When you need a contractor to beat the clock and not cut corners...

...the craftsmen from Allied Builders come through. At City Bank's new data center in Mapunapuna, Allied finished 70 days early in executing intricate plans from GTE Hawaiian Tel and Geoffrey Paterson & Associates.

"They don't just talk teamwork, they get right down and do it," recalls GTE Hawaiian Tel's Project Manager Mark Peterman. "We had a fairly tight space, a lot of equipment, and needed everything yesterday."

"I'd say they almost made 'yesterday' our move-in date," adds a pleased Ben Fong from City Bank, who monitored the job carefully. "There was quality performance from infrastructure on out."

"We always like working with Allied," notes Paterson, the project architect. "They understand design, respect budgets, stay ahead of problems and get along well with people."

ALLIED BUILDERS SYSTEM
Teamwork. Our motto. Our method.

1717 Akahi Street
Honolulu, Hawaii 96819
Telephone (808) 847-3763
Contractor License BC-506

Benjamin B. Fong, City Bank
Mark Miyashiro, Allied Builders System
Mark A. Peterman, GTE Hawaiian Tel
COMPLETE REPROGRAPHIC SERVICES

- Blue Printing • Xerographic Copying
- Xerographic Reductions & Enlargements
- Color Copying • Photo Repro Services
- Laser CAD Plotting • Scanning
- Pin Register Overlay • Printing
- Mounting • Drafting Supplies & Equipment
- Servicing of most Blue Print Machines

“We’ll do the job right . . . the first time”

Mon. — Fri. — 7:30 a.m. - 7:00 p.m.
Saturday — 7:30 a.m. - 12:30 p.m.

536-6148

The Blue Print Company
& Image Control Enterprises
are affiliate companies
The beauty and versatility of marble is superbly evident in downtown Honolulu's new City Financial Tower. The use of sand-colored, Italian Travertine Marble with its unusual texture and veining for the facade of the building's open-columned base enhances the structure's symbolic strength and solidarity. Marble. The ideal choice as a foundation for creativity or for soaring to new heights of imagination.
Contents

Leadership Message

7 Hawaii Architect Serves Architects, General Public
The Hawaii State Council is taking an active role in the future of this magazine.
by Daniel G. Chun, AIA

Educational Buildings

9 Mililani Mauka: ‘School of the Future’
A new elementary school for this Central Oahu community will employ state-of-the-art equipment and design.
by Dennis C. Lee, AIA, CSI

12 Students Enter New Library to Learn
The Farrington High School library provides open areas along with private multipurpose rooms.
by Leslie Hayashi

15 Deteriorating School Facilities Addressed
Education Task Force makes recommendations to improve funding and maintenance of public schools.
by Lt. Gov. Benjamin Cayetano

18 Changing to Meet Maui’s Future
A master plan for Maui Community College will add to the tropical nature of the campus as well as expand classroom space.

Waterproofing

20 Early Detection of Moisture Can Save a Roof
Non-destructive roof moisture surveys can pinpoint the source of water infiltration.
by Guy Akasaki

16 Maui AIA Design Awards

22 Features

In this issue ...

Luxury condominiums at Maui’s Wailea Point earned Riecke Sunnland & Kono Architects, Ltd. a 1991 Maui AIA Design Award of Merit.

This month’s Hawaii Architect features a topic which has long been absent from the magazine — educational facilities.

The relationship of good architecture to educational achievement is a strong one. Quality design boosts faculty morale and student attitudes. The school is often the only example of public architecture in the rural communities of Hawaii. In urban neighborhoods, the school acts as a landmark in a sea of residences.

A reader of the daily newspapers might soon believe that the only thing newsworthy about school faculties is their fire alarm systems. While recent bad news has plagued the state of Hawaii Department of Accounting and General Services, Hawaii Architect would like to point out some promising developments in public school architecture.

The new Farrington High School Library by INK Architects is profiled. Dennis Lee, AIA of Peter Hsi Associates writes about Mililani Mauka Elementary School. The master plan for Maui Community College by Gima Yoshimura Miyabara Deguchi Architects is included.

Rounding out our educational focus is an article by Lt. Gov. Benjamin Cayetano. The school/community-based management proposal will present increased challenges and opportunities for Hawaii’s architects.
WE COLOR HAWAII.

Right here in Hawaii at our Ewa Beach Color Tinting Center, we can meet virtually any color specification for your ThoroWall® installation. That's over 2,400 tints. Available— for the first time—locally. Over the past 75 years, Thoro's reputation for quality and high performance has become well-known worldwide.

Today, Thoro's advanced Exterior Finishing System is available not only in more colors but in more textured finishes than ever before. The result? Architects get more design freedom. Contractors get what they need. And everyone—from the homeowner to the developer— gets what they want. More good news. With ThoroWall® you achieve true aesthetic appeal—and you get it with a cost-effective solution.

And ThoroWall® can be installed over a variety of substrates. From Dens-Glas® to Hardie Board, Durock or concrete. No plywood or gypsum board needed. Want more? You got it. ThoroWall® never needs painting. Maintenance is elective, not required. So spec it the way you want it. And that's the way you'll get it. Get that real stucco look—without getting stuck. And get it in any color tint you want.
Leadership Message

Hawaii Architect Serves Architects, General Public

by Daniel G. Chun, AIA
Vice President/President-elect,
Hawaii State Council

Every month over 5,000 copies of this magazine are circulated. Only about 20 percent of the readers are architects. The great majority are government officials, colleagues in the construction industry and selected members of the community. The goal is to develop an enlightened public who will demand and support good architecture.

The future direction of Hawaii Architect magazine has been debated by the State Council Board. One proposal would have transformed the magazine into a glossy showcase for superior design. Others would emphasize architectural design and community issues. I have a personal preference for an "issue-oriented" magazine because I believe it could fill a gap in publications currently produced in Hawaii.

