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On a national level, the ASPE Board is responsible for providing vision and direction for the organization then ensuring that the vision is implemented. We are currently concentrating on retooling the organization to keep it relevant and efficient and to ensure that our focus is always on providing value to members and promoting our profession. With the changes to our national bylaws in the summer of 2016, the selection of members to serve on a national level is more important than ever. It is the abilities, resources, and experience of our board members that allow the Society to be a sustainable and strong entity. Per our Board and Governance Development Manual, the “Board must be the foundation from which the Society constructs its programs and services.” Board members are expected to commit time, lead fundraising efforts, and market the Society to potential members and supporters. Continuing from our Board Governance and Development Manual, board members required four basic “senses:”

A sense of competence – a Board member must be educated in the structure and operations of the Society, its programs, and must be knowledgeable of current issues and trends in the industry.
A sense of usefulness – a Board Member must feel that their presence and activities on the Board are making a difference.
A sense of belonging – a Board member must feel welcomed to the Board of Trustees and that they are part of a team in fulfilling the mission of the Society.
A sense of power and influence – Board Members need to know that their opinions are heard and valued and that they can influence decisions.

The Governance Committee is currently looking for outstanding nominees willing to serve the Society. The Governance Committee will review the nominations to determine appropriate skillsets and level of commitment. Nominations are due out of the Governance Committee by February 1st. Nominees will then be slated for the membership to vote on this coming Spring. We also have two Industry Trustee positions on the Board which are chosen by the Board. We are looking for visionary leaders in the construction industry who are not estimators by profession but who are on the forefront of education and the business of construction. The elected positions on the Board are the President, First Vice President, Second Vice President, and the five Regional Governors. Other Board positions include the Immediate Past President and the Treasurer.

This is an exciting time for the Society. We are reinventing our value proposition and looking to the future of our industry. Please let me know if you would like to learn more about serving on a national level or if you have suggestions for the Industry Trustee positions.
In the construction industry there are many types of professionals.

- Design professionals – including architects, and engineers – with expertise in disciplines such as civil, geotechnical, structural, mechanical, electrical, acoustical, and an entire host of other fields.
- Estimating construction professionals, who quantify and develop an estimate for the cost of constructing what design professionals have envisioned and defined through their drawings, specifications and, in recent years, their digital models.
- Other construction professionals, including project schedulers, project managers, supervisors, and even though they are not often thought of in this way, the skilled trade workers.

It has been my experience that the vast majority of construction professionals strive to produce a project that they can all be proud of once it is completed. The reality is, “There is no such thing as a perfect set of plans”, and likewise, “There is no such thing as perfect execution of a perfect set of plans.”

So, when imperfection rears its ugly head – either in the design or execution of a project – what happens? That obviously depends on the degree of imperfection. Minor flaws in a design or in work performed in the field can be remedied by simple adjustments or cosmetic repairs. There are, however, times when the magnitude of a design or construction mistake is quite substantial, expensive, and/or impossible to correct satisfactorily.

When problem projects arise with significant design errors, construction errors, or even unanticipated conditions resulting in significant cost or schedule overruns, another type of professional enters the scene. You probably guessed it: attorneys.

Attorneys who focus their practices primarily in the construction industry are usually engaged by the parties involved in a project that has serious design, construction, cost or schedule issues. These attorneys are often members of the American College of Construction Lawyers, and/or the Construction Law Forum of the American Bar Association. As soon as the attorneys are hired, it seems that another type of professional becomes necessary – forensic technical liability experts, and forensic damages experts. Thus begins the process that culminates in what has been dubbed “the battle of the experts”.

One specialized type of forensic expert is the professional who is responsible for assimilating the opinions of all of the other technical liability experts. He must assess the relevant opinions regarding causation of the various identified problems, and determine an appropriate allocation of fault to one or more of the parties. He accomplishes this based on technical information provided by, in some cases, a multitude of liability experts.

This type of professional must also be familiar with the various applicable contracts and subcontract agreements, and the terms that may govern the various parties’ entitlement to compensation. In the process, based on the opinions of the technical experts, and the other relevant information, this professional is called upon to quantify the scope of the issues or elements involved in the various claims and allegations, and proposed solutions for remedying the various problems.

The professional who prepares such an analysis is called a **Forensic Estimator** or **Damages Expert**. The term “forensic” according to Webster simply means “that which is suitable for judicature or debate”. Therefore, the Forensic Estimator is responsible for preparing an analysis and presentation suitable for a judge, jury, arbitrator, mediator, hearing officer, or any other party charged with making a decision or recommendation in a case.
A typical cost estimator for a general contractor (or a subcontractor) performs takeoffs of the work shown in the plans and specifications; procures prices for materials, equipment, subcontracts, and other costs; and then incorporates this information into an estimate of the costs that becomes part of a competitive or negotiated bid.

The Forensic Estimator does this and more. He must rely on the opinions of the other technical experts, and on relevant dispute resolution language within the applicable contracts. Furthermore, he will frequently have to prepare a written report or narrative. This report elaborates upon and explains the rationale and reasoning underlying each element of cost included in the Forensic Estimate, and goes along with any arithmetical computation of the reasonable cost of the line items involved in the various claims and allegations.

Most disputes tend to be resolved through negotiation or mediation once the Forensic Experts on both sides have presented their findings in the form of a written report. Nevertheless, there are also many disputes that are not resolved early on, and the attorneys for each side end up taking depositions of both fact witnesses and expert witnesses. At this point in a case many of the disputed issues become clearer, and some are resolved and dismissed. If there are still unresolved issues, a case may end up going to arbitration or court.

In a trial setting, the Forensic Estimator or Damages Expert is usually the last witness for each party presenting evidence. This is because all of the fact witnesses and technical liability experts need to present their portion of the evidence before an arbitrator, judge, or jury can make any sense out of the summaries and conclusions that the Forensic Estimator has derived. It is important for Forensic Estimators to be articulate both verbally and in writing. The Forensic Estimators needs to know and understand all of the relevant facts involved in a case in order to fulfill his essential role to the trier(s)-of-fact. He is not permitted to usurp the authority of the tribunal, but strives to give only those findings and conclusions that are beyond the tribunal’s expertise, in order to facilitate its proper decision.

In my experience, it is essential that Forensic Estimators study and become familiar with the terms contained in the AIA A201 General Conditions document, and the terms and conditions set forth in ConsensusDocs contracts such as the CD200, which is the ConsensusDocs’ Stipulated-Sum form of agreement between an Owner and General Contractor.

The ConsensusDocs family of contracts is about to celebrate ten years in existence. One notable fact regarding these documents is that over 40 industry organizations have had a seat at the table where the language contained in them has been drafted, modified, and updated to meet the changing environment in the construction industry. The goal was to incorporate language promoting “best practices” in the allocation of risk to the various contracting parties, and in key areas such as payment terms and the responsibilities and relationships of the parties regarding such topics as Building Information Modeling (BIM).

There is a distinct correlation between good contracts, best practices, clear understandings of the scope and quality of work required in a project, and the phenomenon of fewer significant problems resulting in fewer disputes requiring forensic experts and resolution by a third-party.

At one point, the author thought that the advent of the concept of “Partnering” was going to bring an end to contract disputes, and eliminate the need for Forensic Estimators and Damages Experts, altogether. However, there still seems to be many projects which end up being involved in some form of contractual distress or dispute. It is unlikely that, in my lifetime, the need for Forensic Estimators and other technical forensic experts in the construction industry will abate. But that doesn’t mean that all construction industry professionals shouldn’t strive for that illusive level of perfection, and perhaps, someday, we will have no need for forensic analysis.

The author is currently chairman of the ConsensusDocs’ Content Advisory Council of the Coalition of the more than 40 endorsing organizations. He is the representative for the American Society of Professional Estimators. He and his firm are also active in the AGC, ABC, ASA and the Construction Law Forum of the American Bar Association.

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Communication systems in a classroom building are typically limited to lecture halls, tiered classrooms or other larger public assembly type spaces. These systems are also usually provided and installed by the University and only the conduit rough-in and termination boxes are required to be included in the Direct Cost. As a result of the limited information and scope of the project a square foot allowance will generally be acceptable in most typical classroom buildings. A good range for the sound system in this building will be about $0.60 to $1.00 per SF for the conduit rough in and termination boxes.

