

Legislation
Education
UH Structures
In Retrospect

BULK RATE U.S. POSTAGE Permit No. 1023 Permit Mawaii



When Contractors are Communicators...

...the project prospers. That's why good communication is the bedrock of Allied Builders' working philosophy.

Case in point is the beautiful new Waikiki Trade Center based offices of Jetour Hawaii Inc. where Allied Builders was tasked with razing former tenant space, recreating corridors and rooms, modifying ceilings, air conditioning and lighting – so that 12,000 sf of visitor friendly interiors were ready in just 60 days for the holidays.

Observes Jetour's Pat Yoshimoto: "They bent over backwards to get the job done and were always communicative. They truly syncopated with the architect and building manager and gave us a quality product."

Adds architect Roy Yamamoto, a frequent Trade Center contributor: "Once again Allied Builders came through. We always knew where the job was at – without asking. They make our work a more enjoyable experience."



ALLIED BUILDERS SYSTEM

Teamwork. Our motto. Our method.





OOMPH!

Lots of building materials are attractive. So is masonry, which also resists weather, termites, wear and fire. Other attractive building materials don't do all that.

Big difference!





MASONRY INSTITUTE OF HAWAII Phone 833-1882









BUILD HAWAII STRONG WITH MASONRY"

Contents

Volume 22, Number 1

Leadership Message

5 Legislation—busy year for AIA
New AIA president talks about legal issues
by Daniel G. Chun, AIA

Architectural Education

6 New Structures: A changing UH campus scape

Student Housing: Making the ends justify the means Describes new student housing at UH Hilo.

by Melvin Y.K. Choy, AIA, RAIA

10 UH School of Architecture: Ushering in a new era Professor Baker reviews 1992.
by Barry John Baker, AIA

12 ImagiNations: Developing amusement park themes

Students' entries receive national recognition. by Richard Morris

16 Internship: A growing student concern Describes internship, the "missing" link between education and professional practice. by Puanani Maunu

18 Built Environment: Architecture as an educational motivator

Architects are in demand in the nation's classrooms. by Howard J. Wolff

24 Arizona School: An experiment in community design

Relates how a community can participate in the design process.
by M. Rae Douglass, AIA

Mems

21 New Dean: UH School of Architecture
W.H. Raymond Yeh assumes new post.

2.2 Letters to the Editor

Review

28 Year of 1992 in Retrospect Hawaii State Council/AIA

In this issue ...



BILL HAGSTOTZ PHOTO

The cover depicts Hawaii Hall, a landmark at the University of Hawaii at Manoa. This is appropriate with the main focus on architectural education.

Construction activities continue at UH to keep up with

growth and demand for higher education. Work is underway on a new School of Architecture facility, with completion scheduled for summer 1994.

Also under construction are a new sports arena, a Center for Hawaiian Studies building, the Pacific Ocean Science and Technology building, and the student service center building. Expansion is also taking place at UH Hilo.

This construction bodes well for the future of education and architecture in Hawaii and demonstrates the state's commitment to higher education.

The start of the new year is a time for changes and resolutions. This issue of Hawaii Architect introduces design changes to enhance aesthetics, presentation and readability. We invite your comments and ideas in our quest to produce a publication of the highest quality. Efforts are being made to increase the use of color in addition to changes in content and layout. Thanks to our advertisers, who make this publication possible. Your patronage of their products and services is essential to the continued success of Hawaii Architect.

Hauoli Makahiki Hou!





PMP Company Ltd

Publishers

Publisher/ Peggi Marshall Murchison
Executive Director

Sales Manager Miki Riker

Managing Editor Paul Sanders

Art Director Maria Bracho

Production Manager Cynthia Becklund

Graphic Artists Leonardo Henobio Jr. Cheryl Ruddach

Typography/ Lara Prestfeldt Jaracz
Production Rose Cabanlit
Kim Fukumoto

Account Executives Mark Zanetti
Stan Harris

Office Manager Kathy Sanders
Accounting Manager Susan Colletto

Accounting Manager Susan Colletto

Administrative Assistant Kimberlee Myers

Copyright*1993 PMP Company, Ltd., 1034 Kilani Avenue, Wahiawa, Hawaii 96786. Phone 621-8200. Fax 622-3025. All rights reserved. Reproduction of the whole or any part of the contents of Hawaii Architect without written permission is prohibited. Postmaster: send change of addresses to Hawaii Architect (ISSN 0919-83111) at 1034 Kilani Ave., Wahiawa, Hawaii 96786.



HAWAII STATE COUNCIL

1993 Hawaii State Council/ **AIA Officers**

President Daniel G. Chun, AIA

Yice President/ President-elect, Stanley S. Gima, AIA

Secretary/Treasurer E. Alan Holl, AIA

Directors

Christopher J. Smith, FAIA Gerald N. Hiyakumoto, AIA Virginia Macdonald, AIA John Okita, AIA Charles A. Ehrhorn, AIA Steven H. Heller, AIA Francis Oda, AIA

AIA Honolulu

1128 Nuuanu Avenue Honolulu, Hawaii 96817 (808) 545-4242

Honolulu Chapter President Kurt H. Mitchell, AIA

AIA Hawaii Island P.O. Box 1893 Kamuela, Hawaii 96743

(808) 885-4431 **Hawaii Island Section** President

Ed W. Campbell, AIA

AIA Maui P.O. Box 929 Wailuku, Hawaii 96793 (808) 244-9574

Maui Chapter President Thomas R. Cannon, AIA

Hawaii Architect is a monthly journal of the Hawaii Council/American Institute of Architects. Subscriptions are \$24 per year. Opinions expressed by authors do not necessarily reflect those of either the Hawaii State Council/AIA or the publisher. The appearance of advertisements or new products and service information does not constitute an endorsement of the items featured.

Leadership Message

Busy year for AIA Legislation



Daniel G. Chun

t the close of one of the past legislative sessions the AIA Board of Directors was asked what had been enacted. The answer was "nothing," which is not a tragedy in a state with many laws on the books. This year, however, the AIA will be working toward approval of some bills.

The state of Hawaii's Tort Reform Act is about to expire. Touted as a reasoned compromise between all parties, the act should be made permanent or at the very least extended for another term. As professional architects licensed to safeguard health, safety and welfare, we know we need to assume some liability.

However, the AIA believes that this must be an appropriate and fair amount of liability. Perhaps this level of liability should be commensurate with compensation received or the degree of control exercised over the long-term operation of a project. Our point is that we are architects and not insurance companies to which annual premiums are paid.

Related to Tort Reform are local jobs in the architectural profession. Hawaii has a high cost of doing business. From business comes the tax dollars to support all the good things that the state Legislature dreams up. From local business comes the jobs that we need to live in Hawaii. As our local architectural firms look to markets outside the state they often find that the high costs of items such as health insurance make them less competitive with other architects.

While we are not advocating the dismantling of employee benefits, the costs of providing them will, in the long run, affect jobs in Hawaii. Architecture is a somewhat portable service profession. We need to remain competitive in our local market as well. Therefore, the profession's and citizens

ought to have a continuing interest in Tort Reform.

The AIA will also introduce a bill to amend Chapter 464 Hawaii Revised Statutes which deals with professional engineers, architects, surveyors and landscape architects. The first proposed amendment concerns aiding or abetting. The text reads as follows:

§464 - Aiding or abetting. Aiding or abetting an unlicensed person to evade this chapter or knowingly combining or conspiring with an unlicensed person, or allowing one's license to be used by an unlicensed person, or acting as an agent or partner or associate, or otherwise, of an unlicensed personal, with the intent to evade this chapter, shall be a misdemeanor.

Renewed emphasis on unlicensed activity is appropriate in the aftermath of Hurricane Iniki. Although we are not insurance companies, we can speculate as to whether the huge losses they sustained would have been less had they rigorously examined the involvement of licensed professionals in the construction of insured properties.

The second proposed amendment to Chapter 464 would establish a citation for unlicensed activity. This would allow the state Department of Commerce and Consumer Affairs to use its own administrative procedures, as opposed to judicial procedures, to enforce the law. Commonly referred to as "cease and desist" orders, citations may contain an order of abatement and an assessment of civil penalties. This action is similar to recently enacted amendment to the law governing construction operation and aids in the timely and costefficient enforcement of Hawaii law. HA

→ Dan Chun, AIA, is president, Hawaii State Council/AIA.