My tenure as chairman of Hawaii Architect Editorial Board is now approaching mid-life status. At this moment, I have the following requests for readers and contributors to Hawaii Architect:

- More articles need to be submitted each month so that each feature can be shorter and hold the reader's attention.
- I would like to see more critical review of architecture, similar to that in respected national architectural publications. This review should highlight successful design and evaluate areas where one might try something else the next time around.
- Letters to the editor are welcome but please focus a few choice words on the subject. A new policy is printed below so that the letters do not overwhelm the rest of the magazine.

To the majority of readers, I commend your interest in architecture. I hope that the magazine has made you a more concerned observer of our island environment. HA

The editor welcomes letters responding to articles published in Hawaii Architect. Letters should be double-spaced and limited to 150 words. Letters may be edited prior to publication. Letters must contain correct name, signature, address and telephone number for verification.

Mail letters to: Editor, Hawaii Architect, PMP Co., Ltd., 1034 Kilani Ave. Ste. 108, Wahiawa, HI 96786. Letters may also be faxed to 622-3025. HA
The gateway to the campus of Mililani Mauka Elementary School will provide a drop-off lane for students and a shelter with twin translucent hip skylights.

The common area in each classroom cluster will encourage teacher collaboration and give students a sense of belonging.
Mililani Mauka: ‘School of the Future’

by Dennis C. Lee, AIA, CSI

Mililani Mauka Elementary School is designed as a prototype school that emphasizes a home-like learning environment while simultaneously integrating current and future educational technology. The facility will also serve as a community center for educational, cultural and recreational events.

Due to the rapidly changing nature of educational technology, all buildings are pre-wired in accessible cable trays above the ceiling. A computer access floor is installed in the control room to provide flexibility and adaptability for current and future technological system requirements.

An integrated voice/video/data system is provided. The video system is a fiber-optic network with central switching in the control room. This integrated system is capable of off-the-air programming for DOE/state networks, satellite reception, on-site VCR connection, video floppy and laser disk players, and character generators as sources. The voice and data systems are integrated with the computer network connections and telephone handsets in each room.

The network connecting each classroom system with the library, administration, and multipurpose building is capable of generating report cards, student reports, food service reports, personnel reports, plant operations and test scores, accounting and student information.

A sound-masking device emits sound to cancel disruptive noises in the library reading area. Continuous raceways for power, voice, data and video cabling run along all fixed walls. A large wall-mounted video switching system provided in each classroom. There are four student computers and one teacher computer in each classroom as well as a 30-station computer lab.

The school campus is divided into three distinct areas. At the upper end of the site is the play field adjacent to the future fire station. Parking areas with access from Makaikai Street are located in the middle of the site. The buildings are located at the lower end of the site.

A parking area with 115 parking spaces, a drop-off lane, and four bus spaces are provided. A service road is next to the kitchen and library loading areas. It connects to a 20-foot-wide fire access lane between the building complex. The fire access lane doubles as a pedestrian mall and play area. The entire campus will be landscaped according to the Mililani Mauka Landscape Master Plan Standard and will create a strong flavor of Hawaii’s outdoor environment.

The four school buildings are graded on a single level. Entrances are accessible to the physically handicapped. They are sited in a pinwheel pattern that forms a central open court to accommodate outdoor school functions.

A shelter with twin translucent hip skylights will serve as a gateway to the campus and welcome visitors, especially when illuminated at night.

The design process resulted in four simple, understated, house-like buildings with sloping roofs, earth-tone stucco and local soil-color textured concrete block walls. Exterior doors are rust-colored. Evergreen tinted window glass reflects the surrounding architectural character and blends naturally with the Mililani community.

Interior spaces are tailored to a child’s scale. Museum-like, neutral finishes offer opportunities for children and teachers to create their own special environments.

Some of the unique design features of the school are:

- All support facilities, including the administration, multipurpose and library buildings are designed under the initial increment to create a more coherent campus appearance.
- Classrooms are grouped in clusters of six. Each cluster has its own student and staff toilets along with storage space. This efficient layout will encourage teacher collaboration and give the student a sense of belonging.
- Intimate alcoves with picture windows encourage group or individual work.
- The entire campus is accessible from the nearby freeway, Hawaii 115, which parallels the north end of the site.
- Building entrances will be enhanced by the addition of small trees and shrubs.
- The school is designed for future educational technology, and is also capable of rapid expansion.
- The facade of the buildings is a strong architectural statement expressing the school’s mission and purpose.

The design incorporates traditional elements from Hawaiian culture and architecture, but is contemporary in its approach. The buildings are designed to be energy-efficient and environmentally friendly, with features such as solar panels on the roofs and rainwater harvesting systems. The school also incorporates a unique, state-of-the-art HVAC system that provides both heating and cooling.

The school campus is designed to be a prototype for future educational facilities in Hawaii, incorporating the latest in technology and design to create a learning environment that is both functional and aesthetically pleasing. The facility is also designed to be flexible and adaptable, allowing for future expansion and changes in educational methods.

May 1992  Hawaii Architect  9
windows and wood benches between every two classroom clusters welcome informal student socializing. They may also be used as reading nooks.

- The cluster classroom lobby with its high ceiling, skylight, indirect lighting and primary color accent combine to create an exciting, warm environment to greet students, parents and guests.
- The truncated-triangle-shaped classroom offers spatial flexibility for various learning activities. All classrooms are standard for all grade levels.
- Movable partitions between every two classrooms offer opportunities for team teaching and promote collaboration.
- A teacher's office in each
classroom provides flexible classroom sharing and multitrack and year-round teaching.

- The combined multipurpose platform/music classroom provides flexibility for special activities and music education.
- Additional spaces are provided for counselors, parent/community networking and A+ programs.
- All buildings are of steel/masonry, non-combustible type construction and are protected with an automatic fire sprinkler system.

Japanese building form in general is not driven by an architecture of humanism, but rather by an architecture that, with few exceptions, is driven either by the requirements of construction.

