Notice of June 3-4, 2015 meeting of the Board of Architectural and Engineering Examiners.
Posted to the Board of Architectural & Engineering Examiners' web site on May 26, 2015.

STATE OF TENNESSEE
DEPARTMENT OF COMMERCE AND INSURANCE
BOARD OF ARCHITECTURAL AND ENGINEERING EXAMINERS
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AGENDA

BOARD OF ARCHITECTURAL AND ENGINEERING EXAMINERS
NOTICE OF BOARD MEETING

Davy Crockett Tower, Conference Room 1-B
500 James Robertson Parkway
Nashville, Tennessee 37243

Wednesday, June 3, 2015

1:00 P.M. **ENGINEER COMMITTEE MEETING**

CALL TO ORDER – Hal Balthrop, Chair

NEW BUSINESS

- Presentation on Mechatronics Engineering Program at MTSU—Walter W. Boles, Ph.D.
- Applications and Audits for Review, Discussion, and Signature
- Engineering Exam Results
- Report on NCEES Joint Interim Meeting
- General Education (Humanities/Social Sciences) Deficiencies
- Energy Service Companies and Engineering Registration Laws
- Inclusion of Statement on Reference Forms Releasing References from Libel and Slander Claims

UNFINISHED BUSINESS

- Revised Sprinkler Shop Drawings Review Policy
- Decoupling of experience and examination requirements for PE registration

The listed order of items and times on the agenda are subject to change, as the Board reserves the right to move to the next agenda items due to cancelations or deferrals.

Board meetings will be conducted by permitting participation of the Board members by electronic or other means of communication if necessary. Any member participation by electronic means shall be audible to the public at the location specified above. The Department of Commerce and Insurance is committed to principles of equal access. If you need assistance with attending this meeting due to a disability please contact the Department's ADA Coordinator at (615) 741-0481.

- Correspondence from Joseph Tomasello, P.E., re: pre-engineered systems

ADJOURNMENT

Thursday, June 4, 2015

8:00 A.M. PUBLICATIONS COMMITTEE MEETING

CALL TO ORDER – Stephen King, Chair

UNFINISHED BUSINESS
- Reference Manual Revisions

ADJOURNMENT

8:30 A.M. LAW AND RULES/POLICIES COMMITTEE MEETING

CALL TO ORDER – Rick Thompson, Chair

NEW BUSINESS
- Discussion re: qualifications-based selection as it relates to public school systems

UNFINISHED BUSINESS
- Definitions of Practice
- Proposed Comity Statute Revision

ADJOURNMENT

9:00 A.M. ARCHITECT COMMITTEE MEETING

CALL TO ORDER – Rick Thompson, Chair

NEW BUSINESS
- Discuss Proposed NCARB Resolutions

ADJOURNMENT

9:30 A.M. BOARD MEETING

CALL TO ORDER – Rick Thompson, Chair

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- Roll Call
- Acknowledge Guests
- Announcements
- Review Agenda for Changes and/or Additions

CONSENT AGENDA – John Cothron, Executive Director
- Minutes from April 2015 Board Meeting
- Staff Complaint Report

PROFESSIONAL SOCIETY REPORTS

LEGAL CASE REPORT – Ellery Richardson, Assistant General Counsel

DIRECTOR'S REPORT – John Cothron
- Legislative Update
- Licensing Data
- Complaint Data
- Financial Data

ENGINEER COMMITTEE REPORT – Hal Balthrop

PUBLICATIONS COMMITTEE REPORT – Stephen King

LAW & RULES/POLICIES COMMITTEE REPORT – Rick Thompson

ARCHITECT COMMITTEE REPORT – Rick Thompson

UNFINISHED BUSINESS – John Cothron
- Action Items
- Update on Rule Changes
- Qualifications-Based Selection

NEW BUSINESS
- Officer Elections – Rick Thompson
- 2016 Legislative Proposals – John Cothron
- Authorization of Travel and Speakers

ADJOURNMENT

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2015 EXAM RESULTS

Fundamentals of Engineering (Jan-Apr 2015)

ALL CANDIDATES		
Total	Pass	Pass Rate
215	153	71%

	ALL CANDIDATES			SENIOR STUDENTS		
School	Total	Pass	Pass Rate	Total	Pass	Pass Rate
TTU	48	32	67%	41	30	73%
TSU	6	1	17%	2	1	50%
UT KNOX	35	28	80%	33	28	85%
UT CHATT	11	4	36%	8	2	25%
UT MART*	24	20	83%	24	20	83%
U OF MEM	5	3	60%	3	2	67%
VAN	32	27	84%	30	26	87%
CBU	8	5	63%	5	4	80%
LU	21	14	67%	21	14	67%
UNION	11	11	100%	11	11	100%

*Among first time test takers at UTM, 19 out of 23 passed (83% pass rate)

Principles and Practice of Engineering (April 2015)

ALL CANDIDATES				FIRST TIME TAKERS				REPEAT TAKERS			
Discipline	Total	Pass	Pass Rate	Total	Pass	Pass Rate	National	Total	Pass	Pass Rate	National
AGRI	2	2	100%	1	1	100%	79%	1	1	100%	43%
CHE	5	2	40%	1	1	100%	69%	4	1	25%	22%
CIV	106	47	44%	54	36	67%	65%	52	11	21%	28%
ELE	27	13	48%	14	10	71%	63%	13	3	23%	27%
ENV	6	1	17%	1	1	100%	64%	5	0	0%	32%
IND	2	1	50%	1	1	100%	72%	1	0	0%	47%
MEC	25	12	48%	16	7	44%	71%	9	5	56%	41%
TOTAL	**173**	**78**	**45%**	**88**	**57**	**65%**		**85**	**21**	**25%**	

NOTES FROM THE 2015 NCEES SOUTHERN/WESTERN ZONE JOINT INTERIM MEETING
Scottsdale, AZ

I. NCEES Officer and CEO Reports

a. Emerging Engineers and Surveyors Group. Twelve (12) members have been appointed to the new Emerging Engineers and Surveyors Group. The group will connect young engineers and surveyors with NCEES decision makers to provide feedback and discuss topics concerning the licensure process and discuss topics relevant to the future of the engineering and surveying professions.

b. Treasurer's Report. NCEES is experiencing a $1.6 million shortfall in estimated revenue due to a drop in FE exam volume (there was a 19.8% drop in volume in 2014). However, this is offset by a corresponding reduction in expenditures and increased revenue in other areas. So far this fiscal year, NCEES has collected $165,000 in FE exam rescheduling fees—an unexpected revenue source. Also, $117,000 has been collected from candidates who did not schedule their FE exam within 12 months and forfeited the fee. At present, there is a $400,000 surplus for the fiscal year.

c. CEO Report. NCEES staff is recommending to the Board of Directors that the council move to year-round computer-based testing. The PS exam will be converted to a computer-based format in October 2016.

II. Committee and Task Force Reports

a. Advisory Committee on Council Activities.

i. The committee studied structural engineering practice and whether changes should be made to the *Model Law* and *Model Rules*. The committee favors a generic PE license with a protected SE title and restricted SE practice for "significant" structures. A motion will be presented at the Annual Meeting to charge the appropriate committee with developing specific language for the *Model Law* and *Model Rules* to adopt this approach.

ii. A motion will be presented to amend the *Bylaws* to replace the Committee on Nominations with a Tellers Committee since the Committee on Nominations merely forwards nominations made by others and serves as tellers.

iii. A motion will be presented to charge a Special Committee on Bylaws with proposing amendments to the *Bylaws* to create an International Affiliate Organization membership category that would allow membership for foreign partners that have been approved to offer NCEES exams or other groups as designated by NCEES.

iv. A new Position Statement will be presented for adoption that reflects the education standard defined in the Model Law Engineer

2020 and Model Law Structural Engineer 2020 definitions (as defined prior to removal from *Model Law* and *Model Rules*) regarding future education standards for professional engineering licensure.

b. Examinations for Professional Engineers. References continue to be a focus of the CBT transition for the PE exams. Exam committees will be using a combination of a supplied reference (similar to the FE), embedded information in the exam items, and potentially an NCEES-hosted secure website containing required codes and standards that would be accessed by the test center during an examinee's test appointment. The committee is recommending that technical items for an 8-hour PE exam should not be removed in favor of practice-related items (e.g., contract law, professional insurance, financial management, regulatory requirements). Next year, the committee will survey the member boards to gauge interest in a separate practice-related exam and how it would be used.
c. Finances. The Finance Committee is proposing a budget for 2015-16 with a $632,220 surplus. They are assuming a 10% increase in FE/FS exam volumes from the previous year (which represents a 32% decrease from FY 14-15 budgeted FE volumes) and a slight decrease in PE and PS exam volumes. There will be a $264,000 increase in the revenue stream from rescheduled and canceled CBT exam fees. A motion will be presented to set the exam charge for the computer-based PS exam at $300.
d. Education. The committee was charged with working with the MBA Committee on adoption of uniform continuing professional competency (CPC) requirements. They are proposing that member boards either accept the NCEES CPC standard (15 PDHs per calendar year) or accept the standard of the state of renewal. Development also continues on the NCEES CPC Registry. The committee also recommended minor revisions to the Engineering Education Standard.
e. Examination Policy and Procedures. The committee is presenting a motion to update a policy to require volunteers working on NCEES exams to hold an active license with an NCEES member board.
f. Law Enforcement. The committee has been working on a strategy for collecting disciplinary actions from member boards against licensees that can be incorporated into Enforcement Exchange.
g. Uniform Procedures and Legislative Guidelines.
    i. A motion will be presented to change the definition of the term "or the equivalent" in the *Model Law* to state that it means to meet the NCEES Engineering Education Standard.
    ii. The committee will move that the appropriate committee be charged with considering whether the Model Law Engineer, Model

Law Surveyor, and Model Law Structural Engineer designations as defined in the *Model Rules* should be removed from the *Model Rules* and instead be included as a professional policy in the NCEES *Manual of Policy and Position Statements*. These are internal designations that are not intended to be adopted into a jurisdiction's laws and rules.

iii. A motion will be presented to amend the *Model Law* and *Model Rules* to redefine licensure requirements for comity applicants based on proof of minimal competency. This would replace current language stating that a comity applicant's credentials must be of a standard not lower than that in effect when the applicant's original license was issued.

h. Member Board Administrators. One charge of the committee was to evaluate the mutual recognition model of the Nurse Licensure Compact (NLC) of the National Council of State Boards of Nursing to determine the feasibility for developing a similar program within NCEES that would allow professional engineers/professional surveyors to practice across state lines unless otherwise restricted through the mutual recognition of an individual's license in his or her home jurisdiction. Based upon a thorough investigation, the MBA Committee concluded that this type of program is not conducive to engineering/surveying licensure. The committee concluded it should continue to work toward the goal of simplified multistate licensure and reciprocity among the member boards within the framework of the NCEES *Model Law* and *Model Rules*.

III. Engineers Forum

- Discussed structural engineering licensure, which would require a determination of what structures are "significant."
- Discussed reciprocal disciplinary action. Concern was expressed about the "piling on effect."
- The need for greater uniformity in CPC requirements was also discussed.

IV. MBA Forum

- Attendees discussed computer-based testing, continuing education audit documentation, and decoupling of the experience and exam requirements. It was announced that NCEES is developing an online application that will be available for use by member boards.

The next zone meeting is scheduled for April 7-9, 2016, in Nashville, TN.

2014–15 ACCA Motion 8

Move that Position Statement 35 be adopted as follows:

PS 35 Future Education Requirements for Engineering Licensure

One of the goals of NCEES is to advance licensure standards for all professional engineers. Those standards describe the technical and professional competency needed to safeguard the health, safety, and welfare of the public. The Council recognizes that future demands for increasing technical and professional skills and the reduction that has occurred in the formal education requirements needed to obtain a bachelor's degree in engineering from a program accredited by the Engineering Accreditation Commission of ABET (EAC/ABET) have resulted in the need for additional education beyond the bachelor's degree for those entering the engineering profession.

NCEES has identified several future pathways by which a candidate for licensure as a professional engineer might obtain the body of knowledge needed to meet these educational requirements, including the following:

A. A bachelor's degree in engineering from a program accredited by EAC/ABET and a master's or earned doctoral degree in engineering in the same technical area from an institution that offers EAC/ABET-accredited programs, or the equivalent
B. A bachelor's degree and a master's degree in engineering from a program accredited by EAC/ABET
C. A bachelor's degree from a program accredited by EAC/ABET that has a minimum of 150 semester credit hours, of which at least 115 semester credit hours are in mathematics, science, or engineering combined and at least 75 of these semester credit hours are in engineering
D. A bachelor's degree in engineering from a program accredited by EAC/ABET and at least 30 additional semester credit hours of upper-level undergraduate or graduate-level coursework in engineering on topics relevant to the practice of engineering (e.g., engineering-related science, mathematics, or professional practice topics such as business, communications, contract law, management, ethics, public policy, and quality control) from approved course providers (e.g., institutions that have EAC/ABET-accredited programs, or institutions or organizations accredited by an NCEES-approved accrediting body)

NCEES will continue to explore alternative educational pathways for candidates for licensure as professional engineers to develop the body of knowledge needed for entry into the profession. These alternatives will be developed through collaboration with technical engineering societies and other stakeholders engaged with the engineering profession.

Rationale

At the 2014 NCEES annual meeting, the Oklahoma State Board of Licensure for Professional Engineers and Land Surveyors made a motion, which the Council passed, requesting that

> "... the NCEES president assign a charge to the appropriate committee/task force to draft an NCEES position statement that reflects the education standards defined in the MLE 2020 and the MLSE 2020 definitions regarding further education standards for professional engineering licensure ..."

The proposed position statement follows the directives of the motion and includes only the information related to additional education related to professional engineering licensure that was previously included in the NCEES *Model Law* and *Model Rules*. The committee made some minor edits to reflect current terminology used in the accreditation and licensure communities. The language was also modified to make no reference to the year 2020, thereby resolving the potential for confusion about an effective date for implementation of additional education requirements for professional engineering licensure. This was stated as the primary concern behind the motion.

NCEES has a responsibility to recommend changes to the licensure process that will ensure protection of the health, safety, and welfare of the public now and in the future as described in the NCEES strategic plan and in the mission and vision statements.

NCEES is continuing to fulfill this responsibility by promoting, through the proposed position statement, education requirements for licensure *in the future*. Creating this position statement sets the platform for continued dialogue on this important issue. It is consistent with the NCEES-established processes and summarizes NCEES' efforts on future education requirements for professional engineering licensure over the past 15 years—a complex issue requiring careful and continuing deliberation and one that this position statement will serve to facilitate.

Humanities/Social Sciences (General Education) Deficiencies Survey (May 2015)				
	Ignore Deficiencies	*Waive if licensed for certain period of time*	*Must remedy deficiencies*	
AL	X			
AK	X			
AR			X	
DE	X			
FL		X (2 years)		
HI	X (but require additional experience)			
ID			X	
IL			X	
KS			X	
KY	X			
LA	X			
ME	X			
MN	X			
MS		X (no waiver for exam applicants; waived for comity if licensed 5 years)		
MO	X			
NE			X	
NV	X			
OH		X (same as MS)		
OK	X (but require additional experience)			
SC			X	
SD			X	
TX			X	
VA	X			
WV	X			
Total	**13**	**3**	**8**	

Humanities/Social Sciences (General Education) Deficiencies Survey
May 2015

How does your board address humanities/social sciences (general education) deficiencies that are identified by NCEES Credentials Evaluations (or other evaluators)?

Alabama: Alabama is the same as Louisiana.

Alaska: I don't recall the Board ever requiring anyone to take any humanities/social sciences courses.

Arkansas: [Response to May 2013 survey] The Arkansas Board hasn't been inclined to look past the credentials evaluation's conclusion of whether the standard is met regardless of what or how much of a deficiency is reported. In fact, at our last Board meeting we denied an applicant and the only reason was that the NCEES Credentials evaluation report accompanying the application concluded that the applicant's foreign curriculum did not comply with the NCEES Engineering Standard. The analysis showed, however, that the only deficiency was 1 hour in general education and it also showed 40-45 hours more technical/engineering courses than required.

Delaware: The Delaware Board typically forgives these deficiencies. Many of the foreign applicants have surpassed the number of math, science and engineering courses of U.S. students, and our board has deemed this sufficient to meet the intent of the law.

Florida: FL PE will grant a conditional approval for FE candidates with H&SS deficiencies. We have traditionally waived the deficiency for endorsement applicants who have been licensed in another jurisdiction for at least two years. However, that allowance may change soon as we have a committee looking to change our education requirements to better mirror the NCEES standard. However, the changes will be more accommodating for those applicants that have had deficiencies in the past.

Hawaii: Hawaii does not require deficiencies to be made up. Because we have alternative pathways to licensure, we would require additional years of experience.

Idaho: Idaho's board generally requires General Education deficiencies to be made up. This usually applies to foreign educated applicants. They will give them some credit for speaking a foreign language.

Illinois: Illinois requires all deficiencies to be made up. We review the NCEES or ECEI evaluations against Illinois specific requirements.

A Baccalaureate Degree in Engineering from a Non-approved Engineering Program
Mathematics (beyond trigonometry, including a sequence in differential and integral calculus) – 15 hours.
Physics and Chemistry – 15 hours.
Additional Sciences – 10 hours.
Engineering Sciences and/or Design – 30 hours.
Humanities and/or Social Sciences – 15 hours.

Any lack must be made up prior to approval for examination or licensure (if already licensed in another jurisdiction).

Our definition:

Humanities and social sciences are, respectively, the branches of knowledge that concern man and his culture, and that concern individual relationships in and to society. Examples of subjects in these areas are philosophy, history, literature, fine arts, religion, sociology, psychology, political science, economics and foreign languages (other than a student's native language). Non-traditional courses might include social responsibility and professional ethics. Subjects such as accounting and management may be acceptable engineering electives, but do not satisfy the objectives of this area.

Kansas: [Response to May 2013 survey] Kansas has always required that all educational deficiencies be made up, even by comity applicants with years of experience. The current Board is more inclined to be less stringent and are now working on guidelines of some things that might substitute for education. They are concentrating on general education deficiencies for comity applicants. Their point is to use licensure in another state, years of experience in the US, advanced degrees, and possibly gaining US citizenship as ways to waive the requirement. They are also looking at how to waive the basic science and math courses to some degree, using passage of more advanced courses as proof that they have mastered the basics. Again, this concept is in the early stages of talk. They want to review a few more real applications to test out their theories before making it a policy.

Kentucky: We do not require them to make up humanities deficiencies since they typically have excess engineering sciences hours.

Louisiana: In Louisiana, we have not required deficiencies in humanities to be completed. If the math/science/engineering coursework is equivalent, the board considers that as having met the educational requirements.

Maine: Maine has traditionally ignored deficiencies in GE requirements. The Board looks primarily at math, science and engineering credits, with a focus on the qualifications to perform professional engineering, in order to fulfill the Board's fundamental mission of protecting the public.

Minnesota: Minnesota is similar to Maine.

Mississippi: Here is the rule we adopted on this issue:

> **Degrees evaluated as meeting the NCEES Engineering Education Standard** – Degrees from universities that are evaluated by the Board-approved evaluation service and found to meet the NCEES Engineering Education Standard. The evaluation must be completed prior to submitting the application to the Board office.
>
> a. If the evaluation finds deficiencies in humanities, social sciences, or general education, and the applicant is applying for the FE exam or the PE exam, or the applicant is a comity applicant who has been licensed less than five years, then the deficiencies must be remediated by taking additional coursework. The Board must approve the additional coursework proposed by the applicant, prior to beginning the course(s).
>
> b. If the evaluation finds deficiencies in humanities, social sciences, or general education, and the applicant is a comity applicant who has been licensed five years or longer, then additional coursework will not be required.
>
> c. If the evaluation finds deficiencies in areas other than humanities, social sciences, or general education, the deficiencies must be remediated by taking additional coursework, regardless of whether the applicant is a comity applicant or an applicant for the FE or PE exams. The Board must approve the additional coursework proposed by the applicant, prior to beginning the course(s).

Missouri: The Missouri Board is the same as Louisiana.

Nebraska: Nebraska requires the humanities deficiencies to be addressed. International candidates are provided some latitude on this item recognizing their varied cultural experiences.

Nevada: Nevada is the same as Maine.

Ohio: Ohio adopted Mississippi's policy several years ago.

Oklahoma: Oklahoma does not require the applicant to make up deficiencies as you described. However, the Board considers the non-US degrees that are not ABET or CEAB accredited to only be considered as a related science degree, so they must get 6 years of experience unless they have a US MS and/or PhD anyway.

South Carolina: [Response to May 2013 survey] South Carolina requires all deficiencies (including humanities) to be made up, then all coursework must be re-evaluated.

South Dakota: [Response to May 2013 survey] South Dakota is like South Carolina: ALL deficiencies (including humanities) MUST be made up, then all coursework must be re-evaluated by NCEES. (Even if they are 3 hours short!)

Texas: Currently, Texas PE requires an applicant to address the deficiencies. We would allow them to take the required coursework at any recognized college or university.

Virginia: We have only had one in the last several years and he was a foreign app. He was 16 short but after research, the Board waived it because those courses were taught at the high school level.

West Virginia: The WV PE Board response is the same as the Delaware PE Board.

ABET Criteria for Accrediting Engineering Programs, 2015-2016 (Excerpt)

GENERAL CRITERION 3. STUDENT OUTCOMES

The program must have documented student outcomes that prepare graduates to attain the program educational objectives.

Student outcomes are outcomes (a) through (k) plus any additional outcomes that may be articulated by the program.

(a) an ability to apply knowledge of mathematics, science, and engineering

(b) an ability to design and conduct experiments, as well as to analyze and interpret data

(c) an ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability

(d) an ability to function on multidisciplinary teams

(e) an ability to identify, formulate, and solve engineering problems

(f) an understanding of professional and ethical responsibility

(g) an ability to communicate effectively

(h) the broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context

(i) a recognition of the need for, and an ability to engage in life-long learning

(j) a knowledge of contemporary issues

(k) an ability to use the techniques, skills, and modern engineering tools necessary for engineering practice.

GENERAL CRITERION 5. CURRICULUM

The curriculum requirements specify subject areas appropriate to engineering but do not prescribe specific courses. The faculty must ensure that the program curriculum devotes adequate attention and time to each component, consistent with the outcomes and objectives of the program and institution.

The professional component must include:

(a) one year of a combination of college level mathematics and basic sciences (some with experimental experience) appropriate to the discipline. Basic sciences are defined as biological, chemical, and physical sciences.

(b) one and one-half years of engineering topics, consisting of engineering sciences and engineering design appropriate to the student's field of study. The engineering sciences have their roots in mathematics and basic sciences but carry knowledge further toward creative application. These studies provide a bridge between mathematics and basic sciences on the one hand and engineering practice on the other. Engineering design is the process of devising a system, component, or process to meet desired needs. It is a decision-making process (often iterative), in which the basic sciences, mathematics, and the engineering sciences are applied to convert resources optimally to meet these stated needs.

(c) a general education component that complements the technical content of the curriculum and is consistent with the program and institution objectives.

Students must be prepared for engineering practice through a curriculum culminating in a major design experience based on the knowledge and skills acquired in earlier course work and incorporating appropriate engineering standards and multiple realistic constraints.

One year is the lesser of 32 semester hours (or equivalent) or one-fourth of the total credits required for graduation.

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May 27, 2015

John A. Cothron
Executive Director
Board of Architectural and Engineering Examiners
500 James Robertson Parkway
Nashville, TN 37243-1142

Mr. Cothron:

Your request in yesterday's e-mail for input on the "value of humanities/social sciences/general education for an engineer" brought to mind a statement by Dean Curtis Laws Wilson in an address to incoming freshmen in 1961. Dr. Wilson stated that the engineering curriculum should contain only enough humanities to equip the engineer to present his design and prepare an invoice. Accordingly, out of a 156 semester hour program, 9 hours were devoted to "humanities".

Much has changed in the practice of engineering since 1961. The current NCEES education standard presents the general education component of an engineering curriculum as courses which complement the technical content of the engineering curriculum. The key word in the NCEES standard is "complement". This is the same thought that Dr. Wilson expressed in 1961 only the expectations of the practicing engineer in 2015 are vastly different than in 1961.

The Tennessee Board of Architectural and Engineering Examiners has an awesome responsibility of identifying a professional who is technically competent and capable of exercising engineering judgment to make decisions which impact the health, safety, and welfare of the general public. It is this decision making/opinion expressing component of the practice of engineering where the humanities/social sciences/general education component has value. This component of engineering education at one time (1970 to 2000) was very prescriptive. Beginning around the turn of this century, this component became outcomes oriented which made it difficult to define what should be in this component. Universities were given the flexibility to define this component based on the mission of the university.

The Criteria for Fulfillment of the ABET requirement adopted by the Board in 2009 was an attempt to recognize that there are other venues where a practicing engineer gains the knowledge to make professional decisions. However, the Criteria are not an absolute end. The Board has the responsibility for exercising judgment which cannot be relegated to an absolute list of prescriptive criteria.

The necessity for addressing deficiencies in an applicant's academic program by default arises from graduation from a non-ABET accredited program. Deficiencies are identified by an agency or organization which has a criterion as a benchmark. At the present time, the criterion is the NCEES Engineering Education Standard. As you stated in your e-mail, we typically require make-up courses for candidates who do not have the prescribed "16" hours of general education courses. Does this

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satisfy the intent of an education component that "complements" the technical part of an engineer's education? Probably not.

What would I recommend to the Board? I would consider first whether the academic program was a foreign degree or not. If the applicant has spent four or more years in a United States institution pursuing a degree, experiencing the society where he/she will be set aside to practice engineering, the Board's Criteria are a good starting point. Application of the criteria obviously requires discretion, i.e., "progressive experience in the U.S."

For an applicant with the first professional degree from a foreign institution, I would be more prescriptive and require make-up courses following the NCEES standard. I would also be judicious in accepting on-line courses to satisfy the deficiencies in the general education component. The applicant from a foreign institution who is deficient in academic credit is most likely also deficient in societal/cultural interaction in the United States. As harsh as it sounds, I would especially apply this approach to graduates of foreign institutions who are pursuing or have pursued graduate degrees at U.S. institutions.

I am afraid that I have digressed too much and have not addressed the Board's quandary. There is no "one size fits all" answer to the issue. If you and/or the engineering group would like to discuss this in greater detail, I would be glad to meet with you at a mutually convenient time.

Respectfully,

John W. Smith, Ph.D., PE

PROFESSIONAL REFERENCE

7/28/2014

The applicant identified below has applied to establish a CLARB Council Record and has granted CLARB permission to inquire about his/her background and character. The applicant has signed a statement releasing all references from any claims, including claims for libel and slander, which may arise out of the communication of any information to CLARB. The applicant has identified you as a professional reference.

Reference Information:

[redacted]

Please verify this information by completing all of the information requested on the lower portion of the form. Be certain to affix your registration seal in the space provided and sign and date the form. If you do not have a registration seal, please indicate your registration number and jurisdiction of registration in lieu of the seal. Return the form in the pre-addressed envelope provided.

Applicant's Name: [redacted]

1. Indicate, to the best of your knowledge, the applicant's ability by placing an "X" in the appropriate spaces. If "Unsatisfactory" box is checked for either "Technical Competence" or "Professional Conduct", please submit a letter of explanation with this form.

	Excellent	Satisfactory	Marginal	Unsatisfactory	Unknown
Technical Competence	[X]	[ ]	[ ]	[ ]	[ ]
Professional Conduct	[X]	[ ]	[ ]	[ ]	[ ]

2. Your licensure status:

☒ Landscape Architect ☐ Architect ☐ Engineer/Surveyor ☐ Certified Planner ☐ Other

3. Current licensure information:

Jurisdiction: [redacted] Expiration Date: [redacted]

[redacted]

Signature: [redacted] Date: [redacted] CR#: [redacted]

Legacy CR#:

TENNESSEE BOARD OF ARCHITECTURAL AND ENGINEERING EXAMINERS
DEPARTMENT OF COMMERCE AND INSURANCE
500 JAMES ROBERTSON PARKWAY
NASHVILLE, TN 37243-1142
800-256-5758 615-741-3221 (NASHVILLE AREA) 615-532-9410 (FAX)

REFERENCE

THIS REQUEST LETTER IS TO BE COMPLETED BY THE APPLICANT

(Name and Address of Reference)

Re: _____
(Print or Type Name of Applicant)

Dear _____

I have made application to the Tennessee Board of Architectural and Engineering Examiners for registration to

practice ___ architecture
___ engineering
___ landscape architecture

Please send the information requested on the second page directly to the Board office. I have attached the experience page(s) from my application for verification purposes. Please send the experience page(s) to the Board office with the reference form. *If more space is needed, please do not write on the back; use a separate sheet of paper.*

_____
(Signature of Applicant)

Board Statement to Reference:

This Board is required by law to obtain evidence of the good character and technical ability of applicants for registration as architects, engineers, and landscape architects. Statements by responsible individuals with personal knowledge of the applicant's character and qualifications will be considered as evidence. Additional information may be attached.

The Board would like to emphasize that evidence submitted on this form must not be perfunctory nor made for the mere purpose of aiding the applicant to be registered. The execution of this statement will be accepted by the Board as a deliberate act made with full knowledge of the responsibility to protect the public health, safety and welfare. It should be borne in mind that the applicant is not being considered for membership in an organization but for registration as an architect, engineer, or landscape architect, qualified to practice in Tennessee.

