Grand Concept

If you’ve noticed the Conway I-40 overpass with plants lining the sidewalks, that’s this year’s Engineering Excellence Awards Grand Conceptor winner. From right, Garver’s Todd Mueller, P.E., Richard Corbyn, P.E., and Charles Cullen, P.E., were part of a team that finished three projects in one in order to provide access to the former Conway airport site and improve traffic flow in a busy commercial area. The design work was completed in 12 months while the traffic was kept moving.
Finishing a magazine in the second half of March that will be delivered in the first part of April is a normal activity for ACEC/A and ASPE, but these are far from normal times.

As I write this, the ASPE Annual Conference is being postponed because of the coronavirus. Instead, we'll hold that organization's most important annual event August 27-28. We'd like to keep the same speakers and are contacting them as to their availability.

We're printing the magazine even though we don't know what the world will look like in three or four weeks. We hope our member firms will have gotten back to business.

Eventually, everything will be back to normal – well, a new normal – and so even though our world has been turned upside down for a while, we must think about the future – starting with November.

You may have heard that this is an election year, although it would be easy to forget in the midst of a pandemic. While the presidential race will dominate the national discussion, here in Arkansas engineers will be focusing on Issue 1.

As I'm sure you're aware, the Legislature under the leadership of Gov. Hutchinson has referred to voters a constitutional amendment that would permanently extend the half-cent sales tax that funds the Connecting Arkansas Program. The tax is set to expire in 2023.

By extending it, voters will provide $205 million annually in ongoing funding for highway needs and will continue providing $43 million each to cities and counties.

ACEC/A and ASPE will be actively supporting this campaign. Recently, ACEC/A joined the Arkansas Good Roads Foundation, a coalition that since 1975 has worked to increase support for the state's highways. The Good Roads Foundation will be one of the primary leaders of the Issue 1 campaign, and it will do so with ACEC/A's support.

Eventually, we'll all come out of hiding, and commerce will get moving again. But commerce in Arkansas needs a foundation of good roads. As engineers, let's make Issue 1 our number one issue this election season.
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Garver’s Cantrell Field access project for the City of Conway won the Grand Conceptor Award at this year’s Engineering Excellence Awards at the Governor’s Mansion March 5.

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A Garver project that improved access to a closed Conway airport awaiting redevelopment, installed a roundabout at a nearby busy retail area, and planted greenery on the connecting overpass won this year’s Grand Conceptor Award at the Engineering Excellence Awards.
We infused innovation into a wastewater treatment facility to strengthen a community.

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We’re Olsson, engineers who understand that where there’s a project, there’s a purpose. See how our bio-tech approach upgraded key infrastructure in Batesville, Arkansas, at olsson.com.
How to make 2020 an excellent year

For ACEC/A, 2020 began and will end with a reminder of how important our work is in building Arkansas.

On March 5, ACEC/A members gathered at the Governor's Mansion to distribute the Engineering Excellence Awards.

However, the awards aren’t really the point of the evening. The EEA’s real purpose is to celebrate the industry itself.

We do that by sharing a meal and seeing what our competitors have been doing. One firm receives the Grand Conceptor Award because committee members looked at the applications, shrugged their shoulders, and said, “They’re all good, but I guess this one.”

In other words, the EEA’s are more about what brings us together than what sets us apart, which brings me to how the year will end: with voters choosing whether or not to provide the continued funding to help us keep moving Arkansas forward.

In November, voters will be asked to permanently extend the half-cent sales tax funding the Connecting Arkansas Program, which will expire in 2023.

If Issue 1 passes, the Arkansas Department of Transportation will have another $205 million annually for needed highway system preservation and construction. Cities and counties will continue receiving $43 million each. If it fails, they’ll have to absorb the loss of that revenue.

No one likes paying taxes, including me. But if there’s anything government should do, it’s investing in infrastructure. Nothing builds and maintains the economy better than good roads. Most of us start our workday on a roadway. Major corporations and small businesses could not operate without an efficient highway system. No doubt, Walmart, Tyson, J.B. Hunt and others helped build Northwest Arkansas into the booming success it is today, but what if there were no I-49 connecting the region to I-40?

Good roads improve our economy, strengthen our communities, reduce fuel consumption and the need for auto repairs, and save lives. The half-cent sales tax has already transformed Highway 70 connecting Benton and Hot Springs from a two-lane hazardous roadway into a four-lane thruway. Soon it will help complete the $630 million 30 Crossing project connecting Little Rock and North Little Rock.

The original tax was approved by more than 58% of the voters in 2012, and a poll taken by supporters has been encouraging. Gov. Asa Hutchinson has said passage of the tax will be his top priority this election cycle.

But passage is far from assured. Some Arkansans will vote against any tax. The measure will share the ballot with a divisive presidential election and with other ballot issues that may distract voters from the tax’s benefits.

As engineers, we have a part to play in the campaign, which is why ACEC/A has joined the Roads and Bridges Coalition supporting the effort, and why it’s also joined the Good Roads Foundation, which advocates for highway funding year-round.

That’s what ACEC/A is doing as a collective body. As individual engineers and design professionals, we can vote for Issue 1, donate to the campaign, and explain its benefits in private conversations and on social media – respectfully. Just tell people it’s the same tax they’ve been paying, point to projects like Highway 70, and remind them the state has other needs. They drive on those roads in need of repair or rehabilitation just like you do.

This year started with the EEA’s, and it will end with the chance to enact a permanent highway funding source. It’s going to be a good year regardless. Let’s make it excellent together.
During and after the crisis, U.S. will need engineers

This column originally focused on the agenda for the ASPE Annual Conference, which was scheduled for April 16-17 at the Hot Springs Convention Center. The headline was “See you in Hot Springs!”

