



Capital Branch



Central Valley Branch



Feather River Branch



Shasta Branch

August 2010

The Engineerogram

Volume 72, No. 08

President's Message

Building and Transitioning for Tomorrow

by Larry J. Smith, PE, F.ASCE, President



Summer is the time for vacation and a time to reflect on many events. Last week I heard a story about looking back on the “good old days,” and looking forward for something in the future. As you enjoy summer vacation, think about that moment and enjoy life one day at a time. For ASCE summer is election time. Members have received ballots for

Society and local elections. It is important that we vote for who will lead ASCE. Please stay engaged and connected to ASCE by attending any of the many opportunities within the Sacramento Section. Check the calendar on our website at www.asce-sacto.org for information on all of our upcoming events and opportunities for networking.

Building and Enhancing Careers: In the July 2010 issue of the NSPE publication, *PE Magazine*, Danielle Boykin writes an article titled “Hire Me.” The article expressed that, “It takes more than book smarts and a great transcript to get a job offer.” Companies are looking “for well-rounded individuals with great communica-

tion and leadership skills.” ASCE offers all of us opportunities at leadership. Sections, Branches, YMF, and Institutes are looking for volunteer leaders who might wish to follow in the footsteps of those individuals that will be elected to officer positions for 2010 – 2011. Institutes create opportunities for communication. With six active institute chapters in the Sacramento Section, you’ll find some event almost every month. I encourage each of you to step forward and make a presentation about your work and about yourself.

Recognition: The Sacramento Section is pleased to announce the winners of our 2010 Outstanding Civil Engineer Awards. Congratulations to the outstanding engineers who practice Civil Engineering within our community. Mark your calendars for the Section and Branch Officer Installation and Awards Dinner scheduled for September 9th at the Holiday Inn, Capitol Plaza. Online registration will soon be available from the Calendar of Events page on the Sacramento Section website. Support your colleagues and officers with your attendance and personal thanks for a job well done!

Outreaching to Young Members: The 2010 Outstanding Civil Engineering Student Award has been expanded to recognize one student from each of the four universities within our Section. Andrew Langilier from CSU, Chico; Caldean Biscocho from UCD; Jesse Ogren from CSU, Sacramento; and Caroline Grant from UOP will all receive this year’s Outstanding Student Award. Congratulations to all of you.

Vision: I’m pleased to announce that the ASCE Construction Institute has awarded Sacramento Section the opportunity to host a Student Days event in FY 2011. Our CI Chapter is planning this event in the August – September 2011 timeframe. The theme is “The beginning of transition from Student to Young Professional.” This event will require many volunteers and support from each of your firms. It will feature a “Meet the Leaders” session, project tours, and a Job Fair for companies to meet and greet students as they prepare to transition to “young professionals.” I am counting on your support!

Please communicate your ideas to the Board of Directors. Please send your comments or ideas to: sacramentosectiongsd@ermail.asce.org.

IN THIS ISSUE

2010 Sacramento Section ASCE Awards	15
2010 CMAA Standards of Practice Course	16
ASCE Region 9	9
ASCE Sacramento Section 2010-2011 Officer Ballot	10-13
Calendar	3
Capital Branch	5
Central Valley Branch	5
Civil Engineers to Host 140th Annual National Conference	5
EWRI 2nd Annual Symposium	3
Feather River Branch	5
Is Your Membership Information Current?	1
Law and Civil Engineering	5-6
Officer Contacts	2
Outstanding Projects and Leaders	6-9
President’s Message	1
Shasta Branch	5
Structural Fire Resistance One-Day Seminar	14
YMF	4

Is Your Membership Information Current?

by Fareed Pittalwala, Past-President

Please ensure that your membership information is up to date with ASCE’s national database, as our local system is dependant on your information being current. It’s a quick and easy fix that you can accomplish in less than five minutes by going to: <http://tinyurl.com/yhl6pvd>.



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LEGEND
Section Voting Officers
Additional Section Staff
Region 9 Officers
Branch Officers who are not Section Voting Officers
YMF Officers
Committee Chairs
Universities
Conference Chairs
Institutes

For more ASCE activities if you wish to be active in a committee, career opportunities, complete text for the legislative activities, go to the Sacramento Section web site at www.asce-sacto.org, or contact a current officer. To MAKE CHANGES OR RENEW YOUR MEMBERSHIP, go to website: www.asce.org. For MEMBERSHIP APPLICATIONS, please e-mail to memapp@asce.org.

MASTER CALENDAR

Date(s) (Times)	Event	Location	Information
2010 August			
Contact Jasmine Noriega for info	Central Valley Branch Meeting, Page 5	Marie Calendar's, 2628 W. March Lane, Stockton	Jasmine Noriega, jasmine_noriega@dot.ca.gov , 209-406-8982
Contact Shasta Branch for info	Shasta Branch, Page 5		Shasta_asce@yahoo.com
Contact Shane Cummings	Feather River Branch Meeting, Page 5		Shane Cummings, 530-894-2487 sdcummins@handk.net
Thursday, 5th 5:30 pm	YMF Mixer	Zinfandel Grille, 2384 Fair Oaks Blvd., Sacramento	www.sacymf.org
Wednesday, 11th 6:00 pm	Engineers Without Borders Meeting	TBD	Mark Quito, 916-567-2500, quito@pbworld.com
Tuesday, 17th	Sacramento Section Board Meeting	AECOM 2020 L Street, Suite 300 Sacramento, CA 95811	Natalie Calderone, 916-414-1561, natalie.calderone@aecom.com
Tuesday, 24th	Capital Branch Meeting, Page 5	Sofia Restaurant, 815 - 11th St (the corner of 11th and H Street).	Jennifer Wheelis, 916-616-5987 jennifer.l.wheelis@usace.army.mil

