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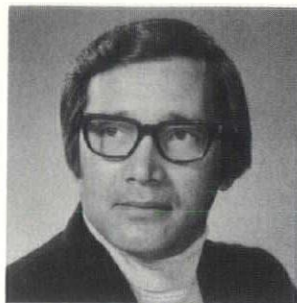
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PRESIDENT'S MESSAGE

By Don Dumlao AIA

I know that it is expected at this time that I reflect on the year's accomplishments and shortcomings and thank all those who contributed and "indeed" I am appreciative . . . however, only time will judge accomplishment; and those who contributed, know it; those who don't know it, didn't. Rather than do what's expected, I would again like to have the President's Message superceded to print a profound, simple presentation made quietly to the State's Environmental Council by Tom Creighton, FAIA, as President of Citizen's For Hawaii and simply ask "Where Does the AIA Stand?"

We believe that all these problems [population planning, transportation and housing] are related and must be planned together. Our questions also indicated that we believe that there are definite limits on continuing growth in Hawaii, beyond which a quality environment is impossible. We believe that the term "quality growth" suggests an impossible situation on a finitely limited group of islands. (There are increasing indications that this is true worldwide, but it seems undisputably true for Hawaii.) Therefore, our recommendations, for any environmental problem, are basically these:

1—Comprehensive planning, rather than the fragmented planning we now have, is essential.

2—Recognition of limits beyond which development and expansion cannot go without destroying the environment, it also essential.

3—Within the limits that the State sets to its growth, the comprehensive planning must be aimed at "quality" for ALL environments — social as well as bio-physical, Nanakuli as well as Kaneohe Bay — and for each person's life — those who cannot afford the housing

that is offered as well as those who are buying the new condominiums.

On comprehensive planning, we believe that a strong State planning body must be established, that will work in close harmony with the County planning agencies. We believe that a State general plan must be formulated, where now we have only a formulated planning process. We believe that each County should have a general plan, in harmony with the State's plan, regularly updated.

We are not sure that the State planning organization recommended by Stewart Udall is the correct solution, but we are sure that the planning of all land uses, from scenic uses to dense urban uses, the planning of transportation, residential planning, educational planning, health planning and all the presently uncoordinated schemes for moving into the future, must be coordinated, where now they are unrelated. We fail to see how any overall plan to protect the environment can be achieved otherwise.

In such coordinated planning, we believe that urban areas must achieve a quality of setting and allow a quality of life they do not now have. Urban design should be basic to redevelopment and to new community planning. We are impressed with the success of New York State's Urban Development Corporation in achieving this end, and think the UDC process should be explored here.

Also in such coordinated planning we think that open lands should be identified and preserved for the various essential open area uses: scenic, recreational, for agriculture and grazing. The pressures that make zoning only a well-intentioned gesture must be restrained, and unplanned, continuing urbanization of agricultural land must be stopped.

We are not at this stage sure of the most effective means. Certainly taxa-

(Continued on Page 8)

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More on Building Costs in Hawaii

The excerpts that follow are taken from 3 basic references.

1—The Interim Committee on Housing: Report to the State of Hawaii Legislature "The Cost of Housing in Hawaii," March 26, 1969.

2—The Planning Department of the City & County of Honolulu: "Elements of a Residential Policy," December 1971.

3—Building Systems Development, San Francisco: "Industrialized Building Methods," June 1969.

One-half the cost of a single-family dwelling is in land cost and site development.

Site preparation — grading, roads, sewers, storm drains and utilities — comprise 15 per cent of total housing cost, and is approximately 30 per cent higher in Honolulu than on the Mainland.

Heavier rainfall, more difficult soil, and more demanding code requirements are responsible for some of this differential.

The construction cost of a house in Honolulu is approximately 30 per cent than the cost of the same house in the average of West Coast cities.

The cost of shipping is estimated to more than the cost of the same house in the average of West Coast cities.

Construction Cost Breakdown

Enclosure	16%
Plumbing and Electrical	13%
Cabinets and Finishes	9%
Finish Site Work	16%

(These percentages are virtually identical for both Honolulu and the Mainland.)

Selling Price Breakdown

Cost of Land Rights (Lease) ..	4.5%
Site Preparation	15.8%
Construction of House	52.0%
Construction Financing,	
Interest and Points	8.3%
Architect's Fee	0.6%
Sales	1.1%
Developer Profit	
and Overhead	17.7%

For comparison to West Coast cities, the table at the bottom of this page rates Honolulu with a cost index of 1.00. Other area costs are relative to that. NOTE: These are NOT prices — they are percentages of Honolulu costs.

While the hourly wage of most labor here is lower than their Mainland counterparts, labor cost per project is about 20 per cent more here. This is due in part to the slower rate of local crews, and to inefficient delivery systems, where labor is not really at fault. Costs are increasing at about 4 per cent per year. The price of housing is appreciating at a rate of 6 to 10 per cent per year.

	Honolulu	Los Angeles	San Francisco	Seattle
Marshall Multiplier	1.00	0.80	0.83	0.82
Boeckh Modifier	1.00	0.87	0.94	0.85
Wages — Carpenter	1.00	1.24	1.32	1.09
Wages — Electrician	1.00	1.03	1.20	0.95
Cost — Lumber / MBF	1.00	0.67	0.81	0.59
Cost — Concrete / cu yd.	1.00	0.57	0.71	0.67

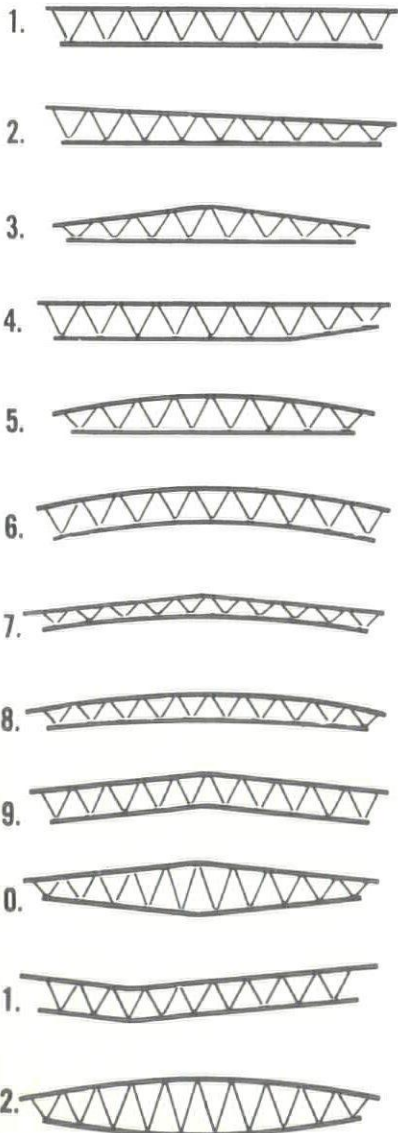
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Boeckh Modifier — American Appraisal Co.