Architectural Education

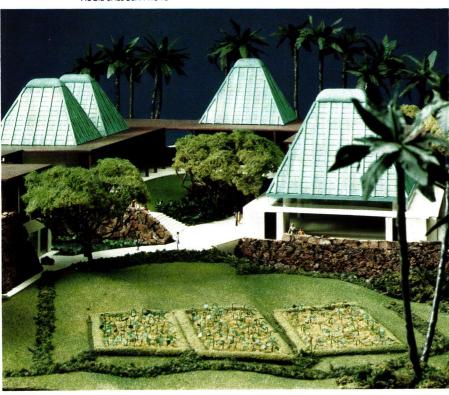
A changing UH campus scape White the scape of the scape



When completed in August 1994, this new 186,000 square foot arena will seat 10,000 spectators in basketball configuration.

Center for Hawaiian Studies under construction on Dole Street at East entrance to the Manoa Campus.

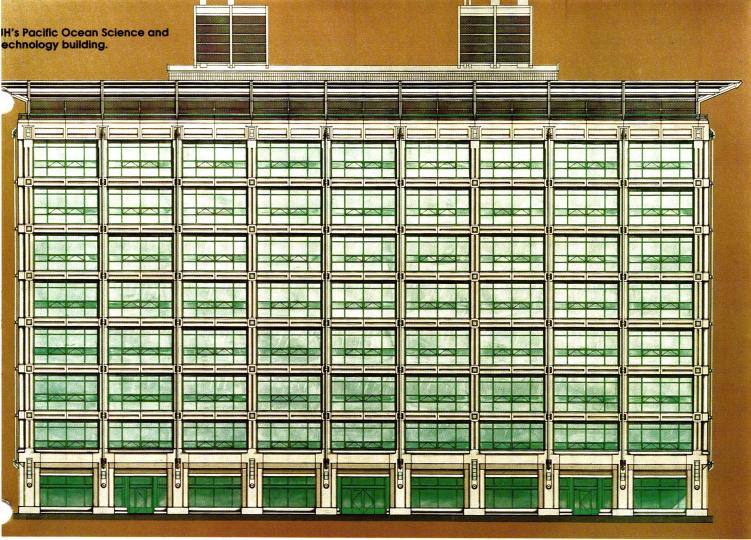
AUGIE SALBOSA PHOTO



ajor materials for the Special Events Arena at the University of Hawaii will include concrete, con crete masonry and sand-blasted aluminum dome. It was designed by Heery Architects and Engineers of Atlanta and Kaua-hikaua & Chun/Architects of Honolulu. Design-build team is led by Charles Pankow Builders.

The 26,000 square foot Center for Hawaiian Studies complex will be clad with lava field-stone, glass, copper siding and copper roofing. The central roof form covers the library/resource center. The right-hand roof form covering the open-air auditorium will overlook Manoa stream. It was designed by Kauahikaua & Chun/Architects, scale model by ADM and construction by T. Sida Contracting.

The 250,000 square-foot, eight-story Pacific Ocean Science and Technology (POST) Building, top of page 7, was designed by Aotani &



Associates to allow maximum flexibility for future changes in lab function and layout. Design team included Edward Aotani, president; Yvonne Vanoy, project manager; and John Tatom, designer

Upon completion in 1994, the fivestory, 110,000-square-foot Student Service Building, below, will consolidate 20 scattered student services departments under one roof. It will be situated between Porteus Hall and Webster Hall. The building, designed by Franklin Gray & Associates Architects Inc., will act as a bridge between surrounding contemporary buildings and adjacent neoclassic quadrangle structures.

Exterior finishes will be sand-blasted cream colored concrete beams and columns, with tan textured exterior wall masses. The windows will be vented and glazed with light bronze glass. The structure will wrap around a large interior garden court which will be provided with a snack bar and dining amenities at ground level. **HA**



Student Housing Making the ends justify the means

by Melvyn V.K. Choy



Student lounge
and dining facilities.

MICHAEL FRENCH PHOTOS



tudent housing at the University of Hawaii at Hilo is in high demand. As the campus continues to experience a sustained growth pattern in student enrollment, state and university officials closely monitor the corresponding need for additional campus dormitories.

University housing presents several challenges to architects. Since most educational projects are in the mid- to low-budget range, intended building materials clearly influence the design. Finishes and furnishings are selected for their durability and ease of maintenance.

For Media Five Limited, another challenge was to create a design for new student housing structures and an additional dining facility using similar architectural vernacular to existing campus structures.

The University of Hawaii at Hilo is located up-slope from Hilo Bay, approximately 10 minutes from the downtown area. Media Five's design solution creates a student housing and dining compound that takes advantage of the site's harbor views. Four new buildings are loosely configured around an open pedestrian plaza, with isolated interconnecting paths protected from vehicular circulation. Open spaces with mature trees provide passive recreational opportunities and contribute to the campus ambiance.

The dormitory facades are of waterproofed plaster capped by red metal roofing, in keeping with nearby existing facilities. Although the three-story housing structures are linearly-oriented, a step-back design softens their look and provides visual interest. Single-loaded corridors allow each unit's bedroom windows to face interior courtyards rather than adjoining living spaces.

A lobby with a front desk and mail center serves as a transitional area from public to semi-public spaces in the student housing compound. The 118 two-bedroom housing units are 637 square feet, featuring built-in desks and open closets for maximum storage.

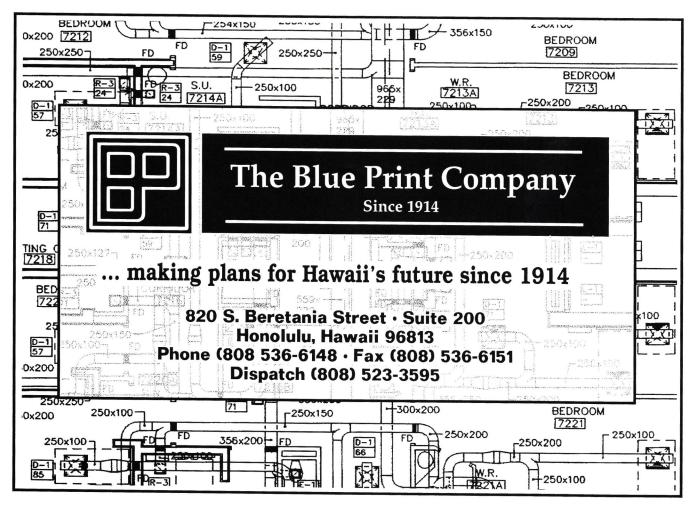
The 300-seat dining room is connected to the housing areas by paved walkways, some protected by covers. An outdoor lanai leads to the snack bar and recreational lounge. Inside the dining room, the food service area is loosely designed as a "hollow square," placing beverage service in the center. A skylight increases interior natural lighting to offset the overhead fluorescents.

Hilo's climate presented the opportunity to use natural ventilation for the student housing and dining facilities, yet its high humidity made it impractical for all areas. High, opentrussed ceilings and fans created large air-circulation areas for the student lounge, snack bar and dining facility. Transom windows and doors increased cross-ventilation.

The student housing and dining facility project would be the first new structures at the University of Hawaii at Hilo to incorporate access for physically-challenged students. Six three-bedroom units were created, each measuring 1,274 square feet. Access ramps, wide doorways and handrails were placed throughout the compound.

As the campus continues to grow, more housing facilities will be required. Media Five is presently providing design services for the next phase in the development of campus student housing, facing challenges that are similar, yet always unique to the site, intended use and population. **HA**

→ Melvin Y.K. Choy, AIA, RAIA, is chairperson of Media Five Limited.



