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The Best Is Yet To Come.
An Architect's (Affordable) Dream House

by Chris J. Smith, President, HS/AIA

Now this is a subject architects can really get interested in, 'cause we all gotta live somewhere. Right? Right! More creativity and originality are expended per housing project than for probably any other building type. Every client is original. Every problem is a challenge—cost considerations, etc. What we need now is a designer house by Gucci or Pucci or whatever. I can just see it now—punk rock bathrooms. My favorite sitting place would sure get vacated quickly. Perhaps this is a solution for the overcrowded family bathroom. The flooring tile would always glow, dishes would sparkle and there would never be another flea (not to mention cockroach) in the house. All new models could be exchanged for next year's racier homes which would also sport more fuel-efficient energy and roomier products. This approach has always confused me and made me wonder how cars can always be getting smaller on the outside and roomier on the inside? I mean r-e-a-l-l-y!

To promote this new creation, we need to get some Madison Avenue hype. Promote it just before Jack LaLanne or Jane Fonda's exercise class and wait for the purchase orders to come rolling in. (Be the first on your block with a new Pucci X-70 LTD Gecko model.) I mean every product, not to mention the clubs, have somehow attached themselves to animal identification, such as lions, elk, moose, colts, mustangs, cougars, etc. In fact, since we have such a fixation on the animal species, perhaps we could invent a new fad—shark skin walls!

Oh well, back to reality. Yes, housing is a need in Hawaii. To me, it's a topic much the same as computers, microwaves and the rest—utterly confusing.
Cover: Common plans for a cluster of affordable homes in Palolo were altered to fit each family's needs and include deep overhangs, reflective ventilated roofs, solar water heating and maximum natural light. See page 14.

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AFFORDABLE HOUSING:
A Unique Challenge for the Architect
by Lew Ingleson, AIA, Ingleson & Meyers

The architect, when commissioned to design housing for low- and moderate-income families, is confronted with a challenge to his architectural skills that is unlike any other project type. This is particularly true in Hawaii, where the high cost of construction and the labyrinth of governmental constraints have created a climate in which it is nearly impossible to deliver any kind of housing that is affordable to families whose incomes are 100 percent or less of the median (currently $30,300/year for a family of four).

As architects, we are constantly dealing with opportunities and constraints. Our training, both in school and in subsequent practice, moves us to patiently search for opportunities to develop appropriate and inventive solutions to contemporary problems. Our recognition of those opportunities and the design solutions that follow are the source of our professional satisfaction.

Constraints such as rigid governmental restrictions, difficult terrain or soils conditions and the like are bothersome and sometimes downright irritating. Similarly, budget constraints for most project types are bothersome and irritating. Normally, however, we are not confronted by a budget that renders the program virtually unbuildable. In designing low-

FHA "minimum" standards were project "maximums." Windows and exterior doors are recessed, providing weather protection without adding expensive roof area. Each apartment is served by one stair (below), thus eliminating long exterior corridors. Privacy is enhanced because residents do not pass other apartments.

Plans must be analyzed and re-analyzed to ensure that all space is utilized to best advantage. Production materials and processes should minimize waste.
income housing, the budget constraint is absolutely overriding. It is not possible to design this type of project cheaply enough. No matter how inexpensive the design, it must be made still less expensive. Even the architects' fees can jeopardize the financial feasibility of a low-income housing project.

Architects are by nature inventive types. We think we know all sorts of ways to build structures that will be less expensive than the standard construction methods we see all around us. Almost every architect has developed his or her "pet" system that is sure to revolutionize the construction industry. Ideas of this sort abound, and many of them certainly have merit. Unfortunately, we can't find anyone willing to spend the time and money it takes to fully research and develop the concept. In the arena of low-income housing, individual project budgets cannot support this sort of effort. Even the multi-million dollar "Operation Breakthrough" of the Lyndon Johnson administration, which focused the research and development resources of many large national corporations on technical construction solutions to low-income housing problems, came to naught. The immediate answer to the problem is not in space-age technology.

Can the architect contribute his skills in meeting this vital community need? Is it possible for the architect to be fully integrated into the process of developing low-income housing? Too often the architect is not involved because he is perceived by the housing developer as a dreamer, lacking the nuts and bolts pragmatism necessary to deal with the problem. This is reinforced by our own tendency to seek out projects that allow us to exercise our artistic ability by creating dynamic spaces and superb details. However, when designing housing for low-income families, there are priorities other than "good design" that must be addressed first.