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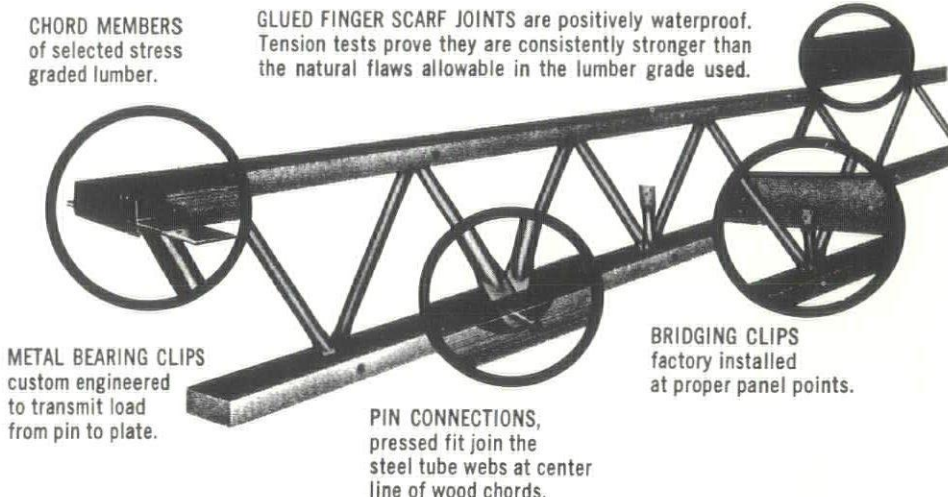
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Architects and the Building Department



Ernest Yuasa

On November 15, Editors Fox and Reinhardt met with Ernest Yuasa, Director of the Building Department of the City & County of Honolulu to discuss the relationships between architects and the building department. We found Mr. Yuasa, an engineer by training, very articulate and candid. The following are not quotes, but portray the content of the discussion.

H.A.: What's new at the Building Department?

Yuasa: Several months ago a survey was made of the agencies involved in the building permit process to determine if plan checking functions of the agencies could be all contained in the building department itself. The only one which responded favorably was the Planning Department. Recently the section of the Planning Department which was responsible for reviewing building permits was incorporated with the Building Department. This seems to be working well, particularly for people applying for permits, as it consolidates the places they have to go.

In addition, on the first of January, the old procedure of issuing separate plumbing and electrical permits will be abolished. Both will be part of the building permit. The building permit fee will be increased to include the two new parts — the total fee will be the same — just all at one time instead of 3.

H.A.: You mentioned permit costs. Is the Building Department self-supporting?

Yuasa: No — far from it. The annual budget of the Building Department is about \$15 million a year, of which about \$2 million is for the actual plan checking sections. Income from building permits is about \$1 million a year.

H.A.: What do you see as the largest problem between architects and the Building Department?

Yuasa: Not checking with us early enough in the design process. Many times — in fact most of the time — architects wait until the end of working drawings to talk to us. Then they send the contractor in for the permit. Everyone gets very upset when we find something wrong. Sometimes the problems are so serious and basic that the project can't be built at all. I can think of a couple of cases where CZC provisions were overlooked, and the project was clearly in violation, with no way to conform. This makes the architect look bad, and the owner very upset. By checking with us early in the design process, the owner's money, the architect's time, and everybody's feelings could have been spared.

H.A.: How early should the architects review their plans with you?

Yuasa: As early as there is something definitive to talk about. We can't review ideas that are in your heads, but put them down on paper, and we'll talk about them. The planning section can talk about zoning, setbacks, height limits, density and such as soon as you have a site plan.

H.A.: What continuity is there between these early reviews and the actual permit application?

Yuasa: As much as possible, the same person you deal with in the preliminary check will do the formal application review. If there is a problem you have resolved or an interpretation made, that can be made part of the project record if you wish. If the project is very complex, it would be a good idea to submit for a formal review at the end of preliminaries before working drawings. This will go through the same process as a regular permit application. Of course we can only review what you have shown.

H.A.: That raises a good question. Suppose a project goes in for a permit, is reviewed, approved, built and the field inspector picks up something which is clearly a violation, but was shown that way on the permit drawings.

Yuasa: No question about it. A violation is a violation. Just because it wasn't picked up on the plan check doesn't make it legal. Our people are human — they miss things, too. The violations would have to be corrected.

H.A.: How are disagreements between you and an architect applying for a permit resolved?

Yuasa: The man at the counter identifies the problem. If he and the architect can't reach a satisfactory agreement, the section supervisor examines it. If agreement still is not there, the problem comes to me, at the administrative level. Most problems can be resolved by this point, but if not, the final authority is the Building, Housing, or Zoning Board of Appeals, which ever is applicable. This is not to say that if you have something which is a violation that someone higher than the counter will approve it if you keep at it long enough. Some interpretations are harder to make than others, or are more far reaching in their scope.

H.A.: How are changes in the Building Code made?

Yuasa: The Zoning Code is of course, an ordinance, and can be changed by the City Council. The Building Code is, too, but it has to be acceptable to HUD, or projects involving Federal funds will be denied funding. This means that our building code can't have special interest groups given advantages, and such. In reality, most changes come from the International Conference of Building officials — at their annual convention. This is not to say that they are immune to special interest group pressure, but at least it's at a national level. These proposed changes are then reviewed with all the groups who might be involved — the AIA, contractors, manufacturers, unions, etc. The AIA Code Committee has regular meetings with our people.

(Continued on Page 8)

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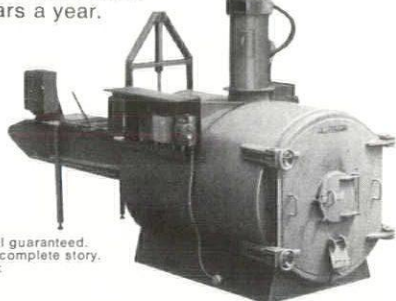
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Building Department continued from 6

H.A.: What are the current standards
by which you regulate?

Yuasa: Codes:

Building Code—Chapter 16, Revised
Ordinances of Honolulu, 1969. 1970
Edition of Uniform Building Code¹
adopted with local amendments.

