HTETCO an Automobile Showroom Renovation at Schematic Design Stage

KALWALL

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Is ASPE Corporate Membership the missing piece of your Marketing Plan?
As we are all aware, this is a very serious and strange world we now live in. ASPE recognizes all the difficult requirements Covid-19 has placed on our businesses and the Society as well. We must comply with the directions and requirements that are placed before us by the governing bodies in our cities and states.

With that said, the 2020 Summit in San Antonio has been postponed to August 25 – 27, 2021. The Board has made this decision due to the inability for most to make proper travel plans or provide adequate personal protections. This re-scheduling was made without cost to our Society. We understand that some cities and states are moving out of the shelter at home requirements, but not all companies will be willing to send their teams to a large gathering this summer. Any individual or company that has registered for the 2020 Summit will have the option to move their registration to the 2021 Summit or request a full refund. Please send your request to Tina for a refund or credit to the next Summit. I apologize for these changes but it is better that we error on the side of caution and keep safety and good health in mind for all the ASPE members and staff.

We will be putting together a virtual award ceremony in August 2020 to honor Members and Chapters that have submitted an award application for year 2020. More information will be coming out soon and it will be worth the time to attend. Also, at this event we will present the ASPE Scholarship winner for 2020. We have received seven (7) applications that the scholarship committee will be choosing from.

Several ASPE Chapters have been putting on excellent on line programs. These programs are open to all members and the notices are posted on the website and sent to members. I encourage everyone to attend/view the programs that are of interest to you.

The Board and the Certification Committee has made modifications to the Certification Program giving candidates for both the CPE and the AEP the ability to be proctored via Zoom or another web-based program. These changes are acceptable by CESB and will keep the programs moving forward.

We as individuals, Companies and as a Society will get through this crisis. Communication is vital; and should you have questions or need information, please don’t hesitate to contact a Board Member.
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## Membership Classification Count (as of 06/16/2020)

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## Congratulations to New CPEs + AEPs (April + May)

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Welcome to Our New Members (April + May)

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<tr>
<td>Edwin Diaz</td>
<td>Forsythe Inc</td>
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Project Report

Amy Biehl Community School
Santa Fe, New Mexico

Architect: Greer Stafford

Wall + Curtain Wall Systems  |  Skyroof® + Skylight Systems  |  Canopies + Walkways  |  Clearspan™ Systems
Amy Biehl Community School

The Amy Biehl Community School, a K-6 school in the public school system of Santa Fe, New Mexico, does more than help students learn how to be environmentally conscious. It helps them live it.

The school was one of 57 from around the country, K-12, named a Green Ribbon School by the U.S. Department of Education. The winners were honored in a ceremony in Washington, D.C.

It was the first time Daylighting Solutions of Albuquerque New Mexico’s exclusive distributor and installer for Kalwall, was part of a project that earned this honor. The school, designed by Greer Stafford/SJCF Architecture, incorporates Kalwall skylights and wall systems.

The Amy Biehl School is one of the centerpieces of the Santa Fe public school system and is touted by administrators for its environmental awareness, which includes being LEED certified.

“Kalwall truly is an energy efficient product,” said Kerry Abbott, president of Daylighting Solutions.

According to the USDE, the Green Ribbon is awarded to school based on their ability to meet the following criteria: “Reduce environmental impact and costs; improve the health and wellness of schools, students, and staff; and provide environmental education, which teaches many disciplines, and is especially good at effectively incorporating STEM, civic skills, and green career pathways.”

Kalwall systems are prominent in many areas of the schools, including the dramatic use of skylight in the main lobby. Skylights are also used in the gymnasium and the Kalwall wall system helps bring diffuse natural light into the cafeteria.

The wellness benefit of diffuse natural daylight in educational facilities is well documented. In a study by the Heschong Mahone Group, a consultant in the field of energy efficiency in buildings, students in classrooms with the most daylighting progressed 20 percent faster on math tests and 26 percent faster on reading tests over a year period than those with the least daylighting.
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FACES OF ASPE: Gustav Alexander Choto

Best advice I ever received

Best advice I share with young (and not so young) estimators

Chapter goal for 2020 - 2021

If I wasn’t doing this, I would be

Purpose is the reason you undertake the journey. Passion is the fire that lights the way. - Anonymous

Don’t ever underestimate the value you bring to the table or the responsibility that comes with being an estimator. Estimators are the lifeblood of companies, and they set the tone for an organization’s success. Never forget that you’re a rockstar!

As a chapter, our goal is to reach as many construction professionals as possible and, through compelling thought-leadership presentations, provide the construction industry with insights into some of the most pressing topics of the day.

I’d be teaching at Construction Management full-time at a university in the spring and fall. I’d travel the world and spend time in the countryside in the summer and winter.
To continue and build upon ASPE's growth as the industry's leader and recognized authority in professional conversion and comparison tools, you can quickly and efficient version-control system. With our and finalize agreements, while maintaining an easy to grant review or editing access to other parties quickly customize it to meet your specific project you to take any ConsensusDocs contract and convert from Word to PDF and PDF to Word.

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.Call for Nominations 2020 Elections will close March 18

Elections will close March 18

Individual's interest with project success. Negotiations and costly claims by aligning each ConsensusDocs are written to neutralize adversarial reduced risk contingencies that increase bid prices. Start from the beginning. Projects benefit from less than other industry standard forms, so savings money. Our subscription packages typically cost ConsensusDocs users save considerable time and

ConsensusDocs are written in plain English, so all can easily follow and understand. Written in plain English, so all can easily follow and understand.

Address all project delivery methods and are contingencies, and lessen adversarial negotiations, ConsensusDocs help you reduce costly claims and allocating risk and incorporating best practices, in the design and construction industry. By fairly addressing issues such as building information modeling (BIM), green construction, integrated estimating, a passionate and committed Board of Directors is necessary

ConsensusDocs...
Calling All CPEs!

- Imagine you are a young estimator who is assigned to work on an estimate for a new hospital radiology floor?
- Suppose you have been a healthcare estimator for 10 years, change jobs and are asked to estimate a new casino?
- What are your next steps if you encounter a project type that you have never estimated before, and are not even sure what you don’t know?

The Standards Committee is working to address this challenge by introducing a new SEP publication that will support estimators, at all levels of experience, to expand their skillset and detail unique information about specific project types. But your help is needed!

ASPE is calling upon all CPEs to share your knowledge by writing Technical Papers on various project types in which you consider yourself an expert. So whether you are an expert in estimating for banking institutions, hospitals, casinos, manufacturing plants, sewer treatment plants, grocery stores, restaurants, office buildings, housing or hotels, we hope you will participate. To reward this effort, the Certification Committee will award the author of successful Technical Papers with 12 PDUs. In addition, if the Technical Paper is selected for publishing, an additional 4 PDUs will be awarded!

(Successful Technical Paper = Earning a Passing Score of 20+)

ASPE is seeking very specific topics. To ensure that a variety of Technical Papers are received, please contact Cinder McDonald, Certification Committee Coordinator (Certification@ASPEnational.org) prior to proceeding, for a list of possible topics. After a topic is approved, you will be provided with the established parameters / the standardized format for the Technical Paper.