These priorities begin with floor space. Space costs money and in most low-income housing projects minimum floor areas, as prescribed by the Housing Code or the Department of Housing and Urban Development (HUD), become the maximum area that will be built. The quantity of floor area is fixed; the quality of that space, however, can be manipulated to provide for the greatest possible efficiency. Floor plans should be analyzed and reanalyzed so that every square foot of space is utilized to best advantage. There should be virtually no wasted space.

The attitude used in developing the floor plans must then be applied throughout the entire design and production process. Are rafter and joist lengths such that there is minimum waste? Can the cut-off ends be utilized for blocking? Are doors and windows placed so that there is no waste of exterior siding or interior wallboard? Can the cut-out material be utilized elsewhere? Does the height of the building cause waste when utilizing standard-size siding panels, or require the use of siding with a premium price? Why use a 1 x 4 trim when a 1 x 2 will do? If the windows are inset in the wall, can the roof overhangs be eliminated, thus saving both framing and roofing? Is a sidewalk formed with straight boards less expensive than a curvilinear one?

This process of reducing to the absolute minimum, analyzing the results, and reducing yet again is the real challenge to the architect's skill. It requires patience, a thorough knowledge of construction practices and methods, knowledge of the cost of labor and materials and the myriad other pieces of information that go into the process.

Is it frustrating? Always! Is it fun? Sometimes. Is it satisfying? Definitely, with the realization that families that might not have been able to afford a house are living in homes that are the results of your efforts.

Buildings are clustered around landscaped open spaces. Apartments are oriented so that major rooms take advantage of external views and open spaces.
Affordable Living in a Garden Apartment

Jack Hall Memorial Housing
Lewis Ingleson, AIA & Associates

The Jack Hall Memorial Housing Project, designed by architect Lewis Ingleson, AIA & Associates, won a merit award for site planning. Located mauka of the sugar mill in Waipahu, this garden apartment complex contains 104 one-bedroom and 40 two-bedroom apartments rented to low- and moderate-income families. Community Development Block Grant funds and Section 8, New Federal Rental Assistance Program were utilized for land acquisition and provision of required subsidies.

The property, characterized by many fine, mature trees, contained plantation houses in such poor condition that they had to be demolished. However, the architects saved most of the trees by integrating them into the site plan.

Design goals, beyond saving the trees and building livable housing units within very restricted budgets and statutory limitations, were to: maintain low building profiles; minimize vehicular through-traffic on the site; provide for privacy; allow for natural ventilation and create visual identity through the use of crisp, architectural forms.

Due to budgetary constraints, whereby FHA "minimum" standards are project "maximums," the overall design concept maximizes livability through careful site planning, extremely efficient floor plans and economic utilization of materials.

The design consists of 10 two-story buildings and a community center arranged around large green areas containing pedestrian paths connecting parking areas with the apartments. Parking is designed so that there is no on-site traffic.

The apartments are oriented so that the major rooms take advantage of external views, where possible. Where no view is available, the apartments are oriented toward the open spaces.

Materials include wood siding and occasional metal roofs, recalling the earlier plantation houses.

Architect:
Lewis Ingleson AIA & Associates

Civil Engineer:
Community Planning

Structural Engineer:
Shigemura, Yamamoto & Associates

Electrical Engineer:
Ho & Okita

Mechanical Engineer:
Mechanical Engineers of Hawaii

Landscape Architect:
Hawaii Design Associates

Acoustical Consultant:
Darby, Ebisu & Associates

Contractor:
Aloha State Corporation

Photography:
Augie Salbosa

Careful site planning won a merit award for Lewis Ingleson, AIA & Associates. Most of the existing trees were integrated into the site plan.
ALLIED TEAMWORK meets a challenge of regal proportions.

Burger King at King's Village, Waikiki

Plans for the remodeling project at Waikiki's King's Village could not be finalized until the previous tenants had vacated the premises. But by that time, Pentagram Corporation's lease had already begun on their seventeenth Burger King restaurant in Hawaii. The meter was running, and the pressure was on.

The architect's measurements on the space revealed the necessity for a tight fit — not just for the restaurant, but for the workers too. A computer network analysis helped to regulate the traffic flow and maximize productivity. The results? According to Rick Conroy of Burger King, "I couldn't be more pleased, bottom line included." At Allied, pleasing clients is our crowning achievement.

The Team:
Stanford Chur, Project Manager,
Allied Builders System
Geoff Patterson, Architect
Rick Conroy, Director of Development of Burger Kings

Teamwork. Our motto. Our method.
Creative Problem Solving In Two Communities
by Norman G. Y. Hong, AIA, Group 70

That this issue of *Hawaii Architect* is devoted to the subject of affordable housing serves, I believe, to remind us of our profession's responsibility in meeting this area of community need. It is in this light that I would like to describe two housing projects in which our firm has been involved: The Waimanalo Village Housing and the Old Vineyard Street Housing.

