Seattle’s Proposed URM Ordinance

For the last several years Seattle’s Department of Planning and Development (DPD), under the direction of the Seattle City Council, has been developing a proposal for a seismic evaluation and retrofit ordinance for the City’s unreinforced masonry (URM) buildings. The ordinance would set reporting requirements, technical standards, and timelines for compliance. Based on the experiences from the Nisqually and New Zealand earthquakes and modeled on similar URM ordinances throughout California, the mandatory retrofit measure would be a first for Washington State. Please join us for an engaging panel discussion on the history, intent, and current status of the URM ordinance.

The program will feature an introduction presented by Seattle City Council Member Richard Conlin who has been a passionate proponent for seismic safety and resilient communities. DPD’s Steve Pfeiffer will then present the background and history of the existing buildings provisions in the Seattle Building Code and the process for the development of the proposed URM ordinance. The process, participants, and recommendations of the URM Policy Committee will be presented by Steve Moddemeyer of CollinsWoerman. He will also explain the follow-up economic analysis that will provide city officials with information on the benefits and costs of the policy choices recommended by the committee. Finally, Bryan Zagers of CPL will discuss the technical basis that has been developed for the ordinance.

Richard Conlin has served on the Seattle City Council since 1997, and currently chairs the Planning, Land Use, and Sustainability (PLUS) Committee. His long-standing priority is to make Seattle more sustainable: a city that values and practices environmental stewardship, economic opportunity, social justice, and community. Steve Pfeiffer is an Engineer, and Technical Codes Manager for DPD. Steve has been with the city for over 28 years and is an expert in the existing buildings provisions. Steve Moddemeyer is a Principal for CollinsWoerman, an architectural, planning and urban design firm based in Seattle, Washington. Steve is known nationally and internationally for his work advising cities, developers, tribes, and large institutions on advanced strategies for sustainable and resilient land use and infrastructure. Bryan Zagers is an Associate Principal with Coughlin Porter Lundeen and currently chairs the SEAW Existing Building Committee. His project experience includes many seismic renovations in Seattle including several URM buildings.

Mini-Seminar:
In addition to the main program, the evening will feature a mini-seminar covering disaster resilience as a form of sustainable design. The session will be presented by Luke Ruggeri of CPL who has been working with the SEAW Sustainability Committee for the last 3 years. Luke will provide a brief background on disaster resilience and its relationship to sustainability while highlighting what structural engineers can do to make their buildings and communities more sustainable through disaster resilient design.

Meeting Information:
Seattle/Southwest Chapter Joint Meeting
Date: Tuesday, April 23, 2013
Place: Hotel Monaco Seattle
1101 Fourth Avenue, Seattle
Note: Valet parking for SEAW meeting attendees is $12.00 while space is available.

Time:
5:00—6:00 PM Registration/Networking
5:30—6:00 PM Mini Seminar
6:00—6:45 PM Dinner
6:45—7:00 PM Welcome/Introductions
7:00—8:15 PM Program

Menu:
Harris Ranch skirt steak with mashed potatoes
~ or ~
Ricotta Gnocchi with caramelized mushrooms, spinach, and pecorino

Price:
SEAW/ASCE Members $40.00
Non-members $50.00
Students/Unemployed $15.00
Registration after 4/17, add $5.00
* Unemployed current members may register at the student rate.

Registration Required
Prepayment Appreciated
Register online at www.seaw.org

Registration deadline is 5pm Thursday, Apr. 18
Credit cards accepted online only; not at the door.
No-shows and cancellations after the deadline will be subject to full charge.
YMF Corner

-by Jennifer Ahlport

The days are getting longer, and summer is soon approaching. In addition to all of the other wonderful things that means, it also means it’s time to start looking for next year’s YMF leadership. This coming June we will be holding elections, and I’ll be accepting self-nominations now through May 24th for all YMF leadership positions. Voting will then run through June 5th and the results will be announced shortly before the June dinner meeting on the 11th.

I encourage everyone to consider volunteering for a position. It’s a great opportunity to develop valuable relationships with members of the structural community. Additionally, it’s a great way to learn more about how SEAW works and all that the organization is involved with.

Following is a list of YMF leadership positions and a brief description of typical activities for each:

**PRESIDENT:** Develop and lead YMF activities, specifically:
- Attends monthly meetings with the SEAW board
- Coordinates two tours, such as building projects or structural material manufacturers
- Sends announcements to YMF
- Contributes a monthly column to the Equilibrium newsletter

**VICE PRESIDENT:** Assists President with YMF activities, including:
- Coordinates two service projects, such as our YMF Habitat build days
- Coordinates SEAW’s booth for the PSEC Engineering Fair

**OUTREACH CHAIR:** Liaises between university students and YMF and develops programs to encourage young engineers to join and participate in SEAW, including:
- Coordinates Student Outreach Luncheons in the spring
- Serves on SEAW’s Public Information Committee

**SOCIAL CHAIR:** Develops programs to encourage sustained involvement of young engineers in SEAW, including:
- Coordinates monthly happy hour events
- Coordinates the annual YMF Picnic
- Helps maintain email list and budget

If you’re interested in a position, please email me at jahlport@gmail.com with your name, email address, current company, alma mater, the position you’d like to run for, and a brief statement explaining why you’d like to hold this position. If you have any questions about the exact responsibilities of the positions, feel free to send me an email as well.