Safety and Security requirements in a classroom building will be comprised of two main components, the fire alarm system and the security system. The fire alarm system will usually be provided by the electrical trade contractor and will be required to meet the University requirements set out in the campus design standard in most cases. It is not unusual to see a closed spec. for the fire alarm system required due to the university guidelines and therefore the cost may be increased as a result. For most fire alarm system in classroom buildings the range of cost will be $2.00 to $3.00 per square ft.

The security system will often be provided and installed by the University and only the conduit rough in and terminal boxes will be required in the Direct Cost. At the conceptual design stage it is unlikely that the University security or risk management department officials have reviewed the project so it will not be known the full extent of the security system. Due to this information it is acceptable to include an allow ance for conduit rough in and terminal boxes at approximately $1.30 per SF.

New classroom buildings, as with any type of building, will vary greatly with regard to earthwork and other related site categories of cost. There are a few commonalities to be discussed in this section as well as Division 32 and 33; however, each project and project site will be unique and should be approached carefully in the preparation of the conceptual estimate.

The majority of earthwork will typically be performed by grading trade contractors as a subcontract to the General Contractor. In some instances an early sitework package will be broken out of the total construction project to allow the project to begin earlier. For this project a subcontracted arrangement is assumed, but there are several considerations that should be included in the cost estimate. Most earthwork contractors will be required to mobilize grading and hauling equipment to a new jobsite in order to perform the required work. This is typically a cost that will be identified early in the project and should be reflected in the cost estimate. Depending on the size of the site, amount of material to be moved, and duration of the project this cost can vary greatly. Typically at the conceptual stage it is reasonable to include a general allowance to account for mobilization costs. For a site of this size (6.3 disturbed acres) it is reasonable to assume an allow ance of $20,000.00. Another cost that should be included is for layout of all building areas, parking areas, hardscapes, and other areas of the site. This will typically be performed by a professional land surveyor who may be
Clearing and Grubbing

Clearing and grubbing will typically consist of removal of vegetation and roots from the project site. Costs will vary with the amount of vegetation or trees to be removed from a project site. Other cost considerations will be method that the removed material is allowed to be processed. Some universities and local jurisdictions allow for on-site burning of removed materials while others will not allow for burning and require that all materials be disposed offsite. Investigation of local restrictions will clarify the cost for this work but generally it is included in the estimate as an allowance per acre. For this project burning onsite will not be allowed, but due to the site conditions and no significant exiting vegetation an allowance of $3,500.00 per acre has been included.

Excavation and Grading

At the conceptual design stage there will likely be no available information regarding grading contours or final building elevations to determine accurate quantities and pricing. In most new projects a preliminary geotechnical study will be available that can outline subsurface conditions and if possible this should be considered when evaluating the excavation and grading costs. Additionally, there may be existing survey information available to assist in understanding the existing conditions and starting grades of the project site. Consultation with the civil engineer and architect may result in some preliminary building elevations for use in determining the quantities of grading and excavation required. In most cases the proposed site will require stripping and removal of topsoil which must then be either hauled offsite or stockpiled onsite for respreading later in landscaped areas of the site. At this stage it is unknown the depth of topsoil excavation that will be required. This information may be available in the preliminary geotechnical reports, but in the absence of such information a good rule of thumb is that 6” should be assumed and clarified as the depth. Topsoil removal will often yield a larger quantity of material than will be required at the landscaped areas and therefore hauling of unnecessary material offsite should be included in the estimate as well. In this market a good unit rate for stripping and stockpiling topsoil will be $3.00 per CY and a good unit price for respreading topsoil will be $2.25 per CY.

Erosion Control will also be required to meet minimum local and state jurisdiction requirements throughout the course of this project. Many universities will have enhanced requirements for erosion control measures as well. At conceptual design the erosion control measures may not be fully identified so an allowance per acre will be the best way to price this work. Consideration should be given to maintenance and repair of damage throughout the course of construction. Additionally, if the earthwork is performed as a separate bid package from the building construction then permitting costs and transfer fees should be included as well in the allowance. For this region and university requirements a reasonable unit cost is $3,000.00 per acre.

Division 32 Exterior Improvements

Exterior Improvements will be unique to each individual project in the areas of paving, roadways, sidewalks and hardscapes, landscaping, irrigation, and site amenities. Depending on the location of the project within the campus setting some classroom buildings will be primarily pedestrian occupancy while others will be planned to accommodate transient occupancy. In cases where pedestrian occupancy is applicable, there will be little to no paved areas and the more transient...
occupancy will require some amount of parking to be provided. Landscape and irrigation will be largely dependent on the location of the building as well as the University Design Guidelines.

Paving

This project is considered a transient occupancy therefore parking areas and roadway connections will require paved areas to be included in the conceptual estimate. If a preliminary site plan is not available then it is recommended to inquire with the University as to the preferred ratio of parking spaces to full time occupants. For most universities a typical range will be 0.50 to 0.85 parking spaces to each full time occupant. In this situation it is reasonable to assume that an efficient parking area will result in approximately 300-350 SF per surface parking space and that each surface parking space will cost approximately $1500.00 to $2,000.00 per space. For this project the site plan identifies the parking areas required and the number of spaces. Parking areas in this region are typically constructed of asphalt paving over an aggregate base course. Asphalt paving is most commonly quantified in square yards. Special consideration should be given to the type of vehicular traffic that travels the roadway and parking areas. For most standard passenger car traffic a light duty paving application will be acceptable; however, in areas that will be traveled by delivery trucks, garbage trucks, or semi trucks it is common to see a heavy duty paving application. Consultation with the civil engineer can clarify the type of vehicular traffic that can be anticipated. For this project the location of the mechanical yard, dumpsters, and connection to the existing primary entry drive it has been assumed that all paved areas will be a heavy duty paving application. In this market a good unit cost for heavy duty paving will be $26.00 - $30.00 per SY. It is also recommended to check with local paving contractors to verify current paving costs due to the fluctuation in oil pricing which is a major factor in asphalt pricing.

Curb & Gutter

Some Universities will have a standard curb and gutter requirement to maintain consistency throughout the campus. Curb and gutter is commonly quantified per lineal foot. Some variation in cost will need to be considered pending the type, size, and forming requirements of the curb and gutter system. For this project a 24” wide curb and gutter placed using an extrusion machine has been assumed and a good unit price for this system is $13.00 per LF.

Striping and Traffic Control

In classroom projects where paved areas will be required there will need to cost included for parking space striping, handicap parking space striping, and standard roadway striping for traffic control. Some Universities will require traffic or parking signage in addition to striping of paved areas as well. For this project parking space and roadway traffic control striping have been included. Striping can be quantified either by lineal foot of striping type, or by parking space. The latter method is used in this estimate and a good unit cost for striping per space will be $15.00 per space.

Sidewalks and Hardscapes

Most classroom buildings regardless of transient or pedestrian occupancy will have some amount of sidewalks and hardscapes areas included. Most Universities will have specific requirements for thickness and width of sidewalks, as well as the type of approved materials, patterns and finishes. Sidewalks and hardscapes areas will typically be broom finished concrete slabs poured onsite, but it is common to see brick paver fields, granite paver fields, or elaborate banding patterns in larger public gathering areas. Typically sidewalk and hardscapes areas will be quantified in square feet and can be taken off directly from the conceptual site plan. It is recommended to provide clarification to the type of finish, and materials assumed in the sidewalks and hardscapes areas as these are common areas where architects and Universities can embellish the design. For this project a standard 6” deep, broom finished sidewalk and hardscapes area has been assumed and a good unit price for this system is $6.25 per SF. Accessible ramps can also be overlooked in the conceptual design estimate. At this stage of design there will not be information available on the construction of a ramp but an acceptable allowance in this market will be $75.00 per SF of ramp area. This will capture costs for sidewalks and foundations.