**LEGEND**

A ADMINISTRATION, CAFETERIA/MULTI-PURPOSE CENTER
B LIBRARY, COMPUTER RESOURCE & CLASSROOMS
C CLASSROOMS & SPECIAL EDUCATION CLASSROOM
D CLASSROOMS
E ENTRANCE SHELTER

1 MECH./ELEC.
2 STORAGE
3 LOCKER
4 KILN
5 CUSTODIAL SERVICE
6 TOILET
7 KITCHEN
8 OFFICE
9 CHILL
10 HEATER
11 FREEZER
12 STAFF DINING
13 UTILITY
14 STUDENT DINING
15 HALLWAY
16 STORAGE
17 MUSICAL INSTR./STORAGE
18 PA
19 DRESSING
20 PLATFORM/MUSIC
21 WHEELCHAIR LIFT
22 JANITOR
23 BOYS'
24 GIRLS'
25 STAFF CONF./ACT.COORD.
26 ELECTRICAL
27 PRINCIPAL
28 V.PRINCIPAL
29 JRO
30 LOUNGE
31 GENERAL OFFICE
32 LOBBY
33 DUPLICATION
34 SPECIAL SERVICES CONF.
35 RECOVERY
36 COUNSELOR
37 PCNC FAC.
38 TREATMENT
39 A+ROOM
40 NURSE'S
41 WAITING
42 CORRIDOR
43 CLASSROOM
44 TEACHER'S OFFICE
45 COMPUTER RESOURCES
46 CONTROL RM
47 WORK PRODUCTION
48 CUSTODIAN
49 LIBRARY.READING/STUDY
50 CONF./LIST.VIEWING
51 FACULTY CENTER
52 A+ROOM
53 SELF CONTAINED CLASS RM
54 RESOURCES
55 ITINERANT CONF.
56 SHOWER RM
57 ELEVATOR MACH. RM

- All classrooms, the library and the offices are air conditioned. Each classroom has its own fan coil unit located in the exterior A/C room. This offers better access for maintenance and quieter operation. It will also eliminate the possibility of ceiling damage due to condensation. Everything is controlled by a computerized energy management system. The chilled water plant includes a heat recovery system designed to generate hot water for use in the kitchen.
- Parabolic louver light fixtures are provided which have high visual comfort probability. Indirect lighting means low glare on marker boards and computer screens.
- All light fixtures are controlled by local switches so that they are used only when the space is occupied.

The school will be built in three increments. The first increment consists of Buildings “A,” “B” and “C.” Building “A” houses the administration area, multipurpose area and kitchen. Building “B” houses the library, the computer lab, the control room, the teachers’ lounge and one cluster of classrooms. Building “C” houses two clusters of classrooms. The second increment consists of the second floor of Building “D” — two clusters of classrooms and one teachers’ lounge. The third increment consists of the ground floor of Building “D” — two clusters of classrooms and one special education classroom.

The school’s ideal enrollment is 359 students for the first increment and 900 students when the school is fully operational. The first increment is scheduled to be completed by the summer of 1993. The second and third increments are scheduled for completion during the summers of 1994 and 1995 respectively.

Dennis C. Lee, ALA, CSI is a partner at Peter Hsi Associates, Inc.

May 1992 Hawaii Architect 11
Students Enter New Library to Learn

by Leslie Hayashi

"Enter to Learn; Go Forth to Serve" reads the Farrington High School motto. And inviting students to "enter to learn" is the school’s new library, designed by INK Architects, Inc.

"The original main building is the structure that uniquely identifies the Farrington High School campus," points out Dennis Irie, AIA, principal architect in charge. "The new library needed to complement that building, and yet be dominant enough to anchor the Ewa end of the campus, just as the theater anchors the Diamond Head end."

The exterior design of the building uses a textured elastomeric coating on concrete masonry, with horizontal rake joints spaced at 24 inches on center as well as cement plaster at feature walls. Wood trusses and laminated wood beams were used for the roof structure, with Monier roof tiles and copper gutters in colors to match those of the original building.

Since the site was separated from the campus by driveways and a large parking area, a landscaped plaza incorporating a large existing monkeypod tree was designed to soften the transition from the existing asphalt surfaces, and to create a student gathering place in front of the library entry.

The visual continuity from the plaza to the entry lobby was achieved by extensive use of glass at the entrance. Instead of using the normally required security mesh to protect the glazed openings, a roll-away aluminum grille was designed to protect against entry during off hours.

Upon learning of Farrington High School's award-winning Art Department, the design team proposed that major walls at the entry and plaza be earmarked for installation of student artwork. Close liaison with the Art Department resulted in adapting elements of the entry to accommodate the art forms that were selected.

Indeed, one of the first things you notice along the wall adjacent to the main entry is a dramatic 16x9-foot ceramic mural, designed by the Art Department and built from tiles glazed and fired by students. Inside, the lobby wall is a bright, colorful saw-tooth series of panels, also by student artists, painted to depict a mountain and ocean scene.

Inside, the 16,500-square-foot library was designed to accommodate a variety of uses and activities. The production workroom which, together with the library, comprises 14,500 square feet, is actually independent of the library itself, and functions primarily as a printing and audio-visual resource for the school.

Direct access without circulation through the library was a requirement, dictating its placement adjacent to the entry plaza. Similarly, the conference room required direct access from the plaza with its own entry and a security separation, which allows its use by community and educational groups during evenings and weekends.

The conference room also presented other challenges. "We

Continued on Page 14
Students noisily approach the library through a landscaped plaza, then enter the foyer observing the dual-sided mural created by their own classmates and we observe a quietness taking over as they come upon a spacious, softly lighted room in muted colors. There is an orderliness about the place with its low shelves, glass panes between rooms permitting students and librarians to see each other, and details such as parking garages for book trucks for tidiness.

The conference rooms allow for library instruction or lectures without disturbing those in the reading room. Students don’t want to act “stupid” in such a nice library, so we find that they borrow more books, come in more often, ask for help and behave better than they did in the old library.