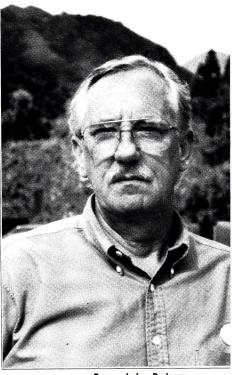
Ushering in a new era UH School of Architecture

by Barry John Baker anuary 1993 marks the beginning of a new era for the School of Architecture at the University of Hawaii (UH) at Manoa, with new challenges and new leadership for both the university and the school. In November, the university's Board of Regents announced the appointment of Dr. Kenneth P. Mortimer, president of Western Washington University, and "a nationally known expert on higher education" as president and chancellor of the University of Hawaii at Manoa. Mortimer will assume his new duties in early 1993.

On Dec. 16, the school also greeted the distinguished new dean and professor of architecture, W.H. Raymond Yeh, FAIA.

I know that our colleagues in the Honolulu Chapter/AIA, and friends and supporters of the school join me, my faculty colleagues and the student body in offering Dean Yeh our best wishes and full support as he builds on the excellent foundation laid by former Chairperson A. Bruce Etherington, FAIA, and former Dean Elmer E. Botsai, FAIA, as he leads a rejuvenated school into the twenty-first century.

The school of architecture has now occupied its temporary home at 1859 East-West Road for one year. Space is at a premium in these new temporaries; design studios are cramped and storage space non-existent, however, in preparation for our present reduced facilities, student enrollment was reduced in the last two years, and this allowed us to squeeze into half the space we enjoyed at George Annex. This is the price we must pay for a future new and larger building. On the plus side, we now have new student design studio work stations, a



Barry John Baker

dedicated and well-equipped classroom and private offices for all faculty. In addition, the slide library and computer center have been significantly expanded. During 1992, state funding allowed us to spend almost \$7,000 on new audio-visual equipment, and over \$115,000 on new computer hardware and software that greatly enhanced our computing ability.

Beginning with this fall semester incoming class of 1998, enrollment will be increased to prepare for our occupation of the new larger facility now under construction on the old George Annex site. The new school building project commenced last August and is on schedule. The ground breaking ceremony was attended by Gov. John Waihee, university and professional leaders and alumni.

The Associated Architects, Hara/Hara/ Toyomura, have designed an excellent functional building, within the constraints of stringent university master plan requirements, and one that is in harmony with the nostalgic charm of adjacent buildings and the old historic college quadrangle. We are appreciative of the efforts of the many professional colleagues whose help and ongoing support contributed so much to the procurement of the original appropriation and the new building under construction.

The school Facilities and Finance Committee, ably chaired by visiting Associate Professor George F. Wallace, and assisted by committee members, Associate Professors Fred L. Creager, AIA; Joyce M. Noe, AIA; and Gordon D.C. Tyau, AIA; and student member R. Richard Morris is currently finalizing the furniture, fixture and equipment list for the new building; however, approximately \$1 million from the original CIP appropriation will be available to start this daunting task.

During the spring of 1992, the School of Architecture student body participated in a national design competition, ImagiNations, organized by the Walt Disney organization.

In the summer of 1992, the American Institute of Architecture students awarded a National Education Honor Award to our Graduate Chairperson, Associate Professor Leighton K.F. Liu for his services to architectural education

During the spring semester of 1992, in conjunction with the Consulate General of Japan, Professor Liu also organized a very successful lecture series and traveling photographic exhibit, Contemporary Japanese Architecture.

Our annual fund drive to support the school and student activities is currently underway. Last year, strong support from the professional community, alumni and friends allowed us to offer almost \$30,700 in direct student scholarships, awards and grants for student travel and assistance. We plan to increase student financial support for the 1992–93 academic year; however, the level will be contingent upon community support.

Current plans call for a minimum of \$40,500 for student scholarships, a one-third increase over last year. We would also like to fund travel by our best students to nine national meetings and conventions. I recently wrote to all members of the Honolulu Chapter/AIA reporting on the state of

the school; in that letter I enumerated how the \$80,560 raised during last year's fund drive was used. Despite the present difficult economic situation, I do ask our professional colleagues for ongoing financial support; please remember every gift to the school helps, no matter how small, and all gifts greatly enrich the life of the students and the school

Exciting things happened in 1992, but better things are yet to come as we enter a new era under the distin-

guished leadership of Dean Yeh. On behalf of Dean Yeh, students, faculty and staff of the School of Architecture at the University of Hawaii at Manoa, I offer my sincere thanks to all our friends in the professional community for your continuing support of the school and wish you all success and prosperity in 1993 and beyond. **HA**

→ Barry John Baker, AIA, is professor of Architecture and interim dean at the university.



Developing amusement park themes

ImagiNations



1992 Disney Imagineering Competition winners. *Left to right,* Clint Nagata, Tracy Sakamoto and Lena Kam.



uring the spring semester of 1992, several design studios at the University of Hawaii (UH) School of Architecture were involved in a national Walt Disney Imagineering (WDI) ImagiNations design competition. This competition was for the design of a ride or other attraction for any of the existing Disney theme parks or for the design of a new theme park. Seven universities had been invited by WDI to participate with entries to be submitted by groups of no more than three students each. At UH, the competition was organized through the UH Office of Student Employment and Cooperative Education Program.

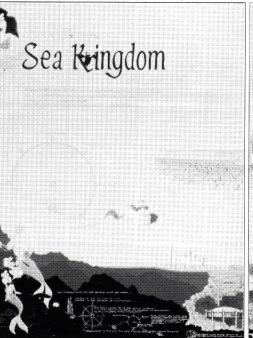
The first challenge in this competition was to develop a new theme or idea. The emphasis was on the uniqueness of the idea and not necessarily on the practicality of the design. During the research phase of this competition, many design teams found ideas which at first seemed

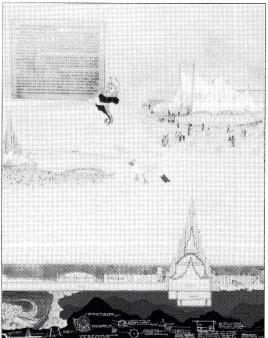
radically new had already been developed by Disney or other amusement parks.

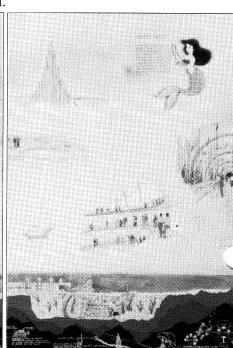
The themes which were developed by the students covered a broad range of interest. Many themes were based on recent advances in computer technology. Amusements which interacted with computers were explored, such as a stroll through an imaginary world where there were interactions with computer-controlled holograms. A ride which used virtual reality was envisioned. It would provide a different experience for each individual, depending on their desires or interests. Other, less computer-driven ideas, were rides which used recent Disney movie themes.

Many different and unusual locations were also envisioned for the new theme park. Parks were proposed for under the sea and on a floating city which would cruise the oceans. Parks would be placed on isolated islands and on orbiting space stations. No location was overlooked.

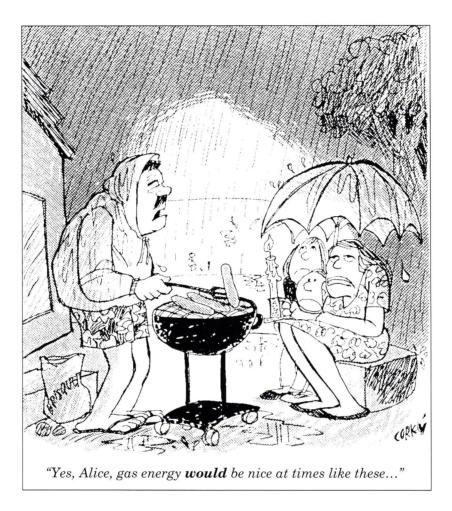
"Sea Kingdom" awarded second place in national contest.







Powerful Reasons To Specify Gas.



Now more than ever, a reliable source of energy is a compelling consumer benefit and a powerful reason for architects to specify gas.

There are plenty more...

Dependable service that respects your schedule. Nearly 90 years of local experience on residential and commercial projects. Free design assistance from the planning stage to post-construction.

Your Gas Company. We've been there for Hawaii's homes and businesses since 1904. We'll be there for you.

