



CONNECTIONS

May 2015 Volume 15 Issue 8

Newsletter of the
Structural Engineers
Association of Oregon

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SEAO has a twitter
account and can
be followed at
[@SEAOregon](https://twitter.com/SEAOregon).



Upcoming SEAO Meetings and Events:

Thursday, May 21, 2015: YMF Happy Hour/NCSEA Trivia Night

Location: To Be Determined

Time: 5:30 pm

See Page 4 for additional information.

Wednesday, May 27, 2015: SEAO Lunch Meeting

Topic: Oregon Zoo—New Elephant Lands Project

Speaker: Ed Quesenberry, Equilibrium Engineers LLC

Location: Portland City Grill, 30th Floor, 111 SW Fifth Avenue, Portland, OR

Time: 11:30 am check-in and lunch buffet; 11:45 am announcements; Noon program

PDH Credit: 1 hour

See Page 3 for additional information.

THE CONCRETE SOLUTION™



Meeting Sponsor: Powers Fasteners

Thursday, June 18, 2015: YMF Happy Hour

Location: Urban Brewery, 3947 N Williams Avenue, Portland, OR

Time: 5:30 pm to 7:30 pm

See Page 4 for additional YMF information.

Friday, July 10, 2015: YMF Lunch Meeting

Location: KPFF Consulting Engineers, 111 SW Fifth Avenue, 26th Floor Conf. Room, Portland, OR

Time: Noon to 1:00 pm

Join us for our bi-monthly lunch meeting to discuss future events and activities. This is a great way to get involved. See Page 4 for additional YMF information.

Thursday, July 16 - Saturday, July 18, 2015: SEA Northwest Conference

Location: Boise, Idaho

Registration is now open.

See Pages 8 and 10 for additional information.

Wednesday, July 29, 2015: SEAO/OACI Annual Golf Tournament

Location: Pumpkin Ridge Golf Club, 12930 NW Old Pumpkin Ridge Road, North Plains, OR

Time: 1:00 pm shotgun start, 6:00 pm social, 6:30 to 7:30 pm dinner & awards

See Pages 14 and 15 for additional registration and sponsorship information.

CONNECTIONS is a monthly publication of the Structural Engineers Association of Oregon, published to disseminate current news to our membership and others involved in the profession of structural engineering. The opinions expressed reflect those of the author and, except where noted, do not represent a position of SEAO.

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PRESIDENT'S MESSAGE: 1,200 STRUCTURAL ENGINEERS IN PORTLAND!

BY: JENNIFER EGGERS, P.E., S.E.



I hope some of you were able to make it to Structures Congress a few weeks ago. Can you believe there were almost 1,200 Structural Engineers in Portland?! It was really nice being able to share our town with engineers from across the country and around the world. I liked hearing conversations about all of the tower cranes around town and how nice Portland was to visit. The Congress was held at the Oregon Convention center with a very well-attended Friday night dinner at the Forestry Center.

Many SEAO members presented at the Congress and/or participated in panel discussions. I had the privilege of sitting on a panel discussion of different potential career paths. A few of us were on the panel representing the consulting career path (both for buildings and bridges). Other panel members represented contractors, city/county employees, manufacturing and academia. This panel was mainly geared toward young engineers either in school or just out of school finding their way through their careers. There was a large variation in attendees' backgrounds and the discussions were great. Every panel member had their own experiences to share, but there were more than a few common themes that came out of the questions asked.

1. The Basics: No matter where you end up, or how much experience you have – it is important to remember and understand engineering basics. There are so many different computer programs that can be utilized to aid our engineering. Take a minute to think about the output of the program and see if it makes sense using your engineering basics.
2. Soft Skills: This is something that isn't really taught in school . . . communication and relationships. It seems like all industries today are relationship based, especially ours. Communication is the key to getting ideas across and to interacting with contractors, building owners, clients, and/or students . . . no matter which path you take.
3. Being inquisitive: A question was asked about what we expected from new hires. We were unanimous in the fact that we didn't expect new team members to know every-

thing coming in on a job. We expect questions. If you are just starting out – ask questions! It is best to brainstorm a solution and then engage in a conversation about assumptions made and your thought process. And don't stop learning . . . EVER. Engineers are by default curious, and we need to feed that trait throughout our entire career.

Even if you are not an engineer starting out (as most of you aren't), I encourage you to keep these discussion topics in mind and communicate the importance of these with your peers and co-workers. They are important at all levels or paths of your career.

As Structures Congress wrapped up on Saturday afternoon, we heard more feedback about how fantastic this Congress was in Portland. We should be proud as a city to have hosted such a big event.

Just a quick reminder that SEAO is introducing the first annual Structural Engineering Awards Presentation this year, which will occur during September's Chapter Dinner Meeting! See pages 4, 11, and 12 for more info and the submission form. I highly encourage everyone to participate. Please help make this first SEAO Awards Event successful! We hope to receive great cross-sectional representation of the talent that SEAO has in our membership. Please start thinking and talking internally in your firm about what projects you want to submit!