If you have any questions regarding Standards, please contact Karla Wursthorn, Standards Committee Chair at kwursthorn@tnward.com.

Thank you for considering this opportunity to be part of this first of its kind estimating reference book!
Mark Rinehart, CPE
Chapter 75 – Delaware
Rinehartm@studiojaed.com

HTETCO an Automobile Showroom Renovation at Schematic Design Stage

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Section 2: Types and Methods of Measurements
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Section 9: Sample Take-Off and Pricing Sheets
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SECTION 1: INTRODUCTION

A schematic design is generally described to be a set of sketches or drawings along with a brief description or narrative of the project scope of work. In the case of an Automobile Showroom Renovation, the Dealer is presented with a new image program from the Automotive Manufacturer which includes a list of proposed finishes that are required to replace the existing finishes in the Dealer’s facility. The estimator can use previous project drawings or create sketches of the facility in order to determine the quantities of items needed to develop the schematic design estimate.

Generally, in the schematic design stage of a project the scope of work is typically broad and loosely defined, therefore, the estimator may choose to use the systems based UniFormat costing method rather than the item based MasterFormat 2016 costing method for creating a schematic design estimate. The scope of work associated with the schematic design of this Automobile Showroom Renovation project can be fairly well defined, therefore, for this paper MasterFormat 2016 will be used.

This type of renovation does not involve structural shell and civil sections of work as the building and site improvements have been completed. No work will be completed under the CSI divisions:

- 03 Concrete
- 04 Masonry
- 05 Metals
- 08 Openings
- 31 Earthwork
- 32 Exterior Improvements

This estimate will be assembled to summarize the work required to replace the building’s existing interior and exterior finishes with the Manufacturer’s image program proposed finishes, utilizing a schematic level floor plan and an elevation of the existing 5,200 square foot Showroom facility building. Estimates for two scenarios will be assembled. The first estimate is a single phased scenario where the Dealer vacates the building entirely and temporarily relocates operations to another location in order to allow for a faster construction schedule and completion. The second estimate is a two phased scenario where the Dealer maintains use and operation of a portion of the building during construction. Providing estimates for both scenarios will allow the Dealer to make an informed decision regarding how the disturbance from the project impacts their business operations.

Sample plans including a phasing diagram and a finish schedule are provided in Section 8.

SECTION 2: TYPES AND METHODS OF MEASUREMENTS

The following units of measure will be used to create a quantity survey (takeoff) of the materials in the building affected by the renovation. These units will then be incorporated into the estimate spreadsheet.

- Lineal Foot (LNFT) – A measure of feet in a line across the ground. Used for items such as handrails, wall base, cabinetry and pipe.
- Square Foot (SQFT) – A measurement of length in feet multiplied by width in feet. Used for items that are part of wall assemblies, windows, ceilings, flooring and painting.
- Square Yard (SQYD) – A measurement of length in yards multiplied by width in yards. Used for items such as flooring and paving.
- Each (EACH) – A measurement of count of items. Used for items such as doors, specialties, plumbing fixtures, HVAC equipment and electrical fixtures or devices.
- Lump Sum (LPSM) – Used for items such as allowances.
- Tons (TONS) – Used for disposal of debris and steel.

Other measurements that may be used to create estimates include Cubic Yards (CUYD) for earthwork and concrete, Acre (ACRE) for earthwork, Pounds (LBS) for ductwork, Board Feet (BDFT) for lumber, Riser (RISR) for stairs and Square (SQ) for roofing. This renovation estimate does not utilize these measurement types.
SECTION 3: PROJECT SPECIFIC FACTORS TO CONSIDER

Section 3 - Specific Factors to Consider

The project will be presumed to be completed in the geographical region of Wilmington, Delaware. This geographic region has a 2019 City Cost Index (CCI) of 104.2 according to RS Means which means Wilmington is generally 4.2% more expensive to build in than the national average. Additionally, since this is a private owner project the work will be performed using open shop labor. If the project were publicly funded, then the work would need to be completed using state scale or Davis-Bacon wage rates which could increase the labor cost portion of the project 20% or more.

The following presumptions will be made for preparation of the estimate:

1. Temporary utility costs do not need to be included in the General Requirements of the estimate. These will be paid for by the owner under existing utility services.
2. Field offices and material storage facilities do not need to be included in the General Requirements of the estimate as the existing building will suffice for both.
3. The general floor plan of the building remains the same therefore no partition walls will be demolished or relocated.
4. Exterior storefront window system and doors to remain.
5. There will be no work in the Janitor’s or Storage Closets.
6. Entrances and bathrooms are presumed to meet current ADA requirements.
7. Showroom ceiling height 14’, Offices, Sales Area and Lounge ceiling height 10’, Restrooms ceiling height 8’.
8. Plumbing fixture replacement with upgraded automatic touchless faucets and flush valves.
9. HVAC registers and diffusers replaced in kind with new.
10. Interior and exterior Electrical fixture replacement on a 1 for 1 basis with LED fixtures for energy efficiency.
11. FF&E will be furnished by the owner including Office and Sales Area system furniture along with the reception desk and any Manufacturer mandated displays.
12. Costs associated for the Dealer relocation in the single phase scenario will not be addressed. It is presumed the Dealer can relocate staff to an adjacent building on the campus.

Seasonal and weather effects on the work is anticipated to be limited for this level of renovation. There may be some bad weather days during construction that could affect the exterior facade demolition, sheathing and ACM installation. However, this work should not take as long to complete as the interior renovations so it is anticipated that any missed time should be able to be made up without impacting the overall schedule or requiring additional premium time for weekend work to catch back up to the schedule.

SECTION 4: OVERVIEW OF COSTS

Estimate pricing is created using RS Means On-Line Software (RS Means). This software offers costing that is both location specific by zip code and by pricing release quarter. This estimate will be calculated using RS Means zip code prefix (198) for Wilmington, DE and pricing release 2019 Quarter 3. Additionally, once an estimate is created in RS Means the costing can be adjusted by location (Zip Code) and updated to the current pricing quarter. This can be particularly useful if estimating a similar project in another state where there is unfamiliarity with local costing or considerable time has passed between when the estimate was created and progress moves forward on the next step of the project. The software can also be used to track historical costs by quarter, back through the year 2007.

RS Means costing includes trade labor and material costs along with their associated OH&P. No additional OH&P is required in the estimate at the trade contractor level.

The State of Delaware has no sales tax; therefore, no allowance for sales tax is included in the estimate. Work in other states would require sales tax to be incorporated into the estimate.

If a very specific material, system or finish is included in the project scope of work, it may be best to obtain direct subcontractor or supplier pricing for these items so their costs can be properly accounted for in the estimate. Having a good relationship with local subcontractors is imperative as this results in their willingness to help with costing at a preliminary or schematic stage.

This estimate will be assembled and marked up using a Modified CM Fee (MCM) of 12% of “job costs” which is a blend of a GC and CM type project. Job cost is defined as all costs spent directly at the jobsite. This includes all labor, equipment, materials and subcontractors. Indirect costs such as insurance, legal, accounting, clerical, reproduction and the office Project Manager or company Principals are included in the MCM fee. Bonds, if required would be included independent of the project costs.