Electrical Code—Chapter 17, Revised
Ordinances of Honolulu, 1969. 1971
Edition of National Electrical Code²
adopted with local amendments.

Plumbing Code—Chapter 19, Revised
Ordinances of Honolulu, 1969. 1970
Edition of Uniform Plumbing Code³
adopted with local amendments.

Housing Code—Chapter 25, Revised
Ordinances of Honolulu, 1969. Based
on Uniform Building Code, Volume III,
Housing¹, 1970 Edition.

H.A.: One last big question. Why does
it take so long to get a building permit?

Yuasa: We get asked that often. Actu-
ally much of the time consumed, if you
consider the elapsed time as beginning
with filling out the application and
ending with the permit in hand, is not
consumed in the Building Department
at all. Several other agencies are in-
volved — we have no control over
them — and the simple routing through
takes time. Checking is often very
complex and involved, and — in de-
fense of the other agencies — their
prime functions are not plan checking.
When they submit a budget item for
another man to check plans, it usually
gets cut out. If you have two men
reviewing plans and one goes on vaca-
tion or is sick, half of the staff is gone.
The Building Department itself doesn't
have this problem. The projects go

through our department quite rapidly.
One portion of that total elapsed time
that we get blamed for — by the owner,
or contractor — is the time that it takes
the architect to make his corrections.
We may soon go to a log-in/log-out
procedure to identify this portion of the
time problem.

H.A.: Would AIA pressure at the
Council or Mayor's Office be appro-
priate to help some of the staffing
problems?

Yuasa: Voter response to their elected
officials about problems that concern
them is always appropriate. You have
to let them know how serious you feel
the problem to be, and then, for them,
it's a matter of priorities.

H.A.: Do you prefer to deal with the
contractor or the architect in getting
permits?

Yuasa: The architect, definately. The
contractor doesn't know why things are
done, or what changes are acceptable.
Who actually pays for the permit is of
no concern to us, but in the review
portion, we prefer to work with the
architect directly.

Editors' note: Prior to our meeting with
Yuasa, H.A. surveyed several firms in
regard to their relations with the Build-
ing Department. Survey results showed
that the architects generally feel the
relationship is a good one, that the
Building Department is helpful, co-
operative, and honest — but too slow.
Suggestions ranged from improved
methods of approving new materials to
simplifying the overlapping of codes.

President's Message continued from 3

tion, devised on one hand to assist
continued open space use and on the
other to penalize change to urban use, is
one tool. Outright purchase, to the
extent that is possible, is the most sure
method. Other devices such as purchase
of easement and air rights should cer-
tainly be studied.

The loss of this unique resource —
open land — is proceeding now at an
accelerating rate, and there will be little
hope of maintaining environmental
quality unless the trend is stopped.
Related to this point is the need to
clarify the purposes for conservation
land, and the allowed uses on it. We

hope that Udall's study will suggest
policies in this regard.

Further aspects of our positions on
planning will be brought out in other
testimony. Underlying all these ques-
tions is people — numbers of people
demanding more space and more serv-
ices.

You see, an AIA year or it's function
does not start and stop annually, but is
continuous... Mahalo.

Don C. W. Dumlao, AIA

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MAKING NO LITTLE PLANS — Part II



By Jack Sidener, AIP

"... the need for an intelligently organized environment is greater than ever. After all the politicizing, psychologizing, evangelizing, lobbying, and earnest grass roots discussions are done, the energy called for to bring human needs into graceful, harmonious, and spiritually nourishing physical form is an architectural one."¹

"If the city is badly organized and poorly shaped, it cannot be beautified. If it is well-organized, the appearance shall give a clear expression of the order, and those persons who have any sense for it will find it beautiful."²

Although the above are contemporary quotations, they might well have come from the program statement for design of one of the Chinese or Athenian new cities as far back as the fourth century B.C. The understanding that harmony, order, and beauty are related human needs, and that they can hardly exist without underlying structural organization, was possessed by the ruler-builders of all the great cities.

Unfortunately for those of us attempting today to improve cities through urban design, there has been a period of some years in which we have been out of favor, because our immediate predecessors have been accused of arrogance. Much of the accusation has been deserved, as there is in most cities a swath of urban devastation through over-zealous renewal plans, an insensitivity to human needs in many large undertakings, and a trail of forlorn monuments such as Brasilia to haunt us.

Along the way we've witnessed the waning of the Master Builder in the flowing cape. There are few Emperor-clients, our world is one in which the

client is multiheaded. The city, as David Crane puts it, is the product of "a thousand designers." As Rolph Preuss pointed out in another article (HA, August, 1972) our own city is designed by developers and the way they respond to the constraints of the CZC and the marketplace. But the CZC is negative, it tells you what you can't do; what is needed is a positive way of improving our urban physical environment, a set of goals and guidelines to direct development. What we need is a design, an "act of will," for Honolulu and for all of Oahu.

The City has the opportunity right now to prepare this design, as a part of the new Oahu Comprehensive Plan which is currently in process. There have not been many urban design elements of comprehensive plans in this country, and there is little agreement among practitioners as to how to approach city-scale or metropolitan-scale design. Most of the attempts so far have seemed to see design as an appendage to planning, as a way of applying cosmetic techniques.

But to be truly successful, urban design must be integrated into the very process of physical planning, to deal with the basic organization of the urban structure. Probably the most totally integrated program is that of the City of Boston, which produced a notable plan based upon the concept of Capital Design.³

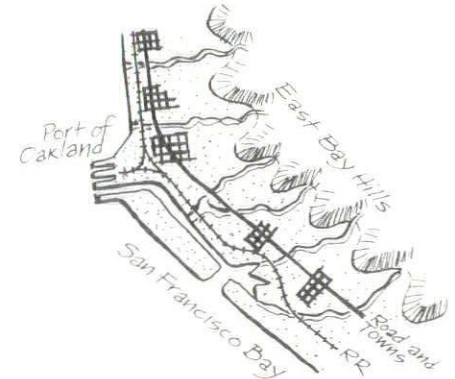
The hypothesis of Capital Design is as follows: Through control of location, siting, and design of municipal capital facilities (parks, schools, streets and transit lines, utilities, and so forth) the city may directly influence the location, form, intensity, and character of private development. For example, points of high access (transit stops) can be located where the city wants to promote high density development, open spaces encourage a development response around them, and, presumably, good design of government facilities will help promote good design in private development.

The Boston planners proposed that the capital facilities should form a web (Capital Web) across the City, connecting building complexes with open spaces and walkways, to help unify neighborhoods and to make more efficient multiple use of municipal lands.