The Gas Company [®]



515 Kamakee Street, Honolulu, Hawaii 96814

A second challenge in the competition was to develop a presentation which required no additional explanation, since the judging was to be by closed jury. This was probably the more difficult part of the competition for architecture students who are normally allowed to make oral presentations along with their graphic boards.

However, in this area, there were many solutions, and superior boards were the mean. Boards were developed which conveyed an overall theme from a distance and provided greater detail when the board was approached. Many other presentation ideas were also attempted. One used a video to create the surrealistic theme of the attraction providing all the sounds and color. Another video tried to show the simplicity of the design by replicating a black and white silent movie.

One of the more unique ideas was to present the progress through an amusement park in the form of a book. The book had an accompanying tape which not only gave voice to words but also provided sound ef-

At the end of the competition in March a majority of the 32 entries submitted by students were from the UH School of Architecture. Entries from Hawaii were first evaluated by a jury of local professionals, including Momi Cazimero, UH regent and graphic designer, Graphic House, Inc.; Warren Sekiguchi, structural engineer, Hickam Air Force Base: James Hutchinson, director/choreographer, Diamond Head Theatre: Ruth Tamura, past president, Hawaii Museums Association; Sheryl Seaman, AIA, architect, Group 70; and Mark Boyd, professor, HUM Theatre & Dance lighting, set director.

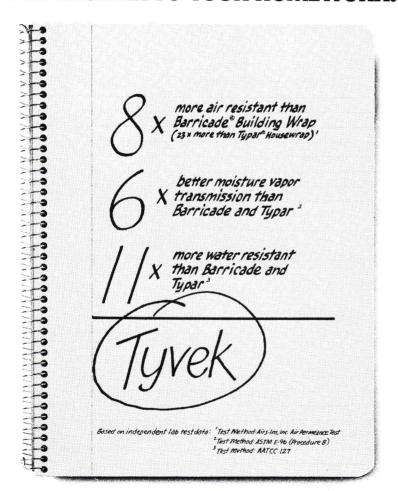
All presentations were then forwarded to WDI, with the three best identified as entries for the national competition.

At the national level, the three best were selected from the nominations of the seven universities, and the groups were invited to WDI headquarters in Glendale to make presentations. One of Hawaii's three groups placed second in this national competition with its entry of "Sea Kingdom." This entry, submitted by Lena Kam, Clint Nagakata and Tracy Sakamoto, was an underwater playground of rides, theaters, restaurants and shops based on "The Little Mermaid." As a result of the competition, each winning group member received a cash award of \$1,500 and an opportunity to spend six months in a cooperative education program at WDI.

Because of UH's success last year, the university has been invited to compete in a second competition this spring. A team from WDI, led by John Paul Scott, head of architecture at WDI, came to the university in November to kick off the 1993 competition. In conjunction with this trip, selected UH students involved in the competition will be given the opportunity of a cooperative education position at WDI for the next six months, starting in January. HA

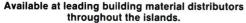
Richard Morris is a 300-level student. UH School of Architecture.

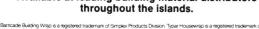
DU PONT TYVEK® HOUSEWRAP... THE ANSWER TO YOUR HOMEWORK.



Why Do The Work And End Up With A Failing Grade? Use Tyvek Housewrap.

No matter how you add it up, TYVEK® Housewrap from Du Pont is the best housewrap you can use. It's durable during installation - tear resistant, and UV resistant up to 4 months. And it performs after it's installed.



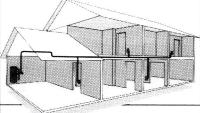




WHY?

is a Central Vacuum System 6 times better than a portable vacuum

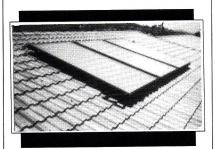
- Cleaner Air, Less Dust (does not recirculate fine dust particles)
- Quiet (hear only a whisper of air)
- Deep cleaning power (more powerful motor)
- Convenience (simply plug into wall inlet)
- Versatile (easily cleans draperies, ceilings, walls)
- Value (built in home improvement)



VACUMAD, Central Vacuum Systems.

A Division of Inter-Island Solar Supply

Phone 523-0711 · Fax 536-5586



What is useful also can be beautiful

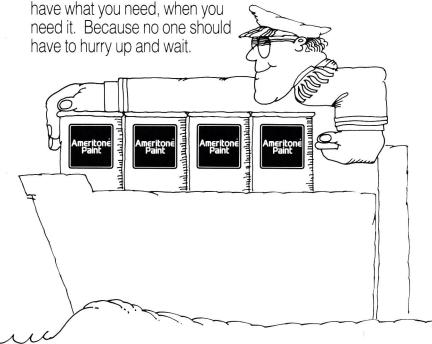
For product specifications call



INTER-ISLAND SOLAR SUPPLY 523-0711

In paradise you shouldn't have to wait for your ship to come in.

Waiting for the right color paint to arrive from the mainland won't make your day. So we have a huge inventory and can provide 860 existing colors in large quantities. Right here in the islands. So you



Ameritone Paint 1353 Dillingham Blvd., Honolulu 96817 841-3693

Kapaa Paint Supply 934-A Kipuni Way, Kapaa 96746 822-1788 Ameritone Maui 140 Alamaha St., Kahului 96732 871-7734

Ameritone Maui West Maui Center #7 910 Honoapiilani Hwy., Lahaina 96732 667-2614 Ameritone Maui South Kihei Commercial Center #206 Kihei, Hawaii 96753 875-1133 Ameritone / Devoe Paints 18A Pohaku St., Hilo 96720 935-2011 Ameritone / Devoe Paints 74-5599 Alapa St., Kona 96745

Ameritone Paint Corporation, P.O. Box 190, Long Beach, CA 90801, 1-800-669-6791



A growing student concern Internship

by Puanani Maunu

rchitecture students have two important concerns about quality education in architectural careers. One of the issues confronting students today is the quality of experience they will receive as interns after graduation. Internship is a nebulous period in an architect's career. It should be a period where students put into practice all they have learned. It is the vital link between education and practice. Most students, however, perceive internship as the weakest link in the process. The primary reason why interns do not receive a well-rounded internship may be because taking students through all facets of practicing professional architects requires a large investment in time, money and patience. Some architects may feel they are investing in training potential competitors. Some just don't want to bother. This is frightening to students about to enter the internship process. Students need continuity in their development through a well-rounded internship process. They also need to feel valued, through fair compensation for their contributions to the firm.

Practicing professionals need to make the commitment of assuring the quality and integrity of the profession through the development of architectural interns. The 1992 AIA Code of Ethics and Professional Conduct states under Canon 1, E.S. 1.2 Standards of Excellence: "Members should continually seek to raise the standards of aesthetic excellence, architectural education, research, training and practice."

The development of students into architects is important because this is where established architects share their vision of the future with newcomers who will be working toward creating the optimum built environment for Hawaii's future.

The best tool for this link in education is the

Internship Development Program (IDP), which assists and guides interns and employers in the professional development of competent architects. In Hawaii, the response to integrate this program into the training of interns has been less than enthusiastic. Its implementation will benefit everyone and will benefit Hawaii. Architects must make the commitment to train interns in the best possible way. Architecture is a lifelong learning process; it is through interaction between architects and interns that interns learn, improve and promote their chosen profession.

At Forum, the national AIAS week-long conference in Buffalo, New York, last November, students from all over the nation and Canada discussed issues affecting their education and future careers. A major issue of great concern is a sustainable future, and the practice of sustainable design in our environment.

Participants unanimously supported a declaration which, in part, reads:

"We, the members of the American Institute of Architecture Students, see around us a world layered with crisis and opportunity, a world our actions will shape. Our ability to act on this vision is dependent both on the tools we gather through education and the way the world has been affected by those preceding us in this vision. We believe that those who follow us will look ahead with the same eyes, that our vision will then be theirs to enhance. In this belief we are compelled to act in our greatest capacity to form and solidify a sustainable future for visions yet to come."

AIAS resolved to 1) develop sustainability as a focal topic in competitions, publications and other AIAS forums; 2) develop model curricula for presentation to university curriculum committees; 3) continue the education, promotion and action for sustainable design by the AIAS and its members; and 4) encourage the other

four collateral architecture organizations (ACSA, AIA, NAAB and NCARB) in fulfilling their roles.

