the corridor, so minimal trade work is done within the unit after it is set in place. Utility hookups are completed while the exterior envelope is sealed or "stitched."

#### Parallel development

The real value in modular is in the construction timeline. The modules begin construction in the factory in parallel with foundation development. Ideally, once a podium or slab is ready, boxes are stacked on site, and a five-floor project can go from podium to fully dried in with units in place in less than six weeks.



This parallel development and accelerated timeline potentially saves six to eight months on a construction schedule. The savings are apparent in a tight labor market, as less time on

site significantly reduces costs (not to mention the reduced construction impact on surrounding neighborhoods).

The shorter schedule also allows contractors to better

time construction projects during ideal weather. Foundations are poured in the spring and boxes are set in the summer, eliminating the need to work through the winter or pay to heat a con-

struction site to accommodate weather-sensitive trade work.

Modular construction requires a collaborative approach throughout the entire process to truly realize the value, beginning with involving the architect in lending and financing conversations. The typical shorter modular construction schedule benefits developers by reducing lengthy carrying costs, as well as interest on construction loans.

Lending practices must also adapt to the speed and efficiency of modular construction because a typical draw schedule doesn't apply when 65 percent of a building is produced in six weeks in a factory. Early conversations with lenders can mitigate these concerns but require a level of team collaboration atypical of a traditional development.

#### **Sustainability goals**

The 2030 Challenge for Architecture states that all new buildings, developments and major renovations shall be carbon neutral by 2030. This is critical for the building industry, which represents nearly 39 percent of global carbon emissions, according to Architecture 2030.org.

This ambitious goal calls for innovative strategies to rethink construction practices. Modular construction at its core is geared toward sustainable outcomes. Factory production has been documented to produce less than 2 percent construction waste, where a typical jobsite can see anywhere from 9 to 12 percent.

A case study by the University of Alberta in 2009 concluded that there was a 43 percent reduction of carbon emissions by selecting modular construction over typical site built. The factory environment also pro-

vides superior quality control and access for maintaining tighter air and weather barriers, reducing on-site work and improving the overall energy performance of the building.

#### A roadblock

Modular construction has the potential to provide a disruptive and innovative construction delivery system, but its strength comes from the sum of its parts. There are still critical players in the modular ecosystem that require significant attention to make modular the affordable housing solution that many envision.

Currently, municipalities are not prepared to support modular construction. A typical modular building requires a building permit thorough the local authority having jurisdiction (AHJ), but most of the drawings in that permit are comprised of a pre-approved permit from the Department of Labor & Industries Pre-Fabricated Building Department — two permits in one.

The difficulty has been in identifying the scope of each AHJ, and where L&I begins and where the AHJ takes over. These inefficiencies are being worked through in the city of Seattle, but only by a few pioneering projects and teams that are innovating and adapting as they go.

With permits in hand, difficulties are often met with local building inspectors who are not versed in the methodologies of modular construction. Inspectors can stop work on jobsites from lack of understanding, and non-standard fire and life safety assemblies.

There is much work to do to further educate municipalities and share the information gained A crane set the units at the jobsite in North Seattle.

IMAGES FROM JACKSON | MAIN ARCHITECTURE

from construction and design professionals. This roadblock highlights how the development industry is still rather siloed, and information is not readily shared.

#### Moving the needle

Modular and off-site construction have the potential to provide many affordable, rapidly built, sustainable homes to regions facing affordable housing crises. Jackson | Main Architecture and a handful of other firms are trying to drive innovation and move the needle on the problem.

Great strides have been made

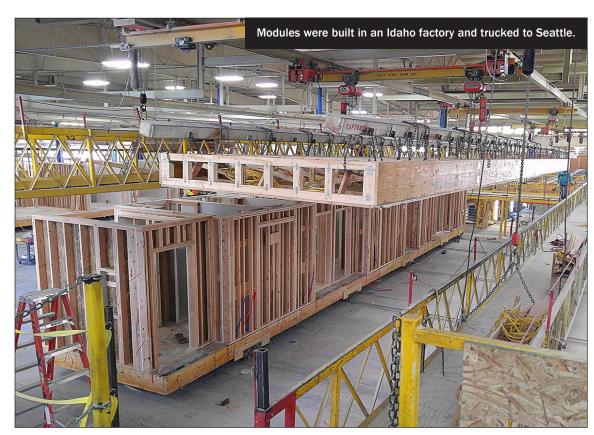
and more progress is on the horizon. Currently, modular is not achieving its full potential and is falling short on the sum of its parts. With more collaboration, policy changes, and willingness among lenders to think outside the norm, real change can be made.

The paradigm shift to modular would be the spark that the development industry needs to gain the overall alignment to deliver affordable housing projects that meet the needs of our region.

With modular projects in the

ground locally, thought leaders such as Jackson | Main Architecture are becoming practice leaders. By remaining open to collaboration and sharing information, experienced teams can pave the way to ease municipalities towards a sustainable solution.

John A. Morefield is an architect at Jackson | Main Architecture focusing on innovative modular design applications and policy development. He is a member of Seattle's West District design review board.





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# DIALYSIS WITH A VIEW: NEW CLINICS BRING IN NATURE

Northwest Kidney Centers is building two clinics with grouped treatment stations facing landscaped courtyards.

magine flying to Chicago from Seattle three times a week, every week, for the rest of your life. This is the typical time commitment for people on kidney dialysis. They sit in a recliner for half a day, connected by tubes to a machine that cleans extra fluid and wastes from their bodies. This is what keeps them alive.

Most dialysis clinics emphasize safety and efficiency over aesthetics. Some patients feel well enough to work on a lap-



BY PJ BAUS

top; others may watch TV, play games or sleep to pass the time. But the surroundings feel, cliniwell. cal. And they quickly grow familiar the 468.000 Americans

who treat their chronic kidney failure with dialysis.

A not-for-profit health care provider in Seattle is set to change that experience. Northwest Kid-

ney Centers has been a leader in the field since it was founded as the world's first dialysis provider in 1962. It will build its newest clinics with an eye to the healing power of nature. This vision aligns with its mission to promote the optimal health, quality of life and independence of people with kidney disease.

#### Thinking differently

"We are now the eighth largest dialysis provider in the country and we rate exceptionally well in federal rankings of dialysis quality. Yet we're always looking for ways to improve patient care," says Austin Ross, vice president of planning at Northwest Kidney Centers.

Since the 1980s, research has shown that hospital patients with a view to nature have fewer negative observations and less pain after surgery. Similarly, employees with views of trees and landscapes took less sick leave per year than those with no view.

With its lengthy hours of con-



RENDERINGS BY MAHI LIM

finement and intensive therapy, dialysis is comparable to inpatient care. Yet connections to nature have not been a focus of dialysis clinics in the United States.

Working with Mahlum, Northwest Kidney Centers has embraced the power of nature to enhance healing and support the comfort and well-being of patients and staff. Taking

lessons from other projects, Mahlum has designed two new clinics with dialysis stations and recovery areas that are human in scale and connected to the natural world.

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#### **Attuned to nature**

The first new-concept clinic is under construction at 4401 S. Trenton St. in Seattle's Rainier Beach neighborhood. It's expected to open next summer. Mahlum's design gives all 12 dialysis stations direct views into a series of landscaped courtyards. During more than 150 dialysis sessions per year, each patient will

enjoy views of lush plantings, seasonal transformations and the changing sky.

Patients will be clustered into "community-scale" groupings of four treatment stations rather than seated in a long row. The new arrangement will feel less institutional and it will allow technicians to be close to the patients in their care.

In the same building, community health education rooms will

host free classes about treatment choices, preparing for dialysis, home dialysis options, nutrition and transplant. For those who choose self-dialysis at home, the facility will include two home-training rooms. At-home treatment avoids the hassles of travel for each dialysis session and it allows for longer, more frequent treatments, closer to the 24/7 schedule of healthy kidneys.

Northwest Kidney Centers selected the Rainier Beach location to bring treatment to patients in an under-served Seattle neighborhood.

"We already have more than 80 patients living within a mile of the new clinic," says Ross, "but currently they get dialysis three times a week at Northwest Kidney Centers' clinics in downtown Seattle or Renton. Many of those patients have mobility issues

and/or depend on public transportation so their travel time can add up to one or two hours each way. This neighborhood location will greatly reduce their time devoted to dialysis and let them enjoy more of regular life."

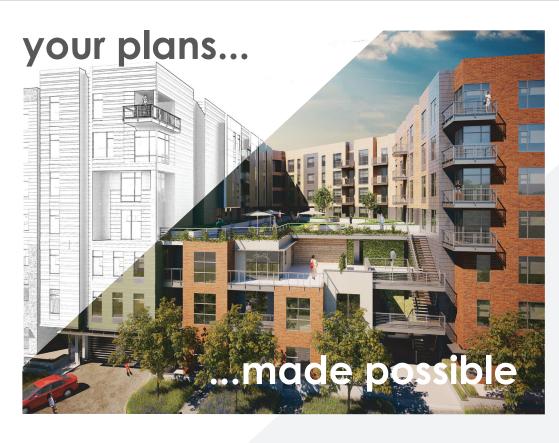
#### **Promising future**

Northwest Kidney Centers and Mahlum will also connect patients to nature in a large new clinic being built at 12901 20th Ave. S. in SeaTac. That clinic is expected to open in about a year, offering 20 stations or capacity for at least 120 patients.

