When you find yourself in the midst of an emergency, a true crisis, you are going to pick up the phone and call someone you know you can trust. On March 12, 2019, 55 miles of Interstate 29, from 10 miles north of Omaha to the Missouri border closed due to the flooding of the Missouri River and over fifty breaches of the levee that protects the residents of Southwest Iowa. The devastation of homes, businesses, and property was on a colossal scale. To make matters worse, the roadways to bring help were underwater and the bridges to cross the Missouri River from Nebraska were inaccessible due to high water on the connecting highways. When the water receded enough on March 27 to evaluate the damage on Interstate 680, Iowa DOT District 4 Engineer, Dr. Scott Schram, made a call. “You spend all those years building relationships with contractors, and when there is an emergency – they answer their phone when you need help. Even when you call them on a Friday afternoon. They bring their expertise to the problem. They know other contractors and they bring those relationships to the table, as well. It’s an emergency and they drop everything to come and help.”

The Flood of 2019

Dr. Schram described dealing with the Flood of 2019 as two separate events. “First there is the ‘Immediate Flood Response’ – Water is going up. Roads are closing. You need to get life and property out of the area,” said Schram. This effort is led by a County Emergency Coordinator in cooperation with Homeland Security, Iowa DOT and County maintenance personnel, law enforcement, and Fire and Rescue personnel. This coordinated response allows each entity to provide their expertise in dealing with the emergency. In this circumstance, the Iowa DOT handles the closures and notifications to the public through the Iowa 511 website and app.

“The second phase is ‘Flood Recovery’”, said Schram. “The waters have receded, the damage is done. Now the clean-up and (Continued on page 3)
Upcoming Events
(Click event for more information)

2019 Strategic Asphalt Committee Field Trip
Dates: September 24-25, 2019
Location: Eastern Iowa

64th APAI Annual Convention
Date: December 4-6, 2019
Location: Hilton Des Moines Downtown
435 Park Street
Des Moines, IA

2019 Impact Leadership Group Conference
Date: September 17-19, 2019
Location: The W Hotel – Buckhead
Atlanta, GA

2020 NAPA Annual Meeting
Date: February 2-5, 2020
Location: Grand Wailea
Maui, HI

2020 Greater Iowa Asphalt Conference
Date: March 4-6, 2020
Location: Des Moines Airport
Holiday Inn Conference & Convention Center
Des Moines, IA

2020 CONEXPO-CON/AGG
Date: March 10-14, 2020
Location: Las Vegas Convention Center
Las Vegas, NV

built, bid, and/or managed hundreds of construction projects. Two things were always present: One, Asphalt, (there is no substitute). Two, a desire to build the best quality project. The truth is that, like fishing, sometimes (most times) the project doesn’t go perfectly. When fishing, you may not get any bites, or your motor won’t start on your boat, or it rains so hard you can’t see. Asphalt paving is no different – the plant breaks down, the subgrade is soft, or it rains so hard you can’t see. These things may deter us temporarily, but they do not temper the passion that lies within the fisherman, nor within the contractor. We have confidence that we can fix the problem, that we can succeed against the odds, and that tomorrow the sun will shine. We get up, dust ourselves off, and continue forward.

We work together to solve the issues. We are asphalt men and women and we will not be dissuaded from achieving our goals of building high-quality roads and smooth parking lots.

As we continued fishing in the rain that day, Jim’s pole suddenly bent forward dramatically. Henry and I watched and cheered as he fought to land what turned out to be a 25 lb. Catfish. It was the biggest freshwater fish he had ever caught, and we all felt like part of his remarkable catch. It is a moment we all shared and when we tell the story, we will always remember that we were together when it happened. Henry and I have been fishing all over the State of Iowa this summer in our little boat and have had great days sharing our successes. I have felt that same sense of shared accomplishment with my crew mates when rolling off the end of a completed highway project or driving my old Buick Regal on a closed road that we had just finished, or standing next to a property owner who was proud of how good his new parking lot looked. The passion of the crew, the plant people, the QC team and management working together to build the project led to the shared sense of pride when we delivered on our promise to build an amazing project. To everyone out there designing, bidding, and paving the next great asphalt project, I salute you. Your passion is the reason Iowa’s Asphalt industry is the pride of every other state. Keep reeling in the big ones.

Smother is Better,

Bill Rosener
restoration can begin.” The Flood of 2019 was the worst flooding Southwest Iowa had ever experienced. The towns of Pacific Junction, IA and Hamburg, IA were inundated with over five feet of flood water. The residents lost everything. “Southwest Iowa is not like the rest of Iowa’s transportation system with a mile-by-mile roadway grid. Due to the Loess Hills and the Missouri River, in Southwest Iowa every road and bridge is critical,” said Schram.

