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Old School Hall, Punahou School
Swan Song Time

by DONALD D. CHAPMAN, AIA
President, Hawaii Society/AIA

What seemed so far away such a short time ago is now not only close, it's here — Swan Song time for your recycled prez. I have enjoyed very much working for and with you this year, and trust what we accomplished is meaningful for most of you. Some goals were achieved, several were not, and the rest? — well, the seeds have been sown, but we won't really know the results until later, and then you will be able to judge for yourself. In looking back, and ahead, I believe 1981 will be recorded as a good year for HS/AIA — as will 1982 — because people are involved. Our legislative program was most successful, the general membership meetings are informative and well-attended, Hawaii Architect continues its excellence, and committees — especially the Codes and 1982 National Convention committees — are certainly performing up to our finest expectations. This is not the work of a few. These positive results are the work of many able hands. Mahalo.

Maybe it is my age. I used to consider myself as one of the younger architects, then it got to be one of the older-younger architects, and it's now to the point where I'm not so sure if it's younger-older, older, or older-older. However, with the sure-footedness that increases with increasing age also goes the privilege of making statements that may, or may not, be genuine truisms. So here goes:

I firmly believe most of us would accomplish a whole lot more in both our private and professional lives if we would simply take the time to relax a little more, laugh at ourselves and with each other a little more, and not be so silent in our recognition of work well done by friend or friendly competitor. My point is, if we took ourselves a little less seriously, became more open and friendly toward one another, laughed and enjoyed each other's company more openly, certainly the communication bridge developed would be very healthy for our own professional growth — even fun! Such open exchange may encourage more creative design thoughts that I suspect are many times subdued through fear of ridicule by one's contemporaries.

Now, "Mahalo Awards" time.

First, my most sincere Mahalo Award to a great EXCOM. Francis Oda, Gordon Ogata, Ted Garduque, Tom Culbertson, Rosalina Burean, Chuck Ehrhorn, Dwight Lowrey, and Ann Thompson: Thank you — and Aloha.

The 1982 National Convention Committee under Jack Lipman and Carol Sakata — there is not enough space in this issue to adequately cover the names, accomplishments, and hours spent by this group that is continually gaining momentum. To all, a thunderous "Mahalo" from a grateful chapter.

Legislative Committee — Maurice Yamasato, Dennis Toyomura, Art Kohara, plus CECH members Rodney Yamamoto, George Nishimura, Ed Hultgren, Yuki Matsumoto, and Joyce Haupt, and CILO's John Connell had a super-successful year. With your continued support, their chances next year of having legislation passed on bills relating to mechanic's liens and unlicensed activity exemptions is favorable. Mahalo.

Codes — the hours Bob Kishi and gang have spent on our behalf is endless. His willingness to respond to brush fires on a moment's notice is most appreciated. A special thanks goes to Alan Holl for his expertise regarding fire codes and chairmanship of this year's Honor Awards Program.

Hawaii Architect — as mentioned in the last issue, we can all be proud of this effort of many — staff, writers, photographers, Crossroads Press, advertisers, etc., but most of all, we owe our biggest Mahalo to co-editors Shannon McMonagle and Glenn Mason.

New HS/AIA — to Jack Lipman go the laurels for seeing us into our new home, and to Frank Gray the honors for making it so nice. Good show — Mahalo, Mahalo.

Some special "Mahalo Awards": to Duane, Pravin, Carol and my CCDS group for giving me the freedom and backup they did; to Ernie Hara and Elmer Botai for their ability and willingness to perform; to the University of Hawaii Student Chapter, led by Lee Coleman, for being there; and to Beverly McKeague, who with Vicki's help, really runs HS/AIA — Thanks.

I know I've overlooked many of you who ably served HS/AIA this year. However, if I can't use the lack of communication excuse, please forgive me and chalk it up to "he must really be part of the older-older group." At long last — and finally — a "Mahalo Award First Class" to each and every one of you for putting up with me a second time. I trust some of your expectations were realized. I do appreciate.

