

# **BUILDING** INDUSTRY HAWAII

APRIL 2017/\$4.95

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## Agenda

- 07:00 AM - 07:50 AM: Check In/ Continental Breakfast
  - 07:50 AM - 08:00 AM: Color Guard/National Anthem  
ASSE Hawaii Chapter Opening Remarks
  - 08:00 AM - 09:30 AM: Keynote Presentation  
by Bill Sims – Beyond Zero Injuries
- Bill's book entitled **Green Beans & Ice Cream** has been inducted into the Executive Book Club at Disney, Boeing, and UPS. Bill's approach to leadership, positive reinforcement and behavior change is thought provoking and inspiring on many levels. Bill will help you to define the qualities of great leadership and redefine how to achieve the results that you desire as a leader. You will be shocked and surprised by what you learn.
- 
- 09:30 AM-10:00 AM: Exhibits/Networking
  - 10:15 AM-11:15 AM: Concurrent Session 1
  - 11:30 AM-12:30 AM: Concurrent Session 2
  - 12:30 PM-01:15 PM: Lunch/Networking
  - 01:30 PM-02:30 PM: Concurrent Session 3
  - 02:45 PM-03:45 PM: Concurrent Session 4

## Reserve Your Seat to Receive Timely Information On:

- HIOSH Update – New Rules
- Federal OSHA Update
- Fire Safety – Are you Prepared?
- What you need to know to comply with OSHA Silica Rule
- The Trap – Hawaii Workers Compensation
- Skills for the Modern Day Safety Professional
- Emerging Technology and the Impact it has on Safety
- Make Safety Training More Effective
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The General Contractors Association of Hawaii plans an ambitious schedule of activities this year, from training members to lobbying lawmakers. New President Cedric Ota, of Hawaiian Dredging Construction Co. Inc., and Executive Vice President Johnny Higa talked with *Building Industry Hawaii* about their goals for the GCA this year.



Hawaii's infrastructure needs, from its crumbling roads to its aging sewer lines, are a top priority across the Islands, according to our report. Meanwhile, the U.S. landed only a D+ grade last month from the American Society of Civil Engineers, pointing to infrastructure issues facing all states. Road paving and pipeline companies seem to be headed for some busy years ahead.

In this issue, we take a look at some of the changes that are coming for Hawaii's residential construction in 2017. They include new energy and electrical codes.

The use of electric cars in Hawaii is taking off, literally, and the state is ranked No. 2 in the nation with EVs per capita. That means the Islands also require more charging stations, according to our report that shows Hawaii had 522 charging stations through November. Meanwhile, new developments are including them in their designs and older structures are installing them.

There's a lot of emphasis these days on safety and health at work, and we report on rule updates for employers, such as more strict recordkeeping on workplace injuries.

And we profile two sports standouts: Ralph S. Inouye Co.'s work on the new football and track and field facilities at Farrington High School, and Swinerton Builders' new 808Futsal project, the first of its kind in Hawaii.

A tip of the hat to Healy Tibbitts Builders for garnering a national award from the Associated General Contractors of America. The company, which has been doing business in Hawaii since 1963, was honored for its innovative approach to replacing the 24-inch underwater pipeline at Joint Base Pearl Harbor Hickam. 🏠

*A hui hou,*

david@tradepublishing.com

## Setting It Straight

HART is negotiating with over 220 property owners as it builds the new rail system, according to board member Glenn Nohara. An incorrect number was attributed to Nohara in the March issue. Also, he is past president of the UH Engineering Alumni Association.

Myles Miyachi's name was inadvertently misspelled in our report on commercial development in the February issue. Miyachi is vice president at Hawaii National Bank.

We regret the errors.

# BUILDING INDUSTRY HAWAII

The Construction Magazine of Hawaii

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GCA President Cedric Ota  
Photo by Nathalie Walker  
Design by Ursula A. Silva

## COMING IN MAY

*Building Industry Hawaii* will highlight **Military Appreciation** with a report on the projects that are vital to Hawaii’s construction industry. Also, we will take a look at new developments in **Concrete & Repairs** and an update on the Islands’ **Trucking & Hauling** sector.

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**APRIL 1, 8**

**Planning and Scheduling (STP Unit 3)**

The General Contractors Association of Hawaii (GCA of Hawaii) presents the Associated General Contractors of America's Supervisory Training Program (STP), designed and field-tested for contractors to help them effectively manage people, time, equipment and materials. Unit 3—Planning and Scheduling (2015 edition)—is the third in STP's six-course program. Instructor Clyde Wachi of Swinerton Builders covers plan preparation, creating a critical path, scheduling software and more. Includes manual. Certificate available after completion of course.

7:30 a.m.-4 p.m. (daily). GCA Conference Room, 1065 Ahua St. Register by March 20. Limited seating; first-come, first-served. To register and for more information, go to [info@gca-hawaii.org](mailto:info@gca-hawaii.org) or [gcahawaii.org](http://gcahawaii.org), or call 833-1681. Fee: GCA of Hawaii members \$295; nonmembers \$395. No refund after March 20. Substitutions available.

**APRIL 3**

**32nd Annual BIA Renaissance Building & Remodeling Awards-Call for Entries**

On April 3, Hawaii's developers and contractors can submit their 2016 projects in the Building Industry Association of Hawaii (BIA-Hawaii) annual Renaissance Awards recognizing the best in Island construction. The Early-Bird Special submission deadline is Friday, May 19; the final deadline is June 16. Project Category Divisions include Details, Hawaii BuiltGreen, Kitchen & Bath, Historic, Residential, Commercial, Master Plan and more.

The Renaissance Awards Gala will be held Oct. 6 at The Modern Honolulu. Access more info, entry forms and instructions at [biahawaii.org](http://biahawaii.org).

**APRIL 5, 12, 19, 26; MAY 3, 10, 17**

**Presentation Skills Class**

AIA Honolulu hosts Pam Chambers' Presentation Skills Class Level 1 (April 5, 12), the final two sessions in a series of six public speaking classes that also feature small group practice. On April 19, Level II's six-class series begins, and shows how to craft an effective public presence.

6-8:30 p.m. (Wednesdays). AIA Honolulu Center for Architecture, 828 Fort Street Mall, Suite 100. For registration and information contact Pam

Chambers at [SpeakOut@pamchambers.com](mailto:SpeakOut@pamchambers.com) or 377-5679.

**APRIL 6**

**CANstruction 2017 Kick-off Meeting**

The theme for the American Institute of Architects Honolulu Chapter (AIA Honolulu) 13th annual CANstruction is "Browse a Library of CANstructures!" Join other building industry professionals and members of the community, prep your teams, and plan this year's canned-food sculpture event to help the Hawaii Foodbank. Brown bag/light pupus.

12:15-1:15 p.m. Conference Room, AIA Honolulu Center for Architecture, 828 Fort Street Mall, Suite 100. Register your team now at [aiahonolulu.org](http://aiahonolulu.org). For more info, contact Reid Mizue at [reid@omizuarch.com](mailto:reid@omizuarch.com).

**APRIL 6**

**ARE Prep Session: Project Management**

The AIA Honolulu Chapter presents an ARE Prep Session to assist those on the path to licensure. ARE 5.0 covers project management; ARE 4.0 covers construction documents and services, and programming, planning and practice. The ARE 4.0 PPP vignette is also covered. Various credits available.

5:30-7 p.m. AIA Honolulu Center for Architecture, 828 Fort Street Mall, Suite 100. Advanced online registration and payment is required. Register at [aiahonolulu.org](http://aiahonolulu.org) until April 6. For more information, contact Jason DeMarco at [JDeMarco@ferrarochoi.com](mailto:JDeMarco@ferrarochoi.com). Fee: AIA/AIAS members \$10 per person; nonmembers \$20. Substitutions available.

**APRIL 7**

**Architecture Firm Crawl in Downtown Honolulu**

The AIA Honolulu Chapter sponsors an evening of on-site education at downtown Honolulu AIA companies. Print out a map of participants from AIA's website, hop from firm to firm, and learn about outstanding projects and professionals.

5-8 p.m. As event approaches, download map of participating AIA Honolulu firms at [aiahonolulu.org](http://aiahonolulu.org). Register at [contact@aiahonolulu.org](mailto:contact@aiahonolulu.org) until April 7. For more info, call 628-7243.

**APRIL 8**

**11th Annual Architecture Month Walking Tour: University of Hawaii at Manoa**

Celebrate AIA Honolulu Chapter's 11th annual Architecture Month with a special tour of UH's campus core and landmark buildings guided by AIA-member architects. Reservations and payment required. Meeting point and staggered tour schedules to be announced.

8 a.m.-noon. Online reservations and pre-payment required at [contact@aiahonolulu.org](mailto:contact@aiahonolulu.org) beginning March 1. For more information, go to [contact@aiahonolulu.org](mailto:contact@aiahonolulu.org) or call 628-7243. Fee: \$15 per person. No refunds.

**APRIL 8**

**Seminar: Building Your Home for Life**

Residential design and construction firm Graham Builders guides homeowners on home additions and renovations from start to finish: where to begin, how to select a builder, potential problems as well as requirements for residential design, setting a budget, estimating, financing and scheduling, going green and more. Seminar is free and open to the public.

9-11 a.m. Honolulu Country Club, 1690 Puumalu St. Registration required. Limited seating. Call 593-2808 or go to [grahambuilders.com](http://grahambuilders.com).

**APRIL 8**

**Beaux Arts Ball "Aces of Architecture"**

The University of Hawaii School of Architecture Alumni Association invites graduates and the public to celebrate Architecture Month and Island design at a gala event featuring casino games and a silent auction.

5:30 pm. Hilton Waikiki Beach Hotel, Grand Ballroom, 2500 Kuhio Ave. For more info, contact the Alumni Association at [uhsaaa@uhalumni.org](mailto:uhsaaa@uhalumni.org). Fee: Students \$55; general public \$75.

**APRIL 8**

**Create Award-Winning Architectural Photos**

The AIA Honolulu Chapter and Jim Doyle of Applied Photography present an all-day architectural photography workshop that explores the aesthetics of downtown Honolulu and advanced production techniques. Bring your own camera, other photo hardware and lunch.

9 a.m.-4 p.m. AIA Center for Architecture, 828 Fort Street Mall, Suite 100. Registration and pre-payment



required at [contact@aiahonolulu.org](mailto:contact@aiahonolulu.org) by April 7. Go to [aiahonolulu.org](http://aiahonolulu.org) or call 628-7243 for more information. Fee: AIA members \$75; nonmembers \$105; students \$55.

#### APRIL 9

#### Sketch-in Celebration of Architecture Month!

AIA Honolulu Chapter hosts an informal sketch-a-thon. Bring your art materials of choice, meet, sketch and socialize with your pictorially inclined peers.

9 a.m.-12:30 p.m. AIA Center for Architecture, 828 Fort Street Mall. For more information, go to [aiahonolulu.org](http://aiahonolulu.org), or contact Mayumi Hara, AIA, at [mayu@jhara.com](mailto:mayu@jhara.com) or 628-7244.

#### APRIL 10-13

#### OSHA 3115 - Fall Protection

Formerly known as OSHA 3110, this four-day course offered by BIA-Hawaii and UC-San Diego's OSHA Training Institute covers state-of-the-art fall technology and current OSHA compliance standards. Topics include conventional systems, body holding devices, anchor points, harness

and vertical / horizontal traveling systems. Course includes a one-day field exercise demonstrating fall protection equipment. All materials provided on first day of class. Various credits available.

8 a.m.-4:30 p.m. CTC-Pacific, 94-487 Akoki Street, Waipahu. Register at [osha.ucsd.edu](http://osha.ucsd.edu). For more information, go to [biahawaii.org](http://biahawaii.org), call (800) 358-9206 or visit [oshatraining@ucsd.edu](mailto:oshatraining@ucsd.edu). Fee: \$750. No refunds after March 27.

#### APRIL 12

#### BIA-Hawaii General Membership Dinner Meeting - April

BIA-Hawaii's general membership dinner meeting features networking, fine dining and an address by Nick Rolovich, Rainbow Warriors Head Coach, considered one of the country's top offensive strategists.

5:30 -8 pm. Japanese Cultural Center of Hawaii, 2454 S. Beretania St. Online registration at [biahawaii.org](http://biahawaii.org). Contact Cathleen Main at 629-7507 or [clm@biahawaii.org](mailto:clm@biahawaii.org) for information and registration. Fee: BIA members \$65; nonmembers \$75. No refunds on cancellations or no-shows 24 hours prior to event.

#### APRIL 12, 13

#### Best Practices for Asphalt Pavements - Oahu & Maui Workshops

The Hawaii Asphalt Paving Industry (HAPI) presents Oahu (April 12) and Maui (April 13) workshops providing a basic understanding of materials, production, placement and compaction operations for a quality asphalt pavement. Jarrett Welch of Quality Paving Consultants presents a program geared to government agencies, contractors, engineers and construction managers. 7.0 PDHs available. Includes morning refreshments and lunch.

8 a.m.-4 p.m. (Oahu and Maui). On Oahu: Pearl Country Club, Pearl Rm. 1, 98-535 Kaonohi St., Aiea. On Maui: Courtyard Maui, Kahului Airport, 532 Keolani Pl. To register and for payment: go to [eventbrite.com/e/best-practices-for-asphalt-pavements-workshop](http://eventbrite.com/e/best-practices-for-asphalt-pavements-workshop) (click on Oahu or Maui link). Fee: HAPI members \$150; nonmembers \$175.

#### APRIL 13

#### YAF Pau Hana: Ferguson Showroom

AIA Honolulu's Young Architects

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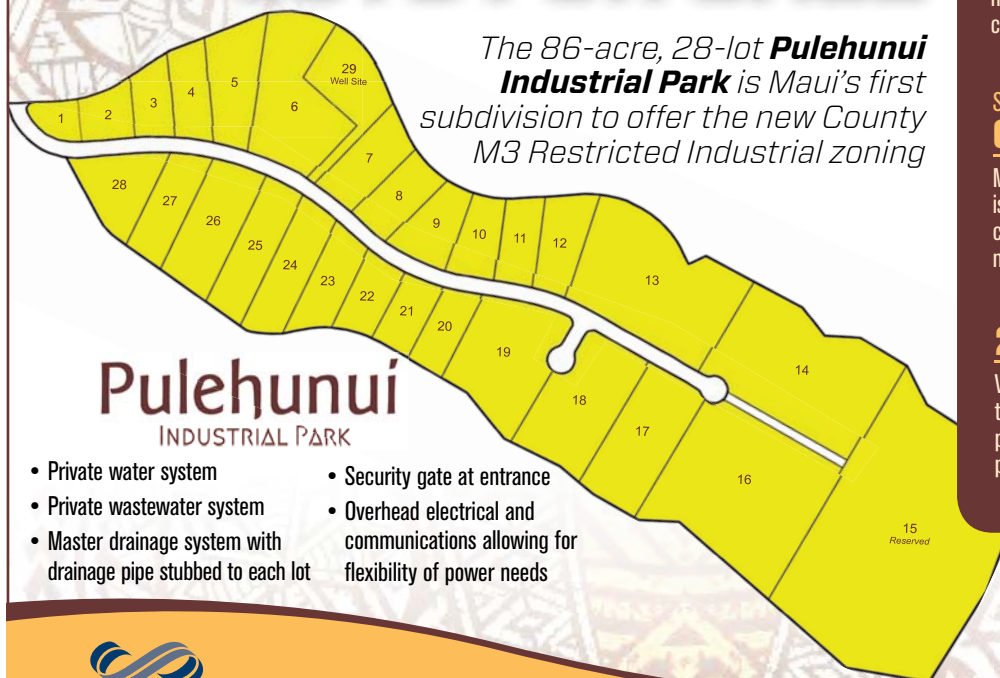
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Forum (YAF) hosts a pau hana at Ferguson Showroom. See top fixtures, hear the latest industry buzz and get to know your peers. YAF Honolulu welcomes professionals who are nearly licensed, newly licensed, and out to 10 years of licensure.

5:30-7 p.m. 925 Kokea St. Register in advance; online registration at aiahonolulu.org until April 13. For more info, contact Kris Powers via kris@masonarch.com or at 536-0556.

**APRIL 14**

**Deadline: Honolulu Rail Transit Project Poster Contest**

“Connecting Communities” is the theme for the 2017 Honolulu Authority for Rapid Transportation (HART) art poster contest for 9th through 12th grade students. Artists can use traditional media or digital technology to create their vision of how the rail project will be a catalyst for connecting people, culture, commerce and recreation in new ways. Entries must be delivered or mailed to HART’s downtown office at 1099 Alakea Street, Suite 1700 by 4:30 p.m. on April 14 to be eligible for judging. Cash prizes will be awarded, and six winners can invite a parent and a teacher to join them on a guided tour of the project. Entries will be displayed in the Kapolei Hale this summer.

Download contest entry forms at <https://tinyurl.com/zcdy9wq>. For more info, contact Bill Brennan at 768-6159 or 228-1526.

**APRIL 18-20**

**Construction Quality Management (CQM) for Contractors**

GCA of Hawaii hosts this three-day CQM course, a joint training program

provided by the U.S. Army Corps of Engineers, Honolulu Engineer District and the Naval Facilities Engineering Command, Pacific Division. This training is a mandatory certification requirement for all appointed contractor quality control system managers (CQCSM) and is valid for five years. First priority to GCs sending a federal job award letter with registration. Limited to two employees per company.

