

Spring 2012
VOL. 26, NO. 1

TENNESSEE CONCRETE MAGAZINE

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Steve Smith
2012 TCA President

Do not dwell
on the past. Look
forward to what
the future may
have in store for
us and our lives.
—————
May our futures
be bright and
filled with hope
and prosperity,
and full of good
change because
“We Are TCA.”

Relecting upon the past and future of the concrete industry, many “changes” have taken place over the past twenty-five years. We have endured so much change that I can’t begin to name all the changes that have occurred in our industry. Not all of the changes have been for the best, but many of these changes have made us better.

We have seen the economy go from a booming economy to a slowing economy. It has been an extremely difficult time that has seen some lose everything in the construction and home building industries. We long for the good ole days of the past when we all had plenty of work and begged for a moment’s peace. As an industry, we would prefer the busy time.

However, this change in the economy has given many of us more family time, and less time at work. This has been a good thing for some who were looking for some downtime, or family time. Families have become closer. Workers have filled cracks that were occurring as a result of spending so much time with fellow employees and few waking hours with family.

We became complacent in the things we do every day in life and our work as well, we thought things will always stay the same and life will go on as usual, but then life hands us an unexpected change. When we are forced and have no better alternatives we accept the change. We move on with our lives and the new changes that have come along in our lives. We embrace the changes and move forward, not back.

Do not dwell on the past. Look forward to what the future may have in store for us and our lives. Take a few moments and think about what it would be like not to have computers, these machines we have become so reliant on for our everyday tasks. Sure, we gripe about them. Yet when they break down, we panic and say, we need the computer to perform the task that we once performed by hand. If the truth is told, they have made our lives easier and more manageable.

Here are more examples of change being good. We have changed from handwritten to printed tickets. Many plants are now computer-controlled rather than lever-controlled. Trucks now use GPS truck tracking and drivers even use their own cell-phones with two-way radios being more as a failsafe. Trucks have gone from manual shift to automatics, and mixer drum controls that were once cable operated are now electronic controls. Except for the occasional breakdowns, these changes have been great.

The concrete industry has gone through many changes in regulations with regards to permitting for air and water, to storm water control and toxic chemical inventory. Some would argue that this has been too much for our industry, but some of the changes have been a comfort to our neighbors. By demanding a higher level of professionalism we can proudly declare to our neighbors that we are good stewards in accordance with regulatory guidelines.

I owe my company and the Tennessee Concrete Association (TCA) so much for making this a career that has molded me into a better individual. Giving back to this industry has been rewarding for me, and I hope it has been rewarding for those who have chosen the concrete industry as a career path by pulling together as a team and helping each other find our niche. There are plenty of places in the concrete organization for us to plug into and plenty work to be done. We can make all the changes that have occurred to our industry even better with everyone’s help.

In closing, as the current president I want like to say thank you to the TCA for this opportunity and for all your help in working to making all our past, present, and future changes possible. May our future be bright and filled with hope and prosperity, and full of plenty of good change because “We Are TCA.”

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Alan Sparkman
Executive Director

Our annual
Tennessee
Concrete Essay
competition...
The projects
and the essays
should be an
inspiration to
each of us—
enjoy!

(See pages 20-21)

SPRING— A TIME FOR OPTIMISM

Welcome to the Spring issue of Tennessee Concrete magazine! This is the issue where we feature the winners of our Annual Concrete Design Awards, as well as the top three essays from our annual High School Concrete Essay contest. I know you will enjoy perusing both the award-winning projects and the essays.

Spring is naturally a time for optimism as the leaves begin to transform the gray forest back to green and we get to enjoy a riot of colors as vegetation of all types awakes from a winter slumber. The construction industry typically has its own awakening as the weather improves and projects begin to come out of the ground much like the new spring vegetation. For many, the past few construction Springs have been muted, but 2012 seems to be an improvement as more projects 'sprout' and the demand for concrete strengthens.

Another ritual we associate with Spring is planting. Thanks to this year's extraordinarily early warm weather, we have already set out tomato plants, beans and cucumbers at our house (even though I had to cover them last night...) and we are anticipating the harvest of fresh vegetables later in the year. Farmers know that planting seeds is only part of achieving a bountiful harvest and they appreciate the importance of replenishing the productive capacity of their fields by adding fertilizer, rotating crops and even letting fields lay fallow every so often.

