

2004 HAWAII STATE MATHCOUNTS COMPETITION

The 21st Hawaii State MathCounts Competition was held March 13, three weeks after the Oahu Chapter Competition. Both competitions were held in the Kamehameha Schools Kalama Dining Hall as they have been for many years. The Hawaii Society of Professional Engineers (HSPE) sponsors this math competition for 6th, 7th and 8th graders. The Mathletes solve math problems individually and as a team of four for individual and team honors. They compete in four rounds called the Sprint, Target, Team, and Countdown Rounds. The Mathlete's total scores in the written Sprint and Target Rounds determine if he or she competes in the Countdown Round, the oral portion of the competition. The ten highest scorers advance to the Countdown Round with the top four winners representing the State of Hawaii at the National MathCounts Competition on May 7, in Washington, D.C.

The top four winners in the Countdown Round were first place David Clifton of Punahou, second place Robert Shimizu of Iolani, third place Steven Bartz of Punahou, and fourth place Aaron Fong of Iolani.

The results of the Team Round placed Iolani first. They will proudly display the HSPE State 1st Place Perpetual Trophy at Iolani until next year's competition. Iolani Coach, Li Ann Wada, will be the official Hawaii State Team Coach at the National Finals. In second place was the Punahou team with Mililani Middle third, Kamehameha Middle fourth, Waikeke Intermediate fifth, and Washington Middle sixth. Other schools competing included Kealahou Intermediate, Chieffess Kamakahoei Middle, Iao Intermediate, and Kamehameha School-Maui.

MC for the awards ceremony was Ken Morikami of HSPE and the award presenters included Dr. Michael Chun, MathCounts Chairman and President and Headmaster, Kamehameha Schools; Anthony Calabrese, Department of Education; Gail Hayashi, Aloha Airlines; and Carolyn Wichter, Big Island MathCounts Coordinator. Aloha Airlines is a major sponsor of MathCounts.

The Oahu Chapter Competition was held February 21, 2004. The positions were reversed with Punahou first and Iolani second, with Mililani Middle third, and Kamehameha Middle fourth. Punahou received the HSPE Oahu Chapter "Perpetual Team Trophy" to display at their school for the year. The highest scorers in the written part of the competition included Aaron Fong of Iolani first, Steven Bartz of Punahou second, Lucia Mocz of Mililani Middle third, and David Clifton of Punahou fourth.

Awards ceremony MC was Scott Seu of HSPE and award presenters included Sister John Joseph Gilligan, Hawaii Catholic Schools; Clayton Fujie, Deputy Superintendent, Department of Education; Tom Simmons, Vice President, Power Supply, Hawaiian Electric Company, Inc.; and Barry Nakamoto, HSPE Honolulu Chapter President.

The Hawaii MathCounts Steering Committee led by Rowena Blaisdell and Pauline Marcello of Kamehameha Schools thanks the volunteer proctors and scorers from Hawaiian Electric Company, the US Army Corps of Engineers, SSFM International Inc., The Gas Company, and ASME. Without their help the competitions would be impossible. The volunteer exam moderator was Lou Muzzarini of the US Army Corps of Engineers.



Winners to the Nationals L-R: David Clifton, Steven Bartz, Robert Shimizu, Aaron Fong, and Coach Li Ann Wada.



Award Presenters L-R: Michael Chun, Anthony Calabrese, Gail Hayashi, and Carolyn Wichter.

KNOW YOUR ASCE HISTORY

by C.S. Papacostas

Last month's article quoted the Chief Engineer of the Kohala Ditch on the Big Island of Hawai'i who specified "A-1 imported Alsen and Germania brands" of cement averaging \$2.60 per barrel in Honolulu and \$3.90 delivered to Kohala.

In my even earlier February 1998 article I gave a brief history of non-bituminous cements from ancient times to a little after 1824, that year being when Joseph Aspdin blended what is now known as Portland cement. Although natural hydraulic cements were produced in America as early as 1818, Portland cement did not become available until 1868 through importation (as ships' ballast) from England, Germany and other European origins.

It is safe then to assume that the cement used at the 1906 Kohala Ditch was of the Portland cement type. But what else is known about the use of natural and Portland cements in Hawai'i? In order to answer this question, I embarked on a fascinating quest that will continue to weave an intricate web for some time to come.

In the meantime here are some facts that have emerged so far:

At about the same time that the above-quoted prices prevailed in Hawai'i, Rolfe Cobleigh, Associate Editor of the "American Agriculturist" published a book in New York entitled "Handy Farm Devices and How to Make Them." In Chapter 9 ("When We Build"), he extols the virtues of Portland cement concrete. He estimates that "Portland cement of the most approved brands costs about \$1.60 per barrel..." Hmm! Sound like the high differential cost of building materials in Hawai'i not a new phenomenon after all!

Cobleigh goes on to assert that "experience both in practical work and in the laboratory has proven beyond a doubt that the best brands of cement, as in all other goods, are the cheapest in the end, and should be insisted upon by all prospective purchasers. Atlas, Alpha, Saylor's, Edison and Giant cements are among the leading brands..."

By the way, Saylor's Portland cement, produced in Coplay, in the Lehigh County of Pennsylvania, was the first to be patented in the U.S. by David Oliver Saylor. In the September 26, 1871 documents for Patent No. 119,413 "for the improvement of the manufacture of cements," he declares that his hydraulic cement weighted "from one hundred and ten pounds to one hundred and twenty pounds per bushel" and was "in every respect equal to the

(continued on page 6)



Published monthly by:

HAWAII COUNCIL OF ENGINEERING SOCIETIES

SERVICE PRINTERS, INC.

1829 Dillingham Boulevard • Honolulu, HI 96819

Telephone: (808) 841-7644 • Fax: (808) 847-1487

ADDRESS ARTICLES FOR PUBLICATION TO:

WARREN YAMAMOTO

1526-C Pukele Avenue • Honolulu, HI 96816

Telephone: 527-6988

WILIKI MAILING LIST

Additions and/or corrections should indicate the proper society, institution or association.

LAVERNE HIGA

Dept. of Design and Construction

City & County of Honolulu

650 S. King Street, 15th Floor

Honolulu, Hawaii 96813

Office: 808-527-6246

Fax: 808-527-6103

HAWAII COUNCIL of ENGINEERING SOCIETIES

P.O. Box 2873
HONOLULU, HAWAII 96802

HOME PAGE:

<http://www.angelfire.com/linux/hces>

2004-2005 OFFICERS

Chairman:	Tony Lau	522-7426
Vice Chair:	Westley Chun	488-0477
Secretary:	Todd Barnes	585-0448
Treasurer:	Erik Kaneshiro	526-1267

SOC	Representative	Alternate
AACE	M. Uyehara	
ASCE	W. Chun	K. Niiya
ASME	J. Grogan	R. Liu
EAH	M. Tome	R. Morrissey
FALEA	M. Shoji	C. Dungca
HALS	E. Kaneshiro	
HSPE	S. Nojima	S. Seu
IEEE	O. Libed	F. Kobashikawa
ITE	W. Kawano	A. Archilla
LGSEA	A. Dar	L. Nagata
SAME	T. Barnes	
SEAOH	L. Nagata	R. Chu
SFPE	S. Dannaway	
UH(assoc)	W.F. Chen	T. Dobry

Hawaii Federal Contracts & Jobs, Jobs, Jobs

By John Myers, Westaff of Hawaii, Inc.

