## SUPERSTRUCTURE

Preparing the
Next Generation
of Field Leaders
to Take the Helm

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## FROM THE CEO

OF EVERYTHING WE DO.

It's people who provide the excitement, expertise, and drive to deliver projects and achieve our clients' goals.

**EOPLE ARE AT THE CORE** 

We pride ourselves on the people who make up the Clark team. We are driven, innovative, and excited to tackle the toughest challenges in the industry. We get it done by focusing on safety, taking care of our clients and trade partners, and delivering results that make lasting impacts in our communities.

Throughout this issue, you'll see how people are coming together to deliver unique and challenging projects. Our Water Group is taking collaboration to a new level, working closely with engineers and public agencies to deliver wastewater treatment facilities that meet the needs of our communities. Our Field Engineering and Virtual Design & Construction groups are collaborating to deliver high-quality laser scans and 3D models of existing conditions to better plan and execute work in the field. And as part of the Field Development Group, our rising superintendents are honing their skills to lead with confidence; and our experienced field leaders are providing

curriculum, training, and mentorship to develop the next generation of leadership.

The Clark team also bucks industry norms. In March, we celebrated Women in Construction Week. While women comprise only 9% of the construction workforce, they make up 29% of Clark. Out of the Clark employees named ENR Regional Top Young Professionals, that number reaches 50%. The women featured in this issue—from Meg Connolly Ehret and Staci Tsuda to Cara Lanigan and Catriona Winter—aren't just great female leaders. They're great leaders, period.

At Clark, every project team is empowered to take the helm and stand out from the crowd with high-quality, on-time results. Every day, they create collaborative environments of trust and deliver outstanding projects for our clients and partners. From the very first project meeting through final turnover, the people who make up the Clark team are trusted partners—to our clients, our trade partners, and each other.

ROBERT D. MOSER, JR.
PRESIDENT AND CEO

#### **SUPERSTRUCTURE**

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### SUPERSTRUCTURE

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#### **FEATURES**



#### The Evolution of Water Reclamation Plants

With increasing pressure on our aging infrastructure, how we manage, utilize, and innovate the treatment of wastewater is more important than ever. The work being done by Clark's Water Group is changing the utilization and effectiveness of water treatment and reclamation plants.



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Preparing the Next Generation of Field Leaders to Take the Helm

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crews kick off the day's work.

Photo by: Dominique Muñoz

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## Continuing Chicago's Waterfront Evolution with 110 North Wacker Drive

The last remaining parcel with a coveted Wacker Drive address and Chicago Riverfront access is about to join the Chicago skyline. The Howard Hughes Corporation and Riverside Investment & Development have partnered with Clark to bring to life 110 North Wacker Drive, a new 53-story architectural icon in Chicago.

Working alongside project architect Goettsch Partners, 110 North Wacker Drive will transform one of the last available pieces of riverside real estate into a state-of-the-art skyscraper featuring 1.4 million square feet of leasable space. The project team currently is demolishing an existing six-story structure to make room for the core and shell Class A office tower.

Offering iconic views of the Windy City, the tower will be clad in an aluminum and glass curtain wall with a stepped western façade. In addition to amenities such as private outdoor terraces and retail space, the project will preserve half of the site as public space comprised of an open-air pocket park and a 45-foot-wide riverwalk underneath the tower's western edge. To create the covered promenade, the Clark team will construct nine load-bearing columns converging into three structural nodes at park level.

Among the tallest office towers in Chicago, 110 North Wacker Drive is located in between a multilevel thoroughfare—Upper and Lower Wacker Drive, the Chicago River, and bascule bridges on the north and south ends of the site. In order to surmount site access challenges, Clark will turn the Chicago River from a constraint into an asset and utilize floating barges for demolition, excavation, and material haul-off. The project will also take full advantage of Wacker Drive's double-decker design, with concrete deliveries, material storage, and additional staging all set to take place on Lower Wacker Drive.

110 North Wacker Drive is the second riverfront project for the Clark, Goettsch Partners, and Riverside Investment & Development team in recent years; the team recently completed the award-winning 150 North Riverside across the river.

The project is designed to achieve LEED® Gold certification. Demolition is underway and completion is slated for the fall of 2020. ■



lering courtesy of Goettsch Part

SPRING 2018

#### **New Contracts**

Across the country and in a variety of markets Clark Construction Group and our subsidiaries have recently been selected to deliver a number of new projects. Our new work this quarter includes:

#### **HEALTHCARE**

#### MedStar Georgetown University Hospital Surgical Pavilion

Construction of a 525,000-square-foot surgical facility featuring 156 patient rooms, 32 operating rooms, and a new emergency department

Location: Washington, DC

Company: Clark Construction Group

**Client:** MedStar Health & Trammell Crow Company **Architect:** HKS and Shalom Baranes Associates

Completion: Winter 2022

#### **Capital Region Medical Center**

Construction of a 620,000-square-foot hospital with state-of-the-art trauma, critical, and surgical care, as well as emergency medical services

Location: Largo, MD

**Company:** Clark Construction Group **Client:** University of Maryland Medical System

Architect: Wilmot Sanz
Contract Amount: \$284 million

Completion: Fall 2020



#### **RESIDENTIAL**

#### Albion at Oak Park

Construction of a 340,000-square-foot 19-story apartment building with 265 residential units

Location: Oak Park, IL

Company: Clark Construction Group

**Client:** Albion Residential

Architect: Hartshorne Plunkard Architecture

**Contract Amount:** \$65 million **Completion:** Winter 2019

#### **MIXED-USE**

#### 4040 Wilson

Construction of a 22-story mixed-use building

on top of an existing parking garage

Location: Arlington, VA

**Company:** Clark Construction Group

Client: The Shooshan Company and Brandywine

Realty Trust

Architect: CallisonRTKL

Contract Amount: \$89 million

Completion: Spring 2020







On the Miami Beach Convention Center project, the Field Engineering Group verified elevator hoistway geometry using 3D laser scanning.

## Field Engineering Group Excels with Enhanced 3D Laser Scanning Capabilities

They say you can't teach an old dog new tricks. While that might be true, Clark's Field Engineering Group has found a way to use old technology with new tricks to add value on complex projects. Through the utilization of 3D laser scanning technology, high definition scanners, and new Virtual Design and Construction (VDC) software, the Field Engineering Group has the capability to provide accurate point clouds for as-built drawings, 3D visualization workflows, BIM CAD models, and digital scene reconstruction.