In the concrete industry, planting seeds (that would be investment) has been the furthest thing from our mind—the focus has been on cutting back on expenses and people, not on making new investments. Since 2008, our industry has done very little to invest in future productive capacity because the economic downturn has been so severe. The age of most fleets (and plants) has increased because very few people have been buying new equipment. Staff sizes have been reduced and the remaining staff has more responsibility than ever before. Many companies have 'right-sized' by getting rid of new talent and middle managers so there is effectively no capacity for the organization to grow, and the prior investment in training and knowledge represented by those who were let go has been forfeited. Our fields

are depleted and we aren't doing enough to restore their productive capacity.

Just as farmers poor practices in land conservation helped create the great Dust Bowl in the last century, the concrete industry is at risk of creating our own Dust Bowl unless we return to an investment mentality that focuses on the future health of our industry as well our present survival. Here are a just a few suggestions for how we can rotate our crops and improve the productive capacity of our fields....

Obvious measures include investing in plants, equipment and fleets again. I always enjoyed purchasing new iron (especially if I got to pick up the new truck and drive it back home), but we need to invest in more than just our fleets. Most of our plants probably won't need additional production capacity in the next few years, but they likely will need equipment or improvements to meet new environmental regulations and they will benefit from new technology that makes them run more efficiently or be more versatile in producing concrete mixes that provide more value to our customers.

Another obvious measure is to build the capacity of our employees. More than just adding numbers by hiring, this involves providing training and building skills in our existing employees. Participation in industry training classes has all but stopped in recent years as companies seek to reduce costs, but investing in increasing the skills and capabilities of your workforce is much akin to applying fertilizer to your fields. Without this investment, yields will certainly decrease.

A really positive sign for our industry is that companies are indeed hiring again—I have heard this from our members all across Tennessee, and it is reflected on a broader scale by an increasing job placement rate for graduates of the CIM program. But along with this, I am hearing that the talent pool—especially for drivers—is extremely shallow. It appears that it is harder than ever to find qualified, reliable individuals to operate the fleets that literally dictate our survival in the ready mix industry. Part of the need to hire more drivers is being driven by the loss of good drivers to other job opportunities as the economy improves—and this suggests that many concrete companies need

to review how they compensate their fleet operators. In simple terms, the best way to fish in deeper waters for bigger, better fish will most likely involve better compensation packages for drivers.

And this leads me to some not-so-obvious things that our industry needs to do to pave the way to a better future. Regardless of where your business is located, success in the ready mix business is extremely local. If the community where you plant is located doesn't do well, your chances of doing well are extremely low. Investing company resources into making your community a better place to live and do business is not only the right thing to do, it is a long-term success strategy for your business. Encouraging your employees to get involved in local issues—and allowing them time and some occasional resources to go along with their involvement—not only improves your community it helps you retain your best employees.

Here are few more 'concrete conservation' practices you might want to consider:

- Invest company time in promoting concrete solutions—more than ever, concrete is the best choice for many construction applications
- Broaden your focus - look outside our industry for inspiration, ideas and issues that need to be addressed
- Get involved in making the concrete industry better instead of just focusing on your own company's success

TCA is here to help our members in all of these areas leverage your membership investment in TCA and let us help you increase the productive capacity of your fields.



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MEMPHIS BOTANIC GARDENS HERB GARDEN



BEST FINISHING COMMERCIAL DECORATIVE

Project Name: Memphis Botanic Gardens
Ready Mix Producer: Memphis Ready Mix
Concrete Contractor: Baltz & Sons Concrete

This is the latest project development in what the Memphis Botanic Gardens hope to be a continued effort to beautify and expand the multiple themed gardens within their grounds, a beautiful collection of extraordinary horticultural landscaping, and one of the City of Memphis' treasured destinations for all ages.

This exciting project has become a showcase for not only Baltz & Sons Concrete, but also for concrete itself. In a single project site, over ten different finishing techniques are demonstrated within the quarter-acre site that is the new Herb Garden of the Memphis Botanic Gardens. This project also provided a venue in which Baltz could introduce pervious concrete to a wider public—after initial meetings with the garden-planning administration, Baltz was able to demonstrate real savings and benefits to using concrete in various finishes, and thus was able to flip the asphalt portions of the original plan into pervious concrete.