In 1972 residents in the older Waimanalo Village were requested to vacate their dilapidated plantation homes and to occupy a future town-house development called the Banyan Tree Project. The residents realized that higher density town-house living with rules controlling children, pets, and vegetable gardens would not fit their rural lifestyle. They organized the Waimanalo Residents Housing Development Corporation (WRHDC) to resist eviction and to seek alternative solutions. With the assistance of attorney Herbert Takahashi and architect Gus Ishihara, the residents struggled for years to organize and develop their own community.

During the next five years, the community overcame what appeared to be insurmountable barriers. Residents obtained leasehold rights to the land from the state (Hawaii Housing Authority and Department of Land and Natural Resources) and acquired variances from the City and County of Honolulu for non-conforming subdivision solutions (i.e., overhead utilities and no sidewalks). They obtained a mixture of Federally assisted funding for rental units (Department of Housing and Urban Development-HUD) and ownership limits (Farmer's Home Loan). It should be noted that the Federal agencies had never permitted a random mix of rental and ownership units until this project occurred. It was one of the goals of the WRHDC to have a random mix to avoid having the project split between rental and owner-occupied units.

In 1977 construction began on the first phase of a 400-unit housing project. In 1980 all four phases were completed and occupied, thereby fulfilling an eight-year dream of WRHDC to own and manage their own community.

Residents in the Vineyard Boulevard area faced problems similar to those encountered in Waimanalo. In December 1972 residents living in the area bordered by Vineyard Boulevard and Punchbowl Street were served eviction notices to make way for the then-proposed state parking structure. Of the 43 families and 25 individuals who lived in the community, the majority had lived there for more than 20 years. Many of the residents were elderly, including "Mama" Hattie Kaakau, a pure-blooded 84-year-old Hawaiian woman.

Faced with eviction, the community organized the Old Vineyard Street Residents Association (OVSRA) to seek alternative solutions which would permit them to live in the area. With the assistance of university students, the Legal Aid Society, attorney Michael Hare, and Brian Taniguchi from the Governor's Office (now State Representative), the OVSRA successfully resisted the eviction deadline. In 1975 they received a loan from the Hawaii Housing Authority to commission a feasibility study.

Group 70, hired in February 1975 to prepare the feasibility study, determined that both housing and

Old Vineyard Street Housing is providing affordable new homes for area residents. Faced with eviction, residents banded together and were assisted by community members and government agencies.

Norman Hong, AIA is this year's HS/AIA secretary.
Waimanalo residents banded together to develop their own community. Overcoming almost insurmountable barriers, they were able to acquire affordable housing that fit their rural lifestyle.

The proposed parking structure could coexist with minimum impact on the Capital District Master Plan. Over the next three years, the community met with numerous county, state and Federal agencies to seek solutions to innumerable obstacles. Some of the milestones reached were: in 1976 a legislative resolution passed permitting housing on state land; in 1976 an agreement was reached with the Department of Accounting and General Services (DAGS) to delineate a 30,000-square-foot parcel of land for the project; in 1977 the State Board of Land and Natural Resources approved a land lease which gave the OVSRA leverage to seek Federal financing; and in 1978 HHA and HUD issued commitments to finance and insure the project.

On July 1, 1978, a groundbreaking ceremony was held and construction was started by Jiggs Tamashiro, a contractor who had worked with the community for months. One year later on June 30, 1979, a dedication was held to celebrate the completion of the Old Vineyard Street Housing.

The Waimanalo and Old Vineyard projects were unique to our firm and to the times, and provided a special chapter in the history of affordable housing in Hawaii. Since then, the Federal programs enabling such projects to occur have disappeared. As a result, the focus on affordable housing has shifted to subsidized elderly rental housing, and to Community Block Grant projects sponsored by the City and County of Honolulu. Recent city-sponsored projects include the Ewa Expandable Homes, Fernandez Village, and the Pauahi-Beretania project.

In summary, architects can provide an invaluable service to the community in the area of affordable housing. By our training and creativity in problem solving, we can help to provide well-designed affordable housing. While it will not result in tremendous profitability, it is highly satisfying and contributes to furthering the favorable image of architects in the community. In closing, I would like to quote one of the residents of Old Vineyard Housing speaking the day after she moved into her new home, after having lived in a dilapidated, unsafe, leaking home throughout her life: “For the first time in my life, I was able to sleep peacefully!”