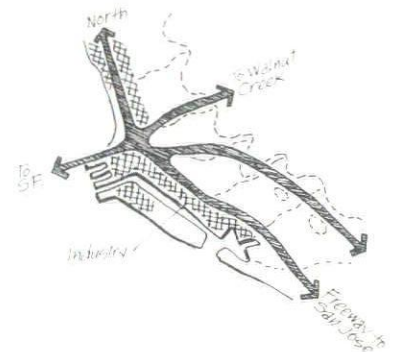
In our work for the City of Oakland, we found the historical and natural basis for a capital design framework to be

present, but an existing General Plan which tended to deny it, and existing freeways and future proposals which subdued it.

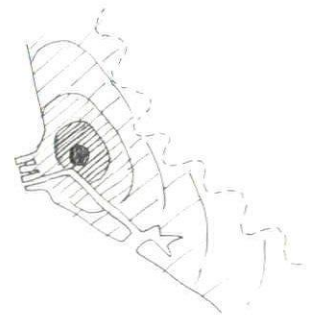
In many ways Oakland's form is similar to Honolulu's, so we may find some lessons in looking at how Oakland developed. Oakland is a linear city between hills and the Bay, and its plain was crossed by wooded streams. Major transportation routes developed parallel to the Bay's edge, with small towns at major route crossings.



By the 1950s the early railroads and highways were paralleled by a freeway and by nearly continuous industrial development.



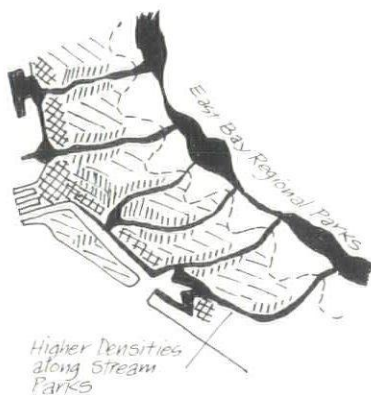
The pattern of commercial and residential densities and growth was, as in most cities, concentric, and heaviest at the historic center.



The combination of these factors was too much for the native streams, and concrete channelization to control increased runoff due to urbanization began to deal the death blow in the 1960s.

The possibility of developing parks along the six major streams, to connect the regional mountain parks to the Bay, had been recognized by a visiting planner in the early 1900s⁵ but his advice was forgotten in the rush of post World War I growth, though the ridge-top regional park system was established as an effective green belt.

The design plan for Oakland capitalized on the potentials of the surviving remnants of natural streams and bay-shore, and proposed a system of continuous parks with adjacent corridors of circulation and higher densities, which became the basic physical feature of the new Comprehensive Plan for the City of Oakland.

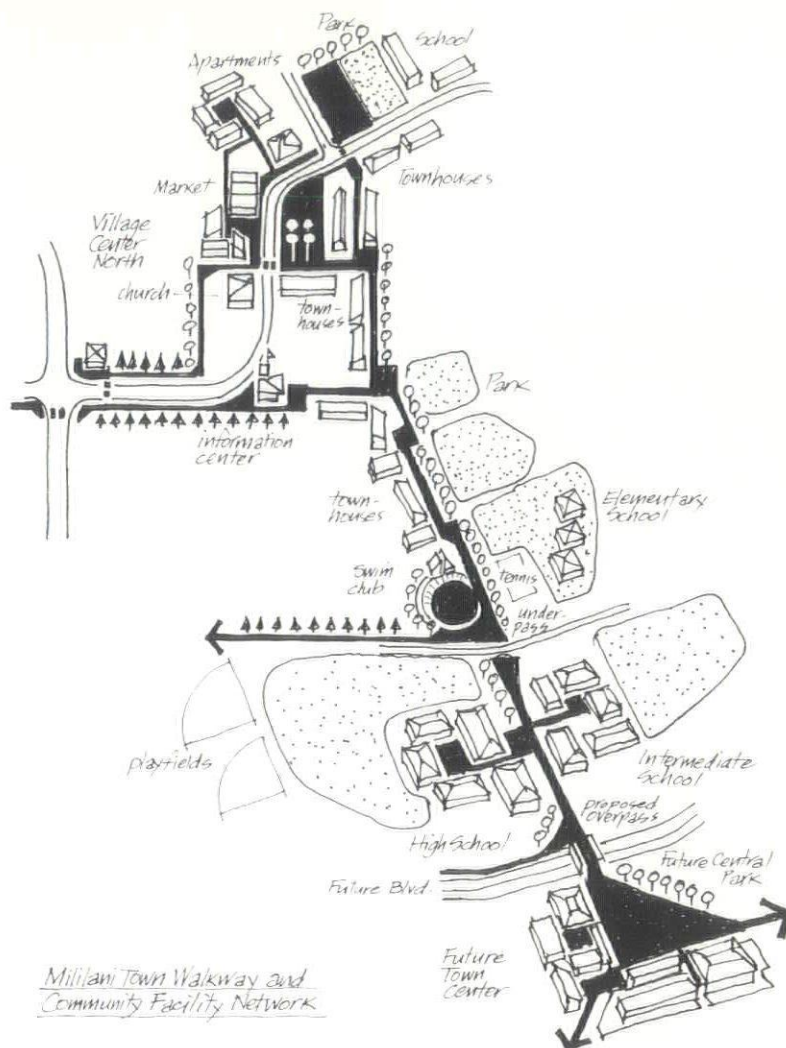


The diagram above illustrates the intended effect. When a hierarchical circulation network and a pattern of commercial centers and subcenters is combined with the open space proposal, the initially amorphous pattern tends to congeal into an organized, if necessarily complex, city in which one has a sense of logic and order in the physical pattern.

One quite small example of the possibilities of the Capital Web concept for giving a sense of order and of community is now nearly complete at Mililani Town, in which a pedestrian walkway and open spaces tie the first Village Center, townhouse clusters, and schools to the future Town Center site.

This well-used network was intended to be expanded into a town-wide open-space and community facility system, but seems to have been unfortunately lost in current master plan revisions.

In this article I have only touched on the kind of contribution urban design can make to Comprehensive Planning, and alluded to how vulnerable design



Mililani Town Walkway and Community Facility Network

concepts can be to the erodability of time and standard, over-simplified land-use planning methods. To succeed, urban design needs to be a continuous staff function in any city's planning department, and to be part of, not appended to, the overall planning process.

There are some who wring their hands at what is happening to Oahu, and for sure there are many losses in this time of rapid change, but there would still seem to be the opportunity to create an organically exciting and dynamic metropolis on this, the Gathering Place.