Noon-4 p.m. (daily). GCA of Hawaii, 1065 Ahua St. To register and for more information, go to [gchawaii.org](http://gchawaii.org). Email confirmation only. Fee: GCA members \$95; nonmembers \$125. No refunds for no-shows and cancellations received after April 12.

**APRIL 18-27**

**40-hr Safety Hazard Awareness Training for Contractors**

BIA-Hawaii’s five-day (April 18, 20, 22, 25, 27) training provides a Site Safety & Health Officer (SSHO) with the additional required certification as stated in the NAVFAC UFGS 1.6.1.1.1. Also covers the EM-385 and an EM-385 manual disc. Industry prerequisites required. Certification provided after successful testing.

8 a.m.-4 p.m. (daily). CTC-Pacific, 94-487 Akoki St., Waipahu. Online registration at [biahawaii.org](http://biahawaii.org). For more information, contact Barbara Nishikawa at [BLN@biahawaii.org](mailto:BLN@biahawaii.org) or 629-7505. Fee: BIA-Hawaii members \$350; nonmembers \$475; \$237.50 with available ETF funding.

**APRIL 19 - MAY 8**

**Construction Business Development Series (CBDS)**

Take your firm to the next level

with the new Construction Business Development Series covering foundation fundamentals, legal aspects, finances, bidding, permitting and more. This free five-day seminar—organized by BIA-Hawaii and the Small Business Administration—is presented through a grant award from Hawaii’s Department of Labor and Industrial Relations/Workforce Development Division.

4:30-7:30 p.m. (April 19 and 26; May 3, 8, and 17). CTC-Pacific, 94-487 Akoki St., Waipahu. Limited seating; first-come, first-served. Contact Barbara Nishikawa at [BLN@biahawaii.org](mailto:BLN@biahawaii.org) or 629-7505 for registration and information.

**APRIL 20**

**NAWIC General Membership Meeting/ Scholarship Night / \$1000 Tool Event**

At the National Association of Women in Construction’s April dinner and membership meeting, members celebrate two other important industry events.

5:30 p.m. (networking); 6 p.m. (dinner and meeting). Honolulu Country Club, 1690 Ala Puumalu St. For more information, go to [nawic114@yahoo.com](mailto:nawic114@yahoo.com) or Honolulu-nawic.org. Dinner fee \$35.

**APRIL 22**

**Building Voices Design Competition**

The University of Hawaii School of Architecture and Community Design Center launch the Building Voices Design Competition, featuring local, national and international designers, architects, artists, engineers and problem solvers. The day-long event will be held on Earth Day, April 22, at the Hawaii State Capitol.

First prize is \$5,000. second is \$2,500 and third is \$1,000. The winning designs will be featured in the Building Voices Traveling Exhibit, also launching at the Capitol on April 22.

For details, go to [buildingvoices.org/competition/](http://buildingvoices.org/competition/).

**APRIL 27-MAY 11**

**OSHA 30-Hour for the Construction Industry**

Offered by GCA of Hawaii. Instruction in OSHA safety standards for safety administrators, managers, supervisors, job site superintendents, project managers and engineers, foremen and workers. Course content: Introduction to OSHA, OSHA Focus Four Hazards and more. Includes lunch and course handout. Attendees will receive an OSHA card upon completion of the course.

7:30 a.m.-3 p.m. (April 27; May 2,

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4, 9, 11). GCA Conference Room, 1065 Ahua St. Limited seating; first-come, first-served. Register by April 20. To register and for more information: [info@gcawaii.org](mailto:info@gcawaii.org), [gcawaii.org](http://gcawaii.org) or 833-1681. Fee: GCA members \$200, nonmembers \$300. No refunds after April 20. Replacements accepted.

**MAY 1-4**

**OSHA 2045 Machinery and Machine Guarding Standards**

This BIA-Hawaii and UC-San Diego OSHA Training Institute four-day training by Harold Gribow covers common machinery types and related OSHA regulations and procedures. Topics include machinery processes, mechanical motions, points of operation, common OSHA machine guarding violations and more. A mock plant inspection provides hands-on experience. Various credits and OSHA safety certification available. All materials provided on the first day of class.

8 a.m.-4:30 p.m. (daily). CTC-Pacific, 94-487 Akoki St., Waipahu. Register at [osha.ucsd.edu](http://osha.ucsd.edu). For more information, go

to [biahawaii.org](http://biahawaii.org), call (800) 358-9206 or visit [oshatraining@ucsd.edu](mailto:oshatraining@ucsd.edu). Fee: \$750. No refunds after April 17.

**MAY 6, 13**

**Oral and Written Communication (STP Unit 2)**

GCA of Hawaii presents the Associated General Contractors of America's Supervisory Training Program (STP), designed and field-tested for contractors to help them effectively manage people, time, equipment and materials. Unit 2—Oral and Written Communication (2015 edition)—is the second in STP's six-course program. Instructor Glenn Nohara, Genba Hawaii Inc. president, covers effective communication, meetings, persuasion and written records and more. Includes manual and lunch. Certificate available after completion of course.

8 a.m.-4 p.m. (daily). GCA Conference Room, 1065 Ahua St. Register by April 21. Limited seating; first-come, first-served. To register and for more information, go to [\[gcawaii.org\]\(http://gcawaii.org\) or \[gcawaii.org\]\(http://gcawaii.org\), or call 833-1681. Fee: GCA of Hawaii members \\$295; nonmembers \\$395. No refund after April 21. Substitutions available.](mailto:info@</a></p>
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**MAY 10**

**Hawaii OSHA Workshop**

The federal Occupational Safety and Health Administration (OSHA), the State of Hawaii OSHA branch (HIOSH) and the American Society of Safety Engineers (ASSE) Hawaii Chapter present a comprehensive review of 2017 jobsite safety rules and regulations, including HIOSH, NFPA 70e and new EM-385-1-1 USACE updates, the new federal OSHA record-keeping rule and more. Register by April 13 for Early Bird Discount. Includes parking, continental breakfast and lunch. Vendor booths available.

7:15-8 a.m. (check-in/breakfast/networking); 7:50 a.m.-3:45 p.m. (program). Dole Cannery, Pomaikai Ballrooms, 735 Iwilei Rd. For online payment and registration, go to [cvent.com/events/hawaii-osh-workshop/fees](http://cvent.com/events/hawaii-osh-workshop/fees). Fee: Early Bird \$105; general \$125.

DESTINATION: HONOLULU  
ETA: 9:30 - 11:30 A.M.

S	M	T	W	T	F	S
31	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
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5	6	7	8	9	10	11

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# Leading the LED Revolution

BY DON CHAPMAN



The last time a revolution was lit quite this well, it was Thomas Edison's. But the age of Edison is dead. Long live Edison. That's just one headline-worthy nugget gleaned from a conversation with Peter Dawson at the Mapunapuna



Peter Dawson

office of Sunburst Designs, the lighting company he founded in 1975 and has run for 42 years with partner and pal John Hunt. Among other projects, Sunburst works with The Queen's Medical Center on lighting in its surgery rooms, and most recently was involved with the newly opened Hilton Grand Islander.

"We did the lighting for that with several of our (associate) companies," Dawson says. "In the rooms, they only have three down lights—LEDs, only 13 watts apiece, 39 total. It

would have been 300 total before."

The future is here: The LED market accounted for \$26 billion in 2016, according to a recent industry study, and is expected to grow to \$54 billion by 2022. No wonder. LEDs are about 20 percent more power efficient than Edison's incandescent bulbs, with higher brightness and longer life span.

"Edison is way over. ... It changes the thinking completely."

Like most revolutions, this one is about control.

- Cisco Systems has introduced its Internet of Things-based Digital Ceiling. Essentially, Dawson says, it offers "every control you can have. AC, security, lighting and everything that happens in a building gets funneled into one IP address. ... Really, the transition is going from Edison to a brave new world.

"It's kind of a Big Brother thing. Let's say you have an armband; you come into your building and it identifies you, and you go to Room 312 and it can source that. If someone says, I want to find so-and-so, right now, if you're in that building they will find you. That's how large this thing is. The changeover from traditional lighting to LED is the last piece.

"And when you walk into 312, sensors will turn on the lights and adjust the AC. ... They've researched how many people it will take in a room to raise the temperature one degree. ... If outside light comes into the room, the lights automatically dim, or if it's a dark rainy day, the lights

come up.

"It's all about control."

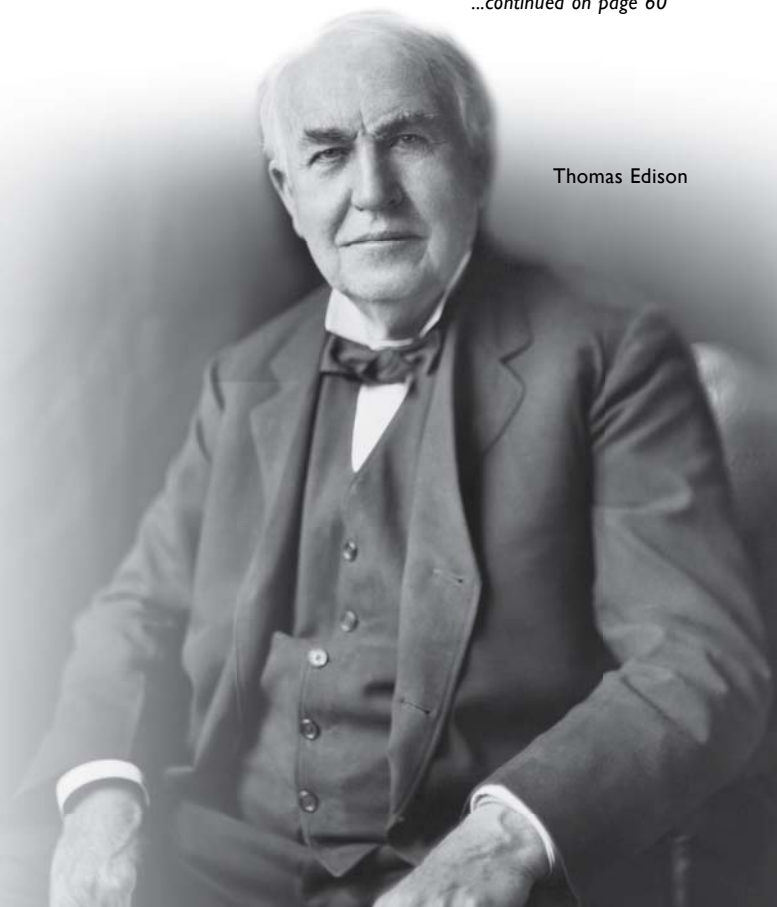
- The Hawaii Department of Transportation has a \$150 million contract with Johnson Controls to replace traditional lighting on roadways, as well as at airports and harbors, with LED lighting.

- The City and County of Honolulu put out a bid to replace its 52,000 street lights with LEDs, then retracted it, in large part because UH scientists argued the lighting's bluish hue would interfere with telescopes atop Mauna Kea and Haleakala. The project is currently up in the air, so to speak, but whenever the city replaces street lights with LEDs, each "smart light" will have a sensor that sends a signal to a central location with the name of that fixture, its address and GPS location and whether it's operating fully or failing, making repairs faster and easier.

- Part of the revolution is measuring watts per square foot, and it's in Hawaii's future. California, Dawson says, has already adopted Article 24, which requires a maximum 4 watts per square foot in housing, less than 3 for commercial. You can't do that with Edison's incandescent way.

- "All of Hawaii's military bases," Dawson says, "have been mandated to make an immediate effort to change out all traditional lighting to LED, and to get their bases 100 percent renewable—and get off the Hawaiian Electric grid. And they're about 23 percent of Hawaiian Electric's grid load right now. ... The military is investing huge amounts

...continued on page 60



Thomas Edison



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# Agency Awards Continue Hot Pace

Two months into the new year and contracts awarded by government agencies have vaulted more than 9.1 percent ahead of last year's pace.

With contracts valued at \$69,036,691 in February, Hawaii builders have landed \$177,763,649 in agency jobs so far in 2017 compared to \$162,208,301 at this point last year.

February's contracts also more than doubled the amount from the same month in 2016 when contractors landed only \$30,938,845 in agency bids.

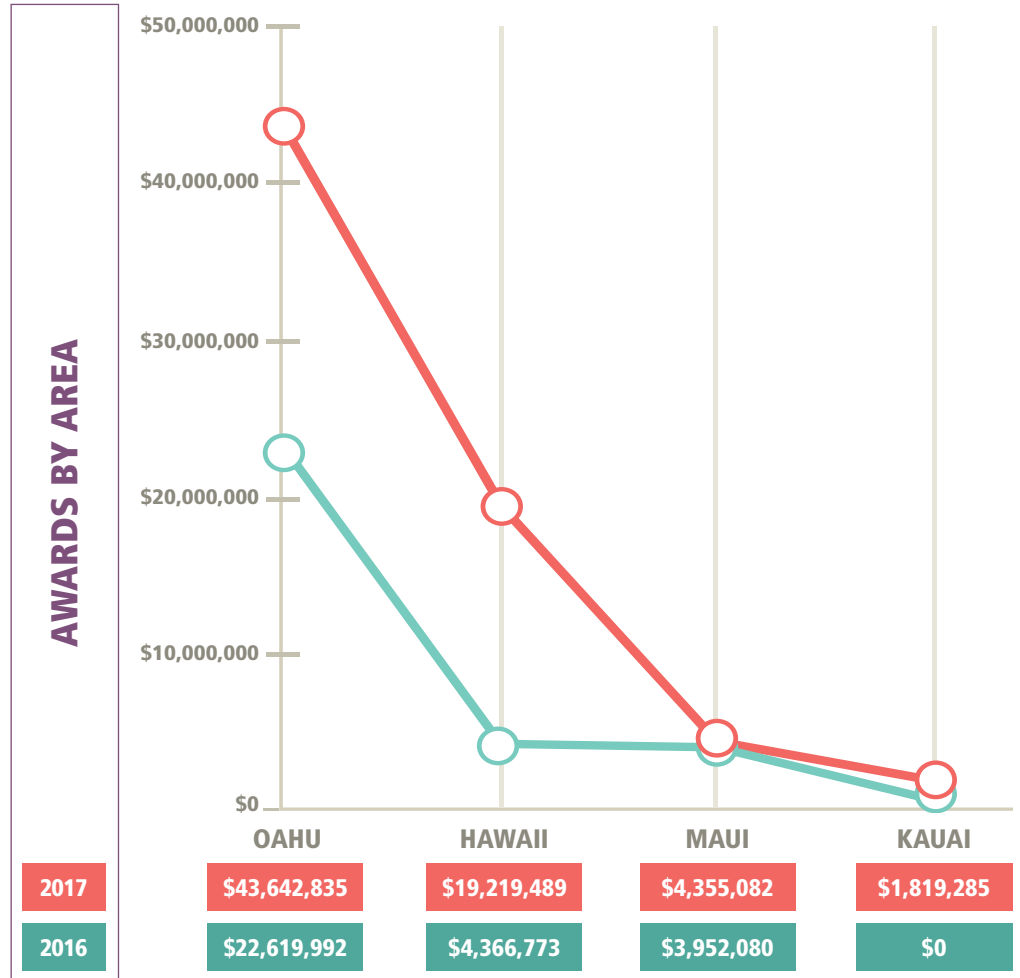
Hawaiian Dredging Construction Co. Inc. won the largest single contract, valued at \$14,920,000 for a bridge project on Kamehameha Highway for the Central Federal Lands Highway Division of the Federal Highway Administration in cooperation with the Hawaii Department of Transportation. Hawaiian Dredging is tasked with improving Roosevelt Bridge (Kipapa Stream) through rehabilitation, addressing load capacity, bridge railing and transitions.

Arita/Poulson General Contracting landed three

contracts with a total value of \$12,277,137, with the largest being a \$7,759,820 heat abatement job, Phase 1B, at Nanakuli High School and Intermediate School.

F&H Construction picked up six contracts totaling \$11,936,440 in February. F&H's largest is a rebid for \$4,306,660 in security systems repairs and

improvements at Maui Community Correctional Center, followed by a \$3,170,000 heat abatement, Phase 1A, job at Maui High School.



## AWARDS BY AGENCY

DOE	\$34,545,409
FEDHWY	14,920,000
UH	11,241,647
DAGS	4,306,660
DOT	1,867,335
C&C Honolulu	1,701,147
DPWHI	454,493
<b>Total</b>	<b>\$69,036,691</b>

## FEBRUARY'S TOP 10 CONTRACTORS

1) Hawaiian Dredging Construction Co. Inc. (1)	\$14,920,000
2) Arita/Poulson General Contracting (3)	12,277,137
3) F&H Construction (6)	11,936,440
4) All Maintenance & Repair (1)	5,227,618
5) Ted's Wiring Service Ltd. (1)	3,676,071
6) Nan Inc. (1)	2,657,099
7) Elite Pacific Construction Inc. (2)	2,613,000
8) Close Construction Inc. (2)	2,483,532
9) Shioi Construction Inc. dba Creative Partition Systems (1)	2,474,200
10) Maui Kupuno Builders LLC dba Manu Builders LLC (1)	1,819,285

Information is summarized from the Contractors Awarded section of *BIDService Weekly*, compiled by Research Editor Alfonso R. Rivera.