Meeting Recap

-by Karen Damianick

Poetry and Tunnels

March’s dinner meeting was our yearly joint meeting with ASCE Seattle Section. The Seattle Section is celebrating its centennial this year and has some special events planned. In addition to a Gala at Lake Union later this year, they have commissioned Washington State’s Poet Laureate to write a poem about civil engineering. As it happens, Washington’s Poet Laureate, Kathleen Flenniken, began life as a civil engineer working at the Hanford nuclear facility and has written a book of poems about her experiences both growing up near to and working at Hanford. She kicked off the meeting by reading from this collection. It was a truly unique experience for an SEAW dinner meeting.

The main content of the dinner meeting was the SR 99 tunnel and was presented by Rick Conte, the Senior Project Manager at Parsons Brinkerhoff. When complete, the tunnel will be almost two miles long with two lanes in each direction (stacked) and extensive safety systems. There will also be extensive traffic revisions at both ends of the tunnel (and above it, in the case of the viaduct).

The star of the presentation was the tunnel boring machine, Bertha. It is 57.5 feet in diameter, 326 feet long, and weighs nearly 7,000 tons. It is shipped in 41 pieces with the largest piece weighing nearly 900 tons. There are only six ships in the merchant fleet that can handle a load that large. By the time this newsletter is published, the first parts of the TBM will already have arrived in Seattle. Tunnel boring will start around July 8 and be complete in the fall of 2014 with the tunnel open to drivers at the beginning of 2016.

Leading up to this point in the project, there has been extensive work along the tunnel route, including monitoring and strengthening structures to limit settlement. Part of this work included the rehabilitation of The Western Building near the tunnel entrance which had pre-existing cracks up to eight inches wide and columns out of plumb by seven inches (the building was still in use). Micropiles were used extensively throughout the project to limit settlement.

As a final note, there is a new museum open to provide history of the viaduct and information on the new tunnel called “Milepost 31” located in Pioneer Square. Beginning in April they will be giving tours of the launch site. You can also follow all the action on twitter @BerthaDigsSR99.

Karen Damianick, PE, SE, is principal and owner of KLD Engineering, is serving as a 2012-2015 director on the Seattle Chapter board, and has been a member of SEAW since 2003. She can be

YMF Leadership

President:
Jennifer Ahlport
jahlport@gmail.com

Vice President:
Tyler Kurz
tkurz@ dici-engineers.com

Past Chair:
Natalie Low
gnatann@gmail.com

Outreach Representative:
April Shen
april.c.shen@gmail.com

Upcoming YMF Events

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apr 9</td>
<td>Happy Hour, 5:00-7:00 PM</td>
<td>Kells, 1916 Post Alley, Seattle</td>
</tr>
<tr>
<td>Apr 16</td>
<td>YMF UW Outreach Luncheon, 11:30am</td>
<td>Big Time Brewery, 4133 University Way NE</td>
</tr>
<tr>
<td>Apr 18</td>
<td>YMF SU Outreach Luncheon, 11:30am</td>
<td>Elsyian Brewing Company, 1221 E. Pike St.</td>
</tr>
<tr>
<td>May 14</td>
<td>Happy Hour, 5:00-7:00 PM</td>
<td>Alibi Room, 85 Pike St., Seattle</td>
</tr>
<tr>
<td>May 15</td>
<td>Eastside Happy Hour, 5:00-7:00 PM</td>
<td>Chantanee Thai, 601 108th NE, #100A, Bellevue</td>
</tr>
</tbody>
</table>

SEAW Seattle Chapter Equilibrium Page 2 April 2013

Created in 2007, the Younger Member Forum provides networking and social opportunities to SEAW members 35 and under, as well as new non-member engineers and students. All SEAW members are welcome to participate in YMF functions.
Spokane Forum May 28
The Structural Engineers Foundation of Washington is excited to take its Forum series to Eastern Washington in May. Join us Tuesday, May 28th, at the Davenport Hotel in downtown Spokane, where Jon Magnusson, P.E., S.E., Hon AIA, will present “Behind-the-Scenes Stories of Washington State’s Latest Generation of Unusual Buildings.”

Magnusson, Senior Principal at Magnusson Klemencic Associates in Seattle, gave a similar presentation at SEFW’s inaugural Fall Forum in Seattle in October 2011. The presentation will provide fun and entertaining highlights of the history, politics, architecture, engineering, and construction of many of Washington State’s most unusual buildings, including CenturyLink Field, Safeco Field, Experience Music Project, and more.

The forum will not be an “engineering” lecture; rather, it is intended for owners, contractors, architects, engineers, and all people with a broad range of interest in the built environment. It is the perfect opportunity for SEAW members to invite clients along for an informative and engaging evening.

A hosted pre-function reception will begin at 5 PM, and the lecture will begin at 6 PM. The event is free and open to the public, but pre-registration is required. Please visit www.sefw.org to register.

Questions can be directed to the Event Chair Dave Peden of Coffman at 509-328-2994 or the SEFW Administrator Angela Gottula at 425-741-1763.

