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BRADSHAW JR.

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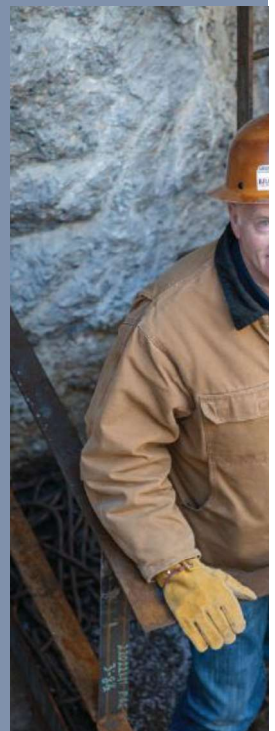
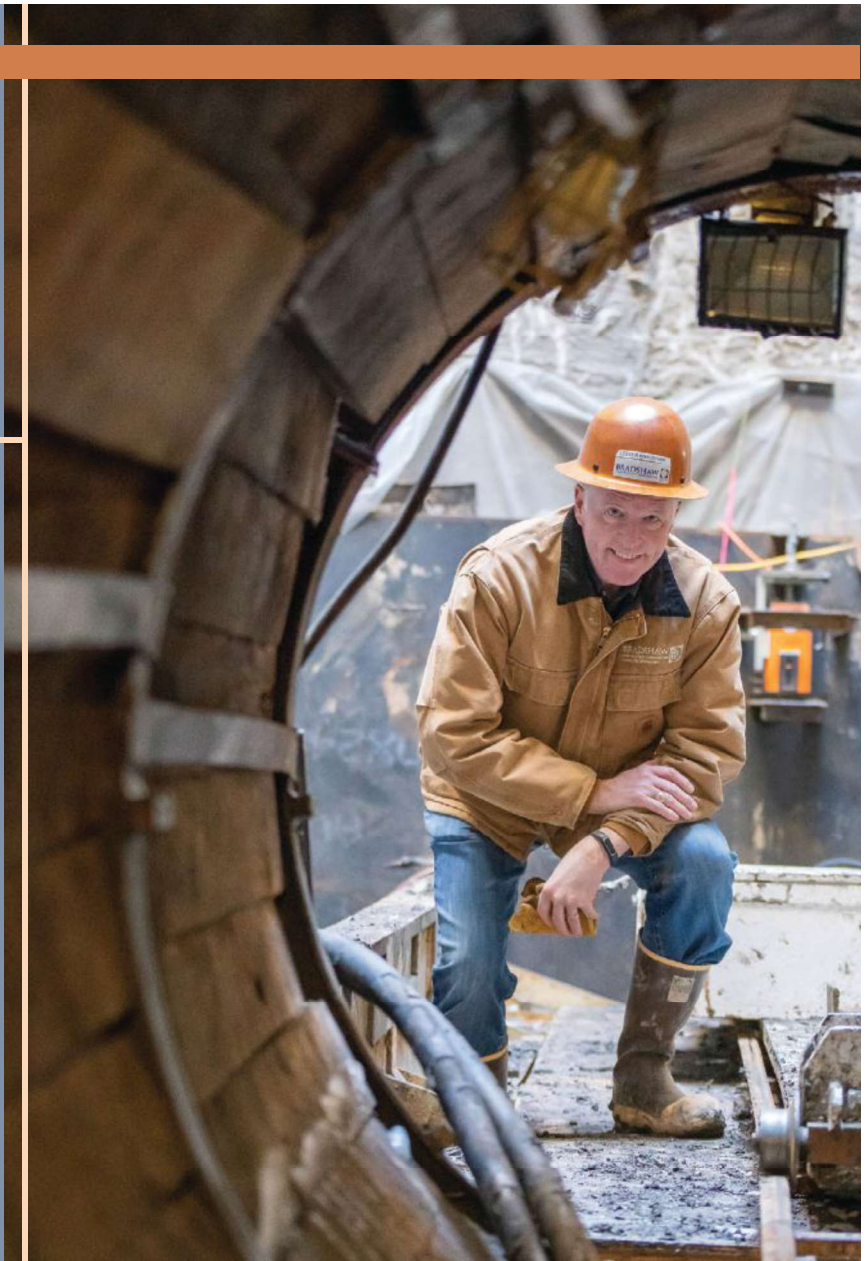
By Sharon M. Bueno

Lester Bradshaw Jr. took his first job underground when he was 14 years old. Fifty-two years later, he still loves to pull on that hard hat and head below the surface with the soil under his dirty, worn work boots — following in the footsteps of his father, Lester Sr.

