



ORANGE SPEEL

ASPE Chapter 3 Newsletter

JUNE 2019

President's Message

06/01/2019



As we approach our June dinner meeting I want to thank all of our members and those that have come to listen to our presenters. So far this calendar year our presenters and their topics have been: January was Insulated Concrete Forms presented by Randy Daniels of Fox Blocks; February was Expansion Joint Covers by Steve Heller of MH Powell Co. In March, Mike Frasco of Bio Clean discussed Stormwater BMP Design and Estimating. Mass Timber Construction by

""Professional Estimators and those in training shall conduct themselves with integrity at all times and not knowingly or willingly enter into agreements that violate the laws of the USA or the states in which they practice. They shall establish guidelines for setting forth prices and receiving quotations that are fair and equitable to all parties"

- Canon # 5

Mike Romanowski, PE of Woodworks.org was the April presentation and at the May dinner meeting Erik Hanson of Geogrid Retaining Walls discussed their Applications, Product Selection and Value Engineering. At our upcoming June 12th dinner meeting Kyle Wilson of MiTek Side Plate, will be presenting on their moment frame system which was born after the 1994 Northridge earthquake, its science, case studies and cost comparisons.

The Estimators Summit will be held in Kansas City June 19th to 22nd. This year's theme is "Rocking the Roles; The Evolution of Preconstruction". Speakers and their topics are being announced by e-mail and are also available on the ASPE National website. I look forward to attending this year's Summit, along with other members who will be representing our chapter. We will present to the group at the September meeting a summary of the event.

Our officer and director elections are done and the following were elected: President Kevin Murphy, CPE; First Vice President Dan Schottlander, CPE; Secretary Bryon Barker; Treasurer Asoka Sellahewa, CPE; Directors are Daniel Luckhardt, CPE and Danielle Leyva, CPE. Committees are Tom Smithson (Meetings/Speakers) and Wil Beukman CPE(Newsletter). Immediate Past President is Ron Svarc, LCPE. I want to thank all of the members who took the time to cast their ballot. As ASPE is a volunteer organization everyone's participation is encouraged and welcomed.

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I want to again thank Erik Hanson of Geogrid who was our May dinner meeting speaker who informed us about Geogrid Retaining Walls, their application and budgeting information.

After the June 12th dinner meeting, our chapter will take its annual summer break. Our next meeting will be held on Wednesday, September 11th. The next newsletter will be published in early September. I wish everyone a safe and relaxing summer vacation.

Kevin Murphy, CPE. ASPE Chapter 3 President.

ASPE Chapter 3 Dinner Meeting

May 8, 2019

Geogrid Retaining Walls by Erik Hanson

Erik Hanson is an estimator / project manager for Geogrid Retaining Wall Systems and has been with them for 8 years. He is currently finishing up their largest project which is a 500,000 SF segmental retaining wall. Geogrid is a contractor, not a manufacturer. It takes manufactured products consisting of special concrete masonry units and geosynthetic reinforcement where their in-house engineers will design a retaining wall which is appropriate for the project. Typically Geogrid retaining walls become most cost effective for walls greater than 6' tall versus a typical CMU retaining wall. These retaining walls can be designed for up to 50' in height. Buildings can be placed close to the edge of the wall, but must have a deep foundation system so as not to surcharge the wall.



Erik Hanson of Geogrid Retaining Walls begins his presentation on modular retaining wall systems.

He explained that a geogrid retaining wall works by using the mass of the soil, behind the wall to hold it in place. The retaining wall first starts with a 6" thick aggregate base foundation. Then the first course of block is placed, leveled and made straight followed by the second course which is placed on top of the first. Next backfill is placed behind the CMU block, compacted and brought up level to the top of the second course. Geosynthetic reinforcement is then placed on top of the fill. The next two courses of block are stacked on the previous course; backfill material placed behind the CMU block, compacted and brought up level to the top of the 4th course, where the geosynthetic reinforcement is placed. This sequence takes place every second course of block till the retaining wall is completed.

The geosynthetic reinforcement typically extends into the fill area the same length as the height of the wall is at that masonry course. The extended length of reinforcement can vary from 80% to 120% of the wall

height and is dependent upon the intended wall design, backfill material, loading and use. The City of Los Angeles has just recently approved the retaining wall for use. However, in lieu of the Geogrid reinforcement extending into the fill they require a steel strap which is 2^n wide $x \frac{1}{2^n}$ thick with corrugations for anchoring.

Other types of retaining walls which Geogrid constructs consist of soil nailing, gabions and open face walls. These walls can also be constructed for stormwater management for above grade retention basins and below grade stormwater detention systems called "geostorage". They can combine multiple retaining wall systems which can be put together to construct the most cost effective retaining wall.

For budgeting purposes, a Geogrid retaining wall will start at \$22 per SF. Dependent upon the final design and application the following items can change the unit price. Is it being done for a private owner or is it a prevailing wage project? Can the existing spoils be used for backfill? If not, does it require select granular import material exclusively or can it be blended with the existing on-site material to create a mixed backfill with the properties that the engineer requires? Dependent upon the type of project it is, the existing conditions and final design the cost can increase up to \$50 per SF.

We want to thank Erik for his presentation on modular retaining walls.

Article by Kevin Murphy, CPE

ASPE Member Meeting

Please RSVP by the Tuesday before each meeting so we are sure to have enough food and place settings.

Registration is available at www.aspe-oc3.org. Click away and make sure you select your dinner choice. On-line payment is now available!

Cost is \$45 if RSVP and pay before the deadline and \$50 if you don't.

The Chapter has to cover the cost of the meals that we confirm.



Board of Directors [2019/2020]:

President: Kevin Murphy CPE

Vice President: Dan Schottlander CPF

Past President: Ron Syarc LCPE

Secretary: Bryon Barker

Treasurer: Asoka Sellahewa CPE

Directors: Danielle Leyva CPE;

Daniel Luckhardt CPE

Committees: Tom Smithson (Meetings/speakers)

Wil Beukman CPE (Newsletter)

Getting the slope right without a laser

ASPE CHAPTER 3: OBJECTIVE:

The object of this Chapter is to further the recognition of construction estimating as a professional field of endeavor.

We wish to promote education and contribute to the betterment of the construction industry.

We observe and promote ethical standards of conduct.

This Chapter contribute to the establishment and publication of standard construction estimating practices.

We want to promote the certification program by which professionalism to construction estimating and adherence to these standards is recognized.

Upcoming Programs in 2019:

June 12: "Advanced engineered structural steel connections"

by Kyle Wilson of SidePlate

June 19-22: Estimators Summit in Kansas City.

September 11: TBD