Sustainable architecture is a continuous inquiry into how to make things better for future generations, how not to waste available valuable and precious resources and how to continue to grow in population without destroying the environmentfresh air and clean water, land and natural resources—the things that are taken for granted. Questions must be asked before solutions can be found. The world's future depends on the actions taken today. The technology that will be borne out of sustainable architecture is an exciting new frontier in architectural technology.

It has to do with environment, ecology, energy and the human consumption in which people live as a diverse and multicultural society. It should also mean looking at the way other cultures use land, natural resources and locally available materials, and how these cultures have adapted their built environment to the surrounding environment and the climate. It also means developing creative, unprecedented alternatives to the bad habits that continue to destroy the ecosystem. It means implementing an intense educational effort to create awareness of the issues. It means working for the good of all, and for future generations.

Students of architecture today em-

brace the meaning of architecture in a global sense and translate it into the personal realm of architecture in Hawaii. To include this concept as an integral part of academic curricula is a desirable goal, because it will carry into the students' careers.

Most students of architecture realize architecture is not just a job, but a lifelong commitment to move humanity forward through the built environment, including local as well as global values. It is an exciting time to be in. **HA**

→ Puanani Maunu is president, Hawaii Chapter of the American Institute of Architectural Students (AIAS).





30" Diameter CUBICON Flase Pillar with Imperial Plaster
1991 Hawaii Renaissance Merit Winner

Office for INK Architects Inc. Architect/Designer: INK Architects Inc.

CUBICON COMPONENTS:

Also for cabinet or furniture construction. Cover with decorative laminates, wood veneers and metals — upholster in fabric or carpet — or finish with paints and lacquers. Your choice of over 30 shapes and sizes. Framing your products with CUBICON shapes will save time and expense, CUBICON shapes can be used for radius corners and round components in place of expensive molded plywood.

Available through these outlets:



VISIT OUR SHOWROOM 2858 Kaihikapu St., Honolulu 96819 PH 833-4344 • FAX 833-4912 Kona Laminates, Inc. 73-5568 Kauhola St. Kailua-Kona 96740 PH 326-2822 • FAX 326-2821

Maui Laminates, Inc. 269 Papa Pl., #5 Kahului, Maui 96732 PH 871-6500 • FAX 871-5959

Built Environment



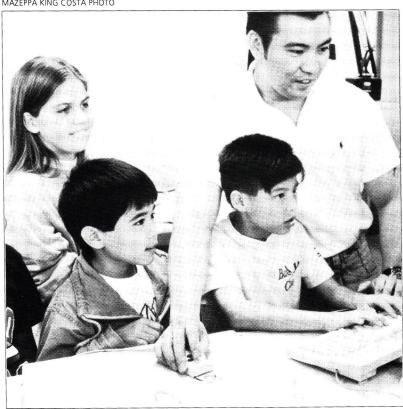
he built environment is architecture in its broadest sense. Comprising cities, streets, houses and parks that we build and the spaces that connect them, it is the physical framework of our activities and interactions and, thus, an important determinant of the shape of our lives.

We all need to be trained to be aware of what is around us, to sense the qualities and interrelationships of the spaces and places that are part of our everyday lives.

Built environment education stresses the development of an awareness of our surroundings, an understanding of the functions and the impact of the environment and the ability to use the environment and, when appropriate, change it for the better.

Brett Yamashida, AIA Associate, demonstrates the CAD system to lan Rehfeldt as Jenny Barrett and Alika Ichinose await their turns.

MAZEPPA KING COSTA PHOTO



Collaborating with teachers and students and utilizing their own specialized training and abilities, interested architects can help develop awareness of space and structure, the ability to analyze surroundings and familiarity with the process and tools of design.

Depending on the grade level and ability of the students, construction projects can help youngsters improve this skills in arithmetic, geometry and trigonometry.

The close coordination of such projects with the existing curricula has been a major factor in the enthusiastic acceptance of architects in the classroom by teachers and administrators.

The emphasis in all such program activities is on active participation in the immediate environment of the school and local community. Although books can supply much background, the classroom, the playground and the neighborhood offer opportunities to learn through direct experience.

Mapping, measurement and interpretive skills are learned as children record their observations and translate their impressions into land-use maps, road maps, drawings and collages. Often these activities lead to three-dimensional studies as well.

Models of the classroom allow children to analyze their environment, reorganize the spaces or rearrange the furniture.

But the process does not have to result in environmental change in order to be a valuable learning experience. A remedial math teacher in New York, for instance, involved her students in measuring and constructing a model of their room, with the primary aim of using that process as a vehicle for teaching math.

At another school, a group of fourth- and fifth-graders were at least two years behind their classmates in basic math skills. They had trouble with multiplication and division; they could not read the markings on a ruler, nor

could they understand the concept of fractions.

Dealing with an architectural project, these abstractions became real for the students. In the process of measuring their room, drawing a plan and building a model, students grasped the concepts of scale and measurement and learned how to convert feet to inches.

And in drawing and constructing the furnishings, the students progressed in math to the point of being able to add unlike fractions.

These children were tested prior to working on the project and again after its completion. Standardized test scores showed that most of the students advanced one to two full grade levels in measurement and fractions. They did equally well in multiplication, problem-solving and abstract reasoning.

In addition, their finished product was most impressive—the envy of all in the school. According to their teacher, this was the first time those in remedial math thought of themselves as "special" in a positive sense; they gained pride and self-esteem through the experience.

It is important to note that this is not an isolated success story. Across the country, architects working with teachers have had remarkable results, not only at all age levels, but at all levels of ability.

The hands-on approach to architecture and built environment education has created excitement in students who have previously been uninterested or unsuccessful in school. In the long term, architects will also reap the benefit of having created a more educated, enlightened and appreciative group of future clients. HA

→ Now a principal with Wimberly Allison Tong & Goo, Wolff spent seven years as an architect-in-the-schools, working with students and their teachers to integrate the study of the built environment with reading, writing and 'rithmetic.

Future Architects

Thirty-three fifth- and sixth-grade Wailupe Valley Elementary School students were recently given a minicourse in architecture and allied career opportunities and the role architecture in their lives when they visited the Waikiki offices and drafting rooms of Wimberly Allison Tong & Goo (WAT&G) Architects and Planners.

When school counselor/career awareness director Meredith Ching called WAT&G to request the presentation, saying the students themselves had asked to visit an architectural office, firm vice-president Charlie Wallace's initial reaction was one of surprise at the youthful-

ness of the group, "But I quickly realized the value of such an experience for the students," he said.

As Ching explained, "At the elementary school level, our goal is to build an awareness of the real-life, working world and to present students with opportunities to make connections between the career world and their studies, to help them understand why they're in school."

At WAT&G the students saw that different careers—including architecture, planning, design, photography, accounting, secretarial/clerical work, marketing and business management—are represented in a large architecture firm.

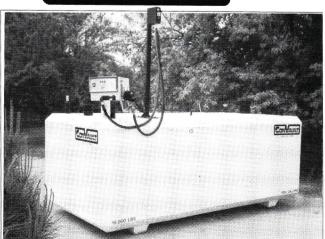
WAT&G architects talked about what encompasses architecture, why architecture and planning are important and the steps involved in the architectural process.

Students were given a tour of the offices and encouraged to ask questions of individual architects and other workers.