Sponsorship opportunities at the Bronze ($250), Silver ($500), and Gold ($1000) levels exist for firms. Please contact either Dave or Angela to become an SEFW Partner for the 2013 Spokane Forum.

We look forward to seeing you on May 28th in Spokane!

SEFW Leadership
PO Box 4397
Everett, WA 98204
Ph. 425/741-1763
admin@sefw.org

Directors:
J. Mark D’Amato
Edwin T. Huston
Jon D. Magnusson
Theodore E. Smith
John G. Tawresey

You’re Invited!
PREMIERE SHOWING:
Structural Engineers of the Seattle 1962 World’s Fair
The Structural Engineers Foundation of Washington is excited to announce the premiere showing of a film documenting structural engineers of the 1962 World’s Fair.

Host: Structural Engineers Foundation of Washington
Where: Seattle Center House Theater (305 Harrison Street)
When: May 7, 2013 - 6 p.m. Reception, 7 p.m. Showing

Hors d’oeuvres provided by Skillet and a no-host bar will be available before the film. Valet parking available at the Space Needle, a short walk to the Armory east entrance and the theater. Self-parking is available at three Seattle Center parking garages.

This event is FREE and we welcome everyone, especially the donors who have helped make this film a reality. If you’d like to support SEFW (a 501c3 non-profit organization) and fund more projects like this, contributions will be welcomed at the event. Donors of $100 or more will receive a DVD of Structural Engineers of the Seattle 1962 World’s Fair.

Capacity is limited, so please RSVP early to ensure seating.

Please register at www.sefw.org or contact our SEFW administrator at admin@sefw.org or 425-741-1763.
SEAW Presents:
Seismic Design Using the 2012 IBC and ASCE 7-10
Seattle, Spokane, and Tri-Cities, May 11, 23 and 24
The 2012 International Building Code, along with the 2010 edition of ASCE 7 Minimum Design Loads for Buildings and Other Structures, will be adopted in Washington State in July 2013. This seminar will address the revised seismic provisions of the 2012 IBC and ASCE 7-10. Topics to be covered will include system and analysis requirements; seismic design criteria; seismic hazards and the revised seismic maps; geotechnical engineering requirements; requirements for inspection, testing, and observation; design and anchorage requirements for nonstructural components; and revised structural design requirements for structural systems, including concrete design, anchorage to concrete, steel design, masonry design, and wood and cold-formed steel design.

Seattle:
Saturday, May 11
UW Kane Hall, Room 110
Registration 7:30 AM
Seminar 8:30 AM to 4:30 PM

Spokane:
Thursday, May 23
Red Lion Inn at the Park
Registration 8:00 AM
Seminar 8:30 AM – 4:30 PM

Tri-Cities:
Friday, May 24
TRAC Center, Room 2
Registration 8:00 AM
Seminar 8:30 AM – 4:30 PM

Seminar Cost:
$240 SEAW members
$340 Non-Members
$ 50 Students
Registration will include refreshments at breaks, a box lunch, and a notebook containing a printed copy of all seminar notes. A late fee of $25 will be charged for registrations made less than one week prior to the seminar date. Cancellations will be subject to a $25 administrative fee. Online registration is open at www.seaw.org.

2013 PNW Bridge Inspectors Conference: Maximizing your Bridge Inspection Program
Tuesday 4/23/2013 to Thursday 4/25/2013
Hilton Portland & Executive Towers, 921 Southwest 6th Avenue, Portland, Oregon
The Pacific Northwest State DOTs and FHWA are jointly hosting the 2013 Pacific Northwest Bridge Inspectors’ Conference. The conference provides a forum for bridge inspectors and managers to share information, innovations, ideas, and best practices. Additional opportunity will be provided for the attendees to gain a current national perspective on bridge inspection from AASHTO and FHWA. The conference will provide continuing education for bridge inspectors.

Who Should Attend?
City, county, state, federal, and consultant bridge inspectors and bridge managers who are responsible for:
- Bridge inspection policy and procedures
- QC/QA
- Preparation and maintenance of bridge inventories
- Bridge inspections
- Load ratings
- Bridge management systems
For information, visit http://home/45069/76270/?
Bridge product and engineering service exhibitors are also encouraged to participate.

University of Washington to Host 2013 National Student Steel Bridge Competition
The University of Washington is excited to announce that they have been selected to host the 2013 National Student Steel Bridge Competition (NSSBC)! The competition will be held on May 31 and June 1, 2013, and is organized by both the American Institute of Steel Construction (AISC) and the American Society of Civil Engineers (ASCE). Student teams from approximately 45 universities from across the United States, Canada, and Mexico, that have qualified for the national competition by placing in the top two in their regional competitions, will be descending on Seattle for the NSSBC. It is estimated that more than 650 top civil engineering students will be visiting the UW and Seattle for the event, making this a great recruitment activity for local engineering firms. The teams will compete with approximately one-fifth scale steel bridges on the basis of construction speed, lightness, stiffness, construction economy, structural efficiency, and aesthetics.

The preliminary schedule includes a public display of all competing bridges and a chance to talk with the students on Friday May 31, to be held in Red Square on the UW campus, weather permitting, or in Hec Edmundson Pavilion. The competition itself will be held on Saturday, June 1, in Alaska Airlines Arena at Hec Edmundson Pavilion and will be open to the public.