Well, not yet.

The coronavirus pandemic has upended ASPE’s plans just like it’s upended the plans of many businesses and organizations. The ASPE leadership along with our executive director, Angie W. Cooper, decided to postpone the conference until August 27-28. We’re hoping the same lineup of speakers will be able to come. And we know the concluding luncheon will continue some of our organization’s most treasured traditions. Those include the announcement of the Engineer of the Year and Young Engineer of the Year, the Order of the Engineer induction ceremony, and the graduation of the most recent Emerging Leaders class.

All of that will happen August 27-28 rather than in April. No big deal.

What is a big deal is how the coronavirus is affecting daily life. It’s already resulted in the deaths of 85 Americans and 6,603 people worldwide as I write this – numbers that surely will be much higher by the time you read this. The American economy has ground to a halt, and no one knows how long this will last. Maybe we’ll have been given the all-clear by the time you read this, but that seems unlikely.

The United States always needs engineering leadership, but that’s especially the case in uncertain times. This public health crisis requires the immediate services of highly skilled biomedical engineers who will help develop vaccines and cures. When the crisis passes, civil and other types of engineers will have roles to play. American life will change in ways we can’t anticipate, just like it changed after the September 11 attacks. Combating viruses may become the new combating terrorism. Medical facilities will have a new focus on infectious diseases and will have to be designed accordingly. Buildings and public spaces may need to circulate air more effectively and encourage people to spread out.

Who knows how designs will change to encourage different types of social interaction? Perhaps society will place a greater emphasis on small gatherings rather than large group meetings. Consider how much educational facilities have changed in the wake of school shootings. Schools across Arkansas are being designed to make it harder for someone to just walk in off the street. Engineers did a lot of that, and they’ll be making the changes that will come in response to the coronavirus pandemic as well.

In addition to engineers’ skills, society will also rely on our mindset. This crisis, and the response to it, requires clear-minded, evidence-based thinking. Otherwise, we may overreact, underreact, or react in the wrong ways. Engineers are trained to look at data, facts and scientific principles. Currently, Congress is composed of not very many engineers, an exception being Arkansas’ own Rep. Bruce Westerman. More of us are needed.

The poet Rudyard Kipling wrote, “If you can keep your head when all around you are losing theirs and blaming it on you.” One thing about engineers: We keep our heads about us. So far, others are not losing theirs, but in some cases, they might. Engineers will be needed to meet the challenges of this moment, and the challenges that will come afterwards. Now is our time to be leaders.

See you in Hot Springs.
In the News

Dunn becomes Crist president; Noland retires

Matt Dunn, P.E., has become president of Crist Engineers, Inc., effective Feb. 10 with the retirement of the firm’s previous president, Stewart Noland, P.E. Noland is retiring after a career of more than 44 years in engineering, 27 of those years with Crist Engineers.

Craig Johnson, P.E. has been elected vice president.

Dunn began his career with Crist Engineers in 1999, became a partner in 2004, and became vice president in 2011. He is a registered professional engineer with 21 years of experience in the water and wastewater market.

He received his Bachelor’s Degree in Industrial Engineering in 1997 and his Master’s Degree in Civil Engineering in 1998, both from the University of Arkansas, Fayetteville.

Noland announced his retirement effective March 31. Noland joined the firm in 1992 as an associate and vice president and has served as president since 2013. He received his Bachelor’s Degree in Civil Engineering in 1975 and his Master’s Degree in Civil Engineering in 1976, both from the University of Arkansas, Fayetteville.

Effective April 1, 2020, the firm’s partners include Dunn; Johnson; Les Price, P.E., secretary/treasurer; and Chad Hastings, P.E.

Founded in 1938, Crist Engineers is one of the oldest consulting engineering firms in Arkansas. The firm offers specialized experience in water treatment and distribution, wastewater collection and treatment, and other engineering services including planning and construction management to clients throughout Arkansas and surrounding states.

Garver opens Rogers office

Garver recently opened its newest office location in Rogers, the firm’s fourth in the state, and it joins more than 30 offices across its 13-state footprint. Employees in Rogers will work hand-in-hand with those based in its growing Fayetteville office and will primarily service clients to deliver innovative solutions for aviation, construction, survey, transportation, and water projects.

Garver’s Fayetteville office opened in 1996 and is currently the base for more than 100 employees. With offices also in North Little Rock and Conway, more than 300 of Garver’s more than 700 employees are based in the state. The new Rogers location will also accommodate a growing Garver workforce that includes employees based throughout the region.

“Our Fayetteville office has been an integral part of Garver’s identity for almost 25 years, but we simply needed...
In the News continues on page 10

more room,” said Garver President and CEO Brock Hoskins, who helped open Garver’s Fayetteville office. “This new location will allow us to continue our organic growth, as well as more personally serve our growing list of valued clients throughout Northwest Arkansas.”

Garver’s Kruger on council for water design-build

Garver Water Implementation Leader Kyle Kruger will serve as vice chair for the Water Design-Build Council (WDBC) Advisory Group in 2020 and serve as chair in 2021.

Kruger, based in Garver’s Fayetteville office, will help facilitate the group’s involvement in WDBC initiatives, and he has also joined the Technical Practices Committee. This year, the committee is focusing on improving resources for Construction Management-At-Risk (CMAR) delivery, a method that promotes collaborative working relationships between owner, designer, and construction manager throughout the life of the project.