Landscaping and Irrigation

Landscaping and irrigation for new classroom building will vary greatly in cost due to several factors such as University requirements, site location, size of site, and existing vegetation to remain on the project site. LEED certification will also be a significant factor in the cost of landscape and particularly the irrigation systems. At the conceptual stage of design the preliminary site layout may indicate some level of landscape intent but will not likely be well thought out by the design team. For these reasons it is recommended to consult with the landscape architect if possible or the University architect to determine an appropriate allow ance for landscape and irrigation systems. Most landscape and irrigation allowances can be quantified by acre at this stage of design until further information is available. For minimally landscaped and irrigated sites an allow ance of $10,000-$15,000 per acre will be a good range, for heavily landscaped and irrigated sites an allow ance of $20,000 - $30,000 will be more applicable. For this project, due to the high visibility of location and location of the site on the campus, an allow ance of $25,000 per acre has been included.

Division 33 Utilities

Utility systems will again be unique to each individual project. In most cases Universities will have a vast network of utilities providing service to most points on a campus. Older campuses may
have multiple types of systems which may make it difficult to determine cost in the conceptual estimate. If possible consultation with the University Facilities office may provide insight to the utility services available to a project site. For this project it is understood that all utilities have been brought to the boundary of the project site at the entry roadway therefore connection points and quantities will be derived as such.

**Storm Sewer**

For this project no formal layout has been provided in order to quantify the storm sewer system. In some cases if no information is available then it may be acceptable to include an allowance on a per acre basis until more information is available. For this project, and any time possible, it is recommended that a consultation with the civil engineer occur to determine general routing of drainage piping, anticipated structures required, and how roof drainage will connect to the storm system. Underground detention should be considered as this will have a significant impact on the cost of this system. Most civil engineers can perform very basic calculations for the site and provide at a minimum an average size and type of storm pipe and rough layout of the proposed network indicating manholes and inlets where applicable. With this limited information it is then possible to quantify pipe by lineal foot, and manholes, inlets, and other required structures by count. On this project the civil engineer identified that the majority of the primary storm pipe will be 24” diameter reinforced concrete pipe (RCP), and that the roof drainage network around the building will be 8” PVC pipe. Additionally the civil engineer was able to identify that there would be 8 manhole structures required throughout the network and 5 curb inlets in the roadway and parking areas. The 24” RCP unit cost will be $75.00 per lineal foot installed to include all excavation, bedding material and backfill required for pipe installation. The 8” PVC roof drain piping unit price will be $14.00 per lineal foot for a full assembly installation as well. The manholes are assumed to be 4’ interior diameter and 8’ deep structures and will typically cost approximately $2800.00 per each installed. Curb inlets including catch basin, inlet frame, grate, and top will cost approximately $3500.00 per each installed.

**Domestic Water System**

Similar to the Storm sewer system the Domestic water system will usually require consultation with the civil engineer if possible to determine the specific requirement for the service to the building. On this project the civil engineer has identified that the main service to the building will need to be brought from just beyond the site boundary and reduced in size prior to entering the building. The engineer has provided quantities for this system per lineal foot for the basic layout but it is important to adjust unit pricing to account for connections, fittings, pressure reduction, valves and other appurtenances for a complete system. The unit prices for ductile iron main pipe will vary according to depth and size of pipe as well. On this project the 6” ductile iron pipe has been included at $45.00 per lineal foot for an installed assembly, and the 4” ductile iron pipe has been included at $40.00 per lineal foot for an installed assembly. The 2” PVC has been included at $10.00 per lineal foot for an installed assembly.

**Fire Water System**

For this system again the engineer has provided quantities in lineal feet and count quantity for number of hydrants. Most universities will require an independent fire loop on a project site as a requirement of the risk management department. Unit pricing for this system as well should reflect all connections, fittings, and other appurtenances required for a complete system. As the design evolves this information will be better detailed and can be broken out for further clarity in subsequent estimates. For this project the 12” ductile iron main has been included at $75.00 per lineal foot for an installed assembly, and the 8” ductile iron main has been included at $55.00 per lineal foot for an installed assembly. The fire hydrants in this market will typically cost approximately $3500.00 per each.

**Sanitary Sewer**

Sanitary sewer systems will typically consist of primarily pipe and manholes and will usually rely on gravity for drainage. In some site conditions elevation and grade changes will make a full gravity system impossible and this condition should be clarified with the civil engineer at the conceptual design stage if possible to eliminate a significant cost impact for a lift station. For this project the University design standard requires that sanitary sewer system piping will be PVC pipe, however some institutions may require that sanitary sewer pipe be ductile iron. This clarification will also have a significant impact on the cost and should be verified with the civil engineer. The 8” PVC pipe has been included at a unit cost of $35.00 per lineal foot for an installed assembly, and the sanitary manhole structures have been included at a unit cost of $2500.00 per each installed. The depth of the sanitary piping and manhole structures will also have a significant impact on the cost of the system and should be clarified with the civil engineer.

**Natural Gas Service**

Some universities will have a contractual arrangement with a local natural gas provider to install gas service to new capital projects and will not account for the cost of gas service in the construction estimate. If this is not the case then the new service will typically be quantified and priced by lineal foot. Most natural gas installations are relatively shallow excavations therefore depth of service will typically not be a significant factor in the cost. For this market a good unit cost is $25.00 per lineal foot.

**Primary Electrical and Telecommunications**

Much like natural gas service, some universities will have a contractual arrangement with a local electrical service provider and will not account for the cost of electrical service to new projects. For this project the university has an arrangement that requires the electrical trade contractor to install ductbanks from the main primary connections point to the building. In addition the contractor must provide and install a primary
switch and transformer. The power service provider will then pull all service conductors and make all primary service connections. At the conceptual stage it is unlikely that the electrical engineer will have sufficient data to provide a detailed site electrical layout. For this reason the engineer will typically provide guidance on the preliminary sizing of these items. The main conductor will reside in a primary ductbank consisting of two 5” PVC pipes encased in concrete. This ductbank can be quantified and priced per lineal foot. A reasonable unit price for this ductbank assembly including all excavation, placement, concrete, etc. will be approximately $65.00 per lineal foot. Manholes will be required and will typically be quantified and priced per each. A good unit price for the manholes will be $3000 per each installed. Because the loading requirements are not fully known the primary switch and transformer sizing is unknown at this time how ever a reasonable unit price allowance for a primary switch on a building of this size is $25,000.00 and a reasonable unit price allowance for a transformer is $50,000.00.

The electrical trade contractor will also be required to provide a telecommunications ductbank similar to that provided for the primary electrical service. The telecommunication ductbank will typically consist of 4 – 4” PVC conduits encased in concrete, and a good unit cost is $100.00 per lineal foot installed.

Site Lighting

On most universities site lighting will be clearly identified in the University design guideline for manufacturer, style and height. This is largely for safety concerns and protection of student and faculty vehicles as well as consistency of appearance throughout campus. At the conceptual stage site lighting will not be laid out and will require assumptions to spacing across the site. In most cases site lighting will be broken down into two categories, parking lot lighting and pedestrian lighting. Other site lighting may be required for hardscape and landscape areas but typically those will be included in the landscape allowance at this stage of the estimate. Parking lot lighting will usually be mounted atop a concrete base for protection from impact. Parking lot lights will vary in the number of heads and total height. In this project a 30’ foot 2 head light poles have been included at a unit cost of $3500.00 per each including concrete pole base and underground conduit and wiring. Pedestrian lighting may take many more forms ranging from decorative pole fixtures to lighted bollards. It is important to clarify with the electrical engineer and University the appropriate fixtures to assume in the estimate. For this estimate a standard acorn style pole fixture has been included at a unit cost of $2,750.00 including concrete base, underground conduit and wiring.

Design Fees

Universities will usually be required to solicit and procure design consultants through a public Request for Qualification process, followed by formal interview and fee proposal process. In most cases this process is regulated by state law and is very specific regarding the structure that the design team will be required to base proposed fees for a given project. Design fee scales are often structured by classification of building type, services required, and consultants required for the particular project. Most fee schedules will require that a full professional team be assembled consisting of architectural, civil engineering, structural engineering, mechanical engineering, and electrical engineering disciplines at a minimum. Other consulting engineers or specialty consultants may be required for a particular project and will often result in an adjustment to the standard fee percentage. Some fee schedules are determined as a function of the Direct Construction Cost and may fluctuate until the final construction contract cost is known. For this project the applicable state fee schedule allows for new university classroom buildings with a Direct Construction Cost between $16 million dollars and $18 million dollars that a basic services design fee will be 5.7% of Direct Cost. Because landscape architecture, audio – visual design, and interior design will be specialty consultants to the design team an additional 2.5% is allowable per the state fee schedule.