Last month's chapter meeting was fantastic. Seth Thomas presented on the new Tsunami chapter in ASCE 7. I hope you were able to attend! If not, visit page 6 for a recap of the meeting presentation. Our chapter meeting this month will be on the new Elephant Exhibit at the Zoo and will be presented by our own Ed Quesenberry. See page 3 for more information. I hope you can attend!

Thank you for your continued participation and support. I am looking forward to seeing you at one of our upcoming events!

Jennifer

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Professional Development

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Seth Thomas (Alternate)—
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MAY LUNCH MEETING ANNOUNCEMENT WEDNESDAY, MAY 27, 2015

Topic: A Structural Safari



How much force can a 14,000 pound elephant generate? That question, along with many other unique questions, were addressed by Equilibrium Engineers in the structural design on the \$42M Oregon Zoo Elephant Lands Project. The presentation will provide an overview of this multi-faceted project, discuss the unique structural challenges encountered during both design and construction, and include some elephant tales that are sure to please.

Speaker: Ed Quesenberry, SE, Equilibrium Engineers LLC

Ed Quesenberry is the founding Principal of Equilibrium Engineers LLC, a structural engineering consulting firm in Lake Oswego. Ed has over 25 years of structural engineering consulting experience on a broad range of building types, including civic, commercial, educational, healthcare and housing facilities in California, Oregon and Washington. Ed earned a Bachelor of Science degree in Architectural Engineering from California Polytechnic State University in San Luis Obispo and is a registered Structural Engineer in most western states. He is Past President of Structural Engineers Association of Oregon, has been an Adjunct Faculty Member at Portland State University, and currently serves on the Board of Directors for the National Council of Structural Engineers Associations.



Location: Portland City Grill, 30th Floor, 111 SW Fifth Avenue, Portland, OR

Check-in & Lunch Buffet: 11:30 am

Announcements: 11:45 am

Program: noon

Cost: Lunch and Program:

| |
|--|
| \$32 — Prepaid Members |
| \$20 — Prepaid YMF Members (Must Be Active in YMF) |
| \$40 — Prepaid Non-Members |
| Free — Students |

Reservations: Pre-registration is required for all. **You can register and pay online at www.seao.org before noon, Friday, May 22.** You can also register with Jane Ellsworth via phone at (503)753-3075 or via Email: jane@seao.org. Note: No-shows will be billed.

PDH Credit: One PDH has been recommended for this program.

Meeting Sponsor: Powers Fasteners

See Page 9 for additional information about this month's sponsor.

AWARDS COMMITTEE NEWS

By: Lauren DiPalma

SEAO is pleased to announce the first annual Structural Engineer Awards Presentation to acknowledge outstanding projects and structural engineering advancement. Projects will be judged by a panel of invited judges from multiple fields related to design and construction and will be based on innovative design, engineering achievement, and creativity.

Submission Categories:

- New Buildings Under \$10M
- New Buildings Over \$10M
- Renovation/Retrofit
- Special Use Structures

Please see pages 11 and 12 for eligibility requirements and submission form. All submissions must be received by June 30, 2015.

DOCTORS WITHOUT BORDERS INFORMATION SESSION

Doctors Without Borders is an international medical humanitarian organization working in more than 60 countries to assist people whose survival is threatened by violence, neglect, or catastrophe. Treating those most in need regardless of political, religious, or economic interest. Whether an emergency involves armed conflicts or epidemics, malnutrition or natural disasters, Doctors Without Borders is committed to bring quality medical care to people caught in crisis.

There will be an upcoming Information Session in Portland, Oregon on Tuesday, June 2nd. Medical and non-medical professionals are invited to join us for an evening presentation to learn more about how you can join Doctors Without Borders' pool of dedicated aid workers as well as how you can put YOUR ideals into practice. Doctors Without Borders recruits both medical and non-medical professionals to work in the field and is always looking for more of both.

Date & Time: Tuesday, June 2, 2015, from 6:30 pm to 8:00 pm
Location: The Cleaners at Ace Hotel Portland
1022 SW Stark Street, Portland, OR 97205

To RSVP: <http://www.eventbrite.com/e/put-your-ideals-into-practice-doctors-without-borders-info-session-portland-or-registration-16340900072?aff=erelexporg>.

For more information on the event or to learn about our work, visit www.doctorswithoutborders.org. If you have any other questions, please contact Leila Fuleihan, Field Human Resources Team at HR.Intern@newyork.msf.org or at 1-212-763-5717. See Page 13 for informational flyer.