"Leaders at Northwest Kidney Centers and our project team hope that bringing nature into treatment spaces helps humanize the clinical experience for patients and staff, and that it will influence design of the next generation of clinics around the country," says Ross.

country," says Ross.
Early indications are positive.
Clinical staff at Northwest Kidney Centers have already begun requesting the opportunity to work in the new Rainier Beach facility a year before its planned opening.

PJ Bauser, AIA, LEED AP, is an associate principal and designer at Mahlum who promotes the influence of the built environment on healthy communities across the Pacific Northwest.



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# **DEVELOPERS MUST PONDER THIS: SAVE OR SCRAPE?**

There is inherent value in structures that maintain character, reduce environmental impacts or simply lower overall building costs.

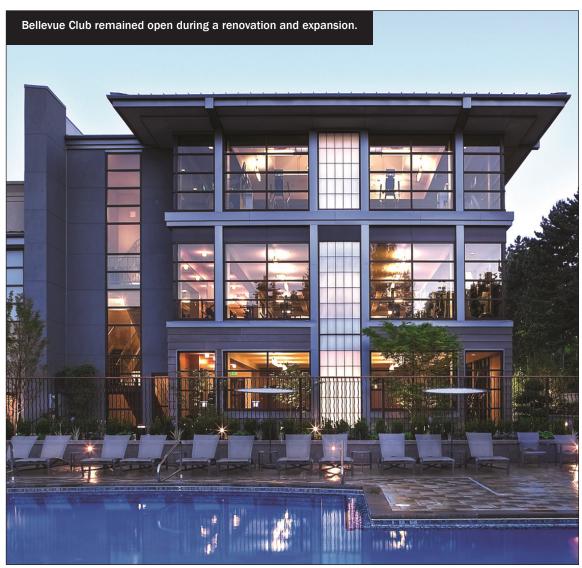


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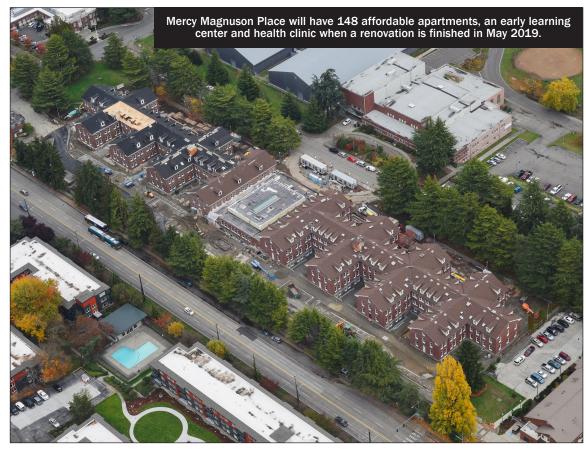


PHOTO BY SKY-PIX AERIAL PHOTOGRAPHY

Residents of in-city neighborhoods know well the trend of a red-hot real estate market: Perfectly good houses are being torn down, replaced by new homes that better suit the needs of new owners. Often, that means maxing out the site

and disrupting the scale and character of their neighborhoods.

The com-

mercial sector is no different. High demand for buildings of all kinds puts tremendous pressure

on urban centers, where vacant ground is rarely available. Developers increasingly look to sites with underutilized buildings and grapple with the decision to demolish the building or renovate and possibly expand and repurpose.

#### Renovate or demolish?

BY BRIAN BRAND

**BAYLIS ARCHITECTS** 

Sometimes it makes sense to start over. Frequently, it does not. Renovating can save money and time, preserve (and add) valuable character and natural assets, save energy and material resources, and reduce waste. While each project is unique, and every owner has different goals, these key questions help owners evaluate whether to scrape or save:

- How strong are the bones? If structural and/or MEP systems need significant modification, you'll need enough value in other areas to offset these costs.
- What are the property's other assets? Mature trees or other natural features, a great location or site flexibility can be just as important as building qualities.
- In what ways does the current building contribute to the neighborhood character, scale, fabric? A storied past, a handsome facade or strong connection to the neighborhood are qualities not easily replicated that grow more valuable over time
- What are the environmental costs/benefits of demolishing and rebuilding? It's often said that the greenest building is the one that's already built, because it embodies energy that doesn't have to be expended to produce a new one. Also, demolishing and disposing of a building is increasingly expensive.
- What does your schedule allow? Repurposing is often faster

#### Some examples

Consider the case of a multibrand, exotic car dealership new to this market. For the company's showroom, Baylis is studying the renovation of a single-brand auto dealership built in the 1980s.

The owner originally wanted to buy vacant land and build new, but our study showed a price-tag that was significantly over their budget. Meanwhile, another site was found, already developed with a car dealership. The structure was in great shape, and it had several features required in the new facility, as well as a better location, access and potential for expansion.

These benefits, along with the money saved by avoiding several code issues associated with developing the first property, reduced costs for the owner by nearly 40 percent.

Baylis has also been involved in creating better spaces for three Eastside athletic clubs.

For both Bellevue Club and Pro Club, given the buildings' strong infrastructure and other assets (parking, location), it made financial sense to reconfigure and update spaces to meet new program and space needs.

gram and space needs.

Different story for a Kirkland-based tennis club, whose 48-year-old, four-story clubhouse would require substantive changes — including new building systems, plan re-configuration and ADA features — to meet code and club needs. After studying the options, we found a cost differential of less than 8 percent between a major renovation and tearing down the building and creating a new clubhouse.

While building the new club-

While building the new clubhouse will be slightly more expensive, it would meet club goals, with room to expand along with a building that meets current zoning and building standards. They are considering their options. What would you do?

Mercy Housing Northwest, Tonkin Architecture and general contractor Rafn Co. are rehabilitating Building 9 in Magnuson Park, a dilapidated barracks built between 1929 and 1940 at Sand Point Naval Base in Seattle. When completed in 2019, the newly renamed Mercy Magnuson Place will include 148 affordable housing units, an early childhood learning center and health clinic.

While the building fell into disrepair after being decommissioned in the 1990s, its historical value and character were intact, along with its key role in the neighborhood's identity. Equally important? A desperate need for family housing in Seattle for people earning between 30 and



IMAGE BY BAYLIS ARCHITECTS

60 percent of the area's median income

While the preservation and adaptive reuse of this large structure and site is challenging in terms of cost, design and permitting, it's worth preserving in the name of providing safe, affordable places to live for working families while preserving history, character and neighborhood fabric.

#### **Creative transformation**

A final example is one of the most creative transformations we've seen in Bellevue: the conversion of a bland, 1970s low-rise office building into the new home for Bellevue First Congregational Church.

The city's oldest church (1896) occupied a 1952 building on

what had become very valuable real estate in the central business district. As part of an extensive strategic and facilities review, the congregation decided the best solution was to sell their long-held property for redevelopment and relocate to a newer facility.

In 2014 First Congregational sold its property for \$30 million, purchased an office building for half the price less than a halfmile away, and hired architect Susan Jones (atelierjones) and Goudy Construction to carry out their desire to create an inspiring light-filled space.

The office building was not the draw — rather it came with underground parking, utilities, an attractive atrium, and zoning that allowed upward expansion, along with solid structural and

system underpinnings.

Jones' design demolished just one corner of the office building to insert a soaring bell tower and sanctuary featuring a 40-foot-tall folded cross-laminated timber wall. The rest of the building was renovated to support administrative, educational and community functions.

Total project cost was around \$10 million (in addition to the building acquisition); the church used remaining funds from the sale to establish an endowment that could be used for mission-driven projects in the future, including building development.

Building on one of the few raw pieces of ground in downtown Bellevue would have required far more money, at much greater environmental expense. Instead, the church's facility and ministry needs are met, the block is improved by an inspiring design that demonstrates an important new sustainable building approach, and the life of a 50-year-old building is extended by several decades.

#### Not so fast

Whether a custom home, multifamily or commercial building, whether 20 years old or 120, the decision to save and renovate always comes with a calculation of costs and benefits. Too often however, this analysis falls short, focusing solely on dollars at the expense of long-term value. As the church example demonstrates, not every building is special, but that doesn't mean it isn't worth saving.

Yes, we need the density in our urban centers and yes the market is hot — time is money, the market doesn't wait — we

get that. We also know there is always a market for value, especially the value inherent in structures that maintain character, reduce environmental impacts or simply lower overall building costs.

Tearing down in the rush to keep up with the market risks demolishing the very traits we love about this place. We can't get those back, and indeed much has already been lost. Surely, it's worth slowing down enough to consider whether we're creating a city we still want to live in.

Senior Principal Brian Brand joined Baylis Architects as its first employee in 1972. He has designed custom homes, apartments and condominiums, office buildings, community and sports facilities, and a King County courthouse.



PHOTO BY LARA SWIMMER PHOTOGRAPHY



# NEW STAGE FOR BUSINESS DEVELOPMENT: SETS, COSTUMES, HUMOR

BCRA staff trained for business development through learning-by-doing.