Since the Board cannot process this application until it receives this reference, a prompt reply will expedite our handling of the application.

THE INFORMATION YOU GIVE WILL BE TREATED IN THE STRICTEST CONFIDENCE.

(see page 2)

Applicant's name _____

TO BE COMPLETED BY THE REFERENCE

THIS IS CONFIDENTIAL INFORMATION – FOR USE OF BOARD MEMBERS ONLY

1. How long have you known the applicant? From _____ to _____ inclusive
2. Are you in any way related to the applicant? _____ What relationship? _____
3. What has been your connection with the applicant? _____

_____

4. Is the applicant's experience description listed on the enclosed application consistent with your knowledge of his or her experience? ☐ Yes ☐ No ☐ Unknown

Comments: _____

_____

5. How would you rate the applicant's:

	Above Average	Average	Below Average	Unsatisfactory	Unknown
Quality of Work	☐	☐	☐	☐	☐
Technical Knowledge	☐	☐	☐	☐	☐
Professional Integrity	☐	☐	☐	☐	☐
Character & Reputation	☐	☐	☐	☐	☐

6. To your knowledge, has the applicant ever been convicted of a felony? _____
7. Would you employ the applicant in a position of trust? _____
8. Is the applicant qualified to be placed in responsible charge of design or supervision of work, with full authority to change designs or specifications? _____
9. If the applicant is in individual practice, please indicate the nature of the practice: _____

_____

10. Do you recommend the applicant for registration? _____
11. Remarks concerning the applicant: _____

_____

I make the above statements with full knowledge that the person referred to is making application for registration by the State of Tennessee as an architect, engineer or landscape architect and after having carefully read the information given on the previous page.

a. My full name is _____
(to be typewritten or printed)

b. My present employer is _____

c. My title or position is _____

d. I am/am not a registered ____ architect
____ engineer
____ landscape architect in the State of _____ License No. _____

_____ _____
(Signature) (Date)

_____
(Address—please include an e-mail address or phone number)

State of Tennessee
Department of Commerce and Insurance
Board of Architectural and Engineering Examiners
500 James Robertson Parkway Nashville, TN 37243-1142
800-256-5758 615-741-3221 (Nashville Area) 615-532-9410 (Fax)
http://www.tn.gov/regboards/ae/

~~DIVISION OF FIRE PREVENTION/CODES ENFORCEMENT~~ ~~PLANS REVIEW~~ POLICY FOR REVIEW OF SPRINKLER SHOP DRAWINGS

~~Pursuant to Tennessee Code Annotated, Section 62-32-112,~~ A~~a~~ ~~registered~~ fire protection sprinkler system contractor registered pursuant to Tennessee Code Annotated, Title 62, Chapter 32, Part 1, through its responsible managing employee, ~~may~~ shall submit shop drawings of proposed fire protection sprinkler system installations ~~in projects whose construction plans and specifications are subject to review by the Division~~. After receipt of the shop drawings, the ~~Division~~ authority having jurisdiction (AHJ) ~~must~~ will review the drawings and ~~may~~ will approve or disapprove the shop drawings.

~~The above-cited section~~ This policy is not intended to circumvent the requirement for plans prepared and sealed by registered architects and/or engineers where appropriate; rather, the ~~section~~ policy is intended to allow the sprinkler system contractor to submit shop drawings to provide for the installation of the sprinkler systems. These drawings ~~should~~ shall be coordinated with the architect or engineer of record. The architect or engineer of record ~~should~~ shall always provide the design intent of the system and ~~should~~ shall review and approve or disapprove the shop drawings submitted by the sprinkler system contractor. Attached and incorporated herein by reference is a copy of the policy of the Tennessee State Board of Architectural and Engineering Examiners which sets forth the architect's or engineer's design responsibilities concerning sprinkler drawings. The goal is for the design drawings to provide sufficient information to indicate compliance with applicable building codes and ensure that the builder or installing contractor will not be required to make ~~design~~ engineering decisions. The registered architect or engineer ~~should~~ shall also provide design from the point of service—that point at which the system is dedicated solely to fire protection—to the building.

This policy is also not intended to result in the fire protection sprinkler system contractor being assigned the architect's or engineer's design responsibilities concerning sprinkler drawings. The design architect or engineer shall not require the sprinkler contractor to provide shop drawings sealed by a registered engineer. The designer shall not assign the ~~design~~ engineering responsibilities to the sprinkler contractor. This is not intended to prevent a fire protection sprinkler system contractor from providing design-build services.

~~To that end, the Division of Fire Prevention will accept shop drawings submitted by sprinkler system contractors. It will review such shop drawings and shall require the seal of a registered architect or engineer where engineering design is involved, as authorized by Tennessee Code Annotated, Section 62-32-112.~~

Adopted 4-10-97
Revised and adopted _____

State of Tennessee
Department of Commerce and Insurance
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http://www.tn.gov/regboards/ae/

POLICY FOR REVIEW OF SPRINKLER SHOP DRAWINGS

A fire protection sprinkler system contractor registered pursuant to Tennessee Code Annotated, Title 62, Chapter 32, Part 1, through its responsible managing employee, shall submit shop drawings of proposed fire protection sprinkler system installations. After receipt of the shop drawings, the authority having jurisdiction (AHJ) will review the drawings and will approve or disapprove the shop drawings.

This policy is not intended to circumvent the requirement for plans prepared and sealed by registered architects and/or engineers where appropriate; rather, the policy is intended to allow the sprinkler system contractor to submit shop drawings to provide for the installation of the sprinkler systems. These drawings shall be coordinated with the architect or engineer of record. The architect or engineer of record shall always provide the design intent of the system and shall review and approve or disapprove the shop drawings submitted by the sprinkler system contractor. Attached and incorporated herein by reference is a copy of the policy of the Tennessee State Board of Architectural and Engineering Examiners which sets forth the architect's or engineer's design responsibilities concerning sprinkler drawings. The goal is for the design drawings to provide sufficient information to indicate compliance with applicable building codes and ensure that the builder or installing contractor will not be required to make engineering decisions. The registered architect or engineer shall also provide design from the point of service—that point at which the system is dedicated solely to fire protection—to the building.

This policy is also not intended to result in the fire protection sprinkler system contractor being assigned the architect’s or engineer’s design responsibilities concerning sprinkler drawings. The design architect or engineer shall not require the sprinkler contractor to provide shop drawings sealed by a registered engineer. The designer shall not assign the engineering responsibilities to the sprinkler contractor. This is not intended to prevent a fire protection sprinkler system contractor from providing design-build services.

Adopted 4-10-97
Revised and adopted _____

John Cothron

From: Joe Tomasello <JT@Reavesfirm.com>
Sent: Friday, April 24, 2015 11:16 AM
To: John Cothron
Cc: tpendleton@ci.collierville.tn.us; jbrown@cityofbartlett.org; allen.medlock@shelbycountytn.gov; a.bell@millingtontn.gov; Gary Farley; tsmithacs@bellsouth.net
Subject: RE: Questions regarding IRC code certification

John:

To be absolutely clear on the issue I think it would be wise to bring it up. It doesn't affect me as an engineer so much as your decision might affect the various code agencies.

As I see it these units (such as the Simpson Strong-tie shear wall) are "predrawn details" and are integral part of the structure. Currently they are being sold 'off the shelf' so to speak, as if they were a 2x4, yet they are an engineered element with specific purposes having limited attributes. The literature accompanying these pre-engineered units limit liabilities by requiring a 'design professional' to specify the appropriate use. This situation only occurs in one and two story residential construction where, as previously indicated, plans and specifications are not required for construction.

In my view, it puts this issue in uncharted waters. Incorporating the use of these pre-engineered elements without being under the seal of an engineer or architect would be akin to allowing a pre-engineered buildings to be erected without a licensed engineer.

Joseph Tomasello, PE
The Reaves Firm
6800 Poplar Avenue, Suite 101
Memphis TN 38138

Phone (901) 761-2016
Direct (901) 821-4968
Mobile(901) 412-8217

From: John Cothron [mailto:John.Cothron@tn.gov]
Sent: Friday, April 24, 2015 10:29 AM
To: 'Joe Tomasello'
Cc: 'tpendleton@ci.collierville.tn.us'; 'jbrown@cityofbartlett.org'; 'allen.medlock@shelbycountytn.gov'; 'a.bell@millingtontn.gov'; Gary Farley; 'tsmithacs@bellsouth.net'
Subject: RE: Questions regarding IRC code certification

Mr. Tomasello,

The Engineer Committee of the Board did not directly respond to that question, but Rule 0120-02-.08(6)(a)(5), which I cited in the letter, may be relevant:

> Contributions of information or predrawn detail items or detail units that are incidental to and intended to be integrated into a registrant's technical submissions are from trusted sources (including, but not limited to, manufacturers, installers, consultants, owners, or contractors), are subject to appropriate review, and are then coordinated and integrated into the design by the registrant.

If you wish, I can present your question to the committee at our next meeting on June 3.

John A. Cothron
Executive Director
Board of Architectural and Engineering Examiners
500 James Robertson Parkway
Nashville, TN 37243-1142
Phone: 800-256-5758 or 615-741-3221
Direct Phone: 615-741-0681
Fax: 615-532-9410
E-mail: john.cothron@tn.gov
Website: www.tn.gov/regboards/ae

From: Joe Tomasello [mailto:JT@Reavesfirm.com]
Sent: Friday, April 24, 2015 10:02 AM
To: John Cothron
Cc: tpendleton@ci.collierville.tn.us; jbrown@cityofbartlett.org; allen.medlock@shelbycountytn.gov; a.bell@millingtontn.gov; Gary Farley; tsmithacs@bellsouth.net
Subject: RE: Questions regarding IRC code certification

Thank you, we appreciate the efforts of everybody involved.

Do you intend to respond to the issue of needing a registered engineer/architect to sign and seal the pre-engineered elements such as the Simpson Strong-tie shear panels? Or, do we consider these similar to 'pre-engineered' buildings, in which case they will need a professional seal?

Thanks,

Joseph Tomasello, PE
The Reaves Firm
6800 Poplar Avenue, Suite 101
Memphis TN 38138

Phone (901) 761-2016
Direct (901) 821-4968
Mobile(901) 412-8217

From: John Cothron [mailto:John.Cothron@tn.gov]
Sent: Friday, April 24, 2015 9:04 AM
To: 'Joe Tomasello (JT@Reavesfirm.com)'
Cc: 'tpendleton@ci.collierville.tn.us'; 'jbrown@cityofbartlett.org'; 'allen.medlock@shelbycountytn.gov'; 'a.bell@millingtontn.gov'; Gary Farley; 'tsmithacs@bellsouth.net'
Subject: Questions regarding IRC code certification

Mr. Tomasello,

I have attached the Engineer Committee's response to the questions you raised at our meeting on April 8.

Please contact me if I can offer any further assistance.

John A. Cothron
Executive Director
Board of Architectural and Engineering Examiners
500 James Robertson Parkway
Nashville, TN 37243-1142
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Direct Phone: 615-741-0681
Fax: 615-532-9410
E-mail: john.cothron@tn.gov
Website: www.tn.gov/regboards/ae

Help us serve you better. Please take a few moments to let us know how we are doing and what we can do better by filling out the following survey https://www.surveymonkey.com/s/Regboards

Outline of Questions for the Board.

April 8, 2015

1. For certification to Building Official registrants are asked to rely on non-registrants work. Since the IRC does not require signed and sealed plans, can we sign such certifications relying on the non-registrant's work?

2. IRC requires the art and science of engineering in seismic design categories D, E, and F. In these areas non-registrants don't have the skills and training necessary to comply with strength and deformation requirements of the code. It's our opinion, given the complexity of the code in these regions that all residential plans need to be signed and sealed by registered engineers and architects. Why is this not the practice in all jurisdictions?

3. Fabricators of support systems are practicing engineering without signing and sealing their product as adequate for their specific use. Fabricators of building system's literature requires registrants to provide foundation and attachment of their product. Is preparing parts and sections of a building under the guise of 'manufacturer' a special case not requiring the signature of a registrant engineer or architect?

4. It is my understanding TCA §62-2-102 exempts residential structures from the requirement of required signed and sealed plans and specifications. If signing a certification for part of a structure is the engineer then responsible for the entire structural system?

Joseph Tomasello, P.E.
The Reaves Firm
6800 Poplar Ave.
Memphis Tn. 38138

State of Tennessee
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http://www.tn.gov/regboards/ae john.cothron@tn.gov (E-mail)

April 24, 2015

Joseph Tomasello, P.E.
The Reaves Firm
6800 Poplar Ave., Ste 101
Memphis, TN 38138

Re: Questions in Regard to Responsible Charge

Dear Mr. Tomasello,

Thank you for discussing your correspondence regarding International Residential Code certifications with the Engineer Committee of the Board on April 8, 2015. In response to your questions, the Committee agreed that a registrant of the Board cannot sign and seal a design that is not prepared under the responsible charge of the registrant. The relevant portions of Rule 0120-02-.08 Seals read, in part,

(5) (a) Except as provided by rule 0120-02-.08(5) and (6), no registrant shall affix his seal or signature to sketches, working drawings, specifications or other documents developed by others not under his responsible charge and not subject to the authority of that registrant in critical professional judgments. . . .

(6) (a) Responsible Charge. Plans, specifications, drawings, reports or other documents will be deemed to have been prepared under the responsible charge of a registrant only when:

1. The client requesting preparation of such plans, specifications, drawings, reports or other documents makes the request directly to the registrant, or to the registrant's employee at the time initial client contact is made, so long as the registrant has the right to control and direct the employee in the material details of how the work is to be performed;

2. The registrant supervises and is involved in the preparation of the plans, specifications, drawings, reports or other documents and has input into and full knowledge of their preparation prior to their completion;

3. The registrant reviews the final plans, specifications, drawings, reports or other documents; and

4. The registrant has the authority to, and does, make any necessary and appropriate changes to the final plans, specifications, drawings, reports or other documents; and

5. Contributions of information or predrawn detail items or detail units that are incidental to and intended to be integrated into a registrant's technical submissions are from trusted sources (including, but not limited to, manufacturers, installers, consultants, owners, or contractors), are subject to appropriate review, and are then coordinated and integrated into the design by the registrant. . . .

(c) Mere review of work prepared by another person, even if that person is the registrant's employee, does not constitute responsible charge unless the registrant has met the criteria set out above.

It was also noted that Tenn. Code Ann. § 62-2-102 exempts one-family and two-family dwellings from the requirement to have plans and specifications prepared by a registered architect or engineer.

The Engineer Committee of the Board welcomes further discussion of this issue. Please contact me if I can offer any further assistance.

Sincerely,

John Cothron

John Cothron
Executive Director

cc: Tim Pendleton, Building Official, Town of Collierville
Jim Brown, Director of Codes Enforcement, City of Bartlett
Alan Medlock, Administrator, Shelby County Construction Code Enforcement
Al Bell, Building Inspector, City of Millington
Gary Farley, Director, Residential Building Code Enforcement

REFERENCE MANUAL FOR BUILDING OFFICIALS AND DESIGN PROFESSIONALS

Sections requiring revision are highlighted.

Table of Contents

Foreword

This manual has been published by the Tennessee State Board of Architectural and Engineering Examiners to aid building officials, design and construction professionals, and the general public in understanding the laws of this state governing the practice of architecture, engineering, landscape architecture, and use of the title "registered interior designer."

Information contained herein is basic and not intended to be a complete discussion of the Tennessee law. A major effort has been made to identify and address questions most asked by building officials; to this end a list of these questions, with their answers, is included as part of the manual.

The regulatory board responsible for assembling this manual protects the public by assuring its registrants and licensees are qualified to competently provide professional design and construction services in their respective disciplines. The principal focus of this Board is the protection of public health, safety and welfare.

The Board has a further responsibility to halt nonexempt, unregistered or unlicensed practice. The Board possesses the authority to investigate violations of its respective statutes and regulations and either discipline or prosecute violators accordingly.

Building officials protect the public by enforcing building code requirements. Throughout their plan check and inspection process, building officials ensure that registrants comply with building codes, local codes and ordinances. Building officials have the authority to reject documents as submitted and to withhold permits for projects that do not adhere to these requirements. Building officials rely on the Tennessee Board of Architectural and Engineering Examiners to assure its registrants and licensees are competent to practice.

A listing of currently registered architects, engineers, landscape architects, and interior designers as well as valid architectural, engineering, and landscape architectural firms, the law delineating the registration requirements and procedures, with the rules of professional conduct including civil penalties for violations of the law, is available on the Board's website.

For further information, contact:

State of Tennessee
Department of Commerce and Insurance
State Board of Architectural and Engineering Examiners
500 James Robertson Parkway
Nashville, Tennessee 37243-1142
(615) 741-3221 (Nashville and Vicinity) 800-256-5758 (Toll Free)
615-532-9410 (FAX)
www.tn.gov/regboards/ae
ce.aeboard@tn.gov (E-mail)

Introduction

The people of the State of Tennessee live and work in an environment which is largely manmade. Tennessee law recognizes the need "to safeguard life, health and property, and to promote public welfare" in that environment by ensuring that design professionals — architects, engineers, landscape architects, and registered interior designers — who shape that environment are properly qualified. Through the State Board of Architectural and Engineering Examiners, the State sets standards for the education, experience, and performance of those who wish to practice these professions.

Similarly, building officials — through their enforcement of building codes — safeguard life, health and property, and promote public welfare. The State Board of Architectural and Engineering Examiners, the building officials, and the State Fire Marshal's Office each have a vital role in the protection of the public; each must be able to depend on the others to fill its assigned role. The building official must be able to depend on professionals who are licensed by the Board to design competently and according to required standards. The Board must depend primarily upon the local building official and State Fire Marshal, particularly in nonexempt municipalities, to assure that only those who are properly licensed are allowed to provide design services.

This manual is provided to assist in the understanding of the laws and rules under which the Board and its registrants are governed with the goal of better serving the people of Tennessee, and updates and replaces the manual published in 2006.

The following portions of this manual have been significantly revised since the last publication:

- The Requirements for Building Design
- A Check List for the Examination of Building Construction Documents
- Appendix B—Letter of Clarification
- Appendix C—Seal Exemptions Clarification [T.C.A., Section 62-2-102(b)]. The former Appendix C (Example of Minimum Conditions Requiring a Registered Architect and/or Engineer When Space is Less Than 5,000 Square Feet) has been deleted due to changes to the Seal Exemptions Clarification policy.
- Appendix H—Design and Practice Policies
    - Addition of As-Built Drawings Policy
    - Revised Delineation of Engineering and Surveying Policy
    - Revised Design Competitions/Requests for Proposals/Requests for Qualifications Policy
    - Replacement of Townhouses Policy with One-Family and Two-Family Dwellings Policy
    - Addition of Signs Policy

The Requirements for Building Design

In general, all structures must have plans prepared by design professionals registered by the Board. Plans and specifications for all structures classified as "assembly," "educational," and "institutional" in the Standard Building Code must also be prepared by architects or engineers.

The only exceptions to this requirement are:

- Structures classified as "business," "factory-industrial," "hazardous," "mercantile," "residential" and "storage" occupancies, as such occupancies are defined in the 1985 edition of the Standard Building Code, which are:

    1. Less than three (3) stories in height; AND

    2. Less than five thousand square feet (5,000 sq. ft.) in total gross area;

- One-family and two-family dwellings and domestic outbuildings pertaining thereto; and

- Farm buildings not designed or intended for human occupancy.
- Signs that do not exceed either of the following limits (unless failure of the support system for the sign is likely to cause harm to people or property):
  (i) Any portion of the sign is twenty feet (20') or more above the ground level; or
  (ii) Any portion of the sign is fifteen feet (15') or more above the ground level, if the sign has more than one hundred twenty square feet (120 sq. ft.) in total sign face area.

In addition, other Tennessee laws and regulations require that plans and specifications for buildings in these classifications be approved by the State Fire Marshal or the State Department of Health as is appropriate to their use. It should be noted that the law provides that any awarding authority, public or private, may require the services of a design professional for any project.

Following is a summary of occupancy definitions from the 1985 edition of the Standard Building Code, which is cited for occupancy definitions in T.C.A. § 62-2-102:

- Assembly Occupancies (A) - buildings or structures, or any portion thereof, for the gathering of persons for purposes such as civic, social, or religious functions or for recreation, food or drink consumption, or awaiting transportation, having a capacity of 50 or more persons. A registered design professional is required to prepare plans and specifications for this type of occupancy regardless of the size of the facility. Examples include: amusement park buildings; auditoriums; churches, synagogues, mosques; dance halls; motion picture theaters; museums; passenger depots; public assembly halls; and restaurants that accommodate 100 or more people, or that have a stage, provide dancing or entertainment features.

- Business Occupancies (B) - use of a building or structure, or any portion thereof, for office, professional, or service transactions including normal accessory storage and the keeping of records or accounts. A registered design professional is required to prepare plans and specifications if the building or structure is over two stories in height or is five thousand square feet or more in total gross area. Examples include: office buildings; service stations; bowling alleys; greenhouses; banks; libraries (other than school); restaurants and dry cleaning establishments using nonflammable solvents.

- Educational Occupancies (E) - use of a building or structure, or any portion thereof, for the gathering together of persons for the purpose of instruction. A registered design professional is required to prepare plans and specifications for this type of occupancy regardless of the size of the facility. Examples include: public and private schools; colleges; universities, academies and day care facilities.

- Factory-Industrial Occupancies (F) - use of a building or structure, or any portion thereof, for assembling, disassembling, repairing, fabricating, finishing, manufacturing, packaging or processing operations, but does not include buildings used principally for any purpose involving highly combustible, flammable, or explosive products or materials. A registered design professional is required to prepare plans and specifications if the building or structure is over two stories in height or is five thousand square feet or more in total gross area. Examples include: manufacturing plants, factories, assembly plants, processing plants and mills.

- Hazardous Occupancies (H) - principal use of a building or structure, or any portion thereof, that involves highly combustible materials or flammable materials, or explosive materials that have inherent characteristics that constitute a high fire hazard. A registered design professional is required to prepare plans and specifications if the building or structure is over two stories in height or is five thousand square feet or more in total gross area. Examples include: dry cleaning establishments using flammable solvents, explosive manufacturing, grain elevators, paint or solvent manufacturing, pyroxylin plastic manufacturing, sodium nitrate or ammonium nitrate, storage of combustible film and tank farms used to store flammable liquids or gases.

- Institutional Occupancy (I) - A registered design professional is required to prepare plans and specifications for this type of occupancy regardless of the size of the facility:

1. unrestrained occupancy - use of a building or structure, or any portion thereof, for the purpose of providing medical care and sleeping facilities for four or more persons who are mostly incapable of self-preservation because of physical or mental disability; examples include: hospitals, nursing homes, mental institutions (restrained and unrestrained) and nursery facilities providing full time 24-hour care for persons under six years of age.
2. restrained occupancy - use of a building or structure, or any portion thereof, for the purpose of providing sleeping facilities for four or more persons who are confined or housed under some degree of restraint or security; examples include: jails, detention centers, correctional institutions, reformatories, pre-release centers and other residential-restrained care facilities.

- Mercantile Occupancies (M) - use of a building or structure, or any portion thereof, for the display and sale of merchandise. A registered design professional is required to prepare plans and specifications if the building or structure is over two stories in height or is five thousand square feet or more in total gross area. Examples include: shopping malls, stores, shops and markets.

- Residential Occupancy (R) - use of a building or structure, or any portion thereof, for sleeping accommodations not classified as institutional occupancies. A registered design professional is required to prepare plans and specifications if the building or structure is over two stories in height or is five thousand square feet or more in total gross area. Examples include: multiple dwellings (more than two families), hotels and motels, dormitories, lodging houses and convents and monasteries.

- Storage Occupancy (S) - principal use of a building or structure, or any portion thereof, for storage that is not classified as hazardous, or for the purpose of sheltering animals. A registered design professional is required to prepare plans and specifications if the building or structure is over two stories in height or is five thousand square feet or more in total gross area. Examples include: aircraft hangars, garages, warehouses, storage buildings, freight depots and automobile parking structures.

Full definitions may be obtained from the Board office.

The Board

The Tennessee Board of Architectural and Engineering Examiners is composed of twelve members — three registered architects, three registered engineers, one registered landscape architect, one registered interior designer, a public member who is not engaged in the practice of architecture, engineering, or landscape architecture, and three non-voting associate engineer members. The members are appointed by the governor and serve for a period of four (4) years. The Board usually meets six (6) times a year and at such other times as the business of the Board may require.

The Board is charged with the examination of the qualifications of applicants for registration and, in proper cases, the issuing of certificates of registration. The Board may also suspend or revoke certificates of registration in cases of misconduct and has the duty to inquire into the identity of any person (or firm) claiming to be an architect, engineer, landscape architect, or registered interior designer and to prosecute persons violating provisions of the registration law. Suspected violations of the registration law should be reported to the Board office. State investigators, representing the Board, gather evidence for use in the examination of reported violations. Their work often includes joint investigations with building officials. If, in the opinion of the Board's legal staff, evidence warrants the filing of formal charges, an outline of the case is presented to the Board for action. The identity of persons involved is not known to the members of the Board until presented to them for formal action. If charges are filed, a formal hearing is held with an administrative judge from the Secretary of State's office conducting the proceeding and the Board members sitting as jury, rendering decisions and penalties where appropriate.

The terms of the act governing the four professions are found in Tennessee Code Annotated (T.C.A.), Title 62, Professions, Businesses and Trades; Chapter 2, Architects, Engineers, Landscape Architects,

and Registered Interior Designers; and in the Rules, Chapters 0120-01, 0120-02, 0120-04, 0120-05, and 0120-06. The law and rules may be viewed on the Board's website located at www.tn.gov/regboards/ae.

The Registration Process

Candidates for registration must be of good character and repute, must have professional degrees, a specified period of experience, and must have passed an examination. Candidates holding unexpired certificates of registration from any state or jurisdiction may be registered without additional examination, provided that the applicant's qualifications meet the requirements of the Tennessee Board.

Examinations are prepared by the four (4) national professional councils of state registration boards—the National Council of Architectural Registration Boards (NCARB), the National Council of Examiners for Engineering and Surveying (NCEES), the Council of Landscape Architectural Registration Boards (CLARB), and the Council for Interior Design Qualification (CIDQ)—to provide consistent national standards of examination and to facilitate reciprocal registration among the various state registration boards.

Upon application, the candidates are required to submit records of education, experience, and letters of recommendation. The submittals are reviewed by Board members of the applicant's profession, and, if found satisfactory, the candidate is admitted to the examination. Registration certificates are awarded at the satisfactory completion of the examination.

Corporations, Partnerships and Firms

Corporations, partnerships, and firms (such as LLC’s, LP’s, and LLP’s) may engage in the practice of architecture, engineering, or landscape architecture in this state, provided that at least one (1) of the principals or officers of the firm is in responsible charge of that practice and is a registered architect, engineer, or landscape architect as required by state law. Corporations, partnerships, and firms must file a disclosure form prescribed by the Board.

Professional Responsibility

Professional registration allows the architect, engineer, or landscape architect registrant to practice his or her profession and allows the interior designer to use the title "registered interior designer." Professional registration imposes on the registrant an obligation to protect the safety, health, and welfare of the public and to render competent service. A primary part of that obligation is the recognition on the part of the registrant of the limit of the registrant's professional competence and the voluntary limitation of professional assignments to activities for which the registrant is qualified by education or experience. The "Rules of Professional Conduct," which carry the enforcement of law, specify the proper conduct of practice (or title in the case of registered interior designers), service in areas of competence, the need for objectivity and truth in public statements, the avoidance of conflicts of interest and improper acceptance of work, and misconduct in practice.

Visible identification of work produced by architects, engineers, and landscape architects is in the form of the registrant's seal, which is required to be placed on all sheets of working drawings, cover or index pages of specifications, and on reports or other documents which are for the use of those other than the originating registrant. The seal must be signed by the registrant and dated. No registrant shall affix his or her seal or signature to sketches, working drawings, specifications, or other documents developed by others not under his or her responsible charge and not subject to the authority of that registrant in critical professional judgments.

The Tennessee registration law requires that members of the Board and registrants of the Board report violations of the law and cooperate with the Board in furnishing information and rendering assistance as the Board may require. The law provides for the assessment of civil penalties against both registrants and nonregistrants for violations of statutes, rules, or orders enforceable by the Board. Violations should be reported to the Board office. The Board believes it is the registrants’ responsibility to be familiar with codes and applicable jurisdictional requirements.

Relationship to Building Officials

The building officials of Tennessee and the Tennessee Board of Architectural and Engineering Examiners have the same goal: the safeguarding of life, health and property, and the promotion of public welfare. Building officials move toward that goal by the adoption of building codes and standards and the enforcement of the requirements of those codes and standards. The Board moves toward that goal by the adoption of standards of education, experience, and professional practice and the enforcement of those standards. In actual practice, each group is dependent on the other for both the creation of standards and enforcement. Much of the material contained in the codes and standards originates in the research and practice experience of the professions. The everyday policing of the requirement that registrants design most structures is dependent upon the building officials. The solutions to building design problems which do not fit the requirements of the building code depend on the experience, knowledge, creativity, and cooperation of the building official and the design professional. The common goal is achieved only by joint cooperative effort.