A Schematic Design estimate should include a contingency to cover costs due to lack of information not yet detailed. This is generally set at a minimum of 10% to 15% of the construction costs but for this application the costs can be fairly well defined so the contingency will be reduced to 5%.

Schematic Design estimates can also include an escalation contingency of approximately 4% per year to capture the time delay between design and construction. This estimate will not include an escalation contingency as completion of design and anticipated start of construction can occur relatively quickly.

Sample single and two phase estimates are provided in Section 9.
SECTION 5: SPECIAL RISK CONSIDERATIONS

Project Safety is the greatest risk for all parties when completing a renovation of an existing building that the owner may continue to occupy while the work is being completed. The interior separation between the owner occupied area and the work area must be substantial enough to maintain employee and customer safety, yet movable as the project progresses. This usually involves a stud framed, plywood faced sectional barrier installed to 8 ft. high then closed off to the structure above with polyethylene or tarps. Phase 1 will maintain use of one existing Restroom, the Managers will be relocated to the Sales Area and additional temporary sales desks will be added from Dealer inventory. No vehicles will be displayed. A door will be incorporated into the separation barrier near the Restroom for the code required second means of egress exit in case of an emergency. Phase 2 will use the renovated Restroom, the Managers will be moved back in the renovated Offices and the sales desks will relocate to the perimeter of the renovated Showroom. No vehicles will be displayed. The code required egress door will be relocated near the existing exit on the opposite end of the wall. Exterior separation of the public area from the work area will be maintained by portable temporary fencing panels.

Demolition work that breaches the building envelope must be completed and closed back with new materials the same day or a temporary security wall will be required to be erected to maintain security of the building for the Dealer. At the schematic stage the estimator may carry an allowance for this work in the estimate if needed. Also, if a building shut-down is required for MEP work, it is usually scheduled for hours the building is closed, therefore any premium time must be accounted for in the estimate. Neither of these two items are anticipated with this project scope of work at this point.

The possibility of impacting asbestos containing material must be considered in renovations of existing buildings. It is always prudent for the owner and contractor to test for asbestos prior to construction starting so the schedule is not delayed due to uncovering asbestos containing material. Some municipalities including Wilmington require testing be completed on all commercial projects before issuing a building permit. Asbestos testing has been included in this estimate.

Building and energy code compliance can affect renovation work. Enlarging bathrooms, corridors and entrances to meet ADA requirements may take up space that was previously dedicated to other uses. Energy code requirements may require additional insulation be included in the exterior envelope. This may potentially affect exterior wall and roof thickness resulting in adjustments required on exterior doors and windows, increased perimeter parapet heights and the possibility of raising rooftop HVAC equipment due the additional insulation thickness. These are not anticipated to affect this project scope of work at this point.

Lastly, it is imperative to review the proposed phasing plan for any multi-phased project with building code officials. This should occur during planning and permitting in order to include requirements the code officials may add to the scope of work. This will make inspections and/or partial or temporary C of O issuances go smoothly.

SECTION 6: RATIOS AND ANALYSIS

Schematic Design cost estimates should be compared to historical data, past projects and recent bids on a unit cost basis per square foot to confirm the estimate is reasonable for both the overall cost and division costs. This comparison provides valuable information to confirm whether or not the estimate is costing out similar to other projects and, allows the design team to identify divisions that may need adjustment if the cost per square foot seems too high or too low. This information is presented in the right most column of the sample estimate spreadsheets.

The single and two phased scenario cost estimates provide the Dealer with the data necessary to make an informed decision regarding how the construction duration impacts their business operations. The two phased estimate scenario is approximately 8% greater in cost than the single phase estimate due to a longer duration project schedule. The two phased estimate scenario increases general conditions which include supervision hours, equipment rental, temporary toilets, etc., along with adding both the labor hours and material costs associated with installing, relocating and demolishing the temporary barrier wall separating the work area from the Dealer’s business operations. Subcontractor costs increase on an average of 5% to cover re-mobilization for two phases. Material costs and work associated with the exterior portion of the renovation are not affected by phasing.

This example is a relatively standard renovation project. As the project size and complexity grows to include substantial changes occurring in the building or additions being constructed on the building, the cost and time difference between a single phase and two or more phases can grow dramatically.

SECTION 7: MISCELLANEOUS

An estimate can only be as good as the information provided to the estimator. It is the responsibility of the estimator to identify as many “gaps” in the scope of work as possible and include reasonable costs or allowances for these items in the estimate. The goal of the schematic design estimate is to provide an accurate and informative estimate to the Dealer. This in turn, will allow the Dealer to decide if the project will be financially feasible and beneficial to itself, the Manufacturer and Customer, thus warranting the decision to move forward to the design development documentation phase of the project. An estimate that is too high may cause the Dealer to reduce the scope of the project which would not provide the anticipated results or complete cancellation of the project. An estimate that is too low could have potentially much worse ramifications by causing the Dealer to make similar adjustments after the project has been completely designed, approved by the Manufacturer, reviewed by governing agencies and bid, thus causing the Dealer to possibly seek additional funding for...
the un-anticipated costs or pay fees associated with re-design to reduce the scope of work back within budget and have the project approved by all parties again.

SECTION 8: SAMPLE SKETCH
Floor plan, exterior elevation, phasing line plan and finish schedule:
## TYPICAL ROOM FINISH SCHEDULE

<table>
<thead>
<tr>
<th>ROOM NAME</th>
<th>FLOOR</th>
<th>BASE</th>
<th>WALL</th>
<th>CEILING</th>
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<td>SHOWROOM</td>
<td>PT1</td>
<td>PT1</td>
<td>P1</td>
<td>ACT1</td>
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<td>MANAGER</td>
<td>C1</td>
<td>VB1</td>
<td>P2</td>
<td>ACT1</td>
</tr>
<tr>
<td>F&amp;I OFFICE</td>
<td>C1</td>
<td>VB1</td>
<td>P2</td>
<td>ACT1</td>
</tr>
<tr>
<td>SALES AREA</td>
<td>C1</td>
<td>VB1</td>
<td>P1</td>
<td>ACT1</td>
</tr>
<tr>
<td>CUSTOMER LOUNGE</td>
<td>PT1</td>
<td>PT1</td>
<td>P1</td>
<td>ACT1</td>
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<tr>
<td>WOMENS RESTROOM</td>
<td>PT2</td>
<td></td>
<td></td>
<td>ACT2</td>
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<tr>
<td>MENS RESTROOM</td>
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## MATERIALS AND FINISHES

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</tr>
<tr>
<td>C1</td>
<td>OFFICE FLOORS</td>
<td>STYLE &quot;SSSS&quot; COLOR &quot;CCCC&quot;</td>
</tr>
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<td>OFFICE FLOORS</td>
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<td>SHOWROOM WALLS</td>
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<tr>
<td>CEILING</td>
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<tr>
<td>ACT1</td>
<td>SHOWROOM &amp; OFFICE CEILING</td>
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<tr>
<td>ACT2</td>
<td>RESTROOM CEILING</td>
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### SECTION 9: SAMPLE TAKE-OFF AND PRICING SHEETS