BY KAREN Johnston

SCOTT Johnston

SPECIAL TO THE JOURNAL

major event was about to begin on an atypical Thursday afternoon at BCRA's Tacoma office. A project manager was lying on a couch, eating popcorn, on a makeshift set at the front of the big conference area. Twenty judges' chairs (holding clipboards with evaluation criteria) were angled in front of the set with 50 chairs behind for BCRA staff. Two cameras were set up with a large screen to connect with those off-site.

Around the office, people in costumes scurried to complete a task or to practice one final time with a colleague. An architect wearing a green wig was pacing and gesturing at the back of the room. In the main event room, attendees were starting through the food and drink line.

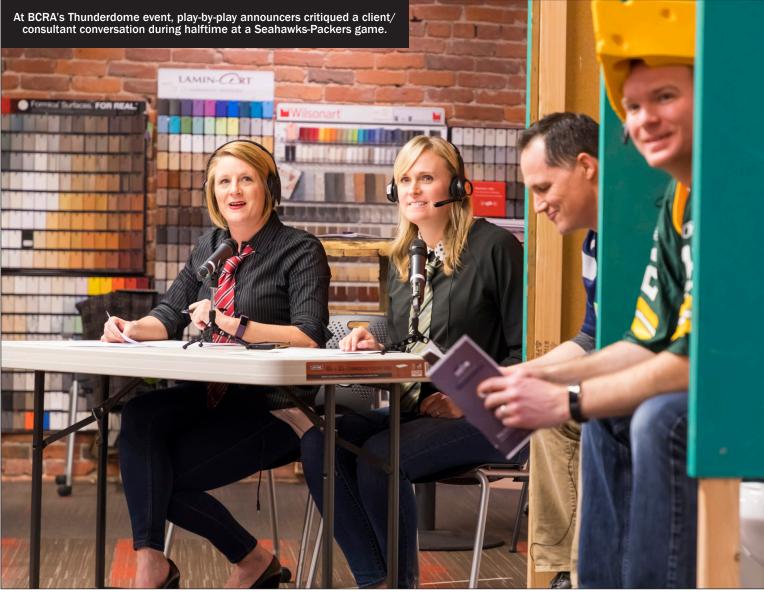
Were these architects and engineers trying out for a reality show? No, this silliness was a calculated strategy to invigorate important business development (BD) ideas and practices in the firm. Teams were competing to determine which of them was best able to demonstrate the most effective BD practices.

BCRA named the event Thunderdome after the gladiatorial arena in the movie "Mad Max Beyond Thunderdome" — and the showdown was about to begin!

#### Why accelerated learning?

How does wearing a green wig motivate technical professionals to develop business? The answer is two words: accelerated learning. These principles create learning by doing. The learning concepts and skills must be not only understood and explained—they must also be demonstrated and evaluated by others.

For today's ambitious, smart professionals, accelerated learning experiences get results quickly and ingrain behavior change that lasts.



PHOTOS FROM BCRA

#### What prompted Thunderdome?

In 2015, BCRA, a 100-person architectural firm with offices in Tacoma and Seattle, asked Johnston Training Group to train 25 of its technical professionals in BD.

That program, which also was designed using accelerated learning techniques, helped these architects, engineers and designers understand and implement key elements of developing business through problem solving, not selling. They learned what to say and do during a meaningful BD conversation, how to make time to develop business and overcome resistance, and strategically whom to contact.

Over time, the firm grew, leadership shifted, and the market changed. New technical people with a variety of skills and experience came on board. The firm

needed a BD recharge — but not a repeat of what many had already experienced.

### How was Thunderdome organized?

Those who had participated in the original program were divided into teams of four people and were assigned one of the following BD concepts to teach:

- Create and use stories and examples from BCRA projects that connect with client needs.
- Network effectively.
- Ask questions that uncover what is important to the potential client or referral.
- Build effective BD habits and figure out how to find time.
- Conduct conversations with contacts about their needs and concerns, not just about how great BCRA is.

Each team had eight minutes to present their idea creatively—no long speeches, no lectures, no PowerPoint. Sets, costumes and humor were encouraged. A useful summary of key ideas had to be distributed to the audience at the end of the eight minutes.

Management offered a substantial amount of prize money for the best presentation. Suddenly teams were huddled behind closed doors with DO NOT DISTURB posted on the outside. Rehearsals were scheduled on Sunday mornings. Of course, sets were built first — after all, these are architects and engineers!

Who were the judges? The panel consisted of 20 junior staff who needed BD training in the multiple markets that BCRA serves. Yes, you read that right. The professionals who had joined the firm in the past three

years — not the firm's leadership — decided who won the prize money.

The criteria each judge used were:

- 1. Which team helped me understand and use their BD concept?
- 2. Which team was the most creative?
- 3. Which team was the most prepared?
- 4. Which team had specific information that I can use?

"Thunderdome helped create a common BD language with more people who may not have been a part of the previous trainings," said Justin Goroch, a senior associate and civil engineer who played the role of Jim Halpert in his team's skit based on TV sitcom "The Office."

What were the other benefits? The activity expanded the seller-



doer model because those who knew how to develop business were forced to explain what they do and why to their co-workers.

Landscape architecture lead Jon McNamara said, "Writing up the questions that I would ask my client about his upcoming project was really helpful. And even though I initially thought the event would be corny, it was actually the best training event I've ever participated in."

The judges could connect the projects that they were working on now with the work that was required to build those trusting relationships initially. They realized that effective BD is more than simply going to networking events.

The judges also saw the considerable effort that senior staff took to make the event effective.

Engineer-in-training Ryan Baltazar commented, "They did all of this work to help us learn. Wow!"

#### What happened after the event?

From the event, market leaders emerged.

Stuart Young, one of the three managing partners, said, "We now have a common understanding of what we want to accomplish, and we often refer to a skit to make a point to ourselves."

#### **Accelerated learning**

Accelerated learning is a complex process in which certain ideas are crucial to making the activity a success. Here are some tips:

Set clear learning objectives and evaluate success on observable behavior.

BCRA wanted to bring BD information and skills to newer employees.

# • Learners must apply the concepts and skills, not just explain them.

That is why speeches and presenting general ideas through PowerPoint were not allowed.

#### Offer a prize worth winning.

The energy changed dramatically when a big-dollar amount was available.

#### Have creative and committed internal coordinators.

In this case, BCRA's marketing and business development leads, Dara t'Sas and Gareth Roe, organized, encouraged and prepared the judges.

#### Capitalize on the naturally competitive nature of smart professionals.

That is why everybody had a speaking part. Some of the best insights came from people who came forward only because they were required to.

### • Don't succumb to the natural excuse "we are too busy."

When you mix fun, competi-

tive spirit and money, technical professionals will find the time.

# • Limit the firm's leadership participation to appearing in cameo roles after the general approach is organized.

The firm's three managing partners — Don Mellott, Doug Oberst and Stuart Young — all had brief, and hilarious, appearances!

#### Have a follow-up plan in place to build on the learning; measure results.

The market leaders from this program went on to get additional training and to lead teams.

Albert Einstein said, "I never teach my pupils. I only attempt to provide the conditions in which they can learn."

Thunderdome provided the conditions to reinvigorate business development at BCRA. The event proved so successful that "Thunderdome: Part Deux" is in the works!

Karen and Scott Johnston lead the Johnston Training Group, which offers interview coaching, presentation skills and business development for AEC firms.

Searching spec books has never been easier.

Plancenter covers the Great Northwest with projects located in Washington, Idaho,

Oregon and Alaska.



PUBLIC AGENCIES POST FOR FREE

#### **NONPROFIT**

**CONTINUED FROM PAGE 3** 

Seattle's first affordable highrise in decades.

Our partnerships create cost efficiencies, combine organizational capacity, and most importantly, multiply our impact in meeting the need for affordable housing in our community.

### Our team skillfully negotiates complex deals.

Affordable housing developers deal with all the challenges of real estate development — and much more. Our deals have more complex legal and financial structures. Our financing comes with rules and regulations market-rate developers don't face.

To navigate these complexities, Bellwether has assembled a development team with expertise in market-rate development, architecture, public policy, urban planning and direct service. This breadth of knowledge uniquely positions us to successfully develop income-restricted housing.

# 9 Our homes create stronger communities.

By locating our buildings in great neighborhoods — near transit, schools and job centers — we ensure that we are all surrounded by a diversity of ideas, perspectives and cultures, and can share in our region's success.

We employ "resident service coordinators" to assist residents in connecting to services that support housing stability

and build community.

The people who live in our buildings report many successes including improved educational outcomes, increased health and well-being, and professional advancements.

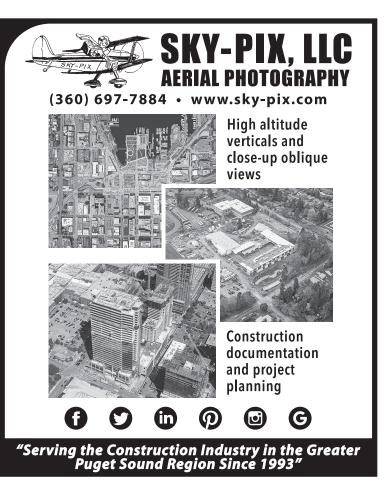
### 10 Our residents are just like you.

For many people in the region, rents are increasing faster than wages. Access to affordable homes helps give our residents peace of mind and security that they can afford to remain in their communities. Our residents include families with kids, young people starting out, recent immigrants and seniors.