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Wadsworth Yee, President
Punahou School: A Tradition of Excellence

by TERRY STEPHENS
University of Hawaii
School of Architecture

The Punahou School in Honolulu, grades kindergarten through 12, is a very unique circumstance in today's world of diminishing funds for education and improvements. Quality facilities have been planned, designed, and financed with the full and enthusiastic support of the alumni and business community. The list of donors is impressive, as are the names which keynote major buildings contributed to the campus environment.

The architects have been several, selected in the gradual process of adding to the school's built environment, beginning with the old School Hall (1852). Notable contributions are C.W. Dickey's Wm. P. Alexander Hall (1933) and Montague Hall (1937); Bertram Goodhue's Griffiths Hall (1923) and Dillingham Hall (1937); as well as current works from the firm of Ossipoff, Snyder, Rowland & Goetz; Ernest H. Hara; and John Hara, to name only a few.

A plaque, adjacent to the Robert Thurston Jr. Memorial Chapel by Ossipoff, et al. (1967), commemorates the gift of the lands in 1829 from Queen Kaahumanu to the Rev. and Mrs. Hiram Bingham, members of the American Board's first Sandwich Island Mission Co. Rev. Bingham donated the lands in 1851 for the founding of a school for missionary children.

Since 1851, Punahou has opened its doors to all races and religions, while retaining its Christian heritage. It is the oldest independent college preparatory school in the West. Its 3,700 students are distributed among 136 classrooms and 28 school buildings, spread over a 76-acre campus at the entrance to Manoa Valley. The school employs an academic faculty of 210, a clerical staff of 75, and a maintenance and service staff of 125. The campus and facilities are valued at $35 million and its annual budget is about $11 million.

Since tuition alone does not cover the costs of education at Punahou, an annual fund-raising campaign called "Living Endowment" helps raise the funds to cover operating expenses. Occasionally the school conducts campaigns for special projects such as new construction, building renovation, and financial aid. A "planned gifts" program takes care of the long-range financial needs of Punahou; general endowment is about $11 million.

A series of master plans have set the goals and standards for planned development at Punahou. The master plan prepared by Stanton Leggett & Associates, Chicago, Illinois (1969), is one of a series of master plans that date back to 1946. It addressed the issue of a steadily increasing enrollment by replacing the old Bishop Hall, and proposed the construction of a new physical education and arts center complex. Both conditions suffered from overcrowded facilities, and the former Pauahi Hall serving...
Punahou
School

administrative functions was
deemed inadequate due to size of
physical plant and termite infestation.
Flexibility was emphasized for all
new construction and/or renova-
tions proposed. Attention was given
to preserving greenbelts by locat-
ing future construction on steep
slopes. Such buildings could per-
haps be multi-storied, thereby con-
serving areas for playing fields and
greenbelts.
Major construction since the
Leggett master plan includes a new
Bishop Hall designed by Ernest
Hara, AIA (an alumnus). It houses
classrooms and a library dispensed
on three levels. The building is val-
ued at about $5 million. A new
administration building also de-
signed by Ernest Hara was con-
structed on property adjacent to
Bishop Hall. This split-level struc-
ture is valued at about $1 million.
The current master plan de-
veloped by Stanton Leggett & Asso-
ciates in 1975 reiterates the ina-
dequacy of the physical education
and sports facilities. This plan led
to a more detailed master plan con-
ducted by Belt, Collins & Asso-
ciates in 1977 for the physical
education and athletic facilities.
The budget for these facilities was
originally $7 million, which later
was increased to $10 million.
Belt, Collins & Associates were
the civil and mechanical engineers;
Ernest Hara, AIA, in a joint ventu-
re with his son, John Hara, AIA, were
the architectural firms chosen to
design the facilities. The project is
140,000 square feet ($70 per
square foot) located on a steep
slope, with portions of the building
30 feet below grade. Along with the
central facility is an open air ceram-
ics studio, the Castle Arts Center,
and a junior school play area total-
ing about 36,000 square feet. Three
new tennis courts, the “Spaulding
Courts,” were also built.
The construction of the physical
education facility and new arts cen-
ter satisfied goals stated in the
1969 master plan. This project, val-
ued at $10 million, is the most
ambitious fund-raising effort ever
conducted in the private sector
within the Hawaiian Islands.
The entire athletic complex is
actually three buildings: Asa Thur-
ston Physical Education Center,
Christopher E. Hemmeter Field
House, and Aileen Forrest Hall (an
addition of another floor to an exis-
ting structure).
The focal point of these struc-
tures is the C. Dudley Pratt Aquatic
Center which replaced the Eliza-
beth P. Waterhouse Memorial
Swimming Tank (1922). However,
the new pool was rededicated to
Elizabeth P. Waterhouse when the
facility was completed in June
1981. The new “deepwater” pool is
25 yards by 50 meters and has a
movable bulkhead that can be set
at 25 meters or moved to the end
for 50-meter races.
Punahou is fortunate in having
its own water supply system. An
artesian well brings up water from
365 feet to within 10 feet of surface
grade, and water is pumped up 210
feet to Rocky Hill Reservoir
(105,000 gallons of storage with a
700-gallon-per-minute outflow
capacity).
The site restraints on the new
athletic facility were stringent. The
depth required to accommodate
both full-court basketball and the
25-yard pool width pushed the
envelope available between the
running track (Alexander Field) and
main circulation across campus
(Ernest Hara Mall). This forced
the architects to slip the pool facilities
under the gymnasium and to sup-
press the pool level below grade to
reduce building bulk.
The Asa Thurston Center provid-
ed the following facilities on three
levels: offices and classrooms,
health center, taping and training
rooms, athletic equipment and dis-
persal facilities, boys and girls
locker rooms, faculty locker rooms,
and weight lifting and gymnastics
facilities.
The Christopher E. Hemmeter
Field House accommodates the
main gymnasium with full-court
basketball, a motor-driven stacking
bleacher system, and pool-related
locker and shower facilities below.
The Aileen Forrest Hall houses a
weight lifting room and training