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New Approaches to Affordable Housing
by Nick Huddleston, David G. Stringer & Associates Ltd.

There is substantial evidence that the usual concerns and approaches in the area of affordable housing are questionable guides for architectural practice. The cost and availability of material, labor, money and real estate, and the steady growth of our populations are issues that are generally outside the scope of the architectural profession.

The common design approaches to affordable housing seem to be equally questionable guides for practice. These efforts range from package or prototype housing designs, to the six-model subdivision, to the high-rise elevatorized housing block, with or without a parklike setting. Common problems in these approaches include a lack of concern for human and social needs, a paucity of detailed design and a level of quality that proclaims and institutionalizes the limited resources of their inhabitants.

The failure of such efforts is documented in the aesthetic squalor of mobile home parks, the monotony of urban sprawl, and the wreckage of moribund urban renewal/slum clearance/mass housing efforts across our nation. Architects who hope to serve their profession and the cause of affordable housing would do well to avoid the distraction of social and economic issues that are beyond their control and the temptation to duplicate efforts with a repeated history of failure.

More promising approaches require a careful consideration of the aspirations and image of the profession and of the impact of architectural design. The image of the profession is generally shaped by large projects and by the work of an architectural elite, both of which receive considerable media coverage and emphasis in the professional schools. A consequence of this emphasis is that many practitioners aspire to artistic recognition and hope for large commissions. This encourages poor imitations of questionable work and reinforces the unfortunate public perceptions that architectural services are a luxury appropriate only for large projects and that architects are impractical artists with little sympathy for common needs and widely shared aesthetic sensibilities.

These elements contribute to the fact that architects have little involvement in most of our housing production to the detriment of both the profession and the built environment. A greater emphasis on the core of architectural practice rather than on the extremes could help to change existing negative perceptions. Most architectural work is more humble, more affordable and more appropriate than the projects and designs that make the news. A recognition of this fact would do much to broaden the use of architectural services in areas that can help to make housing more affordable.

Useful approaches within this frame of reference would include a greater emphasis on the development of technical skills and on a craftsmanlike approach to design. A positive step would be a greater emphasis on activities such as remodeling, the creative re-use of existing structures and infill housing that serve much of our need for reasonably priced housing.

Architects would also do well to study regionally appropriate

Developer Tom Gentry recently announced Crosspointe, which brings a new look to affordable housing in Hawaii.
architectural forms. In contrast to
the common esoteric excesses of
the artistic elite, regional styles
often find ready acceptance, meet
social, cultural, and ecological
needs, and fit gracefully into the
built and natural environment.

Architects could further benefit
the profession and the cause of
affordable housing by moving into
regulatory and planning areas. The
present wilderness of costly
regulatory controls on construc­
tion might well see desirable
reforms through a greater
involvement of practitioners with
design training, a sympathy for the
human and economic needs of the
public, and a greater willingness to
work with performance standards
in preference to detailed
regulations.

The presence of more architects
in planning areas might help us to
realize that the structuring of our
neighborhoods and communities
are design problems in which
detail, diversity and balance are
important issues. With this shift in
emphasis we might begin to
reconsider zoning practices that
leave our suburbs deserted by day
and business districts untraveled
at night.

Local examples of the value of
these broader approaches to
design are easy to find and
instructive. Tom Gentry is a
developer with an architectural
background who has done very
well putting together reasonably
priced housing. David Stringer's
Mauna Luan and Kuapa Kai
projects have shown us that high-
density housing and businesses
can blend gracefully with the built
and natural environment of
residential areas. Jim Pearson has

Affordable tropical residences
by Jim Pearson and Cliff Terry,
AIA, adjoin a stream in Palolo.
Each of 12 families built their
own home or finished a
contractor-built shell.

had a positive effect with his work
and writing on energy-efficient and
ecologically appropriate housing.
His cluster of houses in Palolo
Valley demonstrates the livability
and economics of thoughtfully
conceived small homes that use
owner skills in their production.
The booklet on Ohana and infill
housing that he has helped to
produce since moving to the
Department of Land Utilization
should have a positive influence in
reducing the too-frequent ugliness
of poorly planned building
additions and encourage
economical infill housing.

Finally, architects like C.W.
Dickey and Val Ossipoff have
shown us that architecture that is
sensitive to its natural environment
and uses regionally appropriate
forms can be gracious and
comfortable without sacrificing its
claim to artistic merit.