The WDBC is North America’s leading education resource for best practices in water design-build delivery.

Garver’s McCoy in Bio/Agri Engineering Academy

Garver Transportation Project Manager Kathryn McCoy was a recent selection to the 2020 Class of the Arkansas Academy of Biological and Agricultural Engineering.

Based in Garver’s North Little Rock office, McCoy will help fulfill Academy objectives that include strengthening the dedication of students to biological and agricultural engineering, recognizing distinguished department graduates, and providing advisory guidance and counsel to the department.

McCoy will be recognized along with other 2020 selections during an April ceremony in Fayetteville.

McClelland Consulting Engineers promotes four

McClelland Consulting Engineers, Inc., a regional multidisciplinary consulting engineering firm, has promoted four staff members.

In the News continues on page 10

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IT’S SIMPLE MATH!

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Nathan Streett, PLA, head of MCE’s Land Development Department, has been promoted to senior associate. Streett joined the MCE team in the Fayetteville office in 2015 and has more than 19 years of experience in planning, coordinating, and leadership in the civil engineering and landscape architecture industries. He has completed scores of multimillion-dollar projects while creating a close relationship with many jurisdictional agencies. He is a 2001 graduate of the University of Arkansas, where he obtained his bachelor of landscape architecture.

Nick Batker, P.E., CFM, project manager in MCE’s water/wastewater department, has been promoted to senior associate. Batker joined the MCE-Fayetteville team in 2015 and has more than 20 years of experience in the planning and design of infrastructure and water resource projects, as well as 16 years of experience managing projects. He has experience in planning, design, construction, and project management of water/wastewater pipelines, pump stations, lift stations, drainage systems, and roadways. He is a professional engineer registered in four states. He also has his accreditation as a certified floodplain manager. He obtained his civil engineering degree from Texas A&M University in 1998.

Alex Smith, P.E., has been promoted to senior associate. Smith joined the MCE-Little Rock team in 2010 after obtaining his civil engineering degree from the University of Arkansas. He is a project manager in MCE’s aviation department, where he has gained knowledge of funding and landside design of airports. He regularly attends FAA-sponsored conferences and reviews changes in design and funding. He works with airports on their Disadvantaged Business Enterprise plans and helps develop capital improvement plans to be submitted to the FAA. He also assists in designing projects, performing runway safety area evaluations, and overseeing construction administration.

Paige Witcher has become the newest MCE associate. She joined the MCE-Little Rock team in September 2014 as an office administrator. In addition to organizing and writing the specifications for the Little Rock office, she is tasked with ensuring that the administrative activities within the organization run smoothly and efficiently.

Olsson’s Needham passes P.E. exam

Erin Needham, P.E., an associate engineer at Olsson, recently passed the standard required exam and earned her professional engineer certification.

To earn P.E. certification, a person must complete four years of professional experience under a licensed P.E. and pass the P.E. exam.

Needham is a member of Olsson’s Fayetteville Water/Wastewater team. Since joining Olsson, she has done a number of projects including hydraulic modeling, master planning, design work for a pump station, water lines and a water storage tank.
Needham earned a bachelor’s, master’s and a Ph.D. in civil engineering from the University of Arkansas.

Olsson is a nationally recognized engineering firm. It offers design and consulting services in planning and design, engineering, field services, environmental and technology.

Boyett named a new B&F partner

Danny Boyett, P.S., is a new partner to B & F Engineering’s ownership group, the company’s board of directors has announced.

Boyett joined B&F in 2010. He is a licensed professional surveyor, a project surveyor, and is the current president of the Arkansas Society of Professional Surveyors. He earned his Bachelor of Science in Biology in 1999 from Henderson State University and his Master’s in Geospatial Surveying Engineering in 2010 from Texas A&M University.

“Danny is an outstanding individual and surveyor, and he is well respected by his coworkers and clients,” said James Montgomery, P.S., president of B & F Engineering, Inc.

ASPE Annual Conference will be in August

The ASPE Annual Conference, which had been scheduled for April 16-17, has been postponed until August 27-28 because of the coronavirus pandemic.

Jim Vetter, P.E., ASPE president, decided to postpone the annual event in consultation with Executive Director Angie W. Cooper. The ASPE board of directors approved the move.

ASPE hopes to have the same agenda in August that it planned for April and will be contacting speakers about their availability.

Further information will be shared electronically as it is available.

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MCE would like to congratulate all of the 2020 ACEC Arkansas Award Winners for Engineering Excellence
Geraci and Eakin’s firm lets them stay in engineering but be choosy about their clients

Rick Geraci, P.E., and Mark Eakin, P.E., have practiced engineering for 28 years together at four firms – including their new one, TLG Engineers, where it’s just the two of them.

Both are 70 years old and want to continue doing what they love, but on their own terms.

“Our philosophy is really to work on this enough to pay our mortgages and be able to go fishing,” Eakin said.

Geraci, an electrical engineer, and Eakin, a mechanical engineer, spent about a decade together at H.W. Goodman Engineers until Goodman retired. Then they joined what’s now Batson, Inc., becoming partners in the firm. When founder Charles Batson planned to retire, they moved to Brown Engineers in 2010.

Their departure from that firm was equally amicable. Eakin had been forced to cut back his hours to care for his ailing wife, Judy, now deceased, so he semi-retired but wanted to continue engineering part-time. He started TLG Engineers in January 2019. Geraci was also ready to reduce his hours without giving up engineering completely, so he joined the firm later that year.

