

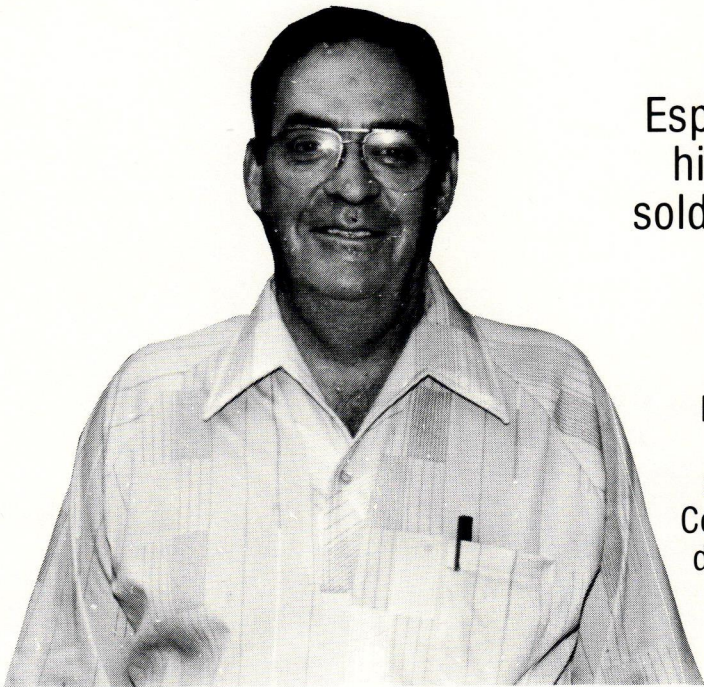
HAWAII ARCHITECT

January 1987

Architecture in Government

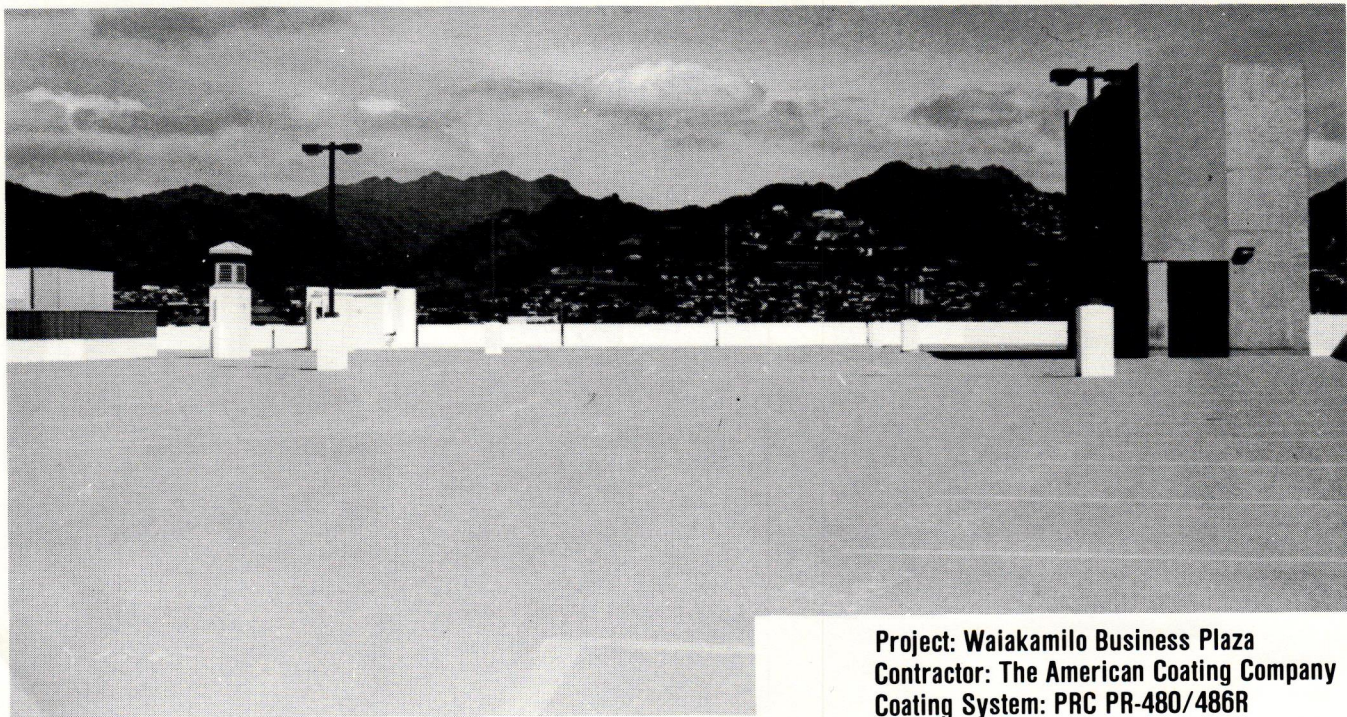
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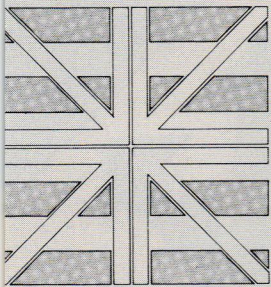


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HAWAII ARCHITECT

Volume 16, Number 1

January 1987

Hawaii Architect is a monthly journal of the Hawaii Society/American Institute of Architects. Subscriptions are \$18 per year. Opinions expressed by authors do not necessarily reflect those of either the Hawaii Society/AIA or the publisher. The appearance of advertisements for new products and service information does not constitute an endorsement of the items featured.

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123 Nuuanu Avenue, Suite 201
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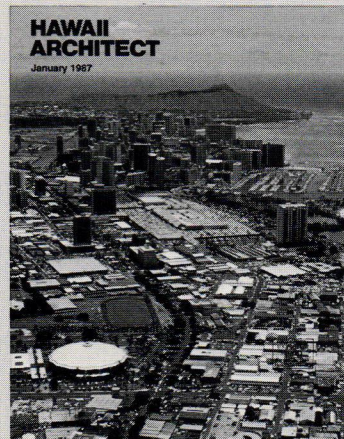
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Cover: A sweeping view of part of the continually growing city of Honolulu with the Kakaako Redevelopment District in the foreground and dramatic Diamond Head as a backdrop. Photo courtesy of Hawaii Community Development Authority.

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Back to Basics, Forward to the Future

by *Evan D. Cruthers, AIA*
President, Hawaii Society AIA

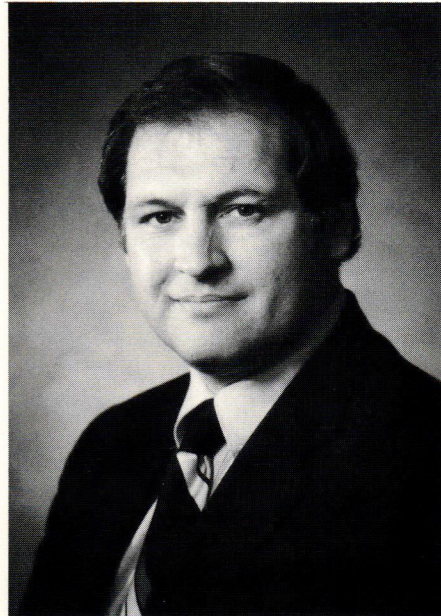
Sound business. Let us roll up our sleeves and work for it this year—as individuals, as firms and as a Society. For architecture and the pursuit of design excellence can better be achieved by individuals and firms who practice in the context of a sound business environment.

It is the basis for our success as individuals and as firms, and it is the groundwork we need for success as a Society. For it ensures that we have the economic strength to serve as advocates in our profession—an important role in our community that we are privileged to fulfill today.

In the past decade, the growth of our Society to over 600 members has brought with it special opportunities for the views of architects in Hawaii to be known by government agencies, legislators and the general public. Over time, the architect has become an increasingly influential leader in the community, whose presence on committees and boards adds talent and resources.

These relationships with our community, in which people can be comfortable in depending on us, speak of a growing awareness of our professional commitment to service through architecture. And always, moving forward to the future brings new levels of growth for us as a Society.

Our new direction for this year can be called "Back to the Basics, Forward to the Future." The complexity of our time calls for us to be focused in our growth. Toward this end, our first two goals are a long-rang plan, and providing all members with resources,



Evan D. Cruthers

programs about practice management, and AIA resources to support you in your professional and economic success.

Other goals for the year are increased membership and membership awareness and services; harmony, efficiency, financial solvency and independence of our sections; improved government relations and consideration of legislative issues; increased public awareness and an improved public image; a state convention that provides educational opportunities with planning as our theme; and supervision of the energy grant.

That's a tall order to accomplish in one year. I have, therefore, taken action to provide you with a comprehensive plan for 1987, and an Ad Hoc Committee to prepare a Strategic Plan for presentation at our annual Membership Meeting in early November 1987.

But most of all, these goals call for your dedication; for strength through the Society; for a return to the all-for-one and one-for-all concept of duty to our clients, service to our community and dedication to our professional society. The AIA is our opportunity to share our experiences, enhance our profession, and move forward together on a wave of synergy in the New Year.

I invite you to take the first step. Let us know what you want and how you feel. And join me and your fellow members in making 1987, our 61st year as a Society in Hawaii, a year of planning and sound business for all.

Evan D. Cruthers became a Media Five principal in 1973, subsequent to a year of private practice in Honolulu during which time he consulted with Media Five. He is currently President and Chief Operating Officer of the firm.

Cruthers is widely traveled and has lived and studied in London, the Panama Canal Zone and Puerto Rico. He earned a degree in architecture from the University of Idaho in 1964, and is licensed in Hawaii, Washington and Oregon. In 1985, he received an Executive Masters of Business Administration degree from the University of Hawaii.

In addition to serving as 1987 President of the Hawaii Society, American Institute of Architects, he is a member of the American Institute of Architects and serves on its National Professional Development Committee.

The Architect and Kakaako Redevelopment

by Rex D. Johnson, Executive Director
Hawaii Community Development Authority



Rex D. Johnson

As the urban form of Kakaako takes on a new, more attractive appearance during the ongoing redevelopment of the 580-acre district, architects are facilitating and playing a large and vital role in the process. The Hawaii Community Development Authority (HCDA), which is planning and regulating this revitalization effort, recognizes the important contributions the architectural profession is making in Kakaako, and we will continue to work closely with architects to

ensure that the District will become a better looking, more functional community.

Implementation of the Master Plan for Kakaako involves a different approach, both for government and the private sector. It requires the cooperation and combined talents of the public and private sectors. First, architects, as well as other professional and community groups, played a vital role in the formulation of the Kakaako Master Plan. Feedback and concerns from these groups were taken into consideration when goals for Kakaako were drafted, and later finalized. It is a process that is still ongoing, as the Kakaako Plan is tested, and at times, amended to facilitate development.