A Check List for the Examination of Building Construction Documents

Construction documents for most projects consist of drawings and specifications. All elements shall complement each other. Completeness and coordination of all necessary information is the responsibility of the registered architect and/or professional engineer. Construction documents submitted to the building official must be of sufficient nature to clearly show the project in its entirety.

The list below is suggested as a pattern for the examination of building construction documents prior to the issuance of a building permit.

1. In general, in order to be complete, the documents must depict the following:

a. The overall work required for the building project, including the architectural, landscape, civil, structural, mechanical, and electrical systems where required by law;

b. Compliance with Life Safety Code; and

c. Compliance with applicable building, fire, and handicap accessibility codes.

2. Identification Plans Cover Sheet

The required construction documents will depend upon the size, nature, and complexity of the project. **Appendix E** lists the suggested standard of the minimum required construction documents that should be submitted for review by building officials and the information that should appear on the cover sheet. **Appendix F** addresses the State Fire Marshal's Office policy regarding the review of sprinkler shop drawings and the standard of care adopted by the Board of Architectural and Engineering Examiners regarding the required minimum documentation for fire protection sprinkler design documents.

3. Preparation by a design professional registered by the State of Tennessee

a. All plans and specifications for buildings and structures must be prepared by a registered architect and/or engineer, except as noted below.

b. Exceptions are:

1. Structures classified as "business," "factory-industrial," "hazardous," "mercantile," "residential," and "storage" occupancies (classifications as described in 1985 edition of Standard Building Code)

WHICH ARE:

a. Less than three stories in height; AND

b. Less than 5,000 square feet in total gross area;

2. One-family and two-family dwellings and domestic outbuildings pertaining thereto;

3. Farm buildings not designed or intended for human occupancy; or

4. Signs that do not exceed either of the following limits (unless failure of the support system for the sign is likely to cause harm to people or property):

(i) Any portion of the sign is twenty feet (20') or more above the ground level; or

(ii) Any portion of the sign is fifteen feet (15') or more above the ground level, if the sign has more than one hundred twenty square feet (120 sq. ft.) in total sign face area.

c. When building officials receive a set of documents for permitting purposes without an architect or engineer's seal, they should ask the designer of record to sign a statement, such as the one contained in **Appendix B**.

Explanatory Notes: The Board has interpreted the above exceptions (See **Appendix C** entitled "Seal Exemptions Clarification") only for those structures classified as above which are also separated from other buildings and/or spaces/tenants by the minimum fire-rated separation required by the applicable code.

Additionally, registered interior designers, while not permitted to practice architecture or engineering, may engage in design services including consultations, studies, drawings, and specifications in connection with reflected ceiling plans, space utilization, furnishings, or the fabrication of non-structural elements within the interior spaces of buildings, but specifically excluding the services specified by law to require other licensed professionals, such as the design of life safety, mechanical, plumbing, electrical, and load-bearing structural systems, except for specification of fixtures and their location within interior spaces.

d. See **Appendix C** entitled "Seal Exemptions Clarification," which was prepared and approved by the Board on April 27, 1989, and revised and adopted on June 25, 2009.

e. See **Appendix G** entitled “Engineering Exemption Policy for Fire Sprinkler System Design,” which was adopted by the Board on August 25, 2005, and became effective on April 1, 2006.

4. Is the design professional properly identified?

The plans and specifications shall be prepared by a design professional registered by the State of Tennessee who shall place that professional's seal (electronically or manually) on each drawing and the title page of specifications containing work for which the professional is responsible. An example of how documents should be sealed is reviewed in **Appendix D**. Since some documents may contain the work of several professionals, documents may contain several seals. The professional's signature and the date of the signature must be across the seal. An architect, engineer, or landscape architect may not affix his or her seal to any document which has not been prepared by him or her or under his or her responsible charge. (The Board imposes serious penalties against those who violate seal restriction provisions.) The registration law for interior designers is a "title" act and not a "practice" act; therefore, it is not necessary to seal any documents they may prepare under the exempt provision stated in the Explanatory Notes above.

5. Statement with Regard to Standard of Care

The design documents submitted to the building official should reveal the complete design intent in all building trades. There should be no areas of incompleteness wherein any building trade or contractor is compelled to make design decisions. Unless the documents meet these criteria, the building official should reject the documents in order to safeguard life, health and property by requiring that only qualified architects, engineers, and landscape architects may practice architecture, engineering, and landscape architecture.

6. Public Works Projects

Public works projects involving architecture, engineering or landscape architecture by the State, any county, city, town, village, or other political subdivision of the state must have plans, specifications, and estimates prepared by registered design professionals when they are:

- greater than $25,000 (contemplated expenditure for complete project, except state park maintenance projects described below), or
- alter the structural, mechanical, or electrical system of the project.

There is an exemption for public works projects located in a state park if the project meets the following conditions:

1) The contemplated expenditure for the complete project does not exceed $100,000 in value and the work is defined solely as maintenance under the policy and procedures of the State Building Commission, or

2) If the project is located in a state park and existing plans are used which have been designed and sealed by a registered architect, engineer, or landscape architect and a registered architect, engineer, or landscape architect reviews such plans for compliance with all applicable codes and standards and appropriateness for the site conditions of the project, makes changes if required, and seals the plans in accordance with state law.

Most Commonly Asked Questions

1. Building officials receive prints of plans with a copy of the seal on them. Is this acceptable or should each print be originally sealed, signed, and dated?

The seal is placed on all original documents and signed and dated by the registrant. In the case of documents which are on translucent material for printing, this would mean that the seal, signature, and date would be reproduced. Similarly, photo copies of sealed, signed, and dated originals are acceptable. The seal without signature and date is unacceptable. (Reference Rules of Professional Conduct 0120-02-.08) An example of how documents should be sealed is on **Appendix D**.

2. When the building official observes the following, certain questions may arise:

Construction plans are submitted with the same engineer's seal on structural, mechanical, plumbing, and/or electrical drawings. Should these designs be executed by separate engineers representing each discipline?

Construction plans are submitted where an architect has sealed structural, mechanical, plumbing and/or electrical drawings. Should these designs, other than architectural, be done by an engineer?

Construction plans are submitted where an architect or engineer has sealed landscape architectural drawings. Should these designs be done by a landscape architect?

A registrant may have expertise beyond the discipline in which he or she is educated and examined. While the building official should not be called upon to judge competence, any time he or she is confronted with the suspicion of incompetence, he or she should contact the Board so that it can make such judgment.

When a complete set of project drawings has been submitted bearing the seal of only one registered architect or engineer, the Board suggests that the building official require that the registrant sign a statement, such as the one contained in the attached form **(Appendix A)**, as to authorship and competence. A copy of any such signed form should be forwarded to the Board for its attention. If a registrant refuses to sign such a statement, the Board should be notified immediately. Regardless, the building official should notify the Board if he or she believes the registrant of one discipline is incompetent to seal the work of another discipline when the documents look incomplete or suspect.

3. If on-site drainage detention is required for a site plan or plat, is a separate seal required for the hydrological calculations? If so, whose seal is adequate — architect, engineer, landscape architect, or surveyor, or is there a special seal for this particular field?

Drainage design, such as storm water retention/detention, can be a highly complex technical process and should be prepared and sealed by a qualified registrant of this Board competent to provide this design and perform the necessary calculations. Major flood construction that would fall within the jurisdiction of the federal and state regulatory agencies would require an engineer's seal along with major flood studies.

4. May site plans and preliminary plats be prepared by an architect, engineer, landscape architect, or a surveyor?

Land surveying, measurement and calculation of areas, boundaries, property lines and the plotting thereof should be performed by a surveyor registered by the Land Surveyors Board. Design changes to the topography and drainage should be performed by a qualified registrant of the Architects and Engineers Board. Design of underground utilities and electric power lines should be performed by the engineer. The arrangement of building(s) on the site, finished grading, and finished site details should be performed by a qualified registrant of the Architects and Engineers Board.

5. When an owner calls to complain that there has been a failure in construction and the structure was built per specifications, who is responsible? What is the responsibility of each person involved?

The determination of degrees of responsibility for construction failures is beyond the scope of the duties of the Board. If there is indication of incompetence on the part of a registrant, the Board should be notified. The Board may then authorize an investigation of the events involved in the failure and, if warranted, take appropriate disciplinary action.

6. If a freestanding building classified as "business" has an area greater than 5,000 gross square feet but is only one or two stories high, must the plans and specifications be prepared by a registered architect or engineer?

Yes. The building must meet both the requirement for an area less than 5,000 square feet and the requirement for a height of less than three stories to be exempt from the requirement for plans and specifications prepared by an architect or engineer. For instance, if a two-story building has 4,000 square feet per floor (or 8,000 total square feet), the plans and specifications shall be prepared by an architect or engineer.

7. If a designer, owner, contractor, or other nonregistrant prepares plans for a building which requires the use of architects or engineers and applies for a building permit, should the building official suggest that the nonregistrant contact an architect or engineer and have him or her review and place his or her seal on the plans and specifications?

No. Under Tennessee law, a registrant may not take over, review, revise, or place his or her seal on plans and specifications begun by persons not properly qualified. A registrant may seal only work which he or she has prepared or which has been prepared under his or her responsible charge. The building official should contact the State Board and refuse to issue a permit until appropriately sealed plans are submitted.

8. Are registrants required for design of building utilities such as electrical service, steam systems, refrigeration systems, etc., where no changes or additions to the building are necessary?

Yes. The intent of the law is that registrants be involved in design work pertaining to the lawful practice of architecture, engineering, or landscape architecture. Use of an electrical or mechanical engineer is not precluded simply because a general contractor is not involved in building or building structure addition and/or modifications.

9. Do registered interior designers have to seal any documents prepared by them?

No. The registration law passed by the State of Tennessee in 1993 is a "title" act requiring that any interior designer who calls himself or herself a registered interior designer must be registered by the Board. The law is not a "practice" act; therefore, interior designers are allowed to do no more and no less than before the legislation was passed. A registered interior designer may provide plans and specifications in connection with reflected ceiling plans, furnishings, the fabrication of non-structural elements within the interior spaces of buildings, or space utilization not affecting life safety.

10. Should a building permit be issued when the building official receives a set of plans for tenant space that is part of a new multi-story office building's construction and the plans are not sealed by a licensed architect or engineer?

No, unless the tenant space is less than 5,000 square feet and separated from other tenant spaces by the minimum fire-rated separation required by the applicable code. A qualified registrant of this board must prepare and seal the plans prepared by him or her for the tenant space, even if the shell of the building is prepared by another registrant. A registered interior designer or non-registrant may provide plans and specifications with reflected ceiling plans, furnishings, the fabrication of non-structural elements within the interior spaces of buildings, or space utilization not affecting life safety.

11. If the building official receives a set of architectural plans for construction or renovation of an existing building without accompanying structural, mechanical, plumbing, and electrical information, should a building permit be issued?

No, unless there are no requirements for work in these accompanying disciplines.

12. What registrant is qualified to prepare site grading and site drainage plans?

A qualified registrant of this board who is competent in that area of design may provide site grading and site drainage plans.

13. When a nonregistrant prepares construction documents for a building, may that individual obtain a review and written certification of adequacy from a registrant and thereby obtain a building permit?

No. The written certification may not be accepted for permit issuance in lieu of construction documents prepared and sealed by a registrant. The registrant must demonstrate responsible charge for the proposed work or face disciplinary action.

14. Are designs (plans and specifications) for "pre-engineered" buildings exempt from the requirement that a registrant of the Board prepare and seal them?

No, unless the building qualifies for an exemption under Tenn. Code Ann. § 62-2-102(b). Pre-engineered buildings are not automatically exempt. The design of pre-engineered steel structures or structural components (i.e., trusses, buildings, etc.) must be prepared, sealed, signed, and dated by a Tennessee registrant. There may be additional engineers, architects, or landscape architects needed for the remaining portions of the project (i.e., electrical, plumbing, HVAC, site design, soils analysis, building circulation and exiting, physically handicapped criteria, landscaping, etc.).

15. May any person provide inspection or review of buildings or sites to determine if the project construction phase conforms to the architectural and engineering construction documents?

Yes. However, the Board recommends a registrant of this board provide construction administration or review of construction. Administration of construction contracts is defined as periodic site visits, change orders, shop drawing reviews, and reports to owners of any observed substantial deviation from the contract documents. Building officials who inspect for conformance with building codes are in no way restricted from performing their duties.

16. May a Tennessee registrant review and "over seal" plans prepared by an out-of-state professional for a design project in Tennessee?

No. A qualified registrant of this board may only seal drawings designed and prepared by or under his or her responsible charge. Sealing any drawings prepared by others will result in disciplinary action.

17. May an owner, builder, or contractor make changes to final architectural, engineering, or landscape architectural plans?

No. When plans are prepared by a Tennessee registrant, no changes may be made except by that registrant.

18. What procedures should a building official follow when the registrant does not provide plans or changes necessary to the project?

Notify the owner of the project. It is the owner's responsibility to hire the proper registrants to provide plans or submittals for the permit.

19. What should building officials do if they know that someone may be violating the registration law?

Notify the Board.

20. May a building official require a structure to be designed by an architect or engineer, although exempt under the registration law, if it is deemed that such a structure is an undue risk to public safety, health, or welfare?

Yes. The building official may require part or all of the structure to be designed by an architect or engineer. The Board and registration law do not supersede the building official's authority to protect the health, safety, or welfare of the public.

21. Are interior designers licensed by the State to "practice" interior design?

No. Registered Interior Designers and Architects are licensed to use the title "registered interior designer." Nonregistrants may not use the title "registered interior designer."

22. Are full height, non-bearing, non-rated partitions considered components that affect the safety of the building?

The addition, relocation, or removal of full height, non-bearing, non-rated partitions could change or affect the safety of a building. Each situation must be judged within its specific context; thus, the building official must decide whether such partitions would affect the safety of the building.

23. Now that the Tennessee Board of Architectural and Engineering Examiners requires interior designers to be registered in order to use the title "registered interior designer," may another registrant call himself or herself a "registered interior designer?"

Any person may render interior design services. Only Registered Interior Designers and Architects registered in the State of Tennessee may use the title "Registered Interior Designer". (Reference T.C.A., Section 62-2-903.)

24. May the seal used by the registrant on construction documents be computer generated?

Yes. The Board has determined that the seal may be an embossed, rubber, sticky, or electronic seal. The registrant must personally sign or affix his or her signature, either manually or electronically, using a secure method.

25. If an existing building or space within a building expands by less than 5,000 square feet, is a registered architect or engineer required to provide appropriate plans and specifications?

Yes, if the cumulative or combined space or spaces (existing or expanded areas) is 5,000 square feet or more, a qualified registrant of this board is required.

26. When does it become necessary for a registrant to prepare and seal drawings and details for landscape construction?

Landscaping associated with new and existing construction of buildings of 5,000 square feet or more or greater than two stories requires the use of a registrant. For non-building/landscape related projects where site improvements are 5,000 square feet or more in area, a registrant is required.

Per T.C.A., Section 62-2-102, nothing shall prevent any awarding authority, public or private, from requiring the services of a registered architect, engineer or landscape architect for any project. See T.C.A., Section 62-2-107 for "Employment of licensees on public works."

27. Is it necessary for a registered architect or engineer to prepare documents for a roof replacement on an existing building?

Yes. A qualified registrant is required for roof replacements or reroofs of all buildings of 5,000 square feet or more or greater than two stories in height. When a roof is replaced, structural loads during and after installation can change, energy requirements may be affected, drainage conditions can change, etc. Notwithstanding the above, a registrant is also required for public works projects under $25,000 if the structural, mechanical, or electrical system of the project is altered.

28. When is a registrant required to prepare plans and specifications for public works projects?

Public works projects involving architecture, engineering or landscape architecture by the State, any county, city, town, village, or other political subdivision of the state must have plans, specifications, and estimates prepared by registered design professionals when they are:

- greater than $25,000 (contemplated expenditure for complete project, except state park maintenance projects described below), or
- alter the structural, mechanical, or electrical system of the project.

There is an exemption for public works projects located in a state park if the project meets the following conditions:

1) The contemplated expenditure for the complete project does not exceed $100,000 in value and the work is defined solely as maintenance under the policy and procedures of the State Building Commission, or

2) If the project is located in a state park and existing plans are used which have been designed and sealed by a registered architect, engineer, or landscape architect and a registered architect, engineer, or landscape architect reviews such plans for compliance with all applicable codes and standards and appropriateness for the site conditions of the project, makes changes if required, and seals the plans in accordance with state law.

~~Plans and specifications for any public works construction or maintenance project involving architecture, engineering or landscape architecture that exceeds $25,000 shall be prepared by a registrant. Notwithstanding the above, a registrant is also required for projects under $25,000 if the structural, mechanical, or electrical system of the project is altered.~~ Construction on any part of an electric distribution system owned by a political subdivision of the State is excluded. (Reference T.C.A., Section 62-2-107.) ~~A registrant is also required for public works projects which have a contemplated expenditure over $25,000.~~

29. Is a registered architect or engineer required to prepare and seal drawings for an existing building space of 5,000 square feet or more if the space is going to be divided into several spaces less than 5,000 square feet?

Yes. While the particular use of a facility may ultimately have individual spaces less than 5,000 square feet and separated by fire-rated construction from other tenants, the overall space requires a registered architect or engineer to be sure construction, egress, systems, etc., are properly designed and integrated collectively.

30. Is a company without a registrant in full-time employ that provides preliminary design services (i.e., schematics, where drawings are prepared to describe the basic plans and elevations) required to have a registrant licensed in the State of Tennessee?

Yes. Preliminary designs and schematic designs that may be used to continue and complete a project, even if intended to be completed by a registrant, shall be prepared by a registrant.

31. May design professionals for local public works projects in Tennessee be selected through the competitive bid process?

No. Design professionals for public works projects in Tennessee are not selected through the competitive bid process, but are chosen through qualifications-based selection, meaning that the

contract is awarded based on recognized competence and integrity. In the procurement of architectural and engineering services, the selection committee/procurement official:

- may seek qualifications and experience data from any firm or firms licensed in Tennessee and interview such firms;
- shall evaluate statements of qualifications and experience data regarding the procurement of architectural and engineering services, and shall conduct discussions with such firm or firms regarding the furnishing of required services and base selection on the firm deemed to be qualified to provide the services required; and
- shall negotiate a contract with the qualified firm for architectural and engineering services at compensation which the selection committee/procurement official determines to be fair and reasonable to the government and in making such determination, the selection committee/procurement official shall take into account the estimated value of the services to be rendered, the scope of work, complexity and professional nature thereof. (Reference T.C.A., Section 12-4-106.)

32. If a registrant's license has expired between the time construction documents were prepared and the time when they are submitted to an authority for review, do the documents need to be re-sealed by a registrant with a current license?

No. As long as the license was current at the time the documents were prepared, the documents do not need to be re-sealed prior to review. However, any changes (updates or modifications) to the documents that are made following the review must be prepared and sealed by a registrant with a current license.

33. May an engineer's calculations be used as plans for construction work?

a. Yes, but only when the document provides a clear description of work acceptable to the building official for the work intended.
b. No, when the document presents only engineering analysis and does not provide a satisfactory description of the work for construction purposes.
c. No, when amended submittals conflict with the original approved description of work.

34. Under what circumstances may a registrant revise plans prepared by another registrant?

In circumstances where a registrant can no longer provide services on a project (such as death, retirement, disability, contract termination, etc.), a successor registrant may perform work on a set of plans originally prepared by another registrant. If the plans are incomplete (are at a stage prior to submittal to a reviewing official), the successor registrant may not seal the set of drawings prepared by the original registrant; rather, the successor registrant must take all steps necessary to ensure that the drawings were prepared under his or her responsible charge before sealing them. If the plans are complete and have been submitted to a reviewing official, the successor registrant may prepare and seal addenda sheets or document and seal changes to the original sheets if revisions are necessary. With the exception of this provision, any changes made to the final plans, specifications, drawings, reports or other documents after final revision and sealing by the registrant are prohibited by any person other than the registrant, including but not limited to owners/clients, contractors, subcontractors, other design professionals, or any of their agents, employees or assigns. (Rule 0120-02-.08)

APPENDIX A

LETTER OF ASSURANCE

When a complete set of project drawings has been submitted bearing the seal of only one registered architect or engineer, the Board suggests that the building official require that the registrant sign a statement, such as the following:

The documents you have submitted on the above-referenced project have your architect's/engineer's seal on all phases of the plans, which is somewhat unusual to find on construction documents for a project of this size and type. In order for this office to recognize you as the total project designer, you will need to provide the following assurances:

I, _____ , confirm that:
(print or type name)

1. All project drawings bearing my seal were prepared under my responsible charge.

2. I am competent in the design of architectural, landscape architectural, civil, electrical, mechanical, plumbing, and structural systems for a project of this size and type either by reason of my education and/or experience.

_____ _____
Signature Profession TN License No. Date

You will need to sign, date, and return this letter of assurance in order for this office to consider you as the total project designer. This letter of assurance may be sent to the Tennessee Board of Architectural and Engineering Examiners if the building inspection department deems appropriate.

Thank you, in advance, for your cooperation in this matter.

Sincerely,

APPENDIX B

LETTER OF CLARIFICATION

When building officials receive a set of documents for permitting purposes without an architect or engineer's seal, they should ask the designer of record to sign a statement, such as the following:

The drawings you have submitted on the above-referenced project do not have the seal of an architect or engineer, which is somewhat unusual to find on construction documents for a project of this type. In order to recognize the fact that a registered architect or engineer is not required for this project, we need you to provide the following assurances (circle all that apply):

1. The design being submitted is less than 5,000 gross square feet and less than three stories in height or a tenant space less than 5,000 gross square feet and separated from other tenant spaces by the minimum fire-rated separation required by the applicable code.

   and/or

2. I am competent in the design of this type of space planning, which does not include changes that affect the structural, mechanical, electrical system, or the life safety of the building and occupants of this space.

   and/or

3. The building or space is not an "A," "E," or "I" occupancy, which would require a registered architect or engineer regardless of size.

   and/or

4. I am a registered interior designer, and these plans and specifications are for build out of spaces less than 5,000 square feet, or these plans and specifications are in connection with reflected ceiling plans, furnishings, the fabrication of non-structural elements within the interior spaces of buildings, or space utilization not affecting life safety. My registration number is _____.

_____ _____

Signature Date

In order for this office to continue to recognize you as the total project designer so that it can process the building permit, you will need to circle the appropriate statement(s) that applies(ly) in this case and sign, date, and return this letter of clarification.

Thank you, in advance, for your cooperation in this matter.

Sincerely,

APPENDIX C

SEAL EXEMPTIONS CLARIFICATION [T.C.A., Section 62-2-102(b)]

The following are situations where a registered architect, engineer, or landscape architect is not required unless an awarding authority deems it necessary:

1. Tenant finishes and tenant improvements to a building of B, F, H, R, M, or S occupancy may be designed by a non-registrant with the following provisions:

   A. Each separate tenant space is less than 5,000 square feet and the tenant spaces are separated from other tenant spaces by the minimum fire-rated separation required by the applicable code. In accordance with Section 402.1.2 of the 1985 edition of the Standard Building Code, "each part of a building or structure included within fire walls shall be considered a separate building."

   B. Remodeling, maintenance, or renovation of any building or structure, which does not alter the structural system, or fire protection, or egress requirements.

2. The following exemptions 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:

   A. Existing interior space. Normal maintenance or remodeling of an existing interior space in an existing building where the occupancy or floor plan do not change but upgrades are needed, such as, remove and replace finishes (wall, floor, ceiling, where these are not a part of a required fire rated assembly), change light bulbs or filters, and rearrange prefabricated partitions.

   B. Mechanical design.

      i. The design of a mechanical system for a building or structure of B, F, H, R, M, or S occupancy, and a temporary structure, wherein the HVAC system developed is not more than a total of 12.5 ton capacity and not more than a total of 500,000 BTU of heating per hour output.

      ii. Normal maintenance or replacement of defective mechanical equipment with like equipment with like size may be accomplished by contractors licensed in their respective trades.

   C. Plumbing design. Minor plumbing upgrades and additions up to the equivalent of three (3) fixture unit values, which do not require any change to the capacity of any waste, vent or supply system.

   D. Electrical design. Minor electrical additions, such as receptacles, lighting, or other circuits, not to exceed 20 amperes, may be designed without benefit of a registrant, if the additional circuits do not require additional distribution panel(s) and/or the need for upgrading, resizing, or enlarging branch circuits and main feeders. In addition, such work shall be performed by an appropriately licensed individual in the state of Tennessee, and such person shall certify to any authority having jurisdiction, in writing, that he/she has evaluated such work in relation to the National Electrical Code and local codes, providing, for the record, the number of circuits added and the revised loads on the existing panel(s).

   E. Roof Maintenance or Repair. Normal maintenance or repair of an existing roof where the weight, drainage, fire protection, and other code related requirements of the original design are not changed or compromised.

Note: In no case can anyone other than an architect or engineer registered in Tennessee provide design documentation with regard to assembly, institutional, and educational occupancies.

Note Regarding Public Works Projects: T.C.A. 62-2-107. (Employment of licensees on public works — Excluded public works)

~~a. Neither the state, any county, city, town, or village, or other political subdivision of the state, shall engage in the construction or maintenance of any public work involving architecture, engineering, or landscape architecture for which the plans, specifications, and estimates have not been made by a registered architect, registered engineer, or registered landscape architect.~~

~~b. Nothing in this section shall be held to apply to such public work wherein the contemplated expenditure for the complete project does not exceed twenty-five thousand dollars ($25,000), and such work does not alter the structural, mechanical, or electrical system of the project.~~

~~c. For the purposes of this chapter, "public work" does not include construction, reconstruction, or renovation of all or any part of an electric distribution system owned or operated directly or through a board by a municipality, county, power district, or other subdivision of the state of Tennessee, that is to be constructed, reconstructed or renovated according to specifications established in the American National Standard Electrical Safety Code, the National Electrical Code, or other recognized specifications governing design and construction requirements for such facilities. Notwithstanding the foregoing, "electrical distribution system" does not include any office buildings, warehouses, or other structures containing walls and a roof, which are to be open to the general public. [Acts 1979, ch. 263, § 36; T.C.A., 62-236; Acts 1988, ch. 990, § 9; 1994, ch. 644, § 3.]~~

(a) Neither the state, nor any county, city, town or village, or other political subdivision of the state, shall engage in the construction or maintenance of any public work involving architecture, engineering or landscape architecture for which the plans, specifications and estimates have not been made by a registered architect, registered engineer or registered landscape architect.

(b) (1) Nothing in this section shall be held to apply to such public work if:

(A) The contemplated expenditure for the complete project does not exceed twenty-five thousand dollars ($25,000), and the work does not alter the structural, mechanical or electrical system of the project; or

(B) The contemplated expenditure for the complete project does not exceed one hundred thousand dollars ($100,000), the project is located in a state park, and the work is solely maintenance, as defined in the policy and procedures of the state building commission.

(2) For a public work located in a state park, existing plans may be used as a basis of design if the plans have been designed and sealed by a registered architect, engineer, or landscape architect and a registered architect, engineer, or landscape architect reviews such plans for compliance with all applicable codes and standards and appropriateness for the site conditions of the project, makes changes if required, and seals the plans in accordance with the requirements of this chapter.

(c) For the purposes of this chapter, “public work” does not include construction, reconstruction or renovation of all or any part of an electric distribution system owned or operated directly or through a board by a municipality, county, power district or other subdivision of the state of Tennessee, that is to be constructed, reconstructed or renovated according to specifications established in the American National Standard Electrical Safety Code, the National Electrical Code, or other recognized specifications governing design and construction requirements for such facilities. Notwithstanding the foregoing, “electrical distribution system” does not include any office buildings, warehouses or other structures containing walls and a roof which are to be open to the general public.

[Acts 1979, ch. 263, § 36; T.C.A., § 62-236; Acts 1988, ch. 990, § 9; 1994, ch. 644, § 3; 2012, ch. 927, § 1.]

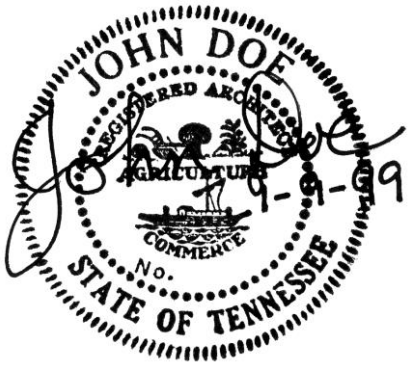
HISTORICAL FOOTNOTE: This policy was adopted by the Board as a result of negotiations with construction-related industry representatives to get T.C.A., Section 62-2-102(b), enacted into law.

Adopted 4-27-89
Revised and adopted 6-8-89
Revised and adopted 10-4-97
Revised and adopted 10-12-01
Revised and adopted 1-9-03
Revised and adopted 4-22-04
Revised and adopted 5-22-08
Revised and adopted 7-10-08
Revised and adopted 9-18-08
Revised and adopted 12-11-08
Revised and adopted 6-25-09
Revised and adopted 10-23-09

APPENDIX D

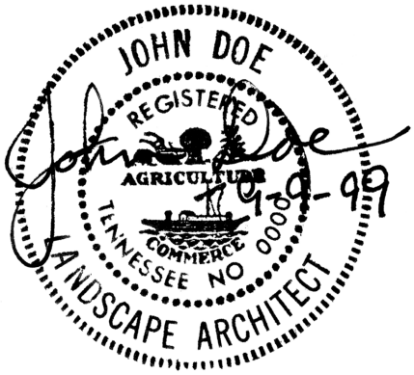
Example of a Properly Signed and Dated Seal

Architect



Engineer

Landscape Architect



APPENDIX E

Several code references in this appendix likely require updating.