They viewed a video on computer-aided design and drafting and saw a CADD printer in operation. When examining some of the tools of the profession, many students found electric erasers as fascinating as computer terminals. HA

🕶 by Mazeppa King Costa

Above Ground Fuel Tanks

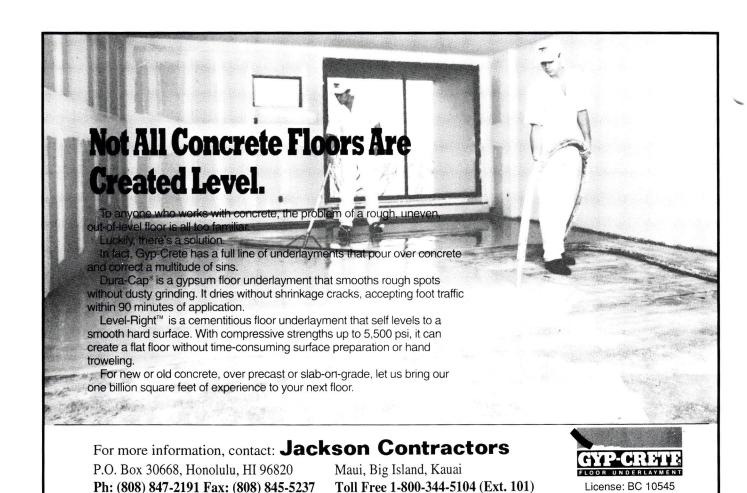


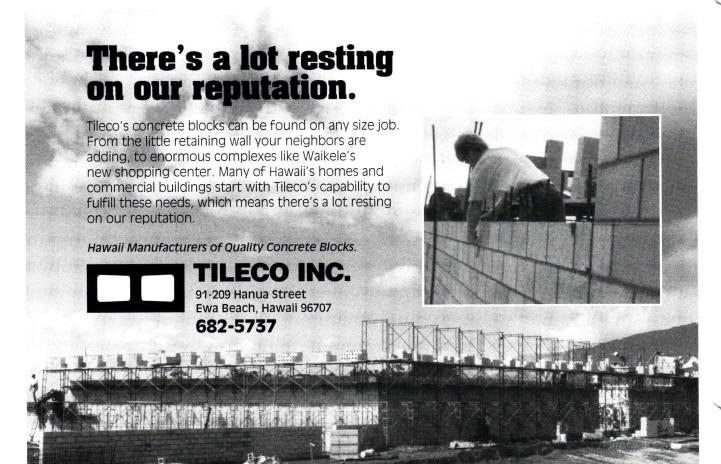
- ConVault is a tank double-contained in a concrete vault.
 - Primary Containment-UL listed steel
 - Secondary Containment-UL listed steel or 30 mil poly (Secondary containments are field testable)
 - 6" of reinforced concrete-2 hr. fire wall and bullet proof
- ConVault is #1 in SALES-over 6000 installation in 50 states and Canada
- ConVault is #1 in SAFETY-not a single failure in over 6000 installations ConVault is #1 in TESTING STANDARDS-the only AST to Fire tested as a complete assembly and has received a Listing from U.L. Canada — the only AST found to be in compliance with EPA secondary containment
- rules; No Diking required ConVault is #1 in VALUE-ConVault often costs less than 50% of the cost of an underground installation and we offer a 20 or 30 year warranty to back up your investment
- ConVaults are available from 125 gal. to 6000 gal. sizes and combinations

Consult with Willocks Construction on your specific application



Willocks Construction Corp. P.O. Box 99, Keaau, Hawaii 96749-0099 Phone: 982-9099 · Fax: 982-9091 On Oahu call 259-6480







UH School of Architecture

New Dean

W. H. Raymond Yeh has joined the University of Hawaii as dean of Manoa's School of Architecture.

Prior to his selection. Yeh was dean and professor of the College of Architecture at the University of Oklahoma, which offers undergraduate and advanced degrees in various fields of architecture.

In his previous post at California Polytechnic State University from 1979-83, Yeh lead the architecture department from its formation to a fully accredited program with the largest facility in the nation.

He holds a master of architecture



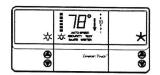
W.H. Raymond Yeh

degree from the University of Minnesota, a bachelor's degree in architecture from the University of Oregon and architectural licenses in California, Oklahoma and Texas. A fellow in the American Institute of Architects (FAIA), Yeh has received numerous awards and honors. His professional work has appeared in Monterey Design Conference Exhibits and the "Guild of Religious Architecture Traveling Exhibit of Ten Best Churches." He has written for both professional journals and popular press and made numerous presentations throughout the United States and Asia. HA





Remote control.



- U.S. Made
- Lifetime Warranty
- ☐ In-Home Service

AIEA

98-027 Hekaha St.

Ph: 488-1221 Fax: 488-1222 KAIMUKI 1139 9th Avenue Ph: 732-8991

Fax: 732-5326

Phone: 671-6133

Fax: 671-6779 Located In Gentry Business Park 94-396 Ukee Street Waipahu, Hawaii 96797

reel studs

From Hawaii's Largest Steel Stud Manufacturer

- Tracks Angles
- Furring Channels
- Resilient Channels



• Easy Installation • Fireproof • Termite-Proof • Durable Consistent Product Quality • ICBO Approved Call Us for Custom Production Jobsite Delivery & Excellent Service



STUDCO OF HAWAII, INC. Proven Dependability Since 1976 845-9311

Fax: 842-1698

224 Baker Way/Sand Island Honolulu, Hawaii 96820



© 1992 General Electric Co

Monogram, by GE. It solves the riddle of how to integrate the appliances into custom kitchen design.

No matter what design theme you choose, the one thing you don't have to worry about nowadays is how the appliances will look.

The Monogram[™]line of built-in appliances now offers such an array of models that you have virtually infinite choice and options.

This year we add the first 36" built-in refrigerator that is flush, trimless and completely cabinet friendly. And there's a new convection wall oven with new technology for faster cooking and sleek flush design.

Monogram component cooktops continue to be the only ones that can be installed perpendicular or horizontal to the counter edge to form clusters in gas, electric, updraft and downdraft.

Getting all your built-in appliances from one manufacturer simplifies the complex process of shopping and delivery. And Monogram offers the industry's most extensive network of factory service professionals.

There's also the extraordinary GE Answer Center™ service on duty 24 hours a day every day of the year to answer any questions you may have at 800.626.2000. Call and we'll send you a brochure and tell you where you can see the line.

Monogram, from GE. A synonym for the best in builtin appliances.



Monogram.



Reader Takes Exception to Costco's Architecture Dear Editor:

An article in the October, 1992, Hawaii architect titled "Costco, City Mill Anchor Hawaii Kai Town Center" highlights the challenge of placing

outlets which are generally found in industrial locations in the midst of an established residential community.

A portion of the article reads as follows: " ... muted color combinations on the walls and roofs lighted up the structures." Looking at the finished product, one can only conclude that the only thing muted about this development is the developer's sensitivity to the ambiance and character of the surrounding community. The walls of all buildings are a very light gray (nearly white in the sunlight) and the built-out bands and roofs are glare white! From any perspective, the development is a scar on an otherwise homogenous community. To further compound the concerns the community already has about this development we have been advised by DLU that the Hawaii Kai Development Company has applied for variances on signage in the shopping center. These are signs which exceed the maximum size or number,

or are otherwise not permitted.

Perhaps the key phrase in the article is "with warehouse operations, auto traffic and vehicular needs of primary importance, and pricey ambiance becomes secondary to efficient construction."

It is unfortunate that commercial developments such as this are al-

lowed to intrude upon residential communities. It would seem that the Department of Land Utilization should take a more active role in this most important area.

Robert B. Fowler, chair Planning & Zoning Committee Hawaii Kai Neighborhood Board

SCHUBERT'S ANNUAL NEW PRODUCT TRADE SHOW

Featuring Seminars & New Products for Protection, Maintenance & Restoration of

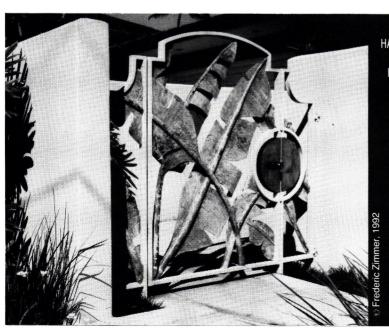
MARBLE • GRANITE • LIMESTONE • SLATE
• WOOD • MASONRY • AGGREGATE

Exhibitors Include: Miracle Sealants 511 Products
New Age Products – Wood Restoration
Federal Masonry Coatings & Protectants
plus carpet, chemical, equipment manufacturers

Prince Kuhio Hotel
2500 Kuhio Ave., Honolulu
Feb. 4, 9 a.m.-5:30 p.m. • Feb. 5, 9 a.m.-4:30 p.m.