September

Wednesday, 1st 5:30 pm	YMF Social	Scandia Family Fun Center, 5070 Hillsdale Blvd., Sacramento	www.sacymf.org
Thursday, 9th 6:00 pm	2010 Sacramento Section ASCE Awards	Holiday Inn, Sacramento	www.asce-sacto.org

October

21st - 23rd	ASCE 140th Annual Civil Engineering Conference.	Bally's Hotel and Casino, Las Vegas	Leikny Johnson, 703-295-6413 ljohnson@asce.org
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2011 February

Tuesday, 15th	Sacramento Chapter of EWRI Hosting the Second Annual Symposium	Hyatt Regency, Downtown Sacramento	
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Conferences	Section Officer Meetings	Seminars	YMF Events
Section Meetings	Branch Meetings	Outreach Events	Student Events
Region 9 Events			

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**Dynamic Balancing in the 21st Century:
Key Steps Toward Achieving Resiliency in California
Water Resources Management - The Implications to
Decision Making and Regulation**

The Sacramento Chapter of the Environmental & Water Resources Institute (EWRI) of the American Society of Civil Engineers (ASCE) is hosting its 2nd Annual Symposium on Tuesday, February, 15 2011 at the Hyatt Regency in downtown Sacramento.

In a fresh and ground-breaking dialogue, the symposium will produce important recommendations in managing California's water and ecosystems toward long-term resiliency. Today's adaptive management processes are increasingly recognizing the fluidity with which our natural systems, social and political influences, and economic realities respond to stressors such as climate change and population growth. Water resource management strategies, using the best available science, decision support tools, and efficacy monitoring must incorporate these stressors and priorities while acknowledging a changing array of uncertainty, risk and variability of outcomes in a dynamically balanced manner. Through lively debates, leading thinkers will discuss key aspects of a new framework necessary to integrate science, societal risk and valuation, and regulatory oversight that recognizes the importance of this dynamic balancing as a key to achieving long-term resiliency in California Water Resources Management.

ASCE[®]

Sacramento Section

Younger Member Forum

August 2010



YMF FALL 2010 PE EXAM REVIEW COURSES

Planning on taking the PE exam? It's not too late to register for the YMF Fall 2010 PE Exam Review Course and let the experienced instructors lead the way! The Sacramento Chapter of the ASCE Younger Member Forum is offering improved review courses for the following exams:

1. Principles and Practice (General / 8 Hour)
2. Engineering Surveying
3. Seismic Principles

October's not that far away, so register now. It's easy; just visit our website at <http://www.sacymf.org/pe-review> to register online. Class schedules, locations, and prices are located on the website too. Don't delay – classes start as early as August 4! And remember, early registration discounts are still available for the Engineering Surveying and Seismic Principles review segments!

AUGUST MIXER!

Join us at our next mixer! On Thursday, August 5, 2010, at 5:30 PM, the YMF group will meet at Zinfandel Grille, 2384 Fair Oaks Boulevard, Sacramento, CA 95825. This month's presentation will be given by our Government Affairs Chair, Rachel Radell. Rachel serves as an Energy Specialist for the city of Roseville. She has served as ASCE's twelfth Congressional Fellow, advising Senator Diane Feinstein on transportation, energy, infrastructure, and environmental issues. Mixers are a great opportunity to catch up with your YMF cohorts and to hear about exciting projects in Civil Engineering. Come out and join your fellow engineers in this fun and informative event! Please note that this meeting will be held on a Thursday, rather than the regularly scheduled Wednesday meeting time.

ELECTIONS

It's that time again! We will be holding elections for the upcoming year in YMF at October's Business Meeting. If you or someone you know would like to be part of the YMF Officers or Chair groups, please let our current president, Kevin Gilton, (giltonkm@bv.com) or secretary, Elizabeth Weeks (eweeks@markthomas.com) know. Join the fun ~ being an officer or committee chair is the best way to be more involved with YMF, as well as to get to know your fellow younger engineers. This year, we even added a couple of new committees! Sorry, positions of Executive Director and President are not eligible for nominations and voting.

JULY BUSINESS MEETING

YMF held our quarterly business meeting on Wednesday, July

7, 2010, 5:30 pm at David Ford Consulting. This was a great opportunity to hear about each committee's activities and upcoming events, to discuss the planned YMF events, to review the annual budget, and more! All in all, it was a successful and productive meeting, with pizza to boot! Don't miss our next scheduled business meeting in October!



WISHES GRANTED!

The 12th Annual Sacramento ASCE Make-A-Wish Charity Golf Tournament was held on Monday, July 12, 2010 at Catta Verdera Country Club in Lincoln. The half day event included lunch, a scramble format tournament on the North Course, and dinner. The event was a smashing success, raising over \$10,000 to grant the wishes of children in need! Thank you to all of the local firms who donated or sponsored holes for this event, to all of the participants who dedicated their day to help this worthy cause, to all of the YMF volunteers and their selflessness, and especially to the Golf Tournament Chair, James Pangburn, for his hard work and dedication to making this a successful event!

UPCOMING EVENTS

- * YMF Mixer, Thursday, August 5th, 5:30 PM at Zinfandel Grille, 2384 Fair Oaks Blvd., Sacramento, CA 95825
- * YMF Social, Wednesday, September 1, 5:30 PM, Scandia Family Fun Center, 5070 Hillsdale Blvd., Sacramento

For more information, visit www.sacymf.org

Central Valley Branch

Jasmine Noriega, President, Central Valley Branch

For more information about the Central Valley Branch meetings, please contact Jasmine Noriega at 209-406-8982, or jasmine_noriega@dot.ca.gov.