## FEBRUARY *(Awards are rounded up to the nearest dollar.)*

### Oahu

<b>Hawaiian Dredging Construction Co. Inc.</b> .....	<b>\$14,920,000</b>
HI STP SR99 (1), Roosevelt (Kipapa Stream) Bridge	
<b>Arita/Poulson General Contracting</b> ...	<b>7,759,820</b>
Nanakuli High and Intermediate School, Heat Abatement, Phase 1B	
<b>All Maintenance &amp; Repair</b> .....	<b>5,227,618</b>
Saunders Hall, University of Hawaii at Manoa, Exterior Repairs and Reroof	
<b>Nan Inc.</b> .....	<b>2,657,099</b>
Marine Center Relocation for the SOEST at Honolulu Harbor and Sand Island, Pier 34/35 Building Improvements	
<b>Arita/Poulson General Contracting</b> ..	<b>1,904,339</b>
Ewa Elementary School, Campbell and Kapolei Complexes, Heat Abatement, Phase 1B	
<b>Close Construction Inc.</b> .....	<b>1,723,032</b>
Aliamanu Middle School, ADA Transition Plan	
<b>Elite Pacific Construction Inc.</b> .....	<b>1,615,000</b>
Music Complex, Acoustical Analysis and Remediation, UH-Manoa	
<b>Prometheus Construction</b> .....	<b>1,106,150</b>
Manoa Stream Tributary Retaining Wall	
<b>Elite Pacific Construction Inc.</b> .....	<b>998,000</b>
Castle High School, Bldg. BB, A/C-5 ACU/PACU	
<b>A's Mechanical &amp; Builders Inc.</b> .....	<b>981,000</b>
Lehua Elementary School, Heat Abatement, Phase 1B	
<b>Close Construction Inc.</b> .....	<b>760,500</b>
UHM CTAHR, Pearl City Urban Garden Center, General Repairs	
<b>Construction Engineers LLC</b> .....	<b>753,430</b>
School of Architecture, General Courtyard Deck Repairs, UH-Manoa	
<b>Wasa Electrical Services Inc.</b> .....	<b>609,600</b>
Koko Head Elementary School, Campus Replace Fire Alarm System	
<b>MEI Corporation</b> .....	<b>594,997</b>
West Loch Golf Course National Pollutant Discharge Elimination System Improvements	

<b>CC Engineering &amp; Construction Inc.</b> .....	<b>582,800</b>
Waianae High School, Waianae and Nanakuli Complexes, Phase 1A, Heat Abatement	
<b>Wasa Electrical Services Inc.</b> .....	<b>546,700</b>
Aiea Intermediate School Campus, Fire Alarm Upgrade	
<b>MJ Construction Co.</b> .....	<b>387,500</b>
Kaimiloa Elementary School, Miscellaneous R&M FY 2013	
<b>Pacific Isles Equipment Rentals Inc.</b> .....	<b>228,000</b>
UHM CTAHR, Pearl City Urban Garden Center, Perimeter Fencing Repairs	
<b>International Roofing &amp; Building Construction</b> .....	<b>135,900</b>
Pearl Ridge Elementary School, Miscellaneous R&M FY 2010	
<b>Allied Pacific Builders Inc.</b> .....	<b>103,300</b>
Leeward District Office, Miscellaneous R&M FY 2008	
<b>Hawaii Industrial Services Ltd.</b> .....	<b>48,050</b>
Pumping pf Underground Sanitary Holding Tanks at Interstate Route H-3 Freeway, Harano Tunnel	

### Maui

<b>F&amp;H Construction</b> .....	<b>4,306,660</b>
Maui Community Correctional Center, Security Systems Repairs and Improvements (Rebid)	
<b>Ted's Wiring Service Ltd.</b> .....	<b>3,676,071</b>
Farrington High School, Electrical Upgrade	
<b>F&amp;H Construction</b> .....	<b>3,170,000</b>
Maui High School, Lahainaluna, Maui and Molokai Complexes, Heat Abatement, Phase 1A	
<b>Arita/Poulson General Contracting</b> ...	<b>2,612,978</b>
Princess Nahienaena Elementary School Phase 1B, Lahainaluna Heat Abatement	
<b>F&amp;H Construction</b> .....	<b>1,845,000</b>
Lihikai Elementary School, Lahainaluna, Maui and Molokai Complexes, Heat Abatement, Phase 1A	
<b>F&amp;H Construction</b> .....	<b>1,042,000</b>
Hana High and Elementary School, Miscellaneous R&M FY 2013	

<b>F&amp;H Construction</b> .....	<b>891,250</b>
Lahaina Intermediate School, Heat Abatement, Phase 1A	
<b>F&amp;H Construction</b> .....	<b>681,530</b>
Princess Nahienaena Elementary School, Heat Abatement, Phase 1A	
<b>Castaway Construction &amp; Restoration LLC</b> .....	<b>575,000</b>
Lahainaluna High School, Building T, Renovate Restrooms	
<b>Tory's Roofing &amp; Waterproofing Inc.</b> .....	<b>419,000</b>
King Kekaulike High School, Miscellaneous R&M FY 2013	

### Hawaii

<b>Shioi Construction Inc. dba Creative Partition Systems</b> .....	<b>2,474,200</b>
Kekaha Elementary School, Waimea Canyon Middle School, Waimea High School, Waialua, Waimea and Kealakehe Complexes, Heat Abatement, Phase 1A and 1B	
<b>Stan's Contracting Inc.</b> .....	<b>798,300</b>
Waiakea Elementary School, Covering of Existing Playcourt	
<b>Harbor Offshore Inc.</b> .....	<b>454,493</b>
Hilo Outfall Landside Repairs	
<b>Stan's Contracting Inc.</b> .....	<b>247,300</b>
Waimea Elementary School, Miscellaneous R&M FY 2013 (Architectural)	
<b>Heartwood Pacific LLC</b> .....	<b>185,000</b>
Waimea Elementary and Middle School, Miscellaneous R&M FY 2010, Kamuela	
<b>Elcco Inc.</b> .....	<b>123,489</b>
Kohala High School, Miscellaneous R&M FY 2010	
<b>Stan's Contracting Inc.</b> .....	<b>72,300</b>
Kohala High School, Miscellaneous R&M FY 2013	

### Kauai

<b>Maui Kupuno Builders LLC dba Manu Builders LLC</b> .....	<b>1,819,285</b>
Kaunualii Highway Resurfacing, Koloa Road to Halewili Road	

## LOW BIDS

The companies below submitted the low bids in February for the work detailed. Submitting the lowest bid is not a guarantee of being awarded the job. However, it is a strong indication of future work, and subcontractors can plan accordingly.

### Oahu

<b>Brian's Contracting Inc.</b> .....	<b>\$2,043,100</b>
Makakilo 920 and Waipahu 228 No. 2 Reservoir Facility Repairs	
<b>Ralph S. Inouye Co. Ltd.</b> .....	<b>1,399,000</b>
Kapolei Middle School, Miscellaneous R&M FY 2010-11	
<b>Alakona Corp.</b> .....	<b>1,203,600</b>
Paving Restoration Along City Jurisdiction, Areas 1 and 4	
<b>BCP Construction of Hawaii Inc.</b> .....	<b>878,860</b>
Honouliuli Wastewater Treatment Plant Operations Locker Building Renovation	
<b>Blackhawk Security</b> .....	<b>706,501</b>
Maintenance of Video Monitoring and Access Control System (VMACS), Honolulu International Airport	
<b>Close Construction Inc.</b> .....	<b>199,391</b>
Ewa Beach Elementary School, Building C, Replace/Repair Stairs	
<b>Peterson Bros. Construction Inc.</b> .....	<b>180,069</b>
Kamaile Elementary School, Miscellaneous R&M FY 2010	
<b>Fine Builders LLC</b> .....	<b>123,767</b>
Hokulani Elementary School, Building B, Renovate 1st Floor	
<b>Lloyd H. Tokuda</b> .....	<b>99,990</b>
Maunawili Elementary School, Building H, Recarpet Library	
<b>MB Construction</b> .....	<b>75,000</b>
Repair Concrete Wall at Pier 2, Honolulu Harbor	

### Maui

<b>F&amp;H Construction</b> .....	<b>3,066,000</b>
Lihikai Elementary School, Heat Abatement, Phase 1B	
<b>Kahului Carpet &amp; Drapery Products</b> ..	<b>1,470,312</b>
Kulanihakoi Street Recycled Waterline Extension Project, Kihei	
<b>Power Constructors LLC</b> .....	<b>531,546</b>
Molokai High School, Miscellaneous R&M FY 2013	
<b>Central Construction Inc.</b> .....	<b>313,300</b>
King Kekaulike High School, Miscellaneous R&M FY 2014	
<b>Island Construction &amp; Demolition</b> .....	<b>309,910</b>
Maunaloa Elementary, Miscellaneous R&M FY 2014, Molokai	
<b>Blackhawk Security</b> .....	<b>129,960</b>
Maintenance of Video Monitoring and Access Control System (VMACS), Kahului Airport	

### Hawaii

<b>Central Construction Inc.</b> .....	<b>700,020</b>
Waiakeawaena Elementary School, Miscellaneous R&M FY 2014	
<b>BCP Construction of Hawaii Inc.</b> .....	<b>590,189</b>
Honokaa High and Intermediate School, Armory Replace Floor	
<b>Summit Construction Inc.</b> .....	<b>483,888</b>
Kau High and Pahala Elementary School, Miscellaneous R&M FY 2010	

<b>Isemoto Contracting Co. Ltd.</b> .....	<b>377,000</b>
Kealakehe Intermediate School, Building H, Reroof Building, Kona	
<b>Stan's Contracting Inc.</b> .....	<b>373,500</b>
Kealakehe High School, Miscellaneous R&M FY 2014	
<b>Elcco Inc.</b> .....	<b>229,600</b>
Hilo High School, Areas 01 and 03 Parking Light Repairs	
<b>Stan's Contracting Inc.</b> .....	<b>207,300</b>
Hilo Intermediate School. Gym Bleacher Replacement and Floor Repair	
<b>Network Power Solutions Inc.</b> .....	<b>85,800</b>
Maintenance of Video Monitoring and Access Control System (VMACS), Kona International Airport	
<b>Pacific Isles Equipment Rentals Inc.</b> .....	<b>37,500</b>
Holualoa Elementary School, P11 Install Boundary Fence	

### Kauai

<b>Society Contracting LLC</b> .....	<b>185,037</b>
Kapaa Elementary School, Building B and E, Recarpet	

# Homefield Advantage for Farrington High

RSI unveils \$19.5M state-of-the-art stadium at 81-year-old school

**T**his fall, for the first time since opening its doors in 1936, W.R. Farrington High School's football team will have a "home-field" advantage.

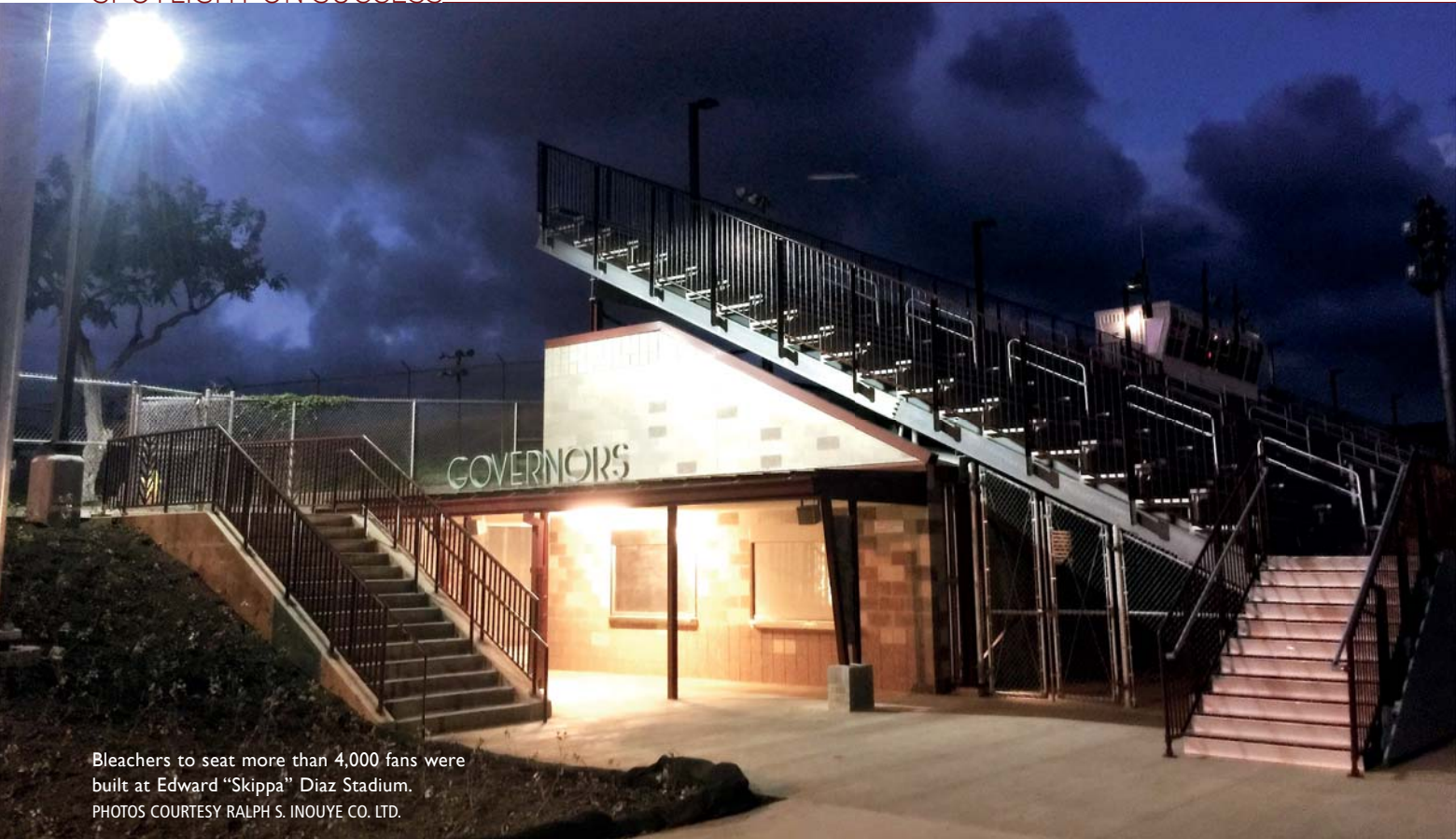
In February, general contractor Ralph S. Inouye Co. Ltd. (RSI) wrapped up work on the Governors' \$19.5 million Edward "Skippa" Diaz Stadium. A commemoration ceremony was held on Feb. 23 at Kusunoki Field, named after Henry Kusunoki, another of the school's legendary coaches.

Farrington High School's new stadium, built by Ralph S. Inouye Co., was completed in February.









Bleachers to seat more than 4,000 fans were built at Edward "Skippa" Diaz Stadium. PHOTOS COURTESY RALPH S. INOUYE CO. LTD.

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RSI launched Phase 1 of the Farrington High School Long Range Development Master Plan for the state Department of Education in February 2015.

“Farrington High School, with its storied athletic history and the center of the Kalihi community, never had the facility to host homecoming or home football games,” says Michael S. Inouye, vice president at RSI. “This project provided one of the largest high schools in the state a state-of-the-art track and field, turf (football) field, locker rooms, press box and spectator seating.

**“The excitement for the coming football season has invigorated the community.”**

*—Michael Inouye*

“The excitement for the coming football season has invigorated the community.”

Inouye says the scope of the job includes “selective demolition, site work and grading” along with installing new synthetic track and field turf and adding stadium lights, aluminum bleachers and the new athletic building with lockers, showers, facility room, concession and storage areas and putting in a new parking lot.

The project’s standout feature? “The simple use of

polished CMU to accent the school colors and the beautiful track and field,” he says.

But there’s more, such as the huge “G” painted at midfield and new bleachers that can hold up to 3,500 maroon-clad Governors fans and as many as 700 spectators on the visitors’ side.

Inouye also gave a nod to Applied Servicing Technology, which specializes in sports surfacing, for the success of the track and field facilities at the stadium.

Even as RSI crews worked to finish the stadium, the Governors’ football players have watched and waited anxiously for the chance to take the field. Farrington has never held a “homecoming” game at home, and instead has had to suit up over the years on other fields, such as Roosevelt High School and Aloha Stadium.

“The FHS football team wanted to practice on their new field prior to completing the locker room and



seating. The entire (project) team worked together to finish the field and secure the completed work so that the football team could practice,” Inouye says, adding that project goals “most definitely” were achieved.

“The facility not only has strengthened school pride, but will provide a gathering place for the Kalihi community,” he says.

Inouye also credits RSI project manager Eric Goo and Mark Tagami, vice president of operations, for their contributions to the successful completion of the project. 🏠

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Sunrise Construction Inc. used cold-formed floor systems with metal pan decking ledgered on all floors at The Residences at Makiki. PHOTO COURTESY SUNRISE CONSTRUCTION INC.

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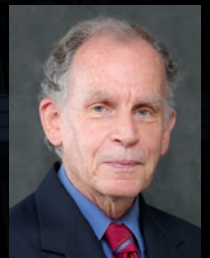
Big changes—including new building codes—are coming to Isle residential construction

BY BRETT ALEXANDER-ESTES

**A**s of April, the State of Hawaii has a new energy building code, and Island residential construction will never be the same.