The HCDA staff strives to touch bases with architects and planners of Kakaako projects, even in the initial stages of the development planning. The HCDA planning office has, as resources, many invaluable topographic boundary maps of the Kakaako District, as well as studies conducted on soil and geology conditions of the area. We welcome architects to come in and make use of these resources in planning these projects.

Because getting any project through the government bureaucracy can be frustrating at times, the HCDA endeavors to walk architects and developers through the process. For example, on a typical large-scale development, we urge architects and designers to meet with the HCDA staff even prior to the initial submission of



Construction on Bruce Stark's ONE WATERFRONT PLAZA in Kakaako is well underway.

(continued on page 9)



A spectacular aerial view of the Kakaako District which is undergoing redevelopment of its 580 acre area. The HCDA is planning and regulating this revitalization effort. Photo by R.M. Towill Corporation.

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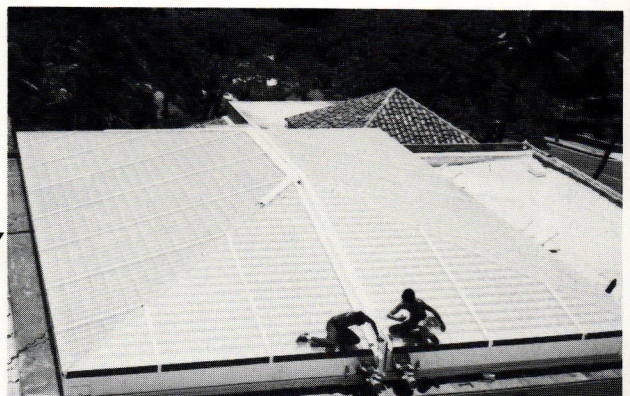
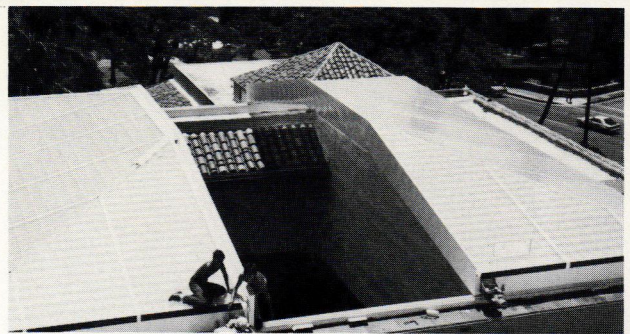
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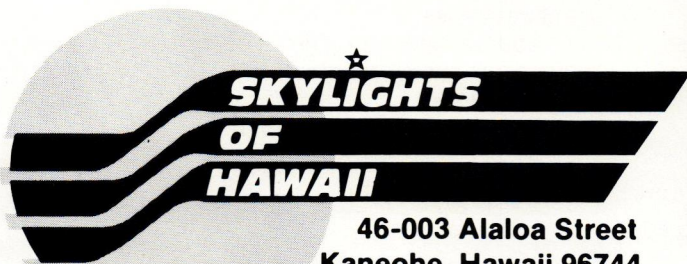
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(continued from page 6)

development permit requests.

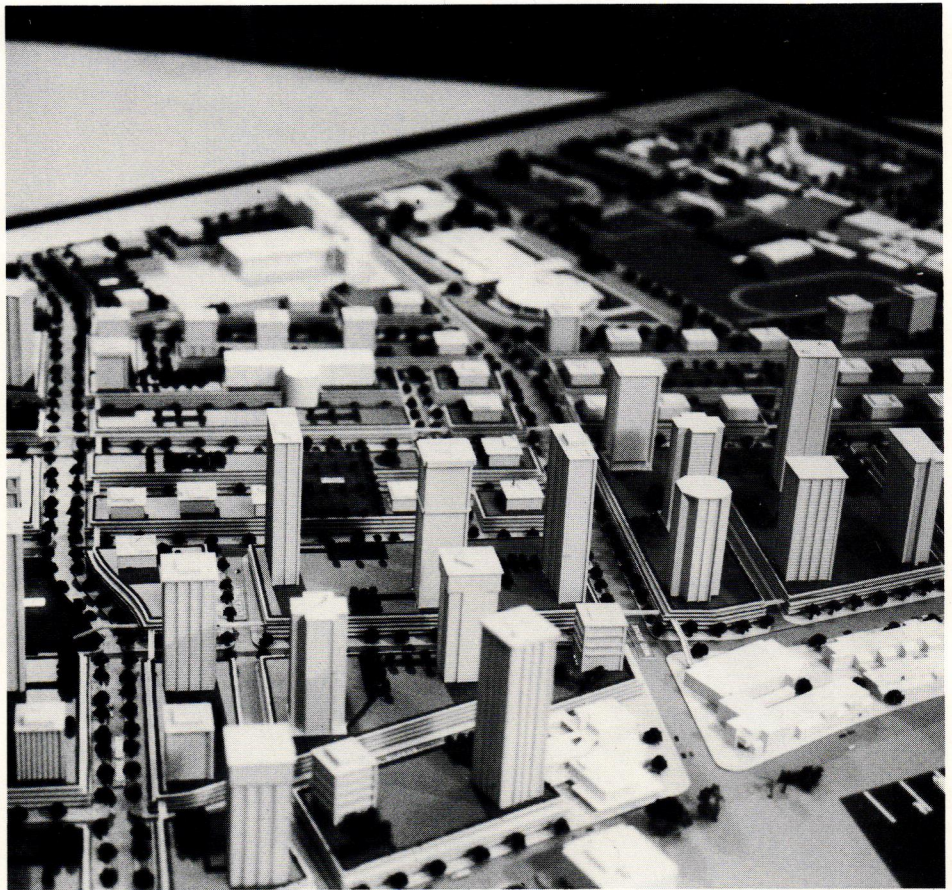
During these "presubmission" meetings, the HCDA planners will explain the permitting process and evaluate the architect's rough plans to check for conformance to Kakaako Plan rules and requirements. Potential problems or conflicts can be pointed out at this early stage, and the HCDA can make suggestions or discuss alternate avenues to ensure facilitation of the project review process.

In many instances, such presubmission meetings will save the developer and his architect time, and help cut through some of the bureaucratic inconveniences normally associated with government-private sector interaction.

After the presubmission meeting(s), the HCDA performs another check (with the assistance of City and County agencies) to ensure that adequate infrastructure exists to accommodate the project. Acknowledging the importance of time in the review process, the HCDA works to complete the entire review (including public hearings) within 60-90 days for larger, planned development projects. Smaller projects are generally reviewed in one day.

The Kakaako Plan's rules and regulations have made the job more challenging for the architect. It is a unique plan, with goals bolstered by strict requirements for building setbacks, preservation of open spaces, building height, density and foot print limits, and provisions for parking. However, it is a challenge that is being met, evident in the creative and attractive planned development and smaller scale designs which have been approved and/or constructed in Kakaako.

Kakaako's successful redevelopment is dependent on the continued hand-in-hand working relationship of the HCDA and the private sector. The architectural professional can take pride in the fact that it is instrumental in shaping one of the most important projects in the State of Hawaii. HA



A conceptual model of what the Kakaako District could look like 20 to 30 years from now.



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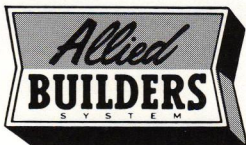
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Connie Manuel, Owner's Rep., McDonald's Restaurants

Regulations and Architectural Quality

by Donald W.Y. Goo, AIA

The recent passage of the Tax Reform Bill, coupled with deregulation, may be one of the most significant events that will affect the quality of future architecture in Hawaii.

Much has been reported about the effect of the Tax Reform Bill in its elimination of the need to discuss business decisions with tax accountants and tax attorneys. The emphasis will be placed on making business decisions on the basis of profit rather than tax incentives. This should tend to improve the quality of the architecture because the motivation will change from high leveraging to higher equity. Emphasis will be put on low operational costs (better materials and equipment) to generate actual profits - not paper profit. Higher equity financing will reduce interest rates.

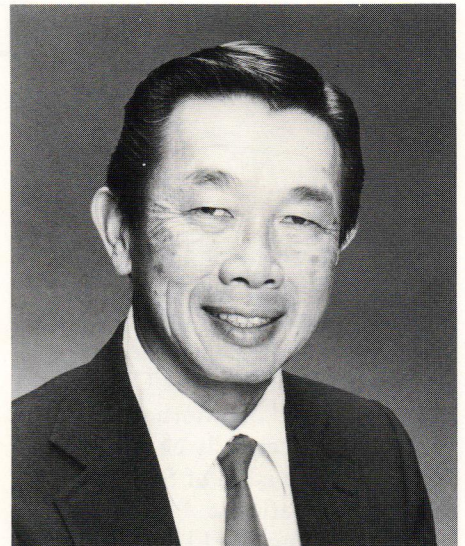
This revolutionary piece of legislation, although controversial, will cause a fundamental change in the quality of architecture. Our personal perceptions of value will be changed and will have a very profound effect on the future generation of building developers, occupants and taxpayers.

Governor Waihee, each of our legislators and County mayors should consider the long-term, social and economic effects of all legislation which they support. It is not often that a significant piece of legislation will be passed; however, that goal should be kept in mind. Someday there will be a proposal made that will be as significant as the "highest and best use" theory that contributed to the economic development in Hawaii in the early 1960s. Hawaii has been struggling to be sensible in its growth and sensitive to the needs of business

development. Good "growth and development" legislation supports and promotes high architectural standards. This type of legislation is fundamental to the molding of responsible attitudes toward our environment and the education and health of all people.

The challenge is: Can we, at State and County level, initiate and pass significant legislation that improves our environment and citizens?

Our greatest resources are our environment and our people, and therefore our priorities should be the development of our environment for the benefit of our citizens and guests and the education of our people. HA



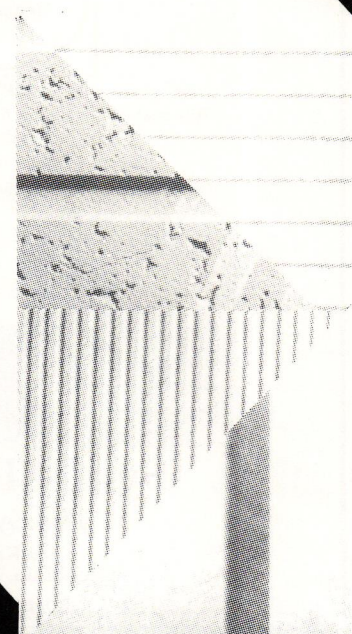
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Special Districts Up for Review

by Benjamin B. Lee, AIA

After finishing one major overhaul of city zoning regulations, which resulted in adoption of the new Land Use Ordinance (LUO), we have embarked on another long overdue—and equally challenging—review and revision of Special District regulations.