In addition to hosting the NSSBC, UW will have its own steel bridge competition team composed of dedicated and determined civil engineering students. These enthusiastic students will spend countless hours throughout the school year in preparation for the competition through weekly team meetings for design considerations, moving forward to bridge fabrication and weekend assembly practices, and concluding with the competition itself.

The UW Student Steel Bridge Team will soon begin fundraising efforts to support the cost of hosting the NSSBC and SEAW Seattle Chapter has agreed to support them by providing advertising and in-kind support. There will be many opportunities for SEAW members and firms to both participate in the NSSBC and to show your support for the UW, including helping with organization, fundraising, and judging. More information is available at http://www.ce.washington.edu/students/NSSBC.html.

To get involved with NSSBC or to donate to the effort, send email to nssbc13@u.washington.edu and make sure to mark your calendars for May 31 and June 1, 2013!

Job Sector Survey
Make your firm’s voice heard by filling out the Puget Sound’s annual Job Sector Survey (JSS).
The JSS project was established by regional economic development organizations committed to providing elected public officials and policy makers with an on-the-ground assessment of the challenges and aspirations of all types of local employers. A full list of JSS project sponsors is listed below.
The survey is now in its third year. Last year, the survey received nearly 1,700 responses from 15 industry sectors. The results [http://www.seattlechamber.com/Libraries/Reports_PDF/JSSReport2011.sflb.ashx] were reported in major news outlets and personally shared with policymakers at all levels of government—from city and county councils to the Washington State Legislature and the U.S. Senate. By taking the survey, your business will be part of the next JSS report.
After you’re done with the survey, feel free to pass it on to other colleagues. More participants provide for better results.
Please note that all personal contact information will be kept confidential.
If you have questions, please feel free to contact JSS Coordinator George Allen.

(Continued on page 5)
The 2012 survey is open to employers within a four-county region including King, Kitsap, Pierce, and Snohomish counties. The JSS is made possible by support from the Prosperity Partnership, Workforce Development Council of Seattle-King County, enterpriseSeattle, King County, Economic Alliance Snohomish County, Pierce County Economic Development Department, Kitsap Economic Development Alliance, Seattle Metropolitan Chamber of Commerce, The Seattle Times, and the City of Seattle’s Office of Economic Development.

Join the PSEC “Ask an Engineer” Contacts List
The Puget Sound Engineers Council (PSEC) invites volunteer engineers to be listed on their “Ask an Engineer” contacts list. As a list participant, your contact information is hidden until you reply to a career-related request sent to the site. Requests are forwarded to everyone on the “Ask an Engineer” contact list. If you reply to a specific question, copy the entire “Ask an Engineer” group so they will know you have replied to the student (or parent, or teacher). You can ask to be removed from the contacts list at any time.

You can view the “Ask an Engineer” page at [http://www.pseconline.org/AskAnEngineer/](http://www.pseconline.org/AskAnEngineer/)
To participate, send your name and email address to Stan Dyke at webmaster@pseconline.org.

Call for Entries:
45th Annual Awards for Excellence in Concrete Construction
The Washington Aggregates and Concrete Association is pleased to formally recognize your professional accomplishments in the outstanding use of Ready Mix Concrete throughout Washington State.

Entries are juried by an independent panel of industry professionals comprised of 2012 award winners. Finalists and a category winner are selected from each of the categories. The Grand Award winner will be awarded to the category winner that best reflects the unique advantages of Ready Mix Concrete. In recognition of their contributions, our Concrete Awards will be presented to the Owner, Architect, Contractor, Structural Engineer, Concrete Contractor and Ready Mix Supplier.

- Submittal Guidelines
  Projects must be located in Washington State.
  - Projects are eligible for 2 years after their completion (from January 2011 to December 31, 2012).
  - Projects must be classified in one of eight categories; Cast-in-Place Structures, Special Applications, Public Works, Tilt-Up, Concrete Paving, Residential, Architectural Concrete, or Sustainable Merit.
- Precedence elements must comprise 45% or less of total concrete within project; precast only projects are ineligible.
- Submit as many projects as you wish. Each entry should be in a separate binder with its own submittal form.
- All entries must be received by 3:30pm Tuesday, April 16, 2013.

For complete details, visit [www.washingtonconcrete.org](http://www.washingtonconcrete.org).

Highline Community College Mentor Night—Help Needed
Tuesday, April 16th 6:00 to 8:00 pm at Highline CC Student Union Building, Pacific Highway South & South 240th St., Des Moines
If you are interested in being a mentor for a night for college...
Meetings, Seminars and Announcements Cont.

(Continued from page 5)

students, the Puget Sound Engineering Council (PSEC) needs your help! The purpose of the mentor night activity has been to bring as many practicing engineers together with as many students as possible. We are trying to inspire the students toward a career in engineering. The mentor night allows engineers to relay their experience in the profession and answer questions posed by students. A typical agenda for the evening will include a welcoming and introduction, potentially a brief panel discussion by young engineering professionals, then breakout sessions where young and experienced engineers discuss their engineering experiences with the students. Students will rotate between mentors and tables to get a broad overview of answers to their questions. Pizza and soft drinks will be provided! If possible, please bring a sample of your work that will fit on a 30- by 30-inch table top.