In 1996, the Military Housing Privatization Initiative Act provided the Military Services with the authority to leverage military construction funds and assets to obtain private sector capital and expertise in order to operate, manage, maintain, improve and build military housing in the U.S. for our soldiers and their families. This legislation, commonly referred to as the "Residential Community Initiative" (RCI), provides a way to maximize use of limited appropriated funds, land, and existing facilities to encourage private sector investment.

Under the RCI, Hawaii's Army, Navy, Marine Corp, Air Force & Coast Guard have established long-term business relationships with private sector developers for the purpose of improving military family housing communities. The Military will provide the developers a long-term interest in both land and family housing assets. These master community developers for these communities will provide new construction of over 10,000 homes and the renovation of over 3,700 homes just on Oahu. The development of these communities will generate in excess of \$2.2 Billion dollars to Hawaii's economy over the next ten-years with sub-contracting opportunities abound for Hawaii's construction industry. The Department of Defense goal is to eliminate all inadequate family housing in the U.S. by 2007 using a combination of traditional Military Construction, Basic Allowance for Housing increases, and privatization.

The RCI privatization program is an essential element for solving Hawaii's acute military family housing problems. RCI is dedicated to building quality residential communities for Soldiers and their families. Further, RCI is built on partnerships with private sector developers who have the expertise, innovation and willingness to work collaboratively with key stakeholders to make RCI a success. It is attracting quality developers and ensuring that it receives quality business plans/agreements at the best cost.

The timeline for Hawaii is already underway with developments at Hickam Air Force Base and Ford Island. The Navy/Marine Corp initiatives are slated to start construction in July '04 with the Army & Coast Guard starting construction in October '04.

The RCI projects will require hundreds of quality employees to meet their respective deadlines and the developers are already hiring engineers, architects, designers, surveyors, cost estimators and other required internal employees for pre-construction phases of these communities. A local staffing company, Westaff of Hawaii, Inc., is currently accepting applications for the above mentioned positions on behalf of some community developers. For more information about Westaff of Hawaii, please visit www.westaffhawaii.com. Westaff may be contacted at 524-0411 or you can submit your resume to jmyers@westaff.com.



Past HCES Chairman Ather Dar recognizes HCES Lifetime Achievement Awardee Ted Kawagashi at the Engineers Week Banquet.



SAME Hawaii Post President LTC David Press presents Kick-Off Luncheon speaker Larry Price a plaque of appreciation.

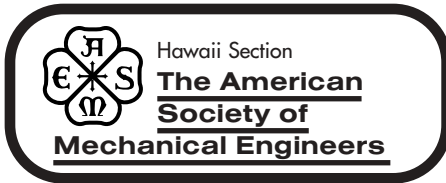


HSPE Vice-President Ken Rappolt presents Young Engineer of the Year Lorna Heller and Engineer of the Year Dennis Lee with their plaques at the Engineers Week Banquet.



Officers & Directors

President	Alan Cadieux
Treasurer	Dr. Amarjit Singh
Secretary	Maelyn Uyehara
Directors	Richard Campbell
	Joesph Uno
	Karl Kagesa



Website: www.asme.org/sections/hawaii

2003-2004 OFFICERS

Chairperson	Raymond Liu	521-3773
Vice-chair	LCDR John Markowicz	484-9164
Treasurer	Rodney Krienke	373-2916
Secretary	Sam Gillie	543-4739
Past-chair	James Grogan	254-2947
Dir 1 yr	Ed Chang	543-4227
Dir 2 yr	Ron Flegal	455-0254

HAWAII SECTION COMBINED COMMITTEES & POWER TECHNICAL CHAPTER MEETING

Date: Tuesday, May 11, 2004

Time: 5:30 p.m. to 6:30 p.m.

Place: Hawaiian Electric Company, Inc. Ward Avenue Cafeteria

All members are invited and asked to attend. Members are always welcome. The Officers and Directors of ASME-HI Look forward to seeing new and familiar faces. Naturally, we are constantly seeking help from the membership to fill the committee positions and with program ideas. In addition, we are having a Power Technical Chapter meeting to discuss programs for next year. Lots of free pizza and pop are always provided. Please contact Ray Liu or Sam Gillie for directions and more information. For Power Chapter questions, please contact Ed Chang.

2004 TEAMS COMPETITION RESULTS

Ron Flegal reports that the school that ASME-HI sponsored in the 2004 Test of Engineering, Aptitude, Mathematics, and Science (TEAMS) Competition placed first in Group 2 - Division 5, 7. The competition was held on the University of Hawaii at Manoa Campus of February 21, 2004. It is sponsored by the College of Engineering with Cheryl Sato Ishii organizing the event. ASME-HI has sponsored Mililani High for several years.

2004 BALLOTS AND SURVEYS

If any Hawaii Section member should read this before the March 31, 2004 deadline and have not sent in his or her election ballot for 2004-2005 officers and directors and survey questionnaire response, please do so. You can also access ballot and survey forms on our website.

2004 REGIONAL ADMINISTRATIVE CONFERENCE (RAC)

Ray Liu and George Demopoulos reported on the RAC events held the weekend of February 21, 2004 in Berkeley, CA. The emphasis of the RAC was preparing for the Society's 125th anniversary in 2005 and its Continuity and Change drive. A new 125th anniversary logo includes the tag line, "Setting The Standard." In addition to ASME's position as a leader in internationally recognized industrial and manufacturing codes, standards and conformity assessment programs, "Setting The Standard" represents the Society's leadership in professional practice and ethics, technical literacy, global exchange, lifelong learning, emerging technologies, engineering advocacy and achievement, and other professional contributions to the engineering and technology community. You are encouraged to visit the ASME website <www.asme.org> to keep up with the activities. Chairman Liu will include his report of the RAC in our Section website <www.asme.org/sections/hawaii>.

ANNUAL PEARL HARBOR BOAT TOUR PLANNED

Stanford Yuen, Past Section Chairperson

and Engineer of the Year, invites you to another annual Pearl Harbor boat tour. He has set aside 10 seats on the boat for ASME members. The boat tour is on Thursday, September 9, 2004, starting exactly at 4:00 p.m. The boat tour takes you around Ford Island and along side the shipyard dry docks and takes a little over an hour. Many historical sites are seen. If you are interested, please contact Ed Chang at 543-4227 for more information.

NOMINATIONS FOR ASME-HI SECTION 2004 PROJECT/DESIGN OUTSTANDING ACHIEVEMENT AWARD

The nomination deadline is April 30, 2004. Although this date is a ways off, you can submit nominations any time before that date. If you know of any unusual or outstanding mechanical engineering-type project or design that have been completed within the past five years, please contact Ed Chang. The nomination process is very simple, easy, and fast.