Shasta Branch

The Shasta Branch is looking for members to fulfill officer and chair duties, including Scholarship Chair and Program Chair. If you are interested, or have questions, please email us at shasta_asce@yahoo.com.

Feather River Branch News

If you have suggestions or recommendations for a meeting topic or location, please contact Amie McAlister at amie.steel@gmail.com or Shane Cummings at sdcummings@handk.net. We are looking to increase our membership participation in our monthly meetings and regular community outreach activities, so please drop us some suggestions.

Capital Branch - August 24th

For more information about the Capital Branch meetings, please contact Jennifer Wheelis at jennifer.l.wheelis@usace.army.mil, or 916-616-5987.



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Civil Engineers to Host 140th Annual National Conference in Las Vegas

Leikny Johnson, ASCE —

Who & What:

The American Society of Civil Engineers' (ASCE) 140th Annual Civil Engineering Conference.

When:

October 21-23, 2010—for a full schedule of events, visit <http://www.asceannualconference.org>.

Where:

Bally's Hotel and Casino, Las Vegas

Why:

The theme of this year's conference is Innovating a Dynamic Future, and sessions will run the gamut from career skills and building sustainable cities to civil engineers' roles in public policy to the impact of earthquakes that have occurred globally in 2010. There will also be several symposia and tours celebrating the 75th anniversary of Hoover Dam.

For more information or to register, please contact: Leikny Johnson, 703-295-6413, ljohnson@asce.org.

Founded in 1852, the American Society of Civil Engineers represents more than 144,000 civil engineers worldwide and is America's oldest national engineering society. For more information, visit www.asce.org.

The Law and Civil Engineering

by Eugene L. Bass, Esq.

Mechanic's Liens and the Importance of Timing

In prior articles, the timing considerations relating to mechanic's liens were discussed in reference to the preliminary notice. Lien rights can be lost unless the correct steps are taken within the time limits set forth in the statutes.

If one who has contributed to the improvement of real property has not been paid for the work of improvement, a mechanic's lien may be recorded and foreclosed. The earliest date that a lien can be recorded is after completion, termination or breach of your contract. Be aware that work on the same project may have been performed under more than one contract and that the lien requirements apply to each contract and not the entire project. For example, site improvement work may have been under a separate contract than later works of improvement. The lien timing for the site improvement work will be tied to the site improvement contract. If the continuation of the project is performed under another contract and if the site improvement work is not paid, care must be taken to record the mechanic's lien within the statutory time periods following completion, termination or breach of the site improvement contract.

Continued on Page 6

Law & Civil Engineering - Continued from Page 5

If you have a direct contractual relationship with the owner, you are an “original contractor” for purposes of the mechanic’s lien laws. Each original contractor, in order to enforce a lien, must record his claim of lien after he completes his contract and before the expiration of 90 days after the completion of the work of improvement if no notice of completion or notice of cessation has been recorded, or 60 days after recordation of a notice of completion or notice of cessation.

Each claimant other than an original contractor, in order to enforce a lien, must record his claim of lien after he has ceased furnishing labor, services, equipment, or materials, and before the expiration of 90 days after completion of the work of improvement, if no notice of completion or cessation has been recorded, or 30 days after recordation of a notice of completion or notice of cessation.

Failure to record the claim of lien within the 30, 60 or 90 day time limit, as applicable, will be fatal to the foreclosure of the lien. In addition, if a lien is recorded late and a foreclosure action ensues, the lien claimant will be exposed to a lawsuit for malicious prosecution. A potential lien claimant should be aware of the status of the project, and if the portion of the project of which his contract was a part, has been completed.

The law provides a theoretical means of learning when a Notice of Completion or Notice of Cessation has been recorded. The County Recorder must mail to those persons who have filed a Preliminary 20-day Notice, notification that a Notice of Completion or Notice of Cessation has been recorded on the property, and shall state the date that the Notice of Completion or Notice of Cessation was recorded with the County Recorder. This law would appear to be the solution to the persistent problem of learning if and when a Notice of Completion or Notice of Cessation has been recorded. However, the application of the law has not followed the theory and the Recorder’s office often fails to send out the notice or sends the notice late.

Another provision of the law also provides that the failure of the County Recorder to mail the notification to the person who filed a Preliminary 20-day Notice, or the failure of those persons to receive the notification or to receive complete notification, shall not affect the period within which a claim of lien is required to be recorded. However, the County Recorder shall make a good faith effort to mail notification to those persons who have filed the Preliminary 20-day Notice under this section and to do so within five days after the recording of a Notice of Completion or Notice of Cessation. While the application of the law is not perfect, it would still be good practice to record the Preliminary Notice. Just don’t rely on the notice from the Recorder’s office being timely.

Following articles will discuss other aspects of mechanic’s liens.

The author’s discussion of legal ramifications of the particular case(s) are provided only for educational purposes and should not be relied on as legal advice. If you have a specific legal problem, please consult with your attorney.

Outstanding Projects and Leaders

by Richard T. Liptak, PE, Project Manager
Dokken Engineering, Folsom, CA

This month’s outstanding project: **West El Camino Avenue Bridge Replacement Over Steelhead Creek, Sacramento, CA.**

The recently completed West El Camino Avenue Bridge Replacement over Steelhead Creek project is an outstanding example of a simple design enhanced with attractive architectural features that automatically brings value and pride to a community. It demonstrates how the innovative thinking of the City of Sacramento and Dokken Engineering, along with spectacular construction by C.C. Myers, Inc., can bring common unity between the residences on West El Camino Avenue and El Camino Avenue through a modern bridge design.