Chances would seem pretty slim, however, if the new Comprehensive Plan is merely a set of policy guidelines and generalized blobs of color. We need a specific design, one which recognizes that "The essential purpose of design is to create the possibilities for events to happen."⁶ Perhaps we even need a little of the arrogance of the Master Builder to get us moving.

As one friend of mine said recently, let's get with it and do it right; it's the only city we've got.

1. Franz Schulze, "Architecture: How Much of an Art." *World*, 7/18/72.

2. Steen Eiler Rasmussen, "Urban Aesthetics, a Summary." Mimeo paper, 1964, U. C. Berkeley.

3. David S. Crane, Chief of Planning and Design, Boston Redevelopment Authority, 1965/1975 General Plan for the City of Boston, Chapter III "A New Design for Boston." 1965. (See also *The Sketchbooks of Louis I. Kahn*, Falcon Press, Philadelphia, 1962, and Edmund Bacon: *The Design of Cities*, The Viking Press, New York, 1967, for examples of greenway and movement system studies which represent the roots of the Capital Design/Capital Web concept. Also see Williams and Okamoto, *Urban Design Manhattan*, Viking Press, New York, 1969, for an exciting expansion of the concept into an "access tree" for dense urban situations.)

4. DeMars and Wells, Jack Sidener, and staff, Oakland City Planning Department, *A Design Framework for Oakland*, (Proposals from the 701 Urban Design Study) Oakland, 1969.

5. Werner Hegemann, *Report on a City Plan for the Municipalities of Oakland and Berkeley*. Municipal Governments of Oakland and Berkeley, 1915.

6. Lawrence Halprin, *Notebooks, 1959-1971*. MIT Press, Cambridge, 1972.

Building Costs in Hawaii — Some Feedback

The editors of the Hawaii Architect have long felt there is a lack of concern for the other guy's point of view. This is true between fellow architects as well as related professionals and others involved in directing our physical environment.

This lack of concern has fostered a great deal of grief and lost opportunity toward achieving our goal of a better life through better architecture.

It is our belief that through an honest attempt to allow all sides of a question to be aired we can stimulate a healthy dialogue, creating a means of communication through which problems can at least be defined — which is the first step toward finding solutions.

In this climate, we welcome all letters — articles, arguments, or just constructive criticism.

Our goal is toward a better, more responsive architecture. We are sure you share this concern.

To the Editors:

After reading Mr. George Y. Whisenand's article on the high cost of building in Hawaii, I felt compelled to respond to his statements with reference to government regulations.

I would be the first to admit that code requirements add to the cost of building. On the other extreme, without some regulation, we would end up with a lot more abuse of safety requirements and many more cases of injury and death to the public, whose welfare we must look out for.

Mr. Whisenand, by his general barrage at government regulations, evidently has not taken the time to investigate the manner in which the City and County of Honolulu adapts its codes.

In the Building Department (of which I was Director for 3 years), we

assembled a Code Review Committee made up of engineers, contractors, suppliers, home builders and architect members from his own AIA. The provisions are reviewed and discussed by this review committee and hammered into final form. This procedure is used for the Building, Plumbing and Electrical Codes. This give-and-take process has been lauded by the very industry he says should be involved in code formulation.

His charge that government has adopted Mainland codes in toto is totally untrue. Ask the review committee, they'll tell him.

His charge that code preparation should not be left to government officials (because their background does not encourage the type of thinking which is needed) is a bunch of baloney. My background as an engineering consultant for some 13 years should speak for itself. I've also had a keen appreciation for Mr. Herbert Muraoka's (Chief, Building Safety Division) desire to simplify regulations rather than complicate them. He meets monthly with your AIA code committee to discuss problems. I've had numerous compliments from various professional groups, including the AIA, praising him for his practical approach to problems.

I have always been ready and willing to discuss any specific proposal from any member of the public — architect, engineer, contractor, anybody — which would eliminate high cost, complicated regulations and red tape.

I'd like to know what provisions are causing unnecessary costs and Mr. Whisenand's counterproposals to improve the situation. I've heard too much general baloney on high cost, I think it's time to get down to the nitty-gritty and ask these generalists to start talking specifics with those whom they malign.

If Mr. Whisenand has specific proposals to improve the situations, I'm all ears.

EDWARD Y. HIRATA
Director and Chief Engineer,
City & County of Honolulu
Dept. of Public Works

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MOLLY MOLENhoff

To the Editors:

I am sorry Ed Hirata took my comments on the contribution of building codes to higher construction costs at such a personal level. Certainly I am aware of the work done by the various liaison committees from the industry (including AIA) with his department on code changes. I'm also fully aware of the fact that there are some modifications made to the Mainland codes when they are adopted into use in Honolulu. However, may I clear the record:

1—Ed Hirata speaks only for the City and County of Honolulu Building Department. There are in use at various State and County levels probably a dozen codes over which Mr. Hirata's department has little or no jurisdiction. Just to mention a few: there are different versions of the Uniform Code in the three Outer Island counties, the State Fire Marshal's Regulations, the State Housing Code, the Building Exits Code, the National Board of Fire Underwriters Manual, the State Industrial Safety Regulations, some four different electrical and plumbing codes and the complete panoply of codes bracketed under OSHA.

2—We cannot relax and rest on our laurels. There is a continuous updating of the Uniform Code by the Pacific Coast Building Officials Conference. The City and County then must adopt the new versions with appropriate modifications. My comments were very strongly aimed at the Pacific Coast Building Officials Conference, not at Herbert Muraoka, whom I also find highly cooperative and open-minded.

My indictment of the construction industry for its failure to keep costs from sky-rocketing touched all phases of the industry. I was pleased to find a general recognition of the validity of my comments even from those who were more harshly viewed than were the Building Department officials. No one on the firing line in the construction industry can afford to be thin-skinned. Only God is perfect and we mortals progress only when we recognize our failures.

GEORGE V. WHISENAND

The way I've been touting the advantages of using Decramastic roofing tiles wherever possible may seem to some people that I'm protecting an investment in L. J. Fisher Co. the manufacturers of Decramastic. Well, that wouldn't be too bad an idea, but I simply want to stress the practicality of using this tile in Hawaii. I could give you an article of superlatives about this product and why you should use it but in the wake of our recent rain storm I would like to present the results of a DYNAMIC WATER INFILTRATION TEST performed by Approved Engineering Test Laboratories of Los Angeles.