LAST CHANCE TO DONATE FOR THE ASME HUMAN POWERED VEHICLE (HPV) PROJECT

The UHM ASME Student Section HPV Team continues to seek support and donations from the engineering community for expenses to design, build, and compete in the April 23-25, 2004 ASME West Coast HPV Competition in Corvallis, Oregon.

The Student HPV Team plans to compete in the April 2004 ASME West Coast Competition. Because of the high cost to participate in this annual ASME student competition, the students seek your help in funding. They expect expenses to reach as high as \$15,000 for materials and travel. Donations are tax deductible. Checks can be made out to "UH Foundation/Engineering/HPV" and mailed c/o Dr. Mehrdad Ghagemi Nejjad, Department of Mechanical Engineering, University of Hawaii at Manoa, 2540 Dole Street, Holmes Hall #302, Honolulu, HI 96822. Any support will be greatly appreciated.

FUTURE ACTIVITIES

Several tours and meeting speakers are being planned. Please watch for the dates and the topics in future Wiliki issues and at the ASME-HI website.



OFFICERS

President	Melvin K. Harano, P.E.	848-6966
	<i>email: harano@thermaleng.com</i>	
Vice-Pres	Robert T. Bigtas, P.E.	526-9019
	<i>email: rbigtas-ssda@hawaii.rr.com</i>	
Secretary	Mark Gouveia, P.E.	521 3773
	<i>email: mgouveia@cdoca.com</i>	
Treasurer	Samuel S. Dannaway, P.E.	526-9019
	<i>email: sdannaway-ssda@hawaii.rr.com</i>	
Past Pres	Robert Lohaus, P.E.	833-4095
	<i>email: lohausebob@hawaii.rr.com</i>	
Directors:	Michael J. Orlowski	474-3819
	<i>email: orlowskim0@pwcpearl.navy.mil</i>	
	Robert M. Miller, P.E.	951-7215
	<i>email: fpehi@hawaii.rr.com</i>	
Webmaster	Derick Kam	
	<i>email: kam@thermaleng.com</i>	

HAWAII SFPE SEMINAR ANNOUNCEMENT PLAN REVIEW AND INSPECTION OF FIRE SPRINKLER SYSTEM

The Hawaii Chapter of the Society of Fire Protection Engineers is sponsoring this excellent two day seminar through a special arrangement with the National Fire Sprinkler Association. This seminar will be very useful for those responsible for the review of fire sprinkler plans and inspection of fire sprinkler systems.

Date: April 27 and 28, 2004

Location: Fort Shafter Golf Clubhouse (Hale Ikena)

Cost: \$250 (\$200 for SFPE members, Chapter Friends, fire service personnel)

For information and to register contact: Sam Dannaway, Program Chairman, Hawaii Chapter SFPE, Tel (808) 526-9019 / Fax (808) 537-5385, E-mail: seminars@sfpehawaii.org

PROVEN RESULTS



- Prestressed solid planks, double and triple tees and beams
- Hollowcore planks ■ Prestressed piles
- Structural precast components ■ Architectural precast

Project: Kauai Judiciary Building

Product: Tritees

Contractor: Unlimited Construction



Where Excellence Endures

91-063 Malakole St., Kapolei, Hawaii 96707 / Ph: (808) 682-5761 / Fax: (808) 682-5764



2003-2004 ASCE Hawaii Section Executive Committee

		Phone	Fax
President	Westley Chun	488-0477	488-3776
	<i>wkcchun@engrsol.com</i>		
Pres-Elect	Keith Niya	533-3646	526-1267
	<i>kniya@atahawaii.com</i>		
Vice-Pres	Walter Billingsley	846-3232	538-7819
	<i>wbillingsley@beltcollins.com</i>		
Secretary	Lori Fong	531-7094	528-2368
	<i>lfong@ascehawaii.org</i>		
Treasurer	Phillip Ooi	956-8512	956-5014
	<i>ooi@wiliki.eng.hawaii.edu</i>		
Past Pres	Horst Brandes	956-8969	956-5014
	<i>brandes@wiliki.eng.hawaii.edu</i>		

APRIL DINNER MEETING

Program: Order of the Engineer Ceremony with ASCE National President, Ms. Patricia Galloway, and University of Hawaii Student Chapter Presentation

The Engineer's Ring Ceremony will be held before dinner at the April Dinner meeting. Registrants for the Ceremony are encouraged to arrive by 6:00 p.m. For information on late registration, please contact Walter Billingsley at 846-3232 or see the ASCE Hawaii Section website at www.ascehawaii.org.

The evening's program will consist of a short presentation on the role of ASCE in promoting professionalism for Civil Engineers, followed by a presentation by the University of Hawaii Student Chapter. The Student Chapter will highlight their past year's activities, including the concrete canoe contest and their recent participation at the Pacific Southwest Regional Conference.

Date: **Thursday, April 15, 2004**

Location: Treetops at Paradise Park Manoa Valley

Time: 5:30 p.m. - Social Time

6:15 p.m. - Engineer's Ring Ceremony

6:45 p.m. - Dinner

7:30 p.m. - Program

9:00 p.m. - Adjourn

Menu: Multi-entree buffet

Cost: \$22.00 for Hawaii Section members
\$25.00 for non-section members and guests

\$11.00 for University of Hawaii at Manoa Student Chapter members

Please make check payable to ASCE-Hawaii Section. Mail to Phillip Ooi, ASCE Treasurer, c/o Department of Civil & Environmental Engineering, University of Hawaii at Manoa, 2540 Dole Street, Holmes 383, Honolulu, Hawaii 96822, postmarked by Monday, January 12, 2004. Reservations for the dinner meeting to Phillip Ooi by Monday, April 12, 2004, by phone at 956-8512, fax at 956-5014, or email at ooi@wiliki.eng.hawaii.edu.

EXECUTIVE COMMITTEE MEETING

March 2, 2004

2004 CALENDAR OF EVENTS (subject to change)

May 20, 2004 - Urban Land Transportation

ENGINEER'S RING CEREMONY PLANNED FOR APRIL DINNER MEETING

The Engineer's Ring Ceremony is the public induction of candidates into the Order of the Engineer. The Order is the roster of engineers

in the United States who have participated in an Engineer's Ring Ceremony and who have publicly accepted the "Obligation of an Engineer." During the Ceremony, candidates formally accept the Obligation of an Engineer and receive a stainless steel ring to be worn as a symbol of recognition of membership in the Order of the Engineer.

The Obligation of an Engineer is the formal statement of an engineer's responsibilities to the public and to the profession. The Obligation includes a pledge to practice integrity, fair dealing, tolerance, and respect, and to uphold devotion to the standards and dignity of the profession, conscious always that an engineer's skill carries with it the obligation to serve humanity by making the best use of Earth's precious wealth.

Any engineer who has graduated from an ABET-accredited engineering program or holds a license as a Professional Engineer is eligible for induction into the Order of the Engineer.