YOUNG MEMBER FORUM ACTIVITIES

By: Phil Davis & Seth Thomas

Upcoming YMF Events:

Thursday, May 21st — YMF Happy Hour/NCSEA Trivia Night

Location: Urban Brewery, 3947 N Williams, Portland, OR

Time: 5:30 pm

This month the YMF will be combining our happy hour with the NCSEA West Coast Trivia and Networking Event. We will still have the usual happy hour with SEAO providing appetizers, but those who are interested can also participate in the trivia event. Email Seth Thomas (seth.thomas@kpff.com) or Phil Davis (Phillip.davis@kpff.com) if you want to participate in the trivia event so we can get a headcounter and form teams.

Thursday, June 18th — YMF Happy Hour —

Location: To Be Determined

Time: 5:30 pm to 7:30 pm

Bring a friend, coworker, or both and enjoy a beer and some food while getting to know some other young professionals in our area.

Friday, July 10th — YMF Lunch Meeting —

Location: KPFF Consulting Engineers, 26th Floor Conference Room, 111 SW Fifth Avenue, Portland, OR

Time: noon to 1:00 pm

Join us for our bi-monthly lunch meeting to discuss future events and activities. This is a great way to get involved in SEAO.

YMF Website Info:

<http://www.seao.org/committees/advocacy/ymf/>. Please visit our website for more information on YMF events and information.

ASK A QUESTION, GET AN ANSWER

Do you have a code question you would like to ask the Wind Committee or Snow Committee? SEAO is pleased to announce a simple way for Q&A's with technical committees. Email questions to jane@seao.org, and SEAO will direct your question to the appropriate committee chair for a response. Questions and their answers will be made anonymous and available to the membership on the website www.seao.org.

Committees include: Seismic, Wind, Snow, Code, Vintage Building, and Special Inspections.

IBC CODE INFORMATION

EXCERPT FROM 2012 IBC HANDBOOK

1803.5.5 Deep Foundations

The purpose of a geotechnical investigation is to define the general subsurface stratifications of soil and rock materials, determine the soil and rock profiles, and locate the ground-water table. Such information will help in selecting the type of deep foundations and in estimating deep element lengths. Furthermore, a geotechnical investigation is often required to render data on specific soil properties, such as shear strength, relative density, compressibility of the soil, and other such findings that will help in analyzing subsurface conditions for determining design loads, type of deep foundations, driving criteria, suitable bearing strata, and probable durability of foundation materials relative to the particular soil conditions found at the construction site. It is generally not economical or feasible to use deep foundations without a geotechnical investigation and report.

Subsurface information is normally obtained by means of test borings that yield suitable samples of soils and rock and give the depths from which they are obtained. Sometimes, certain in situ tests are also conducted, but these should not be made without first making test borings.

This section outlines the kinds of information to be derived from a geotechnical investigation and report. In addition to the items listed in the code provision, the investigation could include other valuable and applicable data that would help in the evaluation, such as:

- Information on existing construction at the site or at adjacent sites, including the type and condition of these structures, age, types of foundations used, performance data, and so on.
- Information on the existence of deleterious substances in the soils or other conditions that could seriously affect the durability and structural performance of the piles.
- Information on the geologic conditions at the site, which could include such items as the existence of mines, earth cavities, underground streams or other adverse water conditions, history of seismic activity, and so on.



This excerpt is from the 2012 International Building Code Handbook, authored by John Henry, PE and Doug Thornburg, AIA. The book is available at iccsafe.org/store. Use ID # 4000S12.



APRIL MEETING RECAP

BY: DEANNA AMNEUS

Topic: ASCE 7-16 Tsunami Loads

A History and Overview of the Upcoming Provisions and How They Affect You

Speaker: Seth Thomas

Seth Thomas is a structural engineer at KPFF. He received his BS in Civil Engineering from Washington State University and then pursued his MS at Oregon State University. His graduate research investigated tsunami forces on buildings with tsunami walls. While in the professional world, he has become very involved in the SEAO. He is the YMF president, Oregon YMF representative, and is on the committee creating the tsunami design provisions. He is also co-writing the ASCE design guide on tsunamis.

Tsunami Basics

- Generation
 - Only some faults are capable of generating a tsunami. These faults are often called subduction zones (for example, the San Andreas Fault is a strike slip fault and would not create a tsunami).
- Propagation
 - Once created, tsunamis travel quickly across the ocean.
 - Waves are typically small (3feet tall) and may not be noticeable to ships
 - The wave travels perpendicular from the fault both ways
- Inundation
 - Inundation is dependent on topography -- low flat land can have large inundation zones.
 - The tsunami wave usually breaks before land and the surge created runs on shore.
 - The surge flows for around 5 to 15 minutes with a speed of 10 to 20mph before receding

Tsunami Code History

United States Tsunami provisions first appeared in the 1980 City of Honolulu Building Code. FEMA guidelines for vertical evacuation structures were published in 2003. The FEMA provisions are very conservative and results in uneconomical designs.

Current Research

Recent events have contributed to the awareness and body of knowledge on tsunami research. In particular, the post-tsunami investigations in Chile and Japan provided valuable insight. Many examples of tsunami-resistant structures and footage emerged. It was common for people to gather in tall structures, and the new provisions reflect that.