In developing the LUO, we did not review these districts in any

detail, but chose rather to bring them into the basic zoning ordinance and defer an in-depth study and specific recommendations for change until after adoption of the LUO.

There are currently eight Special Districts under city zoning jurisdiction: Waikiki, Chinatown, Punchbowl, Diamond Head,

Thomas Square/Academy of Arts, Haleiwa and the Hawaii Capital District.

The impetus for creating these special regulations was a reaction to an intense period of development during the late 1960s and early 1970s. This concern led to the adoption of eight districts, each of which was designed to protect and enhance a specific geographic and/or cultural resource.

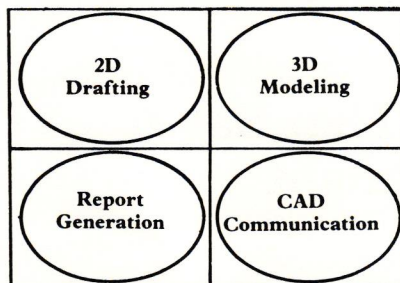
The first of these new districts was the Hawaii Capital District, in June 1972. The final district was the Haleiwa District, in May 1984. During this period of 12 years, a new district was adopted, on the average, every 18 months.

Until the LUO was adopted, the regulations for these districts were contained in separate ordinances which existed independent of the main body of zoning regulations, the Comprehensive Zoning Code (CZC). Sometimes this separate treatment resulted in a lack of consistency across the districts and conflicts with CZC standards.

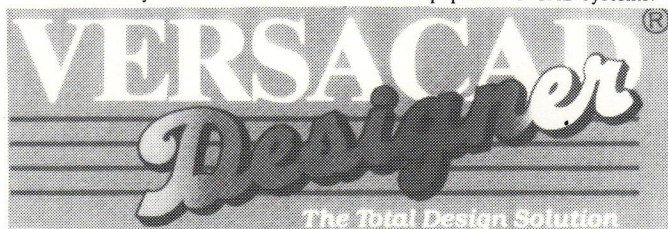
With the LUC adopted, we now want to review the Special Districts comprehensively for internal and external consistency. This study will also look at the BMX-4 Central Business Mixed Use District, primarily because of an expressed interest in providing additional growth potential for the Downtown area.

The revision effort has an ambitious work schedule which

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targets December 1987 as the completion date. At that time, proposed changes to all districts should be ready for submittal to the City Planning Commission.

This study's work program has many similarities to the LUO work program. For example:

An in-house "staff team" approach, is being used, rather than consultants;

A technical advisory committee which will include architects, is being used to provide balance to staff and neighborhood perspectives; and

There will be a commitment to out-reach programs and public input.

Some of the issues which we will be addressing are:

Assuring clear linkages between the objectives and the land controls system of each district.

Providing better guidance on what types of development will be required to undergo what types of permit processes.

Creating informational handbooks to more fully illustrate the architectural objectives of the district. These handbooks should be useful to architects designing projects within the specific district.

Updating district boundaries where necessary to specifically relate to district objectives.

Clarifying what types of design review (and the level of design review) are appropriate for the specific district.

Determining the physical growth of the Central Business District in terms of permitting additional height and densities.

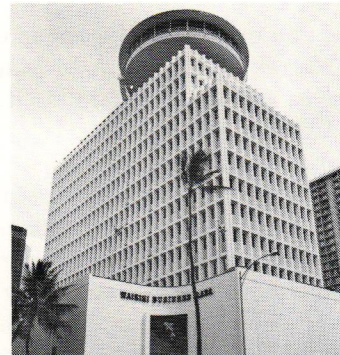
Updating provisions which are out-of-date or which conflict with other public policies.

As the study progresses, we look forward to input from the Hawaii Society/American Institute of Architects, as well as individual architects. Several suggestions have already been made during the LUO project, which we will be considering in this study. We welcome continued and additional input from architects to assure that adopted regulations are reasonable, appropriate and as clear as possible. HA

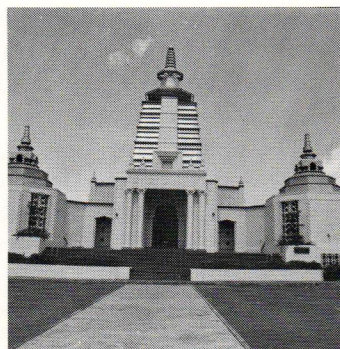
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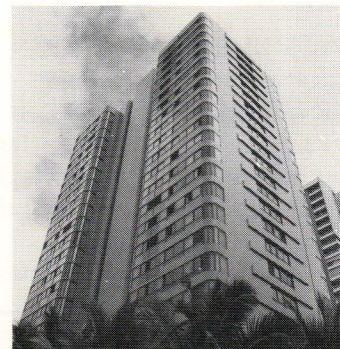
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Light Law for Star Watchers

by Rick Chong, Electrical Engineer

If you ever have the opportunity to trek up to the top of Mauna Kea and see the stars, do it. Considered by most astronomers as the pristine astronomical observation site in the world, Mauna Kea presently has a handful of observatories in year-round use, with another facility soon to be in operation. There is also a group of astronomers that are seriously considering Mauna Kea for their national observatory.

Why is Mauna Kea a prime observatory site? A strategic location on the globe, elevation above the layers of pollution, large percentage of clear viewing days throughout the year, low amounts of water vapor and no light pollution are the major reasons why

Mauna Kea is a desirable location.

Of all the reasons, only one, light pollution, can be controlled through regulation. In comparison to Kitt Peak Observatories, where the adjacent city of Tucson, Arizona has grown tremendously and has a detrimental effect on research, Mauna Kea has a small community around it which produces no measurable light pollution or sky glow. Observatories do most of their work in the infrared and visible region of the light spectrum and the smallest amount of stray light can be detected by the highly sensitive telescopes.

To maintain existing conditions, laws have been passed, with the strong influence of the astronomers who use the observatories at places like Mauna Kea, Kitt Peak and Mt.

Polomar (San Diego), which regulate the type of outdoor lighting used throughout the community.

On the island of Hawaii, an ordinance exists (Article 9. Section 14-50) that requires all outdoor lights, except low pressure sodium (LPS), to be shielded, and all outdoor lights having more than 15 percent of the total emergent flux (unit of light) living in the spectral region below 4400 anostrom units to be filtered with a filter whose transmission is less than 10 percent. Simply put, the ordinance requires outdoor area lighting or flood lighting for security, streets, highways, parking lots, etc. to be of the LPS type, which is a

(continued on page 1

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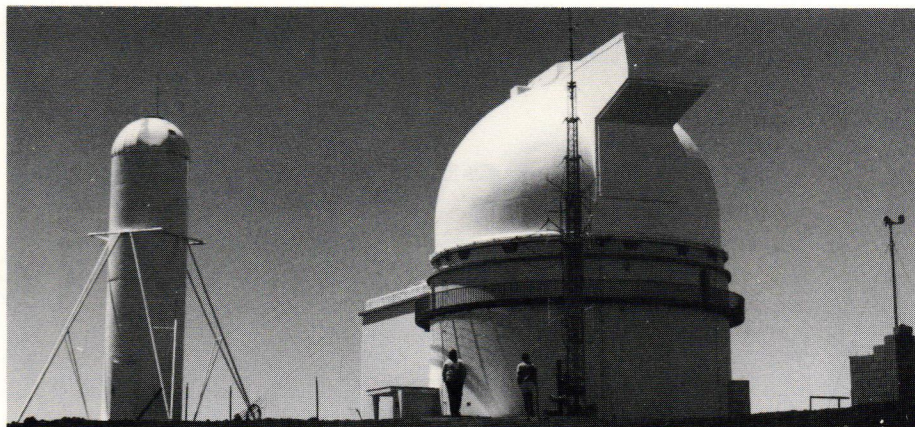
monochromatic light source (yellow bandwidth in the visible spectrum).

Facilities housing public recreation, car dealers or advertising that require good color rendition for the activity conducted or the product sold, are exempted, but must turn off their lights between 11 p.m. and sunrise. This is the time period when most astronomers conduct their research. Special exemptions can be obtained through written requests submitted to the County Chief Engineer.

Why LPS? Why not another lamp source? Since research relies so heavily on the ability of the equipment to detect, examine and record faint light sources from distant universes, any stray light in the infrared or visible spectrum bouncing around in the sky would ruin any data recorded. With only LPS outdoor lights, any amount of sky glow would obviously have the same characteristic bandwidth of LPS lamps. Astronomers can now look at all the different bandwidths produced by what they are observing, and ignore the minute amount of data gathered in the bandwidth characteristic of LPS. Discarding this data has no effect on the end results. With other light sources such as mercury vapor (MV), metal halide (MH) and high pressure sodium (HPS), there is more light interference in a wide range of bandwidths. This would require more data to be discarded, resulting in unclear pictures and conclusions.

Hawaii has a valuable asset in the observatories. They bring in millions of dollars to the economy and provide much recognition for the state as a center for astronomy. Presently, Hawaii County is systematically changing all street lights from MV, MH or HPS to LPS.

Some resorts have already agreed to use LPS in their access roads and parking lots. Our astronomers are also preparing proposed changes for stricter laws governing light pollution or sky glow. The revised ordinance would further guarantee that Mauna Kea will remain a pristine and beautiful location for looking at the stars. HA



The University of Hawaii maintains an 88mm telescope at the top of Mauna Kea, which is considered a pristine astronomical observation site.