Pres. Hosmer and Fraulein Haslorth in a conveyance of the 1890s, with Pauahi Hall in the distance.
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room for women, a dance studio and exercise room, a meeting room for visiting coaches and trainers, and a new snack bar for use during athletic events. This entire complex is bisected by two cross-circulation zones which provide for pedestrian (and electric cart) travel from the upper field (Alexander) to the campus proper. The ramp system allows for electric cart travel from the playing field to the health center and adjacent ambulance zone for the injured.

This project is extensive and ambitious in every way. The buildings receive clerestory light through a saw-tooth free-span roof truss system, and hurricane louvers allow cross ventilation. No electric lighting is required during daylight hours in the gymnasium or gymnastic areas due to this use of clerestory daylighting.

The campus plan has grouped buildings and facilities around major greens or athletic fields so that there is no impression of crowding on the site. Colors, roof pitches, and materials are consistent, as are details, shadow lines, and loggias which surround build-

The new Elizabeth P. Waterhouse swimming pool underway (top), and completed (center). Trustees tour the Asa Thurston Physical Education Center (bottom).

The richness of Punahou School's built environment reflects the spirit and energy of its alumni, faculty, and administration. It is quite an example of dedication to excellence in today's world.
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PROJECT
A Private Residence
Mauna Kea Fairways
ARCHITECT
Heneghan & Leucht Architects, Inc.
PARTNER IN CHARGE
George Heneghan
INTERIORS
Norman Warzinski
ENGINEERS
Richard Libbey (Structural)
Wallace Oki (Electrical)
CONTRACTOR
James Miles Construction, Inc.

PROJECT DATA
Site Size 10,800 sq. ft.
Building Square Footage 3,864 sq. ft.
Lanai 2,768 sq. ft.
Walkways 436 sq. ft.
Building Height 1 story sq. ft.
Cost (Not available)
Construction Types
Foundation Concrete
Exterior Walls Frame with horizontal 1" x 4" lap siding
Partitions Plaster
Roof Framing Wood beam/2" x 6"
T&G channel groove fir decking/
2" rigid insulation/standing seam copper
Floor Concrete with handmade glazed ceramic tiles
Doors Solid core doors copper clad

DESCRIPTION
The hillside residence overlooks a fair-
Technology update

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  P. Chun, President, Apollo Solar Energy Inc.