We were delighted that the architect invited our input throughout the design process, returning with solutions to the needs we expressed. The architect really listened to us! For example, a blight on some other school libraries is the stuffiness when the air conditioner goes off. If that should happen here, we have ample windows that would allow cross ventilation.

The architect suggested that the school might want to do the exterior and interior murals to give its students a sense of ownership. The murals, executed under the direction of art teacher Gail Teshima, are remarkable. Students often pause to take their beauty in.

Jane Uyema and Pam Yoshimoto
Librarians, Farrington High School

"THE BASICS!!"

Lumber and wood products... are the basic components of Hawaii's construction projects. That's why your need for a dependable source of quality materials is our #1 priority.

Thousands of building professionals have relied on Honsador for basic framing packages, specialty products and knowledgeable assistance since 1935. And as your needs have grown, Honsador has responded with innovative, customized services like containerized orders, jobsite delivery, bonding and house packages.

When you get down to basics, Honsador offers you more.

• Truss Joists • Lumber • Drywall
• Siding • Custom Orders • Cedar
• Glulam Beams • Doors • Clears
• Roofing • Mouldings
• Redwood • MDO & HDO Plyforms

Honsador
Hawaii's Lumber People since 1935

CALL 682-2011

MAUI
Ph: 877-5045 • Fax: 877-6571

KONA
Ph: 329-0738 • Fax: 326-2764

OAHU
Ph: 682-2011 • FAX: 682-5252
wanted it to be flexible enough to function as two separate classrooms, and to accommodate large groups as well, explained librarian Pamela Yoshimoto. By utilizing portable walls, this multi-use space seats 90 as a large single room and can easily be divided into two smaller ones. While the production workroom and conference room have features that are unique to the educational programs that are being implemented at Farrington High School, the remainder of the library, including a soundproof listening/viewing/recording room, librarians’ offices, library workroom, professional staff work center and circulation island, were designed in close compliance with the guidelines established in the Department of Education’s Educational Specifications and Standards for Facilities, Volume III: The High School.

The interior design features pastel porcelain ceramic tiles at the library’s entry, complementing the gray carpet and delicate beiges and mauves used throughout. Paned windows, reminiscent of the older, original design, are used unsparsingly. Glass walls are used within the library to satisfy the need for visual control. With its bright, airy feeling and soft indirect lighting, the library provides a soothing and inviting learning environment. HA

Leslie Hayashi is a free-lance writer in Honolulu.

The Farrington High School library floor plan shows the private conference room, workroom and soundproof listening/viewing/recording room.
During statewide public hearings of the Task Force on Educational Governance, the most frequently voiced complaints from parents and educators dealt with the poor condition of public school facilities.

The complaints cited the need for greater cooperation and coordination between the Department of Accounting and General Services (the state agency responsible for school construction and repair) and schools; and the poor condition of school facilities, described as substandard and often in disrepair. Health and safety concerns were blamed for contributing to the poor quality of learning environments.

With these complaints in mind, several of the Task Force’s 15 recommendations centered on improvements in funding and maintaining schools.

- First, the Task Force recommended that more authority be placed at the critical — and only — point where education takes place, which is at the individual school level. It also suggested that the now-murky lines of accountability be more clearly defined.

- The Task Force proposed giving school principals and school/community-based management (SCBM) councils the authority to undertake minor repairs and maintenance work up to $15,000 per school per school year. The Department of Education should develop a formula to adjust the school baseline amount to take into consideration the age and size of schools.

The Task Force found that minor repairs which don’t qualify as emergency repairs can go unattended for long periods. Giving principals the authority to undertake minor repairs would expedite this work and curb the incidences of neglect leading to more costly repairs.

The DOE and DAGS are asked to develop guidelines to help principals and SCBM councils oversee minor repairs and minimize administrative burdens so that principals will not be dealing with projects so large that bids or building permits are required.

- The Task Force proposed establishing a “service agency” relationship between the DOE and DAGS in which the DOE would purchase repair and maintenance services from the DAGS, with the option of going to the private sector if the DAGS cannot provide services in a timely and cost-effective manner.

The Task Force strongly believes that this change would clarify the lines of accountability for school repair and maintenance, and lead to more responsive action. This type of arrangement is used for state motor pool services and by the Naval Public Works Center.

- The State Constitution should be amended to require that a minimum of 30 percent of the state’s operating budget be dedicated to public education. We now spend about 24 percent of the general fund for public schools (not including the University of Hawaii), which is down from a peak of over 31 percent in 1966 and 1967.

The budget law should be amended to require the governor to issue a public declaration whenever budget restrictions are imposed. This declaration should explain why budget restrictions are being imposed, to ensure the public is fully informed of actions affecting education.
Wailea Point is a planned residential community of luxury oceanfront low-rise condominiums on Maui's sunny southern shore. The units were designed to provide each resident with a high level of privacy.

Each unit utilizes masonry/concrete/steel/frame construction for soundproofing, strength and resistance to fire. Tile roofs, waterproofing membranes under ceramic tile floors in kitchen, baths and utility rooms and quarry tile lanai floors add to the quality materials and craftsmanship of these units. Windows are located on all four sides of each residence for excellent cross ventilation and each unit has a large formal entry foyer with a marble floor. Added touches are built-in safes for valuables, wet bars and natural wood ceilings.

Kitchens provide the cook of the house with wraparound mitered windows from counter to ceiling, generous cabinet and counter space with built-in pantry, pass-through counter to dining room and pass-through windows from kitchen to lanai. The lanais offer generous outdoor living space and broad ocean views. A barbecue area is conveniently located near the kitchen.

Two well-planned recreation centers provide an exciting array of amenities, including pools, exercise gym, whirlpool spas, indoor racquetball courts and pavilions with kitchen and lounge areas for parties.

Nestled at the base of majestic Mount Haleakala, the 26-acre site is located on a half-mile of lava rock coastline with views of the West Maui Mountains and the islands of Lanai, Kahoolawe and Molokini. To the east, the second fairway of Wailea's Blue Golf Course hugs the inland border of the parcel, providing sweeping views of the mountain green belt.
The condos were sited on a 26-acre oceanfront parcel of land. The property is enhanced by a half-mile of intriguing lava rock coastline, adjoining two of Hawaii's most spectacular white sand beaches.