In achieving the project goals, this project had to overcome a number of design and construction challenges, environmental constraints, regulatory requirements, and multi-agency coordination issues. But through the cooperative efforts of the owner, designer, construction manager and contractor, and with a proactive partnering approach by all those involved in the project, the West El Camino Avenue Bridge Replacement project has become a reality. It has set the standard for aesthetic features on future City of Sacramento bridge projects.



Sacramento Mayor Kevin Johnson, speaking at the ribbon-cutting ceremony, declared that the new bridge would be “a project that the whole community can be proud of.”

Sacramento Mayor Kevin Johnson attended the ribbon cutting ceremony for this magnificent and complex bridge replacement project, declaring, “This is a symbol and project that the whole community can be proud of...this was a team effort...” This extraordinary bridge replacement project will be a source of great pride for the community and the City of Sacramento for decades to come.

This project consisted of removing the last timber bridge in Sacramento on West El Camino Avenue, constructing a six-span cast-in-place post tensioned concrete slab bridge, improving the safety of an at-grade crossing of the existing railroad track, constructing a temporary



Famed bridge builder C. C. Myers (center foreground) talks with designers at the ribbon cutting ceremony.

Continued on Page 7

Outstanding Projects and Leaders - Continued from Page 6

pedestrian bridge and associated roadway approaches. The new bridge is 326 feet long and 56 feet wide, founded on spread footings at the bents and cast-in-drilled-hole concrete pile-supported footings at the abutments. Incorporated in the bridge design are four flood walls elegantly transitioning the bridge to the existing levees. These revolutionary floodwalls provide the Sacramento region's only 200-year flood protection. Architectural features highlight the bridge with the use of ornamental lights, stained concrete sidewalks, vintage barrier rails and pedestrian overlooks above Steelhead Creek. The finished bridge now provides a home to 10,000 bats.

Construction within the channel involved an extremely accelerated schedule. The falsework construction, initially planned for a duration of four weeks, was built in only ten days. The temporary pedestrian bridge was built and operational in just one week. The footings and columns of the new bridge were finished in twenty working days.

Due to the intricate details of the architectural vintage barrier rails, the forms used to construct the rails were custom fabricated onsite. Only the highest qualified craftsmen were assigned on the task to assure all intricate features were not overlooked.

Special drainage improvements from the bridge to the roadway required traversing under an existing set of Union Pacific Railroad (UPRR) tracks. At nearly twenty train crossings daily, pipe jacking under the tracks was implemented. With the frequently travelled tracks combined with "no interruption to service" requirements, value engineering prevailed and reduced the pipe jacking to a single location on the project, reducing cost and schedule significantly.

At first glance, the West El Camino Avenue Bridge Replacement over Steelhead Creek project appears to be a relatively simple project; remove an old bridge and build a new one. However, the following challenges made this project a complex undertaking:

- **Inspection and Repair**

The existing timber bridge was constructed in 1943 and needed urgent repairs to maintain load rating capacity. Caltrans was ready to order the bridge to be closed. In the first sixty days of the bridge replacement design contract, Dokken Engineering inspected the bridge and prepared a repair contract package for the City to advertise. Repairs were completed and allowed full traffic to be maintained until the bridge was demolished in June 2008.

- **Accelerated Construction Schedule**

The working days specified in the contract were aggressive given the amount of work required to be performed within a narrow time window. For instance, all work within the channel needed to be completed within five months, beginning May 1st and ending by September 30th due to protection of Giant Garter Snake habitat. This work included building the temporary pedestrian bridge, removal of the existing bridge and the construction of the new bridge.

Immediately after C.C. Myers, Inc. was awarded the project, the U.S. Army Corps of Engineers instituted a new design review of all projects on or near levees. The review took six weeks and delayed the Contractor's ability to work in the channel until June 1st, instead of May 1st. Fortunately, the Contractor was C.C. Myers, Inc., and the lost month was made up by condensing the schedule. The project was completed on schedule, despite the significant delay.

- **Bridge Type Selection**

Dokken Engineering worked with City staff to Type Select a thin post-tensioned cast-in-place concrete slab bridge for replacement of the existing structure. This structure type was selected as the thinnest possible solution without introducing a through girder or



The original timber bridge, constructed in 1943, was demolished in 2008. Nineteen timber bents supported the 326-foot span. The new bridge will cross the creek with just five bents.

steel truss type structure and with a single pour, it was the fastest bridge to build. Nineteen channel obstructing timber bents were replaced with five concrete bents to improve the channel hydraulics. Resolution of the bridge type and profile required the cooperation of four agencies, each agreeing to design exceptions in order to reach a balanced all around design.

- **Bridge Foundations**

The new concrete bridge is supported on spread footings and four column bents. The foundations for two abutments and five bents were installed in less than twenty working days, including the necessary diversions and excavations adjacent to the active Steelhead Creek. The spread footings are founded on a thick layer of cemented valley hardpan, thus avoiding the time and expense of constructing deep pile foundations.



The new concrete bridge is supported on spread footings and four-column bents.

- **Floodwall Design**

The existing bridge abutments were depressed into the top of the levee. This required the roadway to be closed during major flood events for the temporary installation of stop logs. Dokken Engineering designed a floodwall and bridge barrier system that will retain the flood flow in creek without requiring the closure of this important flood escape route. These revolutionary floodwalls provide the Sacramento region's only 200-year flood protection.

- **Union Pacific Railroad**

A permit with California Public Utilities Commission (CPUC) and two agreements with the Union Pacific Railroad (UPRR) were approved for this project. The safety of the at-grade crossing was improved with new pedestrian signals, approach sidewalks, and a flatter roadway profile at the crossing. The track at the crossing was upgraded and super-elevated to improve design speeds for the trains.

