

## Chapter V

### From Stone Quarry to Athletic Complex: The *Makai* Campus (Acquired 1953)

*by Kelcey Ebisu*

The Quarry area of the *Makai* Campus (area south of Dole Street) was acquired by the Territory of Hawaii and the Regents on December 8, 1953, primarily for the development of athletic facilities. As its unofficial name suggests, the site was originally part of the Moiliili Quarry operated by the Honolulu Construction and Draying Company, Ltd. (HC&D).

Most of the land itself was part of the immense holdings of the Bernice Pauahi Bishop Estate. It was held by Victoria Kamamalu until May 29, 1866, when she died without a written will. Under the inheritance laws of the time, Moses Kekuanaoa was the sole heir, but he died, also without a will, on November 24, 1868. It was decreed that half of the estate be given to his son Kamehameha V and the other half to Princess Ruth Keelikolani. Kamehameha V died on December 11, 1872, also without a will, and the sole heir was Princess Ruth, who was thought to be his half-sister. Ruth Keelikolani also died intestate on May 25, 1883, and all her property went to her cousin, Bernice Pauahi Bishop, her closest relative, and upon Pauahi's death, became a part of the Bishop Estate.

There had been a quarry in the area as early as 1889 and the Moiliili Quarry was considered the best in the Islands. The rock was approximately 55 feet thick, with very little overburden, and it had good quality "blue rock," a basalt-lava rock called epheline-meililite basalt.

Honolulu Construction and Draying Co. (now known as Ameron HC&D) was incorporated on April 15, 1908, by five men: William H. Hoogs, a contractor, who became its first president and manager; John J. Belser, who owned and operated

a small rock-crushing plant in the Moiliili area and had been a partner in the Lord and Belser General Contracting Co.; William B. Foster, harbor master for the port of Honolulu; G. H. Mayer, a businessman; and John Walker, a general contractor. In June 1910, HC&D leased land from W. C. Cummings with the right to use the land for quarrying purposes at the rental rate of \$50 per month, with a lease period of 20 years, from June 1, 1910. By January 1911, a plant was set up and the quarry was in operation.

According to Robert L. Muller, retired president of HC&D, the County of Oahu also operated a quarry in the Moiliili Quarry area. In 1914, HC&D bought out the County Quarry and, in return, sold rock to the County for an agreed-upon price.

In January 1913, HC&D applied to Bishop Estate for a lease or purchase of the property adjoining and *mauka* of the quarry property used by the company. However, the land was already leased to John Ena until January 1, 1918. HC&D eventually was able to lease that property from the Bishop Estate for ten years, effective July 1, 1918. The land covered 19.93 acres, and the rental charge was \$2,500 per year and ten cents for each cubic yard in excess of 25,000 cubic yards of rock sold.

The lease was later renewed for a period of five years from July 1, 1928, with the total acreage increased to 47.91 acres. The rental fee (or royalty) was set at twenty cents a cubic yard of rock, with the proviso that if the royalty did not equal \$20,000 HC&D would make up the difference. The lease was again renewed and renegotiated later.

After obtaining the exclusive quarrying rights from the Bishop Estate in Moiliili, HC&D dominated the crushed rock business. The rock taken was used for construction materials, for road base and concrete and asphalt aggregate. Some of the rock used for building Central Union Church is said to have come from the Moiliili Quarry. Geoffrey Podmore, surveyor and historian of the Bishop Estate, said that tombstones were once made from Moiliili rock. Portuguese craftsmen known as "Blue Rock Masons" cut the rock. For the celebration of the centenary of the birth

of Kamehameha III, on March 17, 1914, a memorial tablet of polished fine-grain Moiliili rock was made to mark the King's birthplace at Keauhou, North Kona, Hawaii. Many of the curbstones on the streets of downtown Honolulu were made from Moiliili Quarry rock.

To obtain the rock, holes were made into the rock wall, using pneumatic drills. Dynamite was fitted into the holes, and its detonation would bring the entire face of the wall down. Small pieces were then removed with a power shovel and placed on dump trucks that took the rock to the crushing plant within the Quarry site. Originally a railroad track had been built in the Quarry, and the rock was hauled in cars. Whenever the blasting occurred, everything would shake and vibrate, accompanied by an extremely loud sound. Beatrice Krauss remembers when rocks flew out of the Quarry and onto the glass greenhouses used by the Pineapple Research Institute on campus (now Krauss Hall, named after her father), breaking the glass. This occurred between 1928-1932 when netting was not used to prevent rocks from flying about after the explosion. Abraham Piianaia, Hawaiian Studies Director, lived in the Moiliili area as a child and remembers telling the time by the HC&D schedule: On Mondays through Saturdays, at 12:15 the Quarry whistle would blow and dynamite blasting would take place. At 3:45 another whistle would blow, and another round of blasting would take place for ten to fifteen minutes, leaving the Quarry with more rock to be hauled away in the morning.