Subsurface Investigation/Geotechnical Fee

Most universities will require that Geotechnical engineering be contracted independent from the construction team and the design team to eliminate potential conflicts of interest. The primary function of the geotechnical engineer is to drill and perform standard testing on soil samples taken from the project site. These sample borings and resulting data are then compiled into a subsurface investigation report and provided to the design team, contractors, and University to use in determining many structural and foundation system design decisions, as well as excavation and grading recommendations for the project site. At the conceptual level it is not known how many boring locations will be needed across a project site how ever most projects will locate borings in the proposed building location, proposed parking areas, and any other potential areas of concern for the project team. Often the Geotechnical engineer will be requested to include onsite inspection of grading and excavation operations as well as verify compaction of soils prior to vertical construction. A good range of cost for these services is between $0.70 and $1.00 per GSF depending on the size of building and complexity of the project site.

Construction Materials Testing

Similar to Geotechnical engineering, most Universities will require that construction materials testing be contracted to a third party consultant to eliminate potential conflicts of interest. Construction Materials Testing will vary in cost greatly dependent on the structural
nursing classrooms which will require a higher unit cost allowance for FF&E is $8.00 per SF. The second floor is comprised of specialty floor in this building is made up of primarily public gathering and large typed of spaces it is possible to develop a composite unit cost. The first because this classroom building is broken up into a couple of different cost allowance until furniture layout can be provided and accurately priced. It is best to consult with the University and agree to a mutual be derived but this will still be subject to a great amount of speculation. It is best to consult with the University and the architect and agree to a mutual cost allowance until furniture layout can be provided and accurately priced. Because this classroom building is broken up into a couple of different typed of spaces it is possible to develop a composite unit cost. The first floor in this building is made up of primarily public gathering and large classroom spaces. For these types of spaces a good unit cost allowance for FF&E is $8.00 per SF. The second floor is comprised of specialty nursing classrooms which will require a higher unit cost allowance for required FF&E. A good unit cost allowance for the second floor spaces is $10.25 per SF. At the third floor the primary function is office space, and a good unit price allowance for FF&E in office spaces is $6.00/SF. Using this method a composite unit price allowance for FF&E can be developed equaling approximately $8.00 per GSF.

Commissioning
Commissioning has recently become required in some stated for publicly funded projects over a certain value or size regardless of project type. This consultant will typically be engaged by the University during the Design Development stage to review and evaluate the HVAC and related mechanical system design in coordination with the discipline engineer of record. This third party review will also continue through the construction documents and will also review all submittals and shop drawings submitted by the trade and general contractors. Prior to any system equipment startup within the building the commissioning agent will inspect and perform a battery of tests and diagnostic to insure that the systems are functioning properly. Most design specification manuals are now including specific instruction to the general contractors and trade contractors that specifically outline conformance with the commissioning agent. Cost will vary if additional systems are required to be commissioned such as plumbing or electrical. For basic commissioning of the HVAC and mechanical systems a good allowance is between $2.25 and $2.50 per GSF.

Furnishings Fixtures and Equipment
Furnishings Fixtures and Equipment cost is generally for all loose or University provided furniture or small equipment required to occupy and begin operations of a building. In classroom buildings this will often include office furniture, storage filing equipment, classroom tables and desks, and any other item not permanently installed. At the conceptual level it may be difficult to quantify each part and piece of furniture or small equipment that will be required for the building. At most an allowance per space can often be derived but this will still be subject to a great amount of speculation. It is best to consult with the University and the architect and agree to a mutual cost allowance untill furniture layout can be provided and accurately priced. Because this classroom building is broken up into a couple of different typed of spaces it is possible to develop a composite unit cost. The first floor in this building is made up of primarily public gathering and large classroom spaces. For these types of spaces a good unit cost allowance for FF&E is $8.00 per SF. The second floor is comprised of specialty nursing classrooms which will require a higher unit cost allowance for required FF&E. A good unit cost allowance for the second floor spaces is $10.25 per SF. At the third floor the primary function is office space, and a good unit price allowance for FF&E in office spaces is $6.00/SF. Using this method a composite unit price allowance for FF&E can be developed equaling approximately $8.00 per GSF.

Audio Visual Systems
This system will be largely dependent on the requirement of the University for a given building type and function. In some cases the University may even provide this allowance and then work with the end users to develop the scope of the equipment in the building to meet the budget. At the conceptual stage it is best to consult with the University to determine what types of systems and equipment may be desired in order to develop a reasonable allow ance. Consultation with specialty consultant may be required to assist the university in determining the best and most applicable systems to include in the building. For this classroom building type the primary requirement for audio visual systems will be in the main level and second level where the classrooms exist. The desire to have smart board technology in all classroom settings, as well as projections screens and flat panel monitors in many of the classrooms will drive the typical cost for a classroom building well above a normal classroom building. For this project consultation with the University and a specialty consultant resulted in an allow ance of $600,000.00 or $9.72 per GSF. For most classroom buildings cost can vary between $5.00 and 8.00 per GSF.

Telecom & Data Systems Allow ance
This system will often be provided and installed by the University IT department or under a contract agreement on a University wide basis. This cost allowance will capture the cost for all final cabling, equipment, and network systems required to operate the building telephone and computer systems. A good range for telecom and data systems will be between $3.00 and $5.00 per GSF for most typical classroom buildings.

Security Systems Allow ance
Security systems will also typically be dictated by the University and will often be provided by security consultant with a campus wide agreement. Coordination with the University Risk Management department, campus police department, fire department, and University facilities management departments will be necessary to determine the full scope of this system. Most classroom buildings will be accessible to students up to 18-20 hours per day depending on the time of academic year. For classroom buildings with faculty offices security must be considered for access to levels of the building that will consist of office space. Finally many universities are now requiring secure card access to many campus buildings for use with student I/Ds in order to monitor building usage and identification of building occupants at any given time. Most Security systems will not be determined until the later stages of design; however, a reasonable allow ance for most classroom buildings is between $3.00 and $4.00 per GSF.

SECTION 3
Specific Factors to Consider
Each University will have unique criteria inherent to the campus that must be considered in the preparation of the Conceptual Program
Schedules based on size and classification of the subject project. Some Universities are subject to differing policies related to Sales Tax. In this example, the University is allowed by state law to bid projects with sales tax included on permanent materials, but “account” for the sales tax throughout the construction of the project, and execute a deductive change order at the completion of construction to forego payment of sales tax on permanent materials. To many Universities this “Sales Tax Savings” is a key factor in the overall Direct Cost that will be realized. At the conceptual program estimate level it may not be possible to readily identify the complete value of permanent materials required for the project and therefore a percentage multiplier may need to be applied to all direct cost to identify the potential “Sales Tax Savings”. Generally it can be assumed that approximately 40 percent of the total Direct Cost will be considered permanent materials on a typical general classroom building. If the applicable sales tax rate for the local jurisdiction is 10 percent then the “Sales Tax Savings” would be calculated as follows:

\[
\text{Total Direct Cost} \times 40\% = \text{Permanent Materials Cost} \times 10\% \text{ Sales Tax} = \text{"Sales Tax Savings"}
\]

This “Sales Tax Savings” should be identified in the Executive Summary of the Conceptual Program Estimate in the Direct Cost section in order to clearly identify the potential savings that the University can reasonably expect.

Another factor to consider relates to State mandated Design Fee Schedules for Architectural and Design Services Contracts. In this example the University is bound to state law that mandates Design Fee Schedules based on size and classification of the subject project. Thorough review and familiarity with the Design Fee Schedule will be necessary to accurately project the Architectural Fees in the Indirect Cost section of the estimate. Clear definition of how the Design Fee schedule works and the sub-consultant disciplines included in the mandated fees must be researched thoroughly. Consideration must be given to special conditions allowed by the Design Fee Schedule for renovation projects vs. new construction projects. It must also be noted that while many mandated Design Fee Schedules are clearly defined, most times all fee percentages are typically negotiated by the Design Team directly with the University and ultimately the Design Fee Schedule is a “rule of thumb” guideline.