Baltz introduced highly decorative terraces within the design, each having different theme and purpose: A Flagstone Woodland Terrace with concrete seat wall, a decorative floral landing, an elaborate compass rose, a concrete "Timber" bridge and the European-styled cobblestone central garden and cross lanes—each connected with winding pervious

concrete footpaths, banded with stamped concrete. The end result is a feature in-of-itself, showing that concrete can be not just a utilitarian workhorse, but also a beautiful and cohesive part of any environment. Memphis Ready Mix provided the #4,000psi limestone and pea gravel concrete, as well as the pervious concrete, reinforced with Buckeye Ultrafiber 500. Tru-Impressions and Proline Stamps; Contractor Source Water-based Pigments; Kemiko Acid Stains; Brickform Blush-Tone Acid Stains, and Spec-Chem Sealers.



2012 CONCRETE AWARD WINNERS



ARCHITECT/ENGINEER, NON-BUILDING STRUCTURE

Project Name: Neyland Stadium Improvements, Phase 1-C, Sequence 2

Ready Mix Company: Ready Mix USA
Architects: McCarty Holsaple McCarty
General Contractor: Blaine Construction



The iconic Neyland Stadium underwent improvements in 2010 under the collaboration of McCarty Holsaple McCarty and Ross Bryan Associates. Ready Mix USA was privileged to work with Blaine Construction the general contractor to supply 4000 yards of integrally colored concrete for the improvements to the Gate 21 Promenade.

This project faced a number of challenges throughout its duration including:

- A pretty tight timeline due to the University's schedule and the start of the football season; a completion date that was non-negotiable.
- Logistical issues with delivery of multiple colors being poured simultaneously; while other trades were on-site finishing up other projects.
- Maintaining consistent moisture content throughout the project to ensure that there were no deviations within the integrally colored concrete.

Jink's Concrete, the finisher on the project, displayed diverse applications of concrete finishing techniques. Including, intricate joint patterns that created visual interest both inside the stadium and out. A cast-on hardening agent was applied to the finished concrete to maintain the durability and help the longevity of the color and craftsmanship of the concrete.

The pictures were provided to Ready Mix USA but the photographer is unknown.

BEST CONCRETE PARKING LOT

Project Name: Loomis Armored
Ready Mix Company: Metro Ready Mix
Concrete Contractor: Atkinson Construction
General Contractor: Hawkins Development

Loomis Armored Sorting Facility installed their 100,000 square foot concrete parking lot with integral curb in June 2011. The general contractor on this project was Hawkins Development, partnered with Atkinson Construction as the concrete contractor, with Metro Ready Mix Concrete producing all 2,367.50 cubic yards of concrete that was required to complete this massive parking lot.

Remarkably, this project was completed in just four separate pours, all the while trying to beat the excessive heat seen in the summer of 2011. The biggest obstacle during

—Continued on page 12



2012 CONCRETE AWARD WINNERS

BEST CONCRETE PARKING LOT, CONT.—



this pour, was trying to beat the record setting temperatures reaching in the high 90's during what most were calling a heat wave.

Though most of this job was laser screeded, to control water run-off, a very large portion of the parking lot had to be hand screeded.

The reason Metro Ready Mix nominated this project is for the amazing feat of completing such a massive parking lot in four pours. Originally this project was intended to be an asphalt lot, and after much consideration, Loomis Armored went with the sustainability of concrete. Also, this parking lot is one of the first things viewed by traffic on I-24 coming into the Nashville Area.

BEST PERVIOUS PARKING LOT

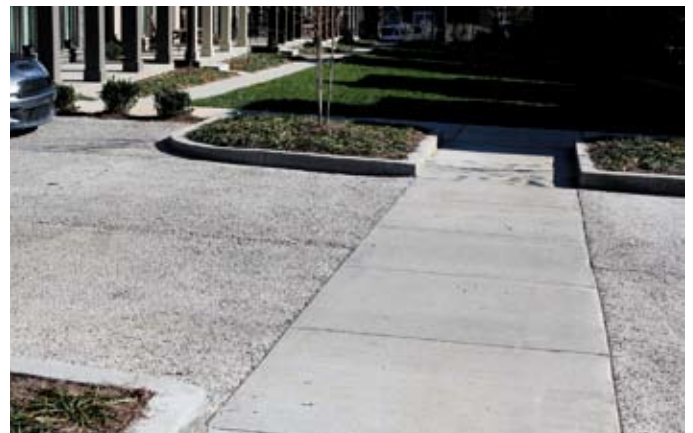
Project Name: Gale Park, Phase I

Ready Mix Company: imi

Concrete Contractor: MarCor Construction, Inc.