While 3D laser scanning has been utilized in the industry for the past 15 years, new technology has changed the game. High-definition scanners capture dimensions and spatial relationships by sending out laser beams which reflect off objects and return to the scanner's sensors. The system creates coordinates for each point and consolidates the data into large point clouds. Combining point clouds and 360-degree photos of a scan location, modeling software aligns the scan and photos with color values to create a 3D color point cloud.

The Field Engineering Group's scanning initiatives, led by Dieter Agate, Greg Galasso, and Tim Edwards, apply in-house 3D scanning and modeling capabilities to mitigate as-built

drawing inaccuracies for renovation and retrofit projects, which often rely on decades-old drawings and building plans. Outdated or incomplete plans can result in inaccurate design drawings, leading to costly delays and setbacks. The Field Engineering Group is using enhanced 3D scanning to develop accurate 3D models of existing conditions, saving projects time and money.

The point-cloud-based as-built models improve designs by analyzing clashes between newly-designed elements and existing conditions, and by evaluating alternative designs prior to construction. The high accuracy of the scans minimizes waste and changes in the field by providing exact measurements for demolition and removal of components, as well as for prefabricated materials.

At the Miami Beach Convention Center Renovation and Expansion, Clark's Field Engineering team utilized 3D laser scanning to map 12 elevator shafts, along with the 50-foothigh perimeter walls of the 60,000-square-foot ballroom. Dieter and Tim collaborated with Clark's VDC team to use a Leica BLK360 laser scanner on the project. Using conventional survey methods, gathering accurate data for the elevators and ballroom would have taken at

least eight days. Collecting more than 225 million data points, the laser scanning process took just 12 hours and the data was used to generate valuable 3D models for construction planning and coordination.

"Thanks to the 3D laser scanning, we were able to start work in the elevator shafts as soon as the concrete walls were completed," stated Rick Yezzi, Project Executive at the Miami Beach Convention Center project. "This process was a huge help for keeping our elevator installation on schedule because it allowed us to confirm dimensions and correct any issues before our trade partners mobilized in the shafts."

Working together, Clark's Field Engineering Group and VDC team are developing in-house, cost-effective capabilities and processes to streamline data collection and workflows to provide better information to project teams faster and more efficiently.

In addition to the Miami Beach Convention Center, the Field Engineering Group's enhanced 3D laser scanning and VDC practices have already been applied to projects including the International Spy Museum, Midtown Center, 1101 16<sup>th</sup> Street, and the CSX Virginia Avenue Tunnel. ■

# Non-Negotiable: Learning an Integrated Safety Approach

#### For Meg Connolly Ehret, her rotational role with Clark's Field Development Group's (FDG) Safety Leadership

**Program** has taught her the importance of full-team coordination and building relationships. As a member of FDG—a three-year program to develop future superintendents—Meg is currently serving a rotation as a full-time, on-site safety manager for the National Museum of the United States Army project. The goal behind the FDG Safety Rotation Program is to further integrate safety into all aspects of Clark's operations and prepare future superintendents for the overall responsibility of site safety.

#### TELL US ABOUT THE SAFETY LEADERSHIP PROGRAM AND YOUR ROLE.

I am the full-time safety manager overseeing the entire project, from sitework to finishes. My rotation as a safety manager is an important part of becoming a better field leader. I am learning all aspects of Clark's Safety Program, while understanding the importance safety has in every aspect of building. My goal during this rotation is to become proficient in my knowledge of construction safety so I am able to successfully lead future projects as a superintendent.

#### **WHAT HAS THIS ROTATION TAUGHT YOU?**

I had a relatively specialized role on previous projects. Here, I am interacting with different trade partners to get a better understanding of their work, as well as the associated safety hazards. I'm playing a part in every activity onsite, not just one area or trade. I've been fortunate to have the opportunity to dive into work plans and absorb everything I can regarding each trade's scope of work and how they can execute that safely. The rotation has taught me how essential it is to integrate safety managers with the planning and execution of work at every stage and with every element of the project.



#### HOW WILL THIS HELP WHEN YOU TAKE ON A SUPERINTENDENT ROLE?

As a superintendent, you need to develop relationships with your trade partners that are centered around trust and the desire to keep them safe. It is extremely important to let our workforce know we genuinely care for their wellbeing and want every person to go home each day the same way they arrived. Being in this role has provided the opportunity to think about our work with safety top of mind, rather than just a deadline or milestone. I intend to bring that mentality with me when I move into a superintendent role.

#### WHAT IS YOUR APPROACH TO SAFETY?

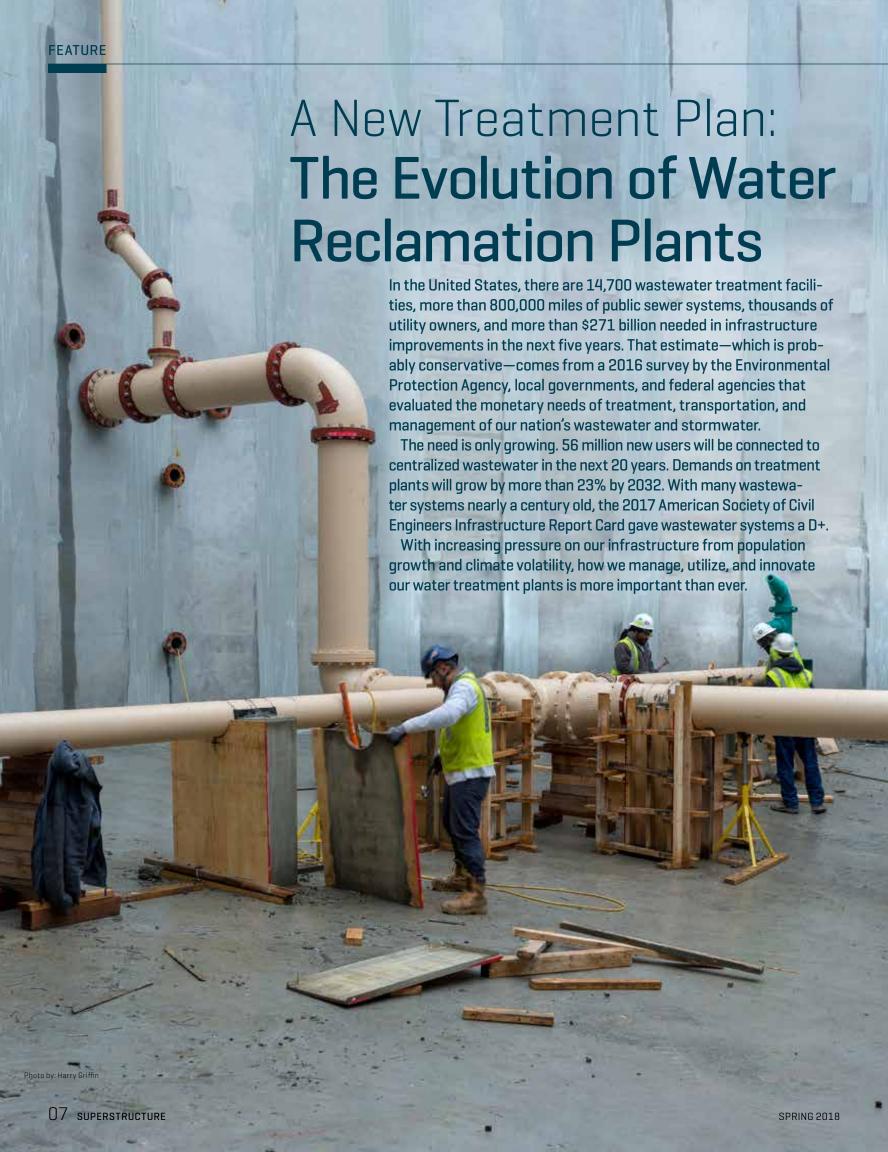
In my opinion, safety is non-negotiable. When lives are on the line, it is not an option, but a requirement. It is important to keep safety as a top priority all the time. If safety is first on our agenda every day, production and quality will fall right into place.