To get the transportation system back on line, the recovery in the eyes of Dr. Schram included the restoration of both I-29 and I-680, as well as reopening the access to the Missouri River bridges from Highway 34 and Highway 2.

As the waters receded, Governor Kim Reynolds issued a disaster proclamation that unlocked money for disaster relief for private citizens and waived the “low bid” requirements for state agencies. The proclamation opened the door for the phone call that Dr. Schram made in the opening of this article and facilitated the expedited reconstruction of Interstate 680 and Interstate 29.

**Interstate 680**

The person that Dr. Schram called that Friday afternoon was Steve Epley, Vice President of Operations for Western Engineering of Harlan, IA. “There was no question in my mind that we were going to help Scott and the DOT,” said Epley. “Yes, we were busy with our scheduled work, but when someone you know calls you and needs help, you go. Never a question for me, our company, or our people.” Western had a saw man cutting the I-680 road edge to remove shoulders on the Saturday morning following the call and the Western crews began repaving the new shoulders on Monday, April 1st. Interstate 680 was open to traffic on April 2nd, four days after Schram had made the phone call for help.

Although the shoulders were repaired and the road was open to traffic, the danger of high water returning remained. To preserve the embankment, Epley and Schram developed a plan to pave the foreslope of the shoulder with HMA to preserve newly constructed shoulders until a permanent solution could be found. High water was projected to return again on April 12th but fortunately did not reach the projected levels. As the water receded for the second time, the HMA foreslopes were milled out and an intricate flood protection grid mat was installed by Western Engineering over the next few weeks. “We almost had it complete except for the anchors, when word came down on May 29th that they were opening the flood gates in North Dakota and the water was going to come back up to flood stage again. We decided to use a 4’ wide x 6” thick asphalt anchor along the top of the flood grid to hold it in place.”

The flood waters closed I-680 the next day, and when they receded ten days later, the asphalt anchor had held the flood protection in place. “We ran out of asphalt late the night we were paving and the 300’ we didn’t get anchored down was the only piece of shoulder that was damaged by the second round of flooding,” said Epley.

**Interstate 29**

Interstate 29 runs from the Missouri line north to Sioux Falls, SD paralleling the Missouri River along the western side of Iowa. It is a major freight corridor and the only major North-South Interstate in western Iowa and eastern Nebraska. The damage and destruction to I-29 was much more extensive than I-680 with large sections of the mainline being destroyed due to the flood waters. Until the I-680 corridor was reopened on April 2nd, the only path to cross from Iowa to Nebraska for over 55 miles was a residential street in Omaha woefully unequipped to handle this emergency.

(Continued on page 5)
IOWA ASPHALT REPORT

64TH

APAI

ANNUAL CONVENTION

DECEMBER 4-5, 2019

APAI AWARD WINNERS

$200

$400

$600

$800

$1000

STAY AHEAD OF THE GAME

ASPHALT KNOWLEDGE

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NEW LOCATION

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detour. When the water finally receded on March 28th, the Iowa DOT was ready to go to work.

The Iowa DOT toured and evaluated the roadway and began to formulate a plan. First, a scheduled tour of the affected area was arranged to allow contractors to evaluate the clean-up of debris. The interstate was covered in corn stover, propane tanks, totes of unknown chemicals, and wooden decks. “There were a lot of decks,” laughed Schram. Contractors were allowed to submit bids for the clean-up and Reilly Construction of Ossian, IA was selected as the contractor. The Iowa DNR set up an impromptu storage area on a closed rest area to take the propane tanks and chemical totes. The clean-up process would take nearly three weeks to complete. During this time, the Iowa DOT, and hired consulting engineer, HDR, evaluated the structural soundness of the remaining pavement and formulated a plan to reconstruct Interstate 29. The plans were developed and put together over a very long weekend by the DOT Central Design engineering staff and were released to the public on April 10 in preparation for an April 12 letting. The letting date moved back to April 17 due to an impending second round of projected flooding on April 12. Thankfully, the rain event was smaller than anticipated, and the second round of flooding was not as severe as anticipated.

Contractors were given a guided tour of the affected areas prior to the letting by the DOT District 4 staff.