Current plans are for National President Patricia Galloway to conduct the Engineer's Ring Ceremony at the Hawaii Section dinner meeting on April 15, 2004 for all candidates who register to participate. There will be a \$10.00 charge for participation in the Ceremony to cover the cost of the ring and certificate. Additional information on registration for the Ceremony will be forthcoming. Please see the announcement and registration form in this issue. Additional information on the planned ceremony is available on the ASCE Hawaii Section website at www.ascehawaii.org.

ASCE JOB LISTINGS

The following employers have openings they would like to fill:

- Austin Tsutsumi & Associates, Inc. (Civil, Traffic/Transportation, Environmental and Surveying - Honolulu and Wailuku)
- Board of Water Supply (Chief Capital Projects Officer - Honolulu)
- CH2MHILL (Water Engineer - Honolulu)
- Engineering Solutions, Inc. (Civil/Environmental Engineers - Honolulu)
- Fewell Geotechnical Engineering (Geotechnical Engineer - Honolulu)
- Fukunaga & Associates, Inc. (Civil and Sanitary Engineer - Honolulu)
- Hawaii Pacific Engineers (Civil and Civil/Environmental Engineers - Honolulu)
- Warren S. Unemori Engineering (Project and Civil Engineers - Wailuku)
- Westaff (Maintenance Engineers - Honolulu)
- Winzler & Kelly Consulting Engineers (Civil and/or Structural Engineering - Guam)

For more information on these job listings, please visit the ASCE Hawaii Section website at www.ascehawaii.org.

MEMBERSHIP DRIVE

ASCE counts on our members to help us grow every year by actively participating in the Member-Get-A-Member Drive. The drive is now year-round and offers great new prizes, such as cash rewards, gift certificates, digital cameras, personal digital assistants, LCD TVs and more. For most prizes, all you have to do to be eligible to win is refer a colleague. This is a great time to help out your colleagues while also helping ASCE find new members. Take a minute to think about the people in your professional life who could benefit from membership. Visit www.ASCEDrive.org to refer them and you could be a winner in the next drawing! Please contact our membership chair, Lori Nishida, at 533-3646 or lnishida@atahawaii.com

for further information.

CONVERTING TO ELECTRONIC VERSION OF WILIKI

If you would like to help the ASCE Hawaii Section reduce operating costs by receiving your monthly issue of the Wiliki via e-mail, please contact Joanna Seto at 522-7426 or e-mail her at jseto@ascehawaii.org.

HAWAII SECTION SCHOLARSHIP

The Scholarship Committee continues to accept donations to the Hawaii Section Scholarship Fund with the goal of establishing a second annual scholarship for a deserving ASCE Student Chapter member. All-contributions are tax-deductible.

Please make checks payable to 'ASCE Hawaii Section' and mail to ASCE Scholarship Committee, P.O. Box 917, Honolulu, Hawaii 96808. If you have any questions, please contact Horst Brandes at 956-8969, or at brandes@wiliki.eng.hawaii.edu.

(continued on page 6)



2003-2004 YMF OFFICERS

		Phone
President	Jamie Hikiji	529-7229
	<i>jhikiji@ascehawaii.org</i>	
Vice-Pres	Paulette Chang	781-1187
	<i>Hawaiiymf@yahoo.com</i>	
Secretary	Scott Jennings	845-8440
	<i>sjennings@rci-group.com</i>	
Treasurer	Geoff Ries	946-2277
	<i>gries@wilsonokamoto.com</i>	
Stud. Chap. President	Ronald Malalis	956-5808
	<i>malalis@hawaii.edu</i>	

Next YMF General Meeting

The next two YMF general meetings are scheduled for Tuesday, April 6, 6:00 p.m. at Gorden Biersch 599-4877, and May 4, 6:00 p.m. at Ryan's Grill 591-9132. If you are interested in attending to find out what the YMF is all about and how much fun we have, please call Jamie Hikiji at 521-3051.

ASCE Job Classified

Looking for work? Visit the ASCE's job listing page at <http://www.ascehawaii.org/jobs/jobsinfo.html>.

CIVIL ENGINEER

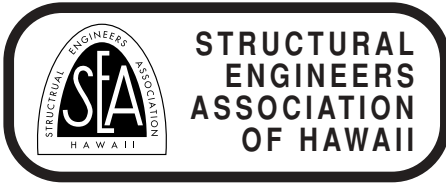
Preferred minimum of two years experience in site work and utilities design.

Excellent salary & fringe benefits.

Please email resume to:
email@grayhongnojima.com
or fax to: (808) 531-8018.



**Gray • Hong • Nojima
& Associates, Inc**



PO BOX 3348, HONOLULU, HI 96801
Web Page URL <http://www.seaoh.org>

OFFICERS & DIRECTORS

Position	Officer	Phone	Fax
President	Randy Chu	373-7950	373-7950
Vice Pres	Beverly Ishii-Nakayama	942-9100	942-1899
Secretary	Shawn Matsumoto	597-8555	597-8559
Treasurer	Jonathan Murai	533-2210	533-2686
Director	Ibbotson Kellet	540-1030	526-1989
Director	Les Nagata	951-5916	941-6489
Director	Wayne Kawano	848-7100	848-2626
Director	Dean Doi	955-4441	942-2027
Past Pres	Tom Tanimura	536-7692	537-9022

HIGHLIGHTS OF BOD MEETING

03 March 2004

Committee Reports:

Convention Committee: This year's convention is tentatively scheduled to be held on Oahu at the Turtle Bay Resort. The committee has not yet determined the theme for the convention but "codes" seems to be a possibility, with an emphasis on ASCE 7-02 wind load provisions and the IBC 2003 seismic provisions. If anyone has any speaker and/or topic suggestions for this year's convention contact Tom Tanimura.

New Business:

Hurricane Resistant Shelter Criteria: The Board will submit their recommendation to the State Civil Defense of using ASCE 7-02 Code with a 3 second gust speed and an Importance factor = 1.15 for the design of new emergency shelter structures.

Ad Hoc Committee on Structural Engineering Practice: The complex codes survey has been completed. Results were tabulated and reported by Dennis Hanatani. SEAHO emailed out approximately 180 surveys, of these approximately 100 surveys went to engineers and another 80 surveys to affiliate members. 32 responses to the survey were received. All the responses were from engineers actively designing in the profession. Survey results indicate there definitely is a concern that codes are becoming too complex to apply in everyday practice. A majority of engineers prefer a 6 year code cycle. Also, a preference for "allowable stress" design is expressed. The SEAHO Board of Directors has instructed the Ad Hoc Committee to reconvene, elect a committee chairperson and proceed on this issue. The committee will now formulate a game plan to try to influence code writing. The feasibility of a 6 year code cycle and bringing all Counties together using one code will be investigated. The committee is now calling for members interested in assisting and participating in this effort and willing to donate time, resources and/or suggestions. Contact any Board member for more information.

NCEES - SE Licensing Examinations: George Nishimura is looking for volunteers to grade the Structural II portion (building & bridge design problems) of the licensing exam. Grading will take place in Clemson, South Carolina. NCEES will pay cost of travel, accommodations, meals and a \$200.00 day honorarium. As a side note, many changes are being contemplated as far as the SE licensing exam is concerned. The Structural I exam (general engineering knowledge) will likely remain the same. The Structural II exam will be

increased to 4 problems including a bridge problem, which all applicants must solve. A Structural III exam is being contemplating for testing seismic analysis and design. Visit the SEAHO website (Issues / Miscellaneous / NCEES) or call George Nishimura at Nishimura, Katayama, Oki, Santo if you are interested in becoming an examination grader or are interested in NCEES exams issues.