One and two phase scenario estimates:

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<tr>
<th>Dealer Name</th>
<th>Typical Showroom Renovation</th>
<th>Single Phase Construction Budget</th>
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<tr>
<td>HTETCO</td>
<td>an Automobile Showroom Renovation at Schematic Design Stage ... continued</td>
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**Schematic Design - Order of Magnitude Budget**

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<tr>
<th>DESCRIPTION</th>
<th>QUANTITY</th>
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<th>TOTAL</th>
<th>REMARKS</th>
<th>COST PER SQFT</th>
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<td>Superintendent</td>
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<td>Scissor Lift Weekly Rental</td>
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<td>1,200 SQFT</td>
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<td>02 Existing Conditions</td>
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<td>06 Wood, Plastics &amp; Composites</td>
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<td>Plywood Sheathing</td>
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<td>07 Thermal &amp; Moisture Protection</td>
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<td>Densified Gravel Stop</td>
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<td>Ceramic Tile 12&quot; x 12&quot; Bathroom Flooring</td>
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<td>Ceramic Tile Base</td>
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<td>2' x 2' Acoustical Ceiling</td>
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<td>Resilient Cove Base</td>
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<td>Mirror</td>
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<td>Soap Dispenser</td>
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<td>Demolish Countertop</td>
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<td>Bathoom ADA Support Cabinet</td>
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### Single Phase Construction Budget

#### Dealer Name

**Building Size**: 5,200 SQFT

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**SUBTOTAL TRADE COST**

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**TOTAL SCHEMATIC DESIGN ESTIMATE**

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### HTETCO an Automobile Showroom Renovation at Schematic Design Stage ... continued

#### Dealer Name
Automobile Showroom Renovation

#### Two Phase Construction Budget
Schematic Design - Order of Magnitude Budget

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| 02 Existing Conditions | | | | | |
| Asbestos Testing | 1 LPSM | | 2,570.00 | $2,570 | |
| Dumpster Average Haul | 6 EACH | | 625.00 | $3,750 | |
| **Subtotal** | | | | $6,320 | $1.22 |

| 06 Wood, Plastics & Composites | | | | | |
| Plywood Sheathing | 1419 SQFT | | 2.75 | $3,902 | |
| Miscellaneous Carpenter Allowance | 1 LPSM | | 2,500.00 | $2,500 | |
| **Subtotal** | | | | $6,402 | $1.23 |

| 07 Thermal & Moisture Protection | | | | | |
| Demolish Gravel Stop | 145 LNFT | | 0.96 | $130 | |
| Demolish EIFS and Gymsaw Sheathing | 1419 SQFT | | 6.00 | $8,514 | |
| Air & Vapor Barrier | 1419 SQFT | | 2.75 | $3,902 | |
| ACM Panels | 1419 SQFT | | 35.00 | $49,665 | |
| Gravel Stop with EPDM Roof Patch | 145 LNFT | | 18.10 | $2,625 | |
| Miscellaneous Caulking Allowance | 1 LPSM | | 3,500.00 | $3,500 | |
| **Subtotal** | | | | $68,345 | $13.14 |

| 09 Finish | | | | | |
| Demolish Acoustical Ceilings | 4,889 SQFT | | 1.00 | $4,889 | |
| Demolish Carpet | 1,224 SQFT | | 0.55 | $673 | |
| Demolish Resilient Cove Base | 219 LNFT | | 0.55 | $120 | |
| Demolish Ceramic Floor Tile | 3,665 SQFT | | 1.64 | $6,011 | |
| Demolish Ceramic Wall Tile with GWB | 576 SQFT | | 1.38 | $795 | |
| Soundly Prep Concrete for New Finish | 4,889 SQFT | | 1.10 | $5,578 | |
| Moisture Resistant GWB | 576 SQFT | | 1.56 | $899 | |
| Ceramic Tile Walls | 576 SQFT | | 12.22 | $7,039 | |
| Ceramic Tile 24”x24” Showroom Flooring | 3,481 SQFT | | 14.50 | $50,475 | |
| Ceramic Tile 12”x12” Bathroom Flooring | 1,053 SQFT | | 11.25 | $1,199 | |
| Ceramic Tile Base | 85 LNFT | | 14.11 | $1,199 | |
| Floor Flashing and Crack Expansion Allowance | 1 LPSM | | 350.00 | $3,500 | |
| **Subtotal** | | | | $128,708 | $24.75 |

| 10 Specialties | | | | | |
| Bathroom Signage | 2 EACH | | 63.00 | $126 | |
| Towel Dispenser & Waste Receptacle | 2 EACH | | 448.00 | $896 | |
| Grab Bar | 6 EACH | | 177.00 | $834 | |
| Mirror | 2 EACH | | 177.00 | $134 | |
| Soap Dispenser | 2 EACH | | 91.00 | $182 | |
| Toilet Seat Cover Dispenser | 2 EACH | | 82.00 | $164 | |
| Toilet Tissue Dispenser | 2 EACH | | 65.00 | $130 | |
| **Subtotal** | | | | $2,302 | $0.44 |
HTETCO an Automobile Showroom Renovation at Schematic Design Stage ... continued

**SECTION 10: REFERENCES**

- Masterformat 2016 – www.csiresources.org/standards/overview
- RSMeans Online Software – www.rsmeansonline.com

---

### DESCRIPTION

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<th>DESCRIPTION</th>
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### SUBTOTAL TRADE COST

- $421,488
- $81.06

### SUBCONTRACTOR RE-MOBILIZATION BURDEN (5%)

- 1 LPSM: 155,856.88
- $15,587

### Schematic Design Contingency (5%)

- 1 LPSM: 21,853.72
- $2,154

### TRADE COST INCLUDING CONTINGENCY

- $443,341
- $83.26

### Permit Fees (2%)

- 1 LPSM: 8806.82
- $5,857

### Modified CM Fee (12%)

- 1 LPSM: 54264.97
- $54,265

### TOTAL SCHEMATIC DESIGN ESTIMATE

- $506,473
- $97.50

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**Building Size**: 5,200 SQFT

Roughly 25% of the construction projects in existence before COVID-19 have been shut down. Early projections of the impact from COVID-19 to remaining construction costs are immediately increasing by an estimated 5% and are anticipated to push out mechanical completion / occupancy by 10% of remaining project duration. These increases of cost and time are not projected to reduce until the COVID-19 pandemic is behind us.

In general, no one disputes there is an impact to project construction activities, except for those few individuals that are in a state of denial or are simply disconnected from the reality of construction life. Today is being globally described as the “NEW NORM” with unthinkable changes being thrust upon us that are not controllable.

The “NEW NORM” is settling a bit at the construction sites thanks to new protocols being implemented nearly everywhere. Some businesses and folks are proactive in those efforts, hitting it hard and hitting it early. The folks that are proactive seem to be the most successful in realizing the new norms and moving past some of the delays and higher costs. Unfortunately, many people, owners, and agencies are sitting back and watching what others are doing. Those folks appear to be losing the most.

However, we are far from realizing the “NEW NORM” in the supply-chain procurement and logistics, long term health and welfare, claims settlement and litigation, development portfolio decisions and commitments, regulatory development and implementation, updates to insurance coverage, and availability of site resources.