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Housing and Open Space: No Need for Conflict
by Paul Cathcart

The most pressing issue facing the people of Hawaii today is their degree of willingness to increase the supply of housing to meet existing and future demands. Inherent in this observation is the dissonance we experience between our desire to slow the inevitable change to our state's unique natural resources versus the need to shelter our growing number of new households.

Anyone concerned about the issue of more housing has to be concerned about more land for housing. Attention appears to be mounting as to whether the slow-growth policies of our state and local governments are indeed acting as barriers to the production of much-needed housing. This appears to be the case if one examines land-use statistics. For example, on Oahu 80 percent of the state population occupies just 9.4 percent of its land area. Looking statewide, less than 4 percent of the state's area is designated for urban use (154,000 acres out of a total of 4,000,000 acres).

The Housing Coalition, representatives of the building industry, labor, government, consumers, financial institutions and landowners (Francis Oda, AIA, represents HS/AIA on the Paul Cathcart, Special Projects Coordinator for Kamehameha Schools/Bernice Pauahi Bishop Estate, is chairman of the Housing Coalition.

Left to right: Audi 5000S Wagon, Porsche 944, Porsche 911 Carrera Targa, Porsche 911 Carrera Cabriolet, Audi 4000S, Porsche 911 Carrera Coupe, Porsche 928S, Audi 5000S.
Coalition’s executive committee, share the same kinds of hopes and fears that most of us in Hawaii feel. We don’t want too many high rises in too many places. We want to preserve agriculture and open space.

We know our sugar and pineapple industries are having serious financial problems. We also know the cost of housing in Hawaii is about the highest in the nation. It is a fact that some of the most economic land for housing—especially on Oahu—is some of our best agricultural land. Yet of the 1.9 million acres designated for agriculture, only 300,000 acres are in production.

We know our government and private industry are working on new job opportunities to replace those lost in the sugar and pineapple industries—new and exciting opportunities such as diversified agriculture, high-tech, alternative energy and communications. In other words, there will be a continuing need for housing that our people can afford to buy or rent. Presently, less than 10 percent of the families in the state can afford to purchase a new average-priced ($135,000) house.

Members of the Housing Coalition believe it is time the people of Hawaii and their political leaders take a fresh look at our needs for open space, agriculture and affordable housing—recognizing that a trade off must be considered. Most Housing Coalition participants believe that a major reason for Hawaii’s high cost of housing is the high price of land; that making more land available for housing will help curb the high costs of land, and thus housing.

The nonprofit Housing Coalition does not take stands on particular issues. Rather it tries to use education and information to stimulate attitudinal change and to help create an atmosphere in which more affordable housing can be built.

The Coalition urges you to give serious consideration to our need for housing and our desires for open space and agriculture, and to how these things relate to the use

Continued on page 30

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What happens when you take the styling, drivetrain, undercarriage, and numerous other components from Europe’s “Car of the Year,” the Audi 5000S, and make a wagon? The incredible Audi 5000S Wagon.

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"...the 5000S Wagon clearly points the way to the future..."
Mililani Uka 6th Graders
Build Scale Model of Original Campus

Future Architects of Hawaii?
by Glenn Miura, AIA, Chapman Desai Sakata, Inc.

As a new member of the "Architect-in-the-School Program," jointly sponsored by the Department of Education (DOE) and the AIA, my assignment was to help the 6th graders at Mililani Uka Elementary School build a model of the campus as it originally was 10 years ago. There was a bit of hesitation to take on a project that required guiding 60 11- and 12-year-olds in the task of finishing a scale model in a couple of months. It had to be completed by then because a luau was planned to celebrate the school's 10-year anniversary and the model would show everyone its humble beginnings.

Mililani Uka was a unique school then. There was a tremendous need to have one more elementary school in the growing community. Since the DOE did not have funds available, Mililani Town Inc., the developer, agreed to build 30 house shells with no interior partitions and offered them to the state to be used as classrooms. When the DOE could build permanent buildings, these house shells would be returned to Mililani Town Inc. to be sold as homes. The school has built permanent classrooms but, due to the large enrollment, eight of the house shells are still used and referred to as the "Old Campus."

It was the Old Campus in its original form that was to be modeled. Easy, so I thought. I built a prototype and couldn't even build a hip roof properly. How could I expect 6th graders to build regular hip, hip-gables and double-pitched hip roofs if they form an object or animal? My technique was similar but instead of being a two-dimensional dot-to-dot, it was three dimensional. Each intersecting point of the roof was a dot and each dot was suspended in space through the use of connecting balsa sticks.