“It just seemed like at that age and with everything going on, it just kind of made sense as an exit strategy to exit while you still had your wits about you,” Geraci said. He later added, “We could work with the clients that we wanted to work with and do as much work as we wanted to try to do.”

Don’t ask what the letters “TLG” stand for, because Geraci and Eakin aren’t telling. Geraci said some people think they know, “and some of it’s pretty hilarious.”

“They’re just letters that mean something to Mark and me,” Geraci said. “It’s kind of a personal thing for us. You know, we’ve worked together for some 28 years.”

While the two will spend fewer hours in the office than in the past, they still plan to do serious work. They specialize in critical electrical and mechanical applications for hospitals, data centers and infrastructure, and in assessing facilities for potential expansions. They work with established in-state and out-of-state clients and have multiple licenses across the country.

They bring to the firm a wealth of experience. Among Geraci’s signature projects was lighting the inside of the Arkansas Capitol dome, which previously was lit only by a chandelier, and overseeing the testing and commissioning of the electrical systems for a chemical weapons disposal facility in Pueblo, Colorado. The $4 billion project disposed of mustard gas artillery shells.

“Obviously, you don’t make any mistakes,” Geraci said. “So that was one that was quite interesting and intricate and from a moral perspective, after what Syria did to some of their own people using mustard gas, it was time to get rid of all that stuff in our arsenal.”

Eakin’s projects have included replacing the main cooling equipment for the 40-story Simmons Tower in Little Rock, and replacing the main cooling machines and revamping the pumping-piping system for the Marriott Little Rock and the Statehouse Convention Center. He has done numerous projects for the National Center for Toxicological Research.

The two have made many friends in what Geraci described as a “people business.” TLG will enable them to stay active without the pressures of maintaining a full-time operation.

“Rick and I still enjoy what we do best, and we work for some very nice clients that fit our niche, and so we kind of developed a philosophy that we could go and work for some of these clients that we’ve had for a long, long time doing exactly what we like to do, and not having to do that everyday junk that we don’t like to do,” Eakin said.
Tudor new ARDOT chief as Issue 1 looms

First female director was Highway Commission’s only choice to replace Bennett

By Steve Brawner
Editor

Lori Tudor, P.E., started as an Arkansas Department of Transportation clerk typist and became a bookkeeper, but she wasn’t satisfied. So, she became an engineer and is now the department’s first female director.

Tudor, ARDOT’s current deputy director and chief operating officer, was named director by the Highway Commission Feb. 20, one day after the current director, Scott Bennett, P.E., announced his retirement effective March 20.

Tudor, who described herself in an interview that day as Bennett’s “wingman,” said she knew she had a chance at the position when he announced his retirement, but the Commission could have engaged in a nationwide search.

“It gives me a lot of confidence because I feel like they have confidence in me,” she said.

She said her priorities as director will be educating voters on Issue 1 and then implementing the program if it passes. Issue 1 is a proposed permanent half-cent sales tax extension that will be on the November ballot. It would permanently extend a 10-year tax passed by voters in 2012 to fund the road-widening Connecting Arkansas Program. That tax is set to expire in 2023. If Issue 1 passes, it would provide $205 million annually to ARDOT and continue providing the tax’s $43 million each that is currently going to cities and counties.

“We thought it might be a little later,” he said with a laugh.

Tudor is a 36-year ARDOT veteran. After high school, she attended college for a year-and-a-half but had to leave school. In need of a job, she began working at the department as a clerk typist in 1981. From there, she worked her way up to become a federal aid bookkeeper, a grade 13 position.

However, she said, “I always knew that I had sold myself short. … I’d reached that glass ceiling. I had moved up as far as I could without a degree.”

Tudor did not know much about engineering when she started at the department. Only two or three female engineers were working there, and it was not a profession women were encouraged to enter.

“I met a lot of engineers, and I began to realize it was a good profession, thought it was interesting, and so I thought, ‘Well, why not?’ So I took a couple of night classes to see how my aptitude in math was, and it was good. And the rest was history,” she said.

She resigned in 1995, earned a civil engineering degree from the University of Memphis, and returned to the department in 1998 as a civil engineer in the Planning Branch. That was a grade 10 position, three levels below her former job. She held various titles in planning, research, and program management until she became assistant chief engineer for planning in 2011. In December 2014, she was named deputy director and chief operating officer.

She is the fifth person to serve as the department’s director in 47 years, following Henry Gray, who served 15 years; Maurice Smith, who served six years; Dan Flowers, who led the department for 17 years; and Bennett, nine years.

However, she said, “I don’t consider myself male or female. I just consider myself an ARDOT employee, an engineer, and I just have worked my heart out my whole career to do the best job that I can, but it is a great milestone that I am the first female to reach this position.”

Bennett described Tudor as “my right-hand person for several years now. One of the things that I told her when I put her in that role is, your job is to do ev-
Bennett said he is leaving for the private sector, the specifics of which would be made public about the time he retires.

Bennett said private sector opportunities arise periodically, and this was the time to accept one.

“A lot of people have said you’ll know when it’s time, and I know it’s time. I know it’s time for the next chapter,” he said.

He leaves as ARDOT is nearing a long-sought permanent funding source. Bennett has been front and center during recent legislative sessions pleading for more highway funding. Fuel taxes have remained unchanged while vehicles have become more fuel efficient and highway construction costs have increased.

Bennett: Always a next big thing

Asked about the timing of his departure, he said that during his tenure, voters passed an interstate bond issue in 2011 and passed the half-cent sales tax for the Connecting Arkansas Program in 2012. In 2016, Gov. Asa Hutchinson and legislators transferred money to highways in a special session. Then in 2019, legislators referred Issue 1 to voters and increased highway funding by $95 million by raising fuel taxes and transferring casino revenues. Hutchinson has said Issue 1 will be his top priority this election cycle.