#### HOW DO YOU BUILD A CULTURE OF SAFETY ON YOUR PROJECT?

Safety is the first thing discussed during every meeting and we encourage our trade partners to take an active role in that conversation. Every month, we recognize crews with a safety coin to applaud work that is done safely and with outstanding workmanship, attitude, and quality. Here, we say "Crew Carries Crew" to remind and empower workers to look out for one another.

#### WHAT IS THE MOST IMPORTANT ASPECT OF SAFETY?

The most important thing is ensuring every worker onsite knows our safety program is about more than just having a record of no injuries. It is about the wellbeing of the people who come to work on our sites every day and making sure they know we care. For me, what resonates most is being relatable—we all want to go home to our loved ones every evening so that we can enjoy life outside of work.



#### THAT'S WHERE THE CLARK WATER GROUP COMES IN.

Headed by Construction Executive David Hill, and comprised of more than 30 professionals, Clark's Water Group is a division of Clark Civil. They're tackling these critical infrastructure improvements head on, and their work is changing the utilization and effectiveness of water treatment and reclamation plants.

"Wastewater treatment plants have come a long way in the past few years," says Hill. "What used to be, really, a solids and water separation tank, is now a complex, evolving segment of our nation's infrastructure that embraces technological innovation. We're bringing to life projects that create meaningful value for communities through renewable fuel sources, replenishing freshwater resources, and marketable products that can be sold to minimize waste and maximize funds for our public clients."

With projects like the Alexandria Renew Nutrient Management Facility and Environmental Center under its belt, Clark's Water Group is tackling some of the most critical plant upgrades in the Mid-Atlantic Region. At the Little Patuxent Water Reclamation Plant Biosolids Processing Facility Addition No. 8 in Savage, MD, the Water Group is more than one year into a facility renovation that adds anaerobic digestion, centrate treatment, phosphorous precipitation, enhanced solids drying, and significant electrical and control upgrades to the existing complex.

The treatment plant currently averages 21 million gallons per day of influent wastewater. Upgrades to the facility will significantly improve the treatment of 175,000 pounds of anaerobically digested solids per day and will reduce the volume of waste leaving the facility each day by 85%.

"Once the upgrade is complete, biosolids leaving the Little Patuxent facility will be a High Quality Class A product for use on local farmland, or by anyone in the community," says Hill. "There's this huge mental hurdle in the United States around reusing waste. But it is a valuable product that is perfectly safe and beneficial for designated uses. It's a product that these treatment plants, which are usually run by public entities, can sell to mitigate some of the facility upkeep and maintenance costs."

Opposite page: Crews strip formwork from concrete pipe supports at the Little Patuxent Water Reclamation Plant.

This page: Temporary handrails are inspected before removing tank covers at the Little Patuxent Water Reclamation Plant.



Photo by: Dominique Muñoz



The possibilities for creating meaningful resources for the community go beyond enriching farmland. Biogas and biosolids that accrue from plant chemical processes can be utilized as renewable fuel sources for turbine power generation.

And let's not forget about all that water. Because of increasingly dense urban environments, more and more stormwater runoff from buildings and impervious surfaces are ending up in combined stormwater/wastewater sewer systems. That's creating more pressure on the wastewater plants, and a greater challenge to generate high-quality re-use water.

As a result of new technologies, more and more plants are capable of selling their reclaimed water as re-use water, which is completely safe for alternate industrial and commercial uses, such as cooling towers, data centers, and golf course landscaping. By giving these systems alternative water sources, local demand on drinking water decreases.

At the Back River Wastewater Treatment Plant in Baltimore, MD, Clark and a joint venture partner are delivering a project to increase the plant's influent capacity to 469 million gallons per day from 180 million gallons per day, while also addressing stricter water quality requirements. When complete, the project will prevent backups and overflows to the wastewater system during storm events, which currently cause untreated overflows straight into the Chesapeake Bay and private properties.

Clark Foundations drives sheet piles for the Influent Pumping Station at the Back River Wastewater Treatment Plant. Clark is replacing the plant's existing headworks in order to increase influent capacity to 469 million gallons per day.

Photo by: Dominique Muñoz

"We're offering our market long-term solutions that are better for our community. By partnering with our clients on these often-overlooked projects, we're delivering infrastructure that will have a positive environmental impact long after we leave."

David Hill. Construction Executive

Clark provided extensive preconstruction services and alternative technical concepts, not only helping the City of Baltimore achieve the best project cost, but also working with the Department of Public Works to identify the best possible project plan to serve the City's long-term needs. In collaborating to deliver the project in parallel with the City's engineers, the team created a project that achieves socially-responsible infrastructure.

Where are these treatment plants heading? What benefits are communities seeing with these new technologies?