Continued on Page 8

Outstanding Projects and Leaders - Continued from Page 7

- **Temporary Pedestrian Bridge**

A temporary bridge was designed, permitted and constructed to accommodate the continuous pedestrian and bicycle use of the West El Camino Avenue Bridge during the demolition of the existing bridge and construction of the new bridge. By working with the local residents to incorporate the temporary pedestrian bridge into the project, the team gained local acceptance for a single stage construction sequence, which saved the project time and money.

- **Environmental Coordination**

The environmental process requires coordination from project inception to well beyond construction. The West El Camino Avenue Bridge project was no exception. Coordination began with review of the environmental documents through the Caltrans Local Assistance and environmental staff, who ensure compliance with State and Federal laws. Multiple environmental regulatory agencies were consulted for the project impacts such as the U.S. Fish and Wildlife Service (USFWS) for the federally endangered Giant Garter Snake, the California Department of Fish and Game (CDFG) for riparian impacts, and the U.S. Army Corps of Engineers (ACOE) for impacts to the stream channel. During construction, environmental coordination continued between the construction contractor to plan for preconstruction surveys for species such as the Giant Garter Snake and monitoring of many construction activities, especially work within the channel. Finally, replacement of trees removed during construction required a planting effort in the spring after the rain subsided.

- **Temporary and Permanent Bat Houses**

Over many years, the existing West El Camino Avenue Bridge had become a roosting habitat for several bat species. Surveys showed that a maternal colony of approximately 9,000 bats was roosting in the crevices of the bridge. A year prior to demolition of the existing bridge, nine temporary bat roosting habitats were constructed just upstream of the bridge to house the bats during construction. Lead by Dokken Engineering, the City approved construction and erection of the bat roosts.



Permanent roosting habitat for bats was incorporated in the design of the underside of the bridge deck, providing distinctively upscale residences for 10,000 bats.

However, due to rainy season and saturated soils within the levee, construction of the roosts commenced under severe conditions where standard construction equipment could not be operated inside the levee limits. With an innovative approach, the solution was developed to deploy a helicopter to lift the prefabricated bat roosts (500 pounds each) and position them in their support frame

with the aid of manual labor and hand tools. After the bats migrated for the winter, netting was placed under the existing bridge encouraging the bats to use their new habitat when they returned. The temporary bat houses were nicknamed “Bat Condos.” With the new bridge, permanent roosting habitat was incorporated in the design providing habitat for a new generation of bats.

- **Right of Way Acquisition**

Portions of fourteen properties, including UPRR property, were acquired by the City of Sacramento’s Real Estate Division. The City did an exceptionally good job of gaining public support for the project and the affected property owners were much more willing than normal to agree to the offers.

- **Multi-Agency Coordination**

Projects having multiple governing agencies and utility companies require complex coordination and if not executed properly, could lead to unwanted delays and cost impacts. A multitude of agencies and utility companies included Verizon, AT&T, Pacific Gas and Electric, Union Pacific Railroad, American River Flood Control District, Reclamation District 1000, the Reclamation Board, U.S. Army Corps of Engineers, California Department of Fish and Game, U.S. Fish and Wildlife Service, and Caltrans. All potential issues were addressed up front, in order to expedite the project and avoid any conflicts. Within the City of Sacramento, coordination occurred between planning, design, utilities, traffic, electrical, right of way and construction.

- **Bridge Aesthetics**

Historically, aesthetic features on bridges are very minimal, if any. The superstructure design used for the West El Camino Avenue Bridge replacement set the new standard for bridge aesthetics in the City of Sacramento with special details including: ornamental bridge lighting, colored stamped concrete sidewalks, colored raised median, pilasters, vintage concrete barrier rails and a pedestrian overlook over Steelhead Creek. These special features are designed to enhance and showcase the scenic creek views up and downstream of the bridge for the many pedestrian and bicycle users.

Even with the greatest challenges of this project, what remains is another marvel of time. This is a magnificent bridge to be seen



Nine prefabricated temporary roosting habitat for bats were lowered into place by helicopter.



The new floodwalls will allow the bridge to remain open during a 200-year flood. Ornamental bridge lighting and vintage concrete barrier rails help improve bridge aesthetics.

Outstanding Projects and Leaders - Continued from Page 8

every day by those who travel the corridor, and for the local residents who take pride seeing the birth of a new era. The West El Camino Avenue Bridge project is one that the City of Sacramento and the entire community can be very proud of.



A scenic overlook offers pedestrians and cyclists a place to rest and enjoy an overview of Steelhead Creek..



Engineers Matt Griggs (Dokken Engineering) and Ricky Chuck (City of Sacramento) try out the new colored stamped concrete sidewalk.



Completed project with architectural features and colors that match the environment and improve the overall aesthetics in the community.

ASCE Region 9

*by Joan Al-Kazily, PhD, P.E.
ASCE Region 9 Governor*



Greetings from ASCE Region 9 Board of Governors!

This year, my last as a Region 9 Governor, I have continued working on Region 9's interaction with the Board for Professional Engineers and Land Surveyors (BPELS) by attending the BPELS quarterly meetings. I also invited a BPELS Board member, Jim Foley, to attend the June face-to face Region 9 Board meeting.

The interchange was very informative.

Almost two years ago I wrote a Region 9 article on mandatory continuing education for relicensing in California and we have spent some time studying this issue. Since it is important to our Society, and since California is now in the minority of 16 states that do not have this requirement, the Region 9 Board considers it to be very important to work towards introducing it in California. Precedent for doing so exists in California because continuing education is a requirement for many other professions including nursing, physical therapy, and accounting.