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Private Residence

way of the Mauna Kea Beach Hotel golf course, and beyond that, the Pacific Ocean, on the Island of Hawai'i's South Kohala coast. Stepped in pods down the hill, the house appears to meander, belying the mass and system of its heavy timbered construction. The traditional materials chosen for the exterior of the house reflect a sophisticated version of the historic Hawaiian home: horizontal beveled wood siding and metal roof. In this case, the roof is copper, not tin.

The double-eaved copper roofs are designed to provide 360-degree positive ventilation by the use of bi-level strip venting. To take advantage of the prevailing tradewinds or their counterforce, the Kona breezes, operable louver can be adjusted to utilize both wind currents as well as the natural convection flows within the house, providing natural air conditioning. The overall design incorporates the use of overhangs to protect the view-oriented fenestration from excess solar gain. On the roof, however, solar collectors operate without the benefit of electrical booster back-up to provide domestic hot water.

The floor plan of the residence provides the openness dictated by climate and by client lifestyle, while the multi-level pods provide the privacy necessary for family living.

The central pod is devoted to living, dining, and kitchen space. The glazed walls open directly to the lanai/pool area on the same level. Hexagonal handmade ceramic tiles flow from indoor living space to outdoor lanai area without the interruption of physical or visual barriers. The pool water recirculates to the pool via a handsome fountain mounted in a rock wall which provides the cooling sound of falling water.

The uphill pod contains the master suite consisting of a spacious bedroom, bathroom, and dressing area. The master suite privately overviews the pool and lanai from an elevated, landscaped vantage point.

The lower pod's two bedrooms has its own built-in lavatory. All bedrooms have direct outside access to the pool deck from their lanais, encouraging pool traffic to bypass the interior of the house.
Public school planning and construction from 1945 to the present has been a constant march to keep up with the demands of a growing population, regardless of whether funds were scarce or plentiful, or whether the job fell under county or state jurisdiction. At times it must have seemed a thankless task to those in charge, especially when having to field community group demands as well as complaints from architects who felt their talents were being compromised in an assembly line process.

Government education officials often displayed a surprising openness to new ideas and a willingness to hear criticism during these years of intense growth.

Keeping Pace with Enrollment Figures

Construction and maintenance of public schools came to a near halt during the war years. Beginning in 1951, with enrollment at 90,000, figures would swell by at least 5,000 annually for the next decade, peaking in 1972 at 183,000 students. The Department of Public Instruction (DPI) scrambled to provide classrooms for the postwar students — in quonset huts, old Japanese language schools, teacher and janitorial cottages, basements, storerooms, even borrowed Sunday school classrooms.

Basic finger plan, Lincoln Elementary (1956, Lou Davis & Philip Fisk).

From 1945 to 1958, $31.5 million would be spent on public school construction, a figure not uncommonly allocated for a single year during the 1970s. Bonds for school construction were issued either by the city and county or by the territory; state and federal funds would come into play later as well.

The 1950s saw the rise to prominence of the “finger” style of school plan, featuring rectilinear classroom corridors, usually single-story, laid out row after row at an angle to the tradewinds, interconnected by a covered pathway which led to the primary service buildings. These classrooms were usually constructed of concrete or concrete block, topped by mini-
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Public Schools

Public Schools mum pitched roofs. One DOE official claims the finger plan was a natural step in the evolution of self-enclosed classrooms in Hawaii, an area highly conducive to natural ventilation and therefore single-corridor construction.

Classic examples of these schools include Kaimuki High School (1949, Guy Rothwell); Leilehua High School (1949-50, Johnson & Perkins); Kahala Elementary (1954, C.F. Wagner); Dole Intermediate (1956, Onodera & Nishida); Lincoln Elementary (1956, Lou Davis & Philip Fisk); and Kalani High School (1958, Belt, Lemmon & Lo). Master plans for these buildings, if they did exist, are not on record at DAGS offices.

Because Hawaii's schools were usually built incrementally, each designed often by different architects, the classic finger plan (see chart) was not a hard-and-fast rule. Slightly different layout configurations of the single-corridor classroom buildings did occur as dictated by individual sites.

Several attempts were made following World War II to establish a manual of standard procedures for public school planning and construction. A territorial committee was first formed in 1949 to study school building needs. It was not until 1954 that the first School Building Guide was completed.