“There’s always going to be that next thing, that next big thing when you’re in this role,” Bennett said. “I’ve had a hand in setting up this program, and setting it up in a way that we really believe is going to be successful and going to be good for the citizens, and we’ve got a lot of good people that can carry this out.”

Holder is new Highway Commissioner

Gov. Asa Hutchinson named Marie Holder to the Highway Commission March 12 to complete the term of the commission’s chairman, Tom Schueck.

Schueck, 78, died March 3.

Holder will complete Schueck’s term, which ends Jan. 14, 2021. Hutchinson said he will appoint Holder to a full 10-year term.

Holder is CEO of Holder Consulting and served as the governor’s chief political fundraiser and re-election campaign treasurer. She managed the governor’s political action committee, ASA PAC, but resigned March 12, she told the Arkansas Democrat-Gazette.

She is the fourth female highway commissioner.

Highway commissioners elected Robert Moore Jr. to replace Schueck as chairman. Alec Farmer is now vice chairman.
Crafton Tull’s 250 owners gather

First Arkansas-based, 100% employee-owned engineering firm meets in Fort Smith
By Steve Brawner

Crafton Tull employees from seven offices in two states “intersected” in Fort Smith Feb. 20 to learn more about becoming the first Arkansas-based 100% employee-owned engineering firm.

The Intersection 2020 event gave company leaders a chance to explain the employee stock ownership plan, or ESOP. It was the first time everyone in the company gathered in one place since its Founders Day event in 2006.

“An intersection is a meeting of two things, right? Whether it's a street, or whether it's ideas or people,” Matt Crafton, P.E., president and CEO, told the gathering.

The meeting came less than six months after Crafton Tull’s 25 shareholders voted unanimously Aug. 31, 2019, to transfer ownership to its 250 employees. That happened in what Crafton said was the firm’s best ever year financially. It also came the same year that the firm lost one of its two founders, Lemuel “Lem” Tull, who died Jan. 30, 2019. Bob Crafton, the other founder, shared memories of the firm’s early years at Intersection 2020.

Matt Crafton said in an interview the day before the event that the board members and original shareholders are not yet at retirement age, but they could “see it on the horizon.” They had spent years discussing Crafton Tull’s future. They considered continuing to allow younger employees to buy the stock owned by those who were retiring. Another option was to sell the firm, but that would have meant the Crafton Tull name and history would be forgotten. Instead, they chose the ESOP option.

“Bob and Lem never tried to seek the spotlight for themselves, and (son) Jim Tull and I don't either,” Crafton said in the interview. “It's about 250 people. But the name itself, Crafton Tull, we think stands for something, a level of quality, a level of service that we provide. And that's our view of it, and we wanted to continue that.”

Employees who work a minimum number of hours earn stock that they don't have to buy. At the end of each year, the stock is valued by an outside company, and employees are allotted a certain number of shares based on their compensation. The old shareholders are being compensated for the stock they previously owned over the next 15 years.

The move makes Crafton Tull the first Arkansas-based engineering firm that is 100% employee owned. Two other Arkansas-based companies, Harps Foods and Central States Manufacturing, are also 100% employee owned.

Crafton said the move offers young employees ownership immediately rather than making them wait years for the chance. It helps them build wealth and a secure retirement. Company officials believe it will assist with recruitment and retention. The longer employees stay, the more stock they will own.

“It's said that an owner is the guy that picks up the trash on the sidewalk outside the front door and throws it away because he's got that certain level of investment and pride in being the owner,” he said. “That's his business or her business. And so, yeah, it should hopefully give everybody a sense of they don't just work here. They're an owner here now.”

The week prior to the meeting, those who had been employed as of Aug. 31 and worked 1,000 hours received an emailed ownership statement. The plan is being administered with the help of a third party trustee, TI-Trust, and two other third party administrators.

Among those benefiting from the change is Taylor Lindley, P.E., 27, of Rogers. Lindley joined Crafton Tull in January 2015 as a civil engineer and learned that he passed the P.E. exam this past December. He said ownership is an additional retirement benefit that also makes the work “a little more personal.” Employees can “focus our career path on ultimately
Crafton said the business will continue to operate as before.

“We’ve still got a board of directors,” he said. “We’ve got management. We’ve got project managers. We’ve got technicians and field people and admin people and everything else, and so the day-to-day operations don’t change. We’ve got to bring in the work. We’ve got to produce good work for our clients. We’ve got to get paid for it and make a profit. So we’ve still got to run the business like we would any other way.”

Crafton said at the Intersection event that he and Jim Tull, the company’s chief financial officer, attended an ESOP conference in November where others expressed surprise that 25 shareholders would vote unanimously to make such a change. Ordinarily those decisions are made by one or two owners or a family.

The company’s history was celebrated at Intersection 2020 with a question-and-answer session where Matt Crafton and Jim Tull quizzed Bob Crafton about his memories.

Raised on a cotton farm, Bob Crafton was the youngest of 14 siblings. His mother died of pneumonia when he was 2 years old. On her death bed, she told his oldest sister, Edna, 22, to take care of the little ones. When Edna married, the next sister took over the child-rearing duties. Other sisters also helped raise him. His father didn’t remarry until Crafton was the last one living at home.

Crafton expected to work on the cotton farm after graduating high school. Instead, he became the first brother to attend college with help from a $100 monthly loan from his older brother, Tommy. He asked his high school math teacher what he should study.