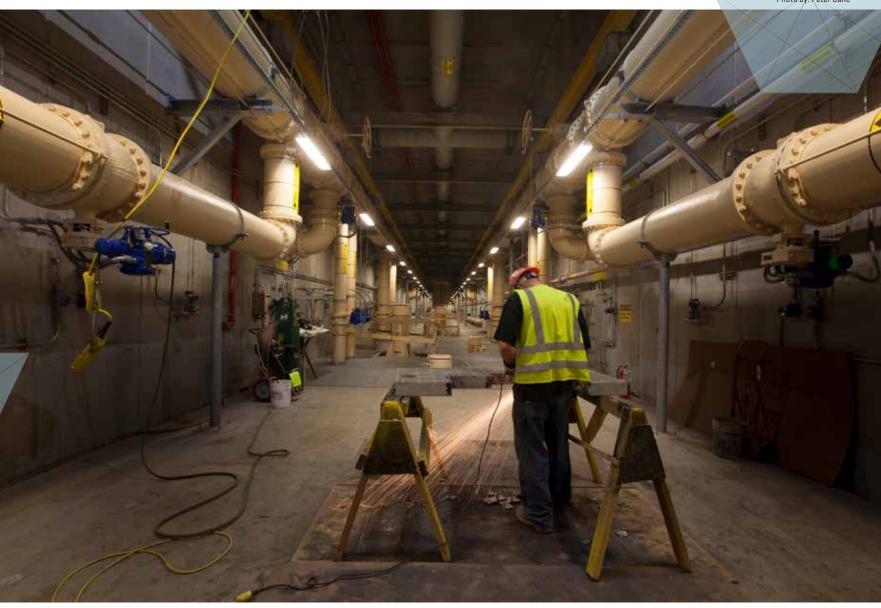
Around the world, and around the United States, plants are exploring these questions with techniques that can even return recycled water as safe drinking water in communities. At a time when water crises continue to proliferate, thinking big when it comes to water sustainability strategies is becoming increasingly important.

Clark's Water Group—comprised of more than 30 professionals—is a division of Clark Civil. They're tackling critical infrastructure improvements head on, and their work is changing the utilization and effectiveness of water treatment and reclamation plants.

When asked about the Water Group's projects, Hill commented, "We're doing more than just building a project. We're offering our market long-term solutions that are better for our community. It's a pressing need, and our teams are truly enthusiastic about the future. It's the idea that we're doing more than constructing responsibly with LEED or Envision certification. By partnering with our clients on these often-overlooked projects, we're delivering infrastructure that will have a positive environmental impact long after we leave."

A craftworker prepares grating in the pump gallery at the Alexandria Renew Nutrient Management Facility.

Photo by: Peter Cane



clarkconstruction.com SUPERSTRUCTURE 10

## Captains of Industry

## Preparing the Next Generation of Field Leaders to Take the Helm

TIS FIVE AM. While a blanket of darkness covers San Francisco, and much of the city has yet to wake, Assistant Superintendent Mary Adams is already at the jobsite ready to tackle the day. She is one of a dozen field leaders working to deliver the \$1 billion Chase Center-future home to the Golden State Warriors. While work won't begin in earnest for another two hours, Mary uses the quiet morning hours to develop a work plan for the day. At 25 years old, she leads a team of 50 people, including crane operators, laborers, and a variety of trade partners who are responsible for the installation of the arena's luxury suites and theater boxes. While a seemingly daunting task for someone who began her career a little over three years ago, Mary enthusiastically, and confidently, embraces the responsibility.

On the opposite side of the country, Assistant Superintendent Megan Angelini is helping to deliver the International Spy Museum in the heart of the nation's capital. Just a few years removed from her college days at the University of Maryland, Megan is now responsible for a team of craftworkers constructing the museum's complex façade. The one-of-a-kind exterior involves 12 different trades and an intricate tapestry of structural steel, metal panels, and curtain wall; it is a crucial element on the project's critical path. Delivering it demands precise sequencing, perpetual coordination and communication, and an appetite for problem-solving. Like Adams, Angelini welcomes the challenge.

Adams and Angelini aren't the only bright and ambitious field leaders making their mark on the built environment. On Clark jobsites from Miami to Seattle, the next generation of superintendents are rising to the challenge when presented the opportunity to run some of the most complex construction operations in the country. Ensuring they have a platform for growth, one which readies them to take the helm and tackle

### More about Mary Adams

- Field Development Group Class of 2020
- Bachelor's degree in civil engineering, Clarkson University
- Currently serving as assistant superintendent on the Chase Center project in San Francisco





Photo by: Dominique Muñoz

the opportunities that lay ahead, is not just important, it's imperative.

From concept to completion, Clark superintendents play an instrumental role in every facet of our work. They are choreographers, orchestrating the movements of hundreds of craftworkers each day. They are champions for safety, managers of risk, communicators and mediators. They are teachers and mentors. They shoulder tremendous responsibility, and they do it all with a laser focus on the goal: delivering our clients' projects safely, on time, and on budget. Mastering the role requires experience, rigorous training and education, and a robust support system of peers and mentors—all hallmarks of Clark's holistic approach to professional development.

"Superintendents are a driving force behind the planning and execution of our projects," notes Chip Hastie, Clark's Senior Vice President of Operations. Clark's approach to their career development puts assistant superintendents like Adams and Angelini on the fast track to project leadership through on-the-job experience, as well as a formal training and mentoring program.

Founded in 2009, the Field Development Group (FDG) is one mechanism the company uses to expedite the development process. This rigorous three-year training program is designed to prepare future superintendents on all fronts. Clark's seasoned superintendents many of whom are past FDG graduates—serve as curriculum planners, course instructors, and, most importantly, mentors, both inside and outside the classroom.

"Through the Field Development Group, we are providing our future superintendents with the training and education they need to become well-rounded and confident field leaders," states Hastie. Today, nearly 40 assistant superintendents and project engineers are enrolled in the program nationwide, and anywhere from 20-25 employees serve as instructors, counselors, and executive sponsors, helping to ensure their success.

#### More about

#### Megan Angelini

- Field Development Group Class of 2020
- Bachelor's degree in civil engineering, University of Maryland
- Currently serving as assistant superintendent on the International Spy Museum project in Washington, DC

"Through the Field Development Group, we are providing our future superintendents with the training and education they need to become well-rounded and confident field leaders."

Chip Hastie, Senior Vice President of Operations



#### More about

#### **Keon West**

- Field Development Group graduate and current instructor
- > Safety Trained Supervisor
- Bachelor's degree in engineering, Lafayette College
- Currently serving as senior superintendent on the 1441 U Street project in Washington, DC
- Previous projects include: The Dalton, Sedona and Slate,
   Waterview, and North Bethesda Market

Superintendent Monique Holley is a beneficiary of that training and is now putting much of the knowledge she gleaned from FDG into practical use on the West Lane Apartments in Bethesda, MD. She is also paying it forward by helping future superintendents as an FDG board member responsible for curriculum development. "With FDG, we are focused on expediting the learning process through an intensive and focused curriculum," notes Holley. "From general conditions and budgeting to schedule analysis and presentation techniques, the FDG program fine-tunes leadership skills and reinforces Clark's approach."