This modeling system allowed the student to actually build a model from scratch, giving him a crude sense of how a house is constructed since the technique follows actual construction sequence. The actual model-making of the Old Campus was smoother and faster than expected. By the end of the first session, most teams had their walls and windows completed. A few had started on their roofs. When I saw them framing the roof, I was amazed and delighted that they were actually doing it. The students adapted quickly to the use and conversion of scales and were actually reading and interpreting plans and elevations from working drawings.

By the second session, all teams had completed their roof framing and a few started sheathing them. By the third session, all teams had completed their house shells and form an object or animal? My technique was similar but instead of being a two-dimensional dot-to-dot, it was three dimensional. Each intersecting point of the roof was a dot and each dot was suspended in space through the use of connecting balsa sticks.

This modeling system allowed the student to actually build a model from scratch, giving him a sense of accomplishment. It taught him to read working drawings and convert scales and it gave him a
both the teachers and I were amazed. The children themselves were just as amazed and proud of their creations. No doubt the program took a lot of my free time but the enjoyment and satisfaction I received were immeasurable. I cannot end this article without mentioning the educators who enthusiastically supported and worked with me. They were Mililani Uka's vice-principal Annette Chun-Ming and 6th grade teachers Pauline Ikeda and Joline Kim-Lee.

I feel the real effectiveness of the Architect-in-the-School Program could be measured by the interest it generated for the profession. Before we started the program, Pauline Ikeda pointed out that only one student in the entire 6th grade class of 150+ students was interested in architecture as a career. At the end of the last session, I called Pauline's class together and asked them, "Okay, now how many of you think you would like to become architects?" Out of a class of just 30 students, seven hands went up.

A Reminder
The Second Annual Hawaii Architect Yearbook

The December Hawaii Architect magazine will be a special year-end issue featuring the work of HS/AIA members. Projects are currently being accepted for this issue. For more information, call PMP Co. at 621-8200.

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Honolulu's H.O.M.E. Policies
by Leigh-Wai Doo
Honolulu City Council

There are 40,000 family units without affordable housing in Honolulu. That is the conservative estimate of family units which earn less than $26,000 yearly, according to the Department of Housing and Community Development. Five years from now, how many moderate-income families will need shelter? How many low-income and high-income families? How many units will be needed 30 years from now? What will the capital improvement and maintenance costs be for water, sewers, roads, trash disposal, fire and police protection and other municipal services? How should our government plan for this growth? How are these questions addressed by the city's 20-year General Plan and Development Plans? What should Honolulu's policy be on meeting our present and future housing needs?

H.O.M.E. (housing opportunities, measures and evaluations) policies for Honolulu are now being planned. Consultant recommendations are being sought under a contract scheduled for completion in early 1985. Community and industry assistance is desired. It is to be a housing blueprint of Honolulu's predictable needs by specific housing category for the next 30 years. It is to be a set of recommendations and alternatives so that our city can begin making hard but necessary choices. Capital improvement planning for 40,000 units can begin now. The city's Development Plans, just enacted, reflect the desired growth areas of Oahu. Now we need a plan to implement that growth.

The Development Plans provide the land-use foundation for our housing program through population policies. A brief review may be helpful.

The Primary Urban Center is projected to accommodate 435,800 to 481,600 people in the next 20 years. This Development Plan shows that the areas of significant growth are only Kalihi-Palama, Iwilei, Kakaako, and Moiliili. Yet it is known that the infrastructure of drainage and road improvements is far from adequate to meet the projected growth in housing. What projects must the city undertake to allow the projected growth? How will projects be funded? What

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incentives should the city provide to urge redevelopment and to prevent slums?

The Secondary Urban Center in Ewa, from West Beach through Makakilo, has been projected to accommodate 80,000 people in the next 20 years, with some people saying it should accommodate 150,000 to 200,000. With the projected major employment centers of Campbell Industrial Park, the deep-draft harbor, and West Beach Resort near by, the traffic congestion to downtown Honolulu can be reduced. With a historical right-of-way for a transit line to downtown Honolulu, this planned community could develop without a reliance on automobiles. The one-car family for weekend use may become a reality. The plans for the Secondary Urban Center may take a full 30 years to be completed but those plans need to begin now if they are to accommodate our projected housing needs.

Urban fringe areas are by General Plan design to remain relatively stable without significant growth. Rural areas of Oahu are also not growth areas by General Plan designation. The country is to remain country.

With a plan of infrastructure and goals to meet, development can be phased, production can be predicted and continuous, and work can be stable and steady. Government planning need not be a reflection of restriction but should take an affirmative direction which is stimulating. Honolulu is already hard at work streamlining its permitting process for land-use development.

