

# The Voice

## ACEC

AMERICAN COUNCIL OF ENGINEERING  
COMPANIES OF TENNESSEE

THE VOICE OF TENNESSEE'S ENGINEERING COMPANIES

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## Now Available: Revised Reference Manual for Building Officials & Design Professionals

by John Cothron,  
Executive Director Board of Architectural  
and Engineering Examiners

The Board of Architectural and Engineering Examiners (A&E Board) recently completed a thorough revision of the *Reference Manual for Building Officials and Design Professionals*, which was last published in 2006. All registrants of the Board should have received the new 2009 edition in the mail in September; it is also available on the Board's website ([www.tn.gov/commerce/boards/ae](http://www.tn.gov/commerce/boards/ae)). Here are some of the more significant changes:

- The appropriate portions of the manual were updated to reflect a recent statutory change exempting signs under a certain size from the requirement to have plans and specifications prepared by a registered architect or engineer (T.C.A. § 62-2-102).
- A question about qualifications-based selection was added to the Most Commonly Asked Questions section.
- The former Appendix C (Example of Minimum Conditions Requiring a Registered Architect and/or Engineer When Space is Less Than 5,000 Square Feet) was deleted due to the fact that the "Seal Exemptions Clarification" policy no longer mandates a specific one-hour or two-hour fire-rated separation between tenant spaces, eliminating the need for the graphic examples.
- The "Seal Exemptions Clarification" policy (Appendix C) was modified to apply not only to Business, Factory-Industrial, Mercantile and Storage occupancies, but also to Hazardous and Residential occupancies, consistent with T.C.A. § 62-2-102. The section on tenant finishes and tenant improvements, which formerly required at least two-hour fire-rated walls between tenant spaces, was changed to require "the minimum fire-rated separation required by the applicable code." The policy was further revised to clarify that the paragraphs on existing interior space, mechanical design, plumbing design, electrical design and reroofing apply to buildings, structures and spaces of B, F, H, R, M, or S occupancy that are 5,000 square feet or more in total gross area or over two stories in height. The paragraph on reroofing was revised by deleting the word "replacement," thus limiting the policy's application to normal maintenance or repair of an existing roof.
- The Standard of Care for Fire Sprinkler System Design (Appendix F) was revised by deleting the portion addressing Microbiologically Influenced Corrosion (MIC), since the State Fire Marshal's Office no longer requires MIC testing.
- Recently adopted policies on "As-Built Drawings" and "Signs" were added to the Design and Practice Policies (Appendix H). The recently revised "Delineation of

(continued on page 2)



John Cothron

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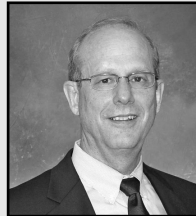
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# Got a Problem? Call an Engineer

by Ed Hargraves  
President, ACEC of Tennessee

Engineers by their nature are problem solvers. From early childhood, in most instances, engineers are tinkerers, fixers and disassemblers of toys; they generally like to explore and see how things work. As they grow older and become exposed to various professions, they begin to see a good fit with the engineering profession.



Ed Hargraves

Sometimes, the problem-solving abilities of engineers make headlines. For example, after the Columbia tragedy, engineers were the problem solvers who proved that a piece of styrofoam projected into the wing of the space shuttle at the correct velocity could indeed cause a hole in the leading surface of the wing and allow the hot gases of re-entry to cause structural failure and the ultimate destruction of the Columbia.

Most of the time, engineers' creativity and problem-solving abilities are quietly being applied to everyday needs. Engineers routinely receive calls from clients with problems such as moisture in a basement or standing water

on their property. Sometimes the call is about the most efficient and least time-consuming route for garbage collection. When you turn on the tap water in the morning to brush your teeth, an engineer somewhere designed the water treatment plant and the water distribution system to get the water to your house. When you turn on the lights when you come home from work, electrical engineers were the ones who designed the power plants and the distribution system to get the electrical power to your house.

## Time in the Spotlight

Far too often, engineers work in the background and are not recognized for their creativity and problem-solving abilities. Each year ACEC of Tennessee offers a chance for the engineering community to highlight and show off its creativity during the annual *Engineering Excellence Awards* event in March. When I review the competition entries every year, I'm always impressed by the diversity of the projects and proud of the creativity of engineers.

Yes, engineers are problem-solvers. Their efforts help make safer, better and more productive lives possible for all of us.

## Revised Reference Manual

(continued from page 1)

Engineering and Surveying" and "Design Competitions/Requests for Proposals/Requests for Qualifications" policies were included, and the "Townhouses" policy was replaced with a new "One-Family and Two-Family Dwellings" policy.

These changes, along with other issues, will be the topic of the upcoming A&E Board presentations on December 2-4, 2009. I hope you will make an effort to attend. (Editor's note: The seminars will be held in Knoxville, Nashville and Memphis. The registration form can be found at <http://www.acectn.org/Events.htm>.)