The Oregon State OH Hinsdale Wave Research Laboratory has hosted much of the tsunami research in the United States. The tests range from full-scale inundation studies to seawall studies. Experimental data has been gathered compared to numerical models.

NOAA and other tsunami models have been calibrated using the data from experimental tests and post disaster investigations.



Town model of tsunami inundation performed at OSU's OH Hinsdale Wave Research Laboratory. Source: http://www.oregonlive.com/politics/index.ssf/2013/03/scientists_warn_oregon_legisla.html

ASCE 7-16 Tsunami Provisions Overview

ASCE has recognized the need to provide design requirements for tsunami loads. In 2011 ASCE tasked a new subcommittee to develop minimum loads from tsunami generated flows. Chapter 6 in ASCE 7-16 will be reserved for tsunami loads. Ample commentary will be added for this chapter to aid in implementation.

- Chapter 6 introduces a tsunami design zone inundation area for a 2,500 year return period. The 2,500 year design zone is correlated with the maximum credible earthquake event on the Cascadia and Aleutian faults. The risk category requirements are stated. Risk Category III and IV may be required as well as Risk Category II buildings above the threshold height. Offshore wave height and tsunami design zone maps will be available through the ASCE website.
- Section 6.4 allows local jurisdictions to designate some essential facilities (fire stations, emergency vehicle garages, and aircraft hangers) structures to Tsunami Risk Category II or III.
- Depending on the risk category, the design tsunami flow can be determined by the energy grade line (EGL) or a site specific analysis.
- The EGL is based on fluid mechanics and uses the design map values. It has been calibrated with numerical models and field data. The EGL provides maximum depth and velocity at the site, but the values do not occur simultaneously.
- The site specific analysis is required in certain conditions such as Risk Category IV buildings with a height taller than 12 feet and designated vertical evacuation buildings.
- The importance factors are developed by a statistical reliability analysis and are similar to earthquake values.
- Unique conditions to tsunami loads include:
 - Increase in fluid density from debris in water.
 - Amplification of flow when funneling between structures.
 - Directionality of flow (must consider 45 degrees of possible interaction with the structure).
 - Requirements for a minimum closure ratio (debris may collect around openings).
 - Buoyancy of structure.

(Continued on Page 7)

APRIL MEETING RECAP (CONT.)

BY: DEANNA AMNEUS

- Residual water trapped on floors.
- Unbalanced loads (large structures with water flowing through).
- Drag forces on structure.
- Bore forces.
- Flow stagnation.
- Debris impact loads.
- Section 6.11 specifies debris impact loads on structures. Common waterborne debris includes utility poles, passenger vehicles, boulders, shipping containers, and large vessels.
 - Determine probable loads from location (large vessels are a concern near ports and harbors) via the site assessment.
 - Determine the alternative simplified impact load.
 - Determine the static or dynamic impact by logs and containers.
- When designing foundations, engineers must consider uplift, loss of soil strength, site erosion, local scour, and horizontal slab loads. To mitigate the damages a tsunami impact could have, several countermeasures have been suggested. For example, an extended slab on grade could extend the scour area and decrease the impact of the footings.
- Structural countermeasures are discussed in section 6.13. Countermeasures include barriers, open structures, and site layout.
- Specific, more stringent requirements for vertical evacuation structures are outlined in section 6.14. These recommendations have been formed in light of successful and unsuccessful shelters in Japan.

ASCE 7-16 Code Status

- Fall 2015 – Public comment
- March 2016 – Published
- TBA 2016 – Tsunami design guide published

Key Points

- All Risk Category III and IV buildings and tall Risk Category II buildings will be shown in the tsunami design zone maps.
- Maps are based on a 2,500 year return period and will be linked to Google Earth.
- Design values will be determined from using the EGL or site specific analysis.
- Three load combinations will be used.
- Hydrostatic, hydrodynamic, and debris impact forces must be considered.
- Specific requirements for vertical evacuation structures are given.



Japan after the 2011 tsunami

Source: <http://www.bbc.com/news/world-asia-20150778>

SEISMIC EVENTS

ASCE Seminars (www.asce.org)

Friday, June 19, 2015, 8:00 AM – 5:00 PM PT, Portland, OR.
[Performance Based Seismic Design of Liquid Storage Tanks.](#)

ASCE Webinars

Monday, June 1, 2015, 8:30 AM – 10:00 AM PT. [Seismic Evaluation and Retrofit of Unreinforced Brick Masonry Buildings Using ASCE 41-13.](#)

Thursday, June 18, 2015, 8:30 AM – 10:00 AM PT. [Seismic Design of Curtain Wall Systems.](#)

Wednesday, June 24, 2015, 8:30 AM – 10:00 AM PT. [Practical Insights for Diaphragm Modeling in the Analysis of Building Structures.](#)

CROSS-LAMINATED TIMBER COMMITTEE NEWS

The Cross-Laminated Timber committee is currently gathering information to create a resource document that will eventually be posted to the SEAO website. If you have information that you feel might be useful or wish to contribute any pertinent information on this innovative material, please contact Scott Nyseth via email at scott.nyseth@stonewoodstructural.com.