Keon West, a Senior Superintendent on 1441 U Street in Washington, DC, also knows first-hand the advantages of the program. An FDG graduate, he rejoined in 2013 as an instructor to help prepare the next generation. "The Field Development Group shapes your learning by exposing you to different components of the company and the industry," says West. "Our goal is to ensure that participants are well-rounded. The better understanding you have of every

"A good superintendent is someone who understands not only the various phases of work in the field, but the different facets of the construction business."

Keon West, Senior Superintendent

facet of the business the stronger leader you become." This philosophy guides the program's curriculum and the company's approach to preparing future superintendents to advance their careers.

With FDG's specialized curriculum, members gain not only knowledge, but the confidence needed to run jobs effectively. Safety is a fundamental element of the program. "Knowledge is power," notes West. "A good superintendent is someone who understands not only the various phases of work in the field, but the different facets of the construction business. This includes understanding the role our counterparts in Safety and Project Management play so that we can better support one another's efforts."

A graduate of an earlier version of Clark's field development program, Vice President John Swagart has a long-term perspective about FDG's impact. In the years since he completed the course, he has served as a program instructor and mentor to many of Clark's young superintendents, including Holley and West. "We are grooming our young people to be ahead of the curve...to be not just exceptional builders, but exceptional leaders," notes Swagart, "the Field Development Group is an essential piece of the puzzle."

While focused training expedites the learning curve, Clark's internal network of superintendent peers and mentors also serves as an invaluable resource to young superintendents. For many, that network grows out of the Field Development Group. "There is a tremendous support structure in place for Clark superintendents," notes Swagart. "From the top

## More about **John Swagart**

- Field Development Group graduate and current mentor
- > Safety Trained Supervisor
- Bachelor's degree in construction management, East Carolina University
- Currently leading construction operations on the Midtown Center project in Washington, DC
- Previous projects include: Norman Y. Mineta San Jose International Airport North Concourse, FDA Center for Biologics Evaluations & Research, and The George Washington University District House Residence Hall



down—ages 65 to 25—we are a tight-knit group." Swagart is quick to share how he's benefited from mentors and advisors throughout his career; he still leans on many of them today and doesn't hesitate to return the favor. Though busy leading operations on Midtown Center in Washington, DC, he makes himself available to colleagues who need guidance or a different perspective to overcome a challenge. Holley recounts placing many calls to Swagart during her first project as lead superintendent. "No

"There is a huge sense of pride and confidence when you say you are a Clark Superintendent. It is a really special thing."

John Swagart, Vice President

matter how busy John was, he always took the time to help," she recalls, "his guidance and support were invaluable to me."

As a current member of FDG, Megan Angelini is already discovering the meaningful role mentors will play in her professional growth. Both Angelini and Adams credit Senior Superintendent Terry Moore for impacting their decisions to pursue careers in the field. "I am really fortunate to have had great mentors from

the beginning," said Angelini, "it's obvious that our leaders want us to succeed and care about us on a personal level."

Mentors like Swagart, Moore, and countless others not only impart valuable advice, they model the softer skills that are essential to being a good field leader. "Developing interpersonal and communication skills in tandem with the ability to execute work is imperative," says West. The notion of a superintendent as a grizzly, authoritarian figure who barks orders at their crew and runs the project site like a dictatorship is a thing of the past. "I appreciate the way Terry leads a job," said Adams. Both she and Angelini cite Moore's hands-on approach to building a respectful rapport with trade partners as influencing their own management style.

"Successful field leaders focus on creating a collaborative environment built on mutual respect, where everyone has a seat at the table and can contribute to the project's success," says West. "It is a different mentality," adds Swagart "and we are modeling that behavior for the next generation."

While at various stages in their careers, Adams, Angelini, West, Holley, and Swagart are all part of the fabric of a close-knit community of field leaders who are passionate about building, and equally devoted to preparing tomorrow's superintendents to take the helm. "There is a huge sense of pride and confidence when you say you are a Clark superintendent," notes Swagart. "It is a really special thing." ■

clarkconstruction.com SUPERSTRUCTURE 14

## BUILDING THE FUTURE WITH A RESILIENT SAN FRANCISCO

The City of San Francisco is making a promise to its residents, and Clark's San Francisco team is doing their part to help the City deliver that promise

San Francisco is committed to rebuilding, renovating, and improving its public safety infrastructure to serve and protect its citizens as part of its 10-Year Capital Plan and the \$400 million Earthquake Safety and Emergency Response Bond, which was approved by 79% of San Francisco voters in 2014. As resilience in the face of natural disasters emerges as a growing part of nationwide sustainability considerations, mitigating risk and protecting public disaster response is up front and on display in the City by the Bay.

Completed by Clark in 2017, the Office of the Chief Medical Examiner (OCME) was the first of 14 pilot projects for the bond-funded Capital Plan, which prioritizes key capital projects that impact public safety. The \$65-million project moved the Medical Examiner out of the cramped, seismically-deficient

Hall of Justice

expanded, and resilient facility in the Bayview neighborhood.

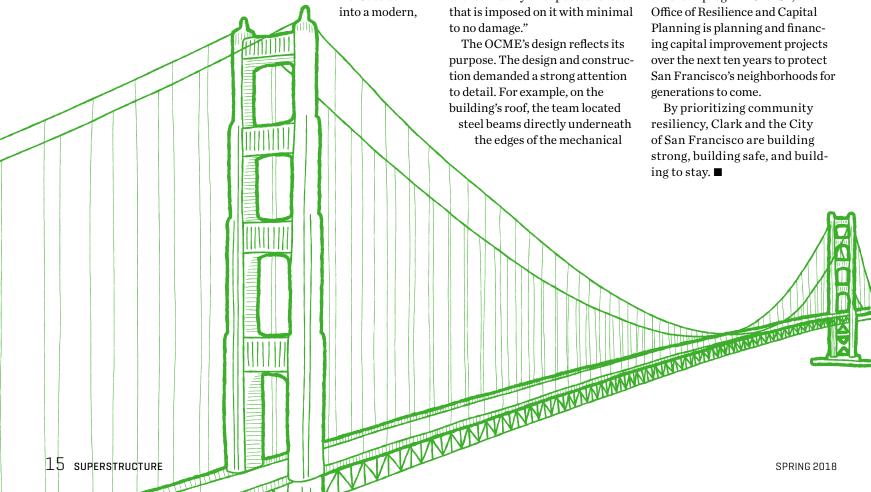
The two-story, 44,000-squarefoot OCME is capable of operating independently off the grid for 72 hours in the event of a major crisis. In addition to a back-up generator and separate water and sewer tanks, the facility also boasts a structure that sets it apart.