Bradshaw's knowledge of the world of microtunneling is virtually unparalleled in an industry that is considered small and tight-knit, with 20 or so microtunneling-only contractors doing business. He is outspoken and detailed when it comes to sharing his perspective. He helped to write the very standard that guides today's microtunneling industry and hopes to be a part of future standard updates. He has earned the respect of his peers in the field and in the microtunneling classroom.

Growing up in a tunneling family, one thing he knew for sure is that he wanted to build things. His prized childhood toy was an erector set he received as a gift. The joy of constructing different crane configurations never lessened — a similar joy he has had over the course of his tunneling career.

He is a contractor in mind, body and soul.





For all that Lester Bradshaw Jr., has accomplished and continues to accomplish, he is the 2021 *Trenchless Technology* Person of the Year — an award that has touched him deeply.

"I never dreamed I would be considered — much less be chosen — as the *Trenchless Technology* Person of the Year," says Bradshaw, now 66. "I'm honored and humbled to be selected for what I consider to be a prestigious industry award. We are all in a very small industry and to receive this is just ... wow.

"I feel like this award recognizes the lifetime of work I've put into this industry to make it better and more lasting. I greatly appreciate *Trenchless Technology* magazine for selecting me."

GROWING UP BRADSHAW

As a boy, Bradshaw was surrounded by family who shaped the way he approaches hard work and business, even today. His parents and grandparents strongly influenced his character and work ethic. He and his three brothers spent lots of time as young boys at their paternal grandparents' farm near Lake Cumberland, Kentucky. Wiped out by the Depression, his grandfather sharecropped for 20 years in order to afford his own farm again. His grandmother taught school while his grandfather also worked for the Works Progress Administration (WPA) during the darkest days of the Great Depression.

"They taught me a lot about perseverance," Bradshaw says. "They were looked down on by the farming world because they sharecropped. They survived tuberculosis, broken spines, and hardest of all, losing two young children. They never complained and just kept getting up.

"Perseverance is important in the kind of business we are in," he says. "The tunneling business, as with most underground businesses, is quite risky and takes a lot of perseverance."

Bradshaw's introduction into tunneling came early in childhood. His father, Lester Sr., got a taste of tunneling at age 17 by way of his uncle, who was a superintendent for an infrastructure contractor constructing a Chicago subway tunnel. After serving in the U.S. Army during the Korean War, his father was anxious to strike out on his own in business. He turned to utility tunnel construction.

"Dad always wanted to be a business man. He went into utility tunneling because the contracts are smaller so you can start a business and not need a lot of capital. He was a farm boy and a hell of a tunnel miner ... a natural," Bradshaw

explains. "He could do anything in hand-mined tunneling. Within a few years, he was a trouble-shooter for a lot of big companies."

As a result of his father's career, the Bradshaw family traveled via a mobile home to wherever the next job was — moving as many as 12 times in one year. Once he and his brothers were of school age, that wasn't practical and the family settled in Maryland. Bradshaw says he struggled in school, with reading in particular; so much so that his school decided to hold him back in the second grade. His father would have none of it.

"He told them, 'He'll be alright, he'll do the work, just move him up.' And they did," Bradshaw remembers. "I didn't let my Dad down. I learned to read on my own."

In those days, dyslexia wasn't something schools had an understanding of. Not until years later did Bradshaw know the root cause of his reading issues. "I'm a verbal dyslexic. I figured out how to read on my own and figured out how to study," he says. "I had that same hard-work-attitude when I got into college."

Bradshaw excelled in mathematics. When it came time for college, he chose math-centric Georgia Tech to further his education, graduating from its five-year co-op civil engineering program in four years and then adding a civil engineering master's degree, all the while helping his father's business in the winter and summer months. He says he really didn't want to be a design engineer and he still dreamed of building things. That path did come to him, albeit a bit later than he had hoped.