Finally, another key factor that must be considered in the preparation of the estimate is how to construct a project on an active campus setting. Special consideration must be given to safety precautions, site fencing, pedestrian protection, site security, etc. A clear understand how the preliminary design and construction schedules and activities will overlap with the academic calendar, sporting events, and student activities calendar should be taken into account in preparation of the Conceptual Program Estimate. For many Universities, a deciding factor in approving a new classroom facility is the delivery of construction projects in late Spring/Early Summer. Typically this allows for the University to move into the building and “settle – in” prior to the start of Fall Semester which typically falls in Late August or Early September. Most Universities schedule classes for the upcoming semesters 6 months in advance based on enrollment statistics, facility occupancy statistics, and professor availability. If a project is scheduled to be delivered outside of the “prime summer window” then it can create a ripple effect for academic and University planning purposes. Planning and investigation during the Conceptual Program Estimate phase of the anticipated design durations, bidding and procurement durations, construction durations, and occupancy duration will inform the University if the project will be delivered in the optimum window of opportunity. If after this evaluation it is determined that the project cannot be delivered in this timeframe, then it may be necessary to evaluate potential cost premiums associated with additional working hours, multiple shifts, increased manpower, etc. An additional option to deliver the project is the consideration of early release packages, multiple prime contracts (Construction Management), or phased delivery. All of these options will have an impact in the total program cost and should be investigated thoroughly and clearly presented if applicable to the project.

SECTION 4

Overview of labor, material, equipment, indirect costs and approach to mark-ups.

At the conceptual level it is necessary to consider how labor, material, equipment, subcontractor costs, etc. will be derived. In this estimate the local region is primarily made up of merit shop contractors, with very few union-based labor agreements. This effectively creates a very competitive bidding and pricing environment and low labor costs. In general, the Southeastern United States labor pool is vast thus allowing labor costs to be somewhat lower. A new and evolving consideration with regard to labor in the Southeast is the potential affect of several immigration laws that are being passed or considered. These new or proposed laws are causing some workforce segments to leave the region and will likely result in an increase in the cost of labor. On some Universities, pending the funding sources of federal grants, there may be requirements of the Davis-Bacon Wage Act or Buy-American clauses which will have an affect on the overall cost of labor and materials, especially in the mechanical, plumbing, and electrical trades.

Material costs should be calculated based on recent project history, and assumed to be projected to the mid-point of construction. Additionally an inflation/escalation contingency factor on Direct Costs should be included to account for marketplace changes over the duration of the project. For this paper an inflation/escalation contingency of 2% per year has been assumed. Assuming a nine month design schedule and fourteen month construction duration for a total program duration of twenty three months, the resulting inflation/escalation contingency for this project should be projected...
though the first 16 months of the project. Therefore the applied inflation/escalation contingency on this project would be 3%.

Other mark-ups should include Design Contingency, and total Project Contingency at a minimum. The Design Contingency is a factor of the experience of the estimator, and the information available at the time of the estimate preparation. Typically at the conceptual level, given the amount of information provided in this example, the recommended mark-up percentage should be roughly 15% of direct cost. This Design Contingency mark-up should be communicated to the Architect, Engineers, and University as real cost yet to be identified in the design documents. This Design Contingency will serve to protect the University throughout the course of design and preconstruction as new information is provided that will better define the full scope of the project.

As opposed to the Design Contingency, the Project Contingency should be included to account for potential changes in cost once construction begins. The Project Contingency should be communicated as cost that will serve as a reasonable reserve to anticipate differing design conditions, University directed changes to project design, etc. This Project Contingency is recommended to be no less than 3% of Direct Cost and Indirect Cost combined for the Conceptual Program Estimate. Basing the Total Project Contingency on both Direct and Indirect Costs will account for any change to the project that will likely include additional services of the design team, consultants, and the contractor.

**SECTION 5**

**Special Risk Considerations**

As with any project there are potential risks that will arise that will likely impact the cost of a given project. For classroom buildings on University campuses one significant risk consideration at the conceptual stage is typically the lack of input from the “End User” of the facility. On most campuses the initial decision to move forward with a new classroom building is made in the administration office with limited input by the dean of the program(s) that will be housed in the new building. The initial program information prepared by the design team usually takes into account the primary spatial needs of the End Users, but more often than not a full survey of department heads, professors, students, etc. is not performed thoroughly in the early stages. This can lead to significant changes in space layout, interior finishes, and technology requirements as the design process moves forward. It is good practice to clearly identify all assumptions regarding finish treatments, allowance regarding FF&E and Technology, etc. in the Conceptual Program Estimate so that when the End User begins to review the designs in detail at the Schematic Design stage, and Design Development stage the original assumptions will be identified and potential impacts will be better understood.

Another significant risk to be considered in the Conceptual Program Estimate is the potential regulations or restrictions of use of funds if there are unknown funding sources. As described earlier many University classroom buildings are initiated to provide new or additional space for departments or college programs that are growing or have significant research efforts ongoing. In many cases these programs will seek State or Federal Grants and appropriations to finance the new project. At the Conceptual Program Estimate creation it may not be fully known the source of all funding to build the project. It is recommended to have several in-depth discussions and meetings with University administrators if possible to identify the sources of funding that are being pursued in order to determine the requirements, and or restrictions of the use of funds. Many funding sources can only be applied to Direct Cost and not Indirect Cost, while others may require that “Buy American” policies be incorporated into the project manual. Other funding sources may stipulate that Davis Bacon Wage Rates must be applied. All of these potential factors associated with the source of funding for the classroom building can have a significant risk in relation to the accuracy of the Conceptual Program Estimate if not researched or qualified early.

**SECTION 6**

**Ratios & Analysis**

When evaluating the accuracy of the Conceptual Program Estimate there are several checks or analysis that can be performed. Keep in mind that the Conceptual Program Estimate consists of more than simply Direct Hard Cost, but also includes Indirect Cost. To gain a comfort level with the Program Total Cost it is necessary to evaluate both Direct and Indirect costs.

In evaluating the Direct Cost, one of the most important areas to check is the relationship of the mechanical, plumbing and electrical systems cost to the total of Direct Building Cost. Typically on a new classroom building the proportion for these systems to the Direct Building cost is in the range of 25-40% of the overall Direct Cost Total. Another cost relationship to review is the cost of the structure vs. the Direct Total Cost. For a structural steel frame, on shallow foundations the acceptable proportion would be 10-15% of the overall Direct Cost Total.

In evaluating the Indirect Cost the general rule of thumb is that Indirect Cost typically will total 15-20% of the overall Conceptual Program Estimate cost. This may vary significantly in classroom building pending the amount of FF&E, Audio/Visual and Technology Systems, and the required consultants and professional services. In the event that the Indirect Cost is disproportionate to the total Program Cost then it may be necessary to clarify in writing the assumptions related to the allowances included in this portion of the Total Project Cost.
SECTION 7

Misc. Pertinent Information
As noted several times in this paper much of the information available at the conceptual design stage will be loosely detailed and lacking in sufficient information to completely quantify and price all components. It is imperative to have a good historical knowledge of building systems, campus standards, and a good working relationship with the University and entire design team. Spending time on campus to understand the campus setting and activity will also be valuable in developing the estimate at this stage of a project. Keep in mind that this conceptual estimate is one component of the business decision that the University officials will need to evaluate this project. When the estimate reflects the unique characteristics of the proposed building and site, captures the applicable indirect cost, and represents a full understanding of how this building will fit within the fabric of the campus then the value of the estimate is much more than the cost it represents.