Call 841-8063 for more information and to reserve seating for the seminar. Space is limited.

SCHUBERT INDUSTRIES



HAND-CARVED, MUSEUM-QUALITY PORTALS, IN WROUGHT IRON, STAINLESS STEEL, ALUMINUM AND COPPER, INDIVIDUALLY DESIGNED AND CRAFTED BY INTERNATIONALLY ACCLAIMED SCULPTOR FREDERIC ZIMMER

ZIMMER

FOR MORE INFORMATION, PLEASE CALL
FREDERIC ZIMMER
(808) 955-5281 OR FAX (808) 533-0623
HONOLULU, HAWAII
BROCHURE AND VIDEO AVAILABLE

An experiment in community design Arizona School

by M. Rae Douglass

Comprehensive floorplan, Valencia Middle School.

he Felezardo Valencia Middle school is designed as a prototype middle school along the guidelines of Tucson Unified School District's (TUSD) "new middle school philosophy." The design evolved from a unique community-oriented process. Because the school is the first financed with public bond money, TUSD established a decision-making process that made the community part of that process. This led to an innovative plan-

ning strategy that produced an educational environment of great quality.

In 1989, a site selection committee consisting of parents, teachers, neighborhood residents, board members and design professionals was formed to investigate potential sites for a new middle school on the southwest side of Tucson.

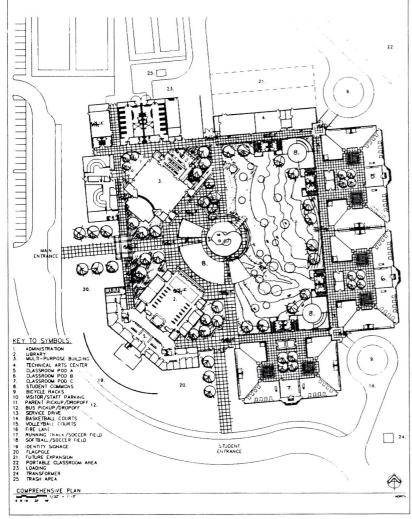
In June of 1990, this committee recommended the preferred site after careful and thorough evaluation of six candidate sites. A level one environmental site investigation of the preferred 30-acre site verified that it satisfied development criteria.

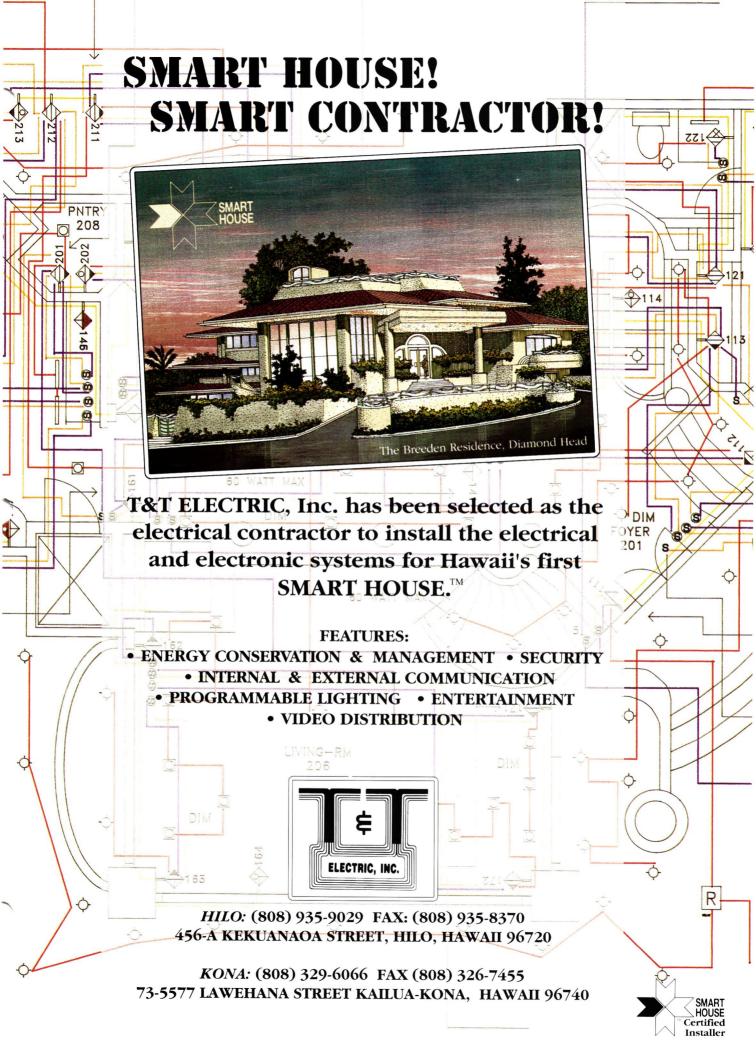
The education specifications for a prototype middle school were being developed simultaneously with the site selection process and in April of 1991, the TUSD departments of instruction and planning completed a report to guide the planning and construction of all new middle schools for the district. The recommended site was acquired and the prototype specifications were adopted, completing the pre-design phase of the project. The design team was selected and given the authorization to proceed in mid-May of 1991.

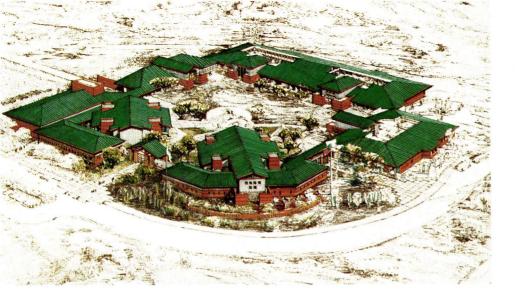
A five-step planning process was begun by the site committee members, the architects and district representatives to arrive at a recommended plan that met all of the district's requirements as well as the neighborhood and community's needs.

These included 1) establish goals and objectives, 2) analyze existing conditions, 3) determine facility needs, 4) evaluate alternative concepts, and 5) recommend a facilities development plan.

Site committee meetings were held throughout the planning process with study models, sketches and group discussions contributing to a thorough analysis of the criteria, in a open participatory style that led to a unanimous







On one hand, Lifetile...



Offering the largest selection of colors, profiles and surface textures in the industry, Lifetile is proud of its commitment to quality and unsurpassed customer service. Hands down, Lifetile is your best choice for concrete roofing tile.



EII EII EI IS A DIVISION OF BORAL INDOGRALES, INC

In Honolulu.....808-526-5228

◆ Overview, Valencia Middle School.

committee approval of the recommended master plan.

The primary goals and objectives included 1) accessibility to the community for year round use, 2) spaces with flexible uses, 3) design sympathetic to cultural and desert context, 4) common planning areas and classroom clusters, 5) create student neighborhoods within larger school community, 6) provide safe and secure environment that can be easily supervised, 7) utilize state-of-the-art equipment and technology, and 8) provide user-friendly environment.

The Felezardo Valencia middle school is designed for 800 students with the ability to expand to 950. The campus buildings form the edges of a compact courtyard scheme. The compact scheme makes travel distances shorter and retains more of the natural desert landscape intact.

The courtyard creates an internal focus for diverse opportunities in social gathering. The amphitheater can be used for larger formal or informal gatherings. There are two smaller areas directly off of the main courtyard that can be used as outdoor classrooms, and all classroom pods have their own, smaller courtyards for social interaction and identity. The sixth-grade students are grouped in one pod providing a "home base" for those younger students.

The campus buildings are sited to give a comfortable fit with the site. Focal points for community access are located closest to visitor parking (administration, performance spaces and library). The campus buildings are all connected by lanai-like covered walkways that shield against the intense desert sun.

Building massing, materials and colors fit into the rugged beauty of the site. The massing is generally low in profile with broad, gently sloping metal roofs. Window openings are minimal on the exterior and occur mostly along the insides of the court-yard spaces. The style of the buildings is in part a response to the site and

the Arizona climate. Rugged splitfaced block was used on the exterior to complement the rocky terrain. A more playful and colorful building exists in the interiors of the courtyards. Brightly colored stucco walls catch the sun and provide brilliant shadow patterns.