Land Development: Core Development

Gale Park is a new hillside community of Craftsman-style single-family homes. The site was designed by Charlie Dean of Dean Design Group and Nick Dryden of DAAD Architecture. It was Developed by Core Development Services. Sunrise Contracting did the excavation and utility work. Nashvillians traveling on I-65 South watched for months as Sunrise cut the top off of a large hill in the Melrose area, busted rock and made the steep site ready for roads and new homes. MarCor Construction, Inc. was selected as the concrete contractor to place the pervious parking lot and drive lanes. Imi ecopave pervious mix was chosen for the



2012 CONCRETE AWARD WINNERS



concrete material. The stone base was 13.5" deep with 2" stone laid down first then a choker course of no. 57 stone. Due to 5% grades throughout the Phase 1 roadway, the architecture designed a series of rubber diaphragms installed within the stone layer to slow down and divert rainwater that would infiltrate the pervious and run downhill in the stone bed. MarCor placed a total of 44,000 SF (710 CY) of 6" thick drive lanes and 5" thick parking spaces during June and July 2011. The dry, hot weather with daily temperatures above 95 F was the toughest challenge facing MarCor's pervious crews. Work schedules were shifted to very early a.m. hours. The project is a great example of Middle Tennessee rainwater management using pervious concrete.

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BEST FINISHING, COMMERCIAL POURED WALLS

Project Name: Hillsboro Hounds
Ready Mix Company: Abernathy Concrete
Concrete Contractor: Dubois Concrete, Inc.
General Contractor: Brindley Construction



The most unique construction project for Brindley Construction in 2011 was the construction of the new kennel for Hillsboro Hounds. The kennel is home to one hundred twenty and puppies used for fox hunting in northern Giles County. While the site work, which included installation of a mile long 20-ft wide road, storm water piping, fencing,



electric gates, septic tanks, concrete walks and site utilities was extensive, the concrete structure was the challenge.

The kennel required sloping concrete slabs for all the kennel areas including the interior corridors, elevated hound

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BEST FINISHING, COMMERCIAL POURED WALLS, CONT.—

beds and outside runs. The concrete was designed to slope and drain into a concrete trench that ran the length of both sides of the building. From the trench, water would drain into a hair separator and then be pumped into the septic tank. Standing water was not an option.

The walls were poured in place reinforced concrete. The roof system is a wood truss with and architectural shingle roof. The attractive state of the art kennel is an example of exceptional concrete construction that was completed on schedule in spite of 17 rain days. Dubois Concrete and Abernathy Concrete were excellent team members in the completion of this exceptional project.

- Reflective roof and R20 insulation to reduce HVAC use in conditioned areas and provide a more comfortable work environment.

The biggest challenge to this project was the requirement to poured at night, with absolutely no electricity in the building! The only access door in the building was in the center of the building, causing the pour to start at both ends of the building and tying it in the middle. Remarkably, the 2,500 yards was completed in three pours.

BEST FINISHING, COMMERCIAL

Project Name: South Central Growers
Ready Mix Company: imi
Concrete Contractor: Cope Brothers Concrete

BEST FINISHING, COMMERCIAL

Project Name: Ameriplex Phase II
Ready Mix Company: Metro Ready Mix
Concrete Contractor: Leonard Lampley Construction



Ameriplex at Elm Hill is located on one of the last remaining large industrial sites in Nashville’s Industrial Central Business District. The 36 acre business park will be home to over 100,000 square feet of LEED certified office warehouse. The Ameriplex Phase ii is a precast LEED certified building owned by Holladay Properties which required just over 2,500 yards of concrete produced by Metro Ready Mix and was finished by Leonard Lampley Construction.

LEED features include:

- Clearstory panels combined with lighting technology to harvest daylight and reduce electrical demand that can be customized for individuals tenant spaces.

South Central Growers Inc., located in Springfield Tenn, planned to add an additional green house totaling 260,00 sq. ft. Two main concerns with the project was cracking on the slab surface and placing concrete in cold weather. The green houses are state of the art facilities that required the expertise of concrete in cold weather. The green houses state of the art facilities that require the expertise of Cope Brothers Concrete Contractors and imi to help solve their problem.