The ramifications of this upheaval are significant, most of which cannot be avoided, cannot be changed anytime soon, and affects every living person globally. This is a truly once in a lifetime event resetting everyone’s lifestyle, and it is not over. The full impact may not be known for another year, or more than likely many years from now.

This advisory focuses specifically on the impact to construction field costs in more detail, as seen through the eyes of a globally recognized construction cost professional, and based on a collection of information gathered over the past couple of weeks, extracted from peer round-table discussions, peer contacts, professional publications, field craft interviews, and first-hand knowledge.

The intent of providing cost impacts is to encourage evaluation of best cost options suitable to each construction site. These are not intended to be used to establish industry benchmarks for all projects or for any one project.

- Impact at Construction Sites: Obvious and Not Obvious
- Contractor Costs – Unseen Until Recently
- Legal, Regulatory, and Political Turbulence – Is This the New Future?
- Health: A Forecast of Long-term Impact – How Will This End? A Perfect Storm is Brewing

The obvious and not-so-obvious Physical Impact at the Construction Sites

Lives are at risk from a very new and a very real threat. And it is not just the lives of the workers, this risk extends to their family, friends, strangers, and loved ones.

In our endeavor to save lives, whether we understand it or not, major changes are suddenly being forced on all domestic and many international construction sites to implement all new safety standards that are not yet fully defined, understood, or accepted.
Field construction personnel are being compelled to immediately break from their life-long routine. They have no choice, did not see this coming, and have no gradual implementation period to adjust. This is what they must do immediately to save lives, to survive and to keep their jobs. Fortunately, some of these are simple low-cost actions that are known to save lives. There is no expectation that these new safety protocols will be relaxed anytime soon.

The above protocols are measurable in terms of probable monetary costs that can be communicated now to those that have to pay the bill. Guidance is provided in this advisory. Tools and guidance are available to support these.

PPE (Mask and Gloves)
Wearing face masks and gloves are now mandated at all sites and is now a common practice everywhere (or should be). This is the lowest cost and probably the most effective method in protecting lives in the construction workplace from the spread of COVID-19.

Not all sites require wearing gloves all day, but all do require gloves to be immediately available. This is a change and is challenging for some, but for the most part, wearing masks is generally viewed as a measure to protect others from contamination, not seen as a method to protect the worker wearing the face mask.

Unfortunately, all masks are uncomfortable, especially to wear all day while performing laborious tasks regardless of location or weather conditions. Wearing face masks all the time is absolutely possible but also nearly impossible for some crafts to perform their work efficiently.

- Continuously wearing added PPE (like OSHA defined Level C) slows down the production of field crafts by 10% according to industry-wide acceptance. However, the impact from the use of simple face masks is not quite as severe. The simple practice of wearing face masks all day is generally viewed very recently by on-site field CM professionals as having an impact of ~5% reduction in overall field craft productivity output.

Social Distancing
Density of workforce has always been a safety constraint. Having too many workers in one area is recognized as a dangerous practice and costly practice, yet most of the time the crafts are packed into restricted geographical areas to accommodate area and project completion schedules.

It is a time-tested well-known proven fact: time and space are luxurious accommodations construction projects cannot afford. Social distancing is suddenly the new norm, yet somehow must be implemented in ways never accomplished in the past.

Social distancing is being put into practice using a wide variety of new methods. Some are complex and some are expensive.

Social Distancing efforts can be broken into five semi-measurable areas of consideration: Site Access, Work Area Protocols, Staggered Schedules, Work Spacing, Crew Sizing, and the added construction management and site facilities.

a. Site Access & Entry Restrictions: In addition to wearing face masks, restrictions are being imposed limiting those on site to those who need to be on site. Strict controls are being put into place to restrict visitors, deliveries, etc. at the sites.

Site Entry / Access restrictions are being implemented at the boundaries of all construction sites. All workers are now being met at the site entry gate where their body temperature is checked, they are required to complete a yes/no questionnaire, and in some instances to provide a list of the names of persons recently visited.

These restrictions are viewed as an effort to reduce exposure at the construction sites, but not all are realistically expected to eliminate direct contamination.

» At least one new full-time person is added on average one for every 50 construction site folks. That individual is dedicated to performing and managing COVID-19 safety mandates. The responsibilities include performing daily site entry requirements, ensuring general site areas are continuously sanitized, workers are wearing PPE, and removing non-compliant workers from the jobsite (some owners are requiring zero-tolerance policies).

Additional responsibilities at some sites include ensuring crew work areas are sanitized at least daily and again when a construction crew leaves an area which is usually only one or two days.

This is measured as a field cost of roughly $1 per hour applied to all field hours. The cost to provide the additional sanitation supplies, thermometers, etc. as well as disposal, sometimes hazardous disposal fees, runs up the cost another 50 cents an hour.

» At some sites, deliveries are received in an isolated location to ensure a sufficient quarantine, generally two days, to eliminate the threat of viral contamination being inadvertently transported into a construction site. This double handling practice is expensive by tying up valuable land and resources and costing time. The probable cost is 2-3% of the value of the stored components.
b. Work Area Access restrictions are being imposed with new infection control and containment protocols in the individual crews work areas. Crew size, location, and timing is rigorously managed to reduce direct exposure to the workers as much as is reasonably possible through new site and work area infection control and containment protocols.

Work areas are often described as a location with geographical boundaries occupied by a combination of two or more discipline specific crafts for multiple days. The impact of these new protocols is twofold:

» Disruptions caused by these new protocols of disinfection activities in the individual crew workspaces, entering the workspace, and in exiting the worksite adds ~ 20 minutes downtime every workday. This results in a further reduction of an additional ~5% in downtime.

c. Staggered Schedules: This is a new practice that is also being implemented on nearly all construction sites.

Unfortunately, the implementation is based on the erroneous but hopeful assumption there is no added cost to the projects.

The craft must report to work and leave work based on staggered schedules. These same staggered schedules impact breaks and lunch timing.

While it is true that staggered scheduling does not initially appear to impact cost, closer observation of this practice has revealed that staggered scheduling dramatically interrupts all daily routines, planning, and expectations at every level of everyone working on-site. Construction folks have their routines that worked well for them for many years.

Now they all must develop and adopt all new routines. “Change” is generally unaccepted and must be forced on most construction personnel to maintain these new safety standards. Change by its very nature becomes contentious creating other problems as well.

» The impact alone from waiting in an exceptionally long line and qualifying for site entry is consuming an average of 30 minutes or more each day. Impact from gate waiting time is generally thought to cut waiting time 15 minutes on average by implementing staggered start-time schedules.

» From my perspective and that of only a handful of others, is that the act of staggering schedules will result in an immediate impact of one hour a day lost time, but will settle in a few months to a longer term inefficiency loss.

d. Work Spacing is another new concept being intentionally implemented on all jobsites, also often without realization of the impact to cost.

» Work spacing is a technique of identifying the workspace needed to accomplish a scheduled task using the new six-foot rule. This effort is useful only at a “crew-sized” task, not based on the traditional peak staffing of the contractor or subcontractors resource performing work in a specific area.