The Reconstruction of I-29

The plans for the project utilized an alternate pavement bid option of 12” of hot-mix asphalt (HMA) or 11” of Portland Cement Concrete (PCC). The project quantities totaled over 25,000 tons of HMA mainline paving or 37,000 square yards of PCC paving. In addition, there was another 18,500 tons of HMA shoulder or 42,000 SY of PCC shoulder. “We wanted to replicate the success we had in bidding alternate pavement types during the Flood of 2011, but we wanted to use the knowledge we had gained in the interim to design the pavement thickness to what we knew we needed, not what we had projected back in ’11,” said Schram. The Iowa DOT also included a high-risk/ high-reward incentive/disincentive for the contractor. The Traffic Safety Management and Operations Engineer (TSMO) had calculated the cost of I-29 being closed at $200,000/day. Dr. Schram and the staff of District 4 determined the target date for completion was May 31. The project was let with the following conditions attached:

ER-029-1(122)0--06-36
Pottawattamie County I-29 Reconstruction Acceleration
April 5, 2019

Missouri River flooding has forced the closure of I-29 from the Missouri Border north to US 34. Restoring traffic to I-29 is a priority of the Iowa DOT. “Open to traffic” means all the work is completed between the right outside edge of shoulder to the left outside edge of shoulder on the mainline. The contractor will be allowed to have daytime lane closures to perform surface correction, mill rumble strips, install subdrain and temporary erosion control after the road is considered open to traffic.

(Continued on page 7)
The 2019 APAI Summer Meeting was held on July 18-19 in sight of the beautiful gold dome of the Iowa Capitol Building in Des Moines. The meeting had over 50 APAI members in attendance for two days of education, communication and camaraderie. The Summer Meeting Luncheon was highlighted by speakers from the City of Des Moines, the Iowa County Engineers Association and the Iowa DOT. “What I love about this event,” said Bill Rosener, Executive Vice President of the APAI, “is that although our industry competes for every ton of asphalt placed in this state, we are all asphalt men and women. We all have the same passion for our industry and our profession and we respect those that share our passion. It makes Iowa’s Asphalt industry unique.”
The contractor is encouraged to work whatever days and hours necessary to reconstruct I-29. The DOT is using the following contract clauses to accelerate the reconstruction of I-29.

1. **Opening I-29 to one lane traffic in both directions** – It is a contract requirement to have one lane of traffic open in both directions by May 31, 2019. An incentive of $200,000 per calendar day will be paid to the contractor for each calendar day prior to May 31, 2019 that one lane each direction of I-29 is opened to traffic.

2. **Opening I-29 to four lane traffic** – It is also desired to have all four lanes of I-29 completed by May 31, 2019. An additional incentive of $10,000 per calendar day, plus the $200,000 in Item 1, will be paid to the contractor for each day prior to May 31, 2019 that I-29 is opened to four lanes of traffic.

3. **No Excuse Bonus for Opening I-29 to one lane traffic in both directions on or before May 15, 2019** – It is desired to have one lane of traffic open in both directions of I-29 on or before May 15, 2019. For opening I-29 to one lane of traffic in both directions on or before May 15, 2019, a bonus of $4 million will be paid to the contractor, in addition to the daily incentive of $200,000 per calendar day.

4. **No Excuse Bonus for Opening I-29 to four lane traffic on or before May 23, 2019** – It is desired to have all four lanes of I-29 completed on or before May 23, 2019. For opening I-29 to four lane traffic on or before May 23, 2019, a bonus of $2 million will be paid to the contractor, in addition to the daily incentive of $210,000 per calendar day.

5. **Disincentive for NOT restoring one lane traffic to I-29 by May 31, 2019** – For each calendar day AFTER May 31, 2019 that one lane traffic has not been restored to I-29 the contractor will be assessed $210,000 per calendar day.

6. **Disincentive for NOT restoring all four lanes of I-29 traffic by May 31, 2019** – For each calendar day AFTER May 31, 2019 that traffic has been restored to one lane of traffic each direction but has not been restored to all four lanes of I-29, the contractor will be assessed $10,000 per calendar day.

One lane traffic in both directions must be median separated and shall not be accomplished through head-to-head traffic or cross-overs.

All work on this contract shall be completed by June 30, 2019. A liquated damage of $1000 per calendar day shall be assessed for any field work, including cleanup, which is not completed by July 30, 2019.

The bids were opened on April 17, 2019 with CJ Moyna and Sons, Inc. of Elkader, IA being the low bidder at $17M, with the second and third bidders at $27M and $30M. The 12” HMA pavement alternate came in at $3M lower than the 11” PCC option. Contracts were signed the same day and the milling began the next afternoon. Henningsen Construction of Atlantic, IA was the low-bid for the asphalt portion of the project and began immediately to mobilize into action. “We were looking at a slow start to the season,” said Brad Henningsen, President of Henningsen Construction. “We had to gear up in a hurry to meet the schedule and demands of paving 40,000+ tons of mix in less than a month.” While CJ Moyna worked on removals and subgrade preparation, Henningsen mobilized two asphalt plants to the area and began production of asphalt on April 29th. “We had some struggles, just like everyone does at the beginning of the season,” said Henningsen, “but losing a day on this job was costing $10,000/day in incentives.” One of the major issues was the lack of trucks available for hire in the area. The Union Pacific Railroad was trying to rebuild its ruined track beds and were rumored to have been paying over $200/hour for trucks to haul material. Materials were also hard to come by. “Southwest Iowa is not rich in aggregate sources,” said Henningsen, “and the largest suppliers were underwater or an additional 20 miles of detours away to reach due to the flooding.”