SEA NW CONFERENCE NEWS

When: July 16 to July 18, 2015

Location: Boise, Idaho

The SEA Northwest Conference is open for registration! Visit SEAIdaho.org for more information on the events available at this year's conference and to register. Applications are also being accepted for exhibitors and sponsors. If you have any questions about the conference and activities available, please contact Sarah McClendon at sarah@mcclendonengineering.com. See page 10 for additional information.

EMPLOYMENT OPPORTUNITIES

PACE ENGINEERS

Structural Engineer

Lake Oswego, OR

PACE Engineers is looking for energetic and career-minded candidates to join our structural team who have a PE license plus 5-years of experience and who also have their SE license. Competence with Microsoft Office, RISA 3D, RAM Steel, and FEA modeling is required. Professional communications with clients and effective coordination skills with colleagues and multi-disciplinary design teams is essential. Strong writing skills are necessary. A spirit of ownership in one's work and the commitment to technically correct work is also required. Project work includes a broad mix of types in various market sectors, including: public works, industrial (high-tech & general), ports, architectural, commercial, institutional, and contractor and vendor services. For more information about this Portland-area employment opportunity, please visit our website at www.paceengrs.com.

STONEWOOD ENGINEERS

Senior Project Manager

Camas, WA

Stonewood Structural Engineers is looking to hire a Senior Project Manager. This position requires the ability to manage large and complex projects. Excellent communication and organizational skills and the ability to develop a rapport with our clients and support staff is imperative. Must be proficient with the IBC and ASCE-7. We are looking for a minimum of 10 years of experience, but will consider less for qualified individuals. Experience in seismic retrofits and concrete and steel design is preferred.

Stonewood Structural Engineers offers a competitive com-

EMPLOYMENT OPPORTUNITIES (CONT.)

pensation package. Benefits include medical, dental and vision insurance, a 401(k) investment plan, and performance bonuses.

Submit resume and cover letter to

scott.nyseth@stonewoodstructural.com

PARKIN ENGINEERING

Structural Design Engineer

Vancouver, WA

Parkin Engineering (www.johnwparkin.com) is seeking an energetic, self-motivated, mid-level structural design engineer to lead a diverse portfolio of projects that include commercial, office, residential, earth-retaining structures, hydraulic control structures in rivers, and formwork design for segmental concrete bridge construction. Applicants should have experience defining and analyzing complete load paths for vertical and lateral-force-resisting systems. System analysis and design requires a depth of knowledge in wind, seismic, snow, and live loading coupled with experience in design of wood, steel, concrete/post-tensioned concrete, and masonry structures. Proficiency in project management and client communications is required.

Parkin Engineering is a subsidiary of Smith-Root, Inc., which is an Equal Opportunity/Affirmative Action Employer providing outstanding benefits and growth opportunities.

To apply, please send résumé and cover letter to jobs@johnwparkin.com and in the subject line please refer to Structural Design Engineer. Please see full posting at www.johnwparkin.com/about/jobs.

EMMERT INTERNATIONAL

Structural/Bridge/Rigging Engineer

Clackamas, OR

Emmert International in Clackamas Oregon is looking for a full-time Structural/Bridge/Rigging Engineer with a P.E. license to join our team. Our selected candidate must possess experience in structural design, foundation engineering, fabrication, and detailing. Additional experience with AASHTO bridge rating, rigging, lashing and hydraulic calculations is preferred. Primary duties and responsibilities will be providing engineering calculations and AutoCAD drawings for the Super-Heavy Transportations and Rigging Industry. Please our website at www.emmertintl.com for additional information regarding this unique opportunity. Competitive compensation commensurate with experience. Send a cover letter and resume to tmemmert@emmertintl.com.

(Continued on Page 9)

EMPLOYMENT OPPORTUNITIES (CONT.)

KPFF CONSULTING ENGINEERS, PORTLAND, OR

Experienced Structural Engineers and Entry-Level Structural Engineers

KPFF Portland is looking for Experienced and Entry-Level Structural Engineers who are motivated and interested in an opportunity for growth.

KPFF is about freedom. Freedom to work on what inspires you. Our engineers work on a vast spectrum of projects that are located around the globe: from anchorage of mechanical systems to complex, non-linear analysis of high-rise structures. We have the benefits of a large, stable firm but none of the red tape that comes with it. Providing first-class service to our clients is what we're about. We are a group of dedicated, friendly, collaborative, hard-working professionals. We are looking for exceptional engineers to join us. Please use the appropriate link below for full details.