The “peak manload” basis assumed three to four hundred square feet of floor space as the time-proven cost optimized workspace density for each hands-on-tools craft (plus one support person). However, overlapping craft / crew work area mobilization and demobilization occurred frequently and was a common practice, until now.

To accommodate schedule drivers, planning must employ two expensive concepts: crew stacking and out-of-sequence work.

» “Crew-stacking” requires crews to be waiting for an area to cleared before the next crew can start. All “touch-surfaces now have to be decontaminated after one crew leaves and before another crew enters. There can be no overlap of the crews.

The crew laying-in-wait usually is a different trade that must be partially mobilized in a nearby location and ready to go when the area opens.

Unfortunately, the exact time a workspace will become available is generally unpredictable. Some protocols being implemented require the departing crew to decontaminate the area by wiping it down before they leave the area. This is a horrendous misuse of the expertise the crew at a high hourly cost and lost time. However, this is a real cost imposed by some sites that have adopted this practice. The argument: “It’s too difficult to manage a separate cleaning crew.”

Some argue that a lower cost “cleaning” crew must always be the ones doing the decontamination, but due to the unpredictable timing, the cleaning crews are not always available resulting in more lost time waiting for the cleaning crew to show up and lost time for the crew laying-in-wait.

» “Out-of-Sequence” work is scheduled in another or adjacent area whether fully ready or not. Construction work is traditionally planned to occur in a cost optimized sequence, i.e. no installed work must be changed or delayed accommodating subsequent installations.
One example is installing equipment and then pouring the concrete foundation under it later.

Work crews must constantly be moving and re-mobilizing to ensure as much work can be done as possible to accommodate project schedules. Out-of-Sequence work typically incurs lost time and expensive rework.

Increased daily work area planning, permitting, and pre-implementation instructions cost an additional 15 to 20 minutes each workday.

e. Reducing crew size is another method of accommodating work distancing. It is not new, but this method usually pushes out scheduled completion dates, whether intended or not, and subsequently becomes expensive trying to recover schedule. Crew sizing is already being practiced for COVID-19 work spacing purposes at some sites and is being planned at others.

Reduced crew size is intended to accommodate two thought processes.

» One is the obvious reduction of risk from exposure to the COVID-19 contaminants. The thinking is that with less people working, the risk of spreading exposure or incurring direct exposure is reduced.

Unfortunately, this approach is complicated by unexpected rampant worker absenteeism associated with COVID-19. The impact of lost time and interruption from unexpected absenteeism must be offset by adding a second working foreman (well experienced journeyman) to each crew. The second foreman must step back and allow the original foreman to direct the work, essentially functioning as a helper rather than a foreman, even though being paid as a foreman. The result is tying up a high value resource and paying a premium.

» The second intent commonly used is to better manage COVID-19 exposure to critical construction activities (i.e. functionally operating tie-ins). By adding the redundant working foreman to each crew, performance and progress is expected to be accomplished no matter what the cost might be. When performing critically important time-sensitive work using a smaller crew, expensive overtime is almost always guaranteed for the entire crew.

Depending on the level of overlap between smaller crews and the redundancy in crew staffing, the impact to downtime and production output ranges from 30 minutes to 2 hours additional time each day.

f. Additional management is necessary to plan all the above activities. The impact is at least 100% increase in CM staff initially for at least three months, then tapering down to 25% for the remaining duration of construction activities. Additional site stores, receiving staff, and security will be needed.

Additional on-site office trailers, cleaning basins & equipment, and storage is required to support the added staff, cleaning supplies, etc.

g. Obtaining site Inspections has been a noted problem. A generally accepted workaround is to use facetime.

Supply Chain

A significant obstacle is being experienced in the supply chain resources providing materials and equipment in a timely manner. Many are identifying this as the single most difficult risk to manage on a construction site today. Contractor are reporting shipping delays of the most basic common commodities averaging 1 week for local deliveries, 2 weeks for domestic non-engineered.

Even though many states allowed construction sites to reopen, many shop fabricators (steel, pipe spools, modules, skidded equipment, etc) were closed for an extended period. Some are still are closed.

Foreign suppliers are experiencing delays of four weeks or more in overseas shipping. Tracking overseas shipments is nearly non-existent because the delays and is leading to lost products, sometime recoverable, sometimes not. Procurement folks are questioning the location of the raw materials and the production.

Vendor staff providing on-site vendor installation support, required as a condition of warrantee, are not able to travel. The dilemma is to decide which option is best even though all cost more and cause delay: find another vendor, accept the loss of warrantee coverage and potential mis-installation by others, negotiate with the vendor who is holding all the cards and has a termination clause in their contract or Purchase order.

Part II will continue in the September / August Estimating Today.
FACES OF ASPE: Eric Rennell

Chapter 25 – Boston – Chapter President
Rennell Capital Group, LLC
Contact: Eric@rennellcapitalgroup.com

If I wasn't doing this, I would be

Love and learn every single day.

Listen with curiosity. Speak with honesty. Act with integrity.

Share, Collaborate, Exchange and Grow

Living on my boat, exploring the world with my kids and wife. Doing a ton of fishing, golfing and antique car collecting.

Best advice I ever received

Best advice I share with young (and not so young) estimators

Chapter goal for 2020 - 2021

If I wasn't doing this, I would be

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2020 ASPE Critical Calendar: July - October

July
8 Certification Committee Meeting via Conference Call
15 Education Committee Meeting via Conference Call
20 Standards Committee Meeting via Conference Call
TBD Board of Directors Meeting via Video Conference
28 Last day for Chapter Reports to Governors for Annual Meeting reports
30 Committee and Technical Committee Chairs progress reports due to their respective Vice President and Society Business Office

August
5 Annual Board Reports due to Society Business Office for Annual Meeting Books
TBD Board of Directors Meeting
17 Certification Committee Meeting via Conference Call
19 Education Committee Meeting via Conference Call
24 Standards Committee Meeting via Conference Call
TBD Joint Technical Committee Meeting

September
9 Certification Committee Meeting via Conference Call
16 Education Committee Meeting via Conference Call
21 Chapter Reports due to Regional Governor for October Board of Directors Reports
22 Standards Committee Meeting via Conference Call
25 Committee and Technical Committee Chairs progress reports due to their respective Vice President and Society Business Office
25 Last day for Board of Director Reports to Society Business Office for October Board Books

October
3 Board of Directors Meeting
5 Society Business Office issues invoices for 2020 Membership Dues Renewals
14 Certification Committee Meeting via Conference Call
21 Education Committee Meeting via Conference Call

Estimating Today • 2020 July/August
ASPE CHAPTER MEETINGS

ARIZONA
Arizona #6
Where: Aunt Chilada’s
7330 North Dreamy Draw Drive
Phoenix - 85020
Date: 2nd Tuesday; Time: 4:00 PM
Meeting Contact:
Gene Plum
gplum@mccarthy.com

Old Pueblo #53
Where: Varies
Tucson
Date: Varies; Time: Varies
Meeting Contact:
Larry Lucero, CPE
llucero@redlineinsulation.com