If you are interested in participating, please sign up online at www.pseconline.org/Events/MentorNights/SignUp or contact Paul Grant at pggrant@pangeoinc.com Maps and further instructions will be sent out prior to the event.

2009 IBC Structural Q & A—Section 1908 Modifications to ACI 318

1908.1.8 ACI 318, Section 22.10. Delete ACI 318, Section 22.10, and replace with the following:

22.10 – Plain concrete in structures assigned to Seismic Design Category C, D, E or F.
22.10.1 – Structures assigned to Seismic Design Category C, D, E or F shall not have elements of structural plain concrete, except as follows:

[a] …
[b] …
[c] Plain concrete footings supporting walls are permitted, provided the footings have at least two continuous longitudinal reinforcing bars. Bars shall not be smaller than No. 4 and shall have a total area of not less than 0.002 times the gross cross-sectional area of the footing. For footings that exceed 8 inches (203 mm) in thickness, a minimum of one bar shall be provided at the top and bottom of the footing. Continuity of reinforcement shall be provided at corners and intersections.

Exceptions:
1. In detached one- and two-family dwellings three stories or less in height and constructed with stud-bearing walls, plain concrete footings without longitudinal reinforcing supporting walls are permitted.
2. For foundation systems consisting of a plain concrete footing and a plain concrete stemwall, a minimum of one bar shall be provided at the top of the stemwall and at the bottom of the footing.
3. Where a slab on ground is cast monolithically with the footing, one No. 5 bar is permitted to be located at either the top of the slab or bottom of the footing.

Q: Section 1908.1.8 [22.10.1 (c)] requires that reinforcement be placed in the top of the stem wall in Seismic Design Category C and higher structures. Is the reinforcement required to be continuous, or can foundation vents interrupt the continuity of the bar?

A: The reinforcement should be continuous. Interruption of the reinforcing by foundation vents could be considered, if reinforcing were placed below the vent opening, which extended far enough beyond the opening to ensure continuity of the strength of the wall or if reinforcing were bent up at an angle and then lapped with the top bar. If lap splices were used, they should conform to the requirements of ACI 318-08.

Also, the rim joist or other member over the vent opening should be adequate to span the opening. The intent of this provision is to add a measure of ductility to the wall so that, under seismic loading, shear cracking in the foundation stem wall will be minimized, preventing a substantial reduction in the lateral load capacity of the wall. It is also intended to minimize differential settlement. [19-45]

Q: Section 1908.1.8 [22.10.1 (c)] prescribes a minimum of one bar at the bottom of a footing and at the top of a concrete stem wall for structures assigned to Seismic Design Category C and higher. What is the maximum distance allowed from the top of the footing or wall for the placement of this bar?

A: The code does not state a specific maximum distance. It is suggested that top reinforcement be placed with proper concrete cover in accordance with Section 7.7.1 of ACI 318-08, but not much more than that, as illustrated in Figure 19-46. [19-46]

This question and answer are from the 2009 IBC Q&A Structural Provisions. The question is a commonly asked question which arises in the application of code provisions during design and plan review. The IBC section is reprinted for easy reference, followed by the question and answer pertaining to that section. The 2009 IBC Q&A Structural Provisions is available at iccsafe.org/store. Use ID # 4003S09.

The applications and illustrations published herein are those of the ICC staff and are not binding on the authority having jurisdiction. The authority having jurisdiction has the ultimate responsibility for rendering interpretations of the code.
The SEAW Committee Corner is dedicated to promoting greater communication between the membership and committees, and to encourage all SEAW members to become active participants in the committee(s) of their choice. Many committees are now using GoToMeeting web-conferencing software to facilitate remote attendance at meetings. Ask the committee chair for details.