Several months ago the Region 9 Board voted official support for the ASCE Policy 425, which supports documented continuing professional development for maintaining status as a licensed Professional Engineer. We are now drafting a concept paper to pursue legislation mandating 30 Professional Hours (PDF) of continuing education, in the two year renewal period, for re-licensing of Engineers in California. The proposed legislation will be similar to that already in effect in 34 states. Please look for direct e-mail communication containing details of the proposed legislation this summer. Your engagement in this issue is important to Region 9.

We acknowledge that this is a controversial issue among California lawmakers. But in our profession it is important for individuals to engage in professional development. The responsibility to do this and to select the appropriate continuing education activities lies with the individual. The proposed legislation will not change this, but it will affirm the principal that professional development is important. Current law suggests that once trained as an engineer no further education is needed to continue practicing. The proposed change will reinforce, to licensees, the need to stay current in their fields, and it will make the commitment to do so transparent to the public and our customers.

It has been my pleasure to serve on the Region 9 Board. I plan to stay connected through membership on committees including the BPELS/Continuing Education Committee and the History and Heritage Committee. I have accepted the task of chairing this latter committee for Region 9. Looking ahead, the Society's History and Heritage Committee is planning a 2-day symposium celebrating the 75th anniversary of the completion of the Hoover Dam, to be held in conjunction with ASCE's 140th Annual Civil Engineering Conference in Las Vegas this October 21st to 23rd. I hope many of you will be able to be there.

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Please vote for one person for each office (write-ins accepted) and **return this ballot to the ASCE Sacramento Section by August 13, 2010.**
On-line voting: Open the following URL: <https://thriva.activenetwork.com/Reg4/Form.aspx?IDTD=3707742&RF=3909852&mode=0>
U.S. Mail: American Society of Civil Engineers, Sacramento Section, P.O. Box 1492, Lincoln, CA 95648; **FAX:** 916-961-2723
EMAIL: asce@asce-sacto.org

Please include your ASCE Membership # _____ . Call ASCE at 1-800-5482723 for assistance with membership.

AMERICAN SOCIETY OF CIVIL ENGINEERS
SACRAMENTO SECTION BALLOT - 2010-2011 OFFICERS

SECRETARY

Candidate # 1

Candidate Statement For: **Mark Quito** - ASCE has played a big part in my college and professional development. It gave me experience and lasting friendships with Civil Engineering professionals. As a professional I think it is time to keep the legacy going for other young inspiring engineers. If elected Secretary, I can continue this legacy as well as push the electronic era even further. I would like to improve on the website, database keeping, and communication between our chapter, other organizations, and the student chapters in a more efficient way.

Prior ASCE/Professional Activities Involvement

- President, Engineers Without Borders Sacramento Valley Professional Chapter
- Member of Society of Hispanic Professional Engineers (SHPE)
- Member of Society of American Military Engineers (SAME)
- Member of American Public Works Associations (APWA)

Check Box to select Candidate

Other Write-ins Accepted: _____

Candidate # 2

Candidate Statement For: **Maqsood Ali, P.E.** - An engineer



builds a better world for the human being. Today's civil engineers have more responsibility than ever. Every civil engineer needs to volunteer some time to develop awareness in the public. My strategic goal is to enhance recognition of

civil engineering as a highly respected profession to improve our image in the public. Since the beginning of my professional engineering career, I have been working to raise voice of civil engineering at every platform.

Prior ASCE/Professional Activities Involvement

Involved in various events co-sponsored by ASCE including being a judge for the Sacramento Regional Science and Engineering Fair, proctor at Math-Counts competition and providing assistance in various ASCE conferences. Worked with "California Emergency Partnership Advisory Group" for two years by representing ASCE.

Check Box to select Candidate

Other Write-ins Accepted: _____

EXECUTIVE DIRECTOR

Candidate # 1

Candidate Statement For: **Natalie Calderone, P.E.** - I have been actively involved in the Sacramento Section of ASCE for the last six years serving as the Section Secretary. I now hope to move to the Executive Director position to have the opportunity to support the Board and Section in a more advisory role. As the Board transitions to new officers, having this role will also allow me to ensure that all of the electronic advances I initiated will be able to continue on seamlessly.



Prior ASCE/Professional Activities Involvement
 I have spent the last 6 years serving the Sacramento Section as Secretary. Achievements include leading the initiative to update our Section web site, setting up electronic registration capabilities for all Section activities, converting our member database to electronic software which will allow us to manage it more efficiently, attended several leadership conferences, Publicity Chair for Orthotropic Bridge Conference 2004, and Conference Chair and Treasurer for Orthotropic Bridge Conference 2008. I was also involved in development of Infrastructure Report Card for both Sacramento Region (as Committee Chair) and California State (as Committee Member). As a college student, I was involved in Steel Bridge Competition both regionally and nationally.

Check Box to select Candidate
 Other Write-ins Accepted: _____

Candidate # 2

Candidate Statement For: **Greg Zeiss, P.E.** - The Executive Director sits on the Section Board of Directors as a voting senior advisor. As a Past President of both our Section and Branch who has held ASCE offices/committees since 1998, my vision is to advise the Section Board on fully utilizing ALL of ASCE's resources and past experience in order to maximize the benefits to the Board and the Section. For instance, I would use my knowledge gained from earlier visits/conversations with ASCE headquarters in Virginia to advise our board on elections, on resources to connect and grow our local institutes, and on resources to use on student outreach. Other items include making sure our Section is providing a candidate for the ASCE Legislative Fly-In Program in Washington DC. The Fly-In briefs members on the latest civil engineering issues pending in Congress and arranges visits with their Representatives and Senators on Capitol Hill to educate them on the issues. I've done it, and it was one of the most rewarding professional experiences of my career. I now use that same experience to talk to my local State Representatives. Perhaps you might be the Sacramento Section member going to DC this year!