SECTION 8
Sample Sketch
SECTION 9

Sample Take-off and pricing Sheet

Sample Conceptual Program Estimate

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### Details of Project

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### Estimated System Cost

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<th>Component</th>
<th>Estimated System Cost</th>
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### Contingency

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<tr>
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<tr>
<td>Wall Cabinets</td>
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<tr>
<td>Storage Shelving</td>
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<tr>
<td>Disturbed Site Area</td>
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<td>6.3 Acres</td>
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<tr>
<td>Perimeter of Disturbed Site Area</td>
<td>2770 LF</td>
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</tr>
<tr>
<td>Parking Area</td>
<td>89900 SF</td>
<td>7451.111 SF</td>
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<td>Perimeter of Parking area</td>
<td>1800 LF</td>
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<tr>
<td>Parking Spaces</td>
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<td>Area of Hardscapes</td>
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## Conceptual Program Estimate - Key Quantities

<table>
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<tr>
<th>Description</th>
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<th>Unit</th>
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<td>6&quot; Di Main</td>
<td>550</td>
<td>LF</td>
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<td>4&quot; Di Main</td>
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<td>2&quot; PVC</td>
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<td>LF</td>
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<td>Fire Water</td>
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<td>1&quot;2&quot; Main</td>
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<td>Hydrants</td>
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<td>EA</td>
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<td>Storm Sewer</td>
<td>2750</td>
<td>LF</td>
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<td>Curv Inlet</td>
<td>5</td>
<td>EA</td>
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<tr>
<td>Manholes</td>
<td>8</td>
<td>EA</td>
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<tr>
<td>Roof Drainage</td>
<td>480</td>
<td>LF</td>
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<td>Electrical Service</td>
<td>4-4&quot; PVC Conduct Ductbank wire/concrete</td>
<td>125 LF</td>
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<tr>
<td>2-6&quot; PVC Conduct Ductbank wire/concrete</td>
<td>125 LF</td>
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<td>Service Arreance</td>
<td>4</td>
<td>EA</td>
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<tr>
<td>Transformer</td>
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<td>EA</td>
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Click Here for PDF of all Sketches, Takeoff's and Terminology

---

### Sample Conceptual Program Estimate
- **Location:** Southeastern United States
- **Conceptual Program Estimate Master Summary**

<table>
<thead>
<tr>
<th>Division of Work</th>
<th>Item</th>
<th>Direct Cost</th>
<th>Quantity</th>
<th>Unit</th>
<th>Unit Cost</th>
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<td>Division 2: Structures</td>
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<td>Division 4: Electrical</td>
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<td>Division 6: Miscellaneous</td>
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</table>

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**Click Here for PDF of all Sketches, Takeoff's and Terminology**
During the Design-Build (or IPD) process, the independent project development systems, which include planning, project strategies, project goals, scheduling, etc, must act as a single unit. One of the threads that ties and holds the Design-Build process together is the project cost. Because of this, the role of the Professional Estimator has changed from one of support to a key member of the total process.

The mindset of each member of the project team must change, recognizing the importance of the Professional Estimator and the role he plays in the design process. At the same time, the Professional Estimator has to change his approach to developing the cost of the project and become an active, not passive, player. As project systems are discussed, the Professional Estimator must recognize, not only if the costs associated with the item being discussed, but whether it fits within the overall project budget, and continually keep every Project Team Member updated on the project costs.

During the initial design phase of the project, which would include the programming, planning and conceptual design phases, the Professional Estimator must be able to review the design as it is being developed and prepare an estimate based on a system type format (conceptual estimate). Using this format provides the designers with global information, which is critical for the development of design options. For example, they can look at the cost of an entire exterior wall system, compare it to the cost of another entire wall system, and the team can decide which system fits with the project scope and cost parameters. This demands that the Professional Estimator understands numerous building systems, their interaction and relationship to other building systems, and all of the associated costs.

As the design process continues, there is a point that the systems estimate must be converted to CSI type format (detailed estimate). The estimate format allows the team to look at individual items and direct and indirect project costs. Additionally, the work needs to be classified and described through a work breakdown structure. The estimate will should follow the CSI format in the same style as how the subcontractors will provide costing data and quotes. Additionally, the Professional Estimator must keep in mind that the final estimate may be used to cost load a schedule or develop an Owner cash flow analysis.

Throughout the Design-Build process, there is a higher level of professionalism the Professional Estimator must bring to the team. Because most of these projects are being valued at today’s pricing structure, but will constructed sometime in the future, the Professional Estimators’ function goes beyond just pricing a work or trade item. He must take into account risk factors that could have an impact on the cost of the project. These factors would include:

- Inflation / Deflation
- Material Price Escalation
- Labor Escalation
- Potential Code Changes
- LEED requirements
- The effect of Incomplete Drawings and/or Specifications
- Special Owner Requirements (an example would be a required amount of MBE participation)

In the Design-Build process, the estimate is a continually evolving document. As the design changes, so does the estimate. The design team needs to take advantage of the knowledge and skills of the Professional Estimator. By using the Professional Estimator correctly, the chances of the project going over budget or time can be reduced dramatically.

By: Dr. Stephen R. Dunn, PhD, LEED and DBIA

Director of Preconstruction Services, GKK Works
<table>
<thead>
<tr>
<th>Member</th>
<th>Company</th>
<th>Chapter</th>
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<tr>
<td>Stan Sarkauskas</td>
<td>Kemp Bros Construction, Inc.</td>
<td>Orange County #3</td>
</tr>
<tr>
<td>Tim Brown</td>
<td>Cumming</td>
<td>Sacramento # 11</td>
</tr>
<tr>
<td>Domenic Dinezio</td>
<td>Barr &amp; Barr Builders</td>
<td>Boston #25</td>
</tr>
<tr>
<td>Wenchen An</td>
<td>Northeastern University</td>
<td>Boston #25</td>
</tr>
<tr>
<td>Samuel Kincannon</td>
<td>University of Arkansas at Little Rock</td>
<td>Arkansas # 33</td>
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<td>Wayne Winn</td>
<td>Jordan Foster Construction</td>
<td>Dallas/Ft.Worth # 43</td>
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<td>Michael Neria</td>
<td>PMC Development</td>
<td>Puget Sound # 45</td>
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<td>Luis Biancalana</td>
<td>Giovani &amp; Sons by TTZ</td>
<td>Gold Coast # 49</td>
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<td>Sam Webber</td>
<td>Barton Malow Company</td>
<td>Orlando # 50</td>
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<tr>
<td>Gregg Fisher</td>
<td>Duran &amp; Venables, Inc.</td>
<td>Silicon Valley # 55</td>
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<tr>
<td>William Harshberger</td>
<td>Mark Line Industries</td>
<td>Old Fort # 65</td>
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<tr>
<td>W Harold Hastings</td>
<td>Tri-North Builders</td>
<td>Brew City # 78</td>
</tr>
<tr>
<td>Yurania Jimenez</td>
<td>Sardis Interiors</td>
<td>SE MAL # 93</td>
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</tbody>
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Chapter Meetings

ARIZONA

Arizona # 6
Where: Double Tree Hotel
320 N 44th Street
Phoenix - 85008
Date: 2nd Tuesday
Time: 5:30 Social Hour Starts
Meeting Contact: Tom Norton, CPE
tomnorton@aspe6treasurer@gmail.com

Old Pueblo # 53
Where: Varies
Date: 1st Wednesday
Meeting Contact: Trip McGrath, CPE
tripm@aol.com

ARKANSAS

Arkansas # 33
Where: Baldwin & Shell - Main Office
1000 West Capital Ave.
Little Rock - 72201
Date: 3rd Friday
Time: 12:00 Noon Social Hour Starts
Meeting Contact: Mickey Perez
mperez@baldwinshell.com

NW Arkansas # 79
Where: Varies
Date: Varies
Time: 11:30 am Social Hour Starts
Meeting Contact: Thom Thibodeau
thom.thibodeau@cox.net

CALIFORNIA

Los Angeles # 1
Where: The Barkley Restaurant
1400 Huntington Drive
South Pasadena - 91030
Date: 1st Wednesday
Time: 6:00 pm Social Hour Starts
Meeting Contact: Joe Miller, CPE
joseph.miller@yahoo.com

Golden Gate # 2
Where: AIA Eastbay
1405 Clay Street
Oakland - 94612
Date: 3rd Wednesday
Time: 6:00 Social Hour Starts
Meeting Contact: Gustav Choto
gchoto@buildingpointpacific.com