Experienced Structural Engineer Apply Here: http://chc.tbe.taleo.net/chc05/ats/careers/requisition.jsp?org=KPFF_2&cws=63&rid=73

Entry-Level Structural Engineer Apply Here: http://chc.tbe.taleo.net/chc05/ats/careers/requisition.jsp?org=KPFF_2&cws=63&rid=151

Experienced and Entry Level BIM/CAD Modelers

KPFF Portland is looking for both Experienced and Entry-Level BIM/CAD Modelers who are motivated and interested in an opportunity for growth.

KPFF is about freedom. Freedom to work on what inspires you. Our modelers work on a vast spectrum of projects that are located around the globe: from anchorage of mechanical systems to complex, non-linear analysis of high-rise structures. We have all the benefits of a large, stable firm but none of the red tape that comes with it. Providing first-class service to our clients is what we're about. We are a group of dedicated, friendly, collaborative, hard-working professionals. We are looking for exceptional modelers to join us. Please use the appropriate link below for full details.

Experienced Modeler Apply Here: http://chc.tbe.taleo.net/chc05/ats/careers/requisition.jsp?sessionid=C7E8EA90347EB424C07FBBB0763537A6?org=KPFF_2&cws=63&rid=96

Entry-Level Modeler Apply Here: http://chc.tbe.taleo.net/chc05/ats/careers/requisition.jsp?org=KPFF_2&cws=63&rid=255

KPFF is an equal opportunity employer.

MAY MEETING SPONSOR INFO POWERS FASTENERS

THE CONCRETE SOLUTION™



Powers Fasteners has been a worldwide pioneer in the fastening industry since 1921 and today is the leading supplier of concrete and masonry anchors and fastening systems in North America. Powers has extensive engineering and manufacturing expertise in mechanical anchors, adhesive anchoring systems, and powered forced-entry systems.



Make a Measurable Improvement

- ✦ Download or update Powers Design Assist Software (www.powersdesignassist.com)
- ✦ Design an anchorage using PDA and create a design report.
- ✦ Turn in the design report at the Powers Table for a FREE DeWalt tape measure.



Powers is a division of Stanley Black & Decker, Inc.

SEAOC CONVENTION SEPT. 9–12, 2015

The official website has been opened for the 2015 Structural Engineers Association of California (SEAOC) Convention.

The convention will be held at the Hyatt Regency in Bellevue on Seattle's Eastside.

Please visit the website for additional information on programs, social events, and exhibitors. Registration should be formally opened on the website soon.
<http://convention.seaoc.org/>

More than Just PDH's!



- ✓ Recognition for newly licensed PE's and SE's!
- ✓ **Young Member's Leadership Meeting**
- ✓ Networking & Socializing with Industry Experts & Exhibitors
- ✓ **Limo ride to dinner!**
- ✓ Idaho food, beer and wine!
- ✓ **Dual Technical Tracks**
- ✓ **Board of Director Training Workshop! (2 bonus PDH's!)**
- ✓ Dinner on the top floor of the tallest building in Idaho
- ✓ Recreational Activities!
- ✓ **Tour inside the new iconic JUMP building!**
- ✓ Learn about Boise's architectural history

✓ **The most fun 12 PDH's you can get in the Northwest!!**

Now accepting Exhibitor applications and Sponsors!
For more information go to SEAIdaho.org



STRUCTURAL ENGINEERS ASSOCIATION OF OREGON

9220 SW Barbur Blvd, #119, PMB #336, Portland, OR 97219
503.753.3075
www.seao.org • E-mail: jane@seao.org

Structural Engineers Association of Oregon 2015 Excellence in Structural Engineering Awards

The Structural Engineers Association of Oregon (SEAO) Excellence in Structural Engineering Awards was created to acknowledge outstanding projects and structural engineering advancement by members. 2015 is the inaugural year of what is sure to become an annual recognition of structural contributions by SEAO members. The SEAO 2015 Awards will be recognized as a part of the September 30, 2015 dinner meeting and awards ceremony.

Eligibility Requirements:

1. Project must have completed construction during the calendar year of 2013, 2014 or 2015.
2. At least one member of the design team, research team, or a principal of the firm responsible for entry must be a member of SEAO.
3. Entries may be of any size, type and location.
4. Projects may be submitted into one category only.
5. Each company may submit up to two projects per category (8 projects total).