PERFORMED FOR

Automated Building Components, Inc. 7525 N.W. 37th Avenue
Miami, Florida 33147

INTRODUCTION

The purpose of this report is to present the testing methods employed and the results obtained during the performance of a Dynamic Water Infiltration Test on roofing shingles. The product submitted for testing was "Decramastic," asphalt and slated granule covered shingles, the thickness including galvanizing. Each dis-assembled shingle measured 34-1/8" wide by 15-3/8" high, and when assembled (mounted) measured 32" wide by 14-3/4" high.

INSTALLATION DETAIL

The shingles were installed on an open wooden frame, and attached to 2" x 2" battens, located 14-3/4" O.C. Alternate means of attachment were used to secure the shingles to the battens at the lower edge of each over-lapping shingle. Some shingles were attached by four (4d) galvanized nails, and some by four (4) 1" long galvanized staples. The assembly of twelve (12) full courses of shingles, with three (3) shingles in each course, and ridge condition was installed on a test roof deck for testing. The pitch of the test deck was 4" in 12".

TEST PROCEDURES AND RESULTS

An aircraft wind generator, with four (4) foot diameter propellor, and capable of providing a slipstream velocity of 120 MPH, was placed sixteen (16) feet downstream from the assembled roof deck. Water was added to the airstream by means of a spray grid nozzle. The simulated rain was equivalent to 10" per hour. The wind blast, and water were applied to the exposed side of the shingles for a period of fifteen (15) minutes. During the entire testing period, the unexposed roof shingles were visually examined for water infiltration. At the conclusion of the fifteen (15) minute period the following results were noted:

No water penetration was noted to occur.

I believe we can conclude that with a Decramastic roof, water problems are non-existent.

Thanks for your time.

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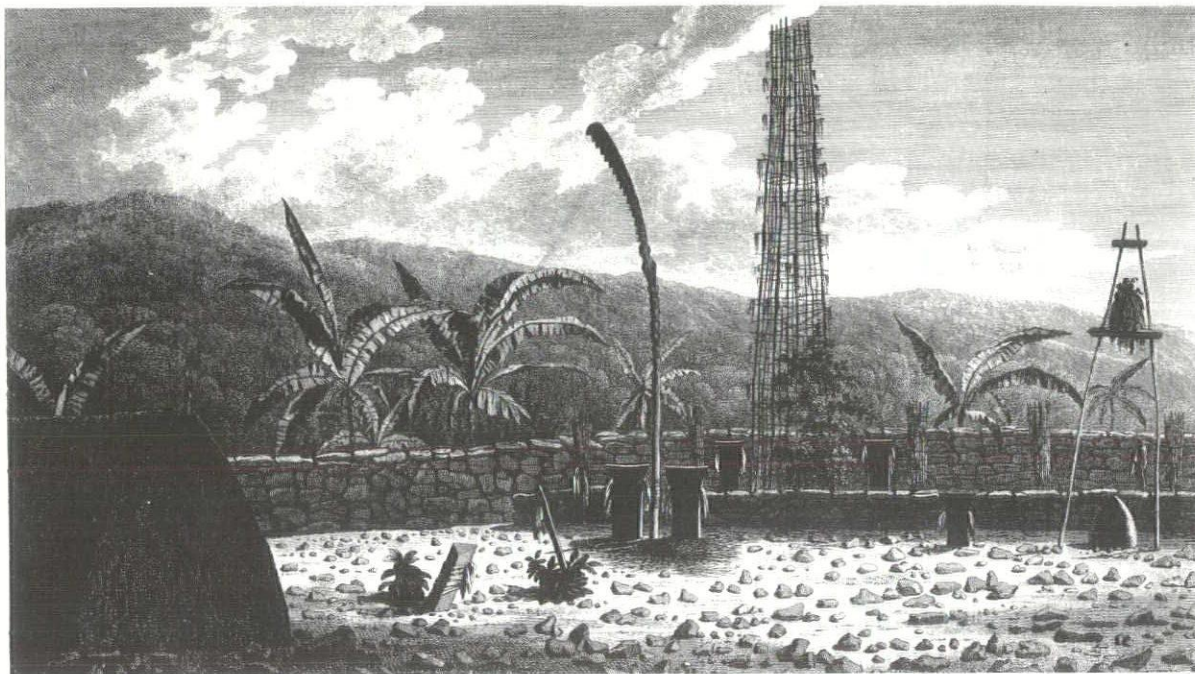
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An Architect for A Temple

By Russ and Peg Apple

Reprinted from the Honolulu Star-Bulletin.
Illustration is from the Webber Prints,
Courtesy of Wendell Carlsmith.

Ka-pou-kahi, A wise Hawaiian of Kauai Island, was an architect, a temple architect.

In the Hawaiian language, a temple architect is a kuhi-kuhi-pu'u-oie, which literally means one who points out hills of sand.

Hawaiian temple architects — having no drawing boards or even paper — planned their temples by shaping models in sand.

Ka-pou-kahi must have been the best in the Islands and well known in 1790.

He was available when Kamehameha the Great needed him.

Kamehameha the Great was on Molokai and in military trouble when he asked for advice from the temple architect on Kauai.

Not that the Molokai Hawaiians gave Kamehameha trouble — they were friendly to him. But back on his home Island of Hawaii, Kamehameha's lands had been invaded and his people killed.

Keoua Kua-hu'ula, a rival high chief that Kamehameha had not been able to eliminate, was behind the Big Island invasion, killing and rapine.

Kamehameha asked the prophet Ka-pou-kahi for advice and help. Great temple architects were also good prophets.

Conquest of all the Hawaiian Islands

was Kamehameha's goal, but he only controlled half of the Big Island — and this half was invaded by Keoua and his army.

Auwe — the Hawaiian cry of lament. Ka-pou-kahi was the man to help, if he would.

To ask him, Kamehameha sent his aunt Ha'alo'u to Kauai, by canoe. Ha'alo'u had two missions on Kauai.

One was to fetch the prettiest girl of all Hawaii for Kamehameha, a girl named Ke-kua-po'i-ula. When ruling chief Ka-hahana married her, he had lost the high status symbol of being able to roast his enemies in fire. He gladly gave up this privilege to take this beauty to wife. She was of a lower chiefly class.

But the beautiful chiefess never had to choose between her husband and Kamehameha.

Ha'alo'u took one look at her. She was too beautiful to introduce into Kamehameha's court. The jealousy she would cause might interfere with conquest. So Ha'alo'u passed the beauty by.

When Ha'alo'u found Ka-pou-kahi, she recited to him her family genealogy. This established her right to approach this famous man. By listening to it, Ka-pou-kahi, became obligated to her. A sacred genealogy is a private passport and sign of kinship among the high chiefly class.