<table>
<thead>
<tr>
<th>Committee Name</th>
<th>Meeting Information</th>
<th>Topic(s)</th>
<th>Contact Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Building Engineering</td>
<td>No information available.</td>
<td></td>
<td>Scott Beard, 253.591.5019 <a href="mailto:sbeard@cityoftacoma.com">sbeard@cityoftacoma.com</a></td>
</tr>
<tr>
<td>Disaster Preparedness &amp; Response</td>
<td>Meets every third Tuesday. Next meeting 4/16, 12:00-1:00 (bring your lunch) Quantum Consulting Engrs., 1511 3rd Ave, #323, Seattle</td>
<td>Debrief recent ATC-20/45 trainings; SEAW database for Post-disaster volunteer assistance to WABO</td>
<td>Joyce Lem, 425.450.6345 <a href="mailto:joyce.lem@hdrinc.com">joyce.lem@hdrinc.com</a> for remote access via GoToMeeting contact John Riley at <a href="mailto:jriley@quantumce.com">jriley@quantumce.com</a></td>
</tr>
<tr>
<td>Earthquake Engineering</td>
<td>No formal committee meeting in April</td>
<td>Continuing to prepare for the seismic seminar for IBC 2012. Any interested person should contact Tom or Andy.</td>
<td>Tom Xia, 206.332.1900 <a href="mailto:txia@dci-engineers.com">txia@dci-engineers.com</a> Andy Taylor, 206.622.5822 <a href="mailto:andyt@kpff.com">andyt@kpff.com</a></td>
</tr>
<tr>
<td>Education</td>
<td>Thursday, April 11, 12—1:00pm at Magnusson Klemencic Assoc., 1301 1st Ave S #3200, Seattle. Phone conferencing available.</td>
<td>Finalize Spring Seminar tasks; Identify seminar venues, pricing, scheduling, etc.</td>
<td>Ardel Jala, 206.684.0573 <a href="mailto:ardel.jala@seattle.gov">ardel.jala@seattle.gov</a> Adam Theiss, 206.292.1200 <a href="mailto:atheiss@mka.com">atheiss@mka.com</a></td>
</tr>
<tr>
<td>Existing Buildings</td>
<td>No meeting in April</td>
<td></td>
<td>Bryan Zagers, 206.343.0460 <a href="mailto:bryanz@cplin.com">bryanz@cplin.com</a></td>
</tr>
<tr>
<td>Legislative</td>
<td>Conference call every Thursday, 7:30am</td>
<td>Current House &amp; Senate bills</td>
<td>Tim Nordstrom, 206.330.8055 <a href="mailto:timn@starseismic.net">timn@starseismic.net</a></td>
</tr>
<tr>
<td>Professional Practices</td>
<td>Thursday, April 18, 4:00 PM, Harbor Club, 801 2nd Ave, Seattle</td>
<td></td>
<td>John Tawresey, 206.622.5822 <a href="mailto:johntaw@aol.com">johntaw@aol.com</a></td>
</tr>
<tr>
<td>Public Information</td>
<td>Wednesday, April 17, 4:00—5:00 pm, GoToMeeting only (contact chair for instructions)</td>
<td>Become an SEAW eReporter</td>
<td>Darrell Staaleson, 253.520.0388 <a href="mailto:dstaal@staleng.com">dstaal@staleng.com</a></td>
</tr>
<tr>
<td>Seattle Users of BIM Structural (SUBS)</td>
<td>To be announced</td>
<td></td>
<td>Irina Wong, chair 206.262.9240 <a href="mailto:iwong@degenkolb.com">iwong@degenkolb.com</a></td>
</tr>
<tr>
<td>Snow Load</td>
<td>No scheduled meetings.</td>
<td>Stay tuned!</td>
<td>John Tate, 509.972.3079 <a href="mailto:jatce@charter.net">jatce@charter.net</a></td>
</tr>
<tr>
<td>Sustainability</td>
<td>Wednesday, April 24, 12:00—1:00 PM at Coughlin Porter Lundeen, 413 Pine St #300, Seattle</td>
<td>Q&amp;A on Life Cycle Assessments Visit the committee blog at <a href="http://seawsustainability.blogspot.com/">http://seawsustainability.blogspot.com/</a></td>
<td>Adam Silvers, 206.622.5822 <a href="mailto:Adam.silvers@kpff.com">Adam.silvers@kpff.com</a></td>
</tr>
<tr>
<td>Technology</td>
<td>To be scheduled.</td>
<td>Work is progressing on database side of SEAW website. Meetings will be scheduled for design.</td>
<td>Steve Dill/Lynnell Brunswig 206.622.5822/206.682.6026 <a href="mailto:steve.dill@kpff.com">steve.dill@kpff.com</a> <a href="mailto:seaw@seaw.org">seaw@seaw.org</a></td>
</tr>
<tr>
<td>Wind Engineering</td>
<td>No information available.</td>
<td>Chair needed!</td>
<td>OPEN</td>
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<tr>
<td>WABO/SEAW Liaison</td>
<td>Thursday, April 11, 11:30 AM at Bellevue City Hall</td>
<td>White papers—Discussion on digital signatures.</td>
<td>Charlie Griffes, 206.285.4512 <a href="mailto:Charlie@ctengineering.com">Charlie@ctengineering.com</a></td>
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Employment Opportunities

Senior Structural Engineer

Lund Wright Opsahl provides a balance of innovative structural design with tried and true engineering that gives clients the constructible, cost-effective structural solutions to meet or exceed their needs. We have assembled a team of professionals with a shared commitment to excellence in structural engineering and client satisfaction, and are currently looking for a new addition to the team.

We are looking for a **Senior Structural Engineer**. The ideal candidate will be an SE, will have ten to fifteen years of engineering experience and will have a demonstrated ability to manage project and staff. Excellent communication skills are a must; you will be providing guidance to staff engineers, as well interacting with clients. Salary DOE. This is a permanent, full-time position.

Please send your resume, salary requirements, and references to: Lund Wright Opsahl LLC, 1201 1st Avenue South, Suite 310, Seattle, WA 98134 or email to: info@lwo@se.com.

**Structural Project Engineers**

KPFF Portland is looking for motivated structural engineers interested in opportunity for growth.

**Position**

Structural Project Engineer

**Position Summary**

As a Structural Project Engineer, you will work individually and collaboratively in the design - construction process for some of the most challenging projects in the Pacific Northwest, as well as nationally and overseas. You will work closely with talented engineers, BIM / CAD technicians, architects, project managers, contractors and client teams.