New Member Applications:

Received allied member applications from the following people:

Alison Agapay - Nagamine Okawa Engineers Inc.
Jose Mandawe, Jr.- Nagamine Okawa Engineers, Inc.
Grant Okunaga - Miyasato Kuniyoshi Engineers LLC.
Brian Murdock - KAI Hawaii, Inc.
Haili Camarillo - KAI Hawaii, Inc.

Applications will be voted on at the April Board Meeting. Please notify any SEAHO Officer prior to the April Board Meeting if you wish to comment on these prospective members.

Web Notes:

SEAHO is currently upgrading our website.

If you have any comments or suggestions, please forward to Les Nagata at les.sag@verizon.net. Newly posted items on the website are as follows: **MEMBER DIRECTORY:** 2004 Committee Chairpersons are now updated. **Issues: Disaster Response:** Hurricane shelter plan and design criteria information. **State of the SE Practice:** Complex Codes Survey results. Changes in Building Codes (Commentary on IBC by Don Allen, National President of LGSEA). **Code Committee:** IBC-03 (Gary Chock commentary on IBC issues of particular interest to Hawaii). **Legislative Committee:** 2003 legislative summary. 2004 legislative issues summary (specific Bills can be accessed by clicking the hyperlink). HB2283, Limits indemnification and legal defense on State contracts. **Miscellaneous:** NCEES call for exam graders

2004 Calendar of Events:

Next BOD meeting: 07 April 2004, 4:30 p.m., at Shigemura, Lau, Sakanashi, Higuchi office.

April 2 Tentative General Membership Meeting: Field trip to Tileco, Rocky Mountain Precast and AES Plants.

April 21: Masonry Design Seminar. Seminar by Don Abrams on transition to LRFD and retrofitting existing building per FEMA 356.

ACI CONCRETE FIELD TECHNICIAN PROGRAM—GRADE I CERTIFICATION

Sponsored by the Cement and Concrete Products Industry of Hawaii

The ACI Certification Program for Concrete Field Testing Technician—Grade I is for the purpose of certifying concrete technicians who have demonstrated the knowledge and ability to properly perform the seven (7) basic field ASTM tests on freshly mixed concrete.

Session I (Practice Session only): Saturday, April 24, 2004 from 8:00am to 12 noon at Ameron Hawaii, Sand Island.

Session II (Examination only): Saturday, May 22, 2004, from 7:00am to 1:00pm (*specific times to be announced*). Location will be at Ameron Hawaii, Sand Island.

Session I: Performance Practice session only (No fee)

Session II: Examinations only. Full Exam (written/performance) \$175. Re-take for written exam only \$100.

Re-take for performance only \$125. **Class size:** is limited to 15 people. Registration deadline is May 14, 2004

For additional information or to register, call CCPI at 848-7100



STRUCTURAL SYSTEMS, INC.

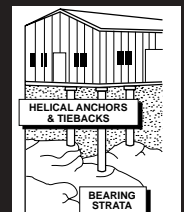
Since 1985

- Stop Settling
- Relevel Foundations
- Compaction Grouting
- Soil Nails/Shoring
- Micro & Pin Piles
- Rock/Soil Anchors
- Clay Stabilization



845-2474
Permanent Solutions

Lic: AC-13555 • 1275 Mikole St. • www.ssihawaii.com • structurs001@hawaii.rr.com





2003-2004 OFFICERS

Office	Name	Phone	Fax
President	Cathy Leong	946-2277	946-2253
Vice Pres	Susan Uejo	521-5361	538-7819
Secretary	Pierson Koike	527-6989	521-2501
Treasurer	Fred Smoot	841-7617	833-6125
Past Pres	Richelle Suzuki	541-2530	541-2700

April Meeting

Date: Tuesday, April 20, 2004
 Time: 11:45 a.m.
 Location: Kakuhihewa State Office Building,
 Conference Room 577 A and B
 Address: 601 Kamokila Boulevard
 Cost: \$8.00 for members/guests and
 \$5.00 for students

The speaker will be Mr. Bruce Tsuchida, President of Townscape, Inc. He will make a presentation on the Keahole to Honaunau Regional Circulation Plan and also summarize subsequent modifications that have occurred since the publication of the final report.

Please call Pierson Koike at 527-6989 or email message to pkoike@co.honolulu.hi.us by noon Tuesday, April 13, 2004 to make reservations. Payment will be collected at the meeting.

Golf Tournament

Date: April 30, 2004
 Location: Hawaii Prince Golf Course, Ewa Beach
 First Check In Time: 10:45 a.m.
 First Tee Time: 11:30 a.m.
 Cost: \$65.00 per person
 Deadline to register: Friday, April 9, 2004

Please contact Susan Uejo, ITE Golf Committee Chair, at phone 521-5361 or email at suejo@beltcollins.com to obtain a golf application form or for further information. Cost includes golf fee and cart, light pupus and prizes. Non-golfers are welcome to join us for pupus about 3:00 p.m., but please sign up as "Pupus Only."

February Meeting Highlights

The February luncheon meeting was held on February 19, 2004, at the office of Belt Collins in Honolulu. President Cathy Leong announced that February 23-27 was Engineer's Week and the Hawaii Section, in conjunction with the Department of Transportation Services (DTS), had prepared a display that would be on exhibition at Kahala Mall during that week. In addition, Legislative Committee Chair, Wayne Yoshioka, reported on the current transportation bills being considered by the legislature that encompass such topics as impact fees, rail, and traffic cameras.

The featured speaker was Glenn Yasui, Highways Administrator for the State Department of Transportation, who provided an update with regards to the Nimitz Highway Contraflow Lane. Mr. Yasui stated that traffic data collected before and after the implementation of the contra-flow lane indicates that the lane has reduced travel times between Keehi Interchange and Pacific Street. In addition, there are also indications that the contra-flow lane has eased congestion along the adjacent parallel routes. Some of the success of the project can be attributed to the further restriction of left-turn traffic movements along Nimitz Highway. Initially, there were concerns by

adjacent businesses that these restrictions would significantly impact their operations, however, preliminary indications show that overall access for these businesses may have improved. Due to the success of the project, the State plans to continue the contra-flow lane operation and is currently studying whether or not to utilize moveable barriers instead of traffic cones. In addition, the State is currently planning several other congestion mitigation projects which include the rerouting of traffic from the Lunalilo Street on-ramp of the H-1 Freeway to Vineyard Boulevard utilizing either delineators or a moveable barrier and the construction of an AM Zipper Lane along the H-1 viaduct to extend the existing Zipper Lane from the Pearl Harbor Interchange to the start of the Nimitz Highway contra-flow lane. The new Zipper Lane will have a moveable barrier with a smaller footprint so that the new Zipper Lane will only require one lane of traffic instead of two lanes.