COVER SHEET FOR PLANS SUBMISSIONS

PROJECT NAME:

PROJECT ADDRESS:

PROJECT DESCRIPTION (Scope of Work):

FIRE DISTRICT:

PROJECT CONTACT PERSON: (Registered Architect or Professional Engineer in Responsible Charge)

****

ARCHITECTS/ENGINEERS/LANDSCAPE ARCHITECTS: List all names and pertinent information for each registrant (architect, engineers, and landscape architect) involved in the project. Include each engineering discipline represented in the project (civil, electrical, mechanical, plumbing, structural)

Name: _____

Company Name: _____

Phone (including area code): _____ (ofc.)

_____ (fax)

E-Mail Address (if applicable) _____

Tennessee License Number: _____

Design Codes/Edition ICC _____ SBCCI _____ NFPA _____

Handicapped Code Edition Used NCHC _____ CABO/ANSI _____

Type of Construction ICC _____ SBCCI _____ NFPA _____

Occupancy Group(s) ICC _____ SBCCI _____ NFPA _____

Number of Stories (**excluding basement unless educational or assembly occupancy)** _____

Height of Building from Average Grade _____

Building Area Per Story _____ Existing _____ Proposed _____

Occupant Load Per Floor ICC _____ SBCCI _____ NFPA _____

Required Exit Width Per Floor ICC _____ SBCCI _____ NFPA _____

Number of Parking Spaces Required _____ Proposed _____ Handicapped _____

Van _____

Fire Protection hourly ratings for all structural components and separation of hazards components required by the applicable building code.

_____ Edition of the SBC _____ Edition of the IBC

_____Columns	_____ Beams	_____ Walls
_____Floor/Ceiling	_____ Roof/Ceiling	_____ Roof Covering
_____Corridors	_____ Shaft Enclosures	_____ Stair Enclosure

_____Tenant Separations _____ Occupancy Separations

Sprinkler System Type _____ **Standpipe System** _____

Fire/Smoke Alarm System: _____

Abbreviations Used and Meaning: _____

WATER SUPPLY DATA (FROM NEAREST HYDRANT TO SITE)

Provide the following flow test data on the plans for hydrant(s) used to meet the 500 feet or less hose lay requirement in accordance with the local authority having jurisdiction. [State Fire Marshal's Office Policy based on NFPA 24 4.2.1]. Show flow test data next to the hydrant tested. Flow test must have been conducted within the last six months from start of design process.

a. Static pressure _____psi
   Residual pressure _____psi (20 psi minimum)
   Flow _____ gpm (500 gpm minimium)
   Tennessee Department of Environment and Conservation Rules and Regulations 1200-5-1-.17, paragraph 18.

b. Party responsible for taking test (name and address)
   _____
   _____

c. Date test taken: _____ Time test taken: _____am/pm

d. Elevation of test hydrant: _____

General Notes:

- Identify use of rooms and spaces.
- Show area increase calculations per SBC 503.3 and SBC 503.4 or ICC
- Show wall ratings on structural, mechanical, plumbing, electrical, and fire protection drawings.
- Provide design live load values on plans for wind, snow, roof, floor, stairs, guard and hand railings, seismic per SBC 1607.1.2, etc. [SBC Chapter 16] or ICC
- Identify any exceptions/appeals/equivalencies and authority granting approval.

Note: This plans cover sheet was developed during discussions with the State Fire Marshal's Office and local Codes Enforcement Officials and should be used as a guideline when submitting plans to the designated reviewing authority.

APPENDIX F

DIVISION OF FIRE PREVENTION/CODES ENFORCEMENT
PLANS REVIEW POLICY FOR REVIEW OF SPRINKLER SHOP DRAWINGS

Pursuant to Tennessee Code Annotated, Section 62-32-112, a registered fire protection sprinkler system contractor, through its responsible managing employee, may submit shop drawings of proposed fire protection sprinkler system installations in projects whose construction plans and specifications are subject to review by the Division. After receipt of the shop drawings, the Division must review the drawings and may approve or disapprove the shop drawings.

The above-cited section is not intended to circumvent the requirement for plans prepared and sealed by registered architects and/or engineers where appropriate; rather, the section is intended to allow the sprinkler system contractor to submit shop drawings to provide for the installation of the sprinkler systems. These drawings should be coordinated with the architect or engineer of record. The architect or engineer of record should always provide the design intent of the system and should review and approve or disapprove the shop drawings submitted by the sprinkler system contractor. Attached and incorporated herein by reference is a copy of the policy of the Tennessee State Board of Architectural and Engineering Examiners which sets forth the architect's or engineer's design responsibilities concerning sprinkler drawings. The goal is for the design drawings to provide sufficient information to indicate compliance with applicable building codes and ensure that the builder or installing contractor will not be required to make design decisions. The registered architect or engineer should also provide design from the point of service—that point at which the system is dedicated solely to fire protection—to the building.

To that end, the Division of Fire Prevention will accept shop drawings submitted by sprinkler system contractors. It will review such shop drawings and shall require the seal of a registered architect or engineer where engineering design is involved, as authorized by Tennessee Code Annotated, Section 62-32-112.

Adopted 4-10-97

Several code references in the Standard of Care likely require updating.

STANDARD OF CARE
FOR FIRE SPRINKLER SYSTEM DESIGN
(Effective January 1, 2006)

COMMENTARY

> This standard of care is intended to be utilized only by engineers for the design of fire sprinkler systems. The standard is not intended for use by others as a code compliance checklist or to replace existing regulatory agency checklists. This standard was developed to assist in design and preparation of contract documents for fire sprinkler systems. This commentary and associated standard is the Board's policy regarding the responsibilities and interactions of an engineer with the design and construction team.

The Standard of Care for Fire Sprinkler Systems Design complements NFPA 13, Chapter 14, Appendix "A" (A-14.1 Preliminary Plans, 2002 edition), and should be interpreted only as a minimum standard of design. Just as the National Fire Protection Association standards are a minimum requirement, so is the Standard of Care for engineers. The engineer is required to evaluate local job conditions for the fire sprinkler system design and coordinate with authorities having jurisdiction (AHJ).

The Design Concept in the Standard of Care refers to those inputs and calculations initially done by the engineer to develop the conceptual ideas and limitations of the system (i.e. the density, water flow, and pressure requirements; classification of the commodities to be protected; and confirmation of the hydraulic data and preliminary hydraulic design). Initial design calculations will be included in the Design

Concept. In a building with several different occupancies and fire loadings, only the area of highest demand needs to be calculated.

The engineer shall establish a margin of safety between the available water pressure and the required demand pressure. When sizing pipe using the initial design calculations, the engineer should leave more safety margin than the contractor. The difference is that the contractor's calculations will enumerate the various fittings and offsets that may not be delineated in the engineer's preliminary design.

A substantial deviation, such as a contractor's proposal for a major design change, should be recalculated and redrawn by the contractor's own Responsible Managing Employee (RME). The RME will certify his changes and submit for approval. If a competent sprinkler contractor submits a reasonable proposal for change, and if the contractor's drawings and calculations meet all the requirements of the engineer's design, and there is not a valid reason why the engineer has used a different layout configuration, the engineer should accept the contractor's drawings and calculations.

Field changes may not require recalculation by the engineer. Deviations in the field such as offsets around ductwork should be anticipated. Initial design calculations by the engineer containing a reasonable, practical pressure safety margin should cover these. Substantial deviations could require the contractor to prove his calculations are still adequate to provide the protection stipulated in the design documents.

The shop drawings and calculations should be submitted to the engineer of record prior to transmittal to the reviewing authorities for documentation and approval. The engineer of record will document his review of the shop drawings and calculations, using a review stamp. This is an engineer's acceptance, acceptance as noted, rejection, or revise and resubmit, etc. of the shop drawings. This is based on review of the shop drawings against the design concept identified in the preliminary plans. The engineer should never place his P. E. seal on the sprinkler contractor's drawings or calculations unless he actually prepared them or supervised their preparation. The reviewing authorities may accept the sprinkler contractor's drawings and calculations even if different from the preliminary design submitted by the engineer, as long as they have been approved by the engineer of record.

The water supply information and flow testing addressed in the Standard of Care requires a flow test less than six months old. The engineer should supervise the performance of the flow test and/or will verify the accuracy of the test during preliminary design.

The engineer's drawings should clearly indicate the point that the licensed plumbing or site utilities contractor's work stops and the licensed fire sprinkler contractor's work begins. Note that the fire service piping is required to be installed and certified by a licensed fire sprinkler contractor. The point of service is defined in state law, including but not limited to, Tennessee Code Annotated, Title 62, Chapter 32 (Fire Sprinkler Contractors) and Rules Chapter 0780-2-7-.01 (Definitions) of the Department of Commerce and Insurance. The drawings are to be prepared to assure continuity in materials and performance in accordance with the various codes, especially National Fire Protection Association, Standards 13 and 24.

STANDARD OF CARE
The Design Concept (Bid Package)

I. The Engineer develops the conceptual ideas and limitations of the system. Plans shall be drawn to an indicated scale, on sheets of uniform size, with a plan of each floor, and shall show those items from the following lists that pertain to the design of the system:

    1. Size and location of all risers, mains, and branch lines as required to provide preliminary hydraulic calculations (See Commentary and Section III).
    2. Size, type (i.e. wet, dry, deluge, pre-action, etc.), and location of risers and standpipes with description and arrangement of valving and accessories, including location of any and all hose valves, alarms and signal devices. Include area protected by each riser, each system, and each floor.
    3. The location and size of the hydraulically most remote area.

4. A description of Occupancy and Commodity classifications.
5. Preliminary hydraulic calculation results including, required design density, area of application, required hose stream, and required duration.
6. Clear statement on the required water supply margin of safety between the required water supply (including hose-streams) and the available supply. A suggested safety margin is a 5% difference between the system demand and the available water supply.
7. Type and finish of sprinkler heads in finished areas. Verify if specific sprinkler head location parameters exist.
8. Clear statement on any required seismic bracing. A statement to the effect of, "Install seismic bracing per NFPA 13" is *not* acceptable as NFPA 13 describes only how to install bracing.
9. Fire pump (if required) room layout, fire pump and controller specification, and transfer switch.
10. Standpipe design (if required) must be clearly delineated on the drawings.
11. A completed Owner's certificate. See NFPA 13, 2002 edition, Figure A.14.1(b) Owner's Information Certificate.

It is understood that, for many projects, a total design package prepared by a design team of various disciplines will be completed. These design documents may consist of multi-disciplinary drawings and specifications, and shall show:

12. Name of owner and occupant.
13. Location, including street address.
14. North arrow.
15. Construction type, building height in feet, building area, and occupancy of each building.
16. Full height cross section, or schematic diagram, including structural member information if required for clarity and including ceiling construction and method of protection for nonmetallic piping.
17. Building features such as combustible concealed spaces, floor openings, window openings, areas subject to freezing, and areas from which it is intended to omit sprinkler protection.
18. Location of fire barriers and their fire resistance rating.
19. Proposed location and approximate size, if a water supply employing pumps or tanks is contemplated.
20. Name and address of party submitting the preliminary plans.
21. Tentative location of underground major piping, including mains, risers, overhead mains, and fire department connections.

II. Site plans (may be combined with floor plans) contain information pertinent to the proper operation of suppression systems. Information below, with the appropriate details, is required:

1. Size and location of water supplies.
2. Size and location of all piping indicating, where possible, the class and type of new pipe to be installed, and the depth to which it is to be buried.
3. Size, type, and location of valves. Indicate if located in pit or if operation is by post indicator or key wrench through a curb box.
4. Size, type, and location of meters and backflow prevention devices.
5. Size, type, and location of hydrants. Include number and size of outlets. Indicate if hose houses and equipment are to be provided and by whom.
6. Size and location of standpipe risers, hose outlets, monitor nozzles, and related equipment.
7. Location of Fire Department connections; if part of private fire service main system, including detail of connections.
8. Water supply information:
    a. Information regarding whether the main is circulating or dead-end.
    b. Pressures under flowing and static conditions. Information on orifice size and co-efficient of orifice used in the test, and pitot pressure.
    c. Elevations of slabs, floors, ceilings, street main connection, test hydrant, etc.
    d. Information on who conducted the flow test, when, and where the test was conducted. If reliable or current (less than six months old) information is not available, the engineer should supervise the performance of a new flow test and/or will verify the accuracy of a new flow test during preliminary design.

III. Preliminary hydraulic calculations.

1. The Engineer shall prepare and submit preliminary hydraulic calculations proving availability of adequate water, (volume, duration, and pressure) for protection of the area of greatest demand.

IV. Specifications

1. Specifications shall be prepared for fire protection the same as for any other portion of the project.

V. Engineer's Seal

1. The engineer of record submitting fire protection system design construction documents shall seal, sign, and date each page or sheet of drawings and the first page of specifications and calculations.

VI. Legend

1. The engineer's drawings should clearly indicate the point that the licensed plumbing or site utilities contractor's work stops and the licensed fire sprinkler contractor's work begins. Note that the fire service piping is required to be installed and certified by a licensed fire sprinkler contractor. The point of service is defined in state law, including but not limited to, Tennessee Code Annotated, Title 62, Chapter 32 (Fire Sprinkler Contractors) and Rules Chapter 0780-2-7-.01 (Definitions) of the Department of Commerce and Insurance.

Adopted 11-1-90
Revised and adopted 9-20-02
Revised and adopted 1-20-05
Revised and adopted 10-17-08

APPENDIX G

Several code references in this policy likely require updating.

ENGINEERING EXEMPTION POLICY
FOR FIRE SPRINKLER SYSTEM DESIGN
(Effective April 1, 2006)

This policy works in conjunction with the Engineering Exemption Policy for Fire Sprinkler Design Decision Trees. The Decision Trees should be referred to first to determine the parameters for use of this policy (see list at the end of this policy). Please note that the head counts in this policy are based on standard sprinkler heads and not extended coverage sprinkler heads. The installation of a sprinkler system in a non-sprinklered existing building which is required due to a change of occupancy or building renovation will automatically fail the System Capacity test.

1: NEW BUILDING CONSTRUCTION REQUIRING SPRINKLERS.
New building construction AND ADDITIONS OF 5,000 SF OR MORE will require the services of a Professional Engineer, competent in Automatic Fire Sprinkler design, for the design of the new fire sprinkler system. These services shall be provided in accordance with **T.C.A. § 62-2-102** [Practice and persons exempt from registration].

2: RENOVATION OF AN EXISTING FIRE SPRINKLER SYSTEM.
If there is no occupancy classification change and adequate capacity has been determined, a Professional Engineer, competent in Automatic Fire Sprinkler design, shall not be required unless the Automatic Fire Sprinklers to be installed or modified in the renovation exceed the following:

A. Light Hazard	225 Sprinkler Heads
B. Ordinary Hazard	225 Sprinkler Heads
C. Extra Hazard	225 Sprinkler Heads
D. High Pile Storage	400 Sprinkler Heads

3: UPGRADING AN EXISTING AUTOMATIC FIRE SPRINKLER SYSTEM.
If there is no occupancy classification change and adequate capacity has been determined, a Professional Engineer, competent in Automatic Fire Sprinkler design, shall not be required unless the Automatic Fire Sprinklers to be installed or modified in the renovation exceed the following:

A. Light Hazard	225 Sprinkler Heads
B. Ordinary Hazard	225 Sprinkler Heads
C. Extra Hazard	225 Sprinkler Heads
D. High Pile Storage	400 Sprinkler Heads

4: NON-SPRINKLERED EXISTING BUILDING.
If an owner elects to install an automatic fire sprinkler system in a non-sprinklered building, which under current code compliance analysis would not require an automatic sprinkler system, it shall not require the services of a Professional Engineer, competent in Automatic Fire Sprinkler design, unless the Automatic Fire Sprinklers to be installed in the new system exceed the following:

A. Light Hazard	225 Sprinkler Heads
B. Ordinary Hazard	225 Sprinkler Heads
C. Extra Hazard	225 Sprinkler Heads
D. High Pile	400 Sprinkler Heads

Classifications are as outlined in current NFPA13 standards.

The Owner or his agent has the option to hire the services of a Professional Engineer, competent in Automatic Fire Sprinkler design, or a Licensed Fire Sprinkler Contractor to prepare the Design Concepts in:

- RENOVATION OF AN EXISTING FIRE SPRINKLER SYSTEM,
- UPGRADING AN EXISTING AUTOMATIC FIRE SPRINKLER SYSTEM, or
- NON-SPRINKLERED EXISTING BUILDING (BY CODE NOT REQUIRING SPRINKLERS).

If the total fire sprinklers exceed the parameters of this policy, a licensed Fire Sprinkler Contractor is not authorized to prepare the Design Concept.
If an Automatic Fire Sprinkler Contractor prepares the Design Concept, the adopted Board of Architectural and Engineering Examiners Board Standard of Care should be followed in preparing the Design Concept.

Installation of Fire Sprinkler Systems in One-and-Two Family Dwellings and Manufactured Homes shall be installed in accordance with NFPA 13-D and shall not be part of this policy.

DEFINITIONS:

ADEQUATE CAPACITY. The existing public water supply or the current system configuration will serve the proposed renovations, upgrades, or additions to the structure. Adequate capacity can be calculated by an RME or PE and submitted to the AHJ for approval.
AHJ (AUTHORITY HAVING JURISDICTION). The organization, office, or individual responsible for approving equipment, materials, an installation, or a procedure. The phrase "authority having jurisdiction" is used in NFPA documents in a broad manner, since jurisdictions and approval agencies vary, as do their responsibilities. Where public safety is primary, the authority having jurisdiction may be a federal, state, local, or other regional department or individual such as a fire chief; fire marshal; chief of a fire prevention bureau, labor department, or health department; building official; electrical inspector; or others having statutory authority. For insurance purposes, an insurance inspection department, rating bureau, or other insurance company representative may be the authority having jurisdiction. In many circumstances, the property owner or his or her designated agent assumes the role of the authority having jurisdiction; at government installations, the commanding officer or departmental official may be the authority having jurisdiction. Source: NFPA 1.
BUILDING. Any structure used or intended for supporting or sheltering any use or occupancy. Source: Life Safety Code (NFPA 101), 2003 edition.
BUILDING OFFICIAL. The officer or other designated authority charged with the administration and enforcement of this code, or a duly authorized representative. Source: International Building Code.
COMMODITY. Combinations of products, packing material, and container upon which the commodity classification is based. Source: NFPA 13.
FIRE CODE OFFICIAL. The fire chief or other designated authority charged with the administration and enforcement of the code, or a duly authorized representative. Source: International Fire Code.
FIRE PROTECTION SPRINKLER SYSTEM CONTRACTOR. A person who contracts, offers to contract, or represents that such person is able to contract with a general contractor, subcontractor, or the general public for the undertaking of the sale, installation or service of a fire protection sprinkler system or any part thereof, or who actually installs or services a fire protection sprinkler system, provided that an owner of real property on which a fire protection sprinkler system is located, or a full-time employee of the owner of real property on which a fire protection sprinkler system is located, may perform simple maintenance of the fire protection sprinkler system, such as replacing a sprinkler head. Source: T.C.A. Section 62, Chapter 32.
HAZARD CLASSIFICATIONS: Light Hazard Occupancies -- Occupancies or portions of other occupancies where the quantity and/or combustibility of contents is low and fires with relatively low rates of heat release are expected. Ordinary Hazard Occupancies – • Ordinary Hazard (Group 1). Occupancies or portions of other occupancies where combustibility is low, quantity of combustibles is moderate, stockpiles of combustibles do not exceed 8 ft (2.4 m), and fires with moderate rates of heat release are expected. • Ordinary Hazard (Group 2). Occupancies or portions of other occupancies where the quantity and combustibility of contents are moderate to high, stockpiles do not exceed 12 ft (3.7 m), and fires with moderate to high rates of heat release are expected.

Extra Hazard Occupancies --

- Extra Hazard (Group 1). Occupancies or portions of other occupancies where the quantity and combustibility of contents are very high and dust, lint, or other materials are present, introducing the probability of rapidly developing fires with high rates of heat release but with little or no combustible or flammable liquids.
- Extra Hazard (Group 2). Occupancies or portions of other occupancies with moderate to substantial amounts of flammable or combustible liquids or occupancies where shielding of combustibles is extensive.

High-Piled Storage -- Solid-piled, palletized, rack storage, bin box, and shelf storage in excess of 12 ft (3.7 m) in height. Source: NFPA 13.

OCCUPANCY CLASSIFICATION. The purpose for which a building or portion thereof is used or intended to be used. Source: Life Safety Code (NFPA 101), 2003 edition.

PE (PROFESSIONAL ENGINEER). An individual who is registered to practice engineering by the Board of Architectural and Engineering Examiners.

RENOVATION. The act of improving by renewing and restoring. Source: Model building code and sprinkler standards (defined in accordance with the latest adopted by the Tennessee State Fire Marshal's Office).

RME (RESPONSIBLE MANAGING EMPLOYEE). An individual who is, or is designated to be, in active and responsible charge of the work of a fire protection sprinkler system contractor. Source: T.C.A. Section 62, Chapter 32.

STANDARD SPRINKLER HEAD. A standard, fast, or quick response fire sprinkler head that does not include an extended coverage head as defined by NFPA 13.

STRUCTURE. That which is built or constructed. Source: Life Safety Code (NFPA 101), 2003 edition.

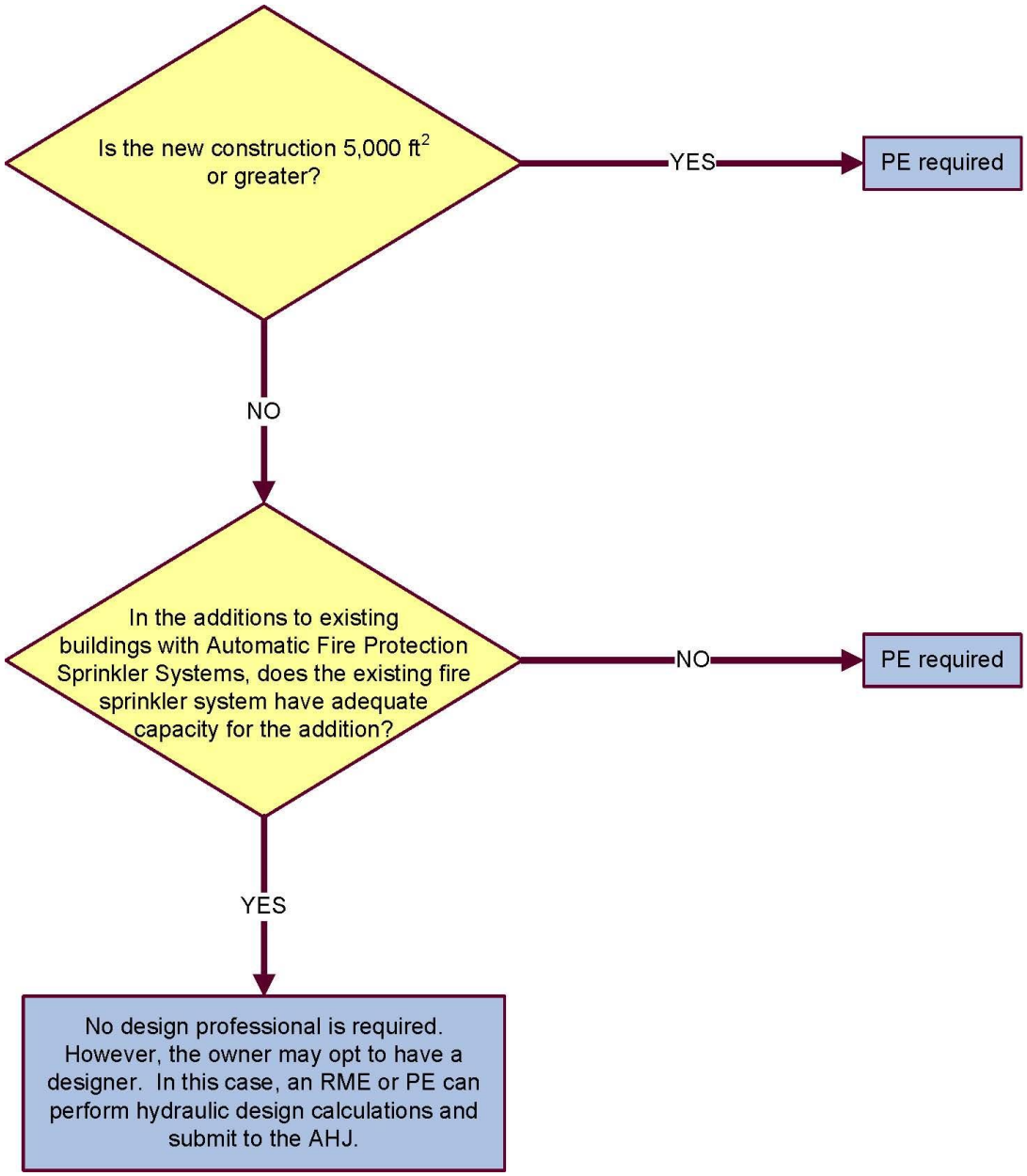
UPGRADE (upgraded, upgrading, upgrades). To raise to a higher grade or standard. Source: Model building code and sprinkler standards (defined in accordance with the latest adopted by the Tennessee State Fire Marshal's Office).