Several times a day an underground irrigation system floods the concrete floor where the plants are stored. The water is stored in a holding pond that contains 23 million gallons of water. The water is recycled through a pump station that was built at their location. Cracks in the concrete slab will allow water to escape and interfere in the recycling process.

The project contained 4,500 yards of concrete with the majority being placed during the winter months. Protecting the concrete and choosing the best mix possible was crucial. Imi suggested using fiber to reduce cracking and “imi Liquid Heat” a product designed to increase set times in cold weather. Cope Brothers also chose to use curing blankets. This would protect the concrete from the harmful elements and allow it to cure properly.

2012 CONCRETE AWARD WINNERS



By using good cold weather concrete techniques and customized mix designs, the job was completed without any complications. South Central Growers was provided a solution and received a successful project.

floor to meet the specification of the new equipment. This was a designed as a fast-track job, The 475,000 square feet slab had to be remove and replaced in 90 days.

Given the tight deadline and engineering specifications they were looking for a high performance concrete solutions that could help speed up the placement process as well as the floor flatness. Besides the compressive strength requirements, the 12 inch slab needed to achieve a corresponding equivalent flexural strength (EFS) of 250psi and floor flatness (FF) of 30 and floor flatness levelness (FL) of 25. IMI suggested using the "imi XS MAX" in place of the rebar for the project. This would meet the specification and eliminated the time and material needed for the reinforcement. This will help save time, but add to the difficulty to achieve the FF and FL numbers required. With an excess of

—Continued on page 16

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BEST FINISHING, COMMERCIAL

Project Name: GM Plant, Spring Hill
 Ready Mix Company: imi
 General Contractor: Thomas Anderson
 Concrete Contractor: Reese Enterprises



In October of 2010, General Motors announced a \$500 million dollar rehabilitation package for the Spring Hill Tennessee plant. The rehabilitation was to prepare for the manufacturing of the next generation Ecotec 4-cylinder engine. This will require a complete demolition of the floor in the original power train building and replacing with a new

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BEST FINISHING, COMMERCIAL, CONT.—

over 30lbs of integrally mixed steel fibers imi XS provided uniform reinforcement throughout the depth of the slab. B&B, with their skilled professional crew, was able to achieve the floor flatness and levelness numbers needed despite the excessive steel fibers.

IMI delivered over 18,000 yards of concrete for the new Spring Hill manufacturing floor. The project met its fast-track construction schedule. B&B Construction was very pleased with their service and product from imi.

.....

BEST FINISHING ARTISAN

Project Name: Roberts Residence

Ready Mix Company: Memphis Ready Mix

Concrete Contractor: Baltz & Sons Concrete

Contractor: Pools Unlimited

This spectacular project is the second phase of work for which Baltz & Sons Concrete was enlisted to provide the hardscape design and installation. Playing off the original patios installed by Baltz, the new phase called for a variety of stamped surfaces—the terraced deck around a custom pool by Pools Unlimited of Memphis, a cabana foundation and floor, cast-in-place cantilever concrete coping, and custom decorative scoring for the cabana floor as well as various icons throughout the project. The challenge of this project was to be able to match up highly aesthetic finishes that were installed over a span separated by several years. A combination of acid-etch and water-based stains were used to pigment the stamped surfaces as well as the hand scored decorative elements- including a banded-floral design with striking blue highlights that match the tile of the pool; a harlequin-diamond pattern on the floor of the pool cabana; London cobblestone, southwest slate seamless banding; stone-edge coping with Sun-Burst features. At the completion of the stain-work of the new sections, all of the surfaces, both old and new, were sealed to help achieve a consistent appearance throughout the project. Memphis Ready Mix provided the #4000psi limestone concrete, reinforced with Buckeye Ultrafiber 500.