With no more than four homes per building, the condominiums at Wailea Point provide each residence a degree of privacy usually associated with single-family homes.
Changing to Meet Maui’s Future

As Maui grows in the face of a changing economy, it’s necessary that infrastructure improvements follow. More residents translates into more jobs and a larger professional labor force. Educational needs will continue to grow, which inevitably will require an expansion of the Maui Community College.

Gima Yoshimori Miyabara Deguchi Architects Inc. was selected to develop the master plan for the college with the intent to preserve the tropical character of the campus while developing a consistent architectural style. At the same time, the guidelines

As the population on Maui continues to grow, so will its educational needs. A master plan for Maui Community College will preserve the tropical character of the campus while expanding classroom space.

The HMK® Stone Care System .. .. as simple as ABC.

ABC Corporation is Hawaii’s exclusive distributor of HMK® Stone Care Products.

This quality European stone care system is the result of decades of field and laboratory testing. Only HMK offers so many choices for cleaning, protection, maintenance and refinishing. HMK products use the finest ingredients, biodegradable whenever possible.

Choose from over 55 products formulated specifically for marble, granite, flagstone, quartzite, onyx, limestone, sandstone, travertine or dolomite. These products are also perfect for other masonry surfaces, terrazzo and agglomerate, and ceramic and porcelain tile.

HMK is the most complete stone care system available to architects and the design community today. Ensure the long lasting beauty of your work by specifying HMK on your next project. Your satisfaction is assured by HMK’s participation in industry technical committees and countless job inspections.

A full range of care direction sheets and product spec data is available free from ABC upon request.

Call ABC today for further information - (808) 671-2671.
consider maintenance costs of various building materials and strive for permanence of construction.

Standardized color schemes were adopted for the campus as well as a uniform signage program. In order to blend in further with the surrounding landscape, a maximum building height of two stories was determined.

A major element of the plan is a central campus mall which utilizes the existing open space between the library building and the student center. This area is envisioned as becoming a focal point of the campus as well as an area in which activities could take place. The other elements of the campus would radiate outward from this central core. Included in this are two major pedestrian pathways extending from the student housing area and from the front of the campus. Anchoring the mall on opposite ends will be the student services and support functions along with appropriate parking areas and a telecommunications and media center. Because of the increasing importance of telecommunications for Maui Community College, these buildings are centrally located.

A major expansion of classroom space is also proposed. In this area will also be a child care facility, which has access to an expanded parking and drop-off area. Areas for additional classrooms and offices are provided adjacent to the new nursing and learning skills buildings now nearing completion.

Commented Clyde Sakamoto, provost of Maui Community College, “The island is expanding at such a rapid pace that it sometimes becomes difficult to keep up with all the changes. By all projections, Maui will become a booming island community in the near future, but with an organized master plan to lead our renovations, we look forward to the future.”

When you select an Ameritone COLOR KEY® Color, that’s just the color Ameritone delivers, whether from our selection or matching your specifications. When Ameritone finishes are specified and our label is on the job, you know you’re getting a quality finish that will stand up.

More than just good paint. Ameritone Paint.

COLOR-QUALITY-OUTSTANDING SERVICE SINCE 1949

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

Ameritone Paint
1333 Dillingham Blvd., Honolulu 96817
841-3561
Kapaa Paint Supply
934 A Kuipun Way, Kapaa 96746
822-1788

Ameritone Maui
140 Alapana St., Kahului 96732
971-7724

Ameritone Maui West
West Maui Center #7
910 Honoapiilani Hwy., Lahaina 96761
267-2614

Ameritone Maui South
Kihei Commercial Center #206
Kihei, Maui 96753
875-1135

Ameritone / Dewoe Paints
184 Poakai St., Hilo 96720
835-2011

Ameritone / Dewoe Paints
74-5598 Alapa St., Kona 96745
329-2766

When Ameritone finishes are specified and our label is on the job, you know you’re getting a quality finish that will stand up.
Waterproofing

Early Detection of Moisture Can Save a Roof

by Guy Akasaki

Roofing is an age-old trade which dates back many centuries. Throughout history, people have been in search of the optimum roof system which can withstand rain, sleet, hail, snow and the sun. Asphalt has been the primary waterproofing material for centuries.

The progression of space-age technology and materials has greatly catalyzed the evolution of roofing. Advanced roofing systems last longer and withstand heat and moisture better. Although the cost of these newer, more durable roofing systems is higher, the benefits are well worth the price increase.

Roof Maintenance

Since re-roofing costs have risen dramatically, proper roof maintenance has become a necessity for building owners. Depending upon the needs of the owner, proper maintenance generally falls into one of the following categories: emergency, interim and long range; 1) emergency maintenance consists of correcting immediate leaks; 2) interim maintenance incorporates correcting existing leaks and performing remedial repairs to procure time necessary to budget for re-roofing; 3) long range maintenance implements a preventive roof maintenance immediately after application of a new roofing system.

In order to implement a successful roof maintenance program, the source(s) or root causes of leaks must be detected. Without proper detection of the origin points of leaks, repairs have a low degree of success.

Non-Destructive Roof Moisture Surveys

Recently, a methodology for finding root causes of water infiltration has been discovered. There are currently three types of devices used in detecting moisture: infrared, capacitance and nuclear. Individually, each aforesaid device has its limitations. However, when devices are combined, moisture detection becomes tremendously effective.

Infrared devices detect temperature differentials at the roof’s surface. However, infrared devices are most effective when used in wind speeds of less than nine miles an hour and where temperature fluctuates 20 degrees or more from morning to evening.

Capacitance devices measure the conduction of electrical currents. A high reading on the capacitance meter denotes high conductivity while low readings indicate low conductivity. Since water has higher conductivity than roofing materials, higher readings indicate higher levels of moisture. However, capacitance meters read actual moisture which includes latent moisture and dew. Therefore, to obtain accurate capacitance readings, the roof surface should be completely dry. Capacitance meters are an excellent secondary device used to back up other moisture detection devices.