ASCE History, from page 1

Portland cement, made in England and imported into this country." In contrast, "the ordinary cement now in our market such as Rosendale, Copley, and other American brands, ... weighs from seventy to ninety pounds per bushel." Interestingly, Saylor's Portland cement is available to this day, being marketed by the Essroc Cement Corp. of the Italcementi Group!

But to get back to Hawai'i, the brands Alsen and Germania preferred by the Kohala Ditch Engineer may be of European origin. An Internet article (at www.keyshistory.org) about building the Florida Keys Railroad around the time of the construction of the Kohala Ditch, says that "Alsen cement was a Belgium cement similar to our Portland cement. Tests revealed that Alsen was better for under salt water use." In a related article by Jerry Wilkinson ("History of the Railroad"), we learn that Alsen cement

was used for underwater work and U.S. cement for above-water arches. Germania, the name of a German heroine, appears to have a more complicated story to be addressed later.

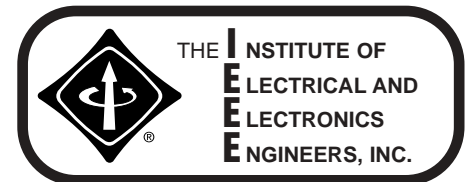
The earliest Hawaiian reference to cement that I was able to discover so far was from a July 1856 issue of the Pacific Commercial Advertiser which indicated that the ship Humboldt's load from San Francisco included "400 casks cement."
 (To be continued)

Do you know of a civil engineering accomplishment or event that your fellow ASCE members might find interesting? Please send a brief description to C.S. Papacostas (fax 956-5014, email msp@wiliki.eng.hawaii.edu). Previous articles in the series may be found at the Section's web site. Just point your browser to <http://www.ascehawaii.org>.

ASCE, from page 4

ASCE ZONE IV JOINT LEADERSHIP CONFERENCE

The 2004 Zone IV Joint Leadership Conference was held in Portland, Oregon. The Hawaii Section was presented the 2004 Zone IV Outstanding Large Section Award and the 2004 Zone IV Website Award. Thank you to Joanna Seto for doing a great job on the website!



IEEE Hawaii Section

P. O. Box 37607 Honolulu, Hawaii 96837
 Email: sec.hawaii@ieee.org
 Web Page: <http://community.hei.com/ieee/>



Hawaiian Electric Company, Inc.

Giving you the Power

An Equal Opportunity/Affirmative Action Employer/ M-F-D-D

At the Hawaiian Electric Company (HECO), we do more than provide electricity. We deliver reliable, environmentally friendly electricity, explore alternate energy sources and help our customers manage their electric consumption. We are looking for energetic, goal-oriented individuals to join our team of professionals to provide excellent, efficient service to our customers. HECO is currently recruiting candidates for the following position:

Electrical Service Designer

Performs field investigations; works closely with the customer; designs the overhead or underground electrical service and coordinates the installation for residential, commercial and industrial customers whose demands are 10 KVA and below.

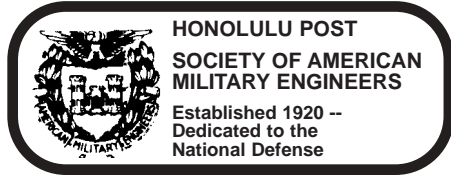
Minimum Qualifications:

- 2 years of community college with successful completion of an electrical curriculum and courses in drafting; OR 2 years experience in electrical consulting or design of overhead and underground distribution systems or equivalent.
- Pass HECO's skills and general aptitude tests.
- Working knowledge of computers.
- Possess excellent customer service skills.
- Color blindness not acceptable.

To explore this employment opportunity, visit:

<http://careers.heco.com>

or call our employment hotline at: (808) 543-4611



P.O. Box 31218; Honolulu, HI 96817
<http://posts.same.org/honolulu/>

SAME OFFICERS

President: LTC Dave Press 438-1069
 Vice Pres: COL Jim Lyon 449-8363
 Secretary: CPT Sam Battaglia 438-1468
 Treasurer: LT Kristina McGee 471-1170x250

PO Box 12204 Honolulu, HI 96828
 website: www.eaauih.org

2003-2004 OFFICERS

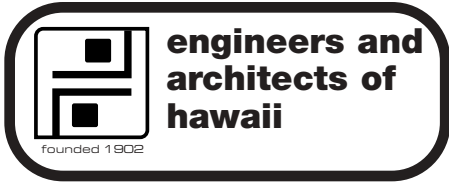
President: Bryce T. Yonemura 473-8000 x2456
 Vice Pres: Kelli Goodin 441-3600
 Secretary: Ryan Sugamoto 956-3357
 Treasurer: Marian Nakama 836-1900 x234
 Directors: Lloyd P.C.W. Lee
 Michael Y. Magaoay
 Randolph H. Murayama
 Wayne H. Nakamura

College of Engineering Open House:

The College of Engineering will hold an Open House on April 3, 2004. The event is held annually for accepted high school students and their parents to visit the College's facilities and learn more about ongoing engineering projects.

2004 EAAUH Golf Tournament: Volunteers are needed for the 2004 golf tournament. If you would like to help, please contact Matt Fujioka (mkf@akinaka.com) or Stacie Kaneshiro (Stacie.Kaneshiro@hickam.af.mil) for more information.

Don't forget to check the EAAUH website at www.eaauih.org for pictures of the 2003 EAAUH golf tournament, information on events, job listings and EAAUH news.



po box 4353, honolulu, hawaii 96813
 An association for Hawaii's Engineers and Architects
 New WEB Address <http://community.hei.com/eah>

OFFICERS FOR 2003 - 2004

President: Martin McMorro
 1st V.P.: Bob Morrissey
 2nd V.P.: Gary Yamamoto
 Treasurer: Ralph Dobson
 Secretary: Sam Gillie

Meetings held every Friday at YWCA room 205 on Richards Street downtown. Parking at Alii Place off Alakea Street for \$1.00 per hour. Meetings start at NOON and end promptly at 1:00 pm.

Members-\$7.50 Guests-\$8.50

Program schedule may be adjusted. Call Secretary to confirm speaker. Anyone wanting a weekly email meeting notice please send your email address to Sam Gillie at sgillie@hei.com.

**Society of American Military Engineers
 Honolulu Post Scholarship**

Award: One \$1,500 Scholarship with a one year SAME 'Young Member' membership

Eligibility:

- (1) High school senior or full-time undergraduate or graduate student at a university with an accredited engineering or architecture program
- (2) Engineering or Architecture Major (for university students)
- (3) U.S. Citizenship
- (4) Minimum 3.0 GPA (require copy of latest transcript)
- (5) Military affiliation or experience (i.e., SAME member or dependent, military dependent, ROTC) not required, but given preference

Requirement: Submit application information (below) with transcript and the following documents type-written and double-spaced:

- (1) Resume of work experience, academic and extra-curricular accomplishments
- (2) Essay (one page maximum) written around Engineer's Week theme (Engineering in the 21st Century) and its impact to society and the military.