Our current projects include:
- Airports
- Arenas + Stadiums
- Long-Span Structures
- Bridges
- Government Facilities + Embassies
- Commercial Developments
- High-Rise Structures
- Mixed-Use Developments
- Corporate Campuses
- Healthcare Facilities
- Education Facilities (K-12 + Higher Ed)
- Museum + Convention Centers

**Qualifications**

The preferred candidate will have:
- 3+ years of experience in structural engineering
- PE and MS / MEng engineering degrees
- Experience with Revit Structure
- Strong verbal and written communication skills
- Creative, proactive, and detail-oriented individual
- Outgoing individuals who thrive when working directly with architects, contractors and other engineers

**Apply**

KPFF would like to hear from you. Please submit a cover letter and resume to sharon.elis@kpff.com. KPFF is an equal opportunity employer.

**Location**

Portland, OR

www.kpff.com

www.traveloregon.com

**Senior Bridge Engineer**

KPFF’s Bridge/Waterfront Group has an open Senior Bridge Engineer position in our downtown Seattle office. We value each member’s contribution, cultivating an atmosphere where employees can think big and design smart.

As a Project Manager you will tackle these exciting challenges:
- Design and manage all aspects of bridge design from new bridges to bridge rehabilitation/retrofits, including seismic design.
- Develop drawings, cost estimates and specifications for various types of bridges and earth retaining structures.
- Perform studies and write reports
- Effectively manage project schedule and budget
- Collaborate with clients to achieve a successful outcome
- Serve as a key stakeholder in developing the Bridge group vision

**Responsibilities**

- Project management of multidiscipline teams
- QA/QC of project construction documents and reports
- Project engineering calculations and model building
- Technical oversight of junior staff
- Market development
- Signatory as engineer of record
- Supervise engineering staff
- Construction support services

**Qualifications**

- Demonstrated project management expertise
- Strong technical and organizational skills
- Seismic bridge design experience
- A minimum of 5 years of experience
- PE required, SE preferred
- BSCE required, Master’s preferred
- KPFF EEO

**Bridge Engineer**

Parsons Brinckerhoff's office in Seattle, Washington is seeking a Bridge Engineering Project Manager to manage projects and be actively involved with business development. This individual will work with senior managers to develop long-range plans and objectives, lead technical design concepts in proposal development, be involved with presentations to clients and perform and manage projects in the preliminary and final design phases. Typical projects are transportation related bridges and structures associated with freeways, local roads, rail transit and public works improvements.

**Experience Required:**

Minimum of 15 years of progressively more senior engineering, project management and business development experience with an emphasis on Puget Sound area experience with WSDOT, Sound Transit and local city and county agencies.

**Education Required:**

A Professional Registration (PE) is required with a Master’s Degree in Engineering and an SE preferred.

M/F/D/V

Please submit resumes and cover letters to ppasea@heery.com or apply online at pwworld.com – Job Code# 17312.

**Structural Project Engineers**

Casper, Phillips, and Associates (CP&A), a Tacoma WA, multi-discipline engineering firm has an opening for a MS or PhD in civil or structural engineering. CP&A specializes in industrial buildings and international machinery design such as container cranes and construction equipment. Most of our industrial building seismic design utilizes performance based non-linear time-history procedures. Machinery design requires consideration of weight, cost, and durability under numerous applications of actual loads.

The successful candidate should be familiar with IBC, ASCE, ACI, and ASIC structural engineering standards. Good communication skills are important, especially listening as well as speaking and writing. International travel is required for many of our projects. Salary is competitive and benefits include professional dues reimbursement, continuing education reimbursement, and medical insurance. Please provide college transcripts, employment history, work product examples, cover letter, and any questions you may have to Jeff Hubbell at [jeff@casperphillips.com].

Continued on Page 9
### Employment Opportunities Cont.

**Structural On-Site Engineer**
Magnusson Klemencic Associates is presently seeking experienced Structural Engineers to join our team in Miami, Florida. We are currently designing a 4+ million SF project spanning multiple city blocks and need on-site engineering support during the construction of the structure.

**Job Responsibilities:**
- Verify the general conformance of construction work with the plans and specifications.
- Observe the general quality of construction to verify that the contractor is following appropriate quality control measures.
- Answer on-site questions.
- Perform daily site visits and prepare written reports.
- Review shop drawings and respond to RFI’s.
- Coordinate with the MKA design team in Seattle.

**Requirements (No Exceptions):**
- BSCE Degree
- PE or SE license
- United States Citizenship
- Minimum of 7 years design experience
- Experience working with the International Building Code (IBC)
- Experience on major multi-million-dollar projects
- Ability to produce written reports
- Good interpersonal skills
- Ability to work under own initiative

**Additional Desired Skills:**
- Ability to speak Spanish
- Experience working with the Florida Building Code
- MSCE Degree

**Senior Structural Engineer**
Location: Seattle, WA

Brown and Caldwell (BC) has been providing municipalities, private businesses and government agencies with sustainable environmental solutions for more than 60 years. Currently our Seattle office has an exciting opportunity for a Senior Structural Engineer to join our Design Group. Project work will be focused on wastewater treatment plant design in British Columbia and Washington. Work on projects in British Columbia will primarily be performed out of the Seattle office, with some field coordination and construction support in British Columbia.