ARKANSAS
Arkansas #33
Where: Varies
Little Rock - 72201
Date: Varies; Time: Varies
Meeting Contact:
Carri Morones, CPE
aspe.carr@gmail.com

NW Arkansas #79
Where: Varies
Bentonville
Date: TBD; Time: TBD
Meeting Contact:
Carri Morones, CPE
aspe.carr@gmail.com

CALIFORNIA
Los Angeles #1
Where: The Barkley Restaurant
1400 Huntington Drive
South Pasadena - 91030
Date: 4th Wednesday, Jan. - Oct.
Time: 6:00 PM Social Hour
Meeting Contact:
Bruce Danielson
ladofaspe@outlook.com

San Diego #4
Where: Varies
San Diego
Date: 3rd Tuesday; Time: 5:30 PM
Meeting Contact:
Lisa Thibodeaux
Lisa@constructionclasses.com

Silicon Valley #55
Where: Varies
To Be Determined
Date: Varies; Time: Varies
Meeting Contact:
Alan Jacobs, CPE
alan.jacobs@vanir.com

COLORADO
Denver #5
Where: To Be Determined
To Be Determined
Denver
Date: 2nd Tuesday; Time: 5:00 PM
Meeting Contact:
Paul Jonez
pjonez@gtc.l.net

CONNECTICUT
Nutmeg #60
Where: Back Nine Tavern
245 Hartford Road
New Britain - 06053
Date: Varies; Time: 6:00 PM
Meeting Contact:
Harrison Levy
klevy@petraconstruction.com

Yankee #15
Where: To Be Determined
Stratford, CT
Date: TBD; Time: TBD
Meeting Contact:
Gregory Williamson, CPE
gwilliamson@bondbrothers.com

DELAWARE
Delaware #75
Where: Varies
Wilmington
Date: 2nd Wednesday; Time: 5:30 PM
Meeting Contact:
Estel Taylor
etaylor@alibireoenergy.com

DISTRICT OF COLUMBIA
Greater D.C. #23
Where: Jacobs
1100 North Glebe Road, Suite #12
Arlington - 22201
Date: 3rd Thursday; Time: Varies
Meeting Contact:
Maurice Touzard, CPE
mtouzard@gmail.com

Golden Gate #2
Where: Join 95 Minna Street
San Francisco - 94105
Date: 3rd Wednesday; Time: 6:00 PM
Meeting Contact:
Gustav Choto
gustav@join.build

Orange County #3
Where: Ayres Hotel
325 Bristol Avenue
Costa Mesa - 92626
Date: 2nd Wednesday; Time: 5:30 PM
Meeting Contact:
Dan Schottlander, CPE
dpschottlander@cox.net

SACRAMENTO #11
Where: Rancho Cordova City Hall
2729 Prospect Park Drive
Rancho Cordova - 95670
Date: 2nd Friday; Time: 12:00 PM
Meeting Contact:
Bryan Hall
bryan.hall@vanir.com

Sacramento #11
Where: Rancho Cordova City Hall
2729 Prospect Park Drive
Rancho Cordova - 95670
Date: 2nd Friday; Time: 12:00 PM
Meeting Contact:
Bryan Hall
bryan.hall@vanir.com

San Diego #4
Where: Varies
San Diego
Date: 3rd Tuesday; Time: 5:30 PM
Meeting Contact:
Lisa Thibodeaux
Lisa@constructionclasses.com

Silicon Valley #55
Where: Varies
To Be Determined
To Be Determined
Date: Varies; Time: Varies
Meeting Contact:
Alan Jacobs, CPE
alan.jacobs@blach.com

Silicon Valley #55
Where: Varies
To Be Determined
To Be Determined
Date: Varies; Time: Varies
Meeting Contact:
Alan Jacobs, CPE
alan.jacobs@blach.com
FLORIDA
Tampa Bay #48
Where: Mitchell’s Fish Market
204 West Shore Plaza
Tampa - 33609
Date: 3rd Tuesday; Time: 5:30 PM
Meeting Contact:
Jim Cummings
jim.cummings@jedunn.com

Gold Coast #49
Where: To Be Determined
To Be Determined
West Palm Beach
Date: TBD; Time: TBD
Meeting Contact:
Carri Morones, CPE
aspe.carri@gmail.com

Orlando #50
Where: Black & Veatch Offices
201 S Orange Avenue, Suite 500
Orlando - 32801
Date: 3rd Tuesday; Time: 6:00 PM
Meeting Contact:
Danny Chadwick, CPE
dkchadwick@bellsouth.net

GEORGIA
Atlanta #14
Where: Sage Woodfire Tavern
4505 Ashford Dunwoody Road
Atlanta - 30346
Date: 2nd Monday; Time: 11:45 AM
Meeting Contact:
Clinton Aldridge
clintonaldridge@gmail.com

INDIANA
Central Indiana #59
Where: To Be Determined
Indianapolis
Date: 3rd Thursday; Time: 5:30 PM
Meeting Contact:
Chris Neal
cNeal@summitconst.com

Old Fort #65
Where: To Be Determined
Fort Wayne
Date: Last Thursday; Time: Varies
Meeting Contact:
Thad Berkes
tberkes@designcollaborative.com

IOWA
Quad Cities #71
Where: To Be Determined
To Be Determined
Davenport
Date: Varies; Time: Varies
Meeting Contact:
Keith Parker, CPE
keithparker@circlebco.com

Greater Des Moines #73
Where: To Be Determined
To Be Determined
Des Moines
Date: 1st Thursday; Time: Varies
Meeting Contact:
Ray Conway
aspe.ia.73@gmail.com

LOUISIANA
New Orleans #9
Where: To Be Determined
To Be Determined
New Orleans
Date: TBD; Time: TBD
Meeting Contact:
Jim Johnson
wamegojim@gmail.com

Western Michigan #70
Where: To Be Determined
To Be Determined
Grand Rapids
Date: Varies; Time: Varies
Meeting Contact:
Mike Alsgaard, CPE
maalsgaard@fishbeck.com

MAINE
Maine #37
Where: To Be Determined
Portland
Date: 1st Wednesday; Time: Varies
Meeting Contact:
John Brockington, CPE
jbrockington@woodwardcurran.com

MARYLAND
Baltimore #21
Where: To Be Determined
Baltimore
Date: Varies; Time: Varies
Meeting Contact:
Clint Townshend
townshend@phoenix-eng.com

MASSACHUSETTS
Boston #25
Where: To Be Determined
Boston - 02116
Date: Varies; Time: Varies
Meeting Contact:
Eric Rennell
eric@rennellcapitalgroup.com

MICHIGAN
Detroit #17
Where: Auch Construction
65 University
Detroit - 48342
Date: 3rd Tuesday; Time: 5:15 PM
Meeting Contact:
Gerald McClelland
gmcclelland@auchconstruction.com

Western Michigan #70
Where: To Be Determined
Grand Rapids
Date: Varies; Time: Varies
Meeting Contact:
Mike Alsgaard, CPE
maalsgaard@fishbeck.com
## ASPE Chapter Meetings (Continued)