THE SKY IS THE LIMIT

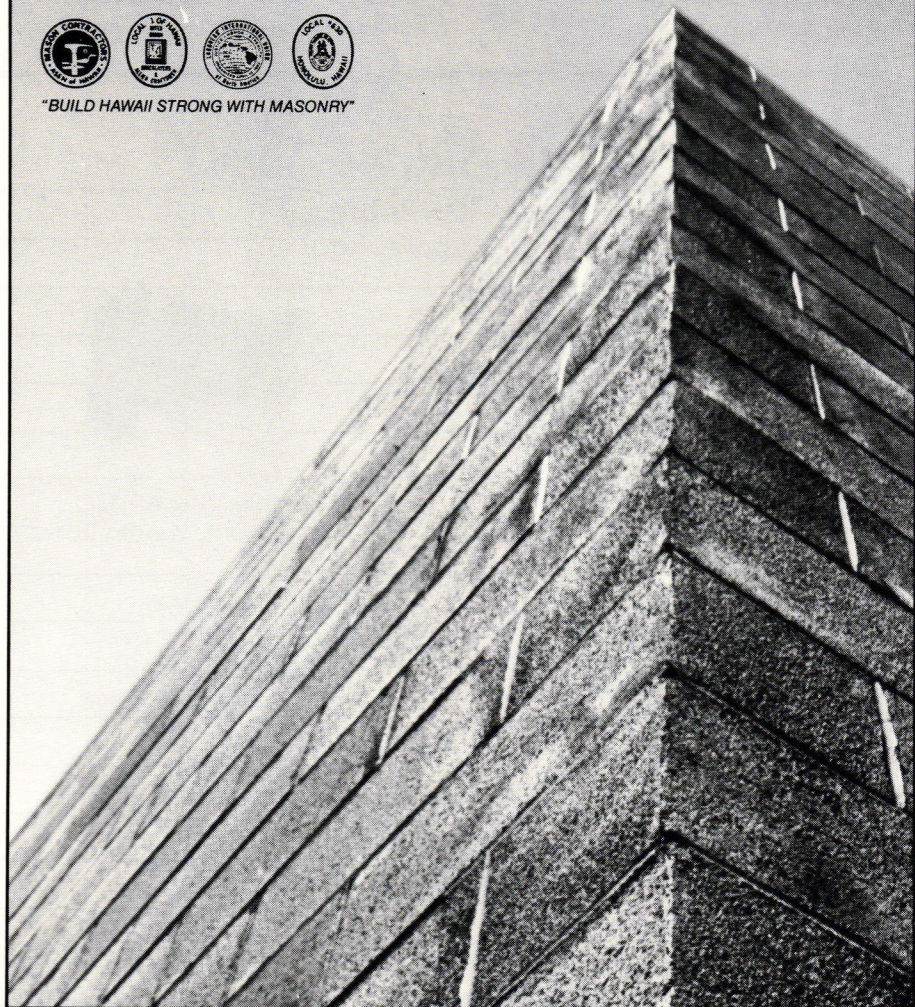


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The Development Process and Building Failures

by Andrew Charles Yanoviak, AIA, CSI

The Construction Specifications Institute (CSI) is an organization of members from various sectors of the construction industry, who have formally adopted the "advancement of construction technology" as their primary goal. The Honolulu Chapter of CSI recently held a public seminar and workshop addressing "Failure Modes in Construction." This article is based on my presentation, which dealt with the need for fundamental structural reform in the development process.

Before we can seriously discuss reform in any interactive process, we need to more carefully examine the context within which it operates. For discussion purposes, we will assume that the construction market in Hawaii is equally divided as shown in Figure

1. We will also assume that architects and engineers (A/E's), as professional design firms, do only 50% of the public work (the remainder being done "in-house"), and 40% of the private work (excluding residences, remodeling

and other work done without A/E's).

On the basis of these assumptions, the extent of A/E involvement with development is limited to about 25% of private building construction in Hawaii and therefore, only about 10% of the total construction market.

Figure 2 is based on the smaller "developer" square in Figure 1. It apportions the assignment of responsibility for building construction failures based on national averages.

Figure 3 represents the contrasting compensation rewards for each class of player in the typical development project. These graphics vividly portray the major differences between assumption of culpability and profitability in this skewed arrangement.

McGraw-Hill's *F.W. Dodge Construction News* reports on comments made by President John A. Busby Jr., FAIA, at the recent national AIA convention. Some of his comments were "Architects have lost too much control over their profession during the last two decades...we've had a dilution of who has authority." And, "For too long, we've had the legal profession telling us how to do architecture...I think architects ought to be the ones who direct that...it is the architect who designs the building."

Further, Busby stated, "Architects' concerns about liability have always been with us...let's look at this not as a crisis, but more objectively, as an opportunity to perfect our work...and see how we can improve." However, he also added, "If architects are going to

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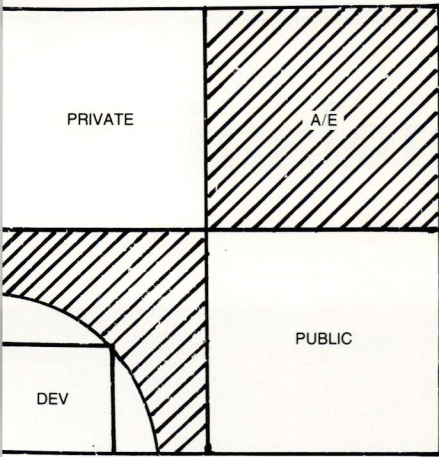


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Figure 1: Construction Market Context: Extent of developer and A/E involvement in Hawaii.



improve their profession, they deserve to be materially rewarded for the effort...the architect must understand that it is fair for him to be compensated for the risk taken." takes."

Regarding a 1983 AIA study (...showing median annual pay for firm principals at \$39,000 and project architects at \$28,000..." Busby stated that, "During the 1980s, we have seen a decline in compensation in relation to the responsibilities that we took on...the percentage fee is no longer a proper and just method of compensation... architects must take an active role in long-term city planning."

Busby did not mention that A/Es do not have a court system or a hospital system to facilitate their individual efforts. During the CSI seminar, I asked the attorneys to imagine how their individual practices and financial remuneration would be affected by the lack of a court system.

Figure 4 shows the typical traditional triangular relationship where there are written contracts between the owner and the A/E, and between the owner and the contractor; however, there is no contract between the A/E and the contractor which creates quite a few problems in practice, some of which have led to eventual "I told you so..." building failures.

Figure 5 shows transitional developments in attempting to alleviate some of the communication

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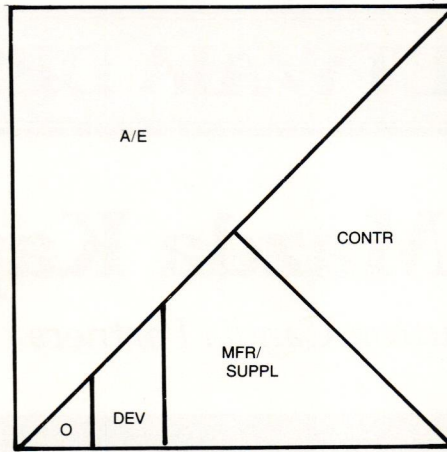


Figure 2: Assignment of responsibility for building construction failures.

"CULPABILITY"

- ° A/E = 50%
- ° CONTRACTOR = 25%
- ° MANUFACTURER/SUPPLIERS = 20%
- ° DEVELOPER = 4%
- ° OWNERS/FINANCIERS = 1%

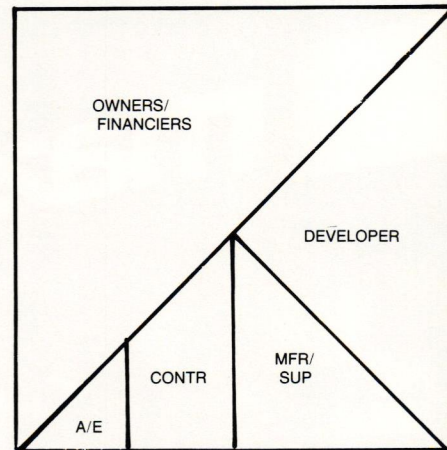




Figure 3: Apportionment of compensation in building construction project.

"PROFITABILITY"

- ° A/E = 3%
- ° CONTRACTOR = 10%
- ° MANUFACTURER/SUPPLIERS = 12%
- ° DEVELOPER = 25%
- ° OWNER/FINANCIERS = 50%



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Shelly Mazda Kapiolani

Sutton Candia Partners

The new sales and service facility for Shelly Mazda was a challenge and an opportunity. Three existing buildings had to be integrated to fill the needs of the client to expand a successful new car dealership in the central Honolulu area.

The Kakaako site included five buildings, two of which were demolished to provide the Kapiolani Boulevard frontage and parking area at the back of the site. Three buildings were renovated to incorporate (A) the Showroom and Dealership offices, (B) Service building with stalls and equipment for 20 cars, and (C) Parts warehouse and service and parts staff offices.

The principal architectural problem was to clean up and simplify space by demolishing all elements except basic structure, walls and roof. The new image was developed by opening the ground floor showroom with full height glass walls and placing a new facade of prefinished metal panels over the old walls. This facade was extended perpendicular to the front building for a lanai along one side to further extend the building front toward the street and provide additional covered display area.

This adaptive reuse project illustrates an interim stage between development of Kakaako at its maximum long range potential expressed in the Kakaako HCDA Plan and its present unimproved but intensively used business district.

The interior design concept for Kapiolani Mazda was defined using clear retailing techniques long established in apparel and jewelry sales. The first step was to define the typical Mazda buyer. As the



Shelly Mazda on Kapiolani Boulevard has a newly designed sales and service facility which reflects the quality of the dealership. All photos by David Franzen



price of the automobile has risen in the past few years, the image of the car has changed from economy to mid-priced well-engineered sedan and luxury sport car as in the popular RX-7. The buyer can be defined as a person willing to spend \$10,000 to \$20,000 plus, but looking for top value in the product.

Materials for the interior were chosen to reflect the materials found in the product. Chrome strip ceiling and metal columns painted by the in-house body shop, with automobile paint, are used in the same ways chandeliers and mirrors are used to enhance diamonds and gold in a jewelry store.

Colors were selected to compliment the range of Mazda colors with particular consideration for the two top selling colors, silver and gunmetal gray. A navy blue tile floor and deep purple walls are livened with white and flashes of brilliant yellow. Natural white oak furniture and interior trim are used, along with a custom designer carpet using the Mazda logo.

Architectural and Interior design were carried out together by the design team so that furnishings and finishes were integrated with the overall design concept which had as its goal the display and sale of cars in an environment that reflects the quality of the product and the dealership.

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Shelly Motors, Inc.

Architect:
Sutton Candia Partners

Interior Design:
Dian Cleve Design

Structural Consultant:
Richard M. Libbey, Inc.