Detecting the source of water infiltration on persistent roof problems is like trying to find a needle in a haystack. By implementing roof moisture surveys, statistical information can be provided on the condition of the roofing system. This
information provides written documentation which substantiates a decision on whether to perform remedial work or re-roof. This is a viable alternative to consultation solely based on visual inspection and experience.

The moisture survey is similar to an X-ray which shows what is taking place beneath the surface of the roofing system. The accuracy of the diagnosis of this roof X-ray looms with the moisture technician. Therefore, the technician’s experience and knowledge of roofing construction, application and materials are extremely important.

Beneficiaries of Roof Moisture Surveys
A major hotel in Kona performed a moisture survey on their entire facility which allowed the owners to accurately assess the condition of the roofing system and budget funds for re-roofing. A major tourist facility in Waikiki used moisture surveys on 15 separate roofs. The surveys enabled management to determine which roofs needed immediate care. Over a period of two years, the aforesaid Waikiki establishment was able to prioritize which buildings required remedial repair and re-roofing. Leak sources were discovered before major problems developed, thereby relieving the owners of possible economic duress and legal suits by unsatisfied tenants.

There are many more success stories involved with moisture surveys. By performing a preliminary visual inspection, a qualified roof inspector can determine whether a moisture survey is necessary. Should a survey be required, the inspector can submit a proposal defining the scope of work and cost involved with a moisture survey. MA

Guy Akasaki is the CEO of Honolulu Moisture Detection Corp.

ADVANTAGES:
Jiffy Seal installed is environmentally safe and meets NIOSH/OSHA manufacturers standards and regulations.

Jiffy Seal is reinforced, giving system superior puncture resistance and strength over other sheet membranes.

Jiffy Seal membranes are inert, inorganic and will never rot, decay or be effected by bacteria/fungus.

When properly applied Jiffy Seal systems will protect and last the life of your structure.

Curing time delays are lowered.

Once installed Jiffy Seal can be covered or backfilled immediately after application.

Release film eliminates need for a paper backing and adds to the ease of membrane application.

Jiffy Seal products are totally cold applied over a wide temperature range.

Molecular bonding of seams forms Jiffy Seal into a monolithic membrane over or around the entire surface being waterproofed.

Protecto Wrap’s high quality control guarantees a uniform thickness over the entire project.

Protecto Wrap Company backs Jiffy Seal systems with over 37 years of manufacturing experience.

Jiffy Seal
Jiffy Seal waterproofing membranes are designed as a waterproofing system for use on concrete, masonry, metal and wood structures as positive protection against water, salts and certain acids and alkalies. Areas of application include foundation walls, split slabs, tunnels, plaza decks, parking decks, balconies, spandrels, earth shelters, bridge decks, shower pans, beneath stucco and in mechanical rooms.

ADVANTAGES:
Jiffy Seal installed is environmentally safe and meets NIOSH/OSHA manufacturers standards and regulations.

Jiffy Seal is reinforced, giving system superior puncture resistance and strength over other sheet membranes.

Jiffy Seal membranes are inert, inorganic and will never rot, decay or be effected by bacteria/fungus.

When properly applied Jiffy Seal systems will protect and last the life of your structure.

Curing time delays are lowered.

Once installed Jiffy Seal can be covered or backfilled immediately after application.

Release film eliminates need for a paper backing and adds to the ease of membrane application.

Jiffy Seal products are totally cold applied over a wide temperature range.

Molecular bonding of seams forms Jiffy Seal into a monolithic membrane over or around the entire surface being waterproofed.

Protecto Wrap’s high quality control guarantees a uniform thickness over the entire project.

Protecto Wrap Company backs Jiffy Seal systems with over 37 years of manufacturing experience.

Jiffy Seal
Jiffy Seal waterproofing membranes are designed as a waterproofing system for use on concrete, masonry, metal and wood structures as positive protection against water, salts and certain acids and alkalies. Areas of application include foundation walls, split slabs, tunnels, plaza decks, parking decks, balconies, spandrels, earth shelters, bridge decks, shower pans, beneath stucco and in mechanical rooms.

ADVANTAGES:
Jiffy Seal installed is environmentally safe and meets NIOSH/OSHA manufacturers standards and regulations.

Jiffy Seal is reinforced, giving system superior puncture resistance and strength over other sheet membranes.

Jiffy Seal membranes are inert, inorganic and will never rot, decay or be effected by bacteria/fungus.

When properly applied Jiffy Seal systems will protect and last the life of your structure.

Curing time delays are lowered.

Once installed Jiffy Seal can be covered or backfilled immediately after application.

Release film eliminates need for a paper backing and adds to the ease of membrane application.

Jiffy Seal products are totally cold applied over a wide temperature range.

Molecular bonding of seams forms Jiffy Seal into a monolithic membrane over or around the entire surface being waterproofed.

Protecto Wrap’s high quality control guarantees a uniform thickness over the entire project.

Protecto Wrap Company backs Jiffy Seal systems with over 37 years of manufacturing experience.
Japanese Architecture Exhibition Reviewed

by Michael James Leineweber, AIA

This exhibition, which opened in March and closed in April, documented the last decade of growth in Japanese architectural thinking, away from what the Japan Foundation and the Architectural Institute of Japan call "modernistic architecture" toward a more "pluralistic architecture."

Exhibit organizers came up with five concepts: structure, space, form, material and ornamentation as the basis for classification in the exhibit. These concepts were put forward as some sort of new world order of architecture, which they believe "has constituted the basis of architecture since its beginnings."

I have a problem with this thesis, on the basis that it oversimplifies the analysis of architecture and sets up some "straw dogs" that the exhibit attempts to demolish. One such "dog" is that structure, space and material were important for early modern architecture but that form and ornamentation were belittled or rejected.