Even with the spring start-up challenges and the lack of trucks and materials, the resiliency of asphalt and the people who work in the asphalt industry were highlighted. “The speed of construction is a huge advantage for asphalt,” said Bill Rosener, Executive Vice President of the Asphalt Paving Association of Iowa. “The speed...” (Continued on page 8)
which I-29 was reconstructed and opened to traffic could not have been done using another pavement. The effort that was made by the APAI member companies, and their employees is unparalleled. When a flood, a true emergency, was impacting Iowans, they stood up, made a commitment to help, and did what they said they were going to do. I couldn’t be more proud of these men and women.” Henningsen crews worked day and night for three weeks to meet the incentive schedule and open the road to traffic. Many workers had over 120 hours in a week. “I can’t express how proud I am of our guys and the impressive effort they provided working extremely long hours, seven days a week,” said Henningsen. The results of these efforts were amazing. The road was open on May 8 to two-way traffic, insuring CJ Moyna $8.6M in initial incentives. They were able to meet the May 15 4-Lane Bonus as well, adding another $2M, for a total of $10.6M in incentives and opening the road sixteen days early.

The saga was not over, however, as a second round of flooding hit Iowa in June as the snow melt from the north made its way down the Missouri River. “Here we go again,” said Schram. “We wasted all that time, money and effort just to have it all go back under water. We thought we might lose it all over again. However the asphalt pavement proved stronger than we anticipated. The resiliency of the asphalt we placed was tremendous,” said Schram. “We only lost about a ½ mile of shoulders that were damaged and we were able to repair those under traffic.”

**Conclusion**

The devastation brought by the Flood of 2019 is not done. Peoples’ lives have been forever altered and the effects of this catastrophe will be generational. This disaster also has shown that having a comprehensive plan in place to deal with the aftermath of the flooding is not only important, but crucial to the preservation of life and property. The Flood of 2019 has also highlighted that strong working relationships, and the trust that comes from these bonds, is what provided the foundation of the flood recovery efforts. The men and women that worked day and night to restore normalcy through rebuilding the infrastructure of SW Iowa are to be celebrated. DOT employees would work all day to fight the floods across the area and go home at night to fight the same flooding with their neighbors. Contractor employees left their homes across the State of Iowa for several months to fight the flood waters and restore the infrastructure of SW Iowa. “I hope this is a once in a lifetime experience. The resolve of the people who were impacted and determination of those who helped in the recovery is inspiring, but not enough to want to go through it again in the future,” said Dr. Schram. “The partnerships and cooperation between Iowa’s contractors and the Iowa DOT personnel to complete this project on budget, and ahead of schedule, was remarkable,” said Rosener. “I am forever impressed that when the men and women of this industry, and our partners at the Iowa DOT, are asked to sacrifice for a greater cause, they respond with a remarkable willingness and desire to help those in need. They are truly inspiring.”
APA Welcomes New Members

APA continues to add to our membership rolls. At their last Board Meeting, the Board of Directors elected three Associate Members to the Association. Thank you to those who have helped recruit these new members.

Fred Petrie, Owner & Operator of Motion Engineering, Inc. started as a Hauck Burner Sales Representative and grew Motion Engineering, Inc. into a multi-faceted organization that has met the demands of the ever changing asphalt world for over 30 years. They provide a unique line of services from certified pipe fitters and electricians to complete plant set ups. Their goals are to exceed their customers’ expectations and provide custom solutions to fit their clients’ needs. They understand the demands of the asphalt industry and are committed to providing comprehensive, timely resources to keep their clients in motion. With safety as their number one core value, they are uncompromising in their intent to provide a safe working environment for their employees, subcontractors and customers.

Sold Out APAI Golf Outings Raise $13,000 for Scholarships

The APAI Golf Outings held in Coralville in June and Denison in August helped to raise over $13,000 for APAI Scholarships to be awarded in 2020. The two events featured sold-out line-ups, terrific sponsorships, perfect weather, and the amazing camaraderie that makes Iowa’s Asphalt Industry unique. The two events also showcased two groups within the APAI, the Iowa Women of Asphalt and the Asphalt Comprehensive Training Program (ACT) who raised workforce awareness and highlighted the activities of the young leaders group, respectively. We would like to thank all of our members and partners in construction for making these events our biggest and best golf outings ever!

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Please welcome these new members and show your support for them, by contacting them and utilizing their services. To find contact information for these members, go to http://www.apai.net/associate-members.aspx.
API Members

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