

HEAT AND PRESSURE

PAW Materials Inc. demolishes the Cross-Florida Barge Canal Bridge in a hot climate and with deadline pressures looming.

Rick Wohlfiel of Florida-based PAW Materials Inc. knows a demolition challenge when he sees one. When commissioned by Tampa-based contractor Cone & Graham Inc. to demolish the Cross Florida Barge Canal Bridge in Inglis, Fla., Wohlfiel was certain of two things: First, that this was, indeed, a demolition challenge; and, second, that his company would overcome any obstacles presented with its unique combination of experience, expertise and innovative equipment.

The section of the Cross Florida Barge Canal Bridge slated to be demolished by PAW stood 55 feet high with width of 36 feet. It spanned the canal at 1,320 feet long, divided into 22 sections.

The project involved removing all 22 bridge sections along with the caps, columns and two end-bents. According

to Wohlfiel, "Each deck section was 60 feet long with four beams that sat on a 150,000-pound cap. Each section was supported by two 48-inches in diameter concrete columns."

MORE CHALLENGES

In addition to the challenges presented by the sheer dimensions of the bridge itself, PAW was further challenged by the presence of an active access road to a nearby marina running parallel to the bridge. Another nearby roadway contained a newly constructed bridge built by PAW's customer, Cone & Graham Inc.

The proximity of these roadways presented the team with a challenging hurdle because it had extremely limited space for the steel and concrete bridge material being removed. To further add to the complexity of the project, the marina access

roadway sat at ground level, 55 feet lower than the Canal Bridge section, requiring PAW to employ surgical demolition methods during the demolition process to ensure the safety of job-site personnel as well as nearby traffic.



Above, from left: Rick Wohlfiel, president and CEO of PAW Materials Inc., and Alan Pendleton, the company's site supervisor. At left, an Allied-Gator MT 20 processes decking from the Cross Florida Barge Canal Bridge.



In addition to this mix of challenges, PAW had demanding time constraints and had to meet several thresholds by specific dates to keep the job on schedule. Because the demolition of the existing Canal Bridge was being immediately followed by the construction of a new bridge, Wohlfiel and his crew were under pressure to clear the way as quickly as possible.

"We needed to allow the pile driving to start at the new end-bent locations," says Wohlfiel. "This had us juggling equipment and working in several areas on the job site at once."

EQUIPPED TO SUCCEED

PAW Materials set about its task armed

with two MT™ Series Multi-Tools made by Allied-Gator Inc., Youngstown, Ohio. One was a model MTR 40 (weighing 7,000 pounds) with a Quick-Change™ cracker/crusher jaw set in an extended reach configuration. This tool was mounted on a 345 model excavator made by Caterpillar Inc., Peoria, Ill.

The other tool was an Allied-Gator model MTR 20 (weighing 4,000 pounds) with the cracker/crusher jaw set configured as a third member on a Caterpillar 325 excavator.

PAW also came to the job site with several other excavators and loaders for moving and loading materials and began to tackle the project.

PAW utilized the Allied-Gator MTR



20 and MTR 40 units to demolish the bridge wall and decking, while another excavator with a hydraulic hammer was used to start chiseling away at the caps and columns after the decking sections were dropped, processed and removed.

“We started by pulverizing the top parapet walls with the MTR 20, then we pulverized the deck beams in a sequence with the MTR 40 to ensure safety during the drops,” says Wohlfiel. “Next, we pulverized the entire concrete deck,

including the support spans, with the MTR 20 to separate the steel reinforcement. Later, we weakened each standing column with a hydraulic hammer and pushed the cap and columns over. We then repeated the procedure 22 times,” explains Wohlfiel.

MEETING THE DEADLINE

PAW began the bridge project on April 1, 2010, and was finished on July 15, 2010, completing this entire project in two-and-one-half months and yielding more than 12,000 tons of processed and recycled materials.

When describing how he and his team overcame the logistical, safety and time challenges presented by this job, Wohlfiel says one of the factors that helped PAWS adapt to the job was the way it used its Allied-Gator MTR 40 C.

He says the excavator-mounted tool was able to reach the 55-foot high sections of the bridge, and then the tool was used in an inverted position to strategically weaken the underside of each decking span to accomplish a predictable and controlled collapse of each section.

As each section was dropped by PAW, the four columns previously supporting each deck section were used to guide each collapsing section straight down to the ground. The standing columns also served as a means of containment to keep each collapsed section precisely within its own footprint.