Orange County # 3
Where: Ayres Hotel
325 Bristol Ave.
Costa Mesa - 92626
Date: 2nd Wednesday
Time: Varies
Meeting Contact: Tom Smithson
tedwardsmithson@gmail.com

San Diego # 4
Where: Varies
Date: 3rd Tuesday
Time: 5:30 Social Hour Starts
Meeting Contact: Mike Moyers, CPE
michael.moyers@bestinteriors.net

Sacramento # 11
Where: Rancho Cordova City Hall
2729 Prospect Park Dr.
Rancho Cordova - 95670
Date: 2nd Friday
Time: 11:30 am Social Hour Starts
Meeting Contact: Corey Coleman
coleecole70@gmail.com

Silicon Valley # 55
Where: Varies
Date: Varies
Time: Varies
Meeting Contact: Alan Jacobs, CPE
info@aspe55.org

COLORADO

Denver #5
Where: Urban Roadhouse
999 18th Street
Denver - 80202
Date: 2nd Tuesday
Time: Varies
Meeting Contact: Matthew Rasmussen
mrasmussen@henselphelps.com

CONNECTICUT

Nutmeg # 60
Information not submitted at this time
Contact: Northeast Governor
James Hanna, CPE - jh@dhuy.com

Yankee # 15
Not Active

DELWARE

Delaware # 75
Where: Varies
Date: 1st Wednesday
Time: 5:30pm Social Hour Starts
Meeting Contact: Jason Gordon
jgordon@penninglighting.com

DISTRICT OF COLUMBIA

Greater DC # 23
Where: Jacobs
1100 North Glebe Rd., Ste 12
Arlington - 22201
Date: 3rd Thursday
Time: Varies
Meeting Contact: Maurice Touzard, CPE
mtouzard@gmail.com

FLORIDA

Tampa Bay # 48
Where: Grill 116
612 N. Dale Mabry
Tampa - 33609
Date: 3rd Thursday
Time: Varies
Meeting Contact: Bob Nidzgorski, CPE
bob.nidzgorski@skanska.com

Gold Coast #49
Information not submitted at this time
Contact: Southeast Governor
Chuck Hesselbein, CPE - chesselbein@baldwinshell.com

Orlando #50
Where: TBD
Date: TBD
Time: TBD
Meeting Contact: Danny Chadwick, CPE
dkchadwick@bellsouth.net

GEORGIA

Atlanta # 14
Where: Sage Woodfire Tavern-Perimeter
4505 Ashford Dunwoody Rd
Atlanta - 30346
Date: 3rd Monday
Time: 11:30am Social Hour Starts
Meeting Contact: Clinton Aldridge
clinton.aldridge@skanska.com

ILLINOIS

Chicago # 7
Where: Barbakoa Tacos & Tequila
1341 Butterfield Rd
Downers Grove - 60515
Date: 3rd Thursday
Time: 6:00pm Social Hour Starts
Meeting Contact: Bob Svoboda, CPE
bsvoboda@ccsdifference.com

INDIANA

Central Indiana # 59
Where: Varies
Date: 3rd Thursday
Time: Varies
Meeting Contact: Jeremy Adkins, CPE
jadkins@theadkinsgroup.net

Old Fort # 65
Information not submitted at this time
Contact: Central Plains Governor
Dave Westfall, CPE
dwestfall@aspengroup.com

IOWA

Quad Cities # 71
Where: Granite City Food & Brewery
5270 Utica Ridge Rd
Davenport - 52807
Date: 1st Wednesday
Time: Varies
Meeting Contact: Ryan Andresen
randresen@russellco.com

Greater Des Moines # 73
Where: Varies
Date: 3rd Thursday
Time: Varies
Meeting Contact: Ryan Haaland
rhaaland@eliteglassandmetal.com

LOUISIANA

New Orleans # 9
Information not submitted at this time
Contact: Southeast Governor
Chuck Hesselbein, CPE - chesselbein@baldwinshell.com

MAINE

Maine # 37
Where: Woodard & Curran
41 Hutchins Drive
Portland - 04102
Date: 1st Wednesday
Time: Varies
Meeting Contact: Ryan Andresen
randresen@russellco.com