The landscaping concept was to use as much of the lush Sonoran desert as possible for ease of maintenance and instructional value of the native Sonoran desert landscape.

The structural system is hollow tile-bearing wall with prefab steel joist. In some areas steel moment frame is used. The roof deck acts as a structural steel membrane. The foundations are set directly onto bedrock, which is about two feet below the surface.

The mechanical system is a combination of air-conditioning for the administrative areas and library, and evaporative cooling for the rest of the project. Evaporative cooling, or "swamp cooling," as it is locally referred, is a system where hot air is blown through moist cooler pads made of wood fiber. Because the average relative humidity in Tucson is 20 percent, this process can cool the incoming desert air by as much as 20 degrees. Since there is no return air, the discharge air is used as secondary cooling in all of the courtyard spaces.

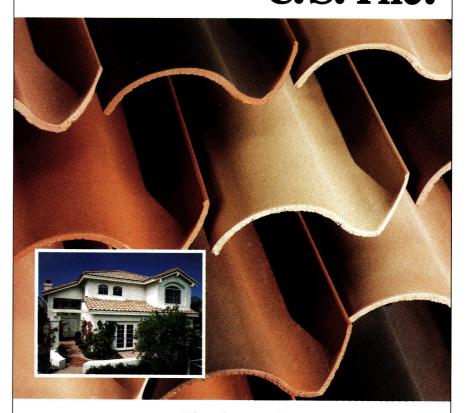
The electrical and communications systems are state-of-the-art. All class-rooms are connected electronically with cable trays that can be changed to accept the latest technology.

Construction of the Valencia Middle School will start early this year. It has enjoyed unparalleled support from the local community, and will be a great asset to the south side of Tucson. This can be attributed primarily to the foresight of the school district in its decision to include the community in the planning process. HA

•• M. Rae Douglass, AIA, is president of Douglass Architects, a Honolulu company. Douglass designed the Valencia Middle School in collaboration with Architecture One, a Tucson firm.



...on the other hand, U.S. Tile.



When the natural beauty and rich warmth of genuine clay is desired, U.S. Tile stands alone in distinction. With three versatile profiles, we offer a full range of blends, standard and custom colors. Hands down, U.S. Tile is your best choice for clay roofing tile.



U.S.TILE IS A DIVISION OF BORAL INDUSTRIES, INC

In Honolulu.....808-526-5228

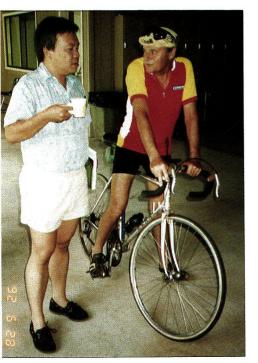
Review

Year of 1992 in Retrospect





PHOTOS PROVIDED BY NANCY PEACOCK



Top left, Dennis Toyomura, FAIA, center, installed as 1992–93 CILO (Construction Industry Legislative Organization) president, Sheraton Waikiki, July 10, 1992. Sharing the moment with Toyomura are, left to right, Rob Hale, AIA; Carol Ann Hale; Nancy Peacock, AIA, President, Hawaii State Council/AIA; Peggy Kohara; Art Kohara, AIA; and Albert Lyman.

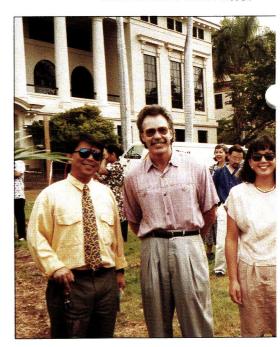
Top right, Harry Olson, AIA, right, presented a box of chocolates to Sen. Akaka as Kurt Mitchell, AIA, looked on.

Left, Ironman Hans Riecke, FAIA, rode up Haleakala to participate in the AIA Leadership Planning Retreat on Maui. Greeting Riecke, cup in hand, is Council President-elect Dan Chun, AIA.

Right, left to right, Ted Garduque, AIA; Fred White of Hon Blue; and Sharon Ching, AIA at ground breaking ceremonies, UH School of Architecture Building.

Bottom left, visit to U.S. Rep. Neil Abercrombie, seated, by, left to right, Rob Hale, AIA; Kurt Mitchell, AIA; Nancy Peacock, AIA; and Marilyce Hale.

Bottom right, Gov. John Waihee, center, attended the groundbreaking ceremonies, UH School of Architecture Building.









Right, present at the IAO Theater Fund-raiser were AIA/Maui officers, left to right, Council Secretary/Treasurer Stanley Gima, AIA; Council Delegate (deceased) Harry Olson, AIA; 1991 President Barry Rand, AIA; 1992 President Marie Kimmey, AIA; Fred Loesberg, AIA; and Robert Hartman, AIA.



Above, meeting with Sen. Dan Inouye were, left to right, Kurt Mitchell, AIA; Janet Martin, Executive Vice President, Honolulu Chapter/AIA; Dan Chun, AIA; and Rob Hale, AIA.



Above, congregating at the Honolulu Airport for their flight to Maui were, *left to right*, Dan Chun, AIA; Rob Hale, AIA; Ted Garduque, AIA; Hawaii State Council Executive Vice President Beverly McKeague; John Okita, AIA; and Chuck Ehrhorn, AIA.

Left, participating in two days of intense discussions at Seabury Hall in Kula were, left to right, Alan Holl, AlA, Honolulu; Gerald Hiyakumoto, AlA, Maui; Marie Kimmey, AlA, AlA Maui president; Yvonne Vail, AlA Maui executive secretary; and Virginia MacDonald, AlA, Big Island.



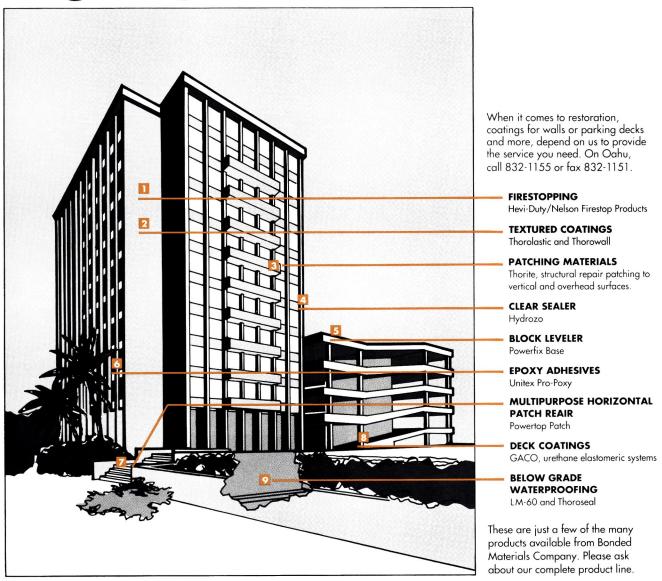
Below, visiting Sen. Dan Akaka were, left to right, Nancy Peacock, AlA; Kurt Mitchell, AlA; Harry Olson, AlA; Janet Martin; Dan Chun, AlA; Marilyce Hale; Rob Hale, AlA; and Ron Martin.



Below, Beverly McKeague, center, makes a point during the June 1992 AIA Leadership Planning Retreat on Maui while Stanley Gima, AIA, Maui/Council Secretary/Treasurer, left, and Terry Cisco, AIA, Big Island Section president, listen.



THE RESTORATION SPECIALISTS.





BONDED MATERIALS COMPANY A Standard of Excellence since 1955.

OAHU 251 Puuhale Road, Honolulu 96819 (808) 832-1155 FAX 832-1151

HAWAII 73-4776 Kanalani Street, Bldg. B, Kailua-Kona 96740 (808) 326-2477 FAX 329-5181

320 Hoohana Street, Bay 13, Kahului 96732 (808) 871-7395 FAX 877-4252 MAUI **GUAM** P.O. Box 7086, Tamuning, Guam 96917 (671) 646-7121 FAX 649-9338 **SAIPAN** Caller Box PPP-263, Saipan, MP 96950 (670) 322-3477 FAX 322-0305

HEADQUARTERS: OAHU 91-400 Komohana Street, Ewa Beach, Hawaii 96707 (808) 673-2000 FAX 673-2020