During the war years, blasting could be heard day and night with the Army and Navy requiring large quantities of rock for their facilities. The Moiliili community objected to the constant noise and the substantial amounts of dust that blew into the area.

Moiliili residents must have rejoiced on November 15, 1949, when the last truckload of blue lava rock was removed from Moiliili Quarry and operations ceased. For about 60 years, high quality blue rock from Moiliili had been the primary source for Oahu. Quarrying activity now moved to Palolo and specially designed side dump semi-trailers hauled rock from

Palolo to the primary crusher at the Moiliili Quarry. By 1951, HC&D had dismantled the crushing plant and built a new crusher at the Kapaa Quarry in Kailua, on the windward side of the island.

In the meantime the University was already moving to acquire Moiliili Quarry property. On September 8, 1945, the Regents requested that the Public Works superintendent condemn and acquire about 95 acres of Bishop Estate land. The move was authorized by the 1945 legislature.

On January 7, 1947, a petition was filed requesting the land. It also stated that Bishop Estate and HC&D would have the right and privilege to continue under their present leases until June 30, 1947, to complete quarrying operations. The floor of the Quarry worked by HC&D would be left an even surface at a grade that would provide proper drainage of the land, and the floor would be covered with no less than two feet of soil.

After Bishop Estate responded on March 4, 1947, the Territory of Hawaii and the Regents jointly submitted an appraisal of \$475,307.32 for the Quarry land, while Bishop Estate Trustees submitted the figure of \$758,149.00 for the 77.712 acres, which included the area *makai* of Dole Street that bordered on the bluff of the Quarry area and the area between the Quarry and Manoa Stream.

After a series of motions, orders, and stipulations, a judge made the decision; the total area would consist of 75.502 acres for the sum of \$627,579.00. A deposit of \$423,680.00 was made and the balance of \$203,899 plus interest would be paid from July 18, 1947. The Final Order of Condemnation was on December 8, 1953.

In 1946, New York architects York and Sawyer prepared master plans for the University which provided for the extensive development of the Quarry area. The plan was not followed. In 1956, the "Bachman Plan" by R. M. Belt, W. K. Collins and Associates included a photo of flooded outdoor basketball courts and noted that the Quarry area was the "final collecting point for all University storm water runoff." Of course, users of the Quarry area

had always had to wade through mud puddles as they parked their cars in the then relatively undeveloped parts of the Quarry. The first major and permanent construction of facilities in the Quarry began in 1956, when the ground-breaking took place for the new \$480,000 Physical Education Building and gymnasium. The facilities which were completed on September 6, 1957, included: Klum Gym, Team Lockers-Varsity Building, Locker Building, classrooms and an indoor-enclosed boxing room.

The original Cooke Field was located between the site where Hemenway Hall stands and University Avenue. It was moved to where Holmes Hall now stands, on Dole Street, across from Johnson Hall dormitories. In April 1966, Cooke Field moved into the Quarry, and for the first time it had artificial turf, laid out by F. T. Opperman, Inc., completed on April 7, 1972. By September 23, 1981, and at a cost of a million dollars, Rons Construction Corporation had installed astroturf, along with other work, including the repairing of the track and field surface, installing of chain-link fences, and converting the track from a 440 yard track to a 400 meter track.

The Duke Kahanomoku Pool, the campus' second swimming pool, was built by State Construction Co. From the start of the project on September 9, 1963, there were numerous problems, complications, and delays. By March 30, 1965, the facility was still not approved as completed. It consisted of a 50 meter by 25 yard swimming pool built above the ground. On November 6, 1967, work started on an addition to the pool. A varsity locker room and men's and women's bathroom-locker room were built by Allied Construction and completed on July 3, 1968. The varsity training room was utilized by men's athletics until they moved to the new Physical Education/Athletic Complex.

A dormitory originally for athletes, Hale Anuenue, was completed in 1969. The facility was financed by Koa Anuenue and was located just beyond the gate of Varsity Place. It no longer is a housing facility for athletes only; it is today an all-male dormitory under the Student Housing Office.

# University of Hawai'i

## Undefeated Champions of 1925

Beat National Guard - 86  
 Healan - 74 Palama - 40  
 Navy - 43 TOWN - 14  
 Occidental at L.A. - 13  
 Colorado Aggies - 41  
 Washington State - 20  
 U of H total score - 331  
 Opponents - 17