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12/81

Pioneer open classroom building at Ewa Beach Elementary (1962, Frost & Frost).

Red Hill Elementary features a building with two Type-S open classrooms (1970, Harry Nakata).
Public Schools

after consultation with AIA members, engineers, government officials, and faculty members. The manual focused on the usefulness of buildings for educational purposes and ways in which construction costs could be kept to a minimum.

The DPI invited a team of professors from Stanford University to evaluate Hawaii's school system in the middle 1950s. Their report, commonly known as the Odell Survey, was completed in 1957 and included a section on the physical plant program. The following assessment was made, among many others:

"Interviews with architects indicated a number of major problems in the proper performance of their functions. Adequate time is not available for proper planning of proposed schools; architects do not supervise the construction of buildings which they have planned; and the quality of inspectors provided by the counties is not uniform, or in every case, even adequate. Nor are fully satisfactory educational specifications for school buildings provided from District and Territorial offices of the DPI."

By 1959, the first comprehensive bible of educational specifications was completed, from which current DOE procedures have evolved. The DPI continued to struggle with an insatiable need for classrooms.

By 1960, eleven grade schools were forced to go on double shifts; Kailua High School and Intermediate at one point was put on triple shifts. It was not long before the value of the portable classroom was discovered; by 1966 the Legislature appropriated nearly $5 million for 280 classroom units. Suppliers of wood, steel and concrete championed their respective attributes, with the budding concrete industry winning a share of the contracts. Later these concrete portables would prove to be pro-

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hibitive to relocate, scarcely deserving of their title as portables. Today there are approximately 700 portables in the statewide inventory, still considered valuable tools to safeguard against overbuilding permanent structures in areas unlikely to develop further.

Other ways to compensate for this aging factor include leasing house shells on a temporary basis from residential developers (as the state did at Mililani in 1973), and designing buildings that can later be converted to office or community use (seen at Mililani Uka and Puuhale Elementary).

Open Classroom Concept

Hawaii's centralized school system attracted attention from New

Due to air traffic noise, Puuhale Elementary has the distinction of being the only fully air-conditioned classroom building in Hawaii's school system (1972, Arthur Kohara).

A portable worthy of the name at Washington Intermediate.

Millani Uka features sloping roofs in keeping with the surrounding neighborhood (1977, Robert Matsu-shita & Associates).
York's Educational Facilities Laboratory around 1960. EFL researchers were intrigued by the fact that changes in Hawaii's school system could be implemented on a statewide basis, unlike school districts on the Mainland, and would therefore make an excellent showcase for current innovative educational programs such as the open classroom concept, which encouraged team teaching in larger student groups. EFL enabled key Hawaii educators to visit progressive Mainland schools and study these new programs. The Ewa Beach Elementary School library/auditorium, designed by Frost & Frost and built in 1962, was one of the first buildings to accommodate the open classroom concept, and it was considered a success.

As the idea gained favor in the mid-'60s and early '70s, several architects attended Mainland educational facility workshops at their own expense. Some of these included Ernest Hara, Douglas Freeth, Ed Miyamasu, Frost & Frost, Edwin Murayama, Michael Suzuki, and Robert Matsushita.

From 1965 through 1967, the general allocation of public school functions was transferred from the city and county to the state Department of Education (DOE) and Department of Accounting and General Services (DAGS). Henceforth, DOE was put in charge of establishing educational specification guidelines and priorities, and budgets for capital improvements. DAGS became responsible for preparing physical plans, selecting architects and consultants, administering construction contracts, inspecting projects, performing functions related to physical planning, and repair/maintenance of school facilities.

The 1968 state legislature passed Hawaii's progressive early childhood education program, designed to increase individual attention given to students. The open classroom was an integral part of this program. Interior walls of many existing classroom buildings were removed; new classrooms constructed to accommodate teams of three teachers to every 60 students, or multiples thereof.

Notable examples of the new buildings were found at Red Hill Elementary (1970, Harry Nakata); Heeia Elementary (1971, Takashi Anbe); Salt Lake Elementary (1970, Anbe Aruga); and Millilani Waena (1971, Kotaro Koizumi). The program flourished well into the 1970s, but it is gradually being phased out today.