For some residents, a Bellwether home means exiting the trauma of homelessness. Your Bellwether neighbors might be teachers, students, bus drivers, veterans or social workers. Our residents are an essential part of the economic and social fabric of our region.

Affordable homes are vital to our collective prosperity. Bellwether's comprehensive approach to real estate, property management, and community development supports positive outcomes for residents and our region.

Bellwether Housing is Seattle's largest nonprofit provider of affordable housing. Richard Loo leads Bellwether's Real Estate Development team. Claire Magula promotes Bellwether's development work and is a Bellwether resident.









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# WHAT HAPPENS WHEN BIG TECH MOVES INTO SMALL CITIES?

Many suburban jurisdictions aren't staffed to handle large, complex projects.

echnology companies are breaking the mold of traditional office space. They want work spaces that are multifunctional, open and dynamic - where conversation, collaboration and creativity are fostered with visual and spatial connec-

> tion throughout all levels of the building.

By providing With this is



BY TANYA WUERTZ **CODE UNLIMITED** 

mind, more tech companies are asking themselves, "Where and how can we create this vision?"

In the Northwest, these opportunities are emerging in the suburbs of Seattle. These are no longer bedroom communities, rather they are small independent communities — such as Redmond, Bellevue and Kirkland — surrounding larger metropolitan areas. They have developed their own epicenter by welcoming new tech companies.

The draw for these companies is simple: The location affords them the ability to create a supportive environment for their business and employees.

#### **New construction**

New technology ventures,

whether digital or physical, have complex programs that drive building requirements beyond what can be supplied by the existing real estate inventory in urban environments. When space is available in the city, it often requires adaptive re-use to meet these innovative goals.

This development can be timeconsuming, expensive and difficult - evident particularly in seismic zones where stringent structural requirements are challenging to retrofit. New construction, however, is more predictable and less burdened by existing conditions that require improvement.

In terms of size, quality and security, urban environments cannot compete with the opportunity to grow from an undeveloped piece of land. Work environments must be modern, with leading-edge laboratories and meeting spaces, to attract and retain the caliber of employee these companies are seeking. Amenities such as outdoor spaces, cafeterias, gyms, lounges and convenience services are mandatory.

This holistic design of a workday results in buildings that function as small, self-sustaining communities within the confines of building walls. This must be achieved in tandem with environments that serve particular business needs.

Whether it be sophisticated cleanrooms, vibration-sensitive facilities, or a flexible design that allows for quick response to market conditions, the design of these buildings requires forwardthinking skills.

Fire-life-safety codes often do not address this level of innovation. Designers find themselves struggling to implement new materials, construction processes or unprecedented engineering within the confines of the building code. However, a code consultant with a deep understanding of the intent of the code can offer solutions that are refined and creative.

The benefit goes beyond reading the code and applying it; rather, it is about understanding the functions happening in the building and crafting a solution that addresses both occupant safety and feasibility. Integrated solutions require a dynamic application of the code, not a static one.

#### **Review process**

One overlooked challenge for those seeking development in these small communities is navigating jurisdictional review. While there may be fewer physical restrictions, hurdles such as land-use, zoning and entitlements must be balanced with building and fire code requirements.

Acknowledging discrepancies early allows for clear definition of the conflicts to identify an appropriate solution in alignment with the goals of both imperatives.

Small jurisdictions are not always staffed to accommodate projects of this size and complexity of scope. Not only does this stretch their resources, but it may also push their technical expertise, driving the need for third-party reviews.

A code consultancy brings a broad range of experts — from licensed architects and fire protection engineers to contractors, structural engineers, plans examiners and accessibility experts — to facilitate these collaborative conversations. We speak the same language; clearly communicating and negotiating with jurisdictions, we meet them where they are at. We learn their concerns and find creative ways to address them. This is the key to moving a project forward.

For example, Code Unlimited has managed incorporation of cross-laminated timber (CLT), atrium smoke control, structural fire engineering and future code changes. We have done this by:

- Providing engineering judgment letters to address detailing at CLT connections.
- Reducing the cost of smoke control mechanical systems with targeted fan placement derived from smoke modeling.
- Eliminating fireproofing based on increased steel member size.
- Referencing future code changes to provide a documented pathway for less restrictive podium buildings and roof decks.
- Applying more realistic techniques for classifying occupancies and calculating occupant load that address occupant awareness and combustible loading in alignment with the new ways people are working in office spaces.

Growing pains are inevitable in

BIG TECH - PAGE 19



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# HERE'S SOUTH LAKE UNION'S NEWEST INNOVATION HUB

The 10 blocks that make up Dexter Corridor are attracting top life science and tech companies.

ntil the early 1990s, the South Lake Union neighborhood was largely characterized by decades-old residential and light-industrial buildings that functioned somewhat inconspicuously in the shadow of Seattle's vibrant downtown core.



BY MIKE RUHL **BIOMED REALTY** 

Recent real estate cycles have brought about a collection of new buildings everything from marketapartand

rate ments Class A office, predominantly for technology innovation, to life science and medical-research buildings -

that have forever changed this

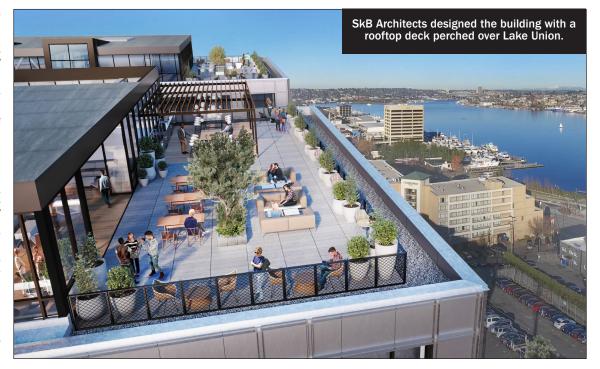
burgeoning neighborhood.

The neighborhood's wholesale redevelopment has come about in response to an expanding economy, increased demand for close-in space, and the ongoing densification of Seattle's urban core. Like any changing community, South Lake Union's new construction has been delivered in waves, with buildings coming online over several development cycles and in distinctive geographic areas, or clusters. The neighborhood's growth reflects both intentional city planning and entrepreneurial developers meeting innovation companies' seemingly insatiable appetite for skilled local labor.

For South Lake Union, most of the new development has taken place south of Mercer Street, to roughly Denny Way, and in between Interstate 5 and Ninth Avenue North. These boundaries represent an ever-expanding neighborhood with existing and future tenants including Amazon, Google, Fred Hutchinson Cancer Research Center, University of Washington, Center for Infectious Disease Research, PATH and many others.

#### Coming of age

In recent years, there has been an increasing amount of construction in a once-quiet subsector of the South Lake Union neighborhood. This area, Dexter Corridor, is just north of where most of the redevelopment has occurred to date, comprised of roughly 10 blocks of prime commercial real estate that's quickly attracting some of the world's



top life science and tech com-

Firms like Facebook, Juno Therapeutics and Battelle, and research organizations such as The Bill and Melinda Gates Foundation, are coming to the Dexter Corridor to take advantage of its convenient access to freeways, restaurants, retail and public transportation. These industry and community powerhouses are also drawn by the area's central location which, depending on the building, can offer 360-degree views of Lake Union,

downtown, Elliott Bay and the Olympic and Cascade mountain ranges.

#### **Dexter Yard joins in**

One of those buildings is Dexter Yard, a Class A project being



IMAGES FROM BIOMED REALTY

developed by BioMed Realty, a provider of real estate for life science and technology communities. The project, between Dexter and Eighth avenues north and Roy and Valley streets, is due for completion in the third quarter of 2021. Dexter Yard will deliver some 515,000 square feet of tech-office and life science laboratory and office space, in addition to 25,000 square feet of ground-floor retail.

BioMed partnered with SkB Architects to create a building that respects the history and character of South Lake Union's industrial past, while also developing a project that functions just as well for life science companies as it does tech firms. The building's strategic design is being marketed to software developers, web-based companies, and life science and biotech firms looking for one of the last opportunities to lease Class A space in the neighborhood.

To that end, nearly two-thirds of all office space under construction in the Puget Sound region has been pre-leased, according to David Abbott and Laura Ford, executive vice presidents with Colliers International who are marketing the project for BioMed.

Dexter Yard has high-quality, technology- and laboratory-capable facilities with floor-to-ceiling clear heights and specialized electrical and plumbing sys-



tems. The project also offers flexible floor plates averaging 21,500 square feet and immediate access to on- and off-site amenities that are increasingly attractive to tech companies.

SkB's design inspiration for the 15-story Dexter Yard project was centered around the history and character of South Lake Union's industrial past, as well as the area's ability to bring together people and companies with innovative, world-changing ideas. The Dexter Yard name reflects the project's open, community-centric orientation: The building's through-block connections and amenity space were designed to invite on-going activity and community engagement.

One of Dexter Yard's most unique spaces is The Field House, a full-sized open athletic field that invites tenants and neighbors alike to play on site. BioMed and SkB envision The Field House being highly flexible, whether it's used for soccer or ultimate Frisbee or just enjoying the space as a spectator.