Mail To: CDR Bert Diehl
 USCG Civil Engineering Unit Honolulu
 Attn: SAME Scholarship Committee
 300 Ala Moana Blvd., Room 8-134
 Honolulu, HI 96850

Deadline: Postmark 10 May 2004

For Further Information: Commander Bert Diehl, U.S. Coast Guard; Telephone (808) 541-2200

Application Information: (Typewritten)

Name: _____

Citizenship: _____

Home Address: _____

City _____ State _____ Zip _____

Phone: _____

E-Mail (if any): _____

School: _____ Major: _____

Student Number: _____ GPA: _____

Student Status: Undergraduate _____ Graduate _____ (Check Applicable)

Full Time Student: Yes _____ No _____

Anticipated Graduation Date: _____

Military Experience/Affiliation: _____

SAME Affiliation: _____

Professional Directory

<p>WES THOMAS ASSOCIATES Land Surveyors 75-5749 Kalawa St., Kailua-Kona, Hawaii 96740-1817 Tel: 808 329-2353 Fax: 808-329-5334 <i>Surveying Hawaii Since 1975</i></p>	<p>720 IWILEI ROAD SUITE 425 P.O. BOX 3351 HONOLULU, HI 96801 PHONE: (808) 536-2705 FAX: (808) 599-4032</p>	<p>R. M. TOWILL CORPORATION SINCE 1930 PLANNING • ENGINEERING • ENVIRONMENTAL SERVICES PHOTOGRAMMETRY • SURVEYING • CONSTRUCTION MANAGEMENT 420 WAIKAMULO ROAD, HONOLULU HAWAII 96817-4941 808 842 1133</p>	<p>URS Engineers Scientists Program and Construction Managers Environmental Planners 815 PULASKI STREET, 9TH FLOOR HONOLULU, HAWAII 96813-1141 PH: (808) 840-1118 FX: (808) 840-1108 hen@urscorp.com www.urscorp.com</p>
<p>WALKER INDUSTRIES, LTD. Precast Concrete Products</p> <p>CONSPAN BRIDGE SYSTEMS AARON UNO P.O. Box 1568 Kahului, Maui, Hawaii 96732 Maui (808) 877-3430 Fax (808) 871-7282</p>	<p>Building for a Better World</p> <p>Washington Contact John Shrewsbury at (703) 629-8594 Arlington, Virginia</p>	<p>Weston Solutions, Inc. Suite 2301 841 Bishop Street Honolulu, Hawaii 96813 Phone: 808.585.0448 Fax: 808.585.7378 www.westonsolutions.com</p> <p>WESTON SOLUTIONS An employee-ownership Company</p>	<p>WILSON OKAMOTO CORPORATION Civil Engineers Structural Engineers Traffic Engineers Planners 1600 Ala Moana Blvd., Suite 400 Honolulu, Hawaii 96813 Phone: (808) 585-1118 Fax: (808) 585-1108 www.wilsonokamoto.com</p>