Another experiment was that of the cluster school, exemplified by the Campbell complex at Ewa Beach (1962, Robert Matsushita), which includes a high school, intermediate, and two elementary schools sharing a common campus and adjoining community park. Although the ambitious cluster concept was not repeated, modified versions were master-planned for the Millilani and Pearl City areas. Due to slower than anticipated growth, however, the scope of the projects was cut back, and the planned intermediate schools were never built.

Today's public school classrooms, for the most part, are built in two-story, single corridor incre-
ments in accordance with master plans that are required for all new schools or major school additions. With few exceptions, these class-
rooms are constructed of concrete or concrete block, with minimum pitched rooftops, unless the archi-
tect can introduce exterior building materials that meet safety and maintenance requirements and still fit within the budget.

Between $20 to $30 million per year continues to be appropriated for public schools as has been the case for the past decade; the pur-
chasing power of these funds has been eroded by inflation. Oahu's overall enrollment is on the de-
cline, especially in areas such as Hawaii Kai, Aina Haina, Palolo and Manoa valleys. The Neighbor Is-
lnds, in contrast, are steadily on the rise in enrollment figures, and receive commensurately more of the new school buildings.

Recent schools include Crest-
amaha); Mililani Uka (1977, Robert Matsushita); Nanakuli Elementary (1977, Wilson Okamoto); Waimea 

The design of these public school buildings continues to be the result of a compromise be-
tween available time and money, educational specifications, com-
munity needs, and the artful persuasion of experienced architects.

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In 1887, Bernice Pauahi Bishop Estate founded the Kamehameha Schools for the purpose of providing a special place for the youth of Hawai‘i to become "good and industrious men and women," as quoted from her will. In carrying out these wishes, the Bishop Estate trustees have carefully planned the growth and changes of the school throughout the years to maintain its high educational standards and the physical beauty found on its sloping campus grounds on Kapalama Heights. The trustees also intend to accommodate present and future needs of Hawaii's students who will benefit from the amenities and facilities provided on the Kamehameha School campus.

Many of these needs will be satisfied through the construction of new buildings and facilities such as the proposed athletic center with football and track facilities, Ke Ala Mano (the new main entrance), Bishop Memorial Chapel, the performing arts center and dining facility, industrial arts facility, and Waoanahele, an outdoor garden classroom with native and indigenous plant specimens. The shape, form, color, and texture of these new buildings and complementary landscapes are to be greatly influenced by specific architectural and landscape architectural guidelines.

These guidelines were based on the original campus master plan layout by Bertram Goodhue and the master landscape plan designed by Albert F. Judd, both dating back to the 1920s. The guidelines were also influenced by the existing character and images created in the buildings designed by C.W. Dickey; Theodore Vierra; Merrill, Simms & Roehrig; Mayers, Murray & Philip; Roehrig, Onodera & Kinder; M.C. Lester; and Ernest Hara from 1930 to 1975.

Examples of significant buildings
are the Auditorium (1936) and Haleakala Hall (1930), both designed by Dickey.

The blending of landscape elements with the buildings and environmental conditions on the site are a major aspect of Judd's master plan. He emphasized the use of plants having cultural/functional importance for the early Hawaiians.

This is an element to be continued in future plantings on the Kamehameha campus with particular attention to enhancing new architectural elements, softening any incongruous building structures, framing important view corridors, and establishing low maintenance conditions.

To guide the future development of Kamehameha Schools, a master plan and architectural and landscape architectural guidelines were prepared by Belt Collins & Associates in 1981. The main intent of the guidelines is to analyze and describe existing conditions and design intentions, and to make the following recommendations:

- Extend existing architectural and landscape architectural concepts through use of similar materials and landscape forms.
- Preserve significant buildings and landscape having historic importance or aesthetic value.
- Maintain an image of development on the campus incorporating new elements complementary to old elements.
- Provide low maintenance conditions in new buildings and landscape and continue original landscape intentions and concepts found on campus.
- Preserve and enhance important view corridors.

In 1928, the trustees envisioned a campus for 1,000 students with school buildings amid groves of selected native and indigenous trees and massed plantings throughout the sloping campus overlooking Honolulu. The views extend out toward Ewa and the Waianae mountain range, toward Diamond Head and back into the mountain gulches, valleys, and peaks of the surrounding heights.