Prior ASCE/Professional Activities Involvement
 I have held the offices of President for both the Sacramento Section (2004/2005) and the Capitol Branch (2002/2003). Additional ASCE offices held include Section President Elect, Section Senior Director, Branch Vice President, Branch Secretary, and Branch Treasurer. For the last three years I have been the co-chair of the ASCE Sacramento Section Construction Institute. I was part of the team that initiated the formation for the Engineer's Without Borders in Sacramento. I have been active in the ASCE Sacramento Section Scholarship and Awards Committees for the last five years.

Check Box to select Candidate
 Other Write-ins Accepted: _____

PRESIDENT-ELECT

Candidate Statement For: **Jon Balzer, P.E.** - When asked



what makes ASCE different from the many other professional communities, the answer is simple – the people. My vision for ASCE is to continue the work of many before me in an effort to further grow the community through value of its people. This vision can be summarized in the following areas of focus: enhancing membership

engagement at all levels, growing the community to outreach more of the profession, and working to grow and change the profession in today’s young engineers and tomorrow’s leaders.

Enhancing membership engagement at all levels is paramount to the growth and effectiveness of ASCE as a community and plays an integral role in retaining and building ASCE membership. The four technical institutes that compose the inner makings of ASCE provide an outlet for members to express their passions and continue to foster the interest and active involvement of its members. By reaching the energy of the group and reacting to the interests of the members, ASCE will continue to build the engagement and harvest active members determined to make a difference.

Prior ASCE/Professional Activities Involvement

Jon has served as an Advisor for the ASCE Construction Institute (CI) Group in the Sacramento Section since 2007 and helped lead the CI Scholarship Program and Evaluation Process for both the Sacramento and San Francisco Sections. During this time, Jon also assisted in Young Member Leadership Conferences and Student Day Events, as well as getting involved in the ASCE CI National Group.

Check Box to select Candidate

Other Write-ins Accepted: _____

JUNIOR DIRECTOR

Candidate Statement For: **Kimberly Brown, P.E.** - I have been involved with ASCE since 2002 at the student level and



2006 at the Section Level. Throughout my years of involvement, I have seen several engineers who have encouraged new and experienced colleagues to participate at several levels within ASCE, advanced the quality of our profession, and promoted our profession to members of the community. The engineers who go

beyond the normal 40-hour workweek and exemplify a true civil servant deserve to have their hard work recognized. In fulfilling my role as Junior Director, I would have the honor of recognizing the Sacramento Section engineers who have proven their commitment to the profession through involvement within the Society by organizing the annual awards and officer installation dinner.

Prior ASCE/Professional Activities Involvement

- 2009 to 2010 – Sacramento Section YMF Executive Director
- 2008 to 2009 – Sacramento Section YMF President
- 2007 to 2008 – Sacramento Section YMF Vice President and Secretary
- 2006 to 2007 – Sacramento Section YMF Newsletter Editor
- Student Involvement – President (2004), Conference Chair (2003), Social Director (2002)

Check Box to select Candidate

Other Write-ins Accepted: _____

TREASURER

Candidate Statement For: **Joshua Wagner** - My vision for the



Treasurer position of the ASCE Sacramento Section is to continue the work started in bringing the Section into full tax compliance while increasing overall budget capacity. I hope that my involvement can increase the value of what the Section has to contribute to our region and enhance the efficiency and transparency of the Section's transactions. I would also like to assist the Section in the area of sustainability by preparing a

document that aids future treasurers in the day-to-day operations of their duties as treasurer and I am committed to managing the Section's money honestly, efficiently, responsibly and professionally. I wish to maintain the Sections' reputation as a fiscally responsible and disciplined organization.

Prior ASCE/Professional Activities Involvement

- Sacramento Section Publications Committee
- Practitioner Advisor for ASCE Student Chapter at Sacramento State
- Spring '09 SSASCE Student Chapter President
- 2008 SSASCE Student Chapter Treasurer
- Fall '07 SSASCE Student Chapter Secretary
- Spring '07 SSASCE Student Chapter Underclassmen Representative
- 2009 Region 9 Outstanding Student Award Winner
- 2008 Samuel Tapman ASCE Student Chapter Scholarship Recipient, 2008
- 2008 Alfred R. Golze Scholarship Recipient
- 2008 Academic Achievement Award Recipient
- 2007 Mid-Pacific Regional Daniel W. Mead Student Competition Winner
- Etc.

Check Box to select Candidate

Other Write-ins Accepted: _____

Register Now for a One-Day Seminar:

Best Practice Guidelines for Structural Fire Resistance Design of Concrete and Steel Buildings

San Francisco – September 13, 2010

Earn 6.0 PDHs

Pre-registration is required

Over the past four years, the National Institute of Standards and Technology (NIST), working through the National Institute of Building Sciences (NIBS) and in collaboration with industry experts, has prepared a comprehensive document providing guidelines on designing structural fire resistance.

The Guidelines contain the current “best practices” for fire-resistant design of concrete and steel structures including a review of existing U.S. and international guidelines and design standards, which use approaches that range from simple prescriptive methods to sophisticated software programs with advanced methods of analysis under a wide range of realistic fire conditions.

Consistent with the document, this seminar will provide general guidance on the approaches to, and practical aspects of, implementing a fire-resistant design approach for concrete and steel buildings. The guidance includes key concepts and examples for identifying performance objectives, conducting risk analyses, selecting design fire scenarios and fire exposure curves, and implementing heat transfer and structural response analyses for the structural fire-resistant design of concrete and steel structures.