Adopted 8-25-05

Engineering Exemption Policy for Fire Sprinkler Design Decision Trees

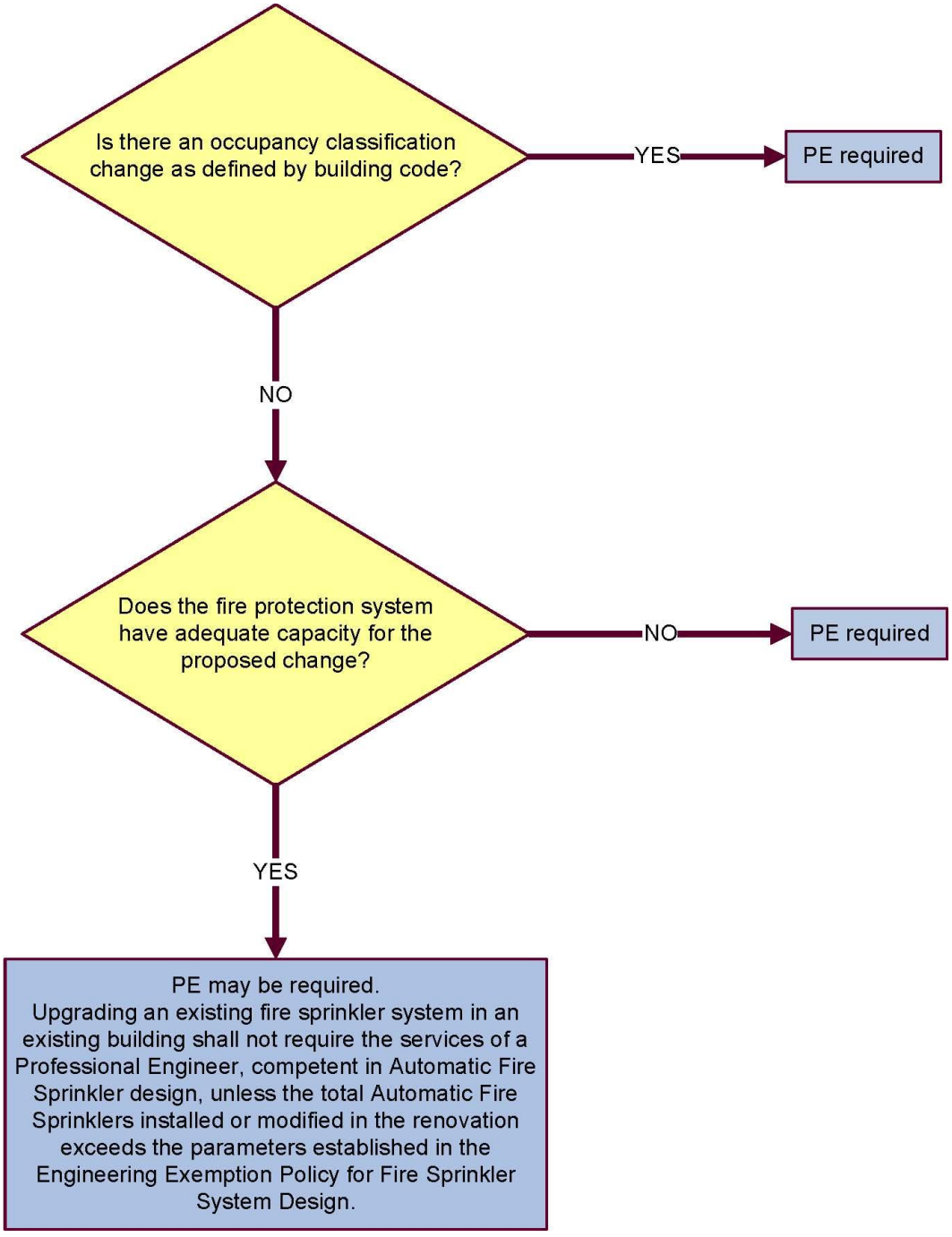
Engineering Exemption Policy for Fire Sprinkler Design Decision Tree

Fire Sprinkler System – New Construction Including Additions



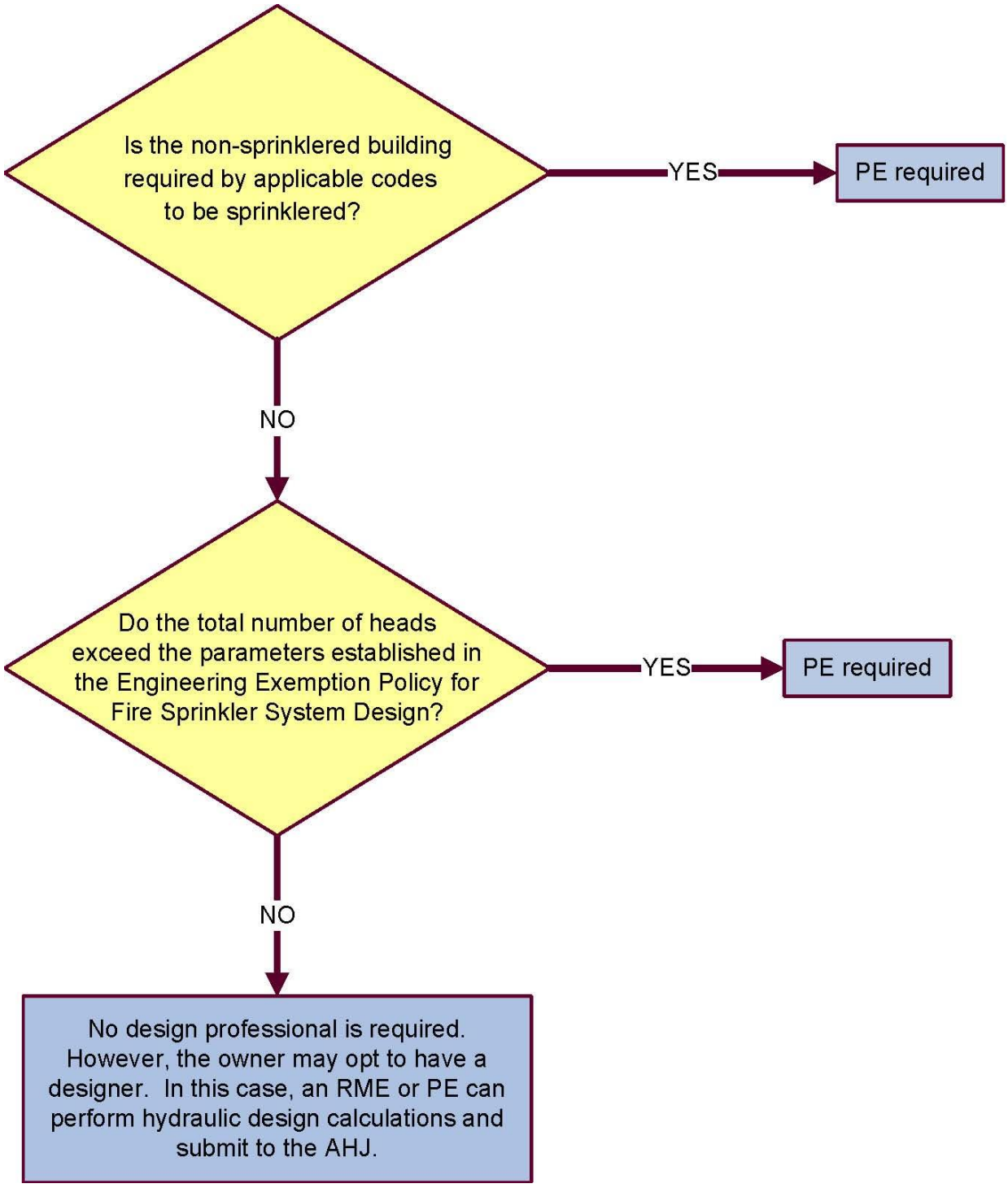
This Decision Tree is the companion document to the Engineering Exemption Policy for Fire Sprinkler System Design.

Fire Sprinkler System – Renovation/Upgrade (no occupancy change)

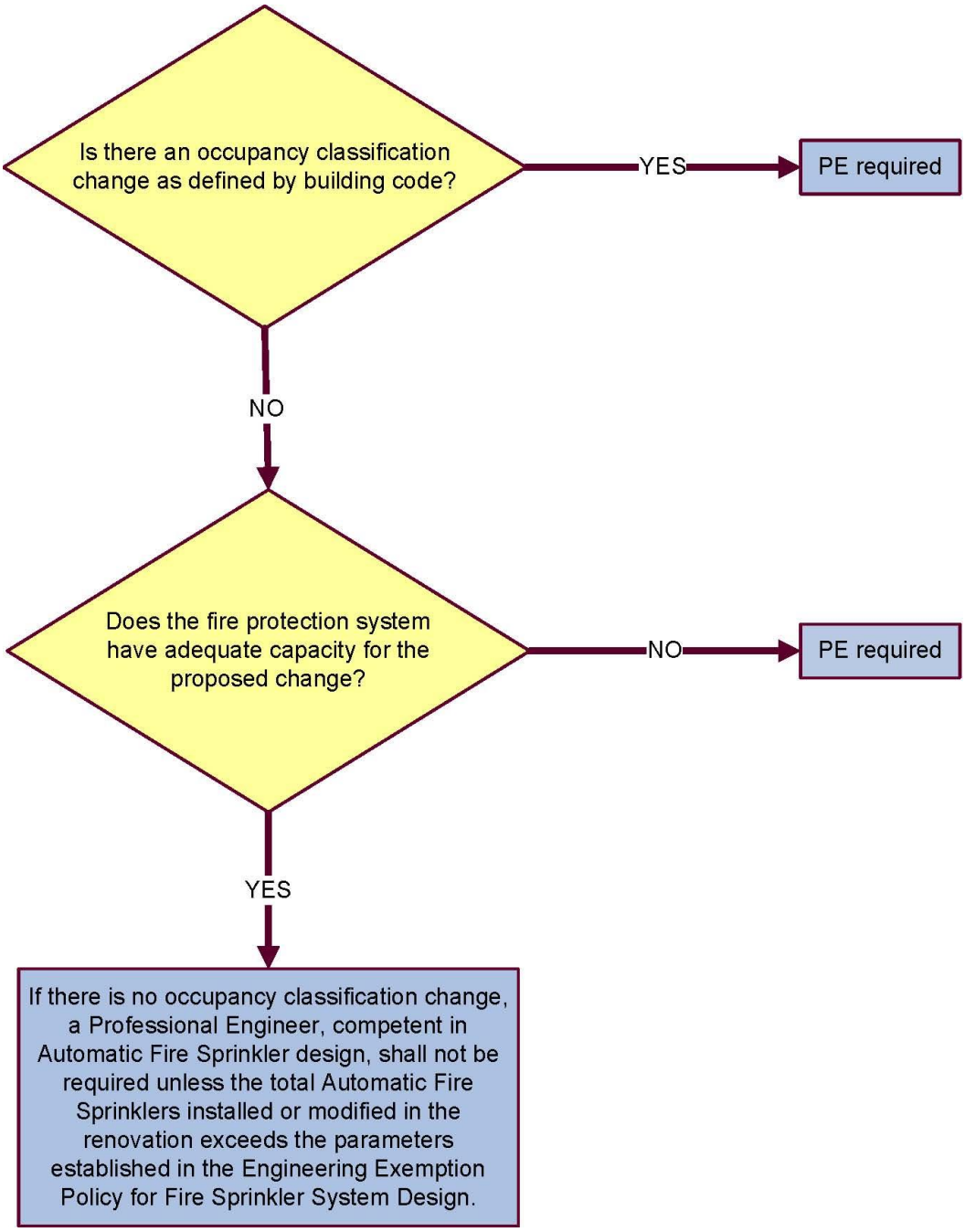


This Decision Tree is the companion document to the Engineering Exemption Policy for Fire Sprinkler System Design.

Fire Sprinkler System – Existing Non-Sprinklered Building



Fire Sprinkler System – Occupancy Classification Change



This Decision Tree is the companion document to the Engineering Exemption Policy for Fire Sprinkler System Design.

APPENDIX H

DESIGN AND PRACTICE POLICIES

Several policies may need to be added or revised.

I. AS-BUILT DRAWINGS

As-built drawings are often used to document how an existing structure, building site, or other development project was constructed.

The Board does not consider the representation of what was believed to be constructed to be the practice of architecture, engineering or landscape architecture. Therefore, the Board does not require that these drawings bear the seal of a design professional. However, occasions may arise when a registered design professional is required to seal such drawings. In such cases, a caveat should be included on the sealed as-built drawings, incorporating the following factors as applicable:

- This as-built drawing is a compiled representation of the constructed project.
- The sources and the basis of information used in the preparation of this as-built drawing are as follows: (insert appropriate sources, such as field inspector's notes, contractor's notes, field measurements, etc.).
- This as-built drawing is believed to be correct to the best of the professional's knowledge.

Adopted 5-22-08

II. ASBESTOS ABATEMENT DESIGN POLICY STATEMENT

Where asbestos abatement design involves the design or modification of buildings, building systems, (including, but not limited to fireproofing, fire protection systems, building ventilation systems, and fire resistive construction), and utilities, or the consequent refitting of buildings, it constitutes the practice of architecture or engineering. Subject to the exemptions listed in Tennessee Code Annotated (T.C.A.), Sections 62-2-102 and 62-2-107, asbestos abatement project drawings and specifications which deal with the design or modification of buildings, building systems, and utilities, or the refitting of buildings shall be prepared by a registered architect or engineer with competence and expertise in asbestos abatement. All such drawings shall, in accordance with T.C.A. Sections 62-2-306(b) and Rule 0120-2-.08 (Seals), bear the seal and signature of the registrant.

The above policy notwithstanding, the Board recognizes that certain aspects of asbestos abatement design which do not involve the design or modification of buildings, building systems, and utilities, or the consequent refitting of buildings may be addressed by a qualified certified industrial hygienist, as certified by the American Board of Industrial Hygiene. A certified industrial hygienist with competence and expertise in asbestos abatement design may develop a written plan and specifications for selection of personal protective equipment, employee training, medical surveillance, employee and equipment decontamination procedures, analytical requirements for monitoring, employee and area monitoring, temporary containment and negative pressure systems, work area clearance, and record keeping.

In addition, the inspection and collection of data as to possible existing asbestos in structures may be performed by a properly trained nonregistrant. Management plans and operation and maintenance plans should be prepared by a qualified registered architect or engineer or by a qualified certified industrial hygienist.

Adopted 1/26-27/89
Revised and adopted 3-30-90
Revised and adopted 10-30-91

III. CONSTRUCTION DOCUMENTS AND USE OF THE SEAL

Pursuant to Rule 0120-2-.08(2)(a), the registrant is required to stamp with his/her seal all original sheets of any bound or unbound set of construction documents. The Board considers that some drawings or sketches are not in the construction documents category when they communicate concepts only and are not to be used for consideration in a machine, process or building project. However, any drawings prepared for the purpose of formal submittal to regulatory authorities (i.e., codes, fire marshals, etc.) as representative of fabrication or construction must be sealed by the registrant. It is recommended that drawings that are not construction documents be clearly designated "preliminary – not for construction" or by some other means indicating the drawings are not complete.

For the purpose of this policy, "working drawings or plans" means "construction documents."

Adopted 4-28-88
Revised and adopted 10-4-97
Revised and adopted 04-25-02
Revised and adopted 05-18-06

IV. DELINEATION OF ENGINEERING AND SURVEYING

In rural areas regarding subdivision development of property, an issue has arisen between surveyors and engineers wherein the surveyors feel they should take responsibility for engineering design because engineering expertise is not available and the importance of such engineering expertise is questionable. Engineers do not subscribe to this extension of the responsibilities of surveyors into their practice.

On September 17, 1987, three members of the State Board of Architectural and Engineering Examiners (Messrs. Lannom, Adsit, and Wynne) met with the Honorable Bill Richardson, Tennessee State Senator, to discuss his original intent in the delineation of the two professions during the Senate's deliberations in 1976, when the surveyors' law was passed.

The language below is the A/E Board's interpretation of the delineation of engineering and surveying:

1. Land surveying, measurement and calculation of areas, boundaries, property lines, the subdivision of property and the plotting thereof must be done by a surveyor and his drawing must bear his seal.

2. Subdivision road alignment, road grades, cutting and filling of subdivision lots, and changes to the topography which involves a final grading plan may be performed by either an engineer or a surveyor; the designer's seal must be applied to the drawing. In localities where instability of final grades and slopes requires analysis of soils to prevent conditions hazardous to life and property, design of roads, slopes, ditches, and building sites must be done by an engineer.

3. Culverts, storm drainage pipes, water lines, sewer lines, electric power lines or other utilities not existing prior to development shall not be shown on a subdivision drawing unless that drawing bears the seal of the engineer who designed them.

4. The issue of whether or not the design of storm water drainage systems may be conducted by a licensed land surveyor was addressed in an opinion by the Attorney General's Office on February 9, 2004 (Opinion No. 04-018). That Opinion answers the question: "Does the statute (Tenn. Code Ann. §62-18-102(3), defining the "practice of land surveying") allow land surveyors to conduct and perform drainage design and calculations required for the construction of

subdivisions, including determining the detention and retention of storm water as well as determining the size of ponds, basins, pipes and culverts which hold and through which storm water will flow?" The Opinion concludes, based on its analysis and past authorities, that a licensed land surveyor **who is not a registered engineer** may not conduct drainage design and calculations of this kind. The Tennessee State Board of Architectural and Engineering Examiners agrees with this opinion.

Adopted 1-26-90
Revised and adopted 10-4-97
Revised and adopted 7-10-08

V. DESIGN COMPETITIONS/REQUESTS FOR PROPOSALS (RFP)/REQUESTS FOR QUALIFICATIONS (RFQ)

A person who is properly registered or licensed as an architect, engineer or landscape architect in another jurisdiction but who is not registered in Tennessee may participate in a design competition or submit RFPs or RFQs in Tennessee so long as prior to participating in the design competition or submitting RFPs or RFQs, the person files an application for registration (without the application fee and supporting documentation) with the Board and certifies therein his or her intent to complete the application process and obtain registration in Tennessee prior to executing any contract that may result from the design competition, RFP or RFQ. In no event may a person who is not registered by the Board enter into a contract to provide architectural, engineering or landscape architectural services in Tennessee.

Adopted 1-19-06
Revised and adopted 2-19-09

VI. DESIGN/BUILD BY CONTRACTORS

Contractors, without in-house registrants, offering "design/build" services are in no way authorized to perform actual architectural, engineering, or landscape architectural services. Such professional services must be performed by duly qualified registrants in conformity with the provisions of Tennessee Code Annotated (T.C.A.), Title 62, Chapter 2, and the Board's Rules of Professional Conduct.

Contractors may offer "design/build" services to the public without having to comply with the firm disclosure and supervision requirements of T.C.A., Title 62, Chapter 2, Part 6, provided no "architectural," "engineering," or "landscape architectural" services are offered in-house. In such event, any contractor without in-house registrants offering design/build services should have organized the design team, comprised of Tennessee registered architects, engineers and landscape architects competent in the work to be performed, prior to the time services are formally proposed. Additionally, qualified Tennessee registrant(s) shall be involved in any activity in preparation for or leading to a signed contract. Members of the design team should be included in any meeting with clients in which the project is discussed.

Any plans, specifications, and/or reports which are part of a proposal, and all subsequent construction documents, shall be prepared and sealed by the registrant(s) having responsible charge of the project. Any person offering design/build services should make every effort to ensure proper coordination of design drawings for the project.

Adopted 10-22-92
Revised and adopted 7-18-97
Revised and adopted 4-25-02
Revised and adopted 1-9-03

VII. DRAFTING FIRMS AND SPECIFICATION WRITERS

As Computer Aided Design (CAD) and drafting play an ever expanding role in our professions, questions arise as to the relationship of these systems to the requirements of the registration law. Among these questions is that of the role of businesses providing drafting services to professional offices. These drafting/CAD services are either by traditional manual methods or by the use of CAD equipment. At the July 31, 1987, meeting, the Board stated the following policy in this regard:

1. The drawings prepared by the drafting service are to be taken from complete information provided by the registrant whose seal will appear on the drawings.

2. The drafting or CAD firm's preparation shall not consist of any original or design work whatsoever produced by that drafting firm, including decisions for use of previously drawn or stored work. The registrant shall retain documented evidence to prove the source of such original or design work is that of the registrant.

This policy also applies to specification writers.

Adopted 7-31-87
Revised and adopted 9-29-95
Revised and adopted 10-4-97
Revised and adopted 4-25-02

VIII. EXPERT TESTIMONY

A person testifying as an expert witness is not required to be registered in Tennessee, so long as the person does not misrepresent his or her credentials as being registered in Tennessee, the person does not present a written document that would be required to be sealed, and the person does not do any other act that would constitute the practice of architecture, engineering, or landscape architecture pursuant to *Tennessee Code Annotated* Title 62, Chapter 2.

Adopted 1-19-06

IX. MULTIPLE REGISTRANTS' SEALS ON A DOCUMENT

If a registrant has been in responsible charge of work done on a document, the registrant's seal should be on it. Where multiple registrants in responsible charge provide content on the same document, all such registrants should seal the document, and, if there is any question, description of the areas of responsibility should be included.

Cover Page: A registrant is not required to seal the cover page of a set of construction documents unless the cover page contains architectural, engineering, or landscape architectural information (i.e. building code information). All registrants in responsible charge who work on a set of specifications are required to seal either the cover page of the specifications, or the cover page(s) for the section(s) of the specifications they produce.

For the purpose of this rule, "working drawings or plans" means "construction documents."

Adopted 1-26-89
Revised and adopted 10-4-97
Revised and adopted 4-23-98
Revised and adopted 4-25-02
Revised and adopted 5-18-06
Revised and adopted 7-20-06

X. ONE-FAMILY AND TWO-FAMILY DWELLINGS

In keeping with the definitions in the 1985 edition of the Standard Building Code, the Board defines a “one-family or two-family dwelling” [T.C.A. Section 62-2-102(b)(2)] as a structure occupied exclusively for residential purposes by not more than two families. A townhouse is considered a single-family dwelling unit constructed in a series or group of attached units with property lines separating such units. The common wall between townhouses must be designed with the minimum fire-rated separation required by the applicable code.

The following are not considered to be one-family or two family dwellings:

- A lodging house, which is defined as any building or portion thereof containing not more than five guest rooms which are used by not more than five guests where rent is paid in money, goods, labor or otherwise.
- An apartment house or multiple dwelling, which is defined as any building or portion thereof used as a multiple dwelling for the purpose of providing three or more separate dwelling units which may share means of egress and other essential facilities.

Note: A “dwelling unit” is defined as a single unit providing complete, independent living facilities for one or more persons, including permanent provisions for living, sleeping, eating, cooking and sanitation.

Adopted 6-25-09

XI. ORIGINAL SHEETS, DEFINITION OF

The words "all original sheets" in Rule 0120-2-.08(2)(a) mean "tracings or reproducible sheets."

Adopted 5-10-91

XII. PROTOTYPICAL PLANS, COMPUTER AIDED DESIGN, AND UNITED STATES POSTAL SERVICES KIT OF PARTS

The substantial portion of any project sealed by an architect, engineer, or landscape architect should be developed under his or her responsibility. The use of predrawn detail items or detail units by a registrant who has reviewed and accepted same, as long as the health, safety, and welfare of the public are protected, is allowed.

Adopted 3-30-90
Revised and adopted 10-4-97
Revised and adopted 4-25-02

XIII. PUBLIC WORKS - STRUCTURAL/WATER LINES

The term "structural" in Tennessee Code Annotated, Section 62-2-107(b), shall not include single water lines not more than 3,000 feet serving up to ten homes. (This does not include wastewater line extensions.)

NOTE: The Board's policy is based on its opinion that the above-described water line is clearly “civil" in nature, rather than "structural." This interpretation is confined to T.C.A., Section 62-2-107(b) and is not to be construed as addressing any other provision of state law.

Adopted 4-30-92

XIV. REVISIONS TO PLANS PREPARED BY PRIOR REGISTRANT

A registrant is prohibited from sealing plans originally prepared by a person not under the registrant’s responsible charge, whether or not that person is another registrant. In special circumstances, specifically where the first registrant has changed employment or is deceased, a

second registrant may perform work on a set of plans originally prepared by another registrant. If the plans are incomplete (are at a stage prior to submittal to a reviewing official), the second registrant may not seal the set of drawings prepared by the first registrant; rather, the second registrant must take all steps necessary to ensure that the drawings were prepared under his or her responsible charge. If the plans are complete and have been submitted to a reviewing official, the second registrant may prepare and seal addenda sheets if revisions are necessary.

Adopted 1-19-06

XV. SIGNS

The Board defines a "sign" [T.C.A. Section 62-2-102(b)(4)] as a self-supporting structure that is arranged, intended, designed or used as an advertisement, announcement or direction, and includes a sign, sign screen, billboard and advertising devices of every kind (from the 1985 edition of the Standard Building Code).

Signs that do not exceed the limits outlined in T.C.A. Section 62-2-102(b)(4) are exempted from the requirement to have plans and specifications prepared by a registered architect or engineer unless an awarding authority deems it necessary. Maintenance or repair of an existing sign that does not require technical calculation or compromise the original design is also exempted.

Adopted 6-25-09

Department of Commerce and Insurance, Authorization No. 335306, 21,000 copies,
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FREQUENTLY ASKED QUESTIONS ABOUT QUALIFICATIONS-BASED SELECTION FOR PUBLIC PROJECTS AS DEFINED BY T.C.A. § 12-4-107(a)

1. To what projects does T.C.A. § 12-4-107(a) apply?

T.C.A. § 12-4-107 applies to all contracts for architectural, engineering and construction services procured by any municipal corporation, county, state, development district, utility district, human resource agency, or other political subdivision created by statute. Some communications from the Board refer to "public works projects," which should not be understood in the narrow sense of projects typically associated with public works departments. The term "public works" is used in the general sense of any project paid for by government funds for public use. The statute does not actually use the term "public works." There may be an exception for certain public school projects (see FAQ #4).

2. What has changed? Is the Board of Architectural and Engineering Examiners imposing a new requirement?

The requirement to select design professionals for public projects through qualifications-based selection is not a new requirement. This requirement has been in the law for many years, and the Board of Architectural and Engineering Examiners is not imposing any additional requirements on the state or local jurisdictions. The only change is that, effective March 11, 2013, the Board may now discipline registered architects, engineers, and landscape architects for failing to comply with T.C.A. § 12-4-107(a) and Rule 0120-02-.02(6).

3. Does T.C.A. § 12-4-107(a) encompass studies and other services that do not involve the preparation of sealed plans?

Version 1: In the event that any study or service, ~~such as Property Condition Assessments (PCAs),~~ planning studies, or other documents, requires professional architectural, engineering, or landscape architectural services and expertise that require the seal of a registrant, or if these professional services are offered by the proposer, it would fall under the scope of the statute.

Version 2: ~~In the event that~~ ~~a~~Any study or service that ~~, such as Property Condition Assessments (PCAs), planning studies, or other documents,~~ requires professional architectural, engineering, or landscape architectural services and expertise that requires the seal of a registrant, or if these professional services are offered by the proposer, ~~it~~ would fall under the scope of the statute.

4. Does T.C.A. § 12-4-107(a) apply to public school systems and public building authorities?

~~Yes.~~ T.C.A. § 12-4-107 applies to all contracts for professional services by any municipal corporation, county, state, development district, utility district, human resource agency, or other political subdivision created by statute. However, T.C.A. § 49-2-203(a)(3)(C), which prescribes the specific procedures to be utilized by school systems in contracts for professional services, allows public school systems to utilize competitive bidding for the construction of school buildings or additions to existing buildings. "Construction" would include construction-related services, including design. This exception does not apply to contracts for energy-related services that include engineering services, pursuant to T.C.A. § 49-2-203(a)(3)(F).

5. Does T.C.A. § 12-4-107(a) apply to non-profit organizations that receive public funds~~, such as charter schools~~?

No. T.C.A. § 12-4-107 applies only to contracts for professional services by any municipal corporation, county, state, development district, utility district, human resource agency, or other political subdivision created by statute. It does not apply to private non-profit organizations, regardless of the source of funding. However, although T.C.A. § 12-4-107(a) does not require qualifications-based selection in these instances, the conditions of the source of funding, such as a governmental grant, may still require qualifications-based selection.

6. Does T.C.A. § 12-4-107(a) apply to landscape architectural services?

Yes. Although the statute does not specifically reference landscape architectural services, it may be safely assumed that such services are included due to the overlap among the architectural, engineering, and landscape architectural professions, and the fact that similar qualifications and standards apply to all three design professions. Additionally, Rule 0120-02-.02(6) does reference landscape architectural services.

7. **Does T.C.A. § 12-4-107(a) apply to interior design services?**

   No. The statute does not reference interior design services, and the Board of Architectural and Engineering Examiners does not regulate the practice of interior design—only use of the title "registered interior designer."

8. **Is it permissible for a registrant to provide a description of intended compensation (i.e., whether you charge a fixed fee, percentage, etc.) in response to a RFQ/RFP for a public project?**

   Yes, provided that a specific monetary amount or percentage is not included in the response.

9. **Is it permissible for a registrant to submit hourly rates and an estimate of man-hours required to complete a design project in response to a RFQ/RFP for a public project?**

   No. T.C.A. § 12-4-107(a) and Rule 0120-02-.02(6) preclude a registrant from submitting any information that could be used to determine compensation in response to a RFQ/RFP for a public project. However, it is permissible to submit hourly rates if an estimate of man-hours is not provided.

10. **Is it permissible for a registrant to submit a price in a sealed envelope in response to a RFQ/RFP for a public project?**

    No. Registrants may only state compensation to a prospective client in direct negotiation following selection based on qualifications.

11. **Does the following procedure comply with T.C.A. § 12-4-107 and Rule 0120-02-.02(6)?**

    A jurisdiction requests responses to a RFQ. Responses are evaluated to prequalify firms for participation in the RFP process. Prequalified proposers then submit formal proposals (RFPs)—including fees— for consideration and final selection.

    No. The prequalification procedure outlined above would not comply. In accordance with T.C.A. § 12-4-107(a), once the public body (client) has selected the most qualified design professional/firm, it may request a fee proposal from that firm. The agency may then negotiate a satisfactory contract with the selected firm. If an agreement cannot be reached and the negotiations are formally terminated, the agency may then proceed to select the next most qualified design

professional/firm on the list and continue negotiations until an agreement is reached. However, this procedure would be in compliance if the agency wishes to contract with as many qualified respondents as possible, multiple firms are selected, and a contract is negotiated with each firm separately following selection based on qualifications.

12. What alternate methods are available for determining possible architectural, engineering, or landscape architectural costs?

a. Enlist the aid of a professional or agency such as a Development District in determining the scope of the project for a RFQ. This should allow a realistic budget for the entire project, including construction, so that price surprises are minimized.
b. State the budget range for professional services in the RFQ. The budgeted amount allows the design professional to determine if they can meet the stated requirements within the budget range and minimizes review time for the municipality.
c. Use standard cost basis schedules such as used by the State Building Commission or Rural Development to determine expected design costs. These schedules have been used for many years by both governments and design professionals to establish reasonable compensation for projects of various sizes.

13. Is it unethical for one firm/registrant to sit in on a proposal interview for another firm/registrant (a competitor)? Would this be a violation of the Rules of Professional Conduct?

Although such conduct is unprofessional, it does not violate the Rules of Professional Conduct.

14. Does Rule 0120-02-.02(6) apply only to individual design professionals, or does it also apply to corporations, partnerships, and firms?

The rule applies to both individual design professionals and corporations, partnerships, and firms registered in the State of Tennessee (see Rule 0120-02-.01 Applicability).

15. What disciplinary action may result from a violation of Rule 0120-02-.02(6)?

Formal discipline could range from a civil penalty ($100-$1,000 per violation) to suspension or even revocation for repeated, grave offenses. The Board considers mitigating and aggravating factors when determining discipline.

16. Can price be considered when selecting a design professional for a public project?

The law does not prevent jurisdictions from negotiating price on projects requiring professional services. Upon selecting the most qualified design professional, the jurisdiction may then negotiate compensation with the registrant/firm. If the contracting agency and most highly qualified firm are unable to negotiate a fair and reasonable contract, the agency may formally terminate negotiations and undertake negotiations with the next most qualified firm, continuing the process until an agreement is reached. The initial selection, however, must be based upon qualifications.

17. Does T.C.A. § 12-4-107(a) and Rule 0120-02-.02(6) apply to transportation planning services for Metropolitan Planning Organizations?

See response to question #3.

18. Does T.C.A. § 12-4-107(a) and Rule 0120-02-.02(6) apply to subconsultants who do not contract directly with a government agency?