Howard Wiig, energy analyst at the state's Department of Business, Economic Development & Tourism, says the new code reflects the changes contained in the 2015

International Energy Conservation Code and “will be a major contribution” to the state’s plan to achieve



Howard Wiig

100 percent clean energy by 2045. An example of one of the new codes, he says, is that no more than 40 percent of a building's façade can be fenestration or windows unless the building's design also includes other "performance leveling" features.

On March 21, Chapter 3-181.1, the new energy code within the Hawaii Administrative Rules, was filed with

**“The estimated energy savings resulting from the new code will be between 30 and 33 percent.”**  
*—Howard Wiig*



Keauhou Lane mid-rise section and tower  
 PHOTO COURTESY PHIL CAMP/ HI•ARCH•Y L.L.P.

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the lieutenant governor's office by the Department of Accounting and General Services. Chapter 3-181.1 is expected to take effect on April 1.

The new code applies to residential renovations as well as new construction, and is just one of many changes ahead.

### An End to Energy Star?

President Trump's preliminary 2018 budget slashes funding for the Environmental Protection Agency and the Department of Housing and Urban Development, among others.

How these proposed cuts will impact Hawaii residential projects is anybody's guess. According to Reuters news agency, one probable casualty is the Energy Star appliance program.

On the plus side, the administration's \$1 trillion infrastructure plan—still under wraps—may spark new Isle residential development.

### Rising Interest Rates

In March, the Federal Reserve raised its benchmark interest rate, the second hike in three months and a sign of more to come. According to Phil Camp, Keauhou Lane project architect



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Phil Camp

and hi•arch•y l.l.p. principal, more hikes “will likely further impact the for-sale product that isn’t ready to go to construction within the next 24 months.”

### High-Density Projects

There is still residential capacity at existing developments in Ewa and Kapolei, says Evan Fujimoto, Building Industry Association of Hawaii (BIA-Hawaii) president. But going forward, he says, “the focus will shift to infill building and high density projects in the urban core.”



Evan Fujimoto

Fujimoto notes that some bills in the 2017 Legislature provide high-density incentives by

waiving infrastructure capacity costs. “This is targeting developers who can offer units with prices for buyers less than 80 percent of AMI,” he says.

“The focus will shift to infill building and high-density projects in the urban core.”

—Evan Fujimoto

“Infrastructure capacity building financing and loan facility bills are also working their way through this legislative session,” Fujimoto says. “All these are aimed at increasing infrastructure capacity, which is necessary for developers to even propose projects.”

### Accelerated Affordables

In a February address, Mayor Kirk Caldwell announced plans for the construction of 800 new affordable dwellings per month in the City and County of Honolulu.



Kirk Caldwell

The City Council must first adopt the plan, which trades city real estate in exchange for privately developed affordable housing, adjusts affordable housing production requirements and provides other financial incentives.

While aspects of the plan are said to be problematic, some in the building industry say trading real property

### See the New Codes

Besides the energy code, other Hawaii building codes are up for repeal and replacement.



Cindy McMillan

The Final Rule Approval for changes to the state’s energy and electrical building codes are posted at: <http://ags.hawaii.gov/bcc/building-code-rules/comments-submitted-on-proposed-building-code-amendments>

These proposed changes are currently going through the Final Rule review process, says Cindy McMillan, Office of the Governor communication director.

“Upon the governor’s signature,” McMillan says, “the final rules are delivered to the lieutenant governor’s office and will go into effect 10 days after filing.”

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View of Aeo's Rooftop Amenity and residences with sustainable finishes and furnishings  
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for affordable development shows promise. The mayor has pledged to fund new residential infrastructure and says his plan will “change the fundamentals in housing in basic, major, aggressive ways.”

### High-Tech Materials

At the 2017 Pac Rim Steel Framing Conference in May, “there will be seminars and exhibits on new technology for steel framing,” says Akira Usami, California Expanded Metal Products Company (CEMCO) field sales manager, Hawaii region, and national product manager for clips and connectors.



Akira Usami

Cold-formed steel (CFS) is the framing material of choice in approximately 70 percent of the state’s current residential projects, Usami says, and “as transit-oriented development begins, mid-rise construction will be a perfect fit for CFS.”

“CFS mid-rise structures perform exceptionally well in seismic testing,”

# Material Concerns

In February, said Associated General Contractors of America Chief Economist Ken Simonson, “steep price hikes have hit a wide range of key materials used in construction in the past few months, and contractors have received numerous letters from vendors announcing large additional increases in the next month or two.” Some examples:

**Steel:** China, the world’s leading producer, is reported to be cutting production now so that it can decrease annual output by 20 percent in 2020.

**Lumber:** In the U.S., the price of framing lumber is up 15 percent since the start of 2017.

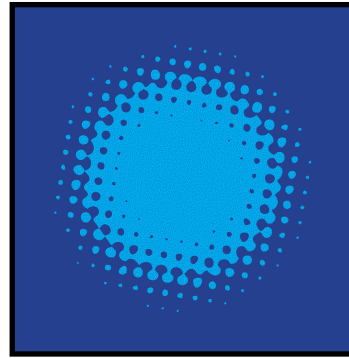
**Glass:** The Bureau of Labor Statistics’ January 2017 Producer Price Index for flat glass manufacturing increased 3.2 percent over January 2016.

“As transit-oriented development begins, mid-rise construction will be a perfect fit for cold-formed steel.”

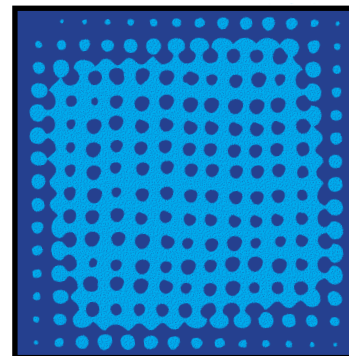
—Akira Usami

Usami notes, “and new building codes will reflect the performance of CFS in these rigorous tests.”

At Schofield Barracks, Sunrise Construction Inc. Project Manager Bobby Flores says the new 186-unit Santa Fe townhome project utilizes light gauge metal wall and floor framing with wood trusses.



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Pre-fabricated steel wall panels were built off-site and delivered for quick installation.

At another Sunrise project in Honolulu, Flores says, steel wall panels for The Residences at Makiki were also prefabricated off-site, "saving precious and very limited jobsite space."

Steel frame is also making a strong showing in the Hana Like neighborhood at Marine Corps Base Hawaii.

"We believe that our rental homes should last over 40 years each," says Gregory Rapp, Hunt Military Communities vice president, citing



Gregory Rapp

the units' "continuous vinyl siding and light-gauge steel framing with minimal metal exposure." The entire neighborhood, Rapp says, is being built with LEED Gold-certified designs.

Not to be outdone, lumber is also staking a claim in Hawaii homebuilding. Says Erin McClanahan, Sause Bros. marketing vice president: "We



DJI MATRICE 210 at Drone Services Hawaii

## Aerial Ally

Michael Elliott, Drone Services Hawaii owner and general manager, says that while drones haven't yet caught on at residential projects, their features are made to order:

Roofing and solar companies use drones to conduct pre- and post-project roof inspections, and build a footage archive for future reference.

On a big residential project, drones can map the area before the company breaks ground and provide ongoing visual reports for progress meetings.

“In reality, a drone is just another job site tool like a nail gun,” Elliott says. “Compared to a hammer, a nail gun is faster, more accurate and safer—and a drone offers the same advantages to a construction project.”

are currently seeing forest product shipments to Hawaii trending upward on a year-over-year basis. And because we are witnessing this trend in dimensional lumber, finish lumber as well as with engineered forest products, it would suggest that new construction projects are on the rise in 2017.”



Erin McClanahan

Camp says current hi•arch•y l.l.p. single-family and single-family custom projects are using more engineered wood. This is probably no surprise to

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Mike Fujimoto

Mike Fujimoto, president and CEO of HPM Building Supply, which sells its own line of package homes.

“I think cross laminated timber does have an exciting future,”

Fujimoto says. “It is a fairly new category, a new product. And it is not widely used yet. But based on its structural properties, I think it has a lot of potential (in residential construction). In terms of I-joists, laminated strand board—all this stuff has become very popular.”

Craig N. Bailey, Honsador Lumber and Truss vice president, agrees. “Engineered wood technology continues to advance,”



Craig Bailey



The Residence at Makiki: five-story light gauge metal framing with red iron post and distribution members

PHOTO COURTESY SUNRISE CONSTRUCTION INC.

he says, citing Isle EWP use in beams, floor joists, subfloor, roof sheeting, siding and trim.

Other in-demand Honsador home-building products include “composite Trex decking, Dryvit stucco systems and IKO roofing.” Better efficiencies, Bailey says, can also be realized with Honsador’s “lighter, stronger drywall products manufactured by USG; consistent engineered wood products manufactured by Weyerhaeuser, LP

and Boise and insulation from Johns Mansville that installs quickly and is less irritating to the skin.”

Gatorbar, a new lightweight rebar substitute, also shows promise.

“We believe Gatorbar has great potential for Hawaii residential projects,”



Gary Okimoto

Santa Fe light gauge metal wall and floor framing with wood trusses

PHOTO COURTESY SUNRISE CONSTRUCTION INC.



says Gary Okimoto, Honolulu Wood Treating LLC senior vice president. He says a Kauai contractor recently installed 1600 lineal feet of Gatorbar in a commercial warehouse parking lot with more than 180 cubic yards of concrete in the pour.

**“I think cross laminated timber does have an exciting future.”**

*—Mike Fujimoto*

Fire sprinklers, however, are expected to add considerable costs to Hawaii homebuilding. Gladys Marrone, BIA-Hawaii CEO, says mandatory sprinklers are part of the state’s pending adoption of the 2012 International Residential Code (IRC). Marrone favors Act 83—an anti-sprinkler measure—currently before the Legislature. If Act 83 is not passed, she says, “all new one- and two-family

## First Installments?

Mayor Caldwell has suggested the following Honolulu parcels as sites for 800-unit-per-month affordable housing:

- Aala Park’s ewa half for 90 new homes
- Seven acres for new senior housing near the former Aiea Sugar Mill
- Eighteen acres near Leeward Community College
- Seventeen acres in Kapolei
- Affordable towers built on the future Pearlridge and Ala Moana Center rail stations
- Possibly converting downtown Honolulu’s Alii Place into affordable homes

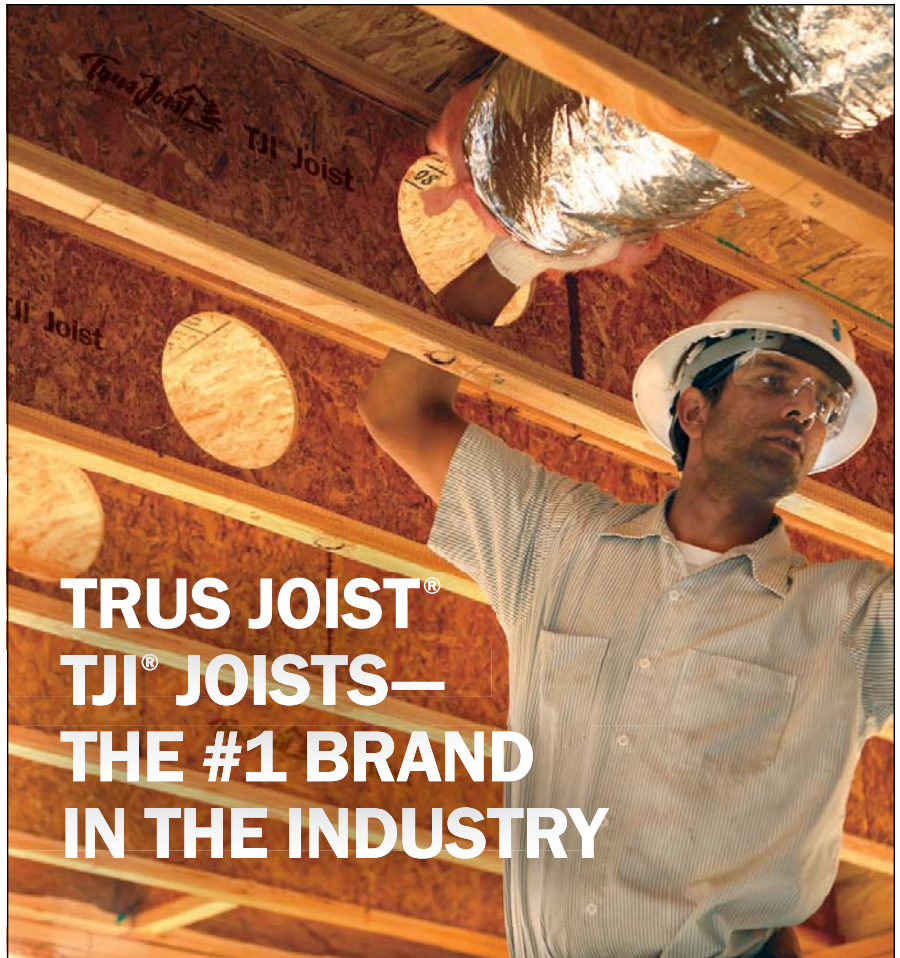
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Gladys Marrone

homes, including ADUs, in Honolulu and statewide, will be required to have fire sprinklers. It will be very difficult to remove it from the code to make it optional.”

### Flexible Floor Plans

These days, “families have to pool resources and build homes that can accommodate three, sometimes four, generations,” says BIA-Hawaii’s Fujimoto, who is also president of Graham Builders, a residential design and construction firm.

In 2017, Fujimoto says aging-in-place and universal design continue to gain in popularity as seniors opt to remain in their homes.

For multi-generation and senior clients, he says, Graham Builders emphasizes wheelchair-accessible bathrooms downstairs, widening hallways to 48 inches and doorways to 36 inches.

## Package Tour HPM Building Supply

Mike Fujimoto, president and CEO of HPM Building Supply, says his company’s top three HPM Home package sellers for end-2016/start-2017 are:

- HPM ‘Maluhia’
- HPM ‘Honokaa’
- HPM ‘Lauhala’

### Honsador

“Our most popular package homes are the ‘Kilohana,’ ‘Malia’ and ‘Malanai,’ and often varies from island to island,” says Craig N. Bailey, Honsador Lumber and Truss vice president, of Honsador’s Island Homes Collection. Last year, he says, Honsador introduced four new models called the Lili’i Cottage Collection: “These small homes start at only 400 square feet and are primarily designed for new ADUs (accessory dwelling units).”

HPM Building Supply’s ‘Maluhia’ package home in Kaneohe  
PHOTO COURTESY HPM BUILDING SUPPLY



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- Residential construction will be one of the prime drivers for the building sector, as the need for more housing intensifies with Hawaii's growing population.



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A kitchen recently completed by Graham Builders using Cambria's "Britannica" quartzite counters

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“People want to live and feel independent, even though many people are living under one roof,” he says. “Separate entrances, sound-proofing, larger laundry facilities, better lighting, and minimizing level changes are all important to address the needs for aging-in-place. We were even asked by one homeowner how their kitchen could be used by three families simultaneously, which translated to having two large sinks and two cooking ranges with a large island.”

### ‘Green’ Rooms

Many new interiors sport fashionable colors, but in 2017 they also need to be ‘green.’

The Howard Hughes Corporation’s new Aeo tower, says Todd Apo, Ward Village vice president of community development, “features highly responsible construction choices, including eco-friendly finishes such as low-emitting carpet, paints, tile, sealants and adhesives instead of less



Todd Apo

expensive code-allowable products.”

BIA-Hawaii’s Fujimoto says recent technological advances in manufacturing are increasing options for residential finishes, “especially in the area of porcelain tiles and quartz countertops. Photo imaging on tile surfaces has become so precise and realistic that it becomes hard to tell that a porcelain tile is not actual stone.”

### New Trade-Offs

Code and other changes can come with a price, but are usually offset by gains in structural strength and sustainability.

Wiig says that due to the lag between the last code change in 2006 and the current 2015 codes, “the estimated energy savings resulting from the new code will be between 30 and 33 percent.”

And Hawaii residential builders are ready. “Whatever changes are required by the community, we’re right there,” says HPM’s Fujimoto. “We have the products our customers require.” 🏠

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# ‘Safety is a Skill’

Hawaii builders, agencies partner to produce more effective training

BY DAVID PUTNAM

Hawaii’s workplace health and safety leaders like what they are seeing: More adherence to the rules by the building industry—and fewer injuries.

“Safety efforts in Hawaii’s construction industry are beginning to bear fruit,” says Joaquin Diaz, director of health, safety and environment (HSE) at Hawaiian Dredging Construction Co. Inc. He cites U.S. Bureau of Labor Statistics data that show injury rates for the Islands’ construction industry “declined in 2015 from 2014.”



Joaquin Diaz

For Hawaii, BLS reports 3.4 cases per 100 full-time workers in 2015, down from 4.9 in 2014.

Today, Diaz adds, “large contractors are partnering as a group to improve safety and health for the workforce across all of the major projects on the Islands. This impacts thousands of construction workers each day as

they travel from large project to large project.”

Tristan Aldeguer, Hawaiian Dredging’s HSE training manager, says that “the role of education in controlling workplace safety is just one major component of managing an effective safety and health program. The bigger question that needs to be asked is: Are employers providing or conducting effective and meaningful training?”

“I have witnessed the ‘death by PowerPoint’ training course, or the made-to-order safety toolbox talks. These types of training programs provide little skill development or hazard recognition.

“The construction industry and OSHA have begun to focus on safety leadership training,” Aldeguer adds. “At Hawaiian Dredging we have incorporated START training (Supervisors Trained in Accident Reduction Techniques). This course teaches front-line leaders the soft skills required for communicating safety training.”