2012 CONCRETE AWARD WINNERS



BEST DECORATIVE FINISHING, RESIDENTIAL

Project Name: Dufur Residence

Ready Mix Company: Memphis Ready Mix

Concrete Contractor: Baltz & Sons Concrete

Landscape Design: Michael Hatcher and Associates

This highly dynamic project was another collaboration of David McMittigen of Michael Hatcher and Associates, and Kevin Baltz of Baltz and Sons Concrete. The unique shape of the pool was a reflection of a challenging existing yard elevation. David's design created highly-functional areas that connect to each other in practical and beautiful ways—the end result: a flowing and extraordinary back-yard living area, with gracefully curving steps, stepper paths and walkways connecting stamped concrete patios and terraces,



each with their own character and purpose, surrounding a custom gunite pool. The pool-deck terraces and patios are stamped Seamless Potomac and Southwest Slate hand tooled into a grand Ashlar-style of large rectangular and square blocks; the exposed aggregate portions are micro-washed limestone aggregate with red sand. A lower path of what appears to be large stones are actually poured in place stamped concrete blocks, a method of adding character and appeal to an otherwise mundane walkway. Memphis Ready Mix provided the #4000psi limestone concrete, reinforced with Buckeye Ultrafiber 500.

—Continued on page 18

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2012 CONCRETE AWARD WINNERS

BEST SPECIALTY CONCRETE PROJECT

Project Name: Kelly Residence

Ready Mix Company: Memphis Ready Mix

Concrete Contractor: Baltz & Sons Concrete

Landscape Design: Michael Hatcher and Associates

This unique project presented a challenge—the Kelly Family wished to create a backyard living space that provided an outdoor kitchen area, a seating terrace, and most importantly, a regulation half-court basketball court. Given the awkward shape and dynamic of the back yard, and the limited amount of space, every effort had to be made to maximize each respective space to be functional, convenient, and part of a larger picture. David McMittigen, of Michael Hatcher and Associates came up with a practical yet beautiful design that addressed each of these issues.

After consulting Kevin Baltz, of Baltz and Sons Concrete, the designer incorporated a band of pervious concrete within the basketball court—this would meet the drainage needs of the court and surrounding areas without diminishing the playable hardscape area. This clever use of pervious concrete further demonstrates the wide range and versatility of concrete. The perimeter curbing would serve as both retainer wall as well as a player “bench”—Baltz installed a fully rounded edge on the face of the curb so as to mini-



mize unpleasant run-ins during play. After placement, the surfaces were then stained, with a neutral green color for the shooting lane, and meticulously laid out and hand-scored foul lines, shooting lane, and three-point line. A custom logo court-name was also added at the request of the client, which was hand-etched with a diamond tipped rotary grinders, and then stained with an epoxy-based concrete paint. The patio and terrace are micro-wash exposed white limestone with stone banding. Memphis Ready Mix provided the #4000psi limestone concrete, as well as the pervious concrete, both reinforced with Buckeye Ultrafiber 500. ❖

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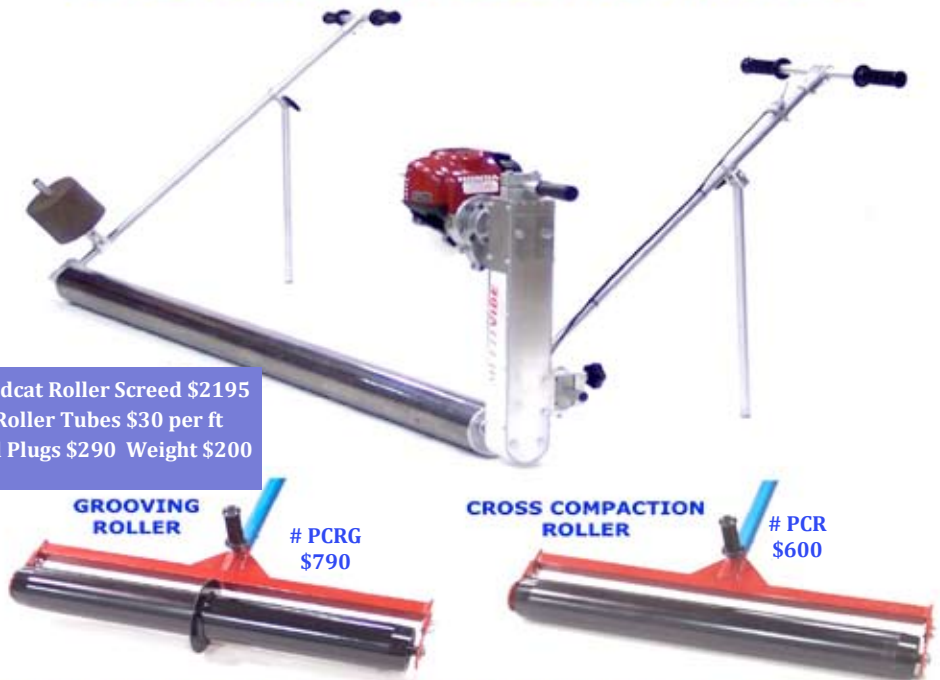