Professional Directory

<p>YOUR AD COULD APPEAR HERE FOR \$200 A YEAR</p>	<p>amec Earth & Environmental, Inc. Tel: 808.545.2462 Fax: 808.528.5379 www.amec.com</p> <p><i>Full service environmental consulting, engineering, and compliance support. Formerly Ogdan Environmental</i></p>	<p>AUSTIN, TSUTSUMI & ASSOCIATES, INC. Civil Engineers • Surveyors 501 Sumner Street, Suite 521 Honolulu, HI 96817 Tel: 533-3646, Fax: 526-1267, Email: atah@atahawaii.com Branch Office: Wailuku, Maui CIVIL • TRAFFIC • SANITARY</p>	<p>BeltCollins www.beltcollins.com</p>
<p>BROWN AND CALDWELL Environmental Engineering And Consulting • Analytical Services 119 Merchant St., Suite 200 • Honolulu, HI 96813 (808) 523-8499 Fax (808) 533-0226 2145 Wells St., Suite 302 • Wailuku, HI 96793 (808) 244-7005 Fax (808) 244-9026</p>	<p>Carter-Burgess Consultants in Planning, Engineering, Architecture, Construction Management, and Related Services 1001 Bishop Street, Suite 850 Paohi Tower Honolulu, Hawaii 96813 (808) 523-9696 Fax (808) 523-9699 www.c-b.com</p>	<p>S.S. DANNAWAY ASSOCIATES, INC. Fire Protection Engineers Building Code Consultants 720 Iwilei Road, Suite 412, Honolulu, HI 96817 Tel: (808) 526-9019/Fax: (808) 537-5385 ssda@hawaii.rr.com</p>	<p>Y. Ebisu & Associates Acoustical and Electronic Engineers 1126 12th Avenue, Room 305 Honolulu, Hawaii 96816 (808) 735-1634</p>
<p>ESM Esaki Surveying and Mapping, Inc. Lihue, Kauai, Hawaii Ph. (808) 246-0625 • Fax (808) 246-0229 esmap@hawaiian.net</p> <p>ENGINEERS • SURVEYORS Established 1979</p>	<p>ESH ENGINEERS, SURVEYORS, HAWAII, INC. (FORMERLY WILLIAM HEE & ASSOCIATES, INC.) 900 HALEKALUWILA STREET HONOLULU, HAWAII 96814 Phone: 591-8116</p>	<p>Fewell Geotechnical Engineering, Ltd. OAHU: 96-1416 Waihona Place • Pearl City, Hawaii 96782-1973 (808) 455-8569 • FAX (808) 456-7062 MAUI: (808) 873-0110 FAX (808) 873-0906</p>	<p>MASA FUJIOKA & ASSOC. A PROFESSIONAL PARTNERSHIP ENVIRONMENTAL • GEOTECHNICAL • HYDROGEOLOGICAL CONSULTANTS MFA 99-1205 Halawa Valley Street, Suite 302 Aiea, Hawaii 96701-3281 Phone 808 484-5366 • Fax 808 484-0007</p>
<p>FUKUNAGA & ASSOCIATES, INC. 1388 Kapiolani Blvd. Honolulu, HI 96814 Phone: 944-1821 Email: office@fainc.org Website: www.fainc.org</p>	<p>GEOLABS, INC. Geotechnical Engineering and Drilling Services 2006 Kalih Street Honolulu, Hawaii 96819 Phone: 841-5064 Fax: 847-1749</p>	<p>GEOTECHNICAL GROUTING CONSULTANT Edward D. Graf 182 Lumahai St. Tel: 808-396-9451 Honolulu, HI 96825 Fax: 808-396-2075</p>	<p>CAROL KWAN CONSULTING, LLC Certified Arborist P.O. Box 893953, Mililani, Hawaii 96789-0953 Mobile (808) 381-1342 FAX (808) 625-4287 E-mail: ckwan@hawaii.rr.com</p>
<p>HPF CIVIL ENGINEERING AND PLANNING WASTEWATER AND WATER TREATMENT CONSTRUCTION MANAGEMENT SERVICES Hawaii Pacific Engineers, Inc. 1132 Bishop Street • Suite 1003 Honolulu, Hawaii 96813-2830 Phone: (808) 524-3771 • Fax: (808) 538-0445 E-mail: hpeinc@hawaiipacificengineers.com</p>	<p>HIDA, OKAMOTO & ASSOCIATES, INC. CONSULTING CIVIL ENGINEERS PACIFIC GUARDIAN TOWER 1440 Kapiolani Boulevard, Suite 1120 Honolulu, Hawaii 96814 Phone: (808) 942-0066 Fax: (808) 947-7546</p>	<p>ERNEST K. HIRATA & ASSOCIATES, INC. Soils and Foundation Engineering 99-1433 Koaha Place • Aiea, Hawaii 96701 Fax (808) 486-0870 • Phone (808) 486-0787</p>	<p>SAM O. HIROTA, INC. Engineers & Surveyors 864 S. Beretania Street Honolulu, Hawaii 96813 Telephone: 537-9971</p>
<p>INABA ENGINEERING, INC. 273 WAIANUENUE AVENUE HILO, HAWAII 96720 Phone: (808) 961-3727 / Fax: (808) 935-8033 Civil Engineering • Structural Engineering Land Surveying</p>	<p>Shaw • Environmental & Infrastructure • Design & Engineering Services • Construction & Maintenance • Homeland Security 590 Paiea Street, Suite B, Honolulu, HI 96819-1835 Tel: (808) 840-2000 • FAX: (808) 639-0339</p>	<p>KFC AIRPORT, INC. PROJECT MANAGEMENT CONSULTANTS PLANNING • ARCHITECTURAL/ENGINEERING DESIGN • CONSTRUCTION MANAGEMENT 3375 Koapaka Street, Suite F220-48 Honolulu, HI 96819 Phone: (808) 836-7787 Fax: (808) 834-4833</p>	<p>KN CONSULTING SERVICES, INC. Civil Engineers 1451 S. King Street, Suite 412 Honolulu, Hawaii 96814 Phone: (808) 941-8882 Fax: (808) 941-8828 Email: knconsb@pixi.com</p>
<p>THE LIMTIACO CONSULTING GROUP CIVIL ENGINEERING AND ENVIRONMENTAL CONSULTANTS 615 Piikoi Street, Suite 1605 • Honolulu, Hawaii 96814 Tel (808) 596-7790 • Fax (808) 596-7361 • www.tlchgahawaii.com</p>	<p>LYON ASSOCIATES CIVIL ENGINEERING / CONSTRUCTION MANAGEMENT 841 Bishop Street, Suite 2006 Honolulu, Hawaii 96813 Tel: (808) 536-6621 Fax (808) 523-1738 E-mail: admin@lyonassociates.com</p>	<p>M&E FACIL, INC. Surveying Civil Engineering & Design Environmental Engineering Water Treatment & Supply Construction Management Wastewater Collection & Treatment 841 Bishop Street, Suite 1900 Honolulu, Hawaii 96813</p>	<p>NAGAMINE OKAWA ENGINEERS INC. CONSULTING STRUCTURAL ENGINEERS 1001 Bishop Street • Pauahi Tower, Suite 725 Honolulu, Hawaii 96813 Phone: (808) 536-2626 • FAX: (808) 536-3926</p>
<p>NAKAMURA, OYAMA AND ASSOCIATES, INC. CONSULTING ENGINEERS ELECTRICAL/TELECOMMUNICATIONS/FIRE PROTECTION 1314 South King St., Suite 401 Honolulu, Hawaii 96814-1939 Telephone (808) 591-8887 Fax (808) 596-2383</p>	<p>NEWCOMER - LEE LAND SURVEYORS, INC. 1498 Lower Main Street, Suite "D" Wailuku, HI 96793-1937 Tel: (808) 244-8889 Fax: (808) 244-8422</p>	<p>Oceanit ...innovation through engineering and scientific excellence... Environmental Engineering Pacific Tower #2970, 1001 Bishop Street Coastal Engineering Honolulu, HI 96813-3654 (808) 531-3017 / Fax: (808) 531-3177 oceanit@oceanit.com / www.oceanit.com</p>	<p>Okahara & Associates, Inc. Engineers & Consultants 200 Kohala St., Hilo, HI 96720 / Ph. (808) 961-5527 Fax (808) 961-5529 677 Ala Moana Blvd., Suite 703, Honolulu, HI 96813 Ph. (808) 524-1224 Fax (808) 521-3151 73-5574 Maiau St., Bay View, Kailua-Kona, HI 96740 Ph. (808) 329-1221 Fax (808) 329-1006</p>
<p>PGE Pacific Geotechnical Engineers, Inc. Soils & Foundation Engineering Consultants 429-B Waiakamilo Road Honolulu, Hawaii 96817 (808) 841-8024 FAX (808) 848-5102 E-mail: pge@pacificgeotechnical.com</p>	<p>PACIFIC MACHINERY INC. 94-025 Farrington Hwy. Waipahu, Hawaii 96797 808/676-0205 FAX 808/676-0264 CATERPILLAR & OLYMPIAN Generator Sets, Engines, Switchgear and Ancillary Equipment. (Prime Power & Standby Power, 8-2000 kW) CATERPILLAR 3600 Utility Plant Generator Sets (1.5-5 MW)</p>	<p>ParEn, Inc. dba park engineering SUIE 300, KAWAIAHAO PLAZA 567 SOUTH KING STREET HONOLULU, HAWAII 96813 TELEPHONE: (808) 531-1676 Engineers, Surveyors, Planners</p>	<p>GRAY • HONG • NOJIMA & ASSOCIATES, INC. 841 Bishop Street, Suite 1100 Honolulu, Hawaii 96813 Tel: (808) 521-0306 Fax: (808) 531-8018 CIVIL & ENVIRONMENTAL ENGINEERS</p>
<p>Sato & Associates, Inc. HONOLULU 2046 South King Street Honolulu, HI 96826 Tel: (808) 955-4441 Fax: (808) 942-2027 MAUI 2115 Wells Street Wailuku, HI 96793 Tel: (808) 244-9265 Fax: (808) 244-5303 CONSULTING ENGINEERS • CIVIL & STRUCTURAL</p>	<p>SHIMABUKURO, ENDO & YOSHIZAKI, INC. Civil, Environmental & Structural Engineers SEY 1126 12th Avenue, #309 Honolulu, Hawaii 96816-3715 Phone: (808) 737-1875 Fax: (808) 734-5516 Email: seyeng@lava.net</p>	<p>msd Consulting Engineers Marc M. Siah & Associates, Inc. 810 Richards Street, Suite 888, Honolulu, HI 96813, Ph: 538-7180 • CIVIL • STRUCTURAL • ENVIRONMENTAL • OCEAN</p>	<p>SSFM INTERNATIONAL 501 Sumner Street, Suite 502 Honolulu, Hawaii 96817 Ph (808) 531-1308 Fax (808) 521-7348 Project Managers, Planners, & Engineers www.ssfm.com</p>

HAWAII COUNCIL OF
ENGINEERING SOCIETIES
P.O. Box 2873
Honolulu, Hawaii 96802

Presorted
Standard
U.S. Postage Paid
Honolulu, Hawaii
Permit No. 1400