EARLY START TO TUNNELING

The family business was called Eastern Tunneling and it got off the ground in the early 1960s, with Lester Sr. working 18 hours a day the first few years. Everyone chipped in as they could. Bradshaw, eager to earn money of his own, took on the role of the office janitor at age 9. On Sundays, he would clean the desks, sweep and mop the floors and take out the trash, earning himself \$5 for his contributions. When he was older, he took on more tunneling-centric jobs.

One of his earliest jobsite memories nearly ended in disaster when he was nine. "I used to stand over the shaft, watching the tunnel and the muck boxes being lifted out. My father would run the crane on the nightshift," he remembers. "Once, the crane malfunctioned as he was lifting up a loaded muck box. I'm standing there with my hand on top of the ladder looking down. All

COVER STORY

of a sudden, the muck box careened everywhere, right before crashing where I was standing, splintering the ladder. Luckily, a laborer had run up and pulled me out of the way just moments before. It was a shocking experience, but I was back the next week fascinated by the work.”

Bradshaw’s tunneling education ran the gamut, starting at the bottom rung, leading to where he is today — each rung a learning experience. Among the jobs he worked along the way are tunnel laborer, tunnel miner, crane operator, shift foreman, shift supervisor, tunnel supervisor, tunnel estimator, project manager and bidder.

“From all of that, I learned that I needed more business training and that I wanted to get away from engineering,” Bradshaw says. “It just wasn’t a fit. I wanted to be a contractor.”

He earned his MBA from Harvard, which coincided with his father’s business coming on challenging times. Bradshaw started working for AMOCO in Chicago, dealing with mergers and acquisitions. He wanted to work in the Denver office to be closer to the oil fields; however, his company wanted him in Houston. A decision had to be made: Bradshaw quit his “office” job and went to work with his father.

“I went from wearing three-piece suits and ties on the 32nd floor of AMOCO’s headquarters to traveling in a rickety old car, wearing hardhats and boots from the local hardware store,” he says. “I started building tunnels again with my dad and my three brothers.”

And he was much happier. Together, they formed LM Bradshaw Contracting Inc., later tweaking the name to Bradshaw Construction Corp., all based in Maryland. This was during the 1980s. Bradshaw describes that period as “probably one of the worst recessions in the United States” while they were trying to grow their business.

“We fought, survived and grew,” he says.

FOCUSING ON MICROTUNNELING

Bradshaw took the reins of his father’s business in 1991, when his father retired. At that time, they were still mostly doing hand-mined tunneling work. The company’s repertoire beyond tunneling grew to include auger boring and pilot tube-guided boring. The company performed its first microtunneling project in 1991, five years after the first microtunneling project was completed in the United States. “It was eight years before we had the chance to do another one,” he says, explaining that no one was actually designing microtunneling projects at that time due to their expense vs. conventional tunneling. Slowly, that tide turned and so did the focus of Bradshaw Construction.

Today, Bradshaw Construction has nearly 100 employees and is home to one of the largest fleets of microtunneling equipment in the United States. Microtunneling is responsible for over 80 percent of the company’s business. They do more hard granitic rock microtunneling than any-



↑ Les with his wife Kirsten on a jobsite. The pair met at a tunneling industry event and were married in 2018.



one and recently completed the longest single drive in rock of 1,860 ft.

GIVING BACK

As the company grew, Bradshaw became an industry advocate and voice of the contractors. As microtunneling slowly emerged as an accepted trenchless method to engineers and owners, Bradshaw pushed to have contractors' input included when it came to important industry standards and guidelines. He was also a founding member of the North American Microtunneling Association (NAMA).

"I told [NAMA founding executive director] Tim Coss that we are a mature enough industry to where intense competitors can sit down and organize a group to push forward common needs and issues of the industry that we all share," he says. "We'll all benefit from it without giving away trade se-

crets of what we do."