The provision of housing goes hand in hand with land-use designations and capital improvements. The land use designations are principally in place. The infrastructure and plans for implementation are needed. Laws to provide incentives for private industry are to be amended. Permit procedures are to be streamlined. Innovations are to be urged. Houses, apartments, condominiums—shelter—are to be built by plan.

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What's New in Flooring?
by Mary Philpotts, ASID, Philpotts, Obayashi Assoc.

Within the realm of flooring materials, the spring 1984 introductions feature several major "breakthroughs" in technology. First you will be relieved to know how static electricity is being controlled by two manufacturers, JJ Industries and United Technical Products (U.T.P.) are producing a carpet with conductive backing. Until now, the only solution came with the inclusion of copper wire interwoven with the carpet fiber, or a spray solution—neither of which was effective enough for high tech. Conductive backing is tested to record less than 1.5 KV static generation and less than 0.1 KV when using conductive footwear.

Also newsworthy is Welco Carpets' new development of a square grid pattern in tufting. To date, you have been seeing only diagonal patterns. The appearance of the grid is a more natural "matting or sisal" design and very appropriate for our island use. The tufting designs are being manufactured in Olefin, a fiber which has undergone genetic fine-tuning. Up until five years ago, the fiber would break down under ultraviolet conditions; however, scientists have now perfected this wool-appearing fiber to outperform others. The fiber itself is lighter than water, allowing it to naturally repel the absorption of liquids. It is solution-dyed, giving greater color permanence, and is available in loop construction of various designs.

What's new in ceramic tile? Forms & Surfaces has a new Serizzo Granite tile that is 1-1/16 inches thick, with a finish similar to a honed surface called diamond cut. Also available is a sandblasted finish on the 12-inch-square tiles of Travertine or Slate. Watch for the Durabend Durock tile backer board by Durabond Products Company.

There is more good news in flooring-related products. Jonsorite Edgeguard comes in five styles to edge finish carpet in brown and black (an improvement over gold and silver, I would say). Miniwax Dash Patch is a quick-setting waterbase patch which will not expand or shrink and can be used under resilient tile or carpet on wood subfloors. A new heavy-duty mastic remover by Construction Adhesives Company is Mastic-Off. It is a three-step process for removing asphalt, tar, oil, grease sealers and coatings.

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The floor in this Royal Summit home was designed by Mark Masuoka, ASID, using tile from International Tile Design. The beige suede tile has an air-brush effect which is similar to the paintings. Photo by Augie Salbosa.
Who May Sue Whom and When

by Paul Alston
Paul, Johnson & Alston

In 1964, an architect designed a supermarket to be built on Main Street, Honolulu. Twenty years later, due to some defect in the original design or construction, part of the roof breaks off and crashes down onto a customer's car. The customer now wishes to sue the building's general contractor and architect for their negligence in designing and building the store. Can he?

Under current Hawaii law, the answer is no. This is because a statute of limitations prohibits the customer from suing anyone for damages caused by the ancient design or construction defect. A statute of limitations bars people from taking too long to file lawsuits on claims that they know about. The law is intended to promote the prompt filing of claims while witnesses and evidence are still available, out of fairness to those persons who will need the witnesses and evidence in defending themselves.

In 1967, the Hawaii legislature passed a statute of limitations for certain lawsuits against design professionals and other registered or licensed persons in the construction industry. According to Hawaii Revised Statutes § 657-8, no lawsuit for damages caused by a design or construction defect could be brought against a design professional, unless it was brought within two years of the injuries. In any event, no suit could be brought more than 10 years after the design professional furnished his or her services. Thus, even if the customer above sued the very same day that his car was damaged, his case would have been dismissed.

The 1967 law immunized all registered and licensed persons in the construction industry from lawsuits at the end of 10 years. In 1972, the legislature shortened this period to six years. The legislature based its action on testimony presented by the General Contractors Association of Hawaii and the Consulting Engineers Council of Hawaii. They noted, among other things, that almost 80 percent of all design or construction negligence claims in Hawaii are filed within the first three years.

In 1973, however, the Hawaii Supreme Court found the statute unconstitutional in Fujioka v. Kam. Building owners had been sued by a minor who was injured when a portion of the building's roof fell on her. The owners in turn sued the engineer and general contractor who had planned, designed and built the structure. The engineer and general contractor argued that § 657-8 barred the owners' lawsuit against them, since they had worked on the building more than 10 years earlier.