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2012 ESSAY CONTEST

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First Place **FOOTING**

MARIA RODRIGUEZ



Sometimes, it is the simple things one takes for granted. One does not notice how much of an impact something that seems unimportant makes. It can be a tree that has been in the backyard for years that is suddenly cut down or a basketball court you have walked by for years that suddenly

is not there anymore. One could see these things every day and not appreciate them until one day they are gone. In my case it was my father's job that was missed. He had worked in construction, specifically the concrete business, since before I was born. My family and I took for granted the fact that my father had a stable job in the concrete business. We would later learn to appreciate his job more.

For years my father had a successful job in concrete, laying down new sidewalks, making new parking lots and the like. My father's job and our life seemed as stable as the concrete he was making. For years there was stability in my family's life, we were successful due to the concrete business, my father went to work in the mornings and always returned home in the evenings. This however changed when the recession hit. Suddenly my father found himself without a job and we were faced with uncertainty. How could something as essential as the concrete business just fade into the background? It was something my family and I could not comprehend and still do not.

My father searched for months for a new job, but in Memphis jobs in concrete were not as available as they used to be. As a result, my father ended up accepting a job in New Orleans in the concrete business. There things were quite different from the situation in Memphis, jobs in concrete were flourishing. New Orleans was in need of repair and reconstruction and what better to use to reconstruct than concrete? There the city was being made strong again, as well as expanding upwards with new bridges. The city of New Orleans was not the only thing being made whole again on account of concrete; our family was slowly rebuilding itself also. We could live our lives with a little less worry, even though we were separated from my father, because concrete once again offered us stability. He had a job, could support his family and could come see his family every

week. Though we were still uncertain about the future, things were looking up.

Concrete seems a simple thing; it's basically a mixture of cement, water, crushed rocks, and other chemicals. However, for me it has been more than that, it has been the rock my family has stood on since before I was born. Concrete has helped rebuild my family just like it is helping rebuild New Orleans. For both of us, concrete has been the base, the footing on which we stood in the past and stand now in the present.

Second Place (Tie)

SHELTER
MEGAN COLLINS



Jason gripped his steering wheel until his knuckles turned white. Hail the size of golf balls was pelting down on his truck, and he could feel the tires wavering on the road beneath him. The sky was ominous, black. Suddenly, the country song humming out of his speakers was interrupted by a jolting electronic siren. Jason's heart flipped; He was so close to the storm he could almost feel the rumble of the cyclone; Panic swelling in his gut. Trying to keep his truck steady, he glanced at his rearview mirror. There it was, in the distance, its tail stabbing into the earth, its ghostly, sickening narrow body twisting in the debris around it. Its top pulled in the dark clouds, summoning more chaos. His mind threw out flashes of questions within seconds.

"What do I do? I'm nowhere close to home. Am I going to die?" He thought back to when he was a child. During tornado warnings, his mother would rush him to the basement. Surrounded by the concrete walls, they would always be safe, his mother had told him. Looking back, he realized he had never experienced how terrifying a tornado could be. One had never torn through his and his mother's home, nor had it ever chased him down a road while he was utterly alone and vulnerable. At that moment, his heart was crying out for a refuge—anything with concrete walls.

Around another curve, he saw it. In front of a one story white farmhouse, there was a small, concrete storm cellar in the side of a grassy mound. Jason didn't think twice; He slowed down as quickly as possible and turned into the driveway of the house, spinning up gravel. He parked, tore his seatbelt from its buckle, and stumbled out of the truck into a desperate run toward the

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cellar. The tornado howled in the near distance, the wind whipped around him so hard that it rushed like water through his ears, and the icy hail pelted around him. He fell on the cellar's door and tried to open it. It must have been locked, so he did the only thing he knew to do. Jason screamed and pounded with his fists as loud and as hard as his strength would let him. Suddenly, the door flew open and an arm jerked him in. Jason stumbled to the hard floor. But as he got to his feet with his knees shaking, he took in his surroundings: a small couch, a wooden chair, and a battery operated lamp.