"Typically during an earthquake, buildings have weak points designed to control the damage," says Clark Project Executive Staci Tsuda. "We have the same thing in the OCME, but the level of steel and foundation members are more typical of what you would see in a much larger facility. When it comes to seismic resiliency, we're not building to the minimum requirements—we're building to withstand the maximum possible impacts than can happen to this structure. That way, when a building receives a seismic load, it can withstand any unexpected force that is imposed on it with minimal to no damage."

equipment pads to ensure the rooftop equipment was tied into the steel structure and supported as one intricate system. On resilient projects, every load must be properly supported and accounted for in every location.

Clark is continuing to partner with the City's Department of Public Works on bond-funded projects with the new Police Department Traffic Company and Forensic Services Division Facility. The Traffic Company (motorcycle police) and Forensic Services Division are currently housed in two separate, deficient facilities. This \$100-million project, currently in the design phase with HOK, will bring together the divisions under a safe, dependable building to serve the community both on a daily basis and in the event of a city emergency.

Moving forward, the City will continue to institutionalize resilience as a civic priority. Under the umbrella program ONESF, the Planning is planning and financgenerations to come.



## SMALL BUSINESS SPOTLIGHT: SORELLA GROUP

Sorella Group founder Sheila Ohrenberg shares advice for nurturing a start-up into a thriving small business

Starting a business can be equal parts daunting and exhilarating. When Kansas native Sheila Ohrenberg left the comfort of her job as a project manager for a local general contractor to launch a specialty supply business with her sister, Karla, she knew the road ahead would be challenging. Twelve years later, Sheila's firm, Sorella Group, is a thriving small, woman-owned business. The company, which supplies and installs specialty items and performs carpentry work, has 40 employees nationwide and projects ranging in size from \$20,000 to \$2 million.

On the surface, Sheila's journey to becoming a successful business owner isn't much different than other fledgling entrepreneurs. She credits staying agile, turning to trusted advisors for guidance, and maintaining a relentless focus on quality and relationships for her continued success.

### Be lean, nimble, and willing to adapt.

Like many start-ups, the early days building Sorella Group were spent working out of the basement of Sheila's house. "We knew we needed to stay lean because cash flow was limited," recalls Sheila, "so we planned to work out of my basement for the first few years." What Sheila and Karla lacked in capital, they made up for with ambition and perseverance. After a few months, business was coming in and the products they were supplying began to pile up in Sheila's garage. "We didn't want to spend money on an office that early on,

but we needed storage space for the products we supplied...so we adjusted," said Sheila.

That was the first of many twists and turns the duo faced, but at every bend, they learned to adjust and evolve. When Karla left Sorella Group—a planned departure to form her own technology firm, Sheila again readjusted and kept moving forward. "Things constantly change, and you have to be able to adapt to survive," said Sheila.

## Surround yourself with good advisors and don't be afraid to ask questions.

While Sheila's resume is filled with projects for the Department of Veterans Affairs and Army Corps of Engineers, nothing quite prepared her for the role of business owner and subcontractor/supplier. "I've never said 'I didn't know that!' more times than I did in the first few years of starting my business," she recalls. "It didn't take me long to realize there was a lot I didn't know, and the only way I was going to learn the ropes was to raise my hand and ask questions." She sought mentors for guidance and found tremendous resources through local industry organizations.

"From the very beginning, the Kansas City American Subcontractors Association proved to be a great resource," recounts Sheila. "Then, in 2008, Karla discovered Women Construction Owners and Executives (WCOE)." Designed to help women leaders "grow their contacts, contracts, and bottom



Sheila (right) and her sister Karla formed Sorella Group in 2006. When determining a name for their business, they settled on Sorella Group—a fitting moniker for the duo as sorella is Italian for "sisters".

line", WCOE is focused on fostering social connections among women in the construction industry with similar experience. It was through this organization that Sheila found a support group of mentors and peers. She has been an active member of WCOE ever since, and currently sits on their National Board of Directors. "My involvement in WCOE has connected me with amazing women who have inspired me, helped me through challenging times, and always encouraged me to celebrate successes," said Sheila.

#### Relationships and performance matter.

Sorella Group's focus on attention to detail and collaboration with their customers helped the firm establish a strong foothold in the industry. "We don't have a bid room. Our work has always been based on relationships and performance," said Sheila.

Operating with that philosophy, the firm has evolved into a full-service supply and carpentry company. Sorella Group now has work in 15 states, and nearly 100 different supplier contracts nationwide, with some projects up to \$2 million.

It was Sorella Group's reputation for quality work and a recommendation from an industry partner that landed the firm their first of many contracts with Clark on the 400 E Street project in Washington, DC. Since then, the company has played a role on numerous Clark projects, including one in Sheila's backyard: The University of Kansas (KU) Central District Development project. Sheila credits the KU project—one of the largest in Sorella's portfolio-for bolstering her firm's capacity. "Both the size of the project and the opportunity to work on the academic and residential aspects of the job allowed us to add staff and grow a different dimension of our business—it has been a great opportunity."

What began 12 years ago as a two-woman outfit operating out of a garage is now a thriving woman-owned business. Sorella Group's vitality is a direct result of Sheila's pioneering spirit, hard work, and perseverance, and a testament to the growing contributions that women are making to the construction industry.

#### PROJECT MILESTONES

This quarter, our project teams across the country reached some exciting building milestones:

#### **UNDERWAY**

#### I-405/SR 167 Interchange Direct Connector

The Washington State Department of Transportation (WSDOT) recently celebrated the halfway point of Atkinson's I-405/SR 167 Interchange Direct Connector project. The Atkinson project team is constructing a direct connector flyover bridge to join the northbound and southbound SR 167 high occupancy toll (HOT) lanes with the I-405 high occupancy vehicle (HOV) lanes by reconstructing portions of SR 167 and I-405 to accommodate the new direct connector ramps in the median.