The Hawaii Supreme Court disagreed with the engineer and general contractor. It stated that the statute of limitations unfairly protected only those persons connected with the construction industry, to the exclusion of others who, although similarly situated, ended up with the entire loss. In Fujioka, for example, the building's owners would have had to pay for all of the minor's injuries if they were negligent, even though the architect and general contractor might also have been negligent.

The legislature responded quickly to Fujioka. In 1974, it added to the list of protected persons "the owner of the real property or any other persons having an interest therein or in the improvement." Since then, the class of persons protected by § 657-8 was increased twice. In 1979, manufacturers and suppliers of materials were added. Sureties of persons already covered by the statute were included in 1980.

But the Hawaii Supreme Court was still not satisfied. In its 1982 decision in Shibuya v. Architects Hawaii, Ltd., the court again struck the statute as unconstitutional.

Derek Shibuya was seriously injured in December, 1975. The forklift he was operating turned over when the metal grating covering a culvert it was crossing became dislodged.

Shibuya sued the architect, general contractor, metal grating fabricator and forklift manufacturer in December, 1977. The general contractor then sued the owner of the forklift and building, and the subcontractor responsible for the steel and metal work used in the building. Before the lawsuit had gone very far, the architect, general contractor, metal grating fabricator and subcontractor were released from the action since the accident occurred more than six years after the building had been completed. This left the forklift manufacturer to defend the lawsuit alone.

Again, the supreme court found that the statute's failure to protect persons outside the construction industry, here the forklift manufacturer, was unfair. Since there was no valid reason for treating persons in construction differently from others who could get sued with them, the court held it was wrong to leave the non-construction person holding the bag.

The legislature wasted no time. In 1983, it completely overhauled the statute of limitations. This time, instead of specifying the persons...
who would be protected, the statute of limitations instead described the type of lawsuit that would be barred at the end of the period.

As the law now stands, no suit for damages to real or personal property arising from any negligence "in the planning, design, suretyship, manufacturing and supplying of materials, construction, supervision and administering of construction and observation of construction relating to an improvement of real property" may be started more than two years after the injury, "but in any event, not more than 10 years after the date of completion of the improvement."

As far as design professionals are concerned, the current version of § 657-8 continues to provide refuge from liability from a fixed point in time—10 years after completion of the improvement. How does it work? Any lawsuit for property damage caused by a design or construction defect must be brought within 10 years of the building's completion. Thus, our customer could not sue the architect or general contractor since the supermarket was built 20 years ago. But if the supermarket was built only five years ago, the customer could sue the architect and general contractor, as long as he did so within two years of the accident.

What if the supermarket had been built nine years ago? Could the customer, whose car was damaged this year, sue the architect and general contractor for a design or construction defect within two years of the accident—in 1984? The answer is no. In no event can this suit be brought after 1983—10 years after the supermarket was built.

The statute of limitations, however, now applies only to suits for property damage. A person who is injured because of a design or construction defect may sue any responsible party at any time after construction, as long as he does so within two years of his injuries. Thus, if our customer's arm had been torn by the crashing roof, he could sue the general contractor and architect, regardless of when the market was built, as long as he sued within two years of his injuries.

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The Hawaii Society/AIA office has a new telephone number. It's 5454-AIA, or 545-4242, whichever is easier to remember. For the convenience of incoming callers, the new number is on a rotary system which enables calls to be placed more efficiently than previously. The Hawaii Society/AIA remains at the same address.

Yamasato Wins Design Competition

Maurice H. Yamasato, AIA earlier this year won Honolulu’s first architectural competition for affordable housing. The firm of Suzuki, Kawabata and Associates Inc. won second place. Third place went to Johnson Reese Luerson Lowrey Architects Inc. Yamasato’s winning Acacia project will be located in Pearl City on land purchased by the city in 1980. Construction is scheduled to begin during the first half of 1985. The two- and three-bedroom units are expected to sell for $60,500 to $70,500.

Housing & Open Space
Continued from page 17

of our land resources. Think about it and then let your government leaders know your viewpoint.

Housing Coalition Suggestions on How Government Might Stimulate Housing

- Determine whether additional private land for residential development is warranted. If there is a lack of sufficient land zoned for residential use, make additional land available.
- On the county level, encourage more higher density development and flexible zoning—smaller lot sizes, additional dwelling units on existing lots (such as Ohana Zoning), smaller setbacks, greater floor-area ratios, etc.
- Where feasible, continue to make county-owned land available for housing development.
- Urge the Federal government to return idle land to the state which then could proceed to develop housing projects under the private-sector bid process.
- Urge the Federal government to provide more on- and off-base housing for military families (to include entering into long-term agreements with private parties to develop and rent off-base housing).