“Why, Bobby, math has been your best subject. Why don’t you try engineering?” she told him.

Crafton spent his first two years of college at what is now Arkansas Tech University, while Lem Tull spent his first two years at what is now the University of Arkansas at Little Rock. They met in 1953 at a summer surveying camp at the University of Arkansas. They didn’t see each other much while finishing their educations at the University of Arkansas, but afterwards both worked at the Highway Department. Crafton had become assistant to the chief engineer when Tull approached him about starting their own company.

Initially reluctant, Crafton eventually said yes. They opened shop in Rogers on Nov. 20, 1963. Their first office was in two adjoining motel rooms and was managed by their wives.

“We were partners,” he said. “We were 50-50 partners all of our lives, and he’s one of the greatest, greatest individuals I have ever met. I come from a large family. I had six brothers. Nobody was any closer to me than Lem Tull. And we got along wonderfully. We had a great time until his passing.”

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GRAND CONCEPTOR AWARD. Garver won the top Engineering Excellence Award for its Cantrell Field Access project for the City of Conway. Pictured from left are Garver’s Daniel Goad, P.E., S.E., and Charles Cullen, P.E.; Jack Bell and Ronnie Hall with the City of Conway; and Todd Mueller, P.E., and Richard Corbyn, P.E., with Garver. The project, pictured below, was also the winner in Category H: Transportation.

Garver wins EEA Grand Conceptor

Conway project provides access to old airport with help from a roundabout and an overpass lined with greenery

By Steve Brawner
Editor

A Garver project that provided access to a closed Conway airport awaiting redevelopment, installed a roundabout at a nearby busy retail area, and planted greenery on the connecting overpass won this year’s Grand Conceptor Award at the Engineering Excellence Awards.

The annual event was held at the Governor’s Mansion March 5.

Garver’s Cantrell Field access project for the City of Conway won the top award chosen by a team of six judges. The project also was the winner in Category H: Transportation.

Todd Mueller, P.E., transportation team lead for Garver’s municipal group, along with project engineers Richard Corbyn, P.E., and Charles Cullen, P.E., took Building Arkansas on a tour of the site.

The project created a four-lane boulevard overpass across I-40 from Highway 64 to Cantrell Field, the former Conway airport that will be redeveloped into commercial property. It also relieves congestion at the I-40/Highway 64 interchange. Garver designed a two-lane roundabout with pedestrian and bicycle-friendly considerations. With an expedited schedule and site constraints, Garver worked closely with the city to do the planning, interchange justification study, environmental studies, and a categorical exclusion in coordination with the Arkansas Department of Transportation and the Federal Highway Administration.

“It’s a pretty complex design,” Mueller said. “We basically built a roundabout kind of up on a mountain, a bridge with vegetation on it, put trees on the bridge. So there’s a lot of difficulty in getting this project done.”

The $16.5 million project, funded by a temporary tax passed by the city, started in 2012 with initial planning and design, with the actual design beginning in 2014. The environmental documents were completed in several months. The design itself took about 12 months. City leaders wanted everything completed by Thanksgiving 2017. First phase construction began in April 2015. The roadway was opened in November 2017.

The project was split into three phases. Phase One included interchange improvements along Highway 64 and three interstate ramps to improve the traffic flow and pedestrian connectivity at the I-40 interchange. A new four-lane boulevard for vehicles, cyclists, and pedestrians connected Highway 64 to Cantrell Field. Garver incorporated the existing interstate ramp into the design, saving costs. Phase Two channeled a
creek through a closed, 900-foot double 11-foot-by-6-foot box culvert structure.

Phase Three involved a multi-lane roundabout immediately adjacent to the Conway Commons Shopping Center that was constructed on a 3% grade to reduce project costs and business impacts. It also involved a four-lane overpass over I-40 with a 212-foot plate girder bridge. The overpass has a mechanically stabilized earth wall system and an ashlar stone finish. The handrails match other structures on the interstate. It was built to accommodate trails on both sides of the overpass along with large pots with plants that enhanced the appearance and added space on the trails, increasing pedestrian comfort and safety. The engineering team structurally checked the pots to ensure the plants could not blow over in the wind, and to make sure the bridge could withstand the weight. They were heavy.

“We don't deal with a lot of flower pots or tree pots on bridges,” Mueller said.

Garver had other challenges to contend with. With the project located in the busy Conway Commons retail area, no roads could be closed during construction. Garver developed a maintenance of traffic plan that kept all lanes open along with an interactive map for the city and stakeholders. The roadway formerly was a three-way intersection at ground level, so 20 feet of fill was needed to build the overpass. Sewer lines had to be lowered, and Corbyn had to design a special wall to save the $500,000 it would have cost to move an electrical box, as well as the inconvenience of shutting down power for the Conway Commons area. While all of this was happening, I-40 was being expanded from four lanes to six.

People's Choice Award

The other major EEA Award is the People's Choice Award, which is chosen by EEA banquet attendees. This year's winner was Crafton Tull for the Washington Elementary Playground for the Fayetteville Public Schools. Attempts to fix the playground's drainage issues had been unsuccessful for more than a century, making it unsafe for students when glass, debris, and exposed rock washed onto the playground during rain events. Crafton Tull's design improvements addressed drainage, erosion and safety issues and implemented environmentally sound low impact development techniques. All on-site mature trees were preserved using permeable materials that allow water absorption at the existing roots. Strategically placed rain gardens clean, direct, and reduce water flow. Construction occurred during the summer months, so that the safe, ADA-accessible playground was ready by the time the 2018 school year began.