Her question was, "How can Kamehameha rule over all the Islands?"

Ka-pou-kahi told her that Kamehameha should build a temple to his family war god, and build it atop Pu'u Kohola hill at Kawaihae on the Big Island.

"If he makes this house for his god,

he can gain the kingdom without a scratch to his own skin."

Ka-pou-kahi joined Kamehameha's staff.

In 1790, Kamehameha had several large temples. They were his through inheritance. But Kamehameha needed a new temple, one built especially to insure his rule over all the Islands — a typical "special purpose" temple to a selected Hawaiian god.

The temple architect from Kauai went to the Big Island, built the temple for Kamehameha, and then stayed on Kamehameha's staff through the years of conquest.

With Pu'ukohola temple built where and how Ka-pou-kahi said, Kamehameha's fortunes changed. His war god was offered the body of Keoua as the principal human sacrifice at the dedication.

Ka-pou-kahi's prophecies began to come true on the very day of the dedication in 1791. On that day, with the death and sacrifice of Keoua, Kamehameha controlled all of the Big Island.

And Kamehameha, with Pu'ukohola temple as his spiritual strength, went on to rule all the Islands.

The platform of the temple Ka-pou-kahi designed and built for Kamehameha in 1791 still stands atop the hill at Kawaihae on the Big Island.

Modern Hawaiians of the Big Island gathered at the temple on November 4 to watch the gift of the land from the estate of the late Queen Emma to the people of the United States. The war temple of Kamehameha will become the Puukohola Heiau National Historic Site.

PLANNING FOR KAIWA RIDGE

By RALPH A. SCHRADER

(The following letter, reprinted in its entirety, was dated November 1, 1972, and sent by Mr. Schrader to the City Council, Planning & Zoning Committee; Honolulu Hale.)

After listening to the Planning Department present its brief on downzoning of Kaiwa Ridge, I conclude that the primary reason for requesting this action is that the area covered in the proposed ordinance is composed of land with slopes in excess of 25 per cent.

It is ridiculous to say that good housing cannot be built on land that has a slope in excess of 25 per cent or that doing such necessarily means destruction of the environment. One has only to look toward the mountains to see that some of our best housing is on steep slopes, that it has been there for a long time without causing damage and the environment, while no longer in its natural state, has not been seriously affected.

It is ridiculous also to say that good housing can be built on all slopes without incurring unacceptable damage.

In view of our land shortage and the demand by agriculture and parks for relatively flat land, it would seem the time has come to investigate the particular problems posed by "slopes" in order to set up special zoning and subdivision regulations. Obviously such regulations should be set up with the aid of engineers, architects, homebuilders, etc. However, to give you some idea of my line of thought I list some of the things that might be considered:

1—Eliminate or limit retaining walls so that the house has to be built on top of land, not into it.

2—Allow narrower roads with no parking on the side in order to minimize cuts and fills.

3—Demand more parking spaces per lot as none would be able to park on the street.

4—Do away with front yard set back for carport.

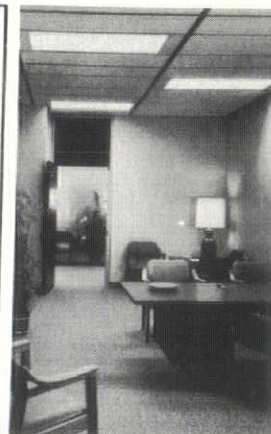
5—Make the minimum lot size 20,000 square feet.

6—Provide special encouragement for

(Continued on Page 17)

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NEW BOOK BY FAIRFAX



Geoffrey Fairfax

"The architecture of Honolulu is many things." These are architect-author Geoffrey Fairfax's first words in his excellent new book, *The Architecture of Honolulu*. His text combined with photographs by Rick Regan adequately verifies that statement. The author introduces his book by aptly tracing the history of Honolulu's architecture starting with the native grass huts and ending with today's high-rise structures. The reader is shown how the conglomerate of architectural styles that we see within the city are the direct result of the introduction of new cultures, philosophies, materials, and physical needs. During this development time with its varying influences, no true sense of regionalism has yet evolved.

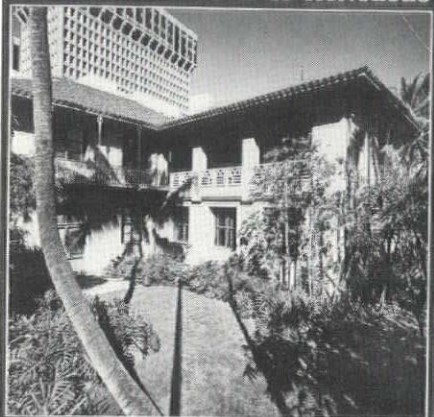
Mr. Fairfax deals not only with the history of Hawaii's architecture, but speaks pointedly to the need to preserve our heritage and our environment in times of an ever-increasing tempo of living not particularly in keeping with the tropics. In presenting the architecture of Honolulu, the city is divided into several geographic sections. In his selecting "a collection of existing buildings that deserve second glance" the author has afforded us a rare treat by giving many of us a first glance at some buildings that perhaps we have never seen before, or presented a view from a new and interesting vantage point of a building we probably have seen many times. For further study,

HAWAII ARCHITECT

structures that are open to the public are thoughtfully noted as such.

The one message that becomes apparent to the reader is that in Honolulu the quality of architecture diminished rapidly as the quantity of construction increased. Of the 106 buildings presented only 27 of them were completed

THE ARCHITECTURE OF HONOLULU



after Statehood, the period of Honolulu's greatest growth.

The *Architecture of Honolulu* is well worthy of three-fourths of an inch of shelf space in your library and might well be considered as an excellent gift to anyone interested in architecture in general or Honolulu in particular.

Schrader from 15

use of P.U.D.

The initiative for this downzoning seems to come primarily from the Lanikai Community Association. It is easy to understand the advantages of such an action to them, but what is good for the Community Association is not necessarily good for the City as a whole. Mainland examples can be produced that would show that acquiescence to Community Association pressures has been a major contributor to many urban problems of our major cities. Therefore, I ask what will this downzoning do for the 99 per cent of the people of Honolulu who do not live in Lanikai? We know there is a shortage of housing; we know there is a shortage of land. What then justifies the removal of this acreage from the available supply? Is the potential damage to the Lanikai Community really that great?