He became NAMA's spokesperson and first chairman. He pushed to be a part of the ASCE standards committee that was developing updated microtunneling guidelines. The importance of including the voices of the microtunneling contractor to the national discussion and writing of industry guidelines cannot be overstated. Bradshaw fought for a seat at the table for his fellow contractors and wasn't shy in voicing what he believed was right and/or wrong in the process. He says for two years he spent every other Friday on conference calls to incorporate his and NAMA members' extensive knowledge in the document, which was published by ASCE in 2015.

"Now that standard is out of date. It doesn't even deal with curved microtunneling or deal with drives over 1,500 ft, Bradshaw says. "Now, we're seeing drives often over 2,000 ft and are seeing a lot of curved drives being designed."

He is also a big supporter of industry

associations as networking tools, as well as agents of education for current and future members of the microtunneling community. Over his career, Bradshaw has been an active participant in NAMA, NASTT, NUCA, The Moles, UCA of SME, ASCE and a sponsor of the Women in Tunneling group.

"Microtunneling is growing and it's displacing other utility installation methods, like trenching and conventional tunneling," he says. "It's becoming more accepted and has finally penetrated throughout the United States. The advent of curved microtunneling and long pushes has really started to excite the marketplaces."

THE BIG TAKEAWAY

Bradshaw's passion for microtunneling is unmistakable when listening to him speak. His stories are interesting and purposeful, explaining how he forged his

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* Data provided by the ASCE Manuals and Reports on Engineering Practice No. 92, "Manhole Inspection and Rehabilitation", 2008 Update.



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Lester M. Bradshaw Jr.

President of Bradshaw Construction Corporation

2021

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PERSON OF THE YEAR**

“

If more people would be like Les our Industry would benefit a lot. Technically as well as humanly.

”

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Lester Bradshaw

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path in this business and has stayed at the top. The lessons of his parents and grandparents are always beneath the actions. Never give up and never quit are lifelong mantras he follows, as well as keeping your integrity and honesty.

The biggest takeaway Bradshaw offers from his lifelong career has to do with the science of it all. “Understanding tunnel geology and ground behavior is more necessary than ever. Often over 50 percent of your job time is spent setting up the microtunneling equipment and tak-

ing it down. That means tunneling is a very small portion of your bid; however, if you’re wrong about the ground conditions and how it’s going to behave, you economically die,” he says.

While his professional life can be all-consuming, the excellent staff at Bradshaw Construction has allowed Bradshaw to step away and enjoy other aspects of his life. His family and friends are a top priority and he has eased up on the once constant air commute back and forth from his home in Denver to the

company headquarters in Maryland. Conference calls and virtual meetings — and the 2020 COVID-19 pandemic — have made that transition easier. After mastering reading for work, Bradshaw also learned to read for fun and truly enjoys this quieter pastime, consuming books of historical and spy themes at a rate he never thought possible. He is also an avid bicyclist, a hobby he has nurtured since he pedaled his first bike at 3.

“I fractured my spine when I was 16 and have had four spinal fusion surgeries [in my lifetime],” he says. “I’ve lived with back pain most of my life but when I’m on a bike, I don’t hurt,” he says, noting he has a group of biking buddies in Delaware that get together once a year to ride 100 miles in a day.

Bradshaw is also a supporter of the National Family Resiliency Center in Maryland, which counsels children and adults going through separation and divorce. He says this organization helped him and his children very much so he supports NFRC with his donations and time having served as board president for five years.

Today, Bradshaw is happily married to Kirsten Young Bradshaw; the pair met years ago at The Moles in New York City and immediately clicked. They married in 2018 and he adopted her daughter Morgan. He has three children living on the East Coast: Kathy, Tori, and Marshall, along with three grandsons, Jimmy, Jack, and Jesse. Life is definitely good.

“I am passionate about what I do. I like being good at things,” Bradshaw says. “This industry is so exciting. There is a certain amount of gambling with it. You’re betting on how quickly you can go through the ground and what it is going to cost you. And every time it is different. You bid jobs. You don’t know if you’ll get chosen so it’s exciting when you get a job. You get a thrill and then you have the anxiety that comes with it. Was I right? It’s truly satisfying when you come up with the answers when others could not.”

Sharon M. Bueno is managing editor of *Trenchless Technology*.