Continues on next page
CATEGORY A: STUDIES, RESEARCH AND CONSULTING. The winner was Garver for the Springdale Water Reclamation Facility Peak Flow Study for Springdale Water Utilities. Pictured from left are Heath Ward and Rick Pulvirenti, P.E., with Springdale Water Utilities; and Chris Buntin, P.E., and Andy Pruitt, P.E., with Garver.

After historic rainfall events pushed the facility’s treatment and storage capacity to the limit, Springdale Water Utilities selected Garver to study the optimal approach for handling peak flows. Using historical flow and rainfall data, the Garver team revised water flow projections and recommended how to best utilize the facility’s capacity. Garver developed a solution that provides the lowest initial investment, minimizes costs, and maximizes the available capacity of existing units. This solution allows the plant to meet future peak flow challenges and improve processes year-round, maximizing return on investment.

The People’s Choice Award is sponsored by BXS Insurance Services. The project was also the winner in Category I: Special Projects.

Other category award winners were:

Category A: Studies, Research and Consulting Engineering Services. The winner was Garver, for the Springdale Water Reclamation Facility Peak Flow Study for the Springdale Water Utilities.

Category B: Building/Technology Systems. The winner was Garver for the LIT ARFF/Vault Generator Upgrades for the Bill and Hillary Clinton National Airport. Pictured from left are Garver’s Adam Roberson, P.E., and Eric Farmer, P.E. Not pictured are Tom Sutton and Tom Clarke, P.E. with the airport. Garver also won an Honor Award in Category H: Transportation, for the airport’s Taxiways A & B Rehabilitation.

Category C: Structural Systems. The winner was Garver for the Dave Ward Drive Pedestrian Bridge for the City of Conway. Pictured from left are Garver’s Todd Mueller, P.E., and Dustin Tackett, P.E.; Jack Bell and Ronnie Hall with the City of Conway; and Garver’s John Ruddell, P.E., S.E., and Joel Skinner, P.E. The winner was Garver for the Springdale Water Reclamation Facility Peak Flow Study for the Springdale Water Utilities. After historic rainfall events pushed the facility’s treatment and storage capacity to the limit, Springdale Water Utilities selected Garver to study the optimal approach for handling peak flows. Using historical flow and rainfall data, the Garver team revised water flow projections and recommended how to best utilize the facility’s capacity. Garver developed a solution that provides the lowest initial investment, minimizes costs, and maximizes the available capacity of existing units. This solution allows the plant to meet future peak flow challenges and improve processes year-round, maximizing return on investment.

Category A HONOR AWARD. Pictured are Michael Baker International’s Matt Roddy and Robert Farrar. Their project was the Arkansas Statewide System Plan for the Arkansas Department of Commerce Division of Aeronautics.

CATEGORY A HONOR AWARD. Crist Engineers received the Honor Award for the Water System Master Plan for the City of Hot Springs. Pictured from left are Monty Ledbetter, City of Hot Springs; John Keckler, E.I., and Matt Dunn, P.E., of Crist Engineers; and Bill Burrough and Todd Piller, City of Hot Springs.
CATEGORY D: SURVEY AND MAPPING TECHNOLOGY, LARGE PROJECTS. Garver won the award for the Kaw Lake Water Supply Surveying project for the City of Enid, Okla. Pictured are Garver’s Wayman White, P.S., Paul Davis, P.S., and Jeff Jones, P.S.

CATEGORY D: SURVEY AND MAPPING TECHNOLOGY, SMALL PROJECTS. B&F Engineering won the award for the Cox Creek Lake 2019 Survey for the Arkansas Game & Fish Commission. Pictured are Jonathan Hamner, P.S., and Danny Boyett, P.S., with B & F Engineering, and Scott Connelley with AGFC.

CATEGORY F: WATER AND WASTEWATER. Olsson Associates won the award for the Water Source Mitigation project for Clarksville Connected Utilities. Pictured from left are Chris Dougherty, P.E., and Brad Hammond, P.E., with Olsson; and John Lester and Rebecca Lester with Clarksville Connected Utilities.

Hillary Clinton National Airport. The airport contracted with Garver for insight into additional safety features that could further safeguard their airfield electrical system. One of the firm’s primary recommendations was providing separate emergency power backup sources for the east vault, west vault, and the ARFF building to enable each facility to operate independently in case of a power outage. Garver helped the airport take proactive measures above and beyond the minimum Federal Aviation Administration requirements and increase safety in the event of emergency incidents, allowing for a more reliable, functional, and efficient airfield electrical system.

CATEGORY C: STRUCTURAL SYSTEMS. The winner was Garver, for the Dave Ward Drive Pedestrian Bridge for the City of Conway. The Stone Dam Creek Trail serves as an essential link for University of Central Arkansas students but lacked a safe option to cross Dave Ward Drive, one of the state’s busiest highways. Garver’s design of a pedestrian bridge provided a safe route for trail users and included unique column designs and LED light fixtures to enhance appearance and safety. The Dave Ward Drive Pedestrian Bridge presents bikers, joggers, and walkers a safe route over a heavily traveled road and also provided the city with an iconic landmark.

CATEGORY D: SURVEYING & MAPPING TECHNOLOGY, LARGE PROJECT. The winner was Garver, for the Kaw Lake Water Supply Surveying for the City of Enid, Oklahoma. Garver is serving as program manager and lead designer for the project that will deliver raw water from the Kaw Lake Reservoir to the city, creating a 50-year sustainable water supply. The project featured unique and extensive requirements for Garver’s Survey Team, many of which were beyond the usual surveying formalities.