Finally, I should point out that the Reference Manual is a living document. I expect that further changes will be made in the coming months to update code references and incorporate suggestions from building officials and registrants. Please contact me at [john.cothron@tn.gov](mailto:john.cothron@tn.gov) or at 615-741-3221 if you have any questions about these changes or suggestions for future revisions.

## MEMBER NEWS

- **Robert F. Polk, PE**, is the new associate-in-charge of the Mid-South Region's Nashville Division at **Wilbur Smith Associates**.
- **Todd Knuckey, PE**, senior vice president and principal of aviation services at **Hanson Professional Services Inc.**, Nashville, recently was named vice chairman for the Airport Consultants Council's (ACC) Legislative and Regulatory Committee, part of ACC's Government Affairs Committees.
- **Barge Waggoner Sumner & Cannon, Inc.** (BWSC) received a national Citation Award from the American Institute of Architects (AIA) for its work on the restoration of the historic Metropolitan Nashville Courthouse. **Lance Wagner, PE, CFM**, a civil engineer in BWSC's Nashville office has successfully completed the process and examination to become an ASFMP Certified Floodplain Manager (CFM).

# 29 Projects Entered in EEA Competition

Twenty-nine projects will compete for honors in the 2010 *Engineering Excellence Awards* competition.



**Rick Gafford**

Twenty-four ACEC of Tennessee member firms—including two new member firms that are competing for the first time—will vie for the prestigious awards. The projects entered in competition are located in cities and towns across Tennessee and in Alabama, Kentucky and



Indiana. “I am pleased and excited by the number of entries and impressed by the diversity of

the project work,” said Rick Gafford, PE, EEA program chair and vice president at Fisher & Arnold, Inc. “The project entries range from an ammunition plant restoration to a bike and pedestrian trail study.” Steve Field, PE, principal at Stantec Consulting Services, is EEA co-chair.

Winners of the *Engineering Excellence Awards* will be announced on the evening of March 2, 2010, during a banquet at the Franklin Marriott Cool Springs in Franklin, Tennessee. An overall *Grand Iris Award* will be presented in addition to a *Grand Award* in each entry category. Publicity concerning competition entrants and award winners is distributed statewide.

## 2010 EEA Entrants

- AECOM:** *Water & Wastewater* - Sheffield Yard Wastewater Treatment Plant, Muscle Shoals, AL;
- AMEC Earth & Environmental, Inc.:** *Environmental* - Former Hahn Oil Facility Phytoremediation, Evansville, IN;
- Askew Hargraves Harcourt & Associates, Inc.:** *Special Projects* - Ripley Courthouse Square, Ripley, TN;
- Barge, Waggoner, Sumner & Cannon, Inc.:** *Building/Technology Systems* - Rehabilitate Building Systems-Building 4207, Marshall Space Flight Center, AL;
- Burns Cooley Dennis, Inc.:** *Special Projects* - Rivertown Development, Memphis, TN;
- Burr & Cole Consulting Engineers, Inc.:** *Structural Systems* - University of Memphis School of Law; Memphis, TN;
- Camp Dresser & McKee Inc.:** *Special Projects* - Kingsport WWTP Upgrades CMAR Implementation, Kingsport, TN;
- EnSafe Inc.:** *Environmental* - Greening a Brownfield: Rails-to-Trails Assessment, Memphis, TN;
- EnSafe Inc.:** *Surveying/Mapping Technology* - Optimizing I-69 Route Selection Via Geophysics, Memphis, TN;
- Fisher & Arnold, Inc.:** *Transportation* - FedEx Winchester Ramp, Memphis, TN;
- Gresham, Smith and Partners:** *Transportation* - TDOT Smartway Memphis, Memphis, TN;
- Gresham, Smith and Partners:** *Studies, Research, and Consulting Engineering Services* - Water Utilities Planning Evaluation, Giles County, TN;
- J. R. Wauford & Company, Consulting Engineers, Inc.:** *Water & Wastewater* - Wastewater Treatment Plant Renovation, Pulaski, TN;
- J. R. Wauford & Company, Consulting Engineers, Inc.:** *Water & Wastewater* - Livingston's New Water Source-Cumberland River, Livingston, TN;
- K. S. Ware & Associates, LLC:** *Small Projects* - Omohundro Water Treatment Plant Hazardous Materials Abatement, Nashville, TN;
- K. S. Ware & Associates, LLC:** *Water Resources* - Wolf Creek Dam Exploratory Drilling and Pressure Testing, Jamestown, KY;
- Neel-Schaffer, Inc.:** *Studies, Research, and Consulting Engineering Services* - Signal Optimization and Corridor Study, Murfreesboro, TN;
- Parsons Brinckerhoff, Inc.:** *Studies, Research, and Consulting Engineering Services* - Interstate 40/Interstate 81 Corridor Feasibility Study, Statewide in Tennessee;
- PBS&J, Inc.:** *Transportation* - Nashville International Airport RW 13-31 East & TW Tie-Ins, Nashville, TN;
- Pickering Firm, Inc.:** *Special Projects* - Riviana Foods New Memphis Facility, Memphis, TN;
- RPM Transportation Consultants, LLC:** *Studies, Research and Consulting Engineering Services* - Regional Bicycle & Pedestrian Study for the Greater Nashville Region, Nashville, TN;
- Ross Bryan Associates, Inc.:** *Structural Systems* - Additions and Alterations to Thompson Boling Arena, Knoxville, TN;
- S&ME, Inc.:** *Special Projects* - General Shale Spring City Plant and Mines, Spring City, TN;
- Smith Seckman Reid, Inc.:** *Water & Wastewater* - Stones River Water Treatment Plant Expansion, Murfreesboro, TN;
- Stantec Consulting Services, Inc.:** *Small Projects* - Willow Branch Stream Enhancement, McMinnville, TN;
- Tetra Tech, Inc.:** *Environmental* - Former Volunteer Army Ammunition Plant Soils Restoration, Chattanooga, TN;
- TranSystems Corporation:** *Transportation* - Music City Central, Nashville, TN;
- Wilbur Smith Associates:** *Transportation* - SmartFIX40, Knoxville, TN;
- Wilbur Smith Associates:** *Studies, Research, and Consulting Engineering Services* - S.R. 840 Socio-Economic Justification Study, Williamson County, TN