No, based on the Board's current interpretation of the statute. T.C.A. § 12-4-107(a) applies only to contracts between a state or local government agency and an architect/engineer/landscape architect. If a registrant is not entering into a contract with a governmental entity, then they may include a fee in their proposal for a public project. However, in keeping with the spirit of the law, the Board urges registrants to select subconsultants on the basis of their qualifications.

19. What is an appropriate way for a registrant to respond to a request for a price?

If a registrant becomes aware of a state or local agency that is requesting a fee in a proposal for a public project, this should be brought to the attention of the Board office. In such cases, Board staff will send a letter to the agency issuing the RFP asking them to eliminate fees from their request. The Board has no jurisdiction over state and local government agencies, but, in most cases, the

issuing agency will voluntarily remove the requirement to submit fees and reissue the request. Registrants may wish to provide information on Tenn. Code Ann. § 12-4-107(a) and Rule 0120-02-.02(6) to prospective clients so they will understand why submittals for public projects are non-responsive on the issue of fees. State professional societies may also offer assistance in educating government agencies regarding qualifications-based selection.

The above responses reflect the Board of Architectural and Engineering Examiners' interpretation of T.C.A. § 12-4-107, as necessary to enforce Rule 0120-02-.02(6), and were adopted on June 12, 2014, and October 10, 2014.

STATE OF TENNESSEE
DEPARTMENT OF COMMERCE AND INSURANCE
BOARD OF ARCHITECTURAL AND ENGINEERING EXAMINERS
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POTENTIAL LAW CHANGES FOR DISCUSSION

- Adding definitions of architecture, engineering, and landscape architecture to the law.
  - Architecture (from NCARB Model Law):

    "Practice of architecture."
    Providing or offering to provide those services, hereinafter described, in connection with the design and construction, enlargement, or alteration of a building or group of buildings and the space within and the site surrounding such buildings, which have as their principal purpose human occupancy or habitation. The services referred to include pre-design, programming, planning, providing designs, drawings, specifications and other technical submissions, the administration of construction contracts, and the coordination of any elements of technical submissions prepared by others including, as appropriate and without limitation, consulting engineers and landscape architects; provided that the practice of architecture shall not include the practice of engineering as defined in **[Statute Reference]**, but a registered architect may perform such engineering work as is incidental to the practice of architecture.
  - Engineering (from NCEES Model Law):

5. Practice of Engineering—The term "Practice of Engineering," as used in this Act, shall mean any service or creative work requiring engineering education, training, and experience in the application of engineering principles and the interpretation of engineering data to engineering activities that potentially impact the health, safety, and welfare of the public.

   The services may include, but not be limited to, providing planning, studies, designs, design coordination, drawings, specifications, and other technical submissions; teaching engineering design courses; performing surveying that is incidental to the practice of engineering; and reviewing construction or other design products for the purposes of monitoring compliance with drawings and specifications related to engineered works.

   Surveying incidental to the practice of engineering excludes the surveying of real property for the establishment of land boundaries, rights of way, easements, and the dependent or independent surveys or resurveys of the public land survey system.

   A person shall be construed to practice engineering, within the meaning and intent of this Act, if he or she does any of the following:

   a. Practices any discipline of the profession of engineering or holds himself or herself out as able and entitled to practice any discipline of engineering
   b. Represents himself or herself to be a professional engineer by verbal claim, sign, advertisement, letterhead, or card or in any other way
   c. Through the use of some other title, implies that he or she is a professional engineer or licensed under this Act

- Landscape Architecture (from CLARB Model Law):

  Practice of Landscape Architecture – Any service where landscape architectural knowledge training, and experience are applied.

  The practice of Landscape Architecture applies the principles of mathematical, physical and social sciences in consultation, evaluation, planning, design (including, but not limited to, the preparation and filing of plans, drawings, specifications and other contract documents) and administration of contracts relative to projects principally directed at the functional and aesthetic use and preservation of land.

  These services include, but are not limited to:
  1. Investigation, selection and allocation of land and water resources for appropriate uses;
  2. Formulation of feasibility studies, and graphic and written criteria to govern the planning, design and management of land and water resources;
  3. Preparation, review and analysis of land use master plans, subdivision plans and preliminary plats;
  4. Determining the location and siting of improvements, including buildings and other features, as well as the access and environs for those improvements;
  5. Design of land forms, storm water drainage, soil conservation and erosion control methods, site lighting, water features, irrigation systems, plantings, pedestrian and vehicular circulation systems and related construction details.

- Amend Comity statute to read as follows:

  62-2-304. Comity.
  The board may, upon proper application therefor, issue a certificate of registration as an architect, engineer, registered interior designer or landscape architect to any person who holds a like unexpired certificate of qualification or registration issued to such person by any state, territory or possession of the United States, or of any country; provided, that the applicant's qualifications meet the requirements of this chapter and the rules established by the board. Any applicant for registration as an architect or landscape architect, pursuant to this section, shall hold an unexpired national certificate issued by

the National Council of Architectural Registration Boards or the Council of Landscape Architectural Registration Boards and shall present proof of the same upon application to the board. Applicants for registration as an architect who hold a like unexpired certificate of qualification or registration issued to such person by any state, territory or possession of the United States, or of any country, and who hold an unexpired national certificate issued by the National Council of Architectural Registration Boards, shall [or "may"] be deemed to have met the registration requirements of this chapter and the rules established by the board.

NCARB
National Council of Architectural Registration Boards 1801 K Street NW, Suite 700K Washington, DC 20006 202/783-6500 202/783-0290 FAX

MEMORANDUM

To: Member Board Members
Member Board Executives

From: Dale McKinney, FAIA, NCARB
President

Date: April 28, 2015

Subject: Resolutions

Attached please find a copy of the final resolutions you will be asked to vote on at the upcoming Annual Business Meeting. It is important that you note one of the resolutions relating to the program currently known as the Broadly Experienced Architect (BEA), now contains **NEW LANGUAGE** as adopted by a UNANIMOUS VOTE of the Board of Directors. These changes reflect recent feedback from the March Regional Summit. We ask that you make every effort to engage your Member Board peers in reviewing this language, preparing your voting delegate for their votes at the Annual Business Meeting. As you are aware, draft resolutions were issued for review and comment in March so that the Board could finalize the drafts for the June Annual Business Meeting. These final revisions demonstrate our ongoing commitment to listen to your feedback and respond accordingly.

The two other proposed resolutions introduced for comment at the Regional Summit remain largely the same from their earlier versions: Resolution 2015-2 amending the *Certification Guidelines* to revise the Broadly Experienced Foreign Architect (BEFA) program and Resolution 2015-3 amending the Bylaws to revise the qualifications to serve on the NCARB Board as a Public Director.

Feedback from March Regional Meeting Incorporated Into Final BEA Resolution Draft
The resolution known as 2015-1 addresses the ability of licensed architects not having a degree from a program accredited by the National Architectural Accrediting Board (NAAB) to obtain an NCARB certificate. The path for these licensees to obtain the certificate, by acquiring additional experience beyond licensure and IDP requirements in their home jurisdiction, is an alternative contained within the *Certification Guidelines* currently known as the Broadly Experienced Architect (BEA) program. All amendments to the *Certification Guidelines* require a vote of the full membership.

A first draft of the proposed resolution was introduced at last year's Annual Meeting and distributed for Member Board comment over the summer months. Based on Member Board feedback and further discussion at the Fall Member Board Chairs/Executives meeting in Indianapolis, a second proposed resolution draft was delivered to the Member Boards in December. This second draft was discussed at the January Committee Summit and March Regional Summit.

NCARB
National Council of Architectural Registration Boards 1801 K Street NW, Suite 700K Washington, DC 20006 202/783-6500 202/783-0290 FAX

At the Regional Summit, concerns voiced by the membership relating to this resolution involved:

- Further reinforcement of the NAAB-accredited degree as the preferred option to satisfy the certificate's education requirements
- Acknowledgement that 17 jurisdictions will grant a license without a NAAB-accredited degree, allowing additional experience as a substitute for educational deficiency
- Acknowledgement that 12 of the above 17 jurisdictions allow licensure with a high school diploma
- The significant difference between the education obtained with a four-year pre-professional degree (degrees leading directly to a degree from a NAAB-accredited Master of Architecture program) and other degrees
- The desire to avoid excluding anyone who can obtain a license in an NCARB Member jurisdiction

With these guiding principles in mind, and acting as a Board proposing national policy which is useable by *all* jurisdictions, the Board voted UNANIMOUSLY to offer a third draft as its formal BEA overhaul resolution. This resolution will be voted on by the Member Boards this June with the following key features addressing steps beyond initial licensure and compliance with the initial licensing jurisdiction's education requirements:

- require five years of licensed practice for those without a degree in a program accredited by the NAAB (revised from two years of licensed experience contained in previous drafts); and
  - require documentation of 2x (two times) the IDP experience requirements for those licensees with a pre-professional degree (no change from previous draft); or
  - require documentation of 5x (five times) the IDP experience requirements for all other licensees (this change from previous drafts addresses the range of applicants eligible for licensure from high school diploma only through an unrelated four-year degree).

- For those pursuing the above options, <u>elimination of the Education Evaluation Services for Architects (EESA) report</u> *(no change from previous drafts)*;

- In all cases, <u>elimination of the review of the BEA committee including dossier submittal, and fees attached thereto</u>. EESA report fees would also be eliminated where a certificate candidate chooses to apply experience rather than additional education to address education deficiencies.

BEA Program Evolution
Currently those licensees without a NAAB-accredited degree must comply with additional experience requirements imposed by their home jurisdiction as an alternative to meet that jurisdiction's education requirements. Then, to obtain an NCARB certificate through the BEA program, the licensed architect must:

- Undergo an evaluation of their transcript, if applicable; and
- Participate in a committee review of work performed under their responsible control; and
- Expend roughly $8,000 in fees with a review process that averages one year for dossier preparation and committee review.

Draft resolutions to overhaul the BEA have focused on removing fee and time barriers, automating a reporting system, and making the process more objective. At the same time, ongoing discussion has focused on assuring that the pursuit of a NAAB-accredited degree is incentivized and valued as a preferred path to satisfying education requirements for licensure.

IDP to Measure Prescribed Experience
Our resolution drafts have consistently asserted that the core hours contained in the streamlined Intern Development Program (IDP) constitute a viable means of framing requirements for additional experience, in lieu of education, in the case of licensed architects without a NAAB-accredited degree.

The Board in its deliberations this past weekend reaffirmed that the IDP is the best measuring stick for additional experience in lieu of accredited education. Currently, 17 jurisdictions impose additional experience requirements, beyond IDP compliance, to compensate for education deficiencies.

Preparing Voting Delegates for June Annual Business Meeting
Our Board urges you to make every effort to review these changes and to have a voting delegate from your jurisdiction be prepared to participate in the resolution votes on the Saturday morning of the Annual Business Meeting. NCARB leadership will be available to discuss all resolutions along with other concerns at the regional meetings preceding the vote. In addition, we have asked the six Regional Directors sitting on the Board to conduct individual outreach to the Member Board Chairs in their regions during the coming weeks. We will also host Q&A calls with NCARB staff, with times/dates to be issued in a separate email.

NCARB
National Council of Architectural Registration Boards 1801 K Street NW, Suite 700K Washington, DC 20006 202/783-6500 202/783-0290 FAX
www.ncarb.org

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In addition, we voted to move forward to the membership two other resolutions which are largely unchanged from earlier drafts presented to you last December, and again at the March Regional Summit in Long Beach. Those two unchanged resolutions address the following:

- A Bylaws amendment to adjust the qualifications for the NCARB Board's Public Director, drawing nominations from the pool of sitting public members on our Member Boards;

- A Certification Guidelines amendment to modify the Broadly Experienced Foreign Architect (BEFA) program, which provides a path for foreign licensed architects to receive an NCARB certificate, to require completion of the IDP and all divisions of the ARE.

I would like to thank you for your active participation in this process. Your thoughtful feedback has helped us shape a more streamlined approach to certification for these candidates.

We look forward to seeing everyone in New Orleans.

Resolution 2015-1

Supported by the Council Board of Directors (14-0)

Title: Revision of the Alternatives to the Education and Experience Requirements for Certification

Submitted By: Council Board of Directors

WHEREAS, the Board of Directors of the Council has determined upon careful consideration that it is advisable and in the best interests of the Council to modify the Alternatives for Certification of an Architect Registered in a U.S. Jurisdiction education and experience requirements set forth in the *Certification Guidelines*; and

WHEREAS, requirements for NCARB Certification may only be changed by an absolute majority vote of the Council Member Boards, with such change becoming effective July 1 following the close of the Council Annual Business Meeting, or such later date identified in the change, with such changes applicable to applicants for certification in process and new applicants;

WHEREAS, prior to implementing the changes to the Alternatives for Certification of an Architect Registered in a U.S. Jurisdiction, the Council Board of Directors must adopt a resolution recommending such changes and submit the proposed changes to the Council Member Boards for approval.

NOW, THEREFORE, IT IS HEREBY:

RESOLVED, that the Alternatives for Certification of an Architect Registered in a U.S. Jurisdiction as included in Section 2 of the *Certification Guidelines* be revised as indicated below:

2.2 Alternatives to the Education Requirement

If you do not hold a professional degree in architecture as identified in Section 1.2, NCARB will accept either of the following:

A. ~~Satisfaction of NCARB's Broadly Experienced Architect (BEA) Program, which permits an applicant with the required years of experience in practicing architecture as defined in the *Legislative Guidelines and Model Law*, *Model Regulations* gained while holding a registration issued by any U.S. jurisdiction to demonstrate that a combination of education and/or experience in practicing architecture satisfies all of his/her education deficiencies with respect to the *NCARB Education Standard* set forth in the *Education Guidelines*. The required years are:~~

- ~~Six years for architects who hold a pre-professional degree in architecture awarded by a U.S. regionally accredited institution or the Canadian equivalent,~~
  ~~or~~
- ~~Eight years for architects who hold any other baccalaureate or higher degree,~~
  ~~or~~
- ~~Ten years for architects who do not hold a post-secondary baccalaureate or higher degree.~~

Five (5) years of continuous licensure in any U.S. jurisdiction with no disciplinary action from any jurisdiction;

and

Documentation of work experience gained pre-licensure and/or post-licensure.

The experience must be verified in accordance with the requirements of the NCARB *Intern Development Program* or by an NCARB certified architect:

- Applicants with a pre-professional degree in architecture awarded by a U.S. regionally accredited institution or the Canadian equivalent must document two times (2X) the experience requirement of the NCARB Intern Development Program.
- All other applicants must document five times (5X) the experience requirement of the NCARB Intern Development Program.

B. Applicants with a degree in the field of architecture that is not accredited by the National Architectural Accrediting Board (NAAB) or the Canadian Architectural Certification Board (CACB) must obtain an Education Evaluation Services for Architects (EESA) NCARB evaluation report stating that he/she has met the *NCARB Education Standard*.

The *Intern Development Program* is described in the *IDP Guidelines*. The *NCARB Education Standard* ~~and the NCARB Broadly Experienced Architect Program are~~ is described in the *Education Guidelines.* These documents ~~which~~ may be revised from time to time by NCARB.

2.3 Alternatives to the Experience Requirement

This alternative shall be available only to those applicants who meet the alternative to the education requirement in accordance with the requirements of Section 2.2 B.

In lieu of completing the Experience Requirement identified in Section 1.3, NCARB will accept registration by an NCARB Member Board for at least five consecutive years together with a certification by the applicant that his or her experience as a registered architect met the intent of the IDP in each of the experience areas, and verification by one or more other architects that the applicant obtained such experience. This alternative shall not apply to applicants initially registered after January 1, 2011.

FURTHER RESOLVED, except as explicitly modified by these Resolutions, all of the provisions of Alternatives for Certification of an Architect Registered in a U.S. Jurisdiction remain unchanged and in full force and effect; and

FURTHER RESOLVED, that these changes shall be submitted to the Council Member Boards for review and approval; and

FURTHER RESOLVED, that upon the approval of the changes by an absolute majority of the Council Member Boards, such changes will become effective July 1, 2016 and will apply both to applications for certification in process and new applications; if applicants whose applications were in process met all certification requirements that existed prior to the changes referenced herein, they will be eligible for certification.

Sponsors' Statement of Support:

This proposal represents an effort to streamline the requirements for certification through the alternative to the education requirement while ensuring that each applicant has documented the pertinent experience necessary to overcome deficiencies associated with their education. Through this program, licensed architects who are certificate candidates without a degree from a NAAB-accredited program are provided with the opportunity to overcome deficiencies identified in their education. A pre-professional degree is defined as architecturally-focused four-year degrees that are not NAAB accredited degrees, but are considered preliminary to a NAAB-accredited degree. These degrees have such titles as B.S. in Architecture, B.S. in Architectural Studies, B.A. in Architecture, Bachelor of Environmental Design, Bachelor of Architectural Studies, etc.; the amount of work in architecture in the program may vary from institution to institution and will determine the length of time required to complete the professional program.

Currently, 17 jurisdictions allow licensure without a degree from a NAAB-accredited program; 12 of those 17 allow licensure with a high school diploma. In all cases, the 17 jurisdictions require additional experience beyond compliance with the Intern Development Program to substitute for an accredited degree credential. Historically, NCARB has required supplemental post-licensure experience, beyond that required for initial licensure in the 17 jurisdictions, plus a transcript evaluation and dossier review by committee before awarding an NCARB certificate.

Four key components were considered in the development of this modified alternative to the education requirement:

1. Experience utilized to overcome deficiencies in education must be *evaluated*
2. Experience utilized to overcome deficiencies in education must *validate competency in educationally deficient areas*
3. The *value of a degree from a NAAB-accredited program needs to be upheld* and perceptions that the proposed alternative allows an enticing work-a-round to the education requirement need to be managed
4. *NCARB must retain its role as the overall "verifier" of the certificate applicant*

The IDP experience requirements today are based on the performance of tasks, and development of the knowledge and skills necessary to competently perform those tasks independently. Architects applying for certification will be required to document their learning through experience by accumulating additional hours verified by a registered architect in each of the IDP categories aligned with contemporary practice.

This proposal utilizes a system and process that is already well-established and trusted by the NCARB membership while providing the validated evaluation desired by the NCARB Member Boards. In addition, the proposal modifies the alternative to the education requirement in a way that enables the Council to eliminate fees associated with the Broadly Experienced Architect (BEA) program.

Architects seeking certification through this proposal may accumulate the proposed hours of experience in a timeframe substantially equivalent to requirements of the current durational requirements of the seventeen jurisdictions that do not require a degree from a NAAB-accredited program for initial licensure. This resolution incorporates structured experience by requiring hours to be earned in specific experience areas and a minimum of five years practicing as an architect.

This proposal:

- recognizes the value of practical experience
- ensures that each applicant documents the pertinent experience necessary to overcome deficiencies associated with their education by requiring additional hours in each of the categories and areas of the Intern Development Program
- encourages intern architects to obtain an architecture degree in an accredited program to avoid having to complete multiple additional years of experience through the IDP
- separately recognizes the value of a four-year pre-professional baccalaureate degree
- streamlines the requirements for certification through the Broadly Experienced Architect (BEA) Program by utilizing the prescriptive requirements of the IDP in lieu of the requirements and fees to complete an Education Evaluation Services for Architects (EESA) evaluation of their education and the subjective nature of submitting an experience dossier for review by committee.

How it will Work:
Applicants seeking certification through this path will be required to document their experience through the Online Reporting system – just like intern architects currently do for IDP. It is important to note that applicants can fulfill the requirements for certification by utilizing **pre or post-licensure experience** as long as it is verified in accordance with the rules of the IDP or by an NCARB-certified architect.

> For example, if an architect without a NAAB-degree documented completion of IDP through the Online Reporting System to obtain their initial license, they can use that approved experience toward satisfying the 2x or 5x IDP requirement for NCARB certification.

Based on their education background, applicants will be required to meet two or five times the core requirements of the IDP experience requirement. They will not simply be required to document completion of 2x or 5x the overall core requirement of 3,740 hours, but rather, must complete 2x or 5x the hours in each experience area. For further clarification, below is an example of the experience requirements that architects applying for certification through this path would need to meet to satisfy the experience requirements.

The chart on the following page shows how that would work for candidates.

Financial Impact:

FY16 – No Financial Impact
FY17 – Loss of revenue offset by reduction in Committee expenses and staff time for a small financial surplus.
FY18 – Loss of revenue offset by reduction in Committee expenses and staff time for a small financial surplus.
FY19 – Loss of revenue offset by reduction in Committee expenses and staff time for a small financial surplus.

The chart below reflects the CURRENT core experience requirements. These requirements will be modified with the launch of IDP Overhaul. The purpose is to show that applicants will need to double or triple the requirements of each of the categories, not simply the core total.

Experience Requirement for Certification	IDP	Two Times (2X) IDP	FiveTimes (5X) IDP
Category 1: Pre-Design	Core Minimum Hours	Core Minimum Hours	Core Minimum Hours
Programming (tasks)	80	160	400
Site and Building Analysis (tasks)	80	160	400
Project Cost and Feasibility (tasks)	40	80	200
Planning and Zoning Regulations (tasks)	60	120	300
Total	**260**	**520**	**1,300**
Category 2: Design	Core Minimum Hours	Core Minimum Hours	Core Minimum Hours
Schematic Design (tasks)	320	640	1,600
Engineering Systems (tasks)	360	720	1,800
Construction Cost (tasks)	120	240	600
Codes and Regulations (tasks)	120	240	600
Design Development (tasks)	320	640	1,600
Construction Documents (tasks)	1,200	2400	6,000
Material Selection and Specification (tasks)	160	320	800
Total	**2600**	**5200**	**13,000**
Category 3: Project Management	Core Minimum Hours	Core Minimum Hours	Core Minimum Hours
Bidding and Contract Negotiation (tasks)	120	240	600
Construction Administration (tasks)	240	480	1,200
Construction Phase: Observation (tasks)	120	240	600
General Project Management (tasks)	240	480	1,200
Total	**720**	**1440**	**3,600**
Category 4: Practice Management	Core Minimum Hours	Core Minimum Hours	Core Minimum Hours
Business Operations (tasks)	80	160	400
Leadership and Service (tasks)	80	160	400
Total	**160**	**320**	**800**
Total Core Minimum Hours	**3,740**	**7480**	**18,700**

Resolution 2015-2
Supported by the Council Board of Directors (14-0)

Title: Revision of the Requirements for Certification of Foreign Architects

Submitted By: Council Board of Directors

WHEREAS, the Board of Directors of the Council has determined upon careful consideration that it is advisable and in the best interests of the Council to modify the Requirements for Certification of an Architect Credentialed by a Foreign Registration Authority as set forth in the *Certification Guidelines*, as well as corresponding provisions in other sections of the *Certification Guidelines*; and

WHEREAS, requirements for Council Certification may only be changed by an absolute majority vote of the Council Member Boards, with such change becoming effective July 1 following the close of the Council Annual Business Meeting, or such later date identified in the change, with such changes applicable to applicants for certification in process and new applicants;

WHEREAS, prior to implementing the changes to the Requirements for Certification of an Architect Credentialed by a Foreign Registration Authority and corresponding sections, the Council Board of Directors must adopt a resolution recommending such changes and submit the proposed changes to the Council Member Boards for approval.

NOW, THEREFORE, IT IS HEREBY:

RESOLVED, that the Requirements for Certification of an Architect Credentialed by a Foreign Registration Authority, included in Section 4 of the *Certification Guidelines* be revised as indicated below,

4.2 Education Requirement
~~You must hold a professional degree in architecture from an accredited/validated/officially recognized architecture program. You are required to describe such program or submit information describing the program from the accreditation/validation/recognition authority~~. You must hold a recognized education credential in an architecture program that leads to a license/credential for the unlimited practice of architecture in the foreign country. You are required to have an official transcript of your educational record sent directly to NCARB from the school. Where there is doubt about the nature of the professional degree, an Educational Evaluation Services for Architects (EESA) evaluation may be required.

4.3 Registration Requirement
You must be credentialed in a foreign country that has a formal record-keeping mechanism for disciplinary actions in the practice of architecture. You are required to describe the process by which you were credentialed or submit information describing the credentialing process from the credentialing authority that granted the credential, and to arrange for independent verification by the credentialing authority directly to NCARB showing that your credential has been granted and

is currently in good standing. You are also required to describe the process by which and the reasons for which disciplinary actions may be taken against architects and the system in which these actions are recorded, or to submit information provided by the disciplinary authority in this regard. You shall secure a written statement from your credentialing authority stating that you either have no record of a disciplinary action or if such record exists, describing such action and its current status. This statement must be sent directly to NCARB from the credentialing authority.

4.4 Experience Requirement

~~You must have completed a minimum of seven (7) years of comprehensive practice as a credentialed architect over which you exercised responsible control in the foreign country in which you are credentialed.~~

- ~~"Comprehensive practice" means the application of the knowledge and skills of those aspects of the profession assessed by the Architect Registration Examination.~~
- ~~"Responsible control" means that amount of control over and detailed professional knowledge of the content of technical submissions during their preparation as is ordinarily exercised by U.S. registered architects applying the required professional standard of care.~~

You must document completion of the *Intern Development Program (IDP).*

4.5 Examination Requirement

You must pass the Architect Registration Examination® (ARE®)

FURTHER RESOLVED, that the introduction paragraph entitled "Requirements for Certification of an Architect Credentialed by a Foreign Registration Authority be deleted from Section 4 of the *Certification Guidelines:*

~~BROADLY EXPERIENCED FOREIGN ARCHITECT (BEFA) PROGRAM~~
~~Foreign architects may apply for NCARB certification through the Broadly Experienced Foreign Architect (BEFA) Program set forth in this section. All information provided in the eligibility and application forms must be in English. English translations must be provided for all transcripts, credentials, and dossier documents. The interview will be conducted in English, without the assistance of a translator~~.

FURTHER RESOLVED, that "Appendix A: The Broadly Experienced Foreign Architect Process" be deleted in its entirety from the *Certification Guidelines*, including its reference in the Table of Contents.

FURTHER RESOLVED, that Section 1, "Requirements for Certification of an Architect registered in a U.S. Jurisdiction," Subsection 1.3 "Experience Requirement" paragraph four be revised as follows:

The Reporting Requirements identified in the *IDP Guidelines* do not apply to architects registered in the United States or Canada or to ~~foreign~~ architects credentialed by a foreign registration authority pursuing NCARB certification ~~through the Broadly Experienced Foreign Architect (BEFA) Program~~.

FURTHER RESOLVED, except as explicitly modified by these Resolutions, all of the provisions of Requirements for Certification of an Architect Credentialed by a Foreign Registration Authority, and the corresponding sections referenced herein, remain unchanged and in full force and effect; and

FURTHER RESOLVED, that these changes shall be submitted to the Council Member Boards for review and approval; and

FURTHER RESOLVED, that upon the approval of the changes by an absolute majority of the Council Member Boards, such changes will become effective July 1, 2016 and will apply both to applications for certification in process and new applications; if applicants whose applications were in process met all certification requirements that existed prior to the changes referenced herein, they will be eligible for certification.

Sponsors' Statement of Support:

The intent of the current Broadly Experienced Foreign Architect (BEFA) program is to allow a path to licensure for a foreign architect so that he/she may obtain the ability to practice independently in the U.S. while protecting the public health, safety, and welfare.

This resolution to modify the requirements for certification of an architect credentialed by a foreign registration authority maintains two existing requirements of the BEFA program:

- *Education Requirement:* Hold a recognized education credential in an architecture program that leads to licensure/credential in a foreign country
- *Registration Requirement:* Credentialed in a foreign country that has a formal record-keeping mechanism for disciplinary actions in the practice of architecture

This proposal requires a foreign architect to complete the requirements of the *Intern Development Program (IDP)* and to pass the *Architect Registration Examination*® (ARE®). Utilization of the IDP enables the Council to standardize expected levels of competence through experience of the foreign architect. Application of these requirements for foreign architects will ensure equality among expectations of foreign and U.S. architects. Requiring compliance with these two recognized Council programs also provides a better assessment of an applicant's competence in understanding and applying U.S. building codes and laws, accessibility requirements, and U.S. practice requirements.

This proposal:

- ensures that each applicant *documents the pertinent experience necessary for competence to practice in the U.S.* in each of the categories and areas of the *Intern Development Program*;
- ensures that the foreign architect clearly *demonstrates his/her understanding and ability to practice independently in the U.S.*;
- recognizes the importance of *applying similar standards for licensure for all who wish to practice in the U.S.*;
- meets the Council's effort to streamline the requirements for certification for foreign architect through the *elimination of the Broadly Experienced Foreign Architect (BEFA)*

Program requirements to complete seven years of practice in the country where credentialed as an architect, evaluation of their experience through submittal of an experience dossier for review by committee, and formal interview.

NCARB must have a certification model that acknowledges a foreign architect's competence to practice in their country of licensure. Currently, NCARB Member Boards do not allow experience to be substituted for completion of the ARE for any U.S. applicant for initial or reciprocal licensure. However, NCARB and its Member Boards hold a higher value of a candidate's demonstration of competence earned through completion of the IDP and the ARE. Application of these requirements for foreign architects will ensure equality among expectations of foreign architects and U.S. architects. Every Member Board expects competence at the point of initial licensure. Demonstrating acquisition of knowledge and skills through examination to practice in a U.S. jurisdiction is a basic element of our licensure requirements.