SEAO Judging Criteria:

Projects will be judged by a panel of invited judges from multiple fields related to design and construction, based on the following criteria:

1. Creativity of structural design
2. Complexity of design criteria
3. Ingenuity of design for efficient use of materials and construction
4. Fulfillment of clients / owners needs or expectations
5. Suitability of the structure for its environment

Entry Instructions:

All entries must include the following:

1. Completed entry form on following page, including signature. Please enter all information as they would appear on an award.
2. Project Information Sheet:
 - a. A written summary of the project emphasizing any outstanding accomplishments achieved and hurdles overcome during the course of the project's duration.
 - b. Two page maximum (including photos and figures), 10.5 point font minimum, 1.5 spaced
 - c. Summary must not include names of participating firms or project team members to allow for impartial judging. Any included names will be removed prior to judging.
 - d. Do not include any confidential or sensitive information.
3. CD/Flash drive with up to 10 photos/images (per entry).
4. \$75 Entry Fee (per entry). Please make checks payable to SEAO.
5. Multiple entries may be mailed submitted together (and paid by single check). Refer to entry form for address.
6. All entries shall become the sole property of SEAO. SEAO reserves the right to use or publish some of the entire entry material in publications. By entering, the Entrant grants a royalty-free license to SEAO to use any copyrighted material submitted. Such right includes publication of photographs and names of award recipients without compensation to Entrants.
- 7. All materials must be received by June 30, 2015.**



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Structural Engineers Association of Oregon 2015 Awards Nomination Form

Project Information:

Project Name:

This project is to be judged under the following category (select **one**):

New Buildings Under \$10M

Renovation / Retrofit

New Buildings Over \$10M

Special Use Structures

**Note: The SEAO Awards Committee reserves the right to transfer projects into a different category as it sees fit*

Project Location: City

State

Zip

Total Construction Budget:

Completion Date:

Entering Firm: (contact must be a current member of SEAO)

Please complete all sections of the form below. This information may be used for publicity purposes.

Firm Name:

Address

City

State

Zip

SEAO Contact: Name

Email

Phone

By signing below, I accept responsibility for any issues regarding project confidentiality agreements.

—→Signature

Involved Entities:

Owner/Developer:

General Contractor:

Architectural Firm:

Geotechnical Firm:

Civil Firm:

MEP Firm:

Other:

Role:

Submission Checklist:

Entry Form

Project Summary (two-page maximum)

CD/flash drive w/ up to 10 photos/images

Check for \$75 per entry made payable to SEAO

Mail all materials to:

SEAO Awards

Structural Engineers Association of Oregon

9220 SW Barbur Blvd, #119, PMB #336

Portland, OR 97219

Submission Deadline: June 30, 2015

**PUT YOUR IDEALS
INTO PRACTICE**



Doctors Without Borders

Recruitment Information Session

Portland, OR

Location: The Cleaners at Ace Hotel Portland

1022 SW Stark St.

Tuesday, June 2, 2015 – 7:00 PM

**All interested medical and non-medical professionals:
join us to learn more about Doctors Without Borders
and how you can put YOUR ideals into practice.**

DOCTORS WITHOUT BORDERS RECRUITS:

PHYSICIANS – NURSES – SURGEONS – ANESTHESIOLOGISTS & NURSE ANESTHETISTS – MIDWIVES
EPIDEMIOLOGISTS – PHARMACISTS – MENTAL HEALTH SPECIALISTS – LAB SCIENTISTS/TECHNICIANS
WATER AND SANITATION, CONSTRUCTION, MECHANICS, AND ELECTRICAL EXPERTS – LOGISTICS PROFESSIONALS
HUMAN RESOURCES & ADMINISTRATIVE PROFESSIONALS – FINANCE PROFESSIONALS
EXPERIENCED FIELD COORDINATORS

**For more information and to register:
Visit www.doctorswithoutborders.org**



2015 SEAO / OACI GOLF TOURNAMENT

**\$20,000
HOLE IN ONE
PRIZE!**



JULY 29TH, 2015
Pumpkin Ridge Golf Club
1:00 PM - SHOTGUN START!

EVENT DETAILS:

The S.E.A.O. and O.A.C.I. have joined together to hold another day of golf, fun and prizes for 2015! After the success of last year's event, we will be heading back to the beautiful, **award winning course and facilities of the Pumpkin Ridge Golf Club!**

Only 20 miles West of Portland, OR, the Pumpkin Ridge Golf Club contains two championship courses, both beautifully etched into the landscape by renowned golf course architect Bob Cupp. The course we'll be playing on, **Ghost Creek, is a par-71, 6,839-yard classic course**, carefully carved through the natural and beautiful Portland wetlands, framed by lush stands of trees, and with dramatic mountain vistas.

We will have a shotgun start at 1:00PM, allowing us to all finish at the same time to share stories of the day's glory and despair, along with dinner, beverage and many prizes. We hope that you will come join us and support both organizations.

The course also offers a 17-acre practice facility to hone your skills prior to the tournament so come early. Power carts and range balls are included in the golf fee.

WHEN:

DATE: Wednesday, July 29th
SHOTGUN START: 1:00PM
SOCIAL HOUR: 6:00PM
DINNER & AWARDS: 6:30-7:30PM

TOURNAMENT:

4-Person Scrambles

CONTACT:

Jane Ellsworth
ph: (503) 753-3075
em: jane@seao.org

Don't forget to bring money for the raffle prizes and string! This year's raffle prizes will be:

- 42" TV
- iPad Mini
- Nike Wedge
- Ocean Salmon Fishing Trip for 2
- Power Washer
- Gift Cards
- Much more!