### Minnesota

**Viking #39**
- **Where:** To Be Determined
  - St. Paul
- **Date:** Varies; **Time:** Varies
- **Meeting Contact:** Keith Parker, CPE
  keithparker@circlebco.com

### Missouri

**St. Louis Metro #19**
- **Where:** AGC St. Louis Training School
  - 6301 Knox Industrial Drive
  - St. Louis - 63139
- **Date:** 3rd Friday; **Time:** 7:30 AM
- **Meeting Contact:** Keith Parker, CPE
  keithparker@circlebco.com

**Heartland #32**
- **Where:** Uncle Buck’s Grill or Bass Pro Shops
  - See Meeting Contact
- **Date:** 3rd Thursday; **Time:** 5:30 PM
- **Meeting Contact:** Lonny Mills
  lonny.mills@flynncompanies.com

### Nebraska

**Great Plains #35**
- **Where:** To Be Determined
  - To Be Determined
  - Omaha
- **Date:** Varies; **Time:** Varies
- **Meeting Contact:** Keith Parker, CPE
  gmwfam5@gmail.com

### Nevada (Continued)

**Las Vegas #72**
- **Where:** To Be Determined
  - Las Vegas
- **Date:** 2nd Thursday; **Time:** Varies
- **Meeting Contact:** Chuck James, CPE
  wcj@clarkcountyny.gov

### New Jersey

**Garden State #26**
- **Where:** The Appian Way Restaurant
  - 619 Langdon Street
  - Orange - 07050
- **Date:** 4th Tuesday; **Time:** Varies
- **Meeting Contact:** Jeffery Senholzi
  costnav@ptd.net

### New Mexico

**Roadrunner #47**
- **Where:** Fiestas Restaurant
  - 4400 Carlise Boulevard NE
  - Albuquerque - 87107
- **Date:** 1st Wednesday; **Time:** 11:30 AM
- **Meeting Contact:** Phyllis Battle
  pbattle@preconstructionservices.com

### New York (Continued)

**Western NY #77**
- **Where:** To Be Determined
  - To Be Determined
  - Rochester
- **Date:** TBD; **Time:** TBD
- **Meeting Contact:** Gregory Williamson, CPE
  gwilliamson@bondbrothers.com

**Empire State #42**
- **Where:** Athos Restaurant
  - 1814 Western Avenue
  - Albany - 12203
- **Date:** Varies; **Time:** Varies
- **Meeting Contact:** James Diamantopoulos
  dandaestimating@aol.com

### Ohio

**Buckeye #27**
- **Where:** To Be Determined
  - To Be Determined
  - Columbus
- **Date:** Varies; **Time:** Varies
- **Meeting Contact:** Keith Parker, CPE
  keithparker@circlebco.com

**Southwestern Ohio #38**
- **Where:** To Be Determined
  - Blu Ash - 45242
- **Date:** 3rd Thursday; **Time:** TBD
- **Meeting Contact:** Chris McCarthy
  chris.mccarthy@danis.com

### Oklahoma

**Landrun-OK City #80**
- **Where:** Ingrid’s Kitchen
  - 3701 North Young Boulevard
  - Oklahoma City - 73112
- **Date:** 1st Wednesday; **Time:** 11:30 AM
- **Meeting Contact:** Phyllis Battle
  pbattle@preconstructionservices.com

### Oregon

**Columbia-Pacific #54**
- **Where:** To Be Determined
  - Portland - 97201
- **Date:** 3rd Tuesday; **Time:** Varies
- **Meeting Contact:** Leanne Legare
  leanne-legare@hoffmancorp.com
ASPE CHAPTER MEETINGS (CONTINUED)

**PENNSYLVANIA**
Greater Lehigh Valley #41
**Where:** D’Huy Engineering Office  
1 E. Broad Street  
Bethlehem
**Date:** Varies; **Time:** Varies  
**Meeting Contact:**  
William Watkins  
www@dhuy.com

Three Rivers #44
**Where:** Webinar  
To Be Determined  
Pittsburgh
**Date:** TBD; **Time:** TBD
**Meeting Contact:**  
Siena Shilale  
siena.shilale@aecom.com

Philadelphia #61
**Where:** Varies  
To Be Determined  
Philadelphia
**Date:** Varies; **Time:** Varies
**Meeting Contact:**  
Richard Baus  
rickb@bencardino.com

Central Pennsylvania #76
**Where:** Loxley’s Resturant  
500 Centerville Road  
Lancaster - 17601
**Date:** 2nd Wed; **Time:** 6:00 PM  
**Meeting Contact:**  
Dan Dennis, CPE  
dd@EGSConstruction.com

**TEXAS**
Houston #18
**Where:** Spaghetti Westerns  
1608 North Shepherd  
Houston - 77007
**Date:** 2nd Monday; **Time:** 6:00 pm  
**Meeting Contact:**  
Dennis Pyland  
dennis.pyland@gmail.com

Rio Grande #40
**Where:** Amigos Resturant  
2000 Montana Avenue  
El Paso - 79903
**Date:** 1st Thursday; **Time:** 6:00 PM  
**Meeting Contact:**  
Rodolfo Barba, CPE  
rodolfobarba1@gmail.com

Dallas/ Ft. Worth #43
**Where:** See Chapter Website  
To Be Determined
**Varieties:** N. Dallas/Mid-Cities/Grapevine
**Date:** Varies; **Time:** Varies
**Meeting Contact:**  
Rick Wyly, CPE  
rick@buildcostcontrol.com

**UTAH**
Great Salt Lake #51
**Where:** Varies  
To Be Determined  
Salt Lake City
**Date:** 3rd Thursday; **Time:** Varies
**Meeting Contact:**  
Phil Capell, CPE  
president@aspe51.org

**WASHINGTON**
Puget Sound #45
**Where:** Varies  
To Be Determined  
Seattle - 98109
**Date:** Varies; **Time:** Varies
**Meeting Contact:**  
Stacie Flynn  
stacieflynn@gmail.com

**WISCONSIN**
Brew City #78
**Where:** Varies  
To Be Determined  
Milwaukee
**Date:** 2nd Tuesday; **Time:** Varies
**Meeting Contact:**  
Chris Rozof, CPE  
crozof@berghammer.com

**TENNESSEE**
Middle Tennessee #34
**Where:** Adventure Science Center  
800 Fort Negley Boulevard  
Nashville - 37203
**Date:** 1st Friday; **Time:** 11:00 AM  
**Meeting Contact:**  
Ricky Sanford  
r Sanford7159@gmail.com

**VIRGINIA**
Richmond #82
**Where:** Baskervill  
101 South 15th Street, Suite #200  
Richmond - 23219
**Date:** 4th Wednesday; **Time:** 5:00 PM  
**Meeting Contact:**  
TK Farleigh  
tkfarleigh@baskervill.com

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**Please Note:** Information is subject to change. Report changes in your Chapter’s information with an email to Tina@ASPEnational.org
ASPE CORE VALUES

EDUCATION:
ASPE educates and mentors professional estimators for the sustainability of the construction industry.

PROFESSIONALISM:
ASPE promotes the lifelong pursuit of excellence and credibility in professional estimating.

FELLOWSHIP:
ASPE develops a fellowship of professional estimators that connects and leads the construction industry.