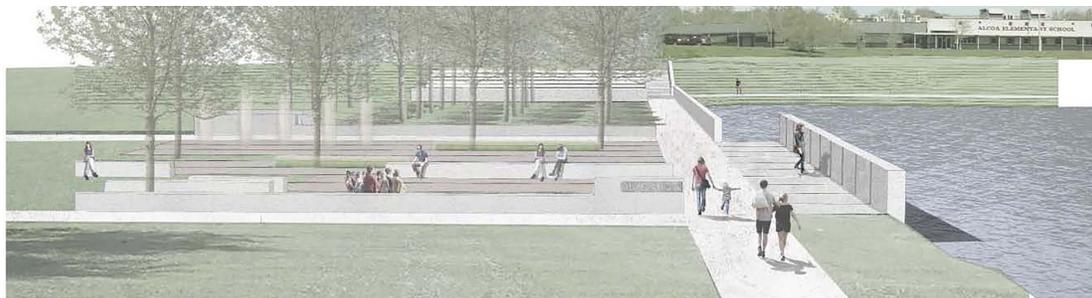


ACEC Tennessee

American Council of Engineering Companies of Tennessee

PRESERVING A COMMUNITY LANDMARK



By: Steve Drummer, P.E.
LDA Engineering

The "Duck Pond" in Alcoa, Tennessee is getting a face lift. The eight acre water feature is located in the center of the City of Alcoa in close proximity to three public schools, a little league ball park, a swimming pool, and a City Park. The area around the pond serves as the venue for several popular City events including Freedom Fest, an Independence Day celebration, and the Duck Pond Fishing Derby usually held in early June. The pond receives a steady flow of daily visitors looking for a spot to spend a few minutes, walk, read, or just relax. Its location near a branch of the Maryville – Alcoa Greenway Trail also increases pedestrian traffic to the area.

In June 2013, the centennial anniversary celebration of the Aluminum Company of America (ALCOA) kicked off. A part of the celebration is a project ALCOA is coordinating and helping fund improvements to the north end of the Duck Pond. The improvements will be anchored by a 12,000 square foot plaza that will include a formal plaza with sitting areas, a splash fountain for kids to cool off, an amphitheater, a playground, and a historical element that will showcase the 100 years of history behind ALCOA and the City of Alcoa which will celebrate its own centennial in 2019. The final look is still under development, but the plaza area will incorporate various elements that will commemorate important events and dates in the company's and city's history. The amphitheater along on the north side will be positioned into a natural hillside. This feature will allow for outdoor performances and a great outdoor classroom for Alcoa Elementary, Middle, and High School.

With the ALCOA centennial project improving one side of the pond, the Alcoa Public Works Department realized the remainder of the Duck Pond also needed some updating. Closer examination revealed four primary concerns: bank stabilization around the shoreline of the pond, lack of connectivity to the Maryville - Alcoa - Blount County greenway/trail system, overall site aesthetics, and water quality of the pond. The City knew they needed additional

engineering resources, and LDA Engineering was selected to plan the needed improvements and also provide engineering support for the ALCOA centennial project.

LDA determined the erosion and poor bank conditions were caused by two primary factors, wave/rippling action on the shoreline and pedestrian traffic concentrated in several areas near the shoreline. Currently, about 70% of the pond's shoreline is not easily accessible to visitors concentrating them in a small area near the parking lot.

Erosion due to foot traffic will be resolved by creating access to the entire shoreline with the extension of the greenway trail and the construction of a boardwalk. This will disperse park users over a wider area instead of concentrating them in a limited area. Additional improvements to the Greenway will allow direct access from Alcoa Elementary School via an ADA accessible path. The boardwalk and greenway trail will be further enhanced with several water level platforms that will serve as piers for fishing or just a convenient spot to put your feet in the water.

The boardwalk will be located between Park Road and the south shore of the pond. Park Road is used for Alcoa Elementary School traffic and actually forms a dam on the south side of the pond. The area between the shoreline and the street is narrow and steep and allows no opportunity to construct a normal greenway trail. LDA developed the solution of raising the boardwalk about 440 linear feet to overcome the challenging terrain.

The outlet control structure for the pond is also located on this side of the pond and the boardwalk will be constructed to cover it completely. This will result in a wider middle section of the boardwalk and will create an excellent place for fishermen on a section of the pond that was previously inaccessible.