Financial Impact:

FY16 – No Financial Impact
FY17 – Loss of revenue offset by reduction in Committee expenses and staff time for a small financial surplus.
FY18 – Loss of revenue offset by reduction in Committee expenses and staff time for a small financial surplus.
FY19 – Loss of revenue offset by reduction in Committee expenses and staff time for a small financial surplus.

RESOLUTION 2015-3

Supported by the Council Board of Directors (12-1-1)

TITLE: *Bylaws* Amendment – Modifications to the Qualifications of Public Director on Council Board of Directors

SUBMITTED BY: Regional Leadership/Procedures and Documents Committee

WHEREAS, the Board of Directors of the Council has determined upon careful consideration that it is advisable and in the best interests of the Council to amend the Council Bylaws to modify the qualifications for a Public Director; and

WHEREAS, the Bylaws may be amended at any special meeting or Annual Meeting of the Council by resolution submitted to the Member Boards not less than thirty days prior to the meeting at which the resolution is to be considered. An affirmative vote by not less than two-thirds of the Member Boards shall be required to secure adoption of any amendment to these Bylaws;

WHEREAS, prior to implementing the amendments to the Bylaws, the Council Board of Directors must adopt a resolution recommending such changes and submit the proposed resolution to the Council Member Boards for approval at least thirty days in advance of a meeting of the Council.

NOW, THEREFORE, IT IS HEREBY:

RESOLVED, that Article VII, Section 2 of the *Bylaws* is amended to read as follows, with the amendments to clause (ii) not taking affect until July 1, 2016:

> "A candidate for election as the Public Director (i) shall be a citizen of the United States, (ii) shall be serving as a public or consumer member on a Member Board ~~not be a person engaged in or licensed to engage in the design of any portion of buildings or structures or a member of a Member Board or Member Board Executive~~, and (iii) shall be nominated by the Council Board of Directors and elected at the Annual Meeting. A Public Director shall serve the same term and with the same limit on succeeding terms as apply to Regional Directors in this Article VII, Section 3, and any vacancy in the office of Public Director shall be filled by the Council Board of Directors.

FURTHER RESOLVED, except as explicitly modified by these Resolutions, all of the provisions of the Bylaws remain unchanged and in full force and effect; and

FURTHER RESOLVED, that these resolutions shall be submitted to the Council Member Boards for review and approval; and

FURTHER RESOLVED, that upon the approval of the resolutions by an affirmative vote of not less than two-thirds of the Council Member Boards, such changes to the Bylaws will become effective July 1, 2016.

Sponsors' Statement of Support

Public members serve a valuable role on many Member Boards in that they help assure that there is a continual focus on protecting the public health, safety, and welfare. Public Member Board Members complement the expertise of architect Member Board Members by bringing a wide range of diverse backgrounds to the table and by sharing the consumer's perspective.

In 2013, a Public Member Task Force was established to discuss the role of public members and how they might be better able to serve the Council. The Task Force was comprised of public members from the NCARB's Member Boards. Initial research conducted by the task force indicated that the governing statutes of 44 of NCARB's 54 Member Boards mandate the inclusion of a public member on the architectural licensing board. These same statutes allocate a total of 81 Member Board Member positions to public members, 60 of which are currently filled. In an attempt to garner feedback from this large base and inform their work on their charge, the Public Member Task force facilitated workshops during the 2013 and 2014 Annual Meetings. Recurring themes and ideas for consideration during these workshops were as follows:

- The public members currently serving on NCARB Member Boards feel they play an integral role on their board.
- Most feel that the public member seat on the NCARB Board of Directors should be selected and elected the same as other board members
- All support the concept of visiting the discussion of the outside public member vs. a public member serving on an NCARB Member Board.
- The NCARB Board of Directors should consider amending the NCARB Bylaws to allow public members who serve on Member Boards to fill the Public Director position on the BOD.

In 2007, the Public Director position was added to the Board of Directors through the passage of *Resolution 2007-03 "Bylaws Amendment: Public Director to Serve on the Board of Directors".* At that time, the qualifications included that the Public Director shall not be a person engaged in or licensed to engage in the design of any portion of buildings or structures or a person participating in the regulation of design of any portion of buildings or structures. In 2013, the language regarding "person participating in the regulation of design of any portion of buildings or structures" was removed from the qualifications through *Resolution 2013- 05 "Bylaws Amendment: Qualification for the Public Director Position"*

Currently, identification of the Public Director nominee is managed by the Board of Directors and presented to the membership for ratification through a vote at the Annual Business Meeting. The process to identify potential candidates has been to extend a call for candidates to Member Boards requesting recommendations of individuals who meet the desired qualifications be submitted to the Board. In FY14, the process was enhanced by expanding the audience to which the call was distributed beyond our Member Boards. Historically, there interest in this position has been low and, at times, the Council has had to recruit candidates.

This proposed Bylaws change reflects the desires of the Public Member Task Force to utilize the skills and knowledge obtained regarding protection of the public health, safety and welfare through service on a Member Board and would increase the pool of potential applicants by enabling a public member currently serving on an NCARB Member Board to apply for and serve as the Public Director on the NCARB Board of Directors. This change would become effective with the election of the FY17 Public Director. The delay is offered in order to provide current public members serving on a Member Board the time to develop a process to select a candidate for election to the position.

No Financial Impact

MINUTES OF A MEETING OF THE
TENNESSEE BOARD OF ARCHITECTURAL AND ENGINEERING EXAMINERS
Davy Crockett Tower
Nashville, Tennessee
Thursday, April 9, 2015

CALL TO ORDER

Richard Thompson, Chair, called the regular meeting of the Tennessee Board of Architectural and Engineering Examiners to order at 9:05 a.m. on April 9, 2015, at the Davy Crockett Tower in Nashville, Tennessee. A quorum was declared present.

The following **Board members** were present:

Susan Ballard	Registered Interior Designer
Hal Balthrop	Professional Engineer
Wilson Borden	Public Member
Robert Campbell, Jr.	Professional Engineer
Jerome Headley	Registered Architect
Philip Lim	Professional Engineer
Bill Lockwood	Registered Landscape Architect
Rick Thompson	Registered Architect
Frank Wagster	Registered Architect

The following **Associate Engineer members** were present:

Richard Bursi	Professional Engineer
Stephen King	Professional Engineer
Laura Reinbold	Professional Engineer

The following **Board staff** was present:

John Cothron	Executive Director
Anthony Glandorf	Legal Counsel
Wanda Phillips	Office Manager
Wanda Garner	Administrative Assistant

The following **guests** were present for part or all of the meeting:

Ashley Cates, American Institute of Architects of Tennessee (AIA-TN)
Candy Toler, Tennessee Society of Professional Engineers/American Council of Engineering Companies of Tennessee (TSPE/ACEC-TN)
Kasey Anderson, TSPE/ACEC-TN
Nathan Ridley, American Society of Landscape Architects- Tennessee (ASLA-TN)

Don Baltimore, Tennessee Interior Design Coalition

Guests were introduced.

No changes/additions were made to the agenda.

CONSENT AGENDA (attached)
Motion was made by Mr. Lockwood and seconded to approve the minutes of the February 12, 2015 meeting. The motion passed unanimously.

Motion was made by Mr. Lockwood and seconded to approve the Complaints for Board Decision. The motion passed unanimously.

PROFESSIONAL SOCIETY REPORTS

Ashley Cates and Candy Toler expounded on legislation which is reported below in the Director's Report, and reported activities of AIA-TN and TSPE/ACEC-TN respectively. Ms. Toler introduced Kasey Anderson as the new Executive Director of TSPE/ACEC-TN, effective May 1, 2015. The Board expressed appreciation to Ms. Toler for her years of service to the engineering profession.

Nathan Ridley and Don Baltimore reported activities of ASLA-TN and TIDC respectively.

LEGAL CASE REPORT (presented by Anthony Glandorf) (attached)

1. *Case No. L15-AEL-RBS-2015001021* *Complaint #201500102*
   Motion was made by Mr. Borden and seconded to close the case. The motion passed unanimously.

2. *Case No. L15-AEL-RBS-2015002041* *Complaint #20150204*
   Motion was made by Mr. Headley and seconded to authorize a formal hearing with the authority to settle with a Consent Order for revocation of the respondent's license based on his license revocation by the Missouri Board. The motion passed unanimously.

DIRECTOR'S REPORT

1. Mr. Cothron reported his activities and those of his staff and Board members.
2. *Legislative Update* (attached)
   a. Senate Bill (SB) 0081/House Bill (HB) 0071, which is an administration bill, has passed in the Senate and is recommended for passage in the House. This bill authorizes the Board to deny certain certificates of registration to persons with felony convictions; removes certain board notifications to governmental entities when revoking or suspending certificates of registration; and removes certain fees for engineer intern certifications or enrollment and for certain exams.

   b. SB0095/HB0084 has passed in the House with an amendment excluding architectural and engineering services. This bill authorizes public institutions of

higher education and the department of general services to participate in, sponsor, conduct, or administer cooperative purchasing agreements with other states or local governments for the procurement of certain goods or services.

c. SB0474/HB0787 has passed in the Senate, and is recommended for passage in the House, with an amendment allowing local governments to adopt sprinkler requirements for townhouses. The bill, as introduced, prohibits the requirement of fire sprinkler systems for townhouses by any local or statewide adopted building codes.

d. SB0620/HB0628, which exempts local jurisdictions that have an established codes department from audit of its records and transactions by the state fire marshal and removes a provision of law stating that state building codes supersede all less stringent provisions of municipal ordinances, has been deferred to 2016. The Board voted to oppose this bill in February.

e. SB0556/HB0678, which would phase out the professional privilege tax, has been recommended for further study.

f. SB0978/HB0823 has passed in the Senate, and is recommended for passage in the House, with an amendment raising the threshold for public works projects that require a registered architect, registered engineer, or registered landscape architect to $50,000.

g. SB0836/HB0477 has passed in the Senate, but has been deferred for study in the House. This bill, as introduced, requires that edges of steps into certain public buildings constructed, purchased, or leased by the state or its political subdivisions after July 1, 2015, be marked with yellow paint to assist persons with vision impairment.

Section 7, Item 28 of the appropriations bill (SB1399/HB1374) earmarks $350,000 for the Board's grants program.

3. *Complaint Data* was presented for informational purposes only. (attached)

ENGINEER COMMITTEE REPORT

The Engineer Committee, through Mr. Balthrop, reported on topics discussed. The minutes of the Engineer Committee meeting follow these minutes. Mr. Campbell requested that TSPE, ACEC-TN, and the American Society of Civil Engineers (ASCE) submit specific proposals on ways to improve the Principles and Practice of Engineering (PE) examinations.

JOINT LANDSCAPE ARCHITECT/ARCHITECT COMMITTEE REPORT

The Joint Landscape Architect/Architect Committee, through Mr. Thompson, reported on topics

discussed. The minutes of the Joint Landscape Architect/Architect Committee meeting follow these minutes.

PUBLICATIONS COMMITTEE REPORT

The Publications Committee, through Mr. King, reported that work continues on revisions to the *Reference Manual for Building Officials and Design Professionals*.

UNFINISHED BUSINESS

1. *Action Items* (attached)
   The action items taken from the February meeting were reviewed and the required action had either been taken or is in process.
   a. Ms. Ballard reported that she will continue to work with AIA-TN to help establish a state fee schedule for interior designers.
   b. In light of a case (#L14-AEL-RBS-2014026091) in which a third party added, in the title block, that a respondent was a registered engineer, though he was not, Mr. Headley moved that legal counsel consider the following and report at the June meeting:
      i. Is this falsifying the document?
      ii. Did the third party commit forgery?
      iii. Can the Board pursue legal action based on it being a threat to the public's "health, safety and welfare"? If it falls outside the Board's purview, who has the authority to discipline?
      iv. Does it fit into a statutory or rule violation?

      The motion was seconded and passed unanimously.

2. *Proposed Rule Changes* (attached)
   a. Motion was made by Mr. Wagster and seconded to approve
      i. the Emergency Rule Filing Form which stays the effectiveness of current pending rules;
      ii. the "Impact on Local Governments" statement; and
      iii. the "Additional Information Required by Joint Government Operations Committee."

      By roll call, the motion passed unanimously.

   b. Motion was made by Mr. Campbell and seconded to approve
      i. the Proposed Rule(s) Filing Form;
      ii. the Regulatory Flexibility Addendum;
      iii. the "Impact on Local Governments" statement; and
      iv. the "Additional Information Required by Joint Government Operations Committee."

      By roll call, the motion passed unanimously.

c. Motion was made by Mr. Borden and seconded to adopt
   i. Proposed Rules – Military Applicant Rule;
   ii. the Regulatory Flexibility Addendum;
   iii. the "Impact on Local Governments" statement; and
   iv. the "Additional Information Required by Joint Government Operations Committee."

   By roll call, the motion passed unanimously.

Break—10:32 to 10:55 a.m.

3. *Qualifications-Based Selection (QBS)*
   Motion was made by Mr. Balthrop and seconded that the Law and Rules/Policies Committee be charged with reviewing the QBS FAQs as they relate to public school systems and that legal counsel provide an outline of issues for discussion prior to the June meeting. The motion passed unanimously.

NEW BUSINESS

1. *Officer Nominations*
   The Nominations Committee, through Mr. Borden, recommended the following slate of officers for 2015-2016. The Board will vote for Board officers at the June meeting.

   Chair – Robert Campbell
   Vice Chair – Susan Ballard
   Secretary – Frank Wagster

2. *Correspondence from Charles Ferguson re: Aerial Adventure Courses* (attached)

   Motion was made by Mr. Lim and seconded to accept Mr. Wagster's opinion in which he (Mr. Wagster) stated that "… the plans for the building/structure should be prepared by design professionals registered in the State of Tennessee. I find nothing in the Reference Manual or the Rules to the contrary." The motion passed unanimously.

Motion was made by Mr. Campbell and seconded to reschedule the Law and Rules/Policies Committee and the Publications Committee meetings to the June meeting. The motion passed unanimously.

The Chair adjourned the meeting at 11:40 a.m.

Attachments
February Minutes
Complaints for Board Decision
Legal Report
Legislative Update
Complaint Data
Action Items

Emergency Rule Filing Form
Proposed Rule(s) Filing Form
Proposed Rules – Military Applicant Rule
Charles Ferguson's Letter w/attachments of 2/15/2015

MINUTES
BOARD OF ARCHITECTURAL AND ENGINEERING EXAMINERS
ENGINEER COMMITTEE MEETING
Davy Crockett Tower- Conference Room 1B
Nashville, Tennessee
Wednesday, April 8, 2015

CALL TO ORDER

Hal Balthrop, P.E., Committee Chair, called the Engineer Committee meeting to order at 1:14 p.m. on April 8, 2015 in Room 1B of the Davy Crockett Tower at 500 James Robertson Parkway, Nashville, Tennessee.

The following **Board members** were present:

Hal Balthrop, P.E.	Chair, Middle TN Member
Robert Campbell, P.E.	East TN Member
Philip Lim, P.E.	West TN Member
Ricky Bursi, P.E.	West TN Associate Member
Stephen King, P.E.	East TN Associate Member
Laura Reinbold, P.E.	Middle TN Associate Member

A quorum was present.

The following **Board staff** was present:

John Cothron	Executive Director
Ellery Richardson	Legal Counsel
Wanda Phillips	Administrative Manager

NEW BUSINESS

APPLICATIONS FOR DISCUSSION

- **JORDAN, Vincent Joseph (Comity)** The applicant's degree was deficient sixteen (16) credit hours in humanities/social sciences (general education) coursework. Following Board criteria, the committee granted five (5) credit hours for experience and one (1) credit hour for citizenship, leaving a deficiency of ten (10) credit hours. The committee

agreed to approve his registration with the caveat that the committee will discuss an updated approach toward humanities/social sciences deficiencies at the June committee meeting. Mr. Cothron was asked to contact Dr. John W. Smith for his recommendation regarding this subject and to research how other states handle such deficiencies.

- **SPRADLIN, Kollan Lee (Exam)** The application was previously approved by Mr. Lim. Mr. Balthrop, however, did not see enough engineering design experience. With updated information, Mr. Balthrop approved the applicant to sit for the exam.

CORRESPONDENCE FROM CHARLES FERGUSON RE: AERIAL ADVENTURE COURSES

Following discussion, the committee agreed to accept the recommendation of Mr. Wagster to require sealed plans for the structure in question.

SEALING SUBSURFACE UTILITY ENGINEERING SURVEY DOCUMENTS

Committee members determined that this question should be directed to the Board of Examiners for Land Surveyors.

****

UNFINISHED BUSINESS

CONFERENCE CALL WITH JOSEPH TOMASELLO, P.E. RE: INTERNATIONAL RESIDENTIAL CODE CERTIFICATION

The committee discussed, by conference call, International Residential Code (IRC) certifications with Mr. Tomasello and Thomas W. Smith, R.A. At the request of Mr. Balthrop, Messrs. Tomasello and Smith provided an overview of the issues of concern. Following discussion, Mr. Cothron was instructed to send a letter to Mr. Tomasello stating that a registrant of the Board cannot sign and seal a design that is not prepared under the responsible charge of the registrant, and citing the appropriate portions of Rule 0120-02-.08 Seals. Additionally, the letter should state that Tenn. Code Ann. § 62-2-102 exempts one-family and two-family dwellings from the requirement to have plans and specifications prepared by a registered architect or engineer, and that the committee welcomes further discussion of the issue. A copy of the letter should be sent to all the building officials referenced in Mr. Tomasello's original correspondence. Mr. Cothron was asked to distribute the letter to committee members for review prior to mailing the letter.

REVISIONS TO STANDARD OF CARE FOR FIRE SPRINKLER SYSTEM DESIGN RE: DELEGATED DESIGN OF FIRE SPRINKLER SYSTEMS

The committee endorsed the second version of the sprinkler shop drawings review policy with two changes:

- Replace the words “design decisions” with “engineering decisions” in the fifth sentence of the second paragraph.
- Replace the words “design responsibilities” with “engineering responsibilities” in the third sentence of the third paragraph.

The revised policy will be sent to the State Fire Marshal’s Office, sprinkler contractors, and engineering societies for comment.

DECOUPLING OF EXPERIENCE & EXAMINATION REQUIREMENTS FOR PE REGISTRATION

The committee discussed strategies for pursuing a law change to decouple the experience and examination requirements for PE registration. Mr. Balthrop noted that the Tennessee Society of Professional Engineers (TSPE) supports the concept of decoupling, while the American Council of Engineering Companies of Tennessee (ACEC-TN) opposes the concept but is open to further discussion. The main reason cited by ACEC-TN for opposing decoupling is that the exam needs to be less academic and more practice-based. The committee agreed to continue discussions with TSPE/ACEC-TN, possibly by appearing at meetings of the TSPE and ACEC-TN Board of Directors.

Adjourn. The Chair adjourned the meeting at 4:00 p.m.

MINUTES
BOARD OF ARCHITECTURAL AND ENGINEERING EXAMINERS
JOINT ARCHITECT/LANDSCAPE ARCHITECT COMMITTEE MEETING
Davy Crockett Tower- Conference Room 1A
Nashville, Tennessee
Thursday, April 9, 2015

CALL TO ORDER

Rick Thompson, Architect Committee Chair, called the joint Architect/Landscape Architect Committee meeting to order at 8:00 a.m. on April 9, 2015, in Room 1A of the Davy Crockett Tower at 500 James Robertson Parkway, Nashville, Tennessee.

The following **Board members** were present:

Robert Campbell, Jr., P.E.	East TN Engineer Member
Jerry Headley, R.A.	Middle TN Architect Member
Bill Lockwood, R.L.A.	Landscape Architect Member
Rick Thompson, R.A.	East TN Architect Member
Frank Wagster, R.A.	West TN Architect Member

A quorum was present.

The following **Board staff** was present:

Anthony Glandorf	Legal Counsel

NEW BUSINESS

NEW APPLICATION FORMS FOR EARLY EXAM ELIGIBILITY CANDIDATES

By consensus, the committee approved the new application forms to be utilized by architect and landscape architect exam applicants who wish to sit for their respective examinations prior to completing the required experience.

REPORT ON NCARB REGIONAL SUMMIT

A written report on the NCARB Regional Summit was submitted (attached).

CORRESPONDENCE FROM CHARLES FERGUSON RE: AERIAL ADVENTURE COURSES

By consensus, the committee agreed with Mr. Wagster's conclusions regarding aerial adventure courses, that is, that the plans for the structure in question should be prepared by a design professional registered in Tennessee.

Adjourn. The Chair adjourned the meeting at 8:20 a.m.

MINUTES
BOARD OF ARCHITECTURAL AND ENGINEERING EXAMINERS
NOMINATIONS COMMITTEE MEETING
Davy Crockett Tower- Conference Room 1A
Nashville, Tennessee
Thursday, April 9, 2015

CALL TO ORDER

Wilson Borden, Committee Chair, called the Nominations Committee meeting to order at 8:30 a.m. on April 9, 2015, in Room 1A of the Davy Crockett Tower at 500 James Robertson Parkway, Nashville, Tennessee.

The following **Board members** were present:

Wilson Borden, Committee Chair
Susan Ballard, R.I.D.
Bill Lockwood, R.L.A.
Rick Thompson, R.A.

A quorum was present.

The following **Board staff** was present:

John Cothron, Executive Director
Anthony Glandorf, Legal Counsel

DISCUSS NOMINATIONS FOR BOARD OFFICERS

Following discussion, a motion was made by Mr. Lockwood and seconded to nominate the following slate of officers for fiscal year 2016:

Robert Campbell, P.E., Chair
Susan Ballard, R.I.D., Vice Chair
Frank Wagster, R.A., Secretary

The motion passed.

Adjourn. The Chair adjourned the meeting at 8:40 a.m.

2015 LEGISLATION

Bill Number(s)/Sponsor(s)	Description	House	Senate	Board Position
SB0081*/HB0071 Norris/McCormick	Authorizes Board to deny certain certificates of registration to persons with felony convictions; removes certain board notifications to governmental entities when revoking or suspending certificates of registration; removes certain fees for engineer intern certifications for enrollment and for certain exams.	**Passed; Pub. Ch. 291**	**Passed; Pub. Ch. 291**	
SB0095*/HB0084 Norris/McCormick	Authorizes public institutions of higher education and the department of general services to participate in, sponsor, conduct, or administer cooperative purchasing agreements with other states or local governments for the procurement of certain goods or services, including architectural or engineering services.	**Passed with amendment excluding architectural and engineering services; Pub. Ch. 272**	**Passed with amendment excluding architectural and engineering services; Pub. Ch. 272**	Oppose as introduced, but support amendment to exclude architectural and engineering services
SB0474*/HB0787 Bell/Williams	As introduced, prohibits the requirement of fire sprinkler systems for townhouses by any local or statewide adopted building codes. - Amends TCA Title 68, Chapter 120.	**Passed with amendment allowing local governments to adopt sprinkler requirements for townhouses; Pub. Ch. 378**	**Passed with amendment allowing local governments to adopt sprinkler requirements for townhouses; Pub. Ch. 378**	
SB0620/HB0628* Tracy/Littleton	Exempts local jurisdictions that have an established codes department from audit of its records and transactions by the state fire marshal; removes provision of law stating that state building codes supersede all less stringent provisions of municipal ordinances.	State Government Subcommittee; action deferred to 2016	General Subcommittee of Commerce and Labor Committee	Oppose
SB0556*/HB0678 Bowling/VanHuss	As introduced, phases out the privilege tax on persons engaged in certain occupations by annually decreasing it by 20 percent over the next five years; eliminates the tax in 2019 and thereafter.	Finance, Ways & Means Subcommittee —taken off notice	Recommended for summer study; FW&M Committee	
SB0978/HB0823* Norris/Lollar	Increases, from $25,000 to $100,000, the threshold for public works projects that require a registered architect, registered engineer, or registered landscape architect.	**Passed with amendment raising threshold to $50,000; Pub. Ch. 403**	**Passed with amendment raising threshold to $50,000; Pub. Ch. 403**	

SB0836/HB0477* Yager/Beck	Requires that edges of steps into certain public buildings constructed, purchased, or leased by the state or its political subdivisions after July 1, 2015, be marked with yellow paint to assist persons with vision impairment.	Deferred to TACIR for study	**Passed**	
SB1092*/HB1300 Harris/Sparks	Requires the state fire marshal, in consultation with TACIR, to submit a report to the legislature addressing fire safety standards affecting places of worship.	Local Government Subcommittee	State and Local Government Committee	
SB1346/HB1261* McNally/Ragan	Authorizes counties and municipalities to opt out of the International Energy Conservation Code standards applicable statewide to buildings classified for certain industrial or storage uses; authorizes counties and municipalities to adopt alternative industrial or storage use standards.	State Government Subcommittee	Commerce and Labor Committee	

Pub. Ch. 427 (SB1399/HB1374), Section 7, Item 28 earmarks $350,000 for the Board's grants program.

Board of Architectural and Engineering Examiners
Open Complaints

	Profession	Complaint #	Received	Allegation	Status	Comments
1	Architect	201202668	12/17/2012	Practice outside area(s) of competence.	Open-Legal	Formal
2	Architect	201401761	7/23/2014	Practice outside area(s) of competence.	Open-Legal	Formal
3	Architect	201402215	9/9/2014	Practice on an expired license.	Open-Legal	Formal
4	Architect	201500789	3/25/2015	Disciplined in another jurisdiction.	Open-Staff	Letter of Caution
5	Architect	201501014	4/21/2015	Practice on an expired license.	Open-Staff	Response requested
6	Architect	201501186	5/5/2015	Disciplined in another jurisdiction.	Open-Staff	Letter of Caution
7	Architect	201501187	5/8/2015	Disciplined in another jurisdiction.	Open-Staff	Letter of Caution
8	Engineer	201300578	3/14/2013	Practice outside area(s) of competence.	Open-Legal	Formal
9	Engineer	201500204	1/12/2015	Disciplined in another jurisdiction.	Open-Legal	
10	Engineer	201500446	2/3/2015	Violation of Rule 0120-02-.04 [Public Statements].	Open-Legal	Investigation requested
11	Engineer	201500597	3/9/2015	Disciplined in another jurisdiction.	Open-Staff	Letter of Caution
12	Engineer	201500720	3/20/2015	Practice outside area(s) of competence.	Open-Staff	Response requested
13	Engineer	201501137	4/29/2015	Unlicensed practice.	Open-Staff	Response requested
14	Engineer	201501138	4/29/2015	Practice outside area(s) of competence.	Open-Legal	
15	Engineer	201501191	5/8/2015	Disciplined in another jurisdiction.	Open-Staff	Letter of Caution
16	Engineer	201501193	5/11/2015	Disciplined in another jurisdiction.	Open-Staff	Letter of Caution
17	Engineer	201501207	5/12/2015	Disciplined in another jurisdiction.	Open-Staff	Letter of Caution
18	Eng Firm	201501192	5/8/2015	Disciplined in another jurisdiction.	Open-Staff	Letter of Caution
	Number over 180 days old: 4 (22%)					
	Number over 180 days old without "clock stopping" action: 0 (0%)					
	Number of formal hearings authorized to be heard by Board: 4					
	Number in Investigations: 1					
	Percent on time (clock stopped within 180 days) last 18 months: 99% (80% is goal)					

THIRD QUARTER FISCAL YEAR 2015
FINANCIAL REPORT

Revenue:

- Revenue for the third quarter of fiscal year 2015 decreased $5,170 from the third quarter of fiscal year 2014.

Expenses:

- Personal services expenditures (staff salaries, per diems, employee benefits) remained consistent with the third quarter of fiscal year 2014.
- In-state travel expenses decreased $559.
- Out-of-state travel expenses decreased $1,794.
- Communication costs remained consistent.
- Third Party Professional Services increased $503.
- Supplies and Office Furniture decreased $1,096.
- $186,504 of the grant funds was expended in the third quarter; the remainder will be expended in the fourth quarter.
- Training of State Employees (includes registration fees for national council meetings) decreased $1,955.
- Computer Related Items decreased $355.
- State Professional Services decreased $910.
- Overall, direct expenditures decreased $122,935.
- The YTD reserve for this fiscal year is $452,079.
- The accumulated reserve from last fiscal year is $1,213,000.