#### Clusters and collisions

Dexter Yard is the latest in a growing portfolio of BioMed's

commercial developments in the Seattle area. The company — which owns and manages Vue Research Center at 307 Westlake and the Omeros Building — believes there's strength in numbers, particularly when it comes to the successful operation of tech and life science firms.

Many of these users have

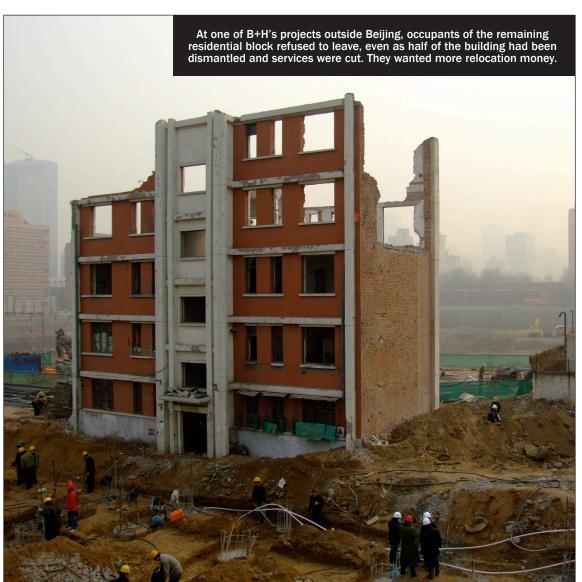
INNOVATION HUB — PAGE 19



MAGES FROM B+H ADVANCE STRATEGY

# EAST MEETS WEST: PLANNING LESSONS LEARNED FROM CHINA

There are tremendous opportunities to reframe our mindset towards future development, especially as we invest in new transit links.



A fter 15 years living in Beijing and Shanghai designing and planning projects across China, from remote loca-

DV CIIV WAITED

BY GUY WALTER B+H ADVANCE STRATEGY

tions to mega cities, struck by three significant differences since moving Seattle: The perception of scale between East and West coasts; the drivers determining a development's mix of uses; and

how a development's timeline can impact the outcome of projects.

#### A question of scale

In China, growth is happening on a massive scale. New cities materialize where industry and agriculture once stood, while vast corporate campuses bloom around elaborate infrastructure systems. The Chinese take this growth and expansion as the norm — a sign of prosperity.

Although development is happening on a large scale, there are lessons to be learned to ensure that it doesn't eradicate the rich existing structures that work.

In Seattle, there seems to be a perception that new developments tower over buildings that existed there before. Density and height discussions focus on aesthetic and visual impact to neighbors first — and benefit for the common good last. The long-term socio-economic benefits and opportunities are often overlooked and depreciated.

#### **Winners and losers**

Projects in China set out with the highest of intentions. Clients are often driven by the desire to do whatever it takes to create truly sustainable solutions to environmental, social and economic prosperity.

Trade-offs diminish barriers that many developers face. For example, China makes it economically viable for developers to provide housing to displaced citizens and communities. Developers will build market-value housing for the displaced, and the percentage of these units is insignificant in the scale of the overall mix of market-value units within the density of the new development.

The belief is that this approach improves living standards and creates better access to jobs. However, the homogeneous norms designed to attract new residents to "destination" cities instead eradicate the cultural and historical foundations that anchor communities to a sense of place.

#### High tide lifts all boats

As the Puget Sound region, and



Seattle in particular, strives to densify, there are lessons to be learned from China's humanfocused development practices.

Developers in Seattle can take advantage of a high tide that could lift all boats. There are tremendous opportunities to reframe our mindset towards future development, especially as we invest in new transit links that will create opportunities for better city and community building. As a city, we should:

**Look beyond the fence.** In our strategic planning practice, we invest a lot of time in thinking holistically about the mix of adjacent businesses, services and opportunities beyond site boundaries. What's already there? What's missing?

Thinking about how adjacent stakeholders can benefit through a shared vision creates opportunity for additional capital partners and serves the whole community, not just the development's target population.

Paint an irresistible vision. The most sustainable developments are embraced by the community at-large because they create local economic engines that benefit the whole. A compelling vision of community provides desired amenities, services, jobs and social attractors. This vision becomes a narrative that animates communities and turns naysayers into strong advocates.

While the approach in the past in China has been to gamify a community through thematic approaches, future generations crave a sense of authenticity that reflects a region's unique assets and attributes.

3 Density creates room for old and new. We can learn from one of China's harshest lessons: Despite the government's best intentions, the bright new developments have created enough

density to support housing for existing and new populations but have no sense of history or culture. New populations struggle to bridge the economic divide that separates the new middle class

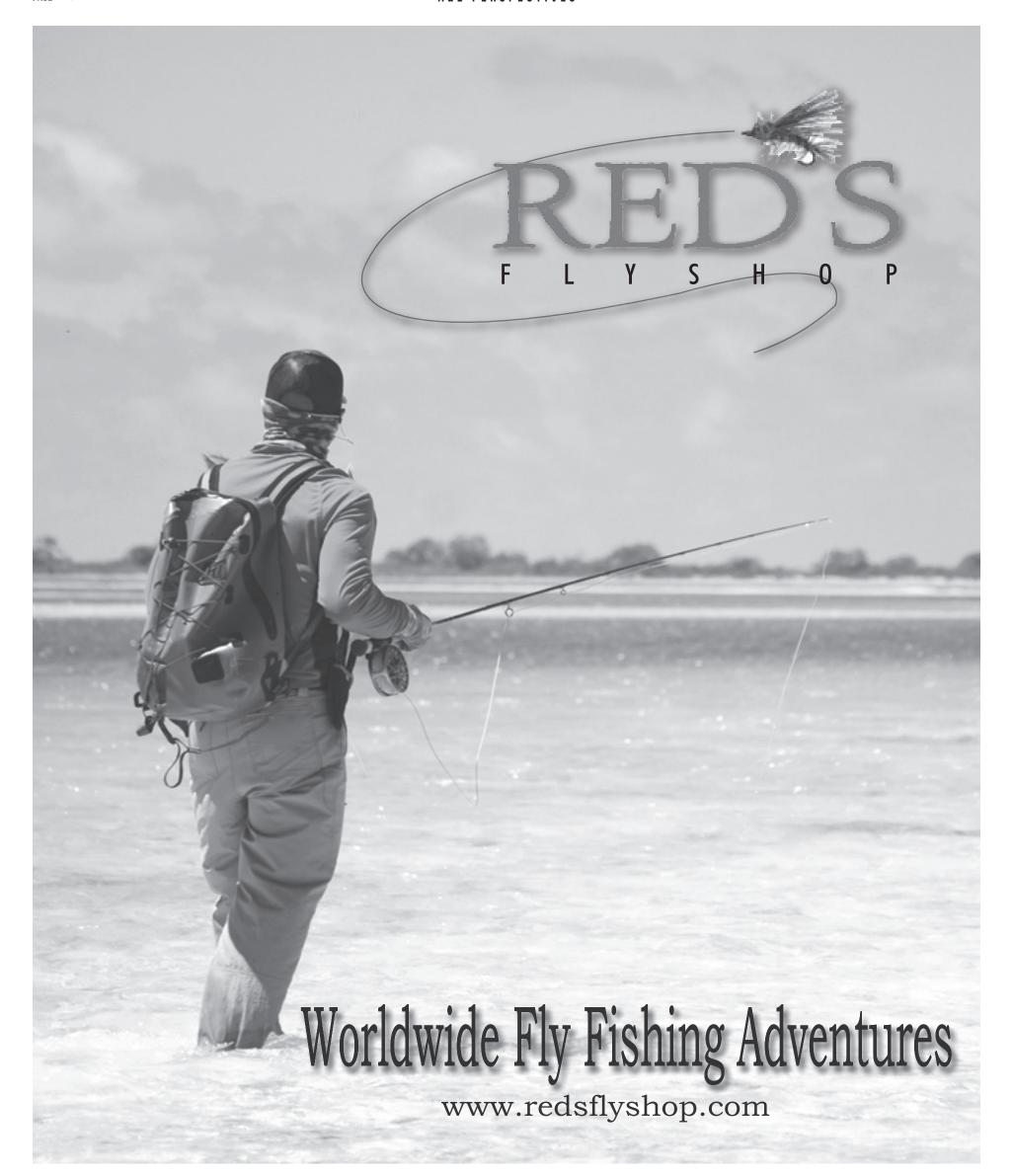
from the developer's image of

prosperity for all.

As we look to solve our own increasing disparity, we need

CHINA --- PAGE 17





#### **INNOVATION HUB**

**CONTINUED FROM PAGE 15** 

already moved their operations to the Dexter Corridor, with others waiting patiently for additional opportunities to become part of the area's growing concentration of innovation-based neighbors.

One of them, University of Washington, has invested heavily in the South Lake Union neighborhood already, with the final building of its multi-phase medical-research campus slated to break ground near Dexter Yard in 2020.

The Dexter Corridor is a place where creative people and their ideas frequently "collide." At first glance, it could seem that having multiple technology and life sciences companies near each other could lead to unhealthy competition. But BioMed and its construction partners believe the opposite is true — having competitive firms, educational institutions and research organizations near one another encourages growth.

Collision spaces also spur new ideas and creative thinking, which are critical activities for the health and prosperity of the Dexter Corridor and other innovation hubs.