While one might say this about the so-called international school of architecture, there are numerous examples of modern architecture—Frank Lloyd Wright's work, as an example, where form and ornamentation were certainly not belittled or rejected, but rather were celebrated and advanced. Certainly there are numerous examples of modern architecture respecting the Vitruvian concepts of "firmness, commodity, and delight."

Part of the problem for Japanese architects is that, as a profession, architecture is a relatively late arrival on the scene in Japan. Architecture has been, and
continues to be, the stepchild of the Japanese construction industry. Japanese building form in general is not driven by an architecture of humanism, but rather by an architecture that, with few exceptions, is driven either by the requirements of construction companies or the artistic pretensions of patrons of architecture as an art.

Perhaps most missing in this exhibit was a sense of the clients, who they are, what they do, and how they use the architecture that is documented in the exhibit. With few exceptions, there were virtually no human beings in the images exhibited. Some exceptions included the Gunma Prefectural Women’s College by Sakakura Associates, and Kawasaki Civic Plaza by Koji & Takae. Others included the Aiichi Prefectural University of Arts by Yoshimura & Okumura, and the Kurashiki Ivy Square by Urabe. Other than that,
the exhibit is virtually devoid of pictures of people interacting with the architecture presented. To me, this becomes a metaphor for the notion that we are dealing with architectural representation as an art, rather than in service of a public.

It seems that this architecture has no place for people in it. Many of the buildings are pictured as cold, inefficient, useless and quite proud of it! It is an architecture sorted, classified, categorized and assigned to conceptual notions of structure, space, form, materials and ornamentation; but utterly without warmth, without soul, without humanity. The exhibit seems to be that of a post-neutron-bomb world in which only these artifacts of the last 10 years remain; without a past, without a context and without a future.

Other than that, the show was beautifully installed, well exhibited, with an exciting opening, and lots of attendance. I think that it has stimulated dialogue on architecture in the community; and for that, Leighton Liu, at the University of Hawaii at Manoa School of Architecture, and Sharon Tasaka, at the University of Hawaii Art Gallery, are to be congratulated on what they have accomplished. I hope that we can see more expositions of architecture like this in the future, and more dialogue on the meaning and context of architecture. HA

Michael James Leineweber, AIA, is the vice chairman at Media Five, Limited.

Looking for Photographs
Bruce Etherington, FAIA, is looking for photographs of the first School of Architecture building at the University of Hawaii called Hale Aloha. This building was occupied from 1964–1970. Anyone with photos which Bruce can use for his archives should send them to: Bruce Etherington, School of Architecture, University of Hawaii, Honolulu, HI 96822. HA
A New Generation of Leaders.

Meet Alvin Nishikawa.

Alvin is Vice President of The American Coating Company. He is in charge of all field and estimating operations. Previously, Alvin was employed with an engineering firm in Chicago and Honolulu where he focused primarily on restoration and water infiltration problems. Alvin holds a M.S. and B.S. in Engineering from Purdue University.

Rehabilitation of buildings:

- Lanais
- Water Tests
- Exterior Walls
- Waterproofing
- Specialty Flooring
- Window Leak Repair
- Concrete Repair & Restoration
- Parking & Recreation Decks
- Environmental Coatings
- Industrial Coatings
- Epoxy/Urthane
- Epoxy Injection
- Elastomers
- Below Grade
- Roofs

THE AMERICAN COATING COMPANY
850-B IWILEI RD., HONOLULU, HI 96817

OAHU (808) 521-7461
FAX 526-3459

BIG ISLAND (808) 935-8863
FAX 968-8656

ASK US ABOUT OUR RECYCLED PLASTIC PRODUCTS.
Five Teams Offer Visions for Waikiki

by Joni Ketter

This is the second in a five-part series of articles explaining the Vision for Waikiki 2020 master planning program.

The five planning teams selected to prepare master plans of Waikiki for the Vision for Waikiki 2020 project brought a wealth of experience and expertise to the project. Each has substantial experience in master planning and/or resort projects.

A brief overview of the teams and their approaches to Waikiki follows.

"Building a new Waikiki through shaping instead of taking"
INTRA — International Tourism and Resort Advisors

Based in San Francisco, INTRA is a consortium of professional service firms dedicated to serving public and private clients who develop and promote tourism and destination resort communities.

INTRA employed the use of architects, urban designers, urban planners, transportation planners, an economist, a resort planner and a local architect.

Several of the firm’s members have worked in Hawaii and resort cities before, including team leader Adam Krivatsy, who has 25 years experience in programming, planning and design for planned resort destinations, including Disney World.

INTRA was interested in the Vision for Waikiki 2020 project for two reasons. First, the firm was fascinated by Waikiki as a complex community. “It’s not a sterile resort,” Krivatsy explained. “It’s a living community that used to be a playground for Oahu residents.” Second, INTRA thought it could truly understand the issues and offer practical solutions.

INTRA made two recommendations that best reflect its approach. The first, a catalyst redevelopment project, would open up the International Marketplace and extend Kalakaua Avenue to the water. The area would also gradually be opened to the Ala Wai, Krivatsy said. “If this would happen, then word would get out that Waikiki is changed.”

The second recommendation
was to restrain growth at a rate that Waikiki can handle.

"Residential growth should be limited to the level that still allows for a gracious Hawaiian lifestyle," Krivatsy said. "Growth of the resort community should not exceed the capacity of the very facilities that it must depend on."

"For visitors, residents and workers alike, Waikiki should be attractive, enjoyable/fun, functional"

Johnson Johnson & Roy/Inc.

JJR was founded in 1961 with offices in Ann Arbor, Dallas and Chicago. A planning, landscape architecture and urban design firm, JJR, with 100 professionals, has expertise in new community planning, urban revitalization, waterfront resort and recreation planning.

Led by Clarence Roy, FASLA, JJR was intrigued by the uniqueness of the Vision 2020 process. "This was the first time we were involved in a collaborative joint partnership with firms just like ourselves," explained team member Kenneth Cobb.