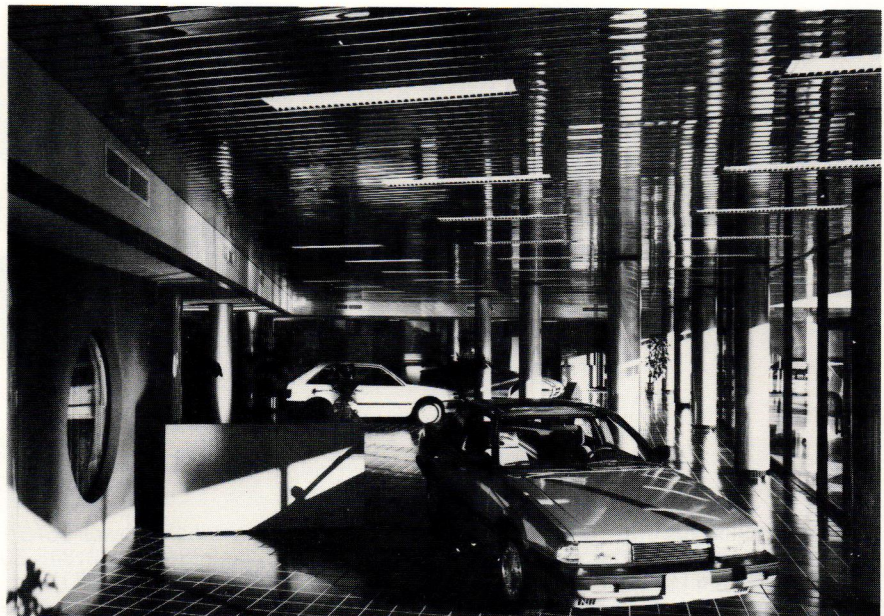
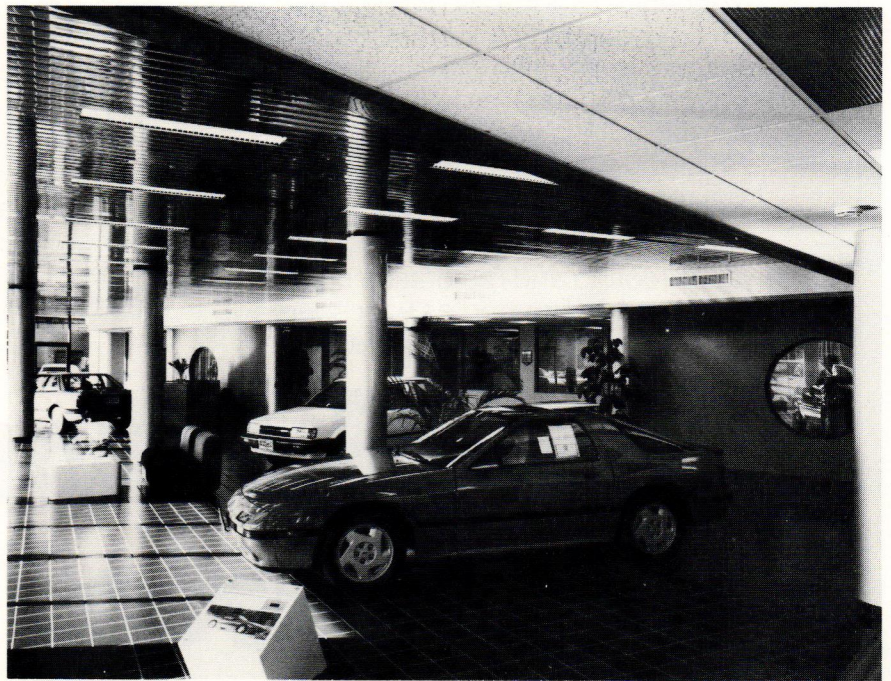
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Kenneth Thom Associates, Ltd.

Electrical Consultant:
Douglas V. MacMahon

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(continued from page 19)

problems inherent in the traditional contractual relationship addressed by the typical AIA standard documents; whereby, the A/E convinces the owner to hire a "clerk of the works" and the contractor in turn bolsters his camp with a "hard-of-hearing" superintendent with a very short memory span. Of course, this arrangement has also led to problems and the eventual retention, by the owner, of a

construction management specialist who may have also served as a value engineering ("cost-savings") expert; and consequently, has assumed major liability responsibility in the process.

The diagram also depicts one of the major problems with building elements such as elevators, windows, hardware, etc. where the A/E, as a part of his percentage fee, meets with the manufacturer's sales representatives; however, the "job-

shopper" contractor and his developer-client are talking directly to the factory, and what the A/E sees in the catalog literature when he makes his selection, (and the product components shown on the shop drawings) may not be entirely recognizable after installation.

Figure 6 shows a trend which is now prevalent in the mainland in many areas, but which has not yet really surfaced in Hawaii, with the exception of some commercial interiors contract work. It is based on the "design-build" concept where the owner/developer no longer contracts directly with the A/E, but rather, retains a contractor who in turn retains the A/E and keeps his creative effervescence well disciplined. In the process, the frustrated A/E has now relinquished many aesthetic and technological design decisions and has lost direct contact with the owner/developer as he moves toward self-annihilation and premature extinction.

Figure 7 shows how some aggressive and well-capitalized A/Es reacted to the previous arrangement by seizing control, as well as direct communication with the owner/developer. Realizing that many contractors are nothing more than brokers hiring and coordinating sub-contractors, some A/Es have decided to take complete charge of both the design and construction functions, and hopefully improve quality control in the process.

Figures 8 and 9 comparatively illustrate what happens to the culpability and profitability factors shown previously in Figures 2 and 3, resulting from this advanced "design-build" arrangement shown in Figure 7. Notice that the A/E has now assumed 75% of the responsibility instead of 50% as before; however he has also increased his profitability from 3% to a full 25%. Therefore, it is up to the individual A/E firms to decide their own risk management options as they increase their compensation and their overall professional quality control of the construction project.

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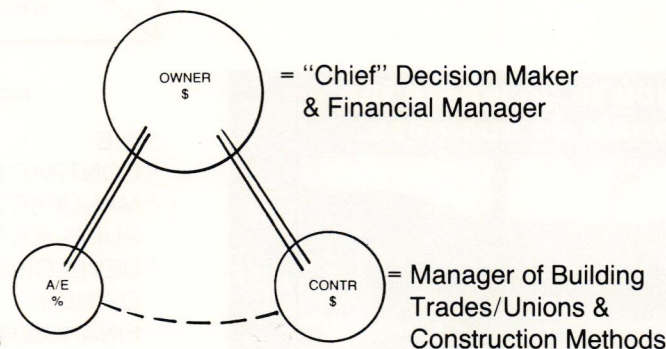


Figure 4: Typical traditional triangular contractual relationships.

"Armed with =
Clerk-of-the-
Works (Paid for
by Owner)

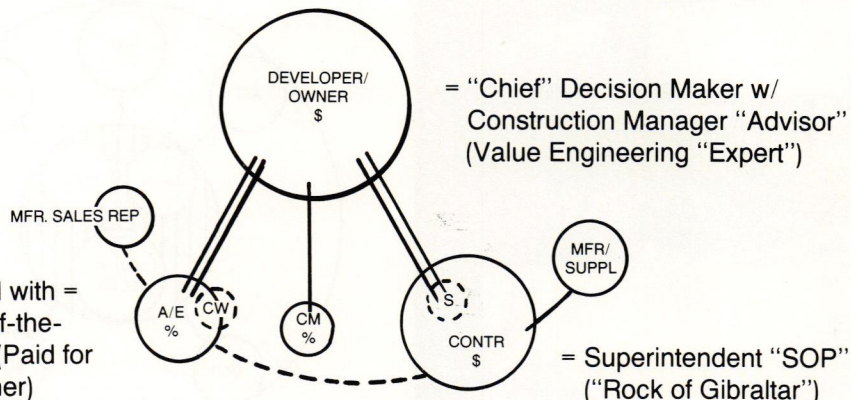


Figure 5: Transitional triangular contractual relationships.

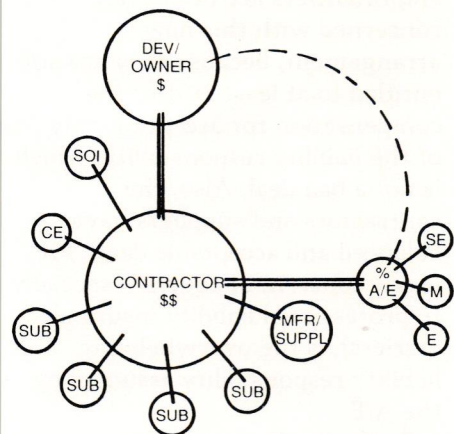


Figure 6: "Design-build" contractual relationships favoring contractor.

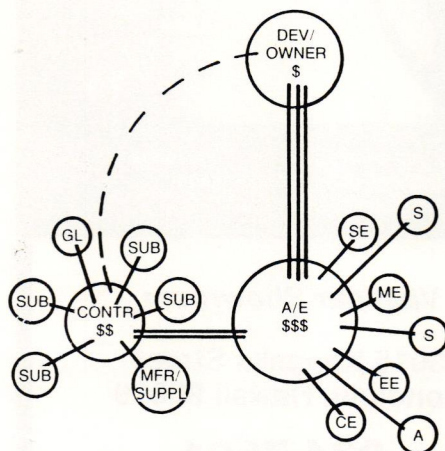
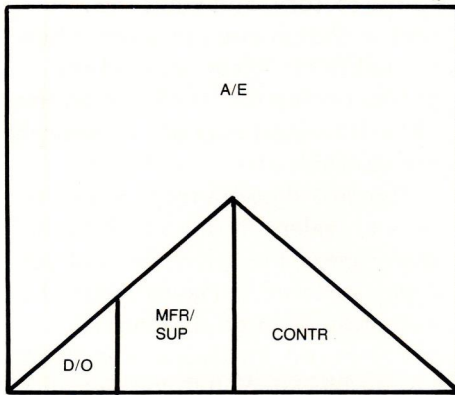


Figure 7: "Design-build" contractual relationships favoring A/E.

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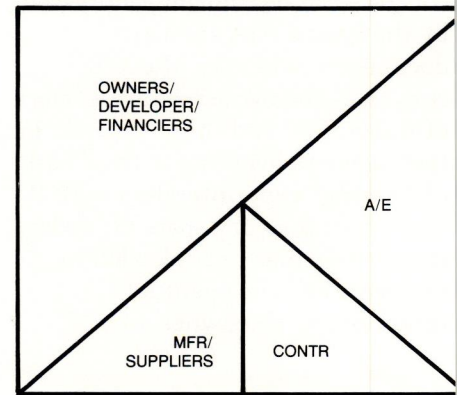
Figure 8: Assignment of responsibility for building construction failures.



"CULPABILITY"

- A/E = 75%
- CONTRACTOR = 12%
- MANUFACTURER/SUPPLIERS = 10%
- DEVELOPER/OWNER/FINANCIERS = 3%

Figure 9: Apportionment of compensation in building construction project.



"PROFITABILITY"

- A/E = 25%
- CONTRACTOR = 13%
- MANUFACTURER/SUPPLIERS = 12%
- DEVELOPER/OWNER/FINANCIERS = 50%

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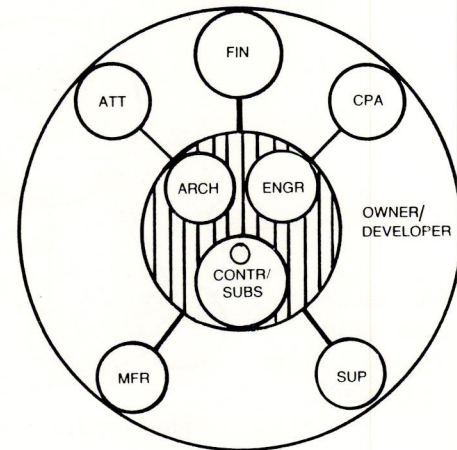


This project demonstrates the beauty that ceramic tile can bring to the common areas and recreational facilities of any condominium.
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Figure 10: The emerging "design-build-turnkey" building construction "Team."