Program

- Introduction to Fire Resistance Design: John Gross, Ph.D., P.E., F.ASCE, NIST
- Decision Framework for Fire Risk Mitigation: Bruce Ellingwood, Ph.D., P.E., Dist.M.ASCE, Georgia Tech
- Design of Steel Structures: Nestor Iwankiw, Ph.D., P.E., S.E., M.ASCE, Hughes Associates, Inc.
- Design of Concrete Structures: Jim Milke, Ph.D., P.E., M.ASCE, University of Maryland
- Detailed Application of the Guidelines: Don Dusenberry, P.E., F.ASCE, Simpson Gumpertz & Heger
- Case Study and Discussion: Darlene Rini, P.E., A.M.ASCE, ArupFire, San Francisco

San Francisco

Monday, September 13, 2010, 7:30am - 3:00pm

Registration Fee: \$95 **Registration Deadline: August 27, 2010**

PG&E Conference Room A, 245 Market St., San Francisco, CA 94105

Local co-sponsors: SEAoNC, ASCE – San Francisco Section

For more information and to register visit www.SEInstitute.org

Questions? Contact Suzanne Fisher at SEI, Tel: 1 800-548-2723 or 703-295-6195, sfisher@asce.org

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2010 Sacramento Section ASCE Awards
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The Sacramento Section is pleased to announce the winners of the 2010 Section Awards. Award winners will be honored at the annual meeting to be held at the Holiday Inn on September 9, 2010. Award winners and guests should arrive prior to 6:00 PM for check in and a pre-award social. Additional details and a link to online registration will be sent to Section Members via email. The event will soon be posted on our website event calendar.

Sacramento Section Award**Award Winner****Company**

Outstanding Civil Engineer in the Private Sector	Ric Reinhardt	MBK Engineers
Outstanding Civil Engineer in the Private Sector	Roy A. Imbsen	Imbsen & Assocs Inc
Outstanding Civil Engineer in the Public Sector	Pete Ghelfi	SAFCA
Joseph W. Gross Outstanding Humanitarian Achievement	George Qualley	Retired
Outstanding Civil Engineering Student	Andrew Langilier	CSU Chico
Outstanding Civil Engineering Student	Caldean Biscocho	UCD
Outstanding Civil Engineering Student	Jesse Ogren	CSUS
Outstanding Civil Engineering Student	Caroline Grant	UOP
Lifetime Achievement Award	Joe Countryman	MBK Engineers
Outstanding ASCE Life Member	Dr. Fred Lee	G Fred Lee & Associates
Jonathan Burdette Brown Education Award	Dr. John Johnston	CSU Sacramento
Outstanding ASCE Practitioner Advisor	Josh Wagner	U.S. Army Corps of Engineers
Outstanding Younger Civil Engineer	Shauna England	U.S. Army Corps of Engineers
Drury Butler Officer of the Year	Jeremy Zorne	Geocon
Outstanding ASCE Branch Officer	Shane Cummings	Feather River Branch
Outstanding ASCE Younger Member Officer	Kimberly Brown	HDR
Legislator of the Year	Senator Darrell Steinberg	
Thomas A Stanton Outstanding ASCE Event	Pal Hegedus	EWRI
Thomas A Stanton Outstanding ASCE Event	Robert Shibatani	EWRI
Thomas A Stanton Outstanding ASCE Event	Pamela Creedon	EWRI

Sacramento Section Institute Awards**Nomination****Company**

Chales C. Pope Construction Award	Louay Owaidat	Magnus Pacific
Francis N. Hveem Geotechnical Award	Ray Costa	Retired
Frederik W. Panhorst Structural Engineering Award	Ray Zelinski	Retired
David N. Kennedy EWR Award	Tim Quinn	Association of California Water Agencies
William H. Hall Flood Control Award	Ricardo Pineda	California Department of Water Resources
Arthur L. Elliot Bridge Award	Kevin Thompson	Retired



2010 CMAA Standards of Practice Course

The CMAA Northern California Chapter is proud to host the CM Standards of Practice Course (SOPC), which is designed for CM professionals seeking to master Construction Management Core Competencies and the CMAA Body of Knowledge.

The Standards of Practice Course, and included Study Kit, are intended to enhance an individual’s Construction Management knowledge. The course is also a valuable aid to individuals preparing to take the examination to become Certified Construction Managers by providing a convenient review course of construction management topics.

Course Content & Study Materials

The Standards of Practice Course focuses on eleven (11) areas of the construction management body of knowledge over three (3) consecutive days. The subjects covered are:

Professional Practice Project Management Program Management Contract Administration	Cost Management Safety & Risk Management Quality Management Value Engineering	Time Management BIM Sustainability
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A seven volume compendium of the CMAA Body of Knowledge, referred to as the Study Kit, is provided to each registered participant. The kit includes the following:

- CMAA Capstone Text
- CM Standards of Practice
- CMAA Contract Administration Procedure
- CMAA Cost Management Procedures
- CMAA Quality Management Guidelines
- CMAA Time Management Procedures
- Four-document set of both A-Series and CM At-Risk Contract Documents

Educational Credit

The credit value for the SOPC is 24 Professional Development Hours (PDH), 2.4 Continuing Education Units (CEUs), as well as AIA Learning Units.

Location & Schedule

West Yost Associates, 2020 Research Park Dr., Suite 100, Davis, CA 95618

Saturday, September 18	Saturday, September 25	Saturday, October 16
8:00 a.m. – 5:30 p.m.	8:00 a.m. – 5:30 p.m.	8:00 a.m. – 4:30 p.m.

Cost

- Members \$550.00
- Owner Members \$350.00
- Non-Members \$750.00

Registration

Register online at: <http://cmaanet.org/upcoming-SOP-courses>