Today, with more than 2,500 students, the campus is defined by the lower, middle, and upper campuses. Each campus differs in character, building design, and environmental setting from the others. The guidelines also reflect these differences by making recommendations for each campus.

The character of the lower campus is a dry landscape with large, open lawn areas shaded by monkeypod trees, lined by rows of eucalyptus and overgrown with brush areas of haole koa. The horizontal character of the buildings with individual classroom units is similar to many other school buildings built in the 1950s. Completed in 1955, these buildings are mostly of concrete and concrete masonry units.

Recommendations for new buildings in this area are to provide both horizontal and vertical features, where appropriate, to harmonize or to provide a balanced contrast to buildings using both these elements.

The middle campus is described as a transitional area between the dry lower campus and the mountain woodlands character of the upper campus. Landscaped by Albert Judd in the 1930s, there are pocket plantings of native and endemic trees and shrubs. Views are carefully considered and plantings complement the buildings and define open space areas.

The buildings are distinctly horizontal in character and present an entirely different picture from the lower campus architecture.

Recommendations for new buildings on the middle campus are for contemporary facilities which express functional uses and activities. Similar roof pitch and roof materials should be used to match existing middle campus building roofs. Wall materials and color should also match existing buildings. The industrial arts facility and Bishop Memorial Chapel are proposed for the middle campus.

The centennial of Kamehameha Schools is to be celebrated with the construction of the new chapel. There is a desire to site this building in the center of the campus as a focal point, and its architectural style should reflect its importance as well as use similar materials and colors as the other buildings on this middle campus.

The character of the upper campus is a mountain woodland setting with a native Hawaiian garden, a color garden, and grass parade and playing fields. The views and scenic drives on this part of the campus provide a highly pleasing setting for the historic Hawaiian-style buildings designed by C.W. Dickey; Mayers, Murray & Philip; Goodhue; and others.

The new buildings proposed on the upper campus are recommended to reflect elements of the existing auditorium designed by C.W. Dickey in 1936. The new performing arts center complex is to be an extension of the existing auditorium so it will be important to propose a design with a style complementary and reflective of Dickey's style. Important views are to be preserved by the use of hipped roof forms. The new dining facility should also be complementary to existing building characteristics.

The existing building designs should be reflected rather than duplicated in the siting of the building, use of roof planes to preserve views, and integration of new uses with similar materials and colors. They should relate and respond to the existing landscape.

Kamehameha School's new facilities will attempt to reflect improved technology and contemporary architectural styles while embracing elements of importance from styles and designs of the past. This time-blending will continue to shape the growing campus of Kamehameha Schools, a gift to Hawaii's youth from the memorable Princess Bernice Pauahi Bishop.  

12/81
CZC Gets Overhaul

by COUNCILMAN GEORGE AKAHANE
Chairman, Planning & Zoning Committee

Since its adoption in 1969, the Honolulu Comprehensive Zoning Code (CZC) has been amended 85 times. These amendments have been sporadic and in response to crises created either by an imminent undesirable development, or by a technical or legal deficiency in the code. They represent a variety of form, style, and legal restraints. As a result, the CZC is no longer a coherent document.

Other deficiencies of the CZC stem from lacking precise guidelines for processing of applications, public participation, and the Department of Land Utilization’s (DLU’s) review and evaluation of various applications.

In 1978, the Honolulu City Council, in an attempt to streamline application handling procedures, amended the CZC by Ordinance No. 78-65, imposing strict time limits on all agencies and the council for reviewing and approval of applications. This amendment also requires referral of applications to the neighborhood boards for review and comment before the DLU’s final report on such applications is prepared. The following charts indicate the agency referrals and time limits for processing of all CZC applications, called for by Ordinance No. 78-65.

Amendment of the CZC in con-

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CZC Overhaul

Overhaul of the 1969 CZC include:
- clear guidelines for social impact management and DLU's application review and evaluation,
- expansion of the current performance standards, and
- principles and standards for urban design.

Also, to maintain the legal consistency of the CZC, future amendments should be made once a year in step with the DPs' annual amendment.
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