When Seattle's earliest settlers arrived along the shores of Lake Union in the 1850s, they could not have possibly imagined what the neighborhood would become some 150 years later. Today, South Lake Union is a thriving, sophisticated mixed-use community where companies are discovering therapies to treat some of the world's most challenging diseases and creating new technologies that are reshaping our business and residential communities and

transforming our lives.

Many of these firms are becoming part of the fabric of the Dexter Corridor, a fast-developing innovation hub where projects like Dexter Yard are poised to support collaborations and idea exchanges — as well as a place to live and play — that will offer new promise for generations to come.

Mike Ruhl is the vice president of leasing at BioMed Realty, which is developing the Dexter Yard life science and tech building in South Lake Union. Ruhl works in the Seattle office.

#### **BIG TECH**

**CONTINUED FROM PAGE 13** 

the development of the relationship between these trendsetting companies and jurisdictions. However, there are benefits to both through a sustained relationship.

Retaining an expert to guide the discussion on code issues can save time, money and headache. This choice allows jurisdictions to sleep at night and designers to spend more time in creative design development. Perhaps most importantly, it allows owners to achieve the buildings they envision to meet the ever-changing needs of their business and employees.

Tanya Wuertz is a senior code

analyst at Code Unlimited, a building and fire code consultant to architects, engineers and developers. Wuertz has over 20 years of experience in architecture, design and project management, with a focus on large-scale campuses and tech industry projects.

#### CHINA

**CONTINUED FROM PAGE 17** 

to create more than just the density to support affordable housing. We must seek to intermingle low-income and affordable units within a development that also provides easy access to well-paying jobs, childcare and support services for all segments of the population, removing the "us" from "them" stigmatization.

**Mix, scale, flex, apply.** We often overcomplicate things, but the basic ingredients are very simple. Programming is easily adaptable, the model is flexible, and each development can have a different driver: a community college, a hospital, a corporate headquarters. The secret sauce is in identifying the critical mix of social and community spaces, services and amenities that will allow each neighborhood to thrive. Residential development can't be a driver alone.

As we plan communities, we should pay more attention to human factors that matter most. Housing is not in and of itself an economic driver. Desirable places to live offer a diverse mix of programs that create a self-sustaining, locally relevant socio-economic environment. Short-term profit margins and schedules will ultimately fall short over time if they ignore the importance of the very things that bind us.

Guy Walter is a principal at B+H Advance Strategy. For more than 25 years he has worked throughout North America, the Middle East and Asia advancing the business case for large-scale planning and urban design that is culturally, environmentally, economically and socially responsive. He recently relocated to Seattle after more than 10 years in China.



# USING INSULATED METAL PANELS? IT'S ALL IN THE DETAILS

IMPs offer quick installation, advanced thermal performance and a tight air/weather barrier.





**ITTNER** 

**ZUGER-CHENEY** 

SPECIAL TO THE JOURNAL

nsulated metal panels (IMPs) are an exterior cladding system that can be used on virtually any type of facility and are commonly found on industrial-type structures such as storage buildings or warehouses.

IMPs offer design and construction teams numerous benefits, such as quick installation, advanced thermal performance and a tight, continuous air/ weather barrier. This continuous insulation, which meets the 2015 Washington State Energy Code requirements, also helps minimize heating and cooling costs.

To ensure the building envelope performs properly in structures that incorporate IMPs, designers need to pay close attention to how the IMP system interfaces with adjacent envelope and structural systems to achieve optimal performance. When working with building owners and designers, Nexus bec Inc. focuses on avoiding thermal bridging, selecting the right sealants and correctly sealing penetrations through the IMP system. When these details are specifically addressed, owners can get the most out of this efficient and cost-effective system.

#### **Avoid thermal bridging**

Thermal bridging occurs when a material that is more conductive than the materials around it spans continuously from the exterior of a wall assembly to the interior of a wall assembly, effectively creating a bridge through the thermal barrier of the wall that allows for the accelerated flow of heat. This frequently occurs at wall studs and is commonly visible on cold days where framing appears to be "shadowed" on the exterior face of walls.

Any structure is susceptible to thermal bridging, but it is a specific concern with metal-framed structures. The biggest concern is thermal bridging will allow for condensation to occur within a wall assembly or on structural members, frequently resulting in deterioration and organic growth within insulation and on gypsum

From an energy-efficiency standpoint, thermal bridging has a significant negative impact on the effectiveness of the building's insulation. For example. metal-framed walls with only batt insulation can see a reduced effectiveness of the insulation of up to 63 percent due to thermal

Advances in IMP construction and detailing, particularly in sealing at panel joints, have helped remedy this issue. This exterior cladding system itself is designed to avoid thermal bridging; however, it is still possible to find IMP systems that do not properly address this concern due to insufficient joint detailing, improper roof-to-wall transitions, and transitions from IMPs to other adjacent materials.

Generally, IMP packages are designed as a complete system, but often project-specific details for transitions are left to the general contractor to determine in the field if not properly captured during design. Design-build projects are most susceptible to "gaps" in the details. For this reason, it is important to pay close attention to joint detailing and how well the IMP details allow for integration with adjacent materials when selecting a system.

#### **Selecting sealants**

Sealants and self-adhered membranes are a critical component in any IMP system and the role it plays as part of the whole building air barrier. The exterior metal face on the IMP will naturally expand and contract with changes in exterior temperature throughout the seasons or even over the course of a day. This thermal expansion may cause panels to bow and shift. putting tremendous strain on sealant joints, both adhesively and cohesively.

It is crucial the design team specify sealants or self-adhered membranes that provide durability, flexibility and exceptional elongation properties over the life of the IMP system.

When specifying a sealant, design teams must consider the regional and specific microclimate around the building, taking into account solar exposure of the panels, wind exposure and potential sources of humidity that may impact both the installation and long-term performance of the sealant.

Considerations beyond climatic conditions potentially affecting the sealant and air-barrier performance are structural movement anticipated (i.e. high wind exposure) and the intended use



**IMAGES FROM NEXUS BEC INC** 

of the building where excessive temperature and humidity may be present on the interior.

These types of conditions may further concentrate performance issues on the sealant joints, which are the most dynamic part of the IMP system. It is important to consult with the IMP manufacturer to make sure the sealant specified has proper adhesion qualities for the intended use, followed with an adhesion test to ASTM standards.

#### Seal from air and water

Every building will have some sort of punched opening, such as windows and doors. It is essential these openings, along with the transitions from slab/ foundation to walls, walls-to-roof assemblies and other penetrations (louvers, vents, electrical junction boxes, security cameras, etc.) are properly detailed to ensure a proper seal for air and water

The redundancy and layering of built wall systems do not exist in the barrier-type system of an IMP, particularly leaving penetrations exposed to climatic conditions. Since many IMP manufacturers often provide full installation details for their systems, it is easy to overlook these critical, project-specific details. For this reason, the design team needs to work collaboratively with the contractor and perform specific site visits during construction to verify the integrity and quality of installation and detailing in the field.

#### Achieving energy efficiency

Insulated metal panels are an effective and efficient way to clad a building that not only meets state and local energy code requirements, but also provides building owners with a facility that is air- and water-tight. However, these systems are not perfect and require special attention to the unique design issues outlined above.

With so many factors to consider, Nexus works closely with designers, construction teams and building owners to ensure the components of an IMP system are properly selected, detailed and installed.

Dani Ittner is an architect, building envelope designer and principal for Tacoma-based Nexus bec Inc., a building envelope consulting, testing and forensics firm. Nichole Zuger-Cheney is a communication specialist for Tairis Marketing Group. She has more than 10 years of experience working in marketing and communications for local AEC



#### SURVEYS

# PCS STRUCTURAL SOLUTIONS

**Specialty:** Structural engineering for buildings and vertical structures

Management: Craig D. Stauffer, president/managing principal, Seattle; Brian C. Phair, CEO/managing principal, Tacoma; Luke A. Heath, managing principal, Portland

Founded: 1965
Headquarters: Tacoma
2017 revenues: \$14 million
Projected 2018 revenues: \$16

million

**Projects:** 850,000-square-foot combined casino and parking structures, including concert halls and restaurants, for Emerald Queen Casino; 380,000-square-foot Tacoma Convention Center Hotel; WSU Elson S. Floyd Cultural Center, with a unique structural system using steel and concrete for minimalistic vertical support

Craig Stauffer, managing principal and president of PCS Structural Solutions, answered questions from the DJC about his firm and trends and issues in the industry.

Q: Which sector of your firm's work has grown the most in recent years? Where do you expect growth in the next few years?

**A:** We generally perform structural services weighted around 50-50 in private/public work. In 2017 our private sector growth was significant and made up over 65 percent of our workload. However, in 2018 we saw a shift back to public sector work, with almost a full swing to 65 percent



of our work comprised of primary and secondary schools, higher education buildings, and other civic projects.

Q: You recently opened an office in Portland. What types of jobs are you getting there, and where is that market headed?

**A:** We have had an incredible response our first 11 months in Portland. We focused on health care and education as a start. We have numerous new schools in design, are working on five health care campuses, and were recently awarded seismic evaluations for 50 buildings.

Q: What are the biggest challenges you face?

**A:** Right now, our biggest challenge is finding tenured new hires with four to eight years of

experience. We would like to hire numerous engineers in Portland and also have openings in our Seattle and Tacoma offices.