Generally, the owner/developer and financiers are not overly concerned with this new arrangement, because they are still entitled to at least 50% of the compensation for accepting only 3% of the liability responsibility, which is not a bad deal. Also, the contractors and suppliers have balanced and acceptable deals. Of major concern, of course (especially to professional liability insurance carriers), is the overwhelming liability responsibility assumed by the A/E.

Figure 10 illustrates a development which has already taken place on the mainland where

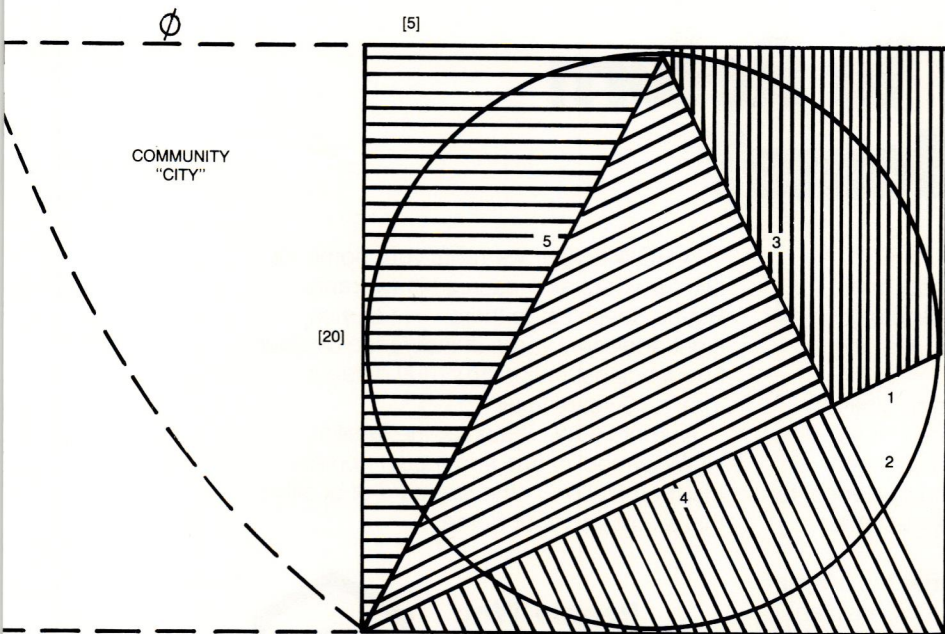


Figure 11: Unified Egyptian "Quadrature" and Grecian "Golden Section."

"LEGEND"

- | | |
|----------------|---------------|
| 1x2 = O/D | Synergistic |
| 2x4 = M/S | Integration |
| 1x3 = C/S | of Responsi- |
| 3x4x5 = A | bility and |
| 5x[5]x[20] = E | Profitability |

it has involved some very well-renowned A/Es; and reportedly, although it has not yet been formally announced, a major Hawaii developer has purchased an A/E firm that will be providing him with "in-house" services.

Some owner/developers have also purchased contractors, and now they are in direct control of materials and products purchases, with the assistance, of course, of their certified public accountants and attorneys to keep them out of troubled waters.

The A/E should keep in mind that he still is required by law to stamp and sign the drawings, regardless of his capabilities to exercise quality control or even observation of construction. It is also not known how the professional liability insurance carriers are responding to these new arrangements and organizational structures, in which

the legal profession is directly involved.

Figure 11 is based on my own architectural design research efforts. It simultaneously represents a marriage between ancient Egyptian and classical Greek geometries (man's very first math and science, and the soul of architecture). It indicates how these harmonic proportions, which are part of all living matter, can perhaps be a guiding light to synergistically integrate and harmoniously balance the levels of responsibility and profitability in a building construction project.

The area defined by unit lengths 1 and 2 (precisely defined by nature) belongs to the owner/developer, while the 2 x 4 goes to the material and product suppliers, and the 1 x 3 is the realm of the contractor and his sub-contractors.

The area defined by the 3/4/5

triangle of Pythagoras is naturally assigned to the architects; and, of course, his engineering consultants have the remaining area defined by unit length 5 (the radius of the "Golden Section" extending out into the "city" community), and the square roots of 5 and 20.

How to achieve an organizational structure and a viable economic communications network appropriate for a marketplace such as Hawaii, in order to aspire toward the framework of Figure 11, is the real challenge of the near future. Perhaps, attorneys and accountants would be willing to work with owner/developers, A/Es, contractors, manufacturers and suppliers to achieve such noble purposes in this island city community.

A/Es do much more than produce construction documents, and they should be compensated adequately by society in order to have the opportunity to institutionalize their design research efforts and its attributes. ■■

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AIA Membership Tops 50,000

The American Institute of Architects honored Rhonda R. Shephard Harrell, AIA, of Delray Beach, FL, with a citation acknowledging her induction as the 50,000th member of the Institute. Harrell received the citation during festivities for the inauguration of the 1987 AIA President, Donald J. Hackl, FAIA, at the National Building Museum in Washington, D.C., on Dec. 5.

John A. Busby Jr., FAIA, 1986 AIA President, presented Harrell with the citation. Noting the significance of her membership, Busby called reaching the 50,000 member milestone "a measure of

the growing value and unity of America's architects, and a reminder of the unwavering commitment of the profession to be of ever greater service to the nation and its people."

The AIA, founded in 1857 with 13 members, is a voluntary, not-for-profit membership organization representing architects in nearly 300 state societies and local chapters stretching from Maine to Guam. The AIA fosters professionalism and accountability among its members by providing continuing education and training, by assuming a strong leadership role in influencing the direction of change in the built environment, and by promoting design excellence.

Ceramic Floor Tiles

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*by Russ Kattengell, Vice President
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Ceramic floor tiles have several advantages in architectural design. Probably the most significant are permanence and durability.

Maintainability is another

advantage. Ceramic floor tile does not require sealants or other recurrent special treatments as needed on some floor coverings. Its surface is easy to clean and it is a simple procedure to repair a damaged surface by replacing individual tile units.

While ceramic floor tile is manufactured in a variety of shapes, sizes, colors, textures and styles, there are actually only a few classes

used for interiors as well as exteriors.

Whether it is the lobby of a hotel or a living room in a family dwelling, ceramic tile is unmatched. Unlike carpeting, there is no nap to wear down. Unlike vinyl, ceramic tile won't lose its "shiny smile."

Here are a few common **myths** about ceramic tile:

- "Ceramic Tile is Heavy." **Incorrect.** Ceramic floor tiles weigh about the same as traditional 3/4" oak flooring, and the weight is distributed evenly. Any well-constructed floor will support ceramic tile without problems.
- "Installation is a time-consuming mess." **Untrue.** In fact, many installations, if laid out properly are finished in as little as one day. Some of the new installation materials used to adhere tile need no mixing and raise no dust.
- "You need a special surface" **No special surface** is necessary. Ceramic tile can be applied to a variety of smooth, sound, dry surfaces including plywood, gypsum board, concrete, vinyl and even existing tile.

Considering the longevity of ceramic floor tiles, they are among the most economical of floor coverings. The advantages are many. ■■

"... ceramic tile won't lose its 'shiny smile.'"

or types. These classes differ basically in the materials from which the tile units are formed and pressed and the kind of firing operation employed.

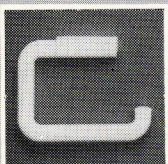
Conventionally, ceramic tile has been classified as "vitreous" or "nonvitreous." Floor tiles are more often vitreous than nonvitreous. The vitreous type of ceramic tile provides greater structural strength and a higher degree of resistance to abrasion.

Ceramic floor tile is as much at home in the corrosive environment of a chemical plant as it is in a residential application. It can be

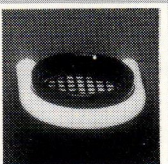
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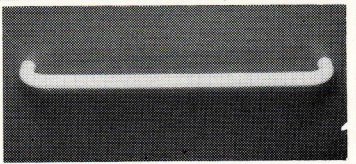
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NEW PRODUCTS

National Laminates Gets New Color Line

Wilsonart® Laminator recently introduced 33 new solid color decorative laminates to its Color Quest line for 1987. This increases the selection to 110 items, according to Bill Reeb, vice president of marketing.

All Color Quest selections are available in a wide range of finishes and product types, including colorthrough SOLICOR®, grooved Decorative Tambours, and in specialty laminates, to resist fire, abrasion and chemicals.

New selections come from the four major color directions, including *Fresh Pastels* - clear, soft, lustrous; *Blended Classics* - mid-tones, colored neutrals; *Jewel Brights* - radiant, brilliant, lively; and *Dramatic Darks* - deep, elegant, luxurious.

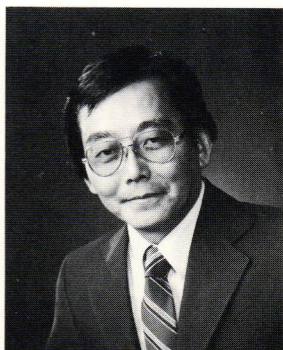
A 6-page 1987 Color Quest brochure containing a selection of solid colors, individually swatched, as well as application photos and a complete technical data listing is available by calling 833-4344.

Appointment For Skylights of Hawaii

Super Sky Products, Inc. recently announced the appointment of Skylights of Hawaii as its exclusive sales representative firm.

Ron York, principal of Skylights of Hawaii has over thirty years of experience in the construction industry, mostly as a general contractor building custom designed homes. In January 1979, Skylights of Hawaii began as a sole proprietorship and was incorporated in October of that year.

(continued)



Gene Fujioka
Vice President

Advice from Gene....

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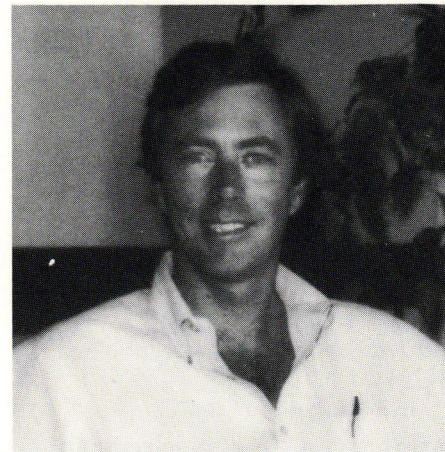
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Super Sky Products, Inc. has long been recognized as a leading manufacturer of custom designed extruded aluminum skylights. The use of extruded aluminum custom skylights began in 1930. Complete installation and glazing of the skylight under direct supervision is backed by a 10 year manufacturer's guarantee against defective design, materials, construction and leakage.