The focus of JJR's vision was to look at Waikiki as a "fun" place. They focused on the public domain, that is, the public areas which would make Waikiki more attractive, functional and fun. JJR's recommendations included upgrading the beach.

"What is Waikiki anyway?" Cobb said. "First and foremost, Waikiki is the beach. And if Waikiki loses any more of the beach it may not be the same place." An immediate project should be to widen and stabilize the beach, Cobb said. "We would create a fantastic new means of walking along the beach on a promenade."

Another recommendation Cobb said is vital to Waikiki's regeneration is a festival-type gathering place at a refurbished Ala Wai Boat Harbor. "The boat harbor presents a unique opportunity," Cobb said. "This is a
state and national treasure that should become a festival place for future generations."

"Restore the balance between nature, the city and the Hawaiian spirit"

Goody, Clancy & Associates/David Dixon & Associates

John Clancy, FAIA, is the principal of Goody, Clancy & Associates, based in Boston.

GC&A has received numerous national awards for planning and design excellence including the American Institute of Architects Citation for Excellence in Urban Design and the AIA Honor Award. David Dixon & Associates teamed up with GC&A for the Vision 2020

Robert Lamb Hart/Planners and Architects recommended a clear, structured walkway that interconnects the community with the beach and all of its activities.
project. It is a Boston-based planning, architecture and urban design firm with broad experience in planning major urban areas and in the revitalization of neighborhoods and commercial districts.

Clancy said his firm also has experience in developing, retaining and preserving affordable and mixed-income housing.

The recommendations made by this group of experts focused on nature, the city and Hawaiiana. "For a resort to be successful, as well as part of a city, it has to reflect the culture and tradition of the people," Clancy said. "It has to reflect the land, the nature.

"Waikiki is probably situated in the most beautiful location in the world for a resort area. Yet, to walk through Waikiki is almost like walking through downtown Manhattan the way it's been built. There's very little openness, very little nature has been brought into the development."

Another recommendation Clancy felt strongly about was the concept of "The Great Park" which would combine Kapiolani Park, the existing zoo and aquarium, the Ala Wai Golf Course, a Waikiki Beach promenade and marina waterfront with continuous esplanades along both sides of a refurbished Ala Wai canal. This would be complemented by the "Maile Lei," a network of parks, squares, paths and water-filled gardens which would meander through the heart of Waikiki.

"Waikiki transformed — the new garden district"

ELS — Elbasani & Logan Architects

Elbasani & Logan Architects is an architectural and urban design firm specializing in urban planning, master planning, governmental and cultural facilities, mixed-use retail and commercial developments. The firm received the 1991 Firm Award from the American Institute of Architects, California Council.

Donn Logan, FAIA, team co-leader with Barry Elbasani, AIA, said ELS brought three specific types of work experience to the Vision 2020 project: revitalization and redevelopment of cities, design of almost every type of building and familiarity with Honolulu and Waikiki. "For the past eight years we've been working out there, the major project being the renovation of the Ala Moana Center," Logan said.

ELS focused their visions on the built patterns of Waikiki rather than the public elements of beaches, parks, etc. "We analyzed the age of buildings and came up with prototypes and architectural guidelines," Logan said. One major ELS recommendation is a new Public Garden.

"This large garden, containing water, horticultural exhibits, entertainment and cultural attractions, would go where the

In your business or ours:

It takes good service people to produce good customer service.

All products of Tileco's state-of-the-art plant meet every requirement of one of the world's oldest and best construction materials. In the hands of our professional masons, these products have helped Hawaii's building industry become the envy of the nation. We are proud of our part.

Tilesco Inc.
91-209 Hanua Street
Ewa Beach, Hawaii 96707
Phone 682-5737

Hawaii Manufacturers of Quality Concrete Blocks.
Sheraton Waikiki, the International Marketplace, the Royal Hawaiian Shopping Center and Princess Kaiulani are today.

Logan conceded this is a radical idea which might be difficult to implement. “Maybe the idea is radical,” he said, “but we wanted to expand people’s imaginations.

“We tried to lay out a step-by-step implementation sequence, utilizing development transfer, that was economically feasible, at least theoretically.”

“America’s ‘Polynesian City’ — the Hawaiian edge”
Robert Lamb Hart/Planners and Architects

Robert Lamb Hart/Planners and Architects has been involved in work where a unique environment required innovative thinking. The firm’s forty land planners, architects and landscape architects have worked on projects throughout the U.S., Europe, the Caribbean and the Pacific Rim.

In addition, the firm has done work in Hawaii and was intrigued by the Vision for Waikiki 2020 project. “I started working in Hawaii as part of the state capitol planning team about 25 years ago,” said team leader Robert L. Hart. “The 2020 process looked like a pioneering effort.”

Hart said his firm tried to create a Waikiki that would be an invitation to investment. “Objectives that most people have for Honolulu and Waikiki — open space and Hawaiiana — can only be realized if the people and the city invest in Waikiki and keep improving it. We need to create conditions that will make investors and the city want to invest in and upgrade Waikiki without destroying it in the process.”

Hart said the most important recommendation his team made was to upgrade the kind of visitors that come to Waikiki. “That’s where the investment money comes from,” he said. Rather than a convention center, Hart focused on a Pacific Congress Center which would go after the high-end meeting market, calling it the “Geneva of the Pacific” idea.

“Upgrading meeting facilities is probably the best hope for renewing the prosperity of Waikiki. Not just bigger but better meeting facilities.”

All five teams agreed the most critical recommendation was the creation of a management development authority that would manage and oversee a master plan for Waikiki. 

Next month, common conclusions of the teams are examined.
SHOO!

If you want to avoid termites, build or buy a home made with masonry. Masonry frustrates termites, regardless of how determined they are.

Big difference. BIG difference!

MASONRY INSTITUTE OF HAWAII
Phone 833-1882

"BUILD HAWAII STRONG WITH MASONRY"
Roll formed in Hawaii for immediate delivery

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

Profile: Dimondek 600