## CALENDAR

### DECEMBER

# 2

Professional Liability Seminar

Knoxville

Information:  
ctoler@tnec.org

### DECEMBER

# 3

Professional Liability Seminar

Nashville

Information:  
ctoler@tnec.org

### DECEMBER

# 4

Professional Liability Seminar

Memphis

Information:  
ctoler@tnec.org

### FEBRUARY

# 14 - 20

Engineers' Week

### MARCH

# 1

ACEC Legislative Reception

### MARCH

# 2

Engineers' Day on the Hill

Engineering Excellence Awards Banquet

Tennessee Engineering Center  
800 Fort Negley Boulevard  
Nashville, TN 37203

Return Service Requested

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### Engineering Students: Apply for 2010 Scholarships by January 29

ACEC of Tennessee is currently accepting applications from engineering students in Tennessee for several national ACEC engineering scholarships, the national Council of Structural Engineers scholarship, and the ACEC of Tennessee scholarship.

Last year, Ipshita Thomas, a student at UT-Chattanooga, won the \$1,000 ACEC of Tennessee scholarship and an additional \$10,000 ACEC national scholarship.

To qualify for a scholarship, a student must be a U.S. citizen and pursuing a degree in engineering or land-surveying at a school 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 2010 to qualify.

Applications must be submitted by January 29, 2010. Application forms and complete information can be obtained at [www.acectn.org/scholar.htm](http://www.acectn.org/scholar.htm).

## FROM THE EXECUTIVE DIRECTOR

### *Your Participation is a Powerful Voice*

by Candy Toler  
Executive Director, ACEC of Tennessee

**A**s we prepare for a new year, I want to remind you of a few of the things that ACEC and ACEC of Tennessee have done for you lately.



Candy Toler

- Your Transportation and Environment Committees continue to meet with state officials to improve the business climate for Tennessee engineering firms.

- We have maintained an effective working relationship with the State Architects' and Engineers' Board and the State Fire Marshal, including development of a dispute resolution process, to keep projects on track.

opment of a dispute resolution process, to keep projects on track.

- With your assistance, we successfully supported and opposed legislation which would have impacted the practice of engineering in many ways, including which professions may perform construction management on prison projects; when an engineer is needed to design a sign; the timing of caution lights at intersections with surveillance cameras; underground utility damage prevention; and exemption

from legislation that authorizes the use of a competitive reverse auction process for bidding.

- Nationally, ACEC continues to promote Qualifications-Based Selection, publishing the first empirical study this fall. ACEC also worked -- on your behalf -- on the authorization of transportation funding; elimination of the 3% withholding on federal projects; and promotion of funding for water and wastewater infrastructure.

#### Your Voice is Needed

ACEC needs your continued participation as *the voice* of Tennessee's engineering companies as we face challenges in 2010. Plan to attend **Engineers Day on the Hill in Nashville on March 2** and **ACEC's Legislative Summit in Washington on April 26-28**. Come celebrate **Engineering Excellence in Nashville on March 2**.

I hope you have found the guest articles appearing in this newsletter during the past year to be informative. If you are interested in submitting an article or have a great suggestion for a topic, please let me know ([ctoler@tnec.org](mailto:ctoler@tnec.org)). Another way to use your voice!

Best wishes for the holiday season. We all look forward to an expanding economy with lots of new engineering projects in 2010!