**NEW
MEMBERS**



Bruce R. Christensen

Bruce R. Christensen is a new Professional Affiliate Member. He is the Senior Sales Engineer with Brewer Chemical Corp. involved in waterproofing, corrosion control and concrete restoration material. Christensen graduated from San Francisco State University with a Bachelor of Science in Marketing, and minor studies in International Business and Economics.

Aza Summers, AIA, is a recent new member. Summers is self-employed; and has a Bachelor of Arts degree from the University of Washington.



**1987
HAPPY
NEW YEAR!!!**

ASLA Members Host Annual Meeting

The Hawaii Chapter of the American Society of Landscape Architects (ASLA) held its annual meeting at the Plaza Club on Dec. 3 and recognition was given to accomplishments of the year, the installation of new officers and presentation of the Malama Aina Award.

During the past year, the chapter had sponsored a series of Talk-Story luncheons on planning, and held a series of lectures at the University of Hawaii on "Landscaping in Hawaii." Additionally, the chapter had co-sponsored a slide-talk of Roberto Burle Marx, and provided judges for the Parade of Homes.

The Hawaii Chapter of the ASLA also initiated a Community Action

1986

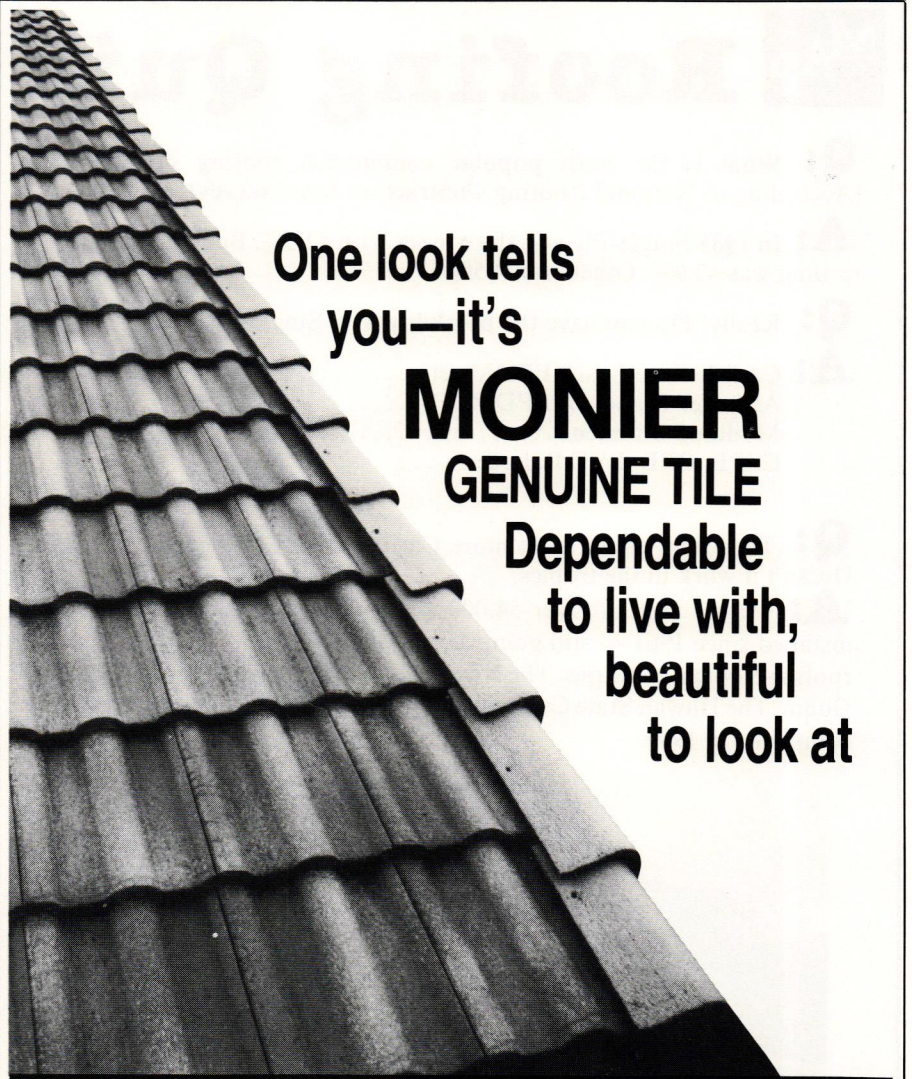
*Malama Aina Award
to Aaron Levine*

Team to assist the state Department of Transportation in its problems with landscaping along state highways. At the University of Hawaii, the chapter initiated an education committee to assist in the establishment of a landscape architecture degree program and co-sponsored a landscape industry seminar.

New chapter officers sworn in at the annual meeting were President, Jan Fong; President elect, Greg Boyer; Vice President, Randy Fujimoto; Secretary, Alan Schildknecht; Treasurer, Todd Black; Member at Large, Richard Brownlie; Trustee, Alan Clarke; and Past president, Ted Green.



Some of the ASLA members at its recent annual meeting were (left to right) Ted Green, Past President; Alan Clarke, Trustee; Greg Boyer, President Elect; Randy Fujimoto, Vice President; Todd Black, Treasurer; and Alan Schildknecht, Secretary.



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The 1986 recipient of the Malama Aina Award was Aaron Levine, FASLA. Levine was recognized for his outstanding contribution to landscape architecture and planning in Hawaii.

The Malama Aina Award is an annual recognition award for persons, agencies or organizations outside of the landscape architecture profession who have supported, promoted or served the profession or preservation and enhancement of the Hawaiian landscape.

1987 Architectural Photo Contest

Entry forms for the 1987 AIA Architectural Photography Competition, organized by the St. Louis Chapter AIA in cooperation with national AIA, are now available. Deadline for entries is March 31. Winning entries will be exhibited at the 1987 AIA Convention in Orlando, and will be

published in *Architecture*. Images for the 1989 AIA calendar will be selected from the entries.

There will be cash prizes totaling \$2,500 to include: 1st prize \$1,000, 2nd prize \$700 and 3rd prize \$300 for any architectural subject or some element of the man-built environment. Photographic interpretation of the subject matter is the issue, not the architecture. There is also the Louise Bethune Award of \$500 for the best image of an architectural subject in the United States.

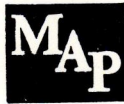
Photo Competition chairman is Albert B. Fuller Jr., AIA, of St. Louis who has worked in cooperation with John Hoke, AIA, of the national staff to bring this opportunity to members, associate members, professional affiliates and student members of the American Institute of Architects.

Entry fee for AIA, Associate and Professional Affiliate members is \$15 for one to five slides, and \$10 for student members. There is no limit to the number of entry fees that may be submitted by any one person. Great care will be taken with all slides submitted, but no responsibility for loss or damage during transit or any phase of the competition will be assumed by the St. Louis Chapter AIA or by the AIA.

Entrants must use the official entry form, which will appear in the January 1987 *Architecture* and a future issue of *Memo*, or may be obtained by sending a stamped self-addressed envelope to St. Louis Chapter, AIA, 911 Washington Ave #225, St. Louis, MO 63101-1203.

Fabrica International Receives Award

At the recent Hawaii Flooring Association (HFA) Convention, Fabrica International was honored by being selected Supplier of the Year. HFA members include dealers contractors and retailers, who rate suppliers based upon service, quality of product (including consistency of quality) operations and support of the Association.



Roofing Quiz

Q: What is the most popular commercial roofing in America? (According to National Roofing Contractors Assn. survey)

A: In 1985 Single-Ply was the winner with 52.5%. Built-up (bitumen) roofing was 43.0%. Others ran 4.5%.

Q: Really! Do you have the breakdown on Single-Ply?

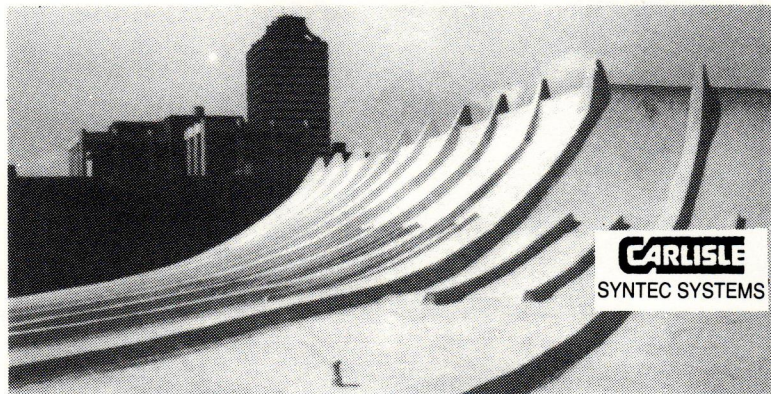
A:

Carlisle Sure-Seal® EPDM est.	12.0%
All other Brands of EPDM	18.5%
Modified Bitumen	12.5%
CSPE, CPE, PVC Polymers	9.5%

TOTAL: 52.5%

Q: Then why aren't there more Carlisle Sure-Seal® jobs in Hawaii? Doesn't it work in the tropics?

A: Mostly inertia. Over 54,000 warranted Carlisle roofs have been installed since 1961 — still going strong. There are thousands of Carlisle roofs in tropical countries. The Navy has more than a million square feet in Guam. The Hawaii State Capitol has a Carlisle Sure-Seal® adhered system completed in 1984.



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Green Makes Move To Group 70

Edward T. (Ted) Green has recently joined Group 70 architects, planners and interior designers as computer systems manager, according to Norman G. Y. Hong, managing partner.

"Ted Green comes to Hawaii with unique credentials," noted Hong, "He is by education and training both an architect and a computer programmer, one of the real pioneers in the integration of computers and design."

Green's computer-design career includes the co-creation of some of America's earliest software systems designed for use by architects. These systems are specific application of the general field of computer-aided design and drafting, commonly called CADD. He most recently served as architectural applications consultant across the western U.S., Canada, Hawaii and Alaska for Sigma Design, Inc. Sigma is recognized today as one of the pacesetters in the CADD field.

Papandrew Named Fellow of ASLA

Thomas P. Papandrew has been elected one of only 15 national Fellows of the American Society of Landscape Architects (ASLA) for 1986. Papandrew is only the fifth person in Hawaii to receive this honor which has been presented by the ASLA since 1899.

Papandrew, director of planning at Belt Collins, was presented the award for direct service to his professional society and excellence in his landscape work that spans 17 years and covers a wide range of

projects in Hawaii and around the globe.