MARYLAND

Baltimore # 21
Where: Varies
Date: 2nd Thursday
Time: 6:00pm Social Hour Starts
Meeting Contact: Steve Krell, CPE
skrell@oakcontracting.com
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<th>Texas</th>
<th>Utah</th>
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<td><strong>Las Vegas # 72</strong></td>
<td><strong>Southwestern Ohio # 38</strong></td>
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<td>Date: 2nd Monday Time: 6:00pm Social Hour Starts</td>
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<td>Meeting Contact: Charlie Stewart, CPE <a href="mailto:charles@buildwithdcbg.com">charles@buildwithdcbg.com</a></td>
<td>Meeting Contact: Ed Harris <a href="mailto:ed.harris@dorrnakaba.com">ed.harris@dorrnakaba.com</a></td>
<td>Meeting Contact: Rodolfo Barba, CPE <a href="mailto:rodolfoorbitab@valerus.com">rodolfoorbitab@valerus.com</a></td>
<td><strong>Meeting Contact: Kenneth Barnes <a href="mailto:kabarnes@valerus.com">kabarnes@valerus.com</a></strong></td>
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<td><strong>Dallas Ft. Worth # 43</strong></td>
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<td><strong>Landrun- OK City # 80</strong></td>
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<td>Where: The Appian Way 619 Langdon Street Orange - 07050</td>
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<td>Where: University Place 310 W. Lincoln St. Portland - 97201</td>
<td></td>
<td><strong>Dave Westfall, CPE - <a href="mailto:dwestfall@aspengroup.com">dwestfall@aspengroup.com</a></strong></td>
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<td><strong>Meeting Contact: Rick Wylly, CPE <a href="mailto:rick.wylly@gmail.com">rick.wylly@gmail.com</a></strong></td>
<td><strong>Meeting Contact: John Shampton <a href="mailto:president@aspe51.org">president@aspe51.org</a></strong></td>
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<td>Meeting Contact: Jeffery Senholzi <a href="mailto:costnwav@ptd.net">costnwav@ptd.net</a></td>
<td>Meeting Contact: Joshua Crooker-Flint, CPE <a href="mailto:joshc@auinc.net">joshc@auinc.net</a></td>
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<td><strong>Washington</strong></td>
<td><strong>Virginia</strong></td>
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<td>Where: Baskerville 101 South 15th Street Ste. 200 Richmond - 23219</td>
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<td>Meeting Contact: Jacob Dyer <a href="mailto:jacob@gulfseaboard.com">jacob@gulfseaboard.com</a></td>
<td>Meeting Contact: Jacob Dyer <a href="mailto:jacob@gulfseaboard.com">jacob@gulfseaboard.com</a></td>
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<td>Meeting Contact: James Madison, CPE <a href="mailto:jmadison@artscontracting.com">jmadison@artscontracting.com</a></td>
<td><strong>NEW YORK</strong></td>
<td><strong>Greater Lehigh Valley # 41</strong></td>
<td><strong>Meeting Contact: Michael Booth, CPE <a href="mailto:electricbooth@msn.com">electricbooth@msn.com</a></strong></td>
<td><strong>Meeting Contact: Michael Booth, CPE <a href="mailto:electricbooth@msn.com">electricbooth@msn.com</a></strong></td>
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<td><strong>Empire State # 42</strong></td>
<td><strong>Three Rivers # 44</strong></td>
<td><strong>WISCONSIN</strong></td>
<td><strong>Brew City # 78</strong></td>
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<td>Date: 3rd Tuesday Time: Varies</td>
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<tr>
<td>Meeting Contact: Ben Nodine, CPE <a href="mailto:aspewy@gmail.com">aspewy@gmail.com</a></td>
<td>Meeting Contact: James Madison, CPE <a href="mailto:jmadison@artscontracting.com">jmadison@artscontracting.com</a></td>
<td>Meeting Contact: Lydell Williams <a href="mailto:ktm_perfection@msn.com">ktm_perfection@msn.com</a></td>
<td>Meeting Contact: Dan Dennis, CPE <a href="mailto:dd@EGSConstruction.com">dd@EGSConstruction.com</a></td>
<td><strong>Meeting Contact: Chris Rozof, CPE <a href="mailto:crozof@berghammer.com">crozof@berghammer.com</a></strong></td>
</tr>
<tr>
<td><strong>OHIO</strong></td>
<td><strong>Buckeye # 27</strong></td>
<td><strong>Central Pennsylvania # 76</strong></td>
<td><strong>INFORMATION N OT SUBMITTED AT THIS TIME</strong></td>
<td><strong>INFORMATION N OT SUBMITTED AT THIS TIME</strong></td>
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<td><strong>TENNESSEE</strong></td>
<td><strong>Middle Tennessee # 34</strong></td>
<td><strong>WASHINGTON</strong></td>
<td><strong>INFORMATION N OT SUBMITTED AT THIS TIME</strong></td>
<td><strong>INFORMATION N OT SUBMITTED AT THIS TIME</strong></td>
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<tr>
<td><strong>Southwestern Ohio # 38</strong></td>
<td>Where: Lovley’s Resturant 500 Centerville Road Lancaster - 17601</td>
<td>Where: Lovley’s Resturant 500 Centerville Road Lancaster - 17601</td>
<td>Where: Baskerville 101 South 15th Street Ste. 200 Richmond - 23219</td>
<td>Where: Brew City # 78</td>
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<tr>
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<td>Date: 2nd Wednesday Time: 6:00pm Social Hour Starts</td>
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<td>Date: 3rd Tuesday Time: Varies</td>
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<tr>
<td>Meeting Contact: David Sanford <a href="mailto:sanford7158@hotmail.com">sanford7158@hotmail.com</a></td>
<td>Meeting Contact: Dan Dennis, CPE <a href="mailto:dd@EGSConstruction.com">dd@EGSConstruction.com</a></td>
<td>Meeting Contact: Lydell Williams <a href="mailto:ktm_perfection@msn.com">ktm_perfection@msn.com</a></td>
<td>Meeting Contact: Michael Booth, CPE <a href="mailto:electricbooth@msn.com">electricbooth@msn.com</a></td>
<td><strong>Meeting Contact: Chris Rozof, CPE <a href="mailto:crozof@berghammer.com">crozof@berghammer.com</a></strong></td>
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<tr>
<td><strong>WASHINGTON</strong></td>
<td><strong>PENNSYLVANIA</strong></td>
<td><strong>TENNESSEE</strong></td>
<td><strong>WISCONSIN</strong></td>
<td><strong>Brew City # 78</strong></td>
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<td><strong>Puget Sound # 45</strong></td>
<td><strong>Greater Lehigh Valley # 41</strong></td>
<td><strong>Desert Pine Golf Club</strong></td>
<td><strong>Where:</strong> Baskerville 101 South 15th Street Ste. 200 Richmond - 23219</td>
<td>Where: Varies</td>
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<tr>
<td>Where: Hales Ales 3rd Tuesday Time: Varies</td>
<td>Information not submitted at this time</td>
<td>Where: 800 Fort Negley Blvd. Nashville - 37203</td>
<td>Date: 3rd Tuesday Time: Varies</td>
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<tr>
<td>Meeting Contact: Michael Booth, CPE <a href="mailto:electricbooth@msn.com">electricbooth@msn.com</a></td>
<td><strong>Meeting Contact: Chris Rozof, CPE <a href="mailto:crozof@berghammer.com">crozof@berghammer.com</a></strong></td>
<td>Date: 1st Friday Time: Varies</td>
<td>Meeting Contact: Ricky Sanford <a href="mailto:sanford7158@hotmail.com">sanford7158@hotmail.com</a></td>
<td><strong>Meeting Contact: Chris Rozof, CPE <a href="mailto:crozof@berghammer.com">crozof@berghammer.com</a></strong></td>
</tr>
<tr>
<td><strong>WISCONSIN</strong></td>
<td><strong>TENNESSEE</strong></td>
<td><strong>DESERT PINES GOLF CLUB</strong></td>
<td><strong>INFORMATION N OT SUBMITTED AT THIS TIME</strong></td>
<td><strong>INFORMATION N OT SUBMITTED AT THIS TIME</strong></td>
</tr>
<tr>
<td><strong>Brew City # 78</strong></td>
<td><strong>Middle Tennessee # 34</strong></td>
<td><strong>Adventure Science Center</strong></td>
<td><strong>INFORMATION N OT SUBMITTED AT THIS TIME</strong></td>
<td><strong>INFORMATION N OT SUBMITTED AT THIS TIME</strong></td>
</tr>
<tr>
<td>Where: Varies Date: 2nd Tuesday Time: 5:30pm Social Hour Starts</td>
<td>Where: Adventure Science Center 800 Fort Negley Blvd. Nashville - 37203</td>
<td>Where: Lovley’s Resturant 500 Centerville Road Lancaster - 17601</td>
<td>Where: Baskerville 101 South 15th Street Ste. 200 Richmond - 23219</td>
<td>Where: Varies</td>
</tr>
<tr>
<td>Meeting Contact: David Sanford <a href="mailto:sanford7158@hotmail.com">sanford7158@hotmail.com</a></td>
<td>Date: 1st Friday Time: Varies</td>
<td>Date: 2nd Wednesday Time: 6:00pm Social Hour Starts</td>
<td>Date: 3rd Tuesday Time: Varies</td>
<td>Date: 2nd Tuesday Time: 5:30pm Social Hour Starts</td>
</tr>
<tr>
<td><strong>Please NOTE:</strong> meeting information is subject to change.</td>
<td>Meeting Contact: Dan Dennis, CPE <a href="mailto:dd@EGSConstruction.com">dd@EGSConstruction.com</a></td>
<td>Meeting Contact: Lydell Williams <a href="mailto:ktm_perfection@msn.com">ktm_perfection@msn.com</a></td>
<td>Meeting Contact: Michael Booth, CPE <a href="mailto:electricbooth@msn.com">electricbooth@msn.com</a></td>
<td>Meeting Contact: Chris Rozof, CPE <a href="mailto:crozof@berghammer.com">crozof@berghammer.com</a> <strong>Please NOTE:</strong> meeting information is subject to change.</td>
</tr>
</tbody>
</table>
By the time you are reading this, all the holiday goodies have been consumed, the decorations have been put away for another year, and we all begin to “try” to remember to write the correct year on our documents. And so, for us with our ASPE, it is time to not only reflect on our previous work (and/or accomplishments), but to also plan for the coming months and ways to better our chapters and our society as a whole.

You have heard that new things were being planned for our ASPE to help us move forward and garner more attention and recognition. For the past two months I have been working with a marketing consultant to create a complete Marketing Plan where we can target the changes that are needed. You will see a great many changes this month that have been made to our website to make it, and keep it, continually changing and new. Check it out!

You will be seeing information going out via Social Media sources from ASPE. PLEASE share these posts with your social media connections and help us get the information out.

We are looking for members that are willing to write a discipline specific blog on a monthly basis for the coming year to be posted and distributed. CPE’s, you can earn 6 PDU’s!! Send me your information and I will get you set up.

During January the Certification Committee will be holding their committee meeting at the Society Business Office. As always, we look forward to having the committee members at the SBO. This committee always has a full slate for their meeting, so be looking for their meeting recaps and further information in upcoming Estimating Today articles.

The Board of Directors will hold their Spring Board Meeting at the SBO on Saturday, March 11, so if you have items you would like to be considered by the Board, be sure to contact either your Regional Governor, a Vice President, or the President. Remember, the board members are elected by “you” and are there to represent you, so let them know your items of interest.

The Regional Conferences are soon upon us, so make your plans now to attend one (or more) of these meetings. The regional conferences are informative, educational, full of good fellowship, and an event you want to make a part of your Society experience. Look for full registration information on our website soon at www.aspenational.org/upcoming events, or contact your governor for details.

Are you interested in a leadership role in our ASPE? Remember, February 1 is the last day to submit your credentials as a candidate for a national office. This is your opportunity to step up and serve - - - consider it!

Until next month,