Coordinated teamwork and effective communication from site supervisor Alan Pendleton also played a tremendous role in PAW’s success on this project, says Wohlfiel. “We had to communicate and work with our customer as well as other sub-contractors, such as D.A.B Constructors Inc., on the job in order to keep harmony and limit issues.”

Wohlfiel says PAW’s team has repeatedly impressed its customers with its ability to coordinate and execute its demolition goals while maintaining the flexibility and versatility to adapt to the changes and challenges that may arise on each project.

When such challenges do arise, PAW relies on the versatility of its equipment. Wohlfiel says innovative technology, such as that offered by Allied-Gator, allows the company to work differently,

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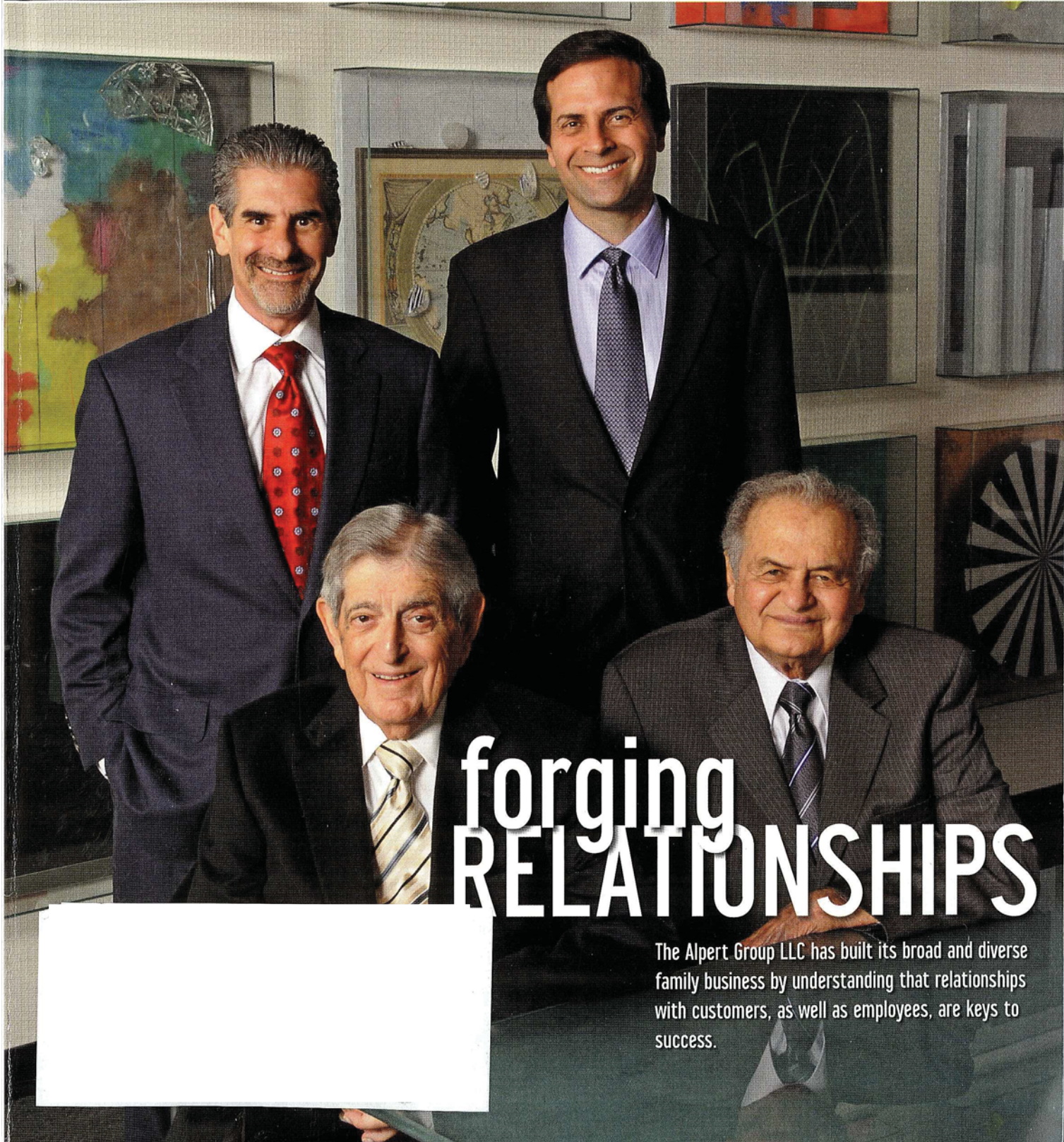
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