On May 10, the American Society of Safety Engineers Hawaii chapter will offer a one-hour “Make Safety

Training More Effective” training session during the Hawaii OSHA Workshop at Dole Cannery. The ASSE course, part of a daylong workshop with the Occupational Safety and Health Administration and Hawaii’s Occupational Safety and Health Division (HIOSH), will provide tips on techniques and delivery methods for effective safety training.

“The ASSE Hawaii Chapter is fully vested in partnering with the various industries performing work here in paradise,” says Terri Watkins, ASSE



Terri Watkins

Hawaii president and the safety director at the Marine Corps Base Hawaii Safety Directorate. “Partnering with builders, the military and the state is a more efficient, holistic method to share best practices, changes in safety requirements, education, engineering protocols and even personal protective equipment.”

Safety workshops are vital, Watkins

says, to ensure that “critical networking among the attendees is established, and many questions get answered during these professional meeting opportunities.”

On May 11, the Building Industry Association of Hawaii, based in Waipahu, will offer a one-day workshop—“Green Beans & Ice Cream”—aimed at CEOs as well as human resources, safety and operations managers.

## New Rules of the Game

Diaz says that OSHA’s recent recordkeeping and reporting rule concerns the construction sector “with the anti-retaliatory language, public posting of injury information for contractors and records retention period. OSHA during the Obama Administration focused on the accuracy of recordkeeping and reporting. These new regulations are the result of those efforts.”

For builders, he adds, “it is not a matter of preparing. It is a matter of doing. The Trump Administration has stated regulations impacting safety would not be affected. Our efforts concentrate on conceding to the new reality and doing what is required. Contractors need to revise policies, train and recordkeep accordingly.”

According to OSHA, the recordkeeping rule, effective Jan. 1, requires employers to “electronically submit injury and illness data that they are already required to record on their onsite OSHA Injury and Illness forms.” OSHA says the information will allow it to use its enforcement and compliance assistance resources more efficiently.

Other recent regulations that contractors must adjust to, Diaz says, include silica and confined spaces in construction.

Failure to heed the new rules can result in fines by OSHA and HIOSH. Diaz says that “the penalties are part of the concern. The bigger concern is the quantity and quality of inspections by either agency. Are the inspection numbers with the threat of large penalties the leverage either agency needs to have compliance?

“We need to focus on safety and health initiatives designed to improve compliance and awareness of hazards. Employers need to understand the

# SAFETY WORKSHOPS

In line with national Safety Week (May 1-5) and the National Safety Stand Down (May 8-12), Hawaii has important safety and health events scheduled for early May:

## Hawaii OSHA Workshop:

More than 500 health and safety experts are expected to attend a workshop on May 10 at Dole Cannery’s Pomakai Ballrooms. The full-day workshop, which begins with registration and check-in at 7:15 a.m. and ends at 3:30 p.m., is being presented by event partners OSHA, HIOSH and the Hawaii chapter of the American Society of Safety Engineers (ASSE).

“By hosting professional events such as the PACRIM Professional Development Conferences and the OSHA One-Day workshops, ASSE strives to continue to strengthen our relationships with those in the safety industry as well as those reliant on safety professionals to keep their workers both safe and productive,” says Terri Watkins, ASSE Hawaii president.

Topics will include an update from HIOSH along with the new federal OSHA recordkeeping rule, a NFPA 70e update, how to create an effective I2P2, understanding Hawaii workers’ compensation, update on the new EM-385-1-1 USACE, how to make a crisis management/ emergency plan and how to sell safety to management.

Fees range from \$105 to \$125 and seats are available at [Cvent.com](http://Cvent.com).

## Green Beans & Ice Cream:

The Building Industry Association of Hawaii will host a one-day workshop on May 11 on topics geared toward CEOs and human resources, safety and operations managers. The event, which will be held from 8 a.m. to 4 p.m. at the BIA-Hawaii’s offices in Waipahu, will feature Bill Sims, author of “Green Beans & Ice Cream,” as keynote speaker.

The workshops will be on such topics as: “How to build a culture of commitment instead of compliance,” “The hidden trap of ‘leave alone/zap’ management,” “How to track and measure results of behavior change and human performance improvement,” and offer tips on how to “produce dramatic improvements in retention, safety, wellness, bright ideas, employee morale and more, while lowering costs and eliminating administrative headaches.”

Cost is \$375. For more information, contact Tristan Aldeguer at [taldeguer@hdcc.com](mailto:taldeguer@hdcc.com) or 478-3257, or go to [greenbeanleadership.com/2015](http://greenbeanleadership.com/2015).



Bill Sims

positive bottom line impact safety implementation has.”

He points to OSHA’s “Safety Pays” website, adding “these areas should be concentrated on by OSHA and HIOSH. They offer a wealth of resources for contractors at no costs.” Aldeguer notes that “it’s too early to tell how the new increase in OSHA and HIOSH penalties will affect Hawaii businesses. OSHA does allow for a discount on penalties for small businesses, so this may not impact small business as much as we initially thought.”

The bottom line, Diaz says, is finding ways to prevent worker injuries.

“It is not strictly education. We need to focus on enhancing employee skills,” he says. “Safety is a skill. Citations indicate not enough training is conducted by contractors, or the training quality is lacking.

“Contractors need to evaluate the effectiveness of the training conducted by asking the simple question: Is my employee learning something new from this they can apply?” 🏠

# MEETING **INFRASTRUCTURE** CHALLENGES

Hawaii's roads, wastewater are major areas of concern



Aerial view of the Kaneohe side of the KK Tunnel Project

BY BRANDON BOSWORTH  
PHOTOS COURTESY CITY & COUNTY OF HONOLULU

**T**he United States got grade of D+ on the 2017 Infrastructure Report Card recently released by the American Society of Civil Engineers. While the ASCE does not have a grade specifically for Hawaii, on its InfrastructureReportCard.org website, the organization notes that the Islands face many infrastructure challenges.



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**Guy Branco, 28 years; Carolyn Cassabar, 13 years; Richard Rista, 22 years**

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“What the new 2017 ASCE 2017 Infrastructure Report Card does is reinforce the need for our state to address long-standing infrastructure issues before we are faced with another Kaloko Dam failure or the need to pump raw sewage into the Ala Wai Canal because yet another water main burst,” says Timothy G.S. Goshi, president of ASCE Hawaii.



Timothy Goshi

“With the influx of high-rise construction to our urban core and the stress this places on our existing roads and sewers, there is a strong sense to be more cognizant and proactive and less reactive.”

“Hawaii has wastewater needs totaling \$2.16 billion,” says Brian Pallasch, managing director of ASCE government relations. “Thirty-nine percent of the state’s roads are in poor condition, costing drivers more than \$700 a year, which is a little above average.”



Brian Pallasch

Bad roads can have big impacts. Last year, the state Department of Transportation filed 40,000 potholes on Oahu alone at a cost of more than \$350,000.

“Our degraded road conditions impact commercial development from the standpoint that tremendous amounts of time, money, and energy go into road maintenance when



A pipe is lowered into the shaft of the KK Tunnel Project.

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those resources could be allocated to increasing infrastructure capacity,” says Evan Fujimoto, president of Graham Builders and 2017 Building Industry Association of Hawaii (BIA-Hawaii) president. “Without infrastructure upgrades, you really can’t

build anything beyond existing uses.

“There are also problem areas like Mapunapuna and Iwilei, where flooding occurs. These conditions certainly impact existing businesses and, without implementation of any long-term solutions, redevelopment involves too much risk to undertake.”

Efforts are being made to address some of these concerns. In the last four calendar years, the City and County of Honolulu has paved 1,363 lane miles and anticipates completing all 1,500 of

the roads that were deemed in unsatisfactory condition by the third quarter of 2017. Honolulu Mayor Kirk Caldwell’s Fiscal Year 2018 Capital Program and Budget (CIP) proposes \$30 million for road repaving and rehabilitation. In addition, \$5 million is included in the operating budget for pothole and emergency road repairs, slurry seal and other types of pavement preservation.

On the wastewater front, a \$100 million-plus upgrade to the Kealahou sewer plant on the Big Island would provide treated wastewater to thirsty North Kona landscapes. Last year, North Kona councilwoman Karen Eoff described the project—one of the most expensive the county has undertaken—as “the most important project in my district, even though it’s not very glamorous. But it is serious.”



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Kapalama Canal Catalytic Project master plan shows greenbelt from Nimitz Hwy. to H-1  
 GRAPHIC COURTESY OF CITY & COUNTY OF HONOLULU

# Wanted: Public Input on Kapalama Canal

## City seeks ideas on project’s redevelopment and upgrades

BY BRETT ALEXANDER-ESTES

The City & County of Honolulu is requesting public input to guide Kapalama Canal’s redevelopment via the city’s project website and at a third community meeting to be held this summer.

The meeting, which has not been scheduled, will be in conjunction with the city’s Environmental Impact Statement (EIS) process, which is expected to be completed by the end of 2017.

Currently, Kapalama Canal’s redevelopment calls for the future HART Kapalama Transit Station at the intersection of Dillingham Boulevard and Kokea Street and a three-block greenway bordering both sides of the canal from just mauka of Nimitz Highway to just north of H-1.

Clean water consistently tops the list of desired

upgrades, so water quality improvements are slated to extend just north of H-1.

Dredging is required to remove existing contamination, deepen the canal and increase flow. At some points, the flow rate will be increased by narrowing the canal as well as deepening it. Mauka of H-1, sediment catchments may extend partway into the canal on either side to capture some of the downstream silt.

Harrison Rue, the city’s Community Building and TOD Administrator, says “some conceptual design” has provided for piers, concrete steps down to the canal, picnic structures, pedestrian bridges and other

greenway enhancements.

Rue says Kapalama Canal’s redevelopment is a ‘catalyst project’—planned and designed to spark corresponding and complementary development on surrounding properties.



Harrison Rue

“We asked canal consultants to look at scores of similar projects,” Rue says of waterway developments such as Mill River Park (Connecticut), San Pedro Creek (Texas), Chicago River Walk and others in Europe, Japan, South Korea and China. Urban areas surrounding similar projects, Rue says, experienced “generally significant increases in investment.”

At present, the city is budgeting \$25 million for

greenway and streetscape redevelopment and \$10 million for dredging.

“Funds are estimates only, and depend on future two-year budget approvals,” Rue says. Whether or not the project is done in phases “depends on the ultimate design and construction budget.”

Rue notes that the goal is “to finish the project as quickly as possible,” possibly within two to three years from its start.

**Click Here for Input**

Go to [connecthonolulu.com](http://connecthonolulu.com), the City & County of Honolulu’s Kapalama Canal website, to submit your upgrade ideas and to get the latest on community workshops, development plans and other project news.

In his State of the County address for 2017, Maui mayor Alan Arakawa highlighted plans “to end the use of placing treated wastewater into injection wells as the primary disposal method in Central and South Maui” by using treated wastewater to cultivate trees and irrigate county parks and at state facilities.

“Both of these projects are in the planning and design stage and should be operational in two years,” Arakawa says. “If successful, these projects would help the county re-use approximately 7 million gallons of treated wastewater a day.”

On Oahu, Caldwell’s proposed fiscal year 2018 capital budget includes \$655.9 million to fund wastewater and Global Consent Decree projects, an increase of approximately \$165.5 million over last year’s budget. Some of the larger projects:

- Dowsett Highlands Relief Sewer (\$85.7 million),
- Honouliuli Wastewater Treatment Plant Secondary



A tunnel pipe being transported as part of the KK Tunnel Project



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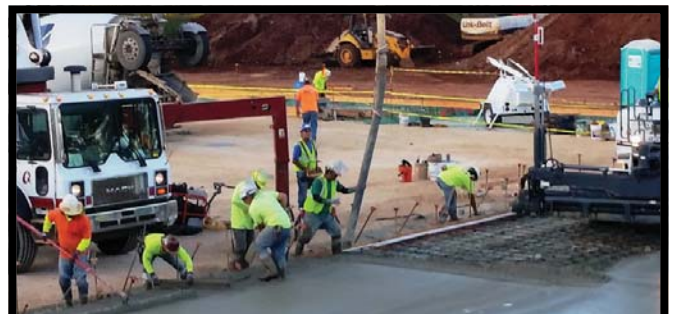


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A 20-foot staging pipe, part of the KK Tunnel Project

- Treatment (\$277 million),
- West Beach No. 1 and No. 2 WWPS and Force Main Systems Improvements (\$33.6 million),
- Awa Street Wastewater Pump Station, Force Main and Sewer System Improvements (\$42 million).

The Honolulu Board of Water Supply Capital Projects Division notes two major projects the BWS is working on this year. The Anoi Road Water System Improvements project involves the replacement of approximately 6,400 feet of 8-inch water main along Anoi Road from Kapunahala Road to end; along Keaahala Road from Keaahala Place to Kamehameha Highway; along Kamehameha Highway from Kahuipa Street to Keole Street; and along Luana Place from Paleka Road to the end of the road.

Many of the existing 8-inch water mains were installed in the 1950s or are of unknown age. The project cost is \$5,582,245. The project is tentatively projected to run from Summer 2017 to Fall 2018.

Another major job, the Diamond Head Water System Improvements, Part II project, involves the replacement of approximately 5,235 feet of 12-inch water mains along 22nd Avenue, Diamond Head Road and Kulamanu Street; and approximately 2,270 feet of 8-inch water mains along Kulamanu Place, Malapua Place, Ulupua Place, Huanui Street, Kaalawai Place, and Kuine Place. The existing 12-inch and 8-inch water mains were installed in the 1930s

and need replacement to improve water service reliability and fire protection. The project will also eliminate a 12-inch water main located along the shoreline that is inaccessible for repair.

The water meters along the shoreline will be relocated to Diamond Head Road. The project cost is \$4,185,347. The project is tentatively projected to run from Summer 2017 to Fall 2018.

The biggest Oahu wastewater project is the ongoing Kaneohe-Kailua Wastewater Conveyance & Treatment Facilities Project (KK Tunnel Project), a multi-phase project which began with the the drilling of an approximately three-mile tunnel from Kaneohe Wastewater Pre-Treatment Facility (WWPTF) to Kailua Regional Wastewater Treatment Plant (WWTP) last year. Pipes are currently being installed in the tunnel, which has an estimated life expectancy of 100-150 years.

The 10-foot inner diameter tunnel uses gravity to carry the sewage, in comparison to a force main, which uses pressure. This is expected to minimize sewage spills near homes and preserve Kaneohe Bay. The tunnel also is designed to eliminate above-ground wastewater storage and lessen operational maintenance requirements, according to Michelle Perez, project scheduler at Bowers + Kubota Consulting.

The KK Tunnel Project is divided into three phases, according to the City and County of Honolulu:

Phase 1 (\$179 million): The tunnel contractor is currently installing pipe within the tunnel. Thus far, more than 740 out of 880 10-foot inner diameter pipe sections have been installed. Once complete, the pipe will be grouted into place concluding phase one (tunnel) of Honolulu's largest sewer project.

Phase 2 (\$149 million): Phase two of the project is underway and includes construction of a tunnel influent pump station (TIPS) within the Kailua shaft. TIPS will receive and pump tunnel flows up to the Kailua Wastewater Treatment Plant (KRWWTWP). Phase two also includes construction of a new generator building, headworks facility and a new odor control facility at the KRWWTWP.

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**“A large scale mechanized tunneling operation like this has never been undertaken in Hawaii... It will be the largest sewer tunnel in Hawaii and the first to be excavated using a tunnel boring machine.”**

*—Michelle Perez*

Phase 3 (\$21 million): The third and final phase of the gravity sewer tunnel project is construction of a tunnel influent facility (TIF) at the Kaneohe Wastewater Pre-Treatment Facility.

Upon completion of all phases, the existing force main that transports wastewater from Kaneohe to Kailua will be decommissioned and flows will be redirected to the new gravity sewer tunnel in 2018.

Companies working on the KK Tunnel Project include Southland Mole JV (tunnel contractor) and Hensel Phelps Construction Co. (Kailua tunnel influent pump station contractor), as well as the engineering firms of Wilson Okamoto Corporation, Jacobs Associates, YK Engineers, LLC and Brown & Caldwell. Bowers + Kubota Consulting is the construction manager.

“A large scale mechanized tunneling operation like this has never been undertaken in Hawaii,” Perez says. “It will be the largest sewer tunnel in Hawaii and the first to be excavated using a tunnel boring machine. Many of the unique challenges faced by this project will enhance the planning, design, and delivery of future tunnel programs in the state. Specifics learned on our hard rock excavation process regarding geotechnical conditions, production rates, and logistical challenges will be transferable to future projects.”

Hawaii's dams are in better shape, though still need work. The ASCE 2017 Infrastructure Report Card states that 123 of the state's dams are considered to be high-hazard potential, though Pallasch says that is actually better than the national average. Furthermore, Pallasch notes Hawaii is ahead of the curve on some dam safety issues. “Ninety-eight percent of Hawaii dams have an emergency action plan, versus the national average of 77 percent,” he says.

Infrastructure projects help facilitate new development. “In the 1980s and 1990s, major infrastructure capacity upgrades were undertaken in Kakaako,” Fujimoto says. “Those improvements are what allowed the area to be developed today.” He adds that “future project proposals will have to complete capacity studies for water, wastewater, drainage, etc.”