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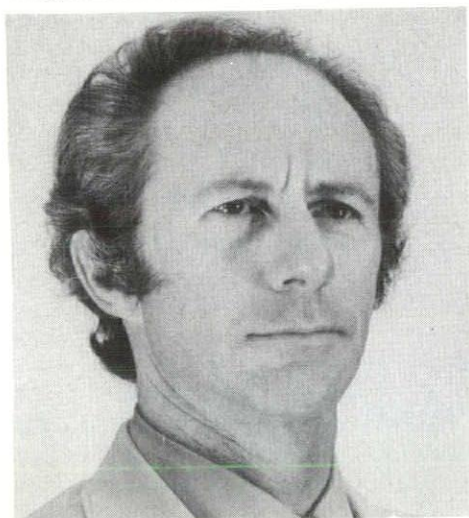
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Peggyjo Gum Appointed Executive Secretary

Donald Dumlao, president of the Hawaii Chapter of The American Institute of Architects, announced today the appointment of Peggyjo Gum to the position of executive secretary to the local chapter of the AIA. Ms. Gum came to Hawaii 2 years ago from Cincinnati, Ohio. In joining the architects she resigned from Cannon's College of Commerce where she had been teaching English and commercial subjects.



Robert Fehlberg, Regional Director for the Northwest Region, spent a few days with Honolulu's architects at the end of November. During his brief stay he met with the members of the executive committee, attended the elections meeting, and visited several offices.

Annual Elections



Pictured, from left, are (front row) Edward Aotani, Jim Reinhardt, Dennis Toyomura, Melvin Choy, and Donald Goo; (back row) Charles Sutton and Sidney Snyder. Jack Lipman is not in the photograph.

November 16, at a lunch meeting at The Willows, the annual elections were held. After an extremely spirited and close vote, which produced 1 tie vote and several 1 vote margins, the following men were elected to serve for 1973:

Vice president/President-elect —
Sid Snyder

Secretary — Ed Aotani
Treasurer — Don Goo
Director — 2 yr. term — Mel Choy
Director — 2 yr. term — Dennis Toyomura
Director — 1 yr. term — Jim Reinhardt
President for the coming year is Ty Sutton.

LETTERS TO THE EDITOR

At this time of Thanksgiving, I'm writing to thank you and the AIA, Hawaii Chapter, for continuing to send me the Hawaii Architect monthly. I read it religiously and share it when I'm done.

I find the articles relevant to problems, even in educational institutions — communication gaps, segmented decision-making, the constant reevaluation of institutional goals. I find, too, that Don Dumlao's President's Messages are straight and action provoking.

I also like emphasis on our looking at the Pacific Region as much as at Hawaii. I like this broad outlook, and I feel we in the high schools should make our Hawaii youngsters more aware of the entire Pacific Region than we have in

the past.

Again, thank you for sending me the Hawaii Architect. Please continue to do so. Thank your Board of Directors for me.

PUANANI KINI

Just a short note to let you know that after talking to you, Bob, and looking over several editions of your fine periodical, the Hawaii Architect, I committed our small company to six full-page ads for the coming six months. We missed the November deadline, but will start in December.

JIM WORDEN

I would like to point out an error in the November issue in the Hawaii Architect in the Letters to the Editors section, regarding Congressman Matsunaga's support of this bill. In my letter to you I did not refer to Mr. Matsunaga as a Senator.

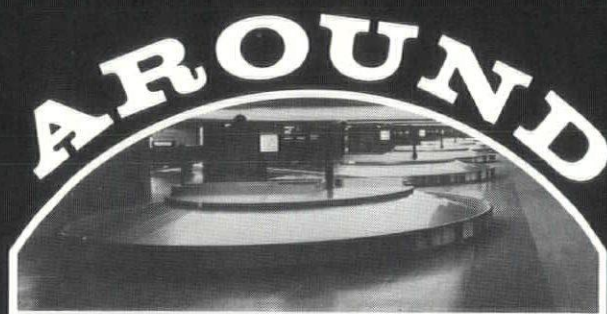
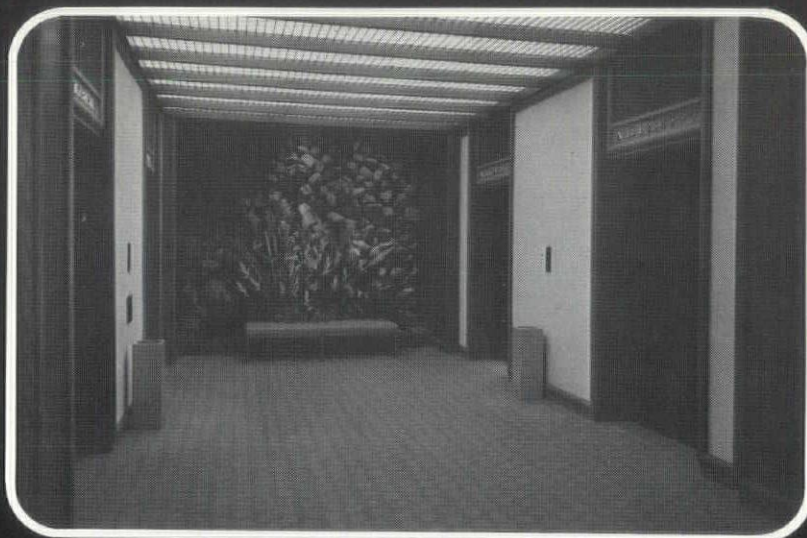
Also, on page 10 of this issue your title reads: "Hulten Speech to NAHURO Meeting October 19." Title should have been corrected to NAHRO which stands for "National Association of Housing and Redevelopment Officials."

Thank you for your attention.

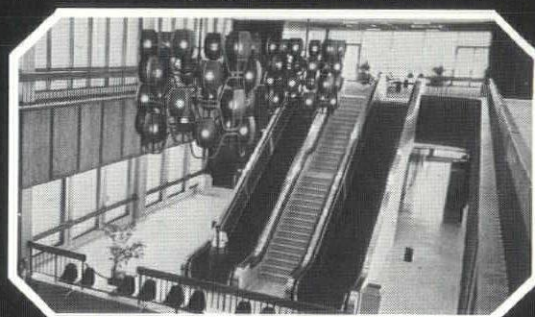
EDWARD R. AOTANI

Editors: You are right. Thanks for setting the record straight.

up
OR
down

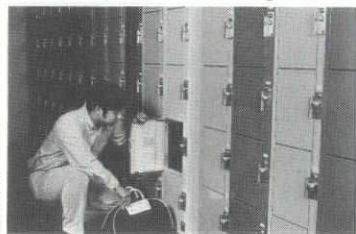


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