**Position Requirements:**
- Comprehensive knowledge of concrete, steel and masonry structural design per IBC and referenced codes; experience using the National Building Code of Canada (NBCC) preferred.
- Experience using ACI 350 Environmental Structures Code.
- Minimum of 10 years experience in structural engineering design.
- Structural design experience with wastewater treatment plants; industrial or commercial design experience a plus.
- Extensive seismic design experience.
- B.S. and M.S. degree (preferred) in Civil Engineering (structural course work emphasis).
- Washington SE license or British Columbia Struct.Eng. license required; if WA SE only, then willingness to obtain British Columbia Struct.Eng. license is required.

This position is subject to a pre-employment background check and a pre-employment drug test.

We offer a competitive salary and benefits package. Please visit our website at http://ch.tbe.taleo.net/CH09/ats/careers/requisition.jsp?org=BROWNCALD-WELL&cws=1&rid=1219 to apply online. We value workforce diversity. EOE/AA

### BIM Survey

The **Survey of Structural Engineering (SE) and Building Information Modeling (BIM)** by:

Joint Structural Engineering Institute (SEI) - Council of American Structural Engineers (CASE) Committee on Building Information Modeling (BIM)

in Collaboration with

The Structural Engineers Association of Texas (SEAoT) IT Committee on BIM

This is the fifth year of a respected and internationally recognized survey on the topic of Building Information Modeling (BIM) in the profession of Structural Engineering. Please complete the survey before April 23, 2013, by visiting the link below:

https://www.research.net/s/SE-BIM-2012-13

The survey considers several key areas of BIM in the profession that include firm demographics, structural system definitions, interoperability, implementation, and the direction the technology should take in structural engineering. It also provides an important opportunity to collectively voice our opinion on the topic of this technology and our profession.

The survey is a collaborative effort of the Joint Structural Engineering Institute (SEI) - Council of American Structural Engineers (CASE) Committee on Building Information Modeling (BIM) and the Structural Engineers Association of Texas (SEAoT) Information Technology (IT) Committee on BIM. The results of the 2012-13 Fifth Annual Survey will be presented in an online webinar after they are collected. For questions or comments on the survey, please visit http://www.seibim.org/index.htm.

SEAW Seattle Chapter Equilibrium Page 9 April 2013
Seattle Chapter Committees & Chairs
House/Program Peter Somers
Refresher Course Mark Moorleghen
Newsletter Lynnell Brunswig
Presentations/Awards Cale Ash
Engineer of the Year Ed Huston
Governance Howard Burton
Committee Liaison Tom Corcoran
YMF Jennifer Ahlport
Seattle Users of BIM Structural Irina Wong

Statewide Committees & Chairs
Code Advisory John Hooper
Earthquake Engineering Tom Xia
Building Engineering Scott Beard
Existing Buildings Bryan Zagors
Professional Practices John Tawresey
Wind Engineering Open
Scholarship Scholarship Legislation
Tim Nordstrom

For Committee contact information, visit www.seaw.org and click the Committee page

SEAW Calendar

APRIL, 2013

Monday 1st Electronic Board Election
(results by 4/22/10)

******** Engineer of the Year selection
President’s awards and Honorary
Member selection

******** Selection of Scholarship winner(s)
ST Scholarship Committee/SEF

Tuesday 9th YMF Happy Hour 5:00 PM
Kells, 1916 Post Alley, Seattle

Tuesday 16th YMF UW Outreach lunch, 11:30am
Big Time Brewery, 4133 University Way NE

Thursday 18th YMF SU Outreach Lunch, 11:30am
Elysian Brewing Company, 1221 E. Pike St.

Monday 22nd May Newsletter deadline
From the Board: Michael Wright

Monday 22nd Seattle Chapter Elections Close

Tuesday 23rd Seattle Chapter Board meeting
Seattle/SW Chapters Joint Dinner Meeting
Hotel Monaco, Seattle
Topic: Seattle URM
*election results confirmed at meeting

MAY, 2013

Saturday 11th SEAW Seismic Design seminar
UW Kane Hall, Seattle

Tuesday 14th YMF Happy Hour, 5:00-7:00 PM
Alibi Room, 85 Pike St., Seattle

Wed 15th YMF Eastside Happy Hour, 5:00-7:00 PM
Chanatee Thai, 601 108th NE, Bellevue

Tuesday 21st Seattle Chapter Board meeting
Seattle Chapter Dinner meeting
Hotel Monaco
Topic: Professional Practices, Risk Issues

Friday 31st State Board Meeting
New and old boards meet

Friday 31st State Newsletter Deadline
Chapter Report: Cale Ash

JUNE, 2013

Tuesday 11th SEAW Spring Social and Awards Event
Lake Union Café, Seattle

Membership

Membership Postings
In accordance with SEAW bylaws, membership applications are vetted by the Executive Director, granted probationary status by the chapter board, and posted for membership comment. Membership is considered accepted 30 days after posting if current year dues are paid and no member objections have been received.

Ronald Boutilier
AS-T 2009, Olympic College
BSCE 2011, St Martin’s University
EIT, Washington
Class: Associate

Christopher Shaw
Sound Structural Solutions
BS Mathematics, 2006, Morehouse College
EIT, Washington
Class: Associate

Ronald V. Skinner
Sound Structural Solutions
CE 2000, Montana State University
Licensed PE, WA
Class: Member PE

Morgan Wiese
Integris Architecture
BSCE 2012, WSU
EIT, Washington
Class: Associate