“We need good infrastructure for economic growth,” Pallasch says. “Infrastructure is the heart of having a livable, civilized society.”

Goshi says solving Hawaii's infrastructure problems requires new modes of thinking.

“It may also be time to consider more public-private partnerships or other creative financing alternatives as other municipalities around the country have done in order to help meet many of the state's infrastructure needs and to provide a better quality of life for our state,” he says. 🏠



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GCA of Hawaii's  
new president  
looks to recoup  
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# Cedric Ota

## UNFAZED BY CHALLENGES



BY DAVE DONDONEAU  
PHOTOS BY NATHALIE WALKER

Cedric Ota tells the harrowing story as if it happened yesterday.

Thirty-five years ago, Ota was overseeing a harbor project in Samoa for Hawaiian Dredging Construction Co. Inc. “We were building the harbor from scratch,” he says. “We established a quarry, we were shooting (blasting the coral), hauling potable water for concrete ... and it was really hot down there.”

So one day Ota—today the new president of the General Contractors Association of Hawaii—opted to beat the heat by diving in for a swim.

The water around the construction area was murky, so he headed for open waters just like he did when he and his brother were growing up in East Honolulu. They spent their boyhood summers diving, fishing and swimming near Kuliouou Beach. So the ocean felt like home.

Ota had just emerged into the pristine ocean outside the harbor when he first saw the shark that was slowly gliding alongside him.

---

**“I want to find ways to get more young people involved because there seems to be a gap between the older current leadership and the millennials.”**

“We were eyeball to eyeball,” he says, laughing at the recollection. “I could have reached out and touched him, he was that close. It was kind of neat. He didn’t seem agitated, he just seemed curious.”

No panic. No kicking, screaming or freezing in fright.

Ota’s heart was pumping with excitement, but he calmly veered left while the shark kept swimming straight into the blue.

Catastrophe avoided: check.

Ability to stay calm under pressure: check.

Samoa boat harbors built without a hitch: check.

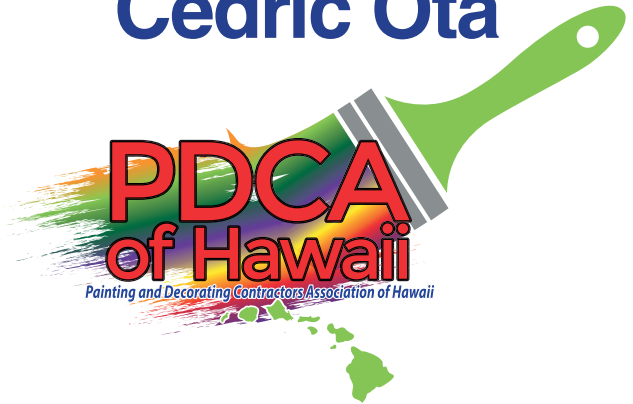
Now 60, Ota’s even-keel attitude and ability to stay calm under pressure continue to serve him well. He is now vice president of the same Waterfront & Foundations Division he first joined at Hawaiian Dredging. Installed as the GCA’s 2017 president in January, his to-do list for the association is already long. He wants to raise member numbers, create the first GCA-HART committee and create more bridges to bring in young industry leaders.

That’s just the start.

Clearly, Ota has decided not to wait around—another life lesson.

“My wife had twins a year after we were married and so as much as I loved fishing and diving, I didn’t make time for any of that while all three of the kids were growing up,” he says. “My time was spent at work and their events. Now we’re starting to share the ocean activities more. They seem to like doing it with me.”

# Congratulations Cedric Ota



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Adding GCA president to his list of duties may seem counterintuitive to dialing down and spending more family time, but Ota can't help himself. Just as he is committed to a pair of current Hawaiian Dredging projects worth a combined \$340 million, he says his GCA duties will include more nights and weekends trying to better the world of contracting.

He loves the challenge.

"There is a lot to do, but it's gratifying," he says. "I'd like to be known as someone who helped somebody in

their career enjoy what they're doing, and that I touched people. Hawaiian Dredging is an old company, so we have multi-generations who've worked for us. It's gratifying to see people come and say, 'Hey, I want my son to start here.' I want to find ways to get more young people involved because there seems to be a gap between the older current leadership and the millennials."

### Urging involvement

Experienced, unassuming, successful and with a strong family

background, Ota believes in treating people at all levels with respect.

And because of his low-key demeanor, he's the type of leader people gravitate toward.

Last month, for example, he was headed for a meeting in the GCA's conference room in the Mapunapuna office. And since it was scheduled to start at 11:30 a.m., he surprised the GCA staff by arriving early with plate lunches in hand.

"They work hard and they're good people," he says. "I really believe this is a small island built on relationships. Cost and quality are factors when you're doing business, but it's also how you treat people."

Ota started getting more involved in the GCA in the early 2000s when he joined a Navy committee. Hawaiian Dredging was involved in a military project with other contractors

**"I really believe this is a small island built on relationships."**

when the GCA formed a committee to help smooth communications. Ota didn't know what to expect, but he says the Navy representative's dedication was so impressive that he decided he wanted to do more, too.

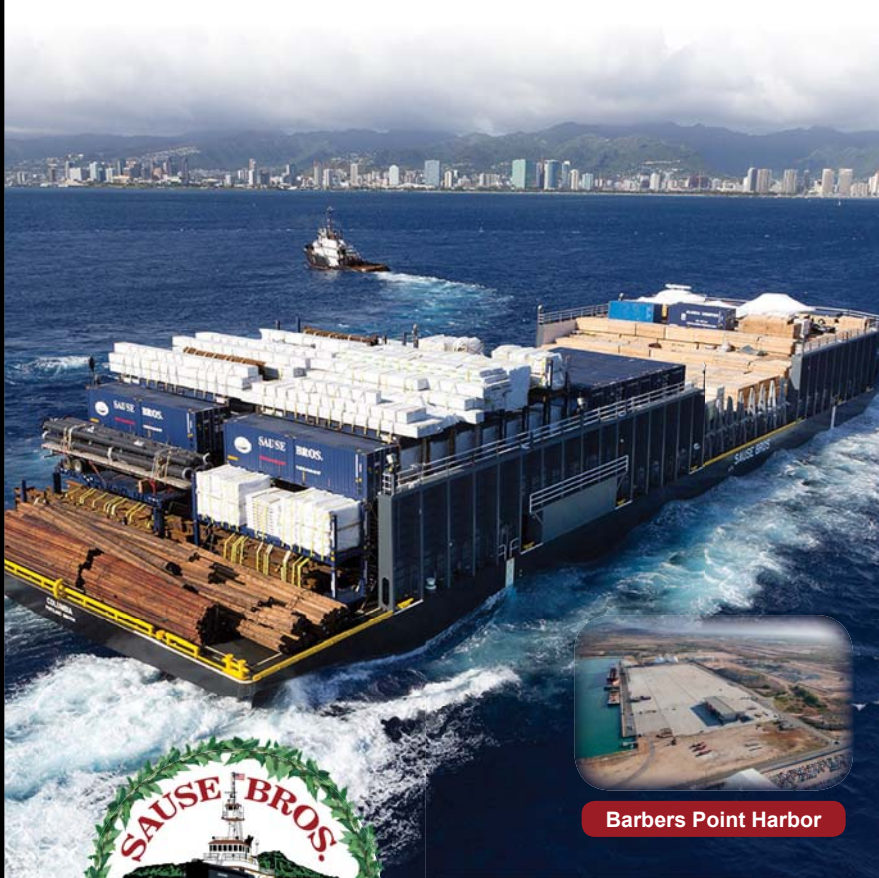
"I found it very interesting," he says. "I found the Navy had a representative who was vested in making the process better. He listened to our issues, we listened to his and from there we tried to make the working situation better. After that, I just kept wanting to get more involved."

In the same vein, one of Ota's first orders of business as the GCA's new president is to form a GCA-HART committee to help with rail transit work. Multiple subcontractors are already involved at two rail stops and other work is ongoing for the next several years. Ota says opening a line of communication between HART and the GCA should help alleviate permitting concerns for some subcontractors as well as other problems that can cause delays.

Another key issue Ota wants to accomplish in his 12-month tenure is

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to get more members involved.

Currently, the GCA has more than 500 members of various levels, but committees often aren't well-represented and need greater focus.

In addition to a more active membership, he's looking for ways to increase membership following some recent attrition.

He cited changes to U.S. health care laws as a main reason GCA membership numbers have dropped.

"We offered healthcare to our members before and some of them did not qualify under the 'Obamacare' rules. And that was their primary purpose for joining," Ota says. "We'll watch what happens (with the repeal) because it affects us directly. We are trying to bring our membership level back up to where we were, with 560 or 570 members again."

Ota likes how the GCA is thinking outside the box these days.

Earlier this year at the State Capitol, the GCA held its first mock bid demonstration involving state legislatures. The goal was to illustrate the need to streamline the bidding process for government jobs.

"If you get the name of the subcontractor wrong, forget to list one or have the number wrong, your bid can be protested, and it ties up the process so that it's tough to move forward," Ota says. "The mock bid session went through all the problems that can occur when you're getting 15 to 20 subs listed and you need to get all the information correct by the time your bid needs to get in."

"It was the GCA's idea. The legislators were the contractors and we had reps from contractors helping to guide

them, but the decisions and responsibility were up to them."


Ota says the legislators had to sort through the bids on a deadline. They also had to read each proposal, figure out what was missing, what was different and which contractor had the low bid that needed to be listed.

Then they had to check for accuracy and get everything into the bid proposal.

"We're trying to pass a bill to allow contractors a period of time to fix their bids," Ota says. "Whether it's a day, two days, two hours—a set time to correct any problems they came across so we can eliminate that issue."

The mock bid process has helped proposals pick up traction, he says, with the primary opposition being subcontractors who work through the unions and want the entire listing to continue.

"We've tried to eliminate the whole listing and just list five major trades," Ota says. "There's over 100 licenses that the state has. If you list a sub and they don't have the right license, you're in big trouble. You can get protested. If the insurance and license isn't right you can get in trouble, too. We're trying to reach a compromise." 🏠



**Best wishes to New President Cedric Ota and the GCA of Hawaii for Continued Success in 2017**

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# ‘Be Their Voice’

Higa outlines association’s ambitious plans and goals for members in 2017

BY DAVID PUTNAM

**A**dvocacy for the construction industry, education, communication and a trained workforce are the major issues for the General Contractors Association of Hawaii in 2017, says GCA Executive Vice President Johnny Higa.

Higa says the GCA will “continue to represent members and be their voice in all matters related to the construction industry,” and carries members’ interests to the state legislature as well as to Hawaii’s congressional representative in Washington, D.C.

He says the GCA, which was founded in 1932, also works to help ensure that the Islands’ building sector



Johnny Higa

maintains a well-trained labor force. The GCA, he says, will “work with and support organizations and agencies to fund programs and train future industry workers.”

Known for its educational efforts, the GCA continues to offer learning opportunities, including courses on:

- 40-Hour OSHA Safety Hazard Awareness,
- Construction Quality Management (CQM),
- OSHA 30-Hour,

- AGC Supervisory Training Programs (STP),
- Highway Work Zone,
- Blueprint Reading,
- Chapter 104-Wages & Hours,
- HIOSH and OSHA Inspection,
- Payment Workshop,
- First Aid/CPR.

The GCA also presents webinars on current issues facing contractors such as ACA, OFCCP compliance, construction trends and forecasts and SBA programs.

Higa says the GCA will also maintain “a network of two-way open communication with GCA members and all relevant industry organizations and agencies.” The GCA, Higa says,

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has 20 committees that work with organizations and agencies ranging from the City & County of Honolulu to the U.S. Navy.

Higa points to the election in January of Cedric Ota of Hawaiian Dredging Construction Co. Inc. as 2017 president. Ota, he says, has long been a “valuable asset to the GCA and the board of directors. From day one, at his installation banquet, President Ota outlined three areas that he would like GCA to focus on during his term as president: increase membership, increase committee involvement and develop a Give Back to the Environment Project.”

The GCA’s commitment to “giving” resulted in a contribution of \$53,500 last year through its Give Back to the Community Project to Kapiolani Medical Center for Women and Children.

“Every year the GCA selects a worthy charity to partner with. GCA is so proud of its members that make it a priority to ‘give back’ and support the local community,” Higa says.

The organization also aims to establish a GCA Education Scholarship Fund, he says.

## Taking Action

According to a recent analysis of government data by the Associated General Contractors of America, with which the GCA is affiliated, U.S. construction employment increased by 58,000 jobs in February to the highest level since November 2008, with gains in both residential and nonresidential markets.

But national numbers don’t always equate to job growth in Hawaii’s construction sector. Higa says that “initial indicators point to a flat or

## Legislative Clout

GCA Executive Director Johnny Higa lists five major legislative issues for 2017:

- Improve efficiency in public works procurement.
- Oppose unnecessary contractor licensing law amendments.
- Protect employers and insurance carrier’s right to use medical examinations on injured workers.
- Improve the delivery of affordable housing.
- Support funding of the rail project.

A key legislative victory in 2016, he says, was “fending off any changes to Hawaii’s Workers’ compensation law.”

The GCA also worked to “improve and streamline the procurement process on public works

construction projects,” he says.

And in December the GCA staged its first Legislative Construction Mock Bid Day Simulation at the state capitol, where attendees—from elected officials to contractors—teamed up to put together a bid package on a public works project.

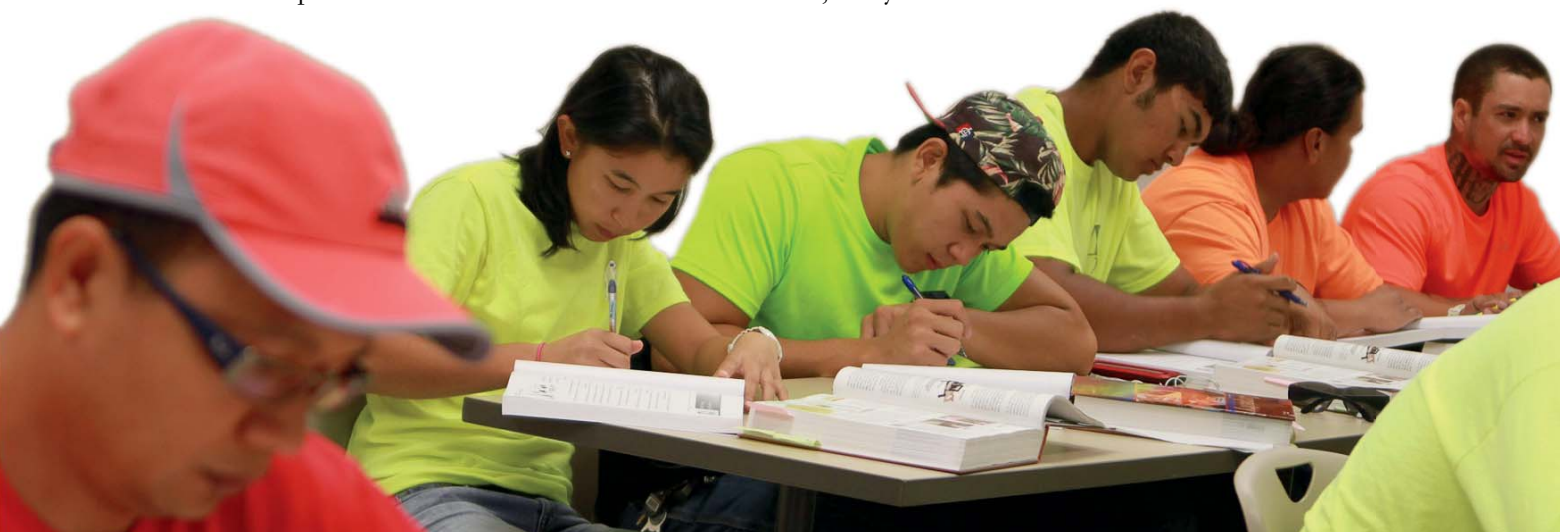
“The bid simulation provided real-time pressure surrounding the bid day requirements and the complexity of Hawaii’s procurement code on public works projects—what the process is like from the actual contractors on bid day, how public works projects differ from private or federal projects, how agencies evaluate low bid contracts and what it takes to bid on a public works construction project,” Higa says.

softer construction market for 2017” in the Islands, adding that, “hopefully, with the support and action from Washington and local authorities, much-needed projects for repairs and maintenance of our infrastructure, utilities, schools and transportation will be forthcoming.”

And for its part, the GCA has built a strong lobbying arm to seek support and jobs for its members. To help keep its members’ interests in front of state lawmakers, this year the

association hired Mike Kido of SanHi Government Strategies to assist with its legislative efforts.

Kido, along with GCA Director of Government Relations Shannon Alivado, Legislative Committee Chair Glen Kaneshige and Vice Chair Lance Wilhelm and contract lobbyist Ken Takenaka, “work diligently to review and act on legislative and regulatory issues that impact GCA members and the construction industry,” Higa says.



## Benefits and More

In 2016 the GCA took steps to bring its medical plan into alignment with the Affordable Care Act, or “Obamacare,” signed into law in 2010. Higa claims “Obamacare” has led to a decline in membership for the GCA, “primarily from members who were ineligible from participating” in the organization’s health plan.

“For GCA to continue to offer a valuable health care insurance alternative, last year GCA was forced to modify its existing plan to fully comply with the ACA regulations,” Higa says.