"Thank you," Jason panted. "It was right behind me." The howl of the tornado was growing louder and the stocky man hurled himself at the couch. The ground around them was trembling and Jason's first instinct was to throw himself to the floor and cover his hear. The crashing noises of destruction and roar of the twister were slightly muffled, but loud enough to convince him he was bound to die in a cellar underground.

* * * * *

"I'm so sorry about your house." Jason felt numb, standing in the mud, surrounded by fallen debris. The man rubbed the back of his hear, staring at the splintered heap.

"I'm sorry about your truck." He didn't turn to face Jason. Jason's truck had landed flipped over in a field only half a mile away. His hands and knees still shook as he looked up at the calm sky. He turned his head back to the concrete storm shelter. It sat in the grassy mound where it had always been.

"I just can't thank you enough. If you hadn't let me in the cellar, I would be dead."

"If I didn't have such a sturdy, concrete storm cellar," the man grunted, "we would both be dead."

Second Place (Tie) **TOUCH OF A SIDEWALK** CATHERINE HARPER



turning me into their canvas. They have poured their imagination

I have lain here for many years, solid and unmoving. Though many have walked upon my broad expanse, few will ever notice my creator's handprint gently pressed into my face, nor the year he proudly inscribed underneath to date the beginning of many years of service. Young children have come

upon me turning me into a vast ocean of rainbows and flowers. They would then take pride in their art until the rain would come over me entirely clean, thus returning me to my normal gray state. I have watched these artistic children grow, soon abandoning their sidewalk chalks to adopt a new bike. I was here to catch them when their balance failed, although I received no thanks. I would hold their tears as they would run inside, their bikes lying abandoned. However, soon they would return. I would watch proudly, containing my joy as they would try again and succeed. And I would inwardly smile as they rode off their bike tires purring against my back.

Soon the days would grow shorter and the sun would sink slowly upon my face. The bikes would disappear and the trees above me would shed their coat of leaves down upon me creating a blanket of red and golds. Pumpkin would then speckle the landscape around me sending off their warm glow, and then candy would appear in large bowls. I would watch the costumed children travel from house to house as they would collect their many treats. I was there to be a path of safety, illuminated by the streetlights, protecting them from the dangers of the alleys and darkness. Occasionally they would drop a piece down to me. How sweet a gesture! I would take it proudly. I know this magical season is short, and it too would come to an end.

The days would continue to grow shorter, and then sun would leave me completely as the sky began to mirror my gray. I would wait for the snow to cloak me in a covering of white so that the children would again play upon me. They would build great castles of white and have great battles ending often in cold fingers and runny noses. I felt their muffled footsteps as they crunched to and fro carrying gifts of the season and tidings of cheer. They would then sing warming each other's spirits and the air as their notes, sung softly, would float in the air around me and up into the cold, still air.

The change would inevitably come again, and now I am worn. My cracked surface allows shoots of green and yellow flowers to arise from beneath me, lifting the spirits of all who walk along my path. My years continue on like this. In my time I have felt the earth shake beneath me, and I have felt waters rise above my back, but most importantly I have seen life. The children that walked upon me have grown and have moved on to other neighborhoods and sidewalks of this great world, but here I will forever lie. The concrete that embodies me will forever hold strong as I continue to lightly touch the lives of all those who walk upon me.

CIM UPDATE

by Dr. Heather J. Brown

BRINGING HOME THE GOLD



Concrete Industry Management has been bringing home the gold! American Concrete Institute (ACI) hosts an International Concrete Competition each semester. This spring was a concrete bowling ball where the students had to target a specific weight, strength and also bowl three rolls. Our MTSU CIM team, Morgan Dennis, Melanie Dennis, Dylan Fuller, Michael Stropoli and Alex Snow, brought home 1st place out of 36 engineering schools. Thank you to the participating faculty member, Dr. Jerry Morton.

American Society of Civil Engineers hosted their Southeast Regional Competition in Tallahassee, Florida, on March 22-24. CIM participated in all twelve competitions and brought home trophies for three categories: 1st place Concrete Beam, 1st place Hydraulic Rocket and 3rd place Surveying. Sixteen students participated with Cory Powell, Blake Knight and Kurt Goethert capturing the titles. Thank you to their advisor, Mr. Jon Huddleston, for all his dedication and hard work. ❖

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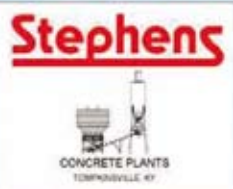
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