In addition, LDA will provide several connections to the Maryville-Alcoa Greenway as part of the construction. This trail system has over 20 miles of greenways, improved sidewalks, and other designated paths that connect parks and neighborhoods in Maryville, Alcoa, and Blount County.

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These companies provide Tennessee engineering firms with products and services and support the activities of ACEC of Tennessee through participation in the Partners Program. Additional information about these Partner Program participants is available at www.acectn.org

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NOVEMBER

26 - 27

ACEC of TN/TSPE Offices
Closed Thanksgiving
Holiday

NOVEMBER

30

Leadership PE Application
Deadline

DECEMBER

2 - 4

Crow Friedman Seminars
Knoxville, Nashville and
Memphis
8 am - 12 pm & 1 - 3 pm

DECEMBER

8

ACEC of TN Board
Meeting

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PRESERVING A COMMUNITY LANDMARK (CONTINUED FROM PAGE 1)

The greenway is the result of an almost 20 year effort that began with the vision to connect Springbrook Park in Alcoa to Sandy Springs Park in Maryville.

To correct the bank erosion due to wave action, the proprietary product Envirolok was selected. This system consists of fabric bags filled typically with engineered soil that will be placed on the banks of the pond and staked down by planting vegetation in the seams between the bags. When the plants extend their roots through the bags into the subsoil, they will create a stable barrier to withstand the wave action and provide protection to the shoreline. The Public Works Department plans to perform this work with their own forces and utilize recycled materials from their water and wastewater plants to develop the engineered soil used in the bags. This green alternative for shoreline protection was important to City Public Works Director Kenny Wiggins since he did not want to use rip-rap or other "hard" material along the shore preferring a more natural look.

Water quality will be enhanced with the addition of several rain gardens situated to intercept runoff from an existing parking lot, portions of a nearby public street, and the Alcoa Middle School parking lot that currently discharges into the pond. The strategic location of

the rain gardens will also help disperse visitors and encourage use of more areas along the shoreline, as well as enhance the aesthetics of the pond by adding areas of color.

Early in the project, LDA Engineering sought funding sources aimed at reducing the construction to a single project that could be accomplished in a single construction period. Grants from a variety of state, federal, and private sources were evaluated and pursued. In November, The City of Alcoa applied for an 80/20 grant through the Tennessee Department of Transportation's Transportation Alternatives, formerly known as the Federal Transportation Enhancement Program. If successful, the City will only be responsible for 20% of the project cost, which will allow the improvements to be constructed as a single project.

A significant number of details and contributing factors will have to be pulled together to complete the total face lift of the Alcoa Duck Pond. With our collaborative efforts and the willingness of the Alcoa Public Works Department to perform some of the work themselves, it is merely a matter of time before there will be a ribbon cutting for the New Alcoa Duck Pond.

LEADERSHIP PE (APPLICATION DUE NOV 30)

ACEC Tennessee is excited to announce that registration is now open for the Tennessee Leadership PE Program set to begin in January 2016. **Application Deadline is November 30th!** The 2016 Tennessee Leadership PE program will build upon the extremely successful inaugural program held this year. The program is designed as a competency based leadership program focused on engineers who are high potential emerging leaders and also engineers who are current mid-level and senior-level leaders. The competencies included in this customized program include: self-knowledge, emotional intelligence, building effective teams, communication, conflict resolution and government advocacy. The program participants will

gain leadership skills while networking with members from other A/E firms, industries, and Federal and State government agencies.

The TENNESSEE LEADERSHIP PE program will include an orientation in January and four additional monthly sessions held in locations across the State. Each session will be 1.5 days with the exception of the orientation session which will be two full days. The sessions will be facilitated by representatives of Partnering Agencies who include the State of Tennessee, Tennessee Valley Authority, Metro Nashville Water Services, and the U.S. Army Corps of Engineers. The 2016 application and tentative schedule are posted at <http://acectn.com/leadership-pe-2016/>.



MEMBER NEWS



In Memory of Johnny Ray Chester

Former ACEC of TN President (1981-1982), Johnny Ray Chester passed away June 23, 2015 after a long battle with Pulmonary Fibrosis. He was a Registered Electrical Engineer, and worked most of his professional career as a design Engineer for Ellers, Oakley, Chester and Rike (now Smith Seckman Reid, Inc.) He retired in 1999.