Belt Collins has worked on projects in over 25 countries. Papandrew assisted with the formation of overseas offices for the firm in Sydney, Singapore and Hong Kong.

Papandrew has traveled extensively to manage projects for Belt Collins in such areas as Southeast Asia, Australia, the South Pacific, Israel and Egypt.

He has served on local governmental and professional committees. For the City Council of Honolulu, he served on the Urban Design Committee of the Comprehensive Zoning Code Overhaul, and the Task Force Committee on Zero Lot Line Development. Additionally, Papandrew also served on the Hawaii Coastal Zone Management Citizens Forum.

Papandrew has held many positions in the ASLA. Among them, he has served as president of the local chapter, chairman of the national convention in 1985 and national vice president.

Papandrew received a Bachelor of Architecture degree from Arizona State University and did work in Graduate Study, Pacific Urban Studies at the University of Hawaii.

CIDS Named Outstanding Project

A concrete honeycomb structural system, developed and patented by Alfred A. Yee, was instrumental in the Concrete Island Drilling System (CIDS) which was recognized as an Outstanding Civil Engineer Project of 1986 by the American Society of Civil Engineers.

The honeycomb structure is composed of more than 200 precast concrete "silos," 42 feet high and 11 feet in diameter. Each silo is constructed by integrating five precast units, each unit about eight feet in height. The precast units are joined together by NISSCO Splice Sleeves, another patented invention of Alfred A. Yee, first utilized in the

construction of the 38-story Ala Moana Hotel building.

Each silo is then tied together by cast-in-place interconnecting vertical walls, perimeter walls and top and bottom deck slabs. The entire perimeter wall and slab areas are post-tensioned for structural strength and crack control. The concrete used is a new type of high-strength, lightweight, cold weather marine concrete.

The CIDS is unique as a drilling platform. Its modular design reduces construction time as silos were prefabricated simultaneously as the slabs were being poured. Sensitive environmental implications such as dredging and gravel-handling activities are avoided since the structure is simply ballasted down with seawater to sit directly on a natural sea-bottom. The entire platform can be refloated and relocated at minimum cost and impact to the environment.

Built by Global Marine Development, Inc., the CIDS, also known as an Arctic Ocean platform has revolutionized the method of drilling offshore on the north slope of Alaska. "With the CIDS, substantial economic and technological advantages have been realized and this method has replaced the only other previous method of offshore drilling which was performed on artificially constructed gravel islands," said Ed Cambridge, senior vice president and executive director of Alfred A. Yee Division...Leo A. Daly in Honolulu. "The honeycomb system was chosen for its strength against the extreme ice pressures, as well as the high wind and wave forces that occur in the Arctic."

According to design engineer Fred Masuda of the Alfred A. Yee Division...Leo A. Daly, the CIDS project is only one of the possible configurations. "Other sizes and plan configurations have been designed to meet various needs of other users such as the ROFOMEX," he said. "The ROFOMEX is a prestressed concrete honeycomb system used for phosphate mining operations in Mexico."

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New Business Center In Iwilei Area

The Iwilei Business Center, a conversion of the 300,000 sq. ft. Del Monte Cannery to industrial condominiums, has been completed

and is sold out, according to Gordon Hess, District Manager of Grubb & Ellis Company, Commercial Brokerage Services in Honolulu.

The largest industrial condominium project ever developed in Hawaii, the center was purchased from Del Monte Corporation in 1983 by Iwilei Business Center, Inc., a subsidiary of Lone Star Hawaii Properties. Grubb & Ellis acts as exclusive sales agent for the property; Architects Hawaii planned the conversion, and

Michael S. Myers, Senior Marketing Consultant with Grubb & Ellis Company, was the project coordinator.

"We're proud of this project and the conversion because it is the first of its kind in the state," says Myers "We've already seen signs of further renovations and restorations in the Iwilei area, following our lead."

The site includes five contiguous buildings of the former pineapple cannery at 500 Sumner Street. The area was zoned I-1 (light industrial), but was recently changed to MX (Mixed Use) under the State Master Plan. Tenants include a variety of users such as industrial, warehouse commercial, office space, light manufacturing, distribution and more.

Tile Contract For Kalakaua

International Tile Design, Inc., supplier of imported ceramic tile, recently announced that it has been awarded a contract to supply materials for the Kalakaua Avenue redevelopment project. The contract was awarded by the City and County of Honolulu.

According to Ken Ryan, general manager at International Tile Design, the contract calls for some 130,000 square feet of tile.

"The tile will be used to delineate pedestrian crossings at major intersections," Ryan pointed out. "It will also be used on both sides of Kalakaua Avenue running its entire length from the intersection of Ala Moana and Kalakaua to the intersection of Kapahulu and Kalakaua."

BIA Installs 1987 Officers

The 32nd annual installation banquet for the Building Industry Association of Hawaii was on Dec. 15 at the Hilton Hawaiian Village.

James Watanabe, president of J V Inc. was installed as president.



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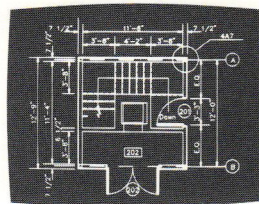
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Senior officers were Donna Goth, president of Blackfield Hawaii Corp., as association president-elect; Walter Arakaki, Walter Arakaki General Contractor, as vice-president; Marvin Uehara, Hasegawa Komuten Hawaii Inc., as secretary; and Frank Machado, Reef Development of Hawaii, Inc., as treasurer.

The Building Industry Association of Hawaii is an affiliate of the 130,000-member National Association of Home Builders.

New Management For Kaneohe Shopping Center

Blackfield Hawaii Corporation recently purchased Kaneohe Shopping Center from the Magoon Estate.

Located in the heart of Kaneohe's business district at 45-934 Kamehameha Highway, the Center covers approximately 3.2 acres of leasehold land area and has 44,994 sq. ft. of ground floor retail space in three separate buildings. The major tenants are Times Supermarket, Walrich Drugs and Wendy's.

Hawaii Management Corporation, a subsidiary of Blackfield Hawaii Corporation, has been named the managing and leasing agent for the center, which is presently 100 percent leased.

U.S. Postal Service In The Millyard

The U.S. Postal Service recently purchased the largest lot in The Millyard, a new business park in Wailuku, Maui, according to Monroe & Friedlander, Inc., the exclusive sales agent for The Millyard.

The landmark Wailuku Sugar Mill, which stood on the site for many years, was recently removed to make way for the construction of the Postal Service's new one-story facility, which will have about 16,000 square feet under roof.

Construction of the building on the 146,955 square-foot fee-simple parcel is scheduled to begin late this year, with completion set for June of 1988.

Architect for the new post office building is Gima, Yoshimori & Associates, AIA, Inc. The Millyard is a development project of C. Brewer Properties, Inc.

Located next to Iao Stream with views of macadamia nut orchards on one side and the ocean on another, The Millyard is divided into 55 parcels from 10,024 square feet suitable for a broad-based selection of commercial and light industrial companies.

The design of The Millyard includes wide roadways, underground utilities and attractive landscaping. Quality design guidelines enhance the project's business environment.

Monroe & Friedlander, Inc., the exclusive sales agent for The Millyard, has sold all but 18 of the business park's lots to date.

The Millyard was first placed on the market in March of 1985.

New President At Shipyard

D. Scott Fitzwater, chairman of the board and chief executive officer of Honolulu Shipyard, Inc., (HSI), a subsidiary of Dillingham Industries, recently announced the appointment of Roy J. Yee, as president and chief operating officer of HSI. Yee replaces Steven C.H. Loui, who, after two years of managing HSI, has announced his resignation in order to devote his time to other business interests. Loui will retain his position as a director.

Also appointed as vice president was James V. Sterling, Jr., who has been with HSI since its formation.

Dillingham Industries is responsible for maritime companies owned by Dillingham Corporation, including HSI, Dillingham Ship Repair (Portland), Foss Marine (Seattle), Pacific Towboat (Long Beach).

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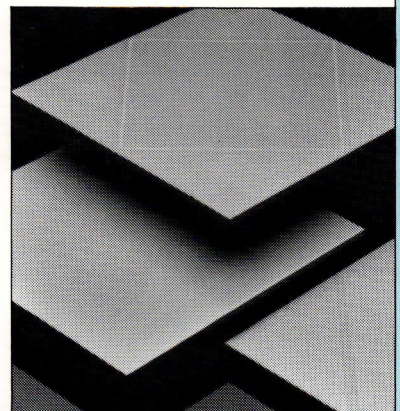
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Welcome to New Editor



Anita K. Painter

The Hawaii Society of the American Institute of Architects welcomes Anita K. Painter, new Managing Editor of *Hawaii Architect*. She joined PMP Publishing Company over a year ago and is also managing editor of two tabloids, *The REALTOR®* and *Ka Nupepa*, a Central Oahu community newspaper.

Painter is a former school teacher with the Department of Defense Dependents Schools, working with families of U.S. military personnel stationed overseas. For 15 years, she has worked with schools and communities in the Far East in Japan, the Middle East in Turkey, and in Europe. She returned "home" to Hawaii in 1984.

Coming Up in *Hawaii Architect*

For 1987, the following themes are scheduled to be featured in *Hawaii Architect*.

January

Architecture in Government
Floor Coverings

February

Building Renovation
Versatility of Wood

March

Art in Architecture
Bathroom Design

April

Resorts
Lighting

May

Historic Preservation
Waterproofing

June

Architects at Work and Play
Kitchen Planning

July

Shopping Centers
Appliances Update

August

Architecture Around the
World
Roofing

September

Computer Versatility
Office Automation

October

Landscape Architecture
Restaurants

November

Medical Facilities
Remodeling

December

Reflections on '87

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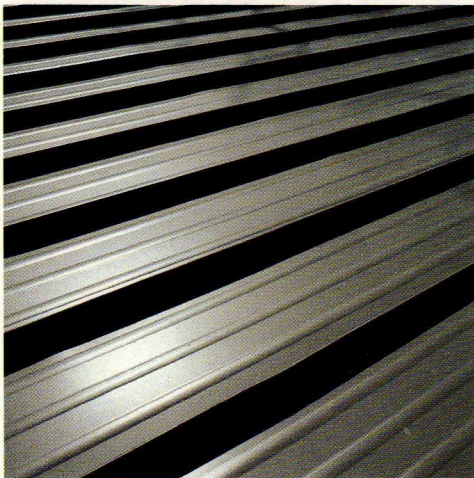
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DIMONDEK[®] METAL ROOFING



Roll formed in Hawaii for immediate delivery

- Floating, concealed anchors eliminate fasteners through panel and allow for expansion and contraction
- Long lengths eliminate end laps in most cases
- Preformed seams lock together without special seaming tool
- Available in prepainted steel, aluminum, stainless steel & copper



JORGENSEN STEEL