Q: What can engineers, developers and government do to make the Puget Sound region more livable and sustainable?

A: There is a genuine need for affordable housing, and developers and governments are making strides to address that need while also trying to integrate sustainable practices. PCS Structural Solutions' engineers are investing in prefabrication, cross-laminated timber, and even writing white papers to our clients on important industry issues such as steel tariffs.

Q: How are rising land costs in Seattle and Bellevue affecting what gets built?

A: The Seattle effect is starting to have a direct impact on cities outside our Seattle office. Land prices, as well as escalated labor costs in Seattle and Bellevue, are making it difficult to deliver projects that people can afford to live in. In recent years we have performed much of this work out of our Seattle office due to the proximity of the clients and projects. We're experiencing opportunities to also perform this design work in our Tacoma office as developers are shifting some of their focus to South Puget Sound.

Q: What change would you like to see in the industry?

**A:** A unified definition of delivery methods and acceptance that one way isn't always the right choice for every project. We are big proponents of integrated

project delivery (IPD) and designbuild; in fact, PCS was the first structural engineering firm in the Northwest to embrace IPD and a tri-party agreement over 10 years ago.

RENDERING BY ANKROM MOISAN ARCHITECTS

GC/CM and even public bid delivery methods can work just fine if the owner is comfortable with the process and the team works collaboratively.

Our design-build project resume has grown exponentially every year, and owners such as the University of Washington have done a great job making the delivery methods well defined and consistent.

We are still seeing owners try different delivery methods without really vetting the right one for the project. The good news is more collaboration is fantastic and the industry continues to head that way.

### **BERGERABAM**

**Specialty:** Multidisciplinary consulting firm specializing in civil and structural engineering, architectural design, environmental services, land-use planning and permitting, landscape architecture, underwater inspection, and construction management and support services

**Management:** M. Lee Marsh **Founded:** 1951

**Headquarters:** Federal Way **2017 revenues:** \$43 million (net)

Projected 2018 revenues: \$45 million (net)

**Projects:** SR 520 floating bridge and landings design-build for WSDOT; U.S. Navy explosives handling wharf at Bangor

M. Lee Marsh, president and CEO, answered questions about

his firm and the engineering industry.

Q: With your seismic work, have you noticed increased interest among clients or a sense of urgency based on predictions of seismic events in our region?

**A:** The interest level has not really changed over the years. The expectation is that for new projects seismic design is covered by the "building codes." Many public clients are trying to seismically retrofit existing structures, but funding is usually limited, so this takes time.

Q: Which BergerABAM specialty has exceeded expectations in the last year?

A: Ports and marine.

Q: Are there any regions/ cities where BergerABAM has expanded recently?

A: San Diego.



IMAGE FROM BERGERABAM

Q: Why has San Diego been a busier place for you to do business?

A: BergerABAM has a long his-

tory of working on Department of Defense architect-engineer design contracts. NAVFAC SW is one strategic clients that is located in San Diego so we went to where the client is located and this client has contributed to our company growth.

#### **SURVEYS**

### **ZGF ARCHITECTS**

**Specialty:** Commercial, mixed-use, healthcare, higher-education, urban planning, interior design, science and technology

Management: Design partners Todd

Stine and Allyn Stellmacher

Founded: 1942; 1987 (Seattle office)

Headquarters: Portland
2017 revenues: \$51 million
Projected 2018 revenues: N/A
Projects: Microsoft campus refer

**Projects:** Microsoft campus refresh, Redmond; Seattle Children's Building Care, Seattle; Montana State University Norm Asbjornson Innovation Center, Bozeman

Todd Stine, design partner at ZGF, responded to questions about his firm and the industry.

### Q: In the last year or so, has ZGF expanded or reduced its staff on the West Coast?

**A:** We have continually expanded our teams to meet the growing demand for our services. In Seattle, our staff grew by more than 7 percent last year, and our other West Coast offices experienced similar growth.

# Q: Are there any new sectors for ZGF that have seen a particularly strong uptick?

**A:** The corporate/commercial office sector continues to keep us busy locally, including Expedia's new headquarters in Interbay, Microsoft's campus refresh in Redmond and the Clifford L. Allenby Building for the state of California in downtown Sacramento.

Governments in general are feeling the back end of the economic expansion, and

their tax revenue streams are as healthy as they've ever been. Public-sector capital projects that may have been sidelined for many years are finally coming to fruition.

Despite some uncertainty at the federal policy level, the healthcare sector remains surprisingly robust.

#### Q: What have been some of the biggest challenges you've faced in the last couple years?

A: Across the board, senior experience is spread thin. During the previous economic downturn, there wasn't sufficient growth in the ranks of mid-career professionals (the next generation of senior leadership). That's challenging, not only on the design side and on the construction side, but also on the owner side. Everyone is trying to take advantage of the strong market, but everyone is stretched thin.

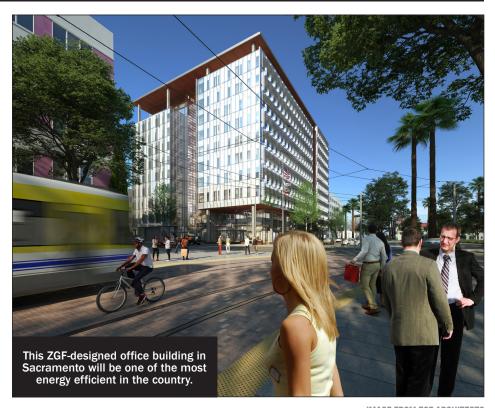
Also, the city of Seattle finds itself overwhelmed with the number of building permits it's processing. Accommodating the city's timelines for getting permits issued has been as big of a challenge as any in terms of keeping projects on track.

# Q: Do you still see demand for highly sustainable developments, and if so what is contributing to that?

**A:** Yes, particularly in the Pacific Northwest, there is a much greater demand in the marketplace by office and multifamily tenants. People are looking to live and work in places where it's healthier to live and work. This very much drives design decisions.

In the higher-ed realm, we're seeing a groundswell of interest in sustainable campus design from incoming students (frankly, it's become an expectation).

For the state of California's net-zero energy Clifford L. Allenby Building in downtown Sacramento, and with the state



**IMAGE FROM ZGF ARCHITECTS** 

of Washington's LEED platinum-certified Helen Sommers Building in Olympia, our clients are setting a standard for what good stewardship of tax dollars looks like long-term.

Moving forward, the Well Building Standard and net zero will continue to get attention. Net-zero water design is something that I expect will see more adoption.

# Q: Are we at a late stage in the building boom, or will the economy's strength keep your business strong in the next few years?

A: The crystal ball is as cloudy as ever.

We thought 2018 would show signs of a slowdown, and we really haven't felt that yet. Early indications are that the first half of 2019 will continue to be strong. It will be interesting to see what happens politically.

The stock market appears to be coming back down to earth, which could lead to the tightening of capital.

Tariffs are certainly affecting the economics of our projects and the availability of materials. But we haven't seen that cause a project to stop.

For now, we're growing as fast as we can.

# FREIHEIT ARCHITECTURE

**Specialty:** Architectural and interior design services across a diverse range of commercial project types with an emphasis on retail, office, mixed-use and multifamily

Management: David Hills, president; Arthur Chang, executive vice president and director of design; Rick Grimes and Sherri Miller, principals

Founded: 1985 Headquarters: Bellevue 2017 revenues: \$7.9 million Projected 2018 revenues: \$8.4 million

**Projects:** Avalara Hawk Tower, Seattle; Avid Townhomes, Bellevue; Chateau Retirement Community, Bothell

Freiheit President David Hills and Executive Vice President Arthur Chang shared what's new with the firm and what to expect for 2019.

Q: Freiheit Architecture has had an eventful year with its name change (from Freiheit & Ho Architects) and move from Kirkland to Bellevue. Has anything else changed?

David Hills: Our name change

marked our successful transition from our founding partners. Surprisingly, the biggest changes are being led by yet another generation moving into leadership, bringing exciting new means and methods of design to the firm while remaining committed to our core belief of pragmatism, which we are known for.

# Q: What are a couple of concerns you have about the current market environment?

Hills: Like everyone else, we are nervous about the length of the current market cycle and the current escalating construction costs and project schedules. However, new project inquiries have only continued to increase for us and we feel our diverse practice puts us in a good position to weather any hiccups that may be ahead.

#### Q: Which of your services or market sectors are in highest demand?

Arthur Chang: There is still a strong demand for housing and urban mixed-use projects, but we are also seeing an uptick in adaptive reuse projects and the growing need

for our master planning services.

### Q: Which areas of your practice would you like to further grow?

**Chang:** Growth areas we would like to see include hospitality and retirement living. Although not specifically related to a particular market, we are also excited about mass timber as a construction type, and hope that the environment will soon be ready to bring some of these projects online in this region soon.

#### Q: What's your boldest prediction for 2019?

**Chang:** We believe that Bellevue CBD and the Bel-Red corridor are poised for explosive growth and that there will be a slight shift from Seattle to the Eastside as livability issues drive new development across the lake. I think these projects are likely to have new complexities and typologies that will be unique to the Eastside.

# Q: What's something you'd like more people to know about the firm?

**Chang:** We are seen as local architects, but many people are surprised to learn that we are working in as many as 26 states, and that we have multiple projects underway on the West Coast.