Congratulations

Congratulations Kathy Ware, PE, of K.S. Ware and Associates, for being chosen as contractor of the year at the TDOT DBE Small Business Annual Meeting!

FROM THE PRESIDENT

ENGINEERS...IT'S TIME TO SPEAK A LITTLE LOUDER



By: John Kenny, PE
President of ACEC of Tennessee

Last month the Tennessee Engineers' Conference was held at the Embassy Suites in Murfreesboro, Tennessee. Our third year collaborating with TSPE and ASCE, the event again included outstanding technical and management seminars for a variety of engineering disciplines with speakers representing U.S. Fish and Wildlife, Tennessee Department of Transportation, Tennessee

Department of Environment and Conservation, Tennessee Tech University, as well as leading industry and consulting firms. We were also very honored to have Representative Beth Harwell, TN Speaker of the House and representatives from the Tennessee Board of Architectural and Engineering Examiners with updates on legislative and regulatory issues affecting Engineers. It was a great atmosphere as well as an occasion for the three organizations to conduct business meetings individually and jointly, network and raise funds for the Tennessee Professional Engineers PAC (TPE PAC).

The TPE PAC is more important today than any other time in its twenty-five year history. The construction industry has rebounded from the most recent recession providing some opportunity for increased demand in the design industry. However, the effects of the recession regarding the workforce availability as well as liability and health insurance premium escalation rates are still creating challenges. Engineers are also faced with increased owner pressures from "just-in-time" economic principals, financing and a continuation of elevating the standard of care.

If those were our only challenges...

At a recent political event, a thirty year career lobbyist and former state representative claimed the A/E industry is being attacked much more today than any point in Tennessee history.

We are faced with a severe transportation infrastructure funding shortfall which could lead to a slug of funds when corrected or more emergency repair projects. The environment is more regulated and protected than any time in history with more documentation the result. US Department of Energy initiatives in conservation and sustainability have brought about increased regulation in areas previously ignored. Reduced contingencies are being placed on projects as a result of enhanced modeling capabilities in the industry. Information technology is moving at a pace making smarter systems infrastructure the norm but creating a need for more specialty consultants. This is occurring while one of the solutions to budget problems are being solved by reducing and minimizing our fees.

Engineers are problem solvers at heart, however we need adequate resources. Those resources, from software to appropriately trained staff, are only possible with funding. It will take our collective efforts through the TPE PAC to make sure the Tennessee engineering industry is sustainable.

The TPE PAC is the Tennessee engineering industry's primary tool for political engagement at the state level. It has grown in recent years, but is in need of a renewed emphasis by Tennessee professionals. Fundraising goals need to approach five times recent annual amounts. It not only can be done, but must be done for the health of our industry.

It wouldn't come without precedent. We have done a fantastic job with the ACEC (National) PAC which is now the largest federal PAC in the design industry, having grown more than 500% in 10 years and closing in on \$1M annually.

TENNESSEE ENGINEERING ORGANIZATIONS OFFER SCHOLARSHIPS

The American Council of Engineering Companies of Tennessee (ACEC of Tennessee) is accepting applications from engineering and land surveying students in Tennessee for several state and national scholarship programs. The Tennessee Engineering Foundation will award four scholarships to engineering students who meet scholarship requirements.

"ACEC of Tennessee has always been committed to promoting the engineering profession in a variety of ways, including education," said Kasey Anderson, ACEC of Tennessee Executive Director. "We count it as a privilege to once again offer these scholarship programs."

ACEC of Tennessee will award up to two \$1000 scholarships to current college students. Applications will be judged on five criteria: cumulative GPA, essay, work experience, recommendation, and extracurricular activities. Applicants must be a U.S. citizen pursuing a Bachelor's, Master's, or Doctor of Philosophy degree in an engineering or land-surveying program in Tennessee approved by the Accreditation Board for Engineering and Technology. Students must be entering their junior, senior, fifth or graduate year in the fall of 2016 to qualify. Students are encouraged to showcase interest and commitment to the field of engineering in the essay. Winners will be announced in February, 2016.