Its existing coverage was converted into a Multiple Employer Welfare Arrangement plan. “The GCA worked

**The GCA will  
“work with  
and support  
organizations  
and agencies to  
fund programs  
and train  
future industry  
workers.”**

diligently with its attorneys, HMSA and its plan administrator to develop the MEWA plan,” Higa says, noting that the MEWA plan became available to members on July 1.

“Currently, almost 100 GCA member companies participate and benefit from this service.”

The GCA membership also got a boost through its “revamped and improved” AGC Supervisory Training Program (STP). The program is a construction-specific curriculum developed and field-tested by contractors for building supervisors and managers. The course includes such topics as productivity and managing project costs, risk management and problem solving.

“So far, GCA has offered all six STP Class Units with a total of 210 students,” Higa says, adding that the GCA plans to continue offering a broad range of educational opportunities for its members through this year

and beyond.

Members also take part in such activities as recognition programs: The annual Build Hawaii Awards highlights outstanding projects, and the annual Safety Awards dinner honors members with outstanding safety records.

The GCA also funds a full-time professorship at the University of Hawaii that teaches construction-related courses to better equip students aiming for

building industry careers.

As for long-term goals, Higa restates the GCA’s mission statement: “The GCA of Hawaii will represent its members and be their voice in all matters related to the construction industry. The association will provide a full range of services satisfying the needs and concerns of its members, thereby improving the quality of construction and protecting the public interest.” 🏠

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# 808Futsal Kicks Off

Swinerton Builders raises Islands' first indoor soccer arena

PHOTOS COURTESY FUTSAL.ORG

“Futsal”—soccer played with only five players on each side and on a smaller, typically indoor field—has taken its place in the lineup of athletic activities available on the Islands with the opening of 808Futsal.

The 53,000-square-foot, air-conditioned facility sits on a two-acre lot at the corner of Opakapaka and Munu streets in Kapolei Business Park. With Swinerton Builders as general contractor,

the \$15 million project broke ground in November 2015. “Swinerton Builders partnered with Honolulu architect firm CDS International on the design-build collaboration,” says Mark Tacazon, Swinerton’s marketing manager.

“The facility was designed utilizing BIM 360 Glue 3D modeling software,” Tacazon says. “Our (project) owner is a very visual person, and the 3D model really gave him the ability to ‘walk’ through the space and visualize



BIM 360 Glue 3D expedited the project.

how the facility would look in 3D.”

Richard Pentecost, founder of 808Futsal, “operates another sports facility (KIHA – Kapolei Inline Hockey Arenas) directly across the street from the project site,” Tacazon says. So the project team and Pentecost conducted a site walk of KIHA very early in the design phase “to see what worked and what didn’t work for him.”

The owner’s input was then used to plan the space and materials for the new project. “We knew very early on what his ‘hot’ items were,” says Tacazon, “and where we really needed to focus our attention to exceed his expectations.”



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“The Design-Build process worked out very well for 808FUTSAL. Communication between all parties was also a key to success! As the owner of this brand new facility, it felt good knowing I could rely on Swinerton as a trusted partner throughout the entire process.”

RICHARD PENTECOST  
Owner, 808FUTSAL



**KAWIKA DEL ROSARIO**  
Futsal Director, 808FUTSAL

**EVAN THOMAS**  
Project Manager  
SWINERTON BUILDERS

**RICHARD PENTECOST**  
Owner, 808FUTSAL



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Weekly OAC meetings were held throughout the project, Tacazon says, and produced many different schematic design layouts. “Once the building layout was finalized, we were able to present many different value engineering options to keep the project within the owner’s budget.”

The final two-level design, says Tacazon, called for “integral colored CMU walls and a structural steel roofing framing system that remained exposed as the final interior building finish.”

BIM 360 Glue 3D was the design’s point man. “The program allows many different design partners to model their respective trades and then ‘glue’ the models together into a merged model,” Tacazon says. “The team can then run clash detections to avoid conflicts before they are constructed in the field.”

But BIM can’t jump every hurdle. “A delay in receiving the grading permit required us to re-sequence how

changes. “Due to a tight jobsite we decided to leave out a 20-foot-wide portion of exterior CMU wall, to act as a point of access for vehicles and equipment to the ground floor of the facility,” says Tacazon. “The rest of the

panels on the roof and a mezzanine level.

Moreover, “we exceeded the client’s expectations in regards to schedule,” Tacazon says. “Even though we had a seven-week delay in grading permit issuance, we were able to hit the origi-

“Communication-wise, (design-build) is a lot more intense.”

—Richard Pentecost

perimeter walls and roof were set, and then we fell back to build the remaining portion after all large equipment was finished inside of the building.”

Again, BIM ran interference: “BIM 360 Field was used to track the quality issues from the design phase through punch list completion, and even into the warranty period,” Tacazon says. The software, he adds, can document ongoing

nal substantial completion date with no additional time or cost extension.”

Swinerton also exceeded the client’s budget expectations “by completing the project on budget, and was even able to return a large portion of un-used contingency funds at the end of the project,” says Tacazon, adding that Swinerton also assisted the client in areas outside the project’s scope.

Pentecost says he’s glad he chose to go with a design-build approach, which he called “amazing,” with Swinerton Builders. “Communication-wise, it’s a lot more intense,” he says.

“We are very proud of our project team.”

—Mark Tacazon

Pentecost adds that having regular contact with both design and build representatives streamlined the process, noting “you can resolve problems a lot easier.”

The project manager, Evan Thomas, made the project go “very easy,” Pentecost says. “Everybody at all levels was really good.”

“808Futsal was a highly successful project that was made possible through the high level of collaboration and execution that resulted from the design-build process between CDS International and Swinerton Builders,” says Tacazon. “We are very proud of our project team for their effort and dedication to making our very first design-build project a stellar success.”

808Futsal was named *2016 Project of the Year* by the Masonry Institute of Hawaii and in February hosted the 2017 Pacific Rim International Futsal Cup. 🏠



The new 53,000-square-foot facility at the corner of Opakapaka and Munu streets

we constructed the building,” says Tacazon. “Originally, we planned on setting two-to-three courses of CMU to act as an edge form for the concrete slab-on-grade. Due to subcontractor’s unavailability to meet the revised schedule, we proceeded to form the slab edge, with block-outs for the CMU walls to be set after slab-on grade-placement.”

To achieve the specified FF/FL numbers, Swinerton utilized its concrete laser screed machine. “This was only the second project on which the Hawaii Division used this sophisticated piece of equipment,” Tacazon says.

Site logistics also required some

issues with photos, print out custom reports and email open-issue notification to a specific subcontractor on a pre-determined schedule. “This technology was instrumental in achieving the high quality standards that the owner expected from Swinerton Builders,” he says.

When the project wrapped in October, Swinerton’s high standards were evident throughout. The arena has three full-size fields, or courts, as well as six mini courts, for both youth and adult leagues. The facility includes bleachers, changing rooms, a kitchen/dining area, a snack bar, a retail/pro shop and its LED lighting over the courts is powered by solar



# Demand Grows for EV Stations

28% increase in electric vehicles in Hawaii drives up need for more charging stations

BY BRANDON BOSWORTH

**M**ore than 5,000 electric vehicles (EVs) are registered in Hawaii, making it second in the nation after California in per capita electric vehicle registrations.

Some 2.94 of every 1,000 registered light cars and trucks in Hawaii are EVs, according to the Hawaii State Energy Office.

“The number of plug-in passenger vehicles registered in the state has increased dramatically since becoming available in Hawaii, with an increase of 28 percent over the past year,” says Katherine McKenzie of the University of Hawaii at Manoa’s Hawaii Natural Energy Institute (HNEI). “By contrast, the number of all other passenger vehicles (virtually all gasoline-powered) rose by 0.3 percent over the same period.”



Katherine McKenzie

The Hawaii Automobile Dealers Association reports that more than half of Hawaii’s 70 dealerships are selling electric cars, and a study by the HNEI estimates there will be 140,000 EVs on the road in Hawaii by 2040.

The increasing popularity of EVs means there will be a greater demand and need for EV charging stations. As of November 2016, there were 522 EC charging stations in Hawaii, according to the Hawaii State Energy Office. A growing number of new commercial properties and residential developments feature EV charging stations, and older buildings are having them installed.

“More and more managers say residents are asking for EV stations,” says Jim Burness, CEO and general manager of Aloha Charge, a subsidiary of National Car Charging, one of the country’s largest EV charging



Jim Burness

equipment distributors. “There’s more pressure to make charging stations available.”

He estimates that 12 percent of vehicles in Hawaii will be EVs by 2020.

Burness says it is much cheaper to install EV charging stations as part of a new construction project than adding them to an existing structure.

“For a brand new parking structure, I recommend making 3 percent to 4 percent of the parking stalls plug-ins, and pre-wiring for three to four times that,” he says. “The No. 1 question is what electrical capacity is available.”

Amber Stone, Aloha Charge’s director of business development, adds, “The biggest unknown for a charging station is the installation and make-ready cost. This truly varies per location, but we have developed a fairly comprehensive menu of potential charges that helps



Amber Stone

us to give a more approximate estimate to our clients.”

“Installing an EV charging station while a structure is being built may eliminate the electrical connection issues,” says Ross M. Kutsunai, sales director at Alternate Energy Inc. “However, usually the safety elements remain depending on the type of structure being constructed. The biggest challenges are usually availability of the electrical connection, sometimes the electrical capacity, and sometimes the safety elements required for commercial installations. Each building must be evaluated for the amount of electrical load to determine if a service upgrade may be required as well.”



Ross M. Kutsunai

The installation of charging stations also varies widely based upon the available electrical connection and service at the structure.

“The parking lot may also require other safety elements as well,

including protective bollards to make sure that the electrical equipment is not damaged by the parking cars,” Kutsunai says. “A recent project we completed in Kapolei required extensive safety elements and the cost exceeded \$15,000 per charging station. A residential charging station is usually \$2,500 or less, depending again on the complexity of the installation including the availability of the electrical connection and any safety elements required.”

### Weighing the Expense

The price of EV charging stations depends what type is selected. At the recent Hawaii Buildings, Facilities & Property Management Expo, Aloha Charge had two models on display. One was intended for personal use and cost about \$700. The other, designed for parking common areas, was about \$1,500 and included more features, such as metering and being equipped to receive credit card payments.

Fast charge stations with maximum charge rates of 200 RPH (miles of range per hour) can cost upward of



A customer uses a Charge Point EV charging station.

\$30,000. Depending on the vehicle model and type of charging station, it can take as little as under 30 minutes to as long as several hours to charge an EV battery. An EV charging station can be installed as a property is being built for under \$7,000. Costs for installing a EV charging station at an existing property vary depending on the structure.

Arden Penton of Volta Charging, founded in Honolulu in 2010, says the biggest challenge when installing EV chargers in an existing facility is placement.



Arden Penton

“The installation process is seamless once we find the best location that fits our model,” she says.

Volta is the largest free-to-use EV charging network in the U.S., owning and operating stations primarily at premium retail centers.

Josh Lucero of electrical contracting firm Hui Kupa’a has been installing EV charging stations for many years. He says the biggest problem when working in existing parking structures is automotive and pedestrian traffic.

“Running the conduits can be a little bit tricky,” he says. “We try to

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# ALOHA ‘ĀINA, ‘IKE HONUA

Image Courtesy of Ferraro Chio

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# HAWAII'S EV CHARGING EXPERTS

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take care of stuff like trenching as quickly as possible in off-hours.”

Still, the benefits may outweigh the cost, especially for commercial properties.

“EV charging stations are the new must-have amenity for all buildings and businesses,” Stone says. “For condos and apartments they are a huge draw. In general 80 percent of charging happens at home. By supplying a charging station in a common area, condos and apartments appeal to a whole new market of residents.”

She adds that it is easy for community associations to set up automated billing and reimbursements for common electricity used, and that reporting and analytics are available to track energy usage, environmental impact and revenue. For retailers, Stone says EV charging stations can serve to “reward loyal customers who visit more and spend more” and “increase customer dwell time by up to 50 percent.”

McKenzie also sees the commercial



The demand for EV charging stations in Hawaii continues to grow.

benefits of EV charging stations. “From a business perspective, EV charging stations have been shown to attract customers and clients from favorable demographics,” she says. “For apartment and condominium

managers, offering the service as an amenity can attract tenants and serve as a market differentiator. Property owners and managers may be able to benefit by including charging stations in their green initiatives, as a part of a sustainable strategy for commercial buildings.”

“More charging stations are planned for Hawaii, and the utilities are rolling out DC Fast Charging stations in key locations to facilitate EV adoption,” McKenzie says.

Stone says the demand for EV charging stations will continue to grow. “The longer I am in this business the more need I see for charging stations,” she says.

“Every EV driver I talk to feels the need for a larger EV charging network not only on Oahu but on all of the islands. And we truly believe in the ‘if you build it, they will come’ mentality. The more accessible charging is, the more likely people are to feel confident buying an electrical car.” 🏠

...continued from page 12

to get away from the grid ... they want to pay themselves.”

• Speaking of HECO: “We’re very close to Hawaiian Electric because one of our (associate) companies designs their transmission poles ... we have worked for years with their engineers and staff. Right now they’re trying

## “All of Hawaii’s military bases have been mandated to make an immediate effort to change out all traditional lighting to LED, and to get their bases 100 percent renewable—and get off the Hawaiian Electric grid.”

to recover from not doing that sale, which put a real jam on what they were doing internally, like putting up new poles—they didn’t order any poles, they didn’t fix the ones they had, wanting to make it look good for those Florida guys (NextEra). But when you get stuff up on a ridgeline, and a pole starts to fall over, and one of those goes down, a lot of people are in trouble. Going out to Ewa Beach you see these 100-foot poles, and some of them have been in

there 15 years. And they’re starting to corrode. HECO is just now going back to that. And that’s part of the renewed grid they’re going to have to do.”

When Oahu’s military bases go off the grid, how will HECO make up the loss in revenue?

“The downside of (the LED revolution) is that China controls 90 to 95 percent of the LED market,” and thus has a major say in world markets, Dawson says. “They can do it—they cut off Japan in 2011.”

That’s because China has a near-global monopoly on the refining of rare earth elements, which are essential in LEDs, smart phones (polishing with cerium makes those screens so shiny), electric car batteries and more. About half come from Baotou, in Inner Mongolia. On his computer, Dawson calls up a Google Maps aerial image of Baotou and its sprawling industrial complex, including a gray “lake” two miles by two miles, full of toxic, semi-radioactive sludge, a by-product of rare earth element refining.

China’s domination is imperiled by a new rare earth element plant in Malaysia, built by Australia, set to open in coming months, environmental concerns be damned. How will China respond?

“This,” says Dawson, “is what we’re speeding into headlong.” 🏠

Have a good story about a good person in Hawaii’s construction industry? Please e-mail me at don@tradepublishing.com.

Healy Tibbitts replaced a 24-inch underwater pipeline from Pearl City Peninsula to Ford Island. PHOTOS COURTESY HEALY TIBBITTS BUILDERS



## Healy Tibbitts Project Wins National Award

The Healy Tibbitts Builders Inc. project, the Replacement of 24-inch Underwater Crossing, Pearl City Peninsula to Ford Island, has been chosen by the Associated General Contractors of America as best new utility infrastructure project of 2016.

Healy Tibbitts received the AGC's Alliant Build America Award which was presented during the AGC's annual conference in Las Vegas in

early March. The award is sponsored by Alliant Insurance Services.

"These awards highlight the most challenging projects that construction firms are building today," says Mark Knight, president of the AGC, of which the General Contractors Association of Hawaii is an affiliate. "Moreover, the awards showcase how construction firms are using skill, technology, and collaboration to successfully build some of the most complicated and complex projects."

Healy Tibbitts President Rick Heltzel says the company "is very honored" by the AGC award, adding that the national recognition "highlights Hawaii's engineering and construction industry's leadership in developing and using innovative technology to

modernize our state's aging underground utility infrastructure."

The \$10 million project required replacing a 62-year-old 24-inch ductile iron pipeline below the harbor channel between Pearl City Peninsula and Ford Island. Healy Tibbitts installed 3,425 linear feet of new state-of-the-art 24-inch PVC pipe below the channel, using horizontal directional drilling, as well as 955 linear feet of iron pipelines to connect to existing waterlines on both sides of the channel.

It was the first time 24-inch fuseable PVC was installed in Hawaii using horizontal directional drilling, which required drilling more than 40 feet below the channel bottom due to difficult soil conditions.

"The success of this project is due to commitment to partnering by all stakeholders," Heltzel says, "including the owner NAVFAC Hawaii, engineering consultants Fukunaga & Associates and Yogi Kwong Engineers and Healy Tibbitts."



Rick Heltzel

## Hensel Phelps Wraps Work on The Grand Islander

General contractor Hensel Phelps recently completed work on The Grand Islander by Hilton Grand Vacations Club, and the 38-story timeshare tower in the Hilton Hawaiian Village Waikiki Beach Resort held its grand opening in March.

Hensel Phelps broke ground on the project in June 2014. After completing the tower's podium, HP placed a structural floor every week and topped off the tower in June 2016.

In a statement, Hensel Phelps notes that "at 626,000 square feet and with a total of 30,000 yards of concrete placed, the Hilton Grand Islander is the largest self-performed project ever completed" in the company's Pacific District. HP also self-performed installation of the 375-foot-tower's architectural precast skin.

The new timeshare for developer Blackstone offers oceanfront and island views from its 418 one-, two- and three-bedroom suites. Two- and three-bedroom penthouses feature full kitchens and private balconies. Amenities include an outdoor mini-pool, whirlpool and sundeck.