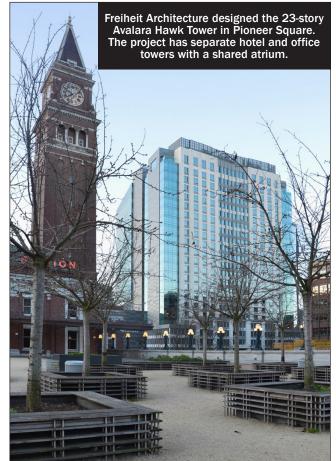


PHOTO FROM FREIHEIT ARCHITECTURE

#### SURVEYS

# SUNDBERG KENNEDY LY-AU YOUNG ARCHITECTS

**Specialty:** Architecture for community-based, environmentally sustainable projects; adaptive re-use

Management: Principals Rick Sundberg, Gladys Ly-Au Young and John Kennedy

**Founded:** 2012 from merger of two firms founded in 2008 (Richard Sundberg Architect and Kennedy Architects)

**Headquarters:** Seattle; satellite office in Minneapolis

2017 revenues: \$2.6 million Projected 2018 revenues: similar Projects: HomeSight's Othello Square, with 68 affordable, limited-equity co-op units adjacent to light rail; new commons, CTE classrooms and performing arts theater at Olympic High School near Bremerton; master plan and phased buildings for an orphanage in a remote village in Tanzania

SKL principal John Kennedy

answered questions from the DJC about his firm and trends and issues in the industry.

# Q: What can architects, developers and government do to make Seattle more livable and sustainable?

**A:** The United Nations just came out with a report demanding "unprecedented changes" in the next 12 years to avoid catastrophic climate change. This was quickly followed by a report of larger-than-anticipated heat buildup in the oceans.

It is difficult to pay attention to this kind of news, and I am guilty of habitually clicking on the latest political outrage, but Seattle can definitely lead the way with government increasing taxes on fossil fuel energy use while simultaneously decreasing taxes on property, income and sales, similar to what was proposed by the defeated statewide initiative

I-1631, but with more emphasis on the balanced reduction of existing taxes.

Architects and developers can follow suit by using our power as trendsetters to make walkability, bikeability and energy efficiency "what the cool kids are doing."

# Q: Which sector of your firm's work has grown the most in recent years? Where do you expect growth in the next few years?

**A:** Our work spans multiple sectors, and typically involves adaptive re-use, energy efficiency and community-based design. Most of our recent growth has occurred in K-12 education, and we expect that to continue. Looking around our region, you see so many run-down, daylight-deficient schools that house dedicated teachers and staff trying to make a difference. It is amazing what can happen when the 1970s gets updated to 2018.

#### Q: You do a fair amount of public work. What trends or issues are you seeing in that sector?

**A:** The biggest trend we see is alternative delivery methods,

specifically GC/CM and progressive design-build. We think it makes much more sense to have general contractors involved early in the process. It is a much more natural and enjoyable way to work—and allows the contractor to form a stronger, mutually beneficial bond with the community served by the building.

# Q: How are rising land costs in Seattle affecting what gets built?

**A:** We work with a lot of non-profits and rising land costs make it even harder for them to realize their vision and meet their community's needs. As architects, we tend to focus more on rising construction costs, and the escalation that has occurred makes it harder to get projects designed and built intact. But, the cranes are still going up, projects get built, and we keep moving forward, just with a little extra editing and creativity.

# Q: Your firm was forged in the last recession. How difficult was that?

**A:** Yes, it was a brilliant move to start a new firm to align with a recession, but having been in this profession for, let's just

say, several decades, we have seen it before, so we shifted to "scrappy" mode. For example, at the time, we were sharing space with Graham Baba Architects, and we would trade staff around depending on who had work, which also led to some great collaboration. In some cases, we even helped clients with some of their less skilled construction tasks — probably not the best idea, but it got us through.

### Q: What's a change you'd like to see in the industry?

**A:** One small change that's been on my mind recently: I'd like to ask owners to limit short lists to three firms rather than five.

And a larger change: The "5 over 2" mixed-use model dictated in Seattle by the economics of zoning and building code seems uninspiring. I wonder if there is a 12-story mid-rise option that could work in some neighborhoods.

And a really big change: Figuring out how to design and build "net-positive" buildings as a matter of course, rather than the exception.

# **WEBER THOMPSON**

**Specialty:** Architecture, interior design, landscape architecture, community planning

**Partners:** Blaine Weber, Kristen Scott, Jeffrey Reibman, Amanda Keating, Elizabeth Holland

Founded: 1988
Headquarters: Seattle
2017 revenues: \$12 million
Projected 2018 revenues: \$15

**Projects:** Watershed office building, Fremont; Othello Square mixed-use development, South Seattle; Nexus condominium tower, Denny Triangle

Weber Thompson's five partners — Amanda Keating, Blaine Weber, Elizabeth Holland, Jeffrey Reibman and Kristen Scott — responded to questions about the firm's projects, the local market and how they're responding to rising construction costs.

#### Q: What are the most interesting projects you're working on?

**A:** We have a very broad spectrum of projects in design at the moment. We're working with Plymouth Housing and Bellwether to address Seattle's housing crisis by pioneering the city's first workforce/low-income residential high-rise, and we're very proud of the work we're doing at

Othello Square with HomeSight and their partners, including the Odessa Brown Children's Clinic.

We just completed the design for a massive Eastside mixeduse, "destination" project that will contain two innovative residential towers, a five-star hotel, and over 75,000 square feet of top-shelf retail. We are also working on two 600-foot-tall towers — one that is residential over hotel, and another that will be residential over commercial office use.

Another of our most interesting projects is Watershed, a new Living Building Pilot Program office building that will be constructed adjacent to a series of bioswales designed by our landscape architecture design studio.

And last — but not least — our interior design studio has been receiving major kudos for recent design on two of our tower projects: Stratus and Helios.

# Q: Has development activity in Seattle peaked? What will the next couple of years bring?

**A:** The Urban Land Institute recently suggested that Seattle is headed for a "plateau" (i.e. a period of leveling off) as opposed to a peak. We all know that there will be a slowdown at some point, but it is difficult to

imagine at this juncture, as our design studios are at full capacity and we have a very strong backlog.

Last year, GeekWire featured a story entitled "Silicon Valley tech workers lead migration to Seattle, which now ranks 2nd in U.S. for software engineer salaries." The story claims that Seattle in particular will continue to see strong in-migration of high-skilled tech workers, engineers and scientists that chose Seattle over Silicon Valley, Boston and New York City.

One manifestation of this is the deeply sustainable commercial office projects we are designing for developers that are very cognizant of a new priority on employee health and wellness via certifications such as Living Building Challenge, LEED and Fitwel.

We pay attention to jobs and in-migration as key indicators of Seattle's continued growth, leading us to believe that we will not see a slowdown for another year or two.

Given Seattle's lengthy "barriers to entry," some of our clients have stated an intent to continue the entitlement process even if there is a slowdown — with the intent of having downstream projects queued up for the next market cycle.

# Q: How are you helping clients respond to rising construction costs?

**A:** Construction prices are indeed the most salient challenge facing our developer clients at the moment. Escalation in labor and materials appears to be increasing at about 8-10 percent per year, which makes it ever more difficult to get a project's pro-forma to "pencil."

We work collaboratively with our clients, their general contractor and all of our design consultants to value-engineer during the entire design process. We also spend more time researching materials that may be more cost-effective, and we find ourselves focused on design solutions that are more efficient and less complex.

Virtual reality is an emerging technology that our architecture and interior design studios are utilizing to help our clients and their contractors better visualize design, understand VE implications and make informed decisions. We are just scratching the surface of this tool and are already seeing swift, positive results in our design process as a result of its deployment.

# Q: Which market variables are having the biggest effects on your bottom line?

**A:** Perhaps the biggest "bottom line" challenge we face is the fact that commercial office lease rates continue to rise here in Seattle. Another is the cost escalation and "planned obso-

lescence" of the cutting-edge technology that we employ in order to remain competitive and relevant.

Lastly, when the economy is really cooking and design professionals are running at full capacity, finding and retaining top talent can be a challenge, but we are fortunate to have a very talented crew and a very high rate of retention. Maintaining the right culture and work environment, and ensuring that we are competitive with other firms in terms of compensation and benefits is crucial in this regard.

# Q: What's another architectural firm doing work you admire?

**A:** We admire the amazing work of BIG — Bjarke Ingels Group — which is based out of Copenhagen and NYC. This firm is consistently able to humanize massive projects in ways that enrich the lives of each project's end-users, with design that is consistently innovative and sometimes whimsical.

We are also impressed by the work of Sir David Adjaye. His thoughtful and poetic design work has earned international acclaim for a broad spectrum of urban projects of diverse scales and complexity.



#### AWARD WINNER

### **2018 NAIOP NIGHT OF THE STARS** HIGH RISE DEVELOPMENT OF THE YEAR

# STRATUS

Congratulations to GID Development Group and its world-class design and construction team on the completion of Denny Triangle's newest luxury residential high-rise tower and the 2018 NAIOP Night of the Stars win.

GIID



Architecture, Interior Design & Landscape Architecture





### **RUSHING**

