Winners of the state scholarships are eligible for the national scholarship

program of ACEC. It will award several scholarships totaling \$20,000, and the Council of Structural Engineers of ACEC will award a \$5,000 scholarship to a structural engineering student enrolled in a Master's degree program for Structural Engineering in the 2016 fall semester. These winners will be announced in October, 2016.

Similarly, the Tennessee Engineering Foundation is offering three, \$3,500 scholarships to rising juniors or seniors at accredited engineering schools in Tennessee; a \$4,000 scholarship is also available to any rising junior or senior in an accredited engineering school in the state of Tennessee, as well as children or grandchildren of any TSPE member at the accredited school of choice, in or out of Tennessee, if all other requirements are met.

Winners will be announced in the spring of 2016. Scholarships are to be used toward the 2016-2017 school year.

Complete information and application forms are available at:

<http://acectn.com/engineering-excellence-awards/scholarships/>

Applications for all scholarships must be submitted by **January 22, 2016**.

CALL FOR FEATURE ARTICLES:

Enjoy writing? Think there is a topic that should be highlighted in the next newsletter? We are giving members an opportunity to bring topics they believe are important to hundreds of members.

To submit your articles or interested topics, please email Judy Logue at jlogue@tnc.org.

NOVEMBER
2015
INSIDE

- **Applications Due to Leadership PE**
- **Member News**
- **Scholarship Applications Coming Up!**

FROM THE EXECUTIVE DIRECTOR

ACEC GETS THE JOB DONE



Kasey Anderson, CAE
kanderson@tnec.org

In the last month I have had the opportunity to spend some time focused on ACEC at the national level, attending the ACEC Fall Conference in Boston and Leadership Orientation at ACEC National Headquarters in Washington, DC. As ACEC Chairman Ralph Christie puts it, "ACEC's job is to create the business environment for the engineering industry." With that in mind, I am confident that ACEC gets the job done, both on the national front and right here in Tennessee.

From a national perspective, ACEC is involved in issues that affect every engineering firm as well as those specific to public and private markets. The list of ACEC's advocacy wins since 2013 is extensive: preserved the 9% A/E tax deduction; passed WRRDA, QBS in wastewater, and WIFIA; enforced QBS and FAR in Federal contracting; killed FHWA cost recovery on alleged "overcharges"; protected engineers in SEC Municipal Advisor Rule; preserved cash accounting; and the list goes on. ACEC's current focus at the national level is on regulatory issues, transportation and infrastructure, DOT FAR-based audit rules, FAA reauthorization, water, energy, tax reform, and federal agency procurement.

ACEC Tennessee's advocacy efforts at the state level are equally comprehensive. In recent weeks we had dozens of meetings with elected and appointed officials at every level of state government addressing the state's procurement strategies, the state design contract and the potential impact of the privatization of state buildings on the A/E community. We continue to address QBS issues as they arise, and are working closely with our partners in the Transportation Coalition of

Tennessee to urge legislators to take action to solve our state's significant infrastructure needs. Additionally, we have been the voice of the engineering community on local codes, transit, and safety matters across the state.

Member engagement is key to our success. ACEC Tennessee is well represented at the national level, with dozens of members representing our state of the following national ACEC committees: Business Resources & Education, Contract Documents, Environment & Energy, Federal Agencies & Procurement Advocacy, International, Membership, Public Relations, Risk Management, Transportation, Engineering Excellence Awards, Nominating, and the Planning Cabinet. Additionally, 26 ACEC Tennessee firms are members of these national ACEC coalitions: Design Professionals Coalition, Small Firm Coalition, Council of American Structural Engineers, and the Council of American Mechanical and Electrical Engineers. Likewise, our members are well engaged in our state committees, with 255 individual members participating in the following ACEC Tennessee committees: Business Practices, Chapter Development, Engineering Excellence Awards, Environment & Energy, Interpro, Leadership PE, Public Relations, and our Transportation Working Groups. These members represent every discipline, market sector and size of firm, and each plays a critical role in our advocacy efforts.

Successful, pro-active advocacy is wholly dependent on our ability to stay well-informed. We rely on you, our members, to make sure we see the forest through the trees. If you come across information that would be helpful to our efforts, whether related to issues we are currently addressing or otherwise, please pass it along. With your help, we can continue to get the job done.