CATEGORY D: SURVEYING & MAPPING TECHNOLOGY, SMALL PROJECT. The winner was B & F Engineering, for the Cox Creek Lake 2019 Survey for Arkansas Game & Fish Commission.

Continues on next page
CATEGORY F HONOR AWARD. McClelland Consulting Engineers received the Honor Award for the Decatur Wastewater Treatment Plant. Pictured are MCE’s Daniel Barnes, P.E.; and Nick Batker, P.E., CFM; Kim Wilkins with Decatur; and Byron Hicks, P.E., with MCE.

CATEGORY F HONOR AWARD. McClelland Consulting Engineers received the Honor Award for the Phillips Wastewater Pump Station for the City of Osceola. Pictured are MCE’s Byron Hicks, P.E., and Jacob Gillip, P.E.; Osceola Mayor Sally Wilson; and MCE’s Adam Triche, P.E.

CATEGORY F HONOR AWARD. Garver received the Honor Award for the Central Arkansas Water Pump Station 1A Rehabilitation. Pictured are Doug Graham, Ronnie Bankston, and Joe O’Hara, P.E., with Central Arkansas Water; and Paul Strickland, P.E., and Edward Holcomb with Garver.

CATEGORY F HONOR AWARD. CWB Engineers received the Honor Award for the Blytheville Water Treatment Plant. Pictured are Oren Noble, P.E., and Clint Bell, P.E., with CWB Engineers; Blytheville Mayor James Sanders; Kyle Breckenridge, P.E., with CWB Engineers; John Callens and Greg Hamlett with Blytheville; and Kyle Martin with CWB Engineers.

Constructed in 1964 as a tributary of the Saline River, current Arkansas Game and Fish boundaries for Cox Creek Lake were inaccurate and confusing because they were created using imprecise technology. To provide AGFC with an accurate survey of the lake terrain and boundary lines, B & F constructed a “surveyor time machine” by coupling its state-of-the-art real time kinetic GPS and modifying the calculations to interpret the terrain as it would have been in 1964. This provided AGFC, residents and businesses with clear and reliable boundary lines.

Category F: Water & Wastewater. The winner was Olsson for the Water Source Mitigation project for Clarksville Connected Utilities. Olsson worked to ensure mitigation measures were in place in anticipation of a proposed oil pipeline project that will eventually cross the watersheds of Clarksville Connected Utilities’ two water supply sources. Olsson conducted a study of possible scenarios should a spill occur and then provided recommendations from those findings. Olsson also designed a new lower intake port and screen to allow full intake capacity, and a new intake structure upstream of where the pipeline will cross a creek to help protect a water source serving 28,000 customers.

Category I, Special Projects, Large Projects. The winner was B & F Engineering for the New Langston Elementary School for the Hot Springs School District. To provide Hot Springs School District students with a modern learning facility that also includes historical preservation, B & F Engineering led a project
CATEGORY J: SMALL PROJECTS. CEI Engineering won the award for the Hobbs East Trail – Bike Trail Tunnel for the Arkansas Department of Parks, Heritage and Tourism. Pictured are Jacob Shy, CEI; Jim Shamburger, Arkansas Parks and Recreation Foundation; and Zachary Hoyt, CEI.

to turn a century-old middle school into the new Langston Elementary Leadership Academy along with constructing a new junior high school. The building’s footprint was designed to work in concert with the existing streets and surrounding facilities to avoid disruptions during construction. In addition to a new classroom building and preserving an existing structure, a historical marker was installed in front of the entrance to commemorate the site.

Category J: Small Projects. The winner was CEI Engineering, for the Hobbs East Trail – Bike Trail Tunnel for the Arkansas Department of Parks, Heritage, and Tourism. When the Arkansas Department of Parks, Heritage, and Tourism wanted to begin a series of mountain bike trails at Hobbs State Park, Highway 12 caused an issue considering it ran right through the trail’s eventual path. CEI responded by designing the Hobbs Trail Connection that features a large corrugated metal tunnel underneath Highway 12. It allows access to each end of the trail without disrupting rider momentum and avoiding safety hazards. The tunnel itself was constructed off site and transported in two sections to where the excavations had been prepared. The final product is a safe corridor for cyclists.

The evening included a brief address regarding the national ACEC organization by Jay Wolverton, chief growth officer at CHA Consulting in Georgia and senior vice chair of the ACEC National Executive Committee.

The event’s sponsors were Environmental Technical Sales, BXS Insurance Services, FTN Associates, Garver’s communications team and ACEC Health Trust.

The 2020 EEA Committee was composed of Chairman Jamie White from Garver, Holly Vetsch, E.I., from B&F Engineering, and Travis Tolley, P.E., from Crafton Tull.

Judges were Linda Smith, P.E., U.S. Green Building Council; Brent Stevenson, executive director, AIA Arkansas; Bill Roachell, president, Associated Builders and Contractors; Dustin Davis, AIA, LEED Fellow, Polk Stanley Wilcox; Ken Jones, P.E., Bernhard TME; and Keith Jacks, CHC, CHFM, Kinco Constructors.
We’re invested in Arkansas.

For more than a century, Garver’s infrastructure designs have helped Arkansans enjoy the best their communities have to offer, like the Cantrell Field Access project that leads to a future retail development in Conway. Garver’s Charles Cullen, Richard Corbyn, Todd Mueller, Dustin Tackett, and the rest of the project team were awarded the Grand Conceptor from ACEC Arkansas for their design that keeps Conway growing. Congrats to them, and to all other Garver teams honored by ACEC this year.

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