#### **TOPPING OUT**

#### **Chase Center**

The Chase Center project is moving full speed ahead, hitting one project milestone after another. After celebrating one million hours without a lost time incident, the Mortenson|Clark team celebrated the project top out. With more than 350 concrete workers ansite, our trade partners Alamillo, McClone, Landavazo, and Shimmick placed 65,000 cubic yards of concrete to reach the milestone. The project team will build a state-of-the-art 18,000-seat arena for the Golden State Warriors. Additional facets of the project include constructing two buildings with more than 580,000 square feet of office and lab space, 100,000 square feet of mixed-use/retail space, and parking.

#### Pacific Visions at the Aquarium of the Pacific

The project team celebrated topping out with city officials and a special guest—a penguin from the aquarium. The Magellanic penguin added his footprints to the final steel beam along with the rest of the team. Clark is constructing a twostory, state-of-the-art immersive theater with seating effects and a 30-foot-high, 180-degree digital screen over a tilted stage floor. Pacific Visions will feature a biomorphic specialty glass cladding system, which wraps the theater and connects it to the existing aquarium. Slated to open in spring 2019, Pacific Visions is the aquarium's first major expansion and will increase the institution's audience capacity to approximately 2 million annual visitors.

#### Long Beach Civic Center

Clark and Edgemoor teams are working in concert with Plenary Group, SOM, and others to bring the Long Beach Civic Center to life by the end of 2020. When complete, the Long Beach Civic Center will consist of a 274,000-square-foot City Hall, a 237,000-square-foot Port Headquarters, a 92,000-square-foot Main Library, and new below-grade parking facilities. The project scope also includes master planning for a commercial mixed-use development with residential, retail, and hospitality spaces. The existing Lincoln Park will include a multipurpose event lawn, dog park, and children's play area.

#### SUBSTANTIAL COMPLETION

#### 2311 Wilson Boulevard

The team at 2311 Wilson Boulevard completed a major milestone, hitting substantial completion. The project team constructed a 297,000 squarefoot, eight-story core and shell office building, as well as three levels of below-grade parking. Building amenities include a daycare, ground-level retail, and a penthouse roof terrace. The building's curtain wall façade is accented by precast panels and limestone elements.

#### The Dalton

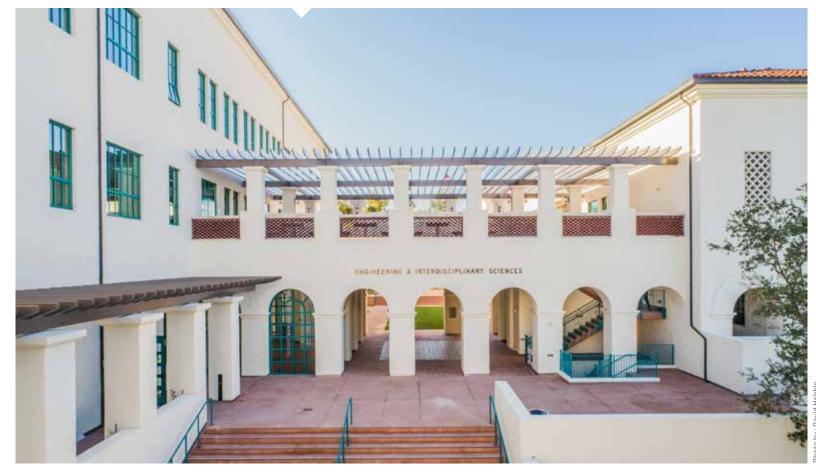
The Dalton, a 14-story mixed-use residential building in Alexandria, VA, hit substantial completion a full 20 days ahead of schedule. The team accomplished this milestone by utilizing Lean principles such as pull planning and establishing accountability among all stakeholders. The 270-unit apartment building features numerous amenities, including a club room, cyber café, community room, rooftop pool, fitness center, and meeting room. The building also includes 1,500 square feet of retail space, and sits on top of two levels of below-grade parking. Landscaped courtyard areas flank the building's entrance. The brick-faced building features a mansard roof.



#### **COMPLETE**

#### San Diego State University Engineering and Interdisciplinary Sciences Complex

In January, the San Diego State University Engineering and Interdisciplinary Sciences Complex was presented as the new centerpiece at a formal ribbon cutting and grand dedication ceremony. After the University asked the team for an expedited delivery to accommodate the start of the 2018 spring semester, the team pulled out all the stops to deliver the complex a full 25 days ahead of schedule.



FILLE DY.

## Standing Out from the Crowd

### Four Clark Employees Earn Regional Top Young Professional Titles

Vice Presidents Brett
Earnest, Kwaku Gyabaah,
Cara Lanigan, and Catriona
Winter have been named as
Top Young Professionals—
formerly known as the Top
20 Under 40—on ENR's
Northwest, California,
Southeast/Texas, and
Mid-Atlantic regional lists,
respectively. ENR's Top

Young Professionals program honors the top nominees in each region under the age of 40. The awards program recognizes individuals who have built extraordinary industry careers in a short amount of time; judging criteria includes industry expertise, leadership, and community service.



**BRETT EARNEST** 





CARA LANIGAN



**CATRIONA WINTER** 



### BOB ADAMS SELECTED FOR UNIVERSITY OF WASHINGTON CONSTRUCTION HALL OF FAME

Atkinson Senior Vice President Bob Adams has been selected for induction into the University of Washington Construction Industry Hall of Fame. This honor is bestowed to persons who have distinguished themselves in the construction industry, in their support of construction education, and in their community.

Bob started his 47-year career with Atkinson after graduating from the University of Washington. During his career, he has traveled across the country and around the world to manage projects, including two of the

world's largest dams in British Columbia and Venezuela. He has served on committees for the Associated General Contractors of America, Washington State Department of Transportation, and Sound Transit, and was the only contractor representative to serve on former Governor Christine Gregoire's "Connecting Washington" budget committee, whose work ultimately led to the 2016 passage of a \$16 billion transportation funding package.

Bob will be inducted into the Hall of Fame at a ceremony in May. ■

#### VICE PRESIDENT ROGER FRICKE JOINS CLARK

Roger Fricke has joined Clark Construction Group as a Vice President. Roger joins Clark with more than 30 years of experience and construction expertise. Having occupied a multitude of construction roles from superintendent to chief estimator and project director, Roger has executed a number of unique and notable projects from the perspective of both client and general contractor. Some of his past projects include The Broad museum, the Peterson Automotive Museum. the Wilshire Boulevard Temple, the Hilton Foundation Headquarters, and the Moda Center in Portland, OR.