The timeshare is the fifth Hilton Grand Vacations Inc. property on Oahu and the eighth in Hawaii.



The new Grand Islander at the Hilton Hawaiian Village Waikiki Beach Resort

© HILTON GRAND VACATIONS

## Gateside Starts \$33M Pearlridge Renovation

General contractor Gateside Inc., along with Pearlridge Center principals and tenants, broke ground in March

on the \$33 million renovation of Oahu's largest indoor retail complex. The project will refresh Pearlridge

Downtown's interior and exterior, expand and remodel the Downtown Food Court and add new tenants to both Downtown and Uptown sections. Several existing standalone tenants will also renovate their buildings, including the Down to Earth building, the Bank of Hawaii branch and the Hawaii Pacific Health Cancer Center at Pali Momi.

All renovations are expected to be completed by the fourth quarter of 2018. Pearlridge Center will remain open throughout construction.

"This investment is part of our *mahalo* to the community, which has supported us for over four decades," says Fred Paine, Pearlridge Center general manager. "In 18 short months, Pearlridge Center will be a more comfortable and exciting place in which to shop, dine, play and spend time together."

Pearlridge Center owners were represented by Washington Prime Group's Greg Zimmerman, development executive vice president, and Stephen Harris, development vice president, for the joint venture with O'Connor Mall Partners LP.



At the Pearlridge groundbreaking on March 14 were, from left: Dwight Kawata (Gateside Inc.); Tricia Sakamoto Riopelle (legislative aide); Scott Topping (Kamehameha Schools CFO/executive vice president); Herbert Pang (Honorary Mayor - Pearlridge Center); Rose Vierra-Schoening (Pearlridge Center Merchant Assn. president); Kendall Doi (Pearlridge Center operations director); Linda Gabriel (Pearlridge Center specialty leasing manager); Fred Paine (Pearlridge Center general manager); Doug Nordlund (Pearlridge Center director of security); Cheryl Gardner (Pearlridge Center office manager).

PHOTO COURTESY PEARLRIDGE CENTER

# Layton, W.W. Clyde Form JV

Layton Construction Co. LLC and W.W. Clyde & Co., a heavy civil construction company, have entered into a joint venture partnership, Layton|W.W. Clyde JV, which will focus on Hawaii projects.

Utah-based Layton Construction began Hawaii operations in 2005 and provides general contracting, construction management and design-build construction services. Its current Hawaii projects include Koloa Landing at Poipu Beach and Timber Resorts on Kauai, and Oahu's Ae'o Tower at Ward Village and Kapolei Embassy Suites.

W.W. Clyde, also Utah-based, builds highways, bridges, dams, airports, mines and environmental reclamation sites in the U.S. intermountain west. The company entered Hawaii's construction market in 2015.

The firms, which have worked together on projects for decades,

formed the JV following discussions between company presidents David S. Layton and Jeff Clyde.

The JV is focusing on Hawaii projects with horizontal and vertical



David S. Layton

features, and where "it's determined there will be benefit to all parties, most importantly, the clients," says Layton Construction in a prepared statement.

"The core values of both companies are focused on integrity, quality, hard work and in tackling tough jobs, and conquering challenges with honesty and fairness," says Layton President David S. Layton.



Jeff Clyde

Citing their firms' long history of cooperation, Jeff Clyde, W.W. Clyde president, says: "We see this joint venture as a win-win for all in the Islands."



At the Aeo tower with Layton Construction as GC, W.W. Clyde is placing concrete from the footings to the top (42nd) floor.

PHOTO COURTESY W.W. CLYDE & CO.

Some recent and ongoing Layton|W.W. Clyde projects include the Hokulei Village Chevron gas station, Poipu's Kainani Villas and Lihue's Timbers Resort-Hokuala, all on Kauai; Aeo and Kapolei Embassy Suites on Oahu; and at the Waikoloa

Beach Marriott on Hawaii Island.

In Hawaii, the joint venture will be operated by the management team of Will Summerhays and Tyler Dillon, representing Layton Construction, and David Lewis and Dustin Olson of W.W. Clyde.

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# The Equalizer

Mana Monitoring works across all PV platforms

Photovoltaic (PV) monitoring—often a maze of mismatched platforms and signals—is seamlessly integrated via Mana Monitoring’s subscription software program.



Zoltan Milaskey

“Mana Monitoring has an intuitive platform that specializes in aggregate monitoring, fleet management and reporting,” says Zoltan “Zoli” Milaskey, the program’s inventor and president of Mana Monitoring.

**“Monitoring is reported in near-real time.”**

—Zoltan Milaskey

Hawaii Pacific Solar President Bob Johnston, whose company helped develop Mana Monitoring and has used the software for about two years, says nearly every PV system has a proprietary monitoring system installed along with it that “monitors the inverters and other components of the system, and provides alerts if there’s a fault or a problem.”



Bob Johnston

Large companies like HPS, Johnston says, “often have many, many installed PV systems throughout their network, whether it’s in the state or nationally or even internationally” and which can’t be evaluated until the data is reconciled.

“What we developed with Zoli and through his company, Mana Monitoring, is a software platform that grabs all this information from



various and varied monitoring platforms and puts them into one,” says Johnston. With Mana Monitoring’s program, he says, “a developer, a solar developer, a power purchase agreement owner, an investment group, or an individual can look at their entire portfolio on one platform.”

that a portfolio manager can monitor, such as billing, operations and maintenance. “Monitoring is reported in near-real time,” Milaskey says, and can be tailored to include custom features and software capabilities for client-specific needs.

Johnston says Mana Monitoring’s

**“It really allows one platform, in one area, so you can see the entire portfolio.”**

—Bob Johnston

Milaskey points out that while other platforms like Locus provide similar integration, Mana Monitoring isn’t tied to the hardware of a particular product or technology. “Mana has no interest, it’s totally agnostic about which technologies are out there, it treats them all equally,” Johnston says.

Mana’s program provides an array of different key areas in all systems

program has been introduced on HPS projects “and our partners’ projects as a testing ground. And it works quite well. Our partners have been very pleased.”

Interested PV owners and operators can contact the company at [info@manamonitoring.com](mailto:info@manamonitoring.com) for evaluation and initial free consultation. 🏠





## Meet 'Minotaur'

Case Construction Equipment introduces its DL450 compact dozer loader. Also known as "Project Minotaur," the DL450 is described as a first-of-its-kind fully integrated design that matches the best operating characteristics of a compact track loader (CTL) with a crawler dozer. The DL450 is currently in the concept phase. Case CE construction equipment is available through Allied Machinery Corp. in Waipahu. [www.CaseCE.com](http://www.CaseCE.com)



## Off-grid Portable Power

The SolPad by California-based SunCulture Solar Inc. is an integrated solar energy solution designed for off-grid uses as well as the modern smart home. Each device is self-sufficient as the panels store both solar and grid energy with battery technology. It can be integrated into an existing power environment to be used for building projects or even recreational activities. Once plugged in, SolPad can power tools and other items, from a coffee maker to work lights. [www.solpad.com](http://www.solpad.com)



## Water Trailer

The portable MWT500 water trailer from Generac Mobile Products can be used to control construction site dust, support cement cutting, landscaping and trenching activities. It features a Tsurumi two-inch centrifugal pump and a 500-gallon tank offering multiple fill options from sources such as a hydrant or hose with an estimated- three to four-minute fill time. The MWT500 is also equipped with a 3-inch tow ring with adjustable hitch height and hydraulic brakes for easy towing. [www.generacmobileproducts.com](http://www.generacmobileproducts.com)



## Portable abrasive blast equipment

Graco's EcoQuip 2 EQP is an affordable option in abrasive blasting. Featuring a portable cart with lift handles, the EQP is easy to transport from one job to another. Designed for a variety of applications—steel and concrete surface preparation, graffiti removal, paint and stain removal from wood, iron fence and railing preparation—the EQP emits up to 92 percent less dust than traditional dry blasting, and works with coarse, fine or non-destructive blast media.

Local Graco distributors include Sherman-Williams and Mr. Sandman Inc. [www.graco.com](http://www.graco.com)

# Ramey Named to Head MRA

Renee Ramey has been appointed executive director of the Metal Roofing Alliance, whose membership includes Kapolei-based Action Roofing. Ramey replaces Bill Hippard, who retired, and will be responsible for the daily management of the MRA's efforts to increase metal roofing's residential market share.

She received a bachelor's degree in marketing and management from the University of Oregon.

The MRA, which represents metal roofing manufacturers, suppliers, dealers, metal industry associations and roofing contractors, is based in Longview, Washington, and was founded in 1998.

## Mitsunaga Honored as AIA Fellow

The American Institute of Architects (AIA) 2017 Jury of Fellows has elevated Hawaii architect Dwight Mitsunaga to its College of Fellows.



Dwight Mitsunaga

The College recognizes AIA architects who have made a significant contribution to architecture and society at the national level and have achieved excellence in their profession. In

April, Mitsunaga will be honored at an investiture ceremony during the AIA Conference on Architecture 2017 in Orlando, Florida.

Mitsunaga is founder and principal architect for Pacific Architects. He was also with Gruen Associates, Los Angeles, and Mitsunaga and Associates, Honolulu. He is a licensed architect in Hawaii, California, Guam, Washington and Oregon and a member of AIA Honolulu, AIA Los Angeles and the AIA California Council.

His Hawaii projects include the Hawaii Law Enforcement Memorial, Pier 2 Cruise Terminal, Suites at the Moana-Surfrider Hotel, Windward Community College Campus Center and the University of Hawaii baseball stadium.

## Kohatsu Hired at Nordic PCL

Sheldon Kohatsu has joined Nordic PCL Construction Inc. as a field engineer.



Sheldon Kohatsu

His duties include assisting the project superintendent in safety implementation and monitoring, project planning and execution, scheduling, quality management, document control and subcontractor management.

## Six Join G70

Six building and design professionals—Lindsay Ching, Aaron Couch, Steven Doo, Kevin Kobayashi, Mark Tabucbuc and Joi Song—have joined the civil engineering, architecture and interior design divisions of design firm G70 (formerly Group 70 International Inc.).

“As we look forward to an exciting year ahead, we’re fortunate that these professionals, who have all shown great promise in their respective fields, decided to join our firm,” says G70 President Charles Kaneshiro.

In G70’s civil engineering division, Couch and Doo will oversee

projects as civil engineer and civil project manager, respectively. Couch will support project managers with planning, designing, and developing construction



Aaron Couch



Lindsay Ching



Steven Doo



Renee Ramey

documents and engineering reports. Doo will manage and assist project teams with planning, design and project continuity. Couch holds a master's degree in civil engineering from the University of Washington; Doo holds a bachelor's degree in civil



Kevin Kobayashi

and environmental engineering from the University of Hawaii at Manoa and is a licensed civil engineer.

In the architecture division, Kobayashi, Ching and Tabucbuc will oversee projects as job captain, designer and architectural designer, respectively.

With nearly 20 years of industry experience, Kobayashi will be responsible for the development and coordination of drawings and specifications and overall project administration.

Ching will coordinate projects and design, with a focus on sustainability. Tabucbuc will guide projects through different design phases. Kobayashi holds a bachelor's degree in architecture from UH-Manoa; Ching and Tabucbuc hold doctorate degrees in architecture from



Mark Tabucbuc



Joi Song

Song holds a bachelor's degree in fine arts/interior design from Parsons School of Design in New York City.

UH-Manoa; In the interior design division, Song will be responsible for coordinating project space planning and concept designs, and managing project documents.



Mitch Millar

**AHL Adds Four**

Project architects Mitch Millar, Gary Koyama and Samuel Ustare

have been hired at Architects Hawaii Ltd. along with Wesley Ohori, a senior technical designer. All four were previously with international architectural and engineering firm Leo A Daly.



Gary Koyama

on the North Hawaii Community Hospital Emergency Department expansion. He holds a bachelor's in architecture from the University of

Wesley Ohori, a senior technical designer. All four were previously with international architectural and engineering firm Leo A Daly. Millar will be working on the University of Hawaii Small Animal MRI facility. He holds a master's in architecture from Kingston University in London.

Koyama will be working on the North Hawaii Community Hospital Emergency Department expansion. He holds a bachelor's in architecture from the University of

Hawaii-Manoa.

Ustare will be working on City & County of Honolulu recreational facility projects. He holds a bachelor's in architecture from UH-Manoa.



Samuel Ustare



Wesley Ohori

Ohori will be working on the Kona Judiciary project and received his certificate of architectural drafting at Leeward Community College.

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# BIA Stews Up Bowls of Fun

Hungry builders, state legislators and their guests turned out in droves to sample the *ono* dishes being served up at the BIA Hawaii's 2017 Legislative Night & Stew Challenge on March 14. Chef Jon Matsubara of Forty Carrots at Bloomingdales, Chef Shaymus Alwin of Azure at the Royal Hawaiian and columnist Erika Engle of The Star-Advertiser served as judges for the annual event held at Café Julia at the Downtown YWCA.



Rep. Daniel Ho, Rep. Cedric Gates, Rep. Scott Saiki, Craig Washofsky, Gladys Marrone, Sen. Will Espero



Shawna Benson, Linda Kondo, Ed Donaher



Stella Moon and Lisa Chang



Clifton and Laverne Crawford, Arlene Golwania, Parris Ernst



Jeivin DeCosta, Kellie Inouye, Helen Chang, Cyd Kamakea, Lance Takaki



Herb and April Gebhardt, Julie Lee, Lloyd Mitchell



Ashley Lin, Malia Yee, Evan Fujimoto



Rep. Richard Onishi, Charles St. Sure, Kimo Pierce, May Price, Karen Watase



Lee Tokuhara, Robyn Titcomb, Peter Phillips, BJ Nagata, Beth Bartholomew-Saunders, Jackson Parker, Beverly Wellman, Mary Flood



Juan and Jessica Rios, Norman Takeya



Clif Lum, Stacey Miyamoto, Jared Chang, Cindy Ligsay, Dean Uchida, Mike Matsumoto



Evan Fujimoto, Cathleen Main and Craig Washofsky



Khara, Laguna and Rep. Kaniela Ing



Warren and Anita Ho, Ken Berry

# Saving for a Rainy Day

## How to Bring Flexibility and Power to Your Company

BY GARRETT J. SULLIVAN



**N**ow is the time to be a contractor. The economy is booming and things have been flowing consistently for the past few years.

In addition, there is a general sense that the winds of prosperity in Hawaii may be changing. The climate for construction is not going to change tomorrow—however, tell-tale signs are starting to appear in economic reports.

This change can be attributed to the slowing of high-rise luxury condominiums. Currently, the high-end resort, retail and residential market sectors are helping to sustain robust activity. The pivot point—where the construction market economy moves into unknown territory—appears to be in 2019.

One area that is beginning to generate economic buzz is the great work by the Hawaii Affordable Rental Housing Coalition. This continually expanding group of construction industry-related businesses, labor organizations, construction industry associations, engineering associations and other groups are trying to find affordable housing solutions for the approximately 64,000 rental units that need to be built for working families. It has become painfully apparent that the state and city are not able to solve this community issue alone. Achieving Hawaii's needed affordable housing is going to require some out-of-the-box thinking and government approvals, as well as the waiving of fees in coming years.

Starting to gain traction is the thought that if these various groups

and agencies could soon move proactively, affordable housing could be a key to maintaining our strong engine in the construction industry. While an enormous amount of work still needs to be completed, affordable housing could be the bright star in 2019.

With these changes in the economic climate in mind, now is the time to prepare for the challenges ahead. In addition to economic changes, there could be personal health challenges, disasters or other financial emergencies.

One great way to prepare is to enhance your emergency or rainy day fund, which is a reserve to be used in times when regular business income is disrupted or decreased. It allows companies to set aside excess revenue for use when there is a need to plug holes in a budget, defend against an economic perfect storm, or keep the company losses at bay.

In an emergency, rainy day funds can be used for a variety of purposes, including increasing material inventory, paying suppliers on time and maintaining key employees.

Here are a few simple steps to creating a rainy day fund:

First, set up a rainy day fund savings account at a financial institution other than your current banking partner. The idea is to buy laddered certificates of deposit which mature on different dates to allow you to obtain cash when you need it without penalty and to use the cash by making it slightly more difficult for you to withdraw it without first thinking it through.

Second, review your monthly cash flow. When you have surplus cash in the operating account, take the excess and move it to the rainy day fund. Make this a monthly ritual, as now is the time when profit is most likely to be at its height.

Next, review the annual budget and costs to date every month. Strive to find ways to lower overhead. Consider a monthly staff meeting on just this subject and implement the fiscally sound suggestions immediately to improve profit and, ideally, the rainy day fund.

While the appropriate amount of the rainy day fund will certainly vary given the size of the company, one goal would be to set aside one year of the company overhead. When this goal is achieved, the company will be better positioned to deal with any economic storm or disaster.

A rainy day fund will give you the flexibility to make the company decisions you want and not have decisions dictated to you. You will be in a position of power—which means that in the future, you will not have to chase low-margin projects. 🏠

*Garrett Sullivan is president of Sullivan & Associates Inc., a management consultancy which focuses on the construction industry and is tailored toward leaders who want a reliable, trustworthy partner to help increase profits, streamline operations and influence employees to treat the company like their own. Reach him at [GSullivan@SullivanHi.com](mailto:GSullivan@SullivanHi.com) or 478-2564.*

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