WHERE:

PUMPKIN RIDGE GOLF COURSE
12930 NW Old Pumpkin Ridge Rd
North Plains, OR 97133
Phone: (503) 647-4747

DINNER:

Dinner Will Be Served

FEES:

Golf & Dinner: \$110/person
(Includes golf cart & driving range)
SEAO Young Members Forum: \$85
5' String \$20
Mulligan: \$5/ea
String & 5 Mulligans: \$35

Appropriate "Country Club" attire is required:

- Collared Shirts
- No Denim
- Shorts must have a 6" inseam
- Soft spikes only

NO REFUNDS FOR CANCELLATIONS AFTER JULY 3rd

**PLEASE RETURN
THIS ENTRY FORM
BY JULY 3rd TO:**

S.E.A.O.

9220 SW Barbur Blvd. #119
PMB #336
Portland, OR 97219
(503) 753-3075 Phone
(503) 214-8142 Fax

☐ **Check Enclosed**

☐ **VISA** / ☐ **MasterCard** / ☐ **AMEX Accepted**

Name On Card: _____ Card #: _____ Exp. Date: _____

Contact Number: _____ Billing Zip Code: _____ 3-Digit Code On Back Of Card: _____

| Player Names | Green Fees | Membership | Payment Enclosed |
|--|--|---|------------------|
| | <input type="checkbox"/> Golf & Dinner - \$110 | <input type="checkbox"/> SEAO <input type="checkbox"/> OACI | \$ _____ |
| | <input type="checkbox"/> Golf & Dinner - \$110 | <input type="checkbox"/> SEAO <input type="checkbox"/> OACI | \$ _____ |
| | <input type="checkbox"/> Golf & Dinner - \$110 | <input type="checkbox"/> SEAO <input type="checkbox"/> OACI | \$ _____ |
| | <input type="checkbox"/> Golf & Dinner - \$110 | <input type="checkbox"/> SEAO <input type="checkbox"/> OACI | \$ _____ |
| String & Mulligan Add-Ons (1 Mulligan = 1 Shot Per Person) | | | |
| <input type="checkbox"/> 5' String - \$20 (Limit 5' Per Foursome) _____ Qty | | | \$ _____ |
| <input type="checkbox"/> Mulligans - \$5 ea (Limit 5 Per Foursome) _____ Qty | | | |
| <input type="checkbox"/> 5' String & 5 Mulligans - \$35 (Limit 1 Per Foursome) _____ Qty | | | |

Total \$ _____

2015 SEAO / OACI GOLF TOURNAMENT



JULY 29TH, 2015
Pumpkin Ridge Golf Club

Contact Info:

Jane Ellsworth
(503) 753-3075
oaci@comcast.net

Donation / Hole Sponsor Form

Sponsor Information:

Company Name: _____

Contact Name: _____

Phone: _____ Fax: _____

Email: _____

HOLE SPONSORSHIP

☐ **GOLD** - \$200 for flag at the hole and recognition on banner at dinner.

Hole Preference _____

☐ **SILVER** - \$150 for tee sign stationed driving range before golf and recognition on banner at dinner.

☐ **BRONZE** - \$125 recognition on banner at dinner.

WE THANK YOU FOR YOUR SUPPORT!

If you or your company would like to sponsor more than the above hole sponsorships, please check any of the additional sponsorship items below, or add a proposed sponsorship in the "Other" section:

RAFFLE PRIZE SPONSORSHIPS

☐ 42" TV | \$600

☐ iPad Mini | \$500

☐ Gift Cards | \$50 & \$100

☐ Ocean Salmon Fishing Trip for 2 | \$250

☐ El Gaucho Gift Card | \$150

☐ Ringside Restaurant | \$150

☐ Nike Wedge | \$100

☐ Power Washer | \$500

Please Return This Form A.S.A.P. to:

S.E.A.O.

9220 SW Barbur Blvd., Suite #119, PMB #336
Portland, OR 97219

Fax: (503) 214-8142

Email: oaci@comcast.net

SPECIAL SPONSORSHIPS

☐ **LD/KP/Long Putt Hole Sponsor**
\$150 Hole Preference _____

☐ **On Course Drink Refreshment Sponsor**
\$375 (Host drink cart for one beverage per participant to be redeemed during play)

☐ **Tee Off Sponsor**
\$250 (Host keg of Micro-brew)

☐ **19th Hole Sponsor**
\$250 (Host keg of Micro-brew)

☐ **Golf Cart Sponsor**
\$200 (Host the golf carts with a sign in each cart with your company name)

☐ **Scorecard Sponsor**
\$200 (Host the scorecards with the name of your company on each card)

OTHER PROPOSED SPONSORSHIP

☐ _____