In his new role with Clark, Roger will contribute to the preconstruction efforts for complex cultural projects and pursuits in Los Angeles, as well as contribute to the region's strategic planning efforts.



Roger holds a Bachelor of
Science in Building Construction
from the University of
Washington. A LEED AP, he
is also a Board Member of the
Façade Tectonics Institute. ■

#### FOUR PROJECTS RECEIVE BUILD AMERICA AWARDS

Clark and Atkinson project teams were recognized during the Associated General Contractors of America's 2018 Construction Risk Partners Build America Awards. The Build America Awards honor the nation's most impressive construction projects which demonstrated state-of-theart advancement and innovation, and excellent project management, client service, community relations, and safety practices.



VENTURA COUNTY MEDICAL CENTER HOSPITAL REPLACEMENT WING WINNER, DESIGN-BUILD BUILDING



150 NORTH RIVERSIDE
MERIT WINNER
NEW BUILDING OVER \$100M



WASHINGTON STATE UNIVERSITY'S THE SPARK MERIT WINNER NEW BUILDING \$10-99M



I-15/I-215 DEVORE INTERCHANGE MERIT WINNER DESIGN-BUILD CIVIL

#### IN FLORIDA AND CALIFORNIA, TEAMS REACH MAJOR SAFETY MILESTONES

The Miami Beach Convention Center Renovation and Expansion project team continues to keep safety a top priority as the job pushes towards completion later this year. Since the project broke ground in 2015, the team has reached four million hours without a lost time incident.

Across the country, Atkinson's Southern California team is also achieving major safety milestones. With projects including the I-5 Pavement Rehabilitation in Santa Clarita and the I-10 HOV Improvements in Covina, the Southern California division had zero lost time incidents and zero recordable incidents in 2017.





Each fall, Senior Vice President Larry Stovicek boards a bus from Washington, DC to Pittsburgh. He makes his return trip on a bicycle. Here's why:

#### AS SUMMER WAS JUST HEATING UP IN 2012,

Larry Stovicek opened an email from his daughter, Emily. One of her former college field hockey teammates had convinced her to sign up for Ride Allegheny, a fundraising bicycle ride supporting our wounded military veterans. She was enlisting her dad to join her. Emily listed the reasons he should join her: "It's for a good cause,"..."We can train together,"..."We'll be in great shape!" But, she saved one small detail until the end, Larry recalled, "We would begin our bike ride in Pittsburgh, and log more than 300 miles over the course of 4 days on our journey back to Washington, DC."

Yes, it would be physically challenging, but it would be even more rewarding. He was on board. He had just one suggestion when he responded to Emily: "We should probably go buy bikes." So, with their shiny new bikes, they started training for their upcoming 310-mile ride from Pittsburgh to Washington, DC.

In addition to his training, Larry started to learn more about the organization they would be sponsoring. Ride Allegheny is an annual event that sponsors Operation Second Chance (OSC), a small non-profit organization that provides support to wounded men and women of our armed forces while they are in recovery at Walter Reed National Military Medical Center and as they transition back to duty or to civilian life. Larry quickly learned that this grassroots organization was making a huge

impact on the lives of many of our wounded heroes and their families.

Larry recalls one experience with OSC that pushed his fundraising efforts into overdrive. Larry joined a group of wounded veterans and their families for an Army vs. Navy lacrosse game in Annapolis, MD. "I had the opportunity to sit and chat with a 19-year-old veteran who was recovering at Walter Reed. He lost an arm and both of his legs while deployed in Iraq. Talking with this young man who made a huge sacrifice to protect our freedom was a really humbling experience. I decided that fundraising and enduring the ride from Pittsburgh to DC was one small way I could thank him and others for their sacrifices."

To participate in the ride, Larry had to raise \$500 for OSC. He hit that goal, and kept going, eventually raising \$15,000 for the cause in his first year. Over the six years that he's ridden, Larry has raised a grand total of \$300,000 for our wounded military heroes. He's also convinced his brother, sister-in-law, niece, and four of his Clark colleagues to ride with him.

And with summer just around the corner, Larry will soon be back on his bike training for this fall's ride—his seventh—and kicking off his fundraising efforts. Just one small way of giving back to those that sacrifice so much protecting our freedom. ■

Left: Larry and his daughter Emily have been participating in Ride Allegheny together since 2012.

Below: Riders cycle their last mile of the 310-mile journey from Pittsburgh to DC.



## THE WAY WE WERE

## The Washington Post

**ROUNDING THIRD** 

Vice President Ronnie Strompf was featured on the cover of The Washington Post overseeing construction operations as the team readied the ballpark for Opening Day.



#### Ballpark Field General Rallies the Troops

No Detail Is Too Small as Workers Feverishly Prepare for Opening Day

By DANIEL LEDUC

World War II had Patton. The Nationals

World War II had Parton. The Nationals hotlpark has Roomie Strompin now. He's striding down a concourse at the ball-park-in-progress, and the loudest sound be hears is a single worker with a grinder, shooting sparks in one corner. This is too shooting sporks in one corner. "This is too quiet for the amount of work that should be

going on in here. Strompt growts. Trim from walking eight miles a day around the ballpark, he's the person who has to make sure the \$611 million project in Southeast Washington is finished by spring. And that's why he's breathing down the

necks of 900 employees, scattered high and low throughout the sprawing site. At 62, Strompf is something of a legend in the world of Washington construction. He helped oversee work on the National Scie

Foundation in Arlington County, the new Department of Transportation headquarters in Southeast and office towers in Tysons Cor-ner as vice president of Clark Construction. He was project superimendent of the city's most expensive building, the Washington Convention Center. When city officials were considering whom to select to build the bullpark, they

See BALLPARK, 46, Col 1

TEN YEARS AGO, on March 30, 2008, baseball fans in the Washington, DC area celebrated the opening of Nationals Park with a walk-off home run by Ryan Zimmerman in a Nationals' win over the Atlanta Braves. Clark served as the managing joint venture firm to deliver Nationals Park, alongside Hunt Construction Group and Smoot Construction.

To ensure that the ballpark was ready for 2008 Opening Day, the facility was constructed under a fast-track design-build delivery method. Despite a two-month delay at the start of the project due to the land purchase, Clark delivered the project ahead of the original completion date and on budget.

Vice President Ronnie Strompf's leadership was key to the project's success. Ronnie was featured on the home page of The Washington Post just a few months before the ballpark was scheduled to open. The chief orchestrator of the 900 tradespeople that delivered the stadium, Ronnie knew what was critical to delivering the stadium on-time, stating in the article, "It's not about me; it's about the workers here."

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