FY 2014-2015 FINANCIAL REPORT
BOARD OF ARCHITECTURAL AND ENGINEERING EXAMINERS

	1ST QUARTER JULY-SEPT 2014	*1ST QUARTER JULY-SEPT 2013*	2ND QUARTER OCT-DEC 2014	*2ND QUARTER OCT-DEC 2013*	3RD QUARTER JAN-MAR 2015	*3RD QUARTER JAN-MAR 2014*	4TH QUARTER APR-JUNE 2015	*4TH QUARTER APR-JUNE 2014*	TOTALS
REVENUE									
ARCHITECTS	$ 61,585.00	*$ 70,410.00*	$ 65,765.00	*$ 62,880.00*	$ 79,900.00	*$ 69,915.00*	$ -	*$ 65,721.00*	
ENGINEERS	258,430.00	*263,395.00*	248,330.61	*239,124.00*	279,160.39	*296,225.00*	-	*289,424.00*	
ENGINEER INTERNS	1,605.00	*30,990.00*	1,365.00	*900.00*	4,010.00	*2,610.00*	-	*1,735.00*	
LANDSCAPE ARCHITECTS	8,720.00	*6,550.00*	6,535.00	*5,655.00*	8,090.00	*5,445.00*	-	*7,940.00*	
INTERIOR DESIGNERS	9,980.00	*5,495.00*	8,475.00	*5,375.00*	7,980.00	*10,115.00*	-	*6,755.00*	
CASE AND COMPLAINT REVENUE	-		-		-			*15,450.00*	
STATE REGULATORY FEE	-		-		-			*(93,300.00)*	
	$ 340,320.00	***$ 376,840.00***	**$ 330,470.61**	***$ 313,934.00***	**$ 379,140.39**	***$ 384,310.00***	**$ -**	***$ 293,725.00***	
EXPENDITURES									
REGULAR SALARIES & WAGES	$ 66,583.00	*66,368.13*	$ 65,983.34	*$ 66,574.67*	$ 63,983.18	*65,583.00*	$ -	*64,183.00*	
PART-TIME SALARIES & WAGES (PER DIEM)	3,050.00	*3,433.34*	3,650.00	*2,666.66*	2,050.00	*2,800.00*	-	*3,950.00*	
EMPLOYEE BENEFITS	29,307.16	*28,612.42*	29,210.96	*28,825.91*	29,411.03	*29,827.80*	-	*28,831.70*	
IN-STATE TRAVEL	3,058.90	*2,382.16*	9,526.26	*9,537.66*	2,764.15	*3,322.83*	-	*6,025.93*	
OUT-OF-STATE TRAVEL	4,748.35	*4,062.09*	7,486.78	*4,600.34*	1,384.61	*3,178.73*	-	*7,351.98*	
PRINTING & DUPLICATING	-	*119.51*	65.88	*255.92*	-	*-*	-	*-*	
COMMUNICATIONS & SHIPPING COSTS	4,552.77	*4,860.09*	5,526.46	*5,187.45*	5,297.82	*5,591.43*	-	*5,828.02*	
MAINTENANCE & REPAIRS	-	*-*	-	*-*	17.36	*229.95*	-	*-*	
THIRD PARTY PROFESSIONAL SERVICES	9,545.56	*9,306.37*	11,817.43	*154,251.22*	15,254.86	*14,751.93*	-	*4,051.79*	
SUPPLIES & OFFICE FURNITURE	284.91	*582.96*	3.24	*492.35*	203.26	*1,299.56*	-	*164.76*	
RENTALS & INSURANCE	269.04	*269.04*	550.50	*787.44*	403.56	*403.56*	-	*391.14*	
GRANTS & SUBSIDIES	-	*-*	-	*-*	186,504.00	*300,000.00*	-	*-*	
TRAINING OF STATE EMPLOYEES	2,675.00	*-*	-	*300.00*	745.00	*2,700.00*	-	*2,680.00*	
COMPUTER RELATED ITEMS	122.65	*189.00*	-	*140.90*	145.98	*501.15*	-	*1,390.47*	
STATE PROFESSIONAL SERVICES	8,207.85	*8,564.27*	11,871.53	*13,250.63*	11,589.33	*12,499.26*	-	*18,132.03*	
TOTAL DIRECT EXPENDITURES	**$ 132,405.19**	***$ 128,749.38***	**$ 145,692.38**	***$ 286,871.15***	**$ 319,754.14**	***442,689.20***	**$ -**	***142,980.82***	
COST BACKS									
DEPARTMENT								*208,237.73*	
INVESTIGATIONS								*3,297.31*	
LEGAL								*45,605.00*	
TOTAL COST BACKS								***257,140.04***	
TOTAL EXPENDITURES	**$ 132,405.19**	***$ 128,749.38***	**$ 145,692.38**	***$ 286,871.15***	**$ 319,754.14**	***442,689.20***		***400,120.86***	
YTD RESERVE	**$ 207,914.81**	***$ 248,090.62***	**$ 392,693.04**	***$ 275,153.47***	**$ 452,079.29**	***216,774.27***		***323,170.13***	
BALANCE ADJUSTMENTS (CORE EXPENSE)								***(88,954.00)***	
ACCUMULATED RESERVE								***1,213,000.39***	

NOTES: Rentals and Insurance includes lease of reproduction equipment; Training of State Employees includes registration fees for national council meetings; State Professional Services includes printing by state agencies and lease of office space.

MONTHLY EXPENDITURE DETAIL
FY 2014-2015

JANUARY 2015

REGULAR SALARIES & WAGES	**$**	**22,261.18**	
PART-TIME SALARIES & WAGES (PER DIEM)	**$**	**700.00**	
EMPLOYEE BENEFITS	**$**	**9,775.19**	
IN-STATE TRAVEL			
In-State Mileage	$	-	
In-State Airfare	$	-	
In-State Meals & Incidentals	$	-	
In-State Lodging	$	-	
In-State Travel--Other	$	-	
	$	**-**	
OUT-OF-STATE TRAVEL			
Out-of-State Airfare	$	-	
Out-of-State Travel--Other	$	-	
Out-of-State Meals	$	-	
Out-of-State Mileage	$	-	
Out-of-State Lodging	$	-	
	$	**-**	
PRINTING & DUPLICATING	**$**	**-**	
COMMUNICATIONS & SHIPPING COSTS			
Telecommunications	$	-	
Postal Charges	$	1,915.16	
Freight & Express Charges	$	8.04	
	$	**1,923.20**	
MAINTENANCE & REPAIRS			
Nashville Stationary Co.	**$**	**17.36**	Countertop installation
THIRD PARTY PROFESSIONAL SERVICES			
Court Reporter Services	$	-	
Document Destruction Services	$	-	
General Business Consulting Svcs			
Credit card fees (online renewal)	$	1,550.54	
Organization Memberships/Dues	$	-	
Other Legal Services	$	-	
Other	$	-	
Consulting Services--Testing Services	$	-	
	$	**1,550.54**	
SUPPLIES & OFFICE FURNITURE			
Office Supplies & Furniture	$	157.76	Countertops
Operational Supplies	$	-	
Training Supplies	$	-	
Sensitive Minor Equipment	$	-	
	$	**157.76**	
RENTALS & INSURANCE			
Rent or Lease of Buildings	$	-	
Rent or Lease of Reproduction Equipment	$	134.52	
	$	**134.52**	
GRANTS & SUBSIDIES	**$**	**-**	

MONTHLY EXPENDITURE DETAIL
FY 2014-2015

TRAINING OF STATE EMPLOYEES		
In-Service Training	$	-
Out-Service Training	$	-
	$	**-**
COMPUTER RELATED ITEMS		
Maintenance of Equipment	$	-
Data Processing Supplies	$	-
Data Processing Services (Non-State)	$	-
Sensitive Minor Computers	$	-
	$	**-**
STATE PROFESSIONAL SERVICES		
Data Processing Services (F&A, OIR)	$	-
Statewide Accounting Billing	$	-
Telephone Billing	$	951.79
Payroll Billing	$	-
Lock Box Billing	$	-
Attorney General Billings	$	-
Administrative Judges Billing (SOS)	$	-
Agency Internal Administrative Costs	$	-
Agency Internal Info Systems Costs	$	-
Printing & Reproduction by State Agencies	$	-
Rent or Lease of State Buildings	$	2,492.96
State-Owned Vehicle Charges	$	-
Other	$	-
	$	**3,444.75**
TOTAL JANUARY 2015	**$**	**39,964.50**

FEBRUARY 2015

REGULAR SALARIES & WAGES	**$**	**20,861.00**
PART-TIME SALARIES & WAGES (PER DIEM)	**$**	**1,100.00**
EMPLOYEE BENEFITS	**$**	**9,157.64**
IN-STATE TRAVEL		
In-State Mileage	$	1,113.90
In-State Airfare	$	-
In-State Meals & Incidentals	$	594.00
In-State Lodging	$	890.85
In-State Travel--Other	$	-
	$	**2,598.75**
OUT-OF-STATE TRAVEL		
Out-of-State Airfare	$	443.70
Out-of-State Travel--Other	$	-
Out-of-State Meals	$	-
Out-of-State Mileage	$	-
Out-of-State Lodging	$	-
	$	**443.70**
PRINTING & DUPLICATING	**$**	**-**
COMMUNICATIONS & SHIPPING COSTS		
Telecommunications	$	-

MONTHLY EXPENDITURE DETAIL
FY 2014-2015

Postal Charges	$	1,734.65
Freight & Express Charges	$	-
	$	**1,734.65**
MAINTENANCE & REPAIRS	**$**	**-**
THIRD PARTY PROFESSIONAL SERVICES		
Court Reporter Services	$	-
Document Destruction Services	$	20.34
General Business Consulting Svcs		
Credit card fees (online renewal)	$	1,967.26
Organization Memberships/Dues		
NCEES	$	6,500.00
CIDQ	$	3,900.00
Other Legal Services	$	-
Other	$	-
Consulting Services--Testing Services	$	-
	$	**12,387.60**
SUPPLIES & OFFICE FURNITURE		
Office Supplies & Furniture	$	45.50
Operational Supplies	$	-
Training Supplies	$	-
Sensitive Minor Equipment	$	-
	$	**45.50**
RENTALS & INSURANCE		
Rent or Lease of Buildings	$	-
Rent or Lease of Reproduction Equipment	$	134.52
	$	**134.52**
GRANTS & SUBSIDIES		
MTSU	$	1,372.00
University of Memphis	$	44,422.00
TSU	$	18,867.00
TN Tech	$	39,813.00
UTC	$	27,629.00
Lipscomb	$	13,501.00
CBU	$	14,177.00
O'More College of Design	$	1,342.00
Vanderbilt	$	25,381.00
	$	**186,504.00**
TRAINING OF STATE EMPLOYEES		
In-Service Training	$	-
Out-Service Training		
NCARB Regional reg. fee	$	450.00
	$	**450.00**
COMPUTER RELATED ITEMS		
Maintenance of Equipment	$	-
Data Processing Supplies	$	145.98
Data Processing Services (Non-State)	$	-
Sensitive Minor Computers	$	-
	$	**145.98**
STATE PROFESSIONAL SERVICES		
Data Processing Services (F&A, OIR)	$	-

MONTHLY EXPENDITURE DETAIL
FY 2014-2015

Statewide Accounting Billing	$	-
Telephone Billing	$	1,363.33
Payroll Billing	$	-
Lock Box Billing	$	-
Attorney General Billings	$	-
Administrative Judges Billing (SOS)	$	-
Agency Internal Administrative Costs	$	-
Agency Internal Info Systems Costs	$	-
Printing & Reproduction by State Agencies	$	354.55
Rent or Lease of State Buildings	$	2,492.96
State-Owned Vehicle Charges	$	-
Other	$	-
	$	**4,210.84**
TOTAL FEBRUARY 2015	**$**	**239,774.18**
MARCH 2015		
REGULAR SALARIES & WAGES	**$**	**20,861.00**
PART-TIME SALARIES & WAGES (PER DIEM)	**$**	**250.00**
EMPLOYEE BENEFITS	**$**	**10,478.20**
IN-STATE TRAVEL		
In-State Mileage	$	69.56
In-State Airfare	$	95.84
In-State Meals & Incidentals	$	-
In-State Lodging	$	-
In-State Travel--Other	$	-
	$	**165.40**
OUT-OF-STATE TRAVEL		
Out-of-State Airfare	$	-
Out-of-State Travel--Other	$	38.00
Out-of-State Meals	$	319.50
Out-of-State Mileage	$	-
Out-of-State Lodging	$	583.41
	$	**940.91**
PRINTING & DUPLICATING	**$**	**-**
COMMUNICATIONS & SHIPPING COSTS		
Telecommunications	$	-
Postal Charges	$	1,639.97
Freight & Express Charges	$	-
	$	**1,639.97**
MAINTENANCE & REPAIRS	**$**	**-**
THIRD PARTY PROFESSIONAL SERVICES		
Court Reporter Services	$	-
Document Destruction Services	$	-
General Business Consulting Svcs		
John W. Smith (transcript eval.)	$	100.00
Credit Card Fees (online renewal)	$	1,216.72
Organization Memberships/Dues	$	-

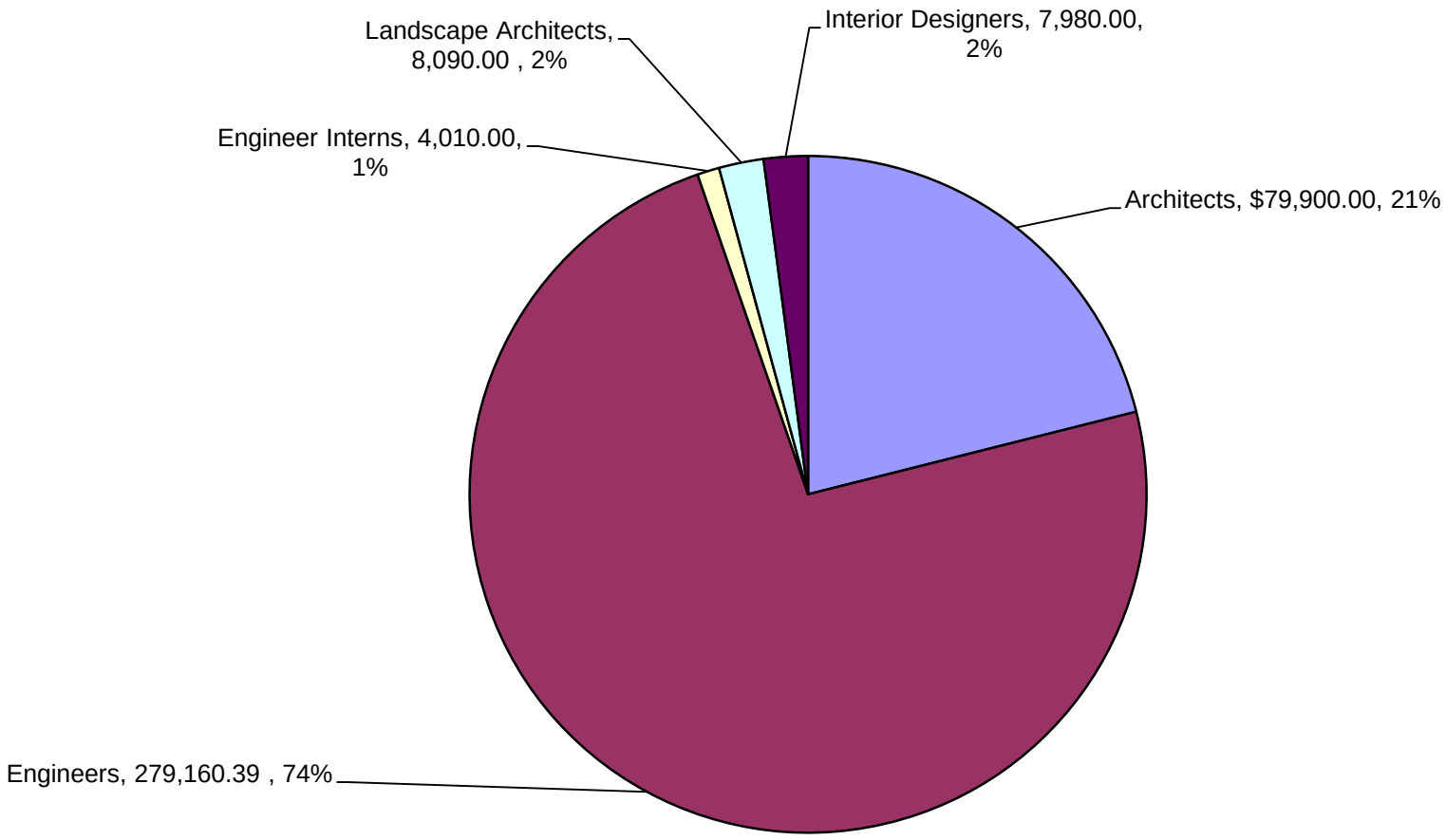
MONTHLY EXPENDITURE DETAIL
FY 2014-2015

Other Legal Services	$	-	
Other	$	-	
Consulting Services--Testing Services	$	-	
	$	**1,316.72**	
SUPPLIES & OFFICE FURNITURE			
Office Supplies & Furniture	$	-	
Operational Supplies	$	-	
Training Supplies	$	-	
Sensitive Minor Equipment	$	-	
	$	**-**	
RENTALS & INSURANCE			
Rent or Lease of Buildings	$	-	
Rent or Lease of Reproduction Equipment	$	134.52	
	$	**134.52**	
GRANTS & SUBSIDIES	**$**	**-**	
TRAINING OF STATE EMPLOYEES			
In-Service Training	$	-	
Out-Service Training	$	295.00	(NCEES reg. fees)
	$	**295.00**	
COMPUTER RELATED ITEMS			
Maintenance of Equipment	$	-	
Data Processing Supplies	$	-	
Data Processing Services (Non-State)	$	-	
Sensitive Minor Computers	$	-	
	$	**-**	
STATE PROFESSIONAL SERVICES			
Data Processing Services (F&A, OIR)	$	-	
Statewide Accounting Billing	$	-	
Telephone Billing	$	1,440.78	
Payroll Billing	$	-	
Lock Box Billing	$	-	
Attorney General Billings	$	-	
Administrative Judges Billing (SOS)	$	-	
Agency Internal Administrative Costs	$	-	
Agency Internal Info Systems Costs	$	-	
Printing & Reproduction by State Agencies	$	-	
Rent or Lease of State Buildings	$	2,492.96	
State-Owned Vehicle Charges	$	-	
Other	$	-	
	$	**3,933.74**	
TOTAL MARCH 2015	**$**	**40,015.46**	

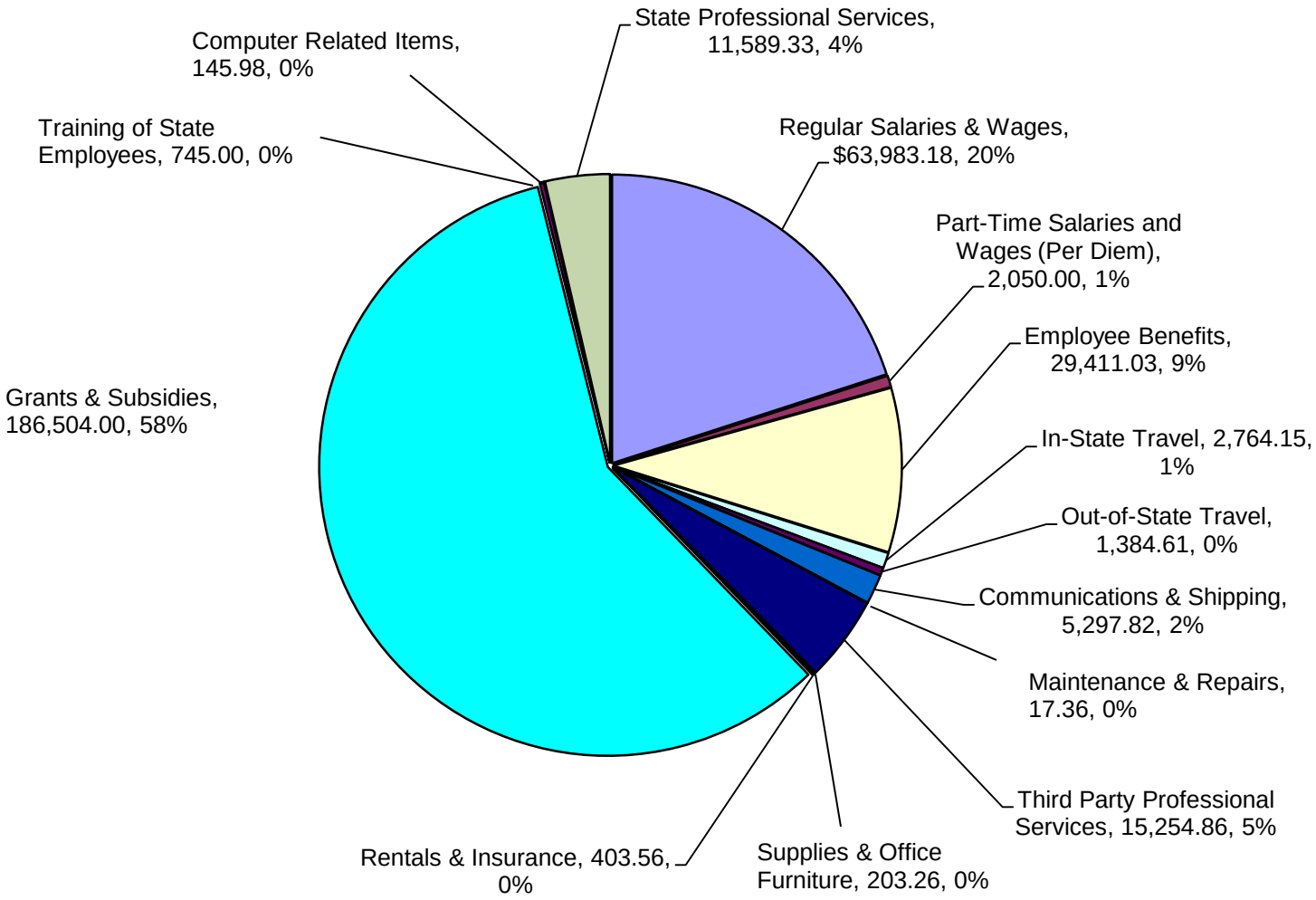
MONTHLY REVENUE BREAKDOWN
FY 2014-2015

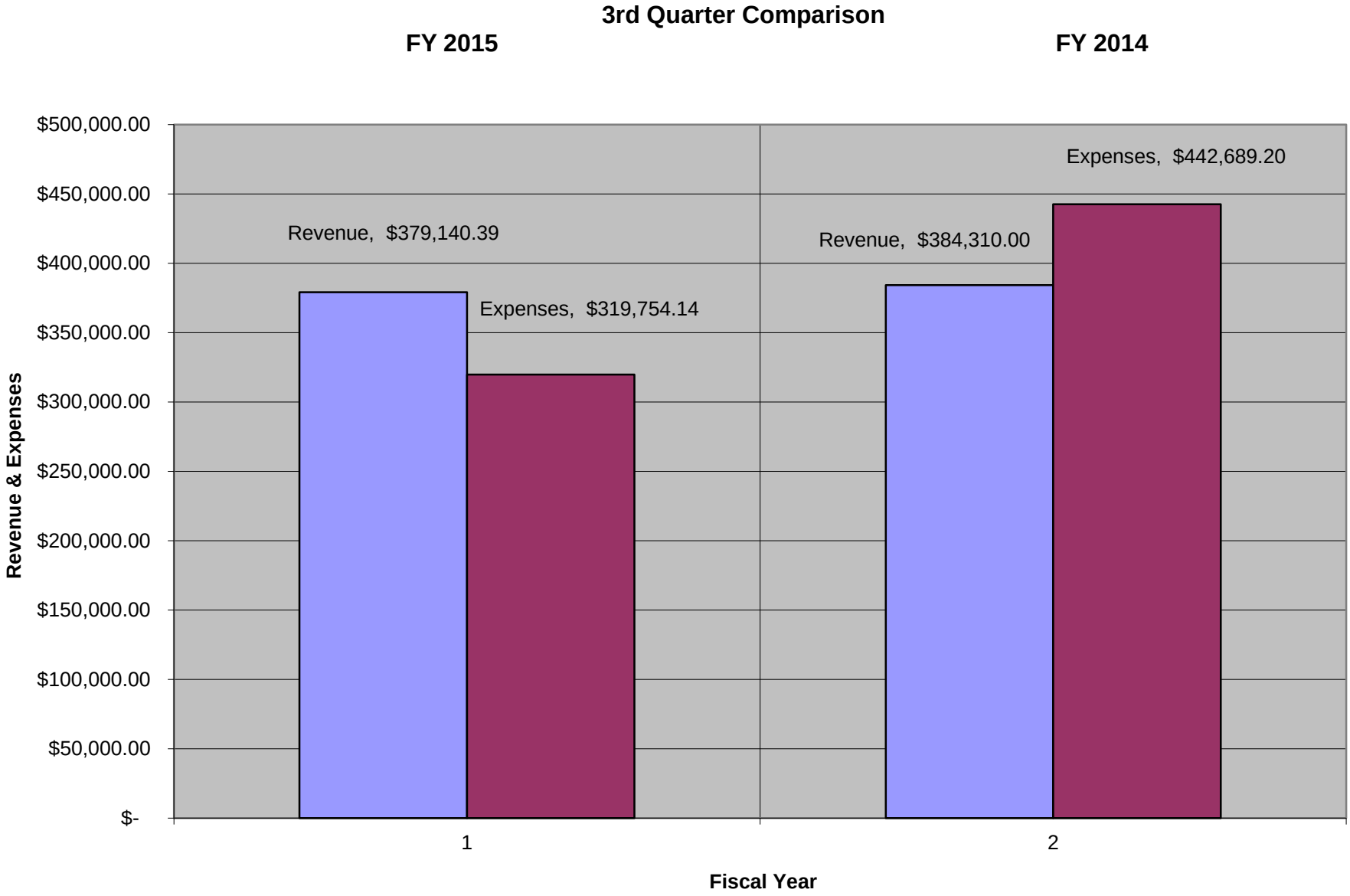
First Quarter	**Architects**	**Engineers**	**Eng Interns**	**Land Arch**	**Int Designers**	**Total**
July	$ 20,295.00	$116,440.00	$ 195.00	$ 2,355.00	$ 2,615.00	$ 141,900.00
August	$ 20,955.00	$ 76,495.00	$ 270.00	$ 2,910.00	$ 3,005.00	$ 103,635.00
September	$ 20,335.00	$ 65,495.00	$ 1,140.00	$ 3,455.00	$ 4,360.00	$ 94,785.00
	$ 61,585.00	**$258,430.00**	**$ 1,605.00**	**$ 8,720.00**	**$ 9,980.00**	**$ 340,320.00**
Second Quarter						
October	$ 21,135.00	$ 67,995.00	$ 555.00	$ 2,885.00	$ 3,580.00	$ 96,150.00
November	$ 22,225.00	$ 64,680.00	$ 285.00	$ 1,635.00	$ 2,655.00	$ 91,480.00
December	$ 22,405.00	$115,655.61	$ 525.00	$ 2,015.00	$ 2,240.00	$ 142,840.61
	$ 65,765.00	**$248,330.61**	**$ 1,365.00**	**$ 6,535.00**	**$ 8,475.00**	**$ 330,470.61**
Third Quarter						
January	$ 29,425.00	$122,860.39	$ 840.00	$ 2,100.00	$ 2,410.00	$ 157,635.39
February	$ 23,690.00	$ 77,800.00	$ 1,865.00	$ 3,080.00	$ 2,465.00	$ 108,900.00
March	$ 26,785.00	$ 78,500.00	$ 1,305.00	$ 2,910.00	$ 3,105.00	$ 112,605.00
	$ 79,900.00	**$279,160.39**	**$ 4,010.00**	**$ 8,090.00**	**$ 7,980.00**	**$ 379,140.39**
Fourth Quarter						
April						$ -
May						$ -
June						$ -
	$ -	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**

Revenue--3rd Quarter, FY 2015
Total Revenue: $379,140.39



Expenditures--3rd Quarter, FY 2015
Total Expenditures: $319,754.14




3rd Quarter Comparison
FY 2015
FY 2014
$500,000.00
$450,000.00
$400,000.00
$350,000.00
$300,000.00
$250,000.00
$200,000.00
$150,000.00
$100,000.00
$50,000.00
$-
Revenue & Expenses
Revenue, $379,140.39
Expenses, $319,754.14
Revenue, $384,310.00
Expenses, $442,689.20
1
2
Fiscal Year

TN BOARD OF ARCHITECTURAL AND ENGINEERING EXAMINERS

ACTION ITEMS

From April 9, 2015 Meeting

Rick Thompson

- Review the *Reference Manual for Building Officials and Design Professionals* and revise the Appendix E (Cover Sheet for Plans Submissions).

John Cothron

- Review the *Reference Manual for Building Officials and Design Professionals* and revise the Introduction, The Requirements for Building Design (adding occupancy definitions)

Bill Lockwood

- Review the *Reference Manual for Building Officials and Design Professionals* and revise the Most Commonly Asked Questions #24 (expand based on Robert Campbell's newsletter article regarding electronic seals and signatures); Appendix H (Design and Practice Policies)

Stephen King

- Review the *Reference Manual for Building Officials and Design Professionals* and revise the Most Commonly Asked Questions #32, #33, and #34

Ricky Bursi

- Review the *Reference Manual for Building Officials and Design Professionals* and revise the Standard of Care for Fire Sprinkler System Design; Appendix G (Engineering Exemption Policy for Fire Sprinkler System Design)—pages 21-31

Ellery Richardson

- File the proposed rules with the Secretary of State pursuant to T.C.A. § 4-5-202.

- Provide clarification of how QBS law applies to public school systems.

- In light of a case (#L14-AEL-RBS-2014026091) in which a third party added, in the title block, that a respondent was a registered engineer, though he was not, consider the following and report at the June meeting:
    i. Is this falsifying the document?
    ii. Did the third party commit forgery?
    iii. Can the Board pursue legal action based on it being a threat to the public's "health, safety and welfare"? If it falls outside the Board's purview, who has the authority to discipline?
    iv. Does it fit into a statutory or rule violation?

Susan Ballard

- Communicate with AIA in regard to a state fee schedule for interior designers.