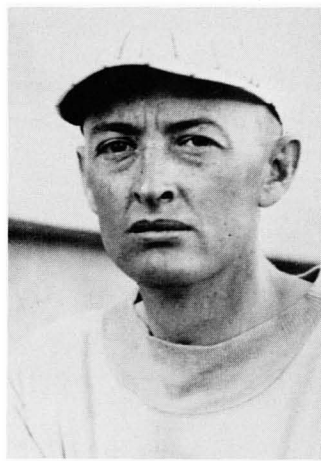


Back Row: Otto Klum, coach. Dave Penhallow, mgr. J. Holt, guard. Dan Ainea, tackle. W. Holt, end. A. Kaaua, tackle. G. Young, guard. J. Cruickshank, center. A. Wriston, tackle. H. Thompson, end. L. Loudermilk, guard. W. Kaeo, tackle. Carter Gall, Asst. coach. Middle Row: O. Dawson, full back. E. H. Tong, end. J. Gerdes, half back. R. Gurrey, end. E. Touse, guard. T. Nakamura, tackle. A. Brown, end. R. Jacobson, end. B. Cruickshank, end. R. Rice, tackle. Front Row: R. Weight, center. W. Whittle, half back. L. Collins, tackle. R. Penhallow, end. A. Lemus, quarter back. E. Fernandez, half back. W. Wise, apt. half back. T. Searle, full back. J. Morse, quarter back. W. Fernandez, full back. R. Anderson, end.

One of Coach Klum's greatest moments was his "wonder team" of 1925 which went through an entire season undefeated. Klum is the first man on the left, back row. Klum considered the win over the Washington State Cougars in 1925 and his 1923 team's triumph over the University of California his greatest victories. The lack of seasoned players in 1938 and 1939 gave the Rainbows a mediocre season. University Photo (1925)



Klum Gymnasium will be remembered by most faculty and students as the site for registration, when long lines of students hoped for class sections of their choice as they crowded onto the Gym floor. The Gym was first proposed in March 1956, after a basketball game in the old gym (*makai* of Sinclair Library) was cancelled because the roof leaked and the floor was flooded. Klum, the first major structure in the Quarry area of the *Makai* Campus, was designed by Rothwell and Lester, architects, and constructed by H. T. Hayashi, with William M. Wachter, Superintendent of Public Works. Completed in 1957, the Gym was dedicated in January 1958, by Shunzo Sakamaki, Dean of Summer Session, and who in the twenties, as editor of *Ka Leo* got fellow students to sign a petition to the legislature which resulted in the construction of the first gym in 1928. —Laura J. Pence. University Photo by Masao Miyamoto (1967)



Otto Klum. In 1958, the gymnasium in the Quarry area was named for Otto "Proc" Klum, football coach for 19 years. First hired in 1921, Klum became athletic director and chairman of the physical education department until 1938. Klum developed some of the greatest teams in Hawaii's gridiron history. Klum led the first team from the Islands to travel to the mainland (at that time by ship) in 1923. Klum was dismissed by the Regents in May 1940. Despite his coaching ability, the Board felt that Klum could not do justice to his job without remaining on campus for the entire academic year. From 1937, Klum had been living in Oregon, returning to Hawaii just before the season opened, and leaving in early January. Tommy Kaulukukui, who had been one of Klum's greatest stars, along with Luke Gill, succeeded the "Manoa Fox" as coach in 1940. University Photo (n.d.)



Kahanomoku Pool (2). The University's second pool was built above ground in 1964 in the Quarry at a cost of three hundred thousand dollars. It was built at a time when the Quarry itself was a complex of mud pools (as shown above) and parking lots. It was closed in 1978 and is scheduled for demolition. The pool was named in honor of Duke Paoa Kahanomoku (1890-1968), who won swimming medals in the Olympics of 1924 and 1928, including a gold medal with an official record in the 100-meter swim. He also received a "Red Medal" for rescuing eight persons from a capsized launch in Newport Beach, California, in 1925. He was a sheriff of Honolulu from 1922-1960. He was installed in the Swimming Hall of Fame in Florida in 1965. Called the "Father of Surfboarding," he introduced the sport to Australia in 1912; he was recognized by the Surfing Hall of Fame in 1966 in California. Kahanomoku also acted in Hollywood films from 1922 to 1930. —Laura J. Pence. University Photo by Masao Miyamoto (n.d.)



Dormitories and Pond. Rising on the eastern end of the Quarry area are the Hale Noelani and the Hale Wainani residence hall complexes. Two of the five Hale Noelani low-rise buildings are to the left, while the twin high rise buildings (one is 13 stories, the other 14 stories) of Hale Wainani are on the right. Hale Noelani, with 530 beds, was completed in 1977 at a cost of over 7.5 million, while Hale Wainani, with 648 beds, was completed a few years later at a cost of about 8 million. In the foreground, in a nicely landscaped area, is the Quarry Pond, fed by a spring. Located at the foot of a stairwell from a spot between Johnson Hall "B" and Gateway House, the pond has been the site of an annual fishing derby held since 1978, sponsored by the Marine Options Program. Prizes were awarded for most fish (tilapia fish) hooked and the largest fish caught. Before receiving the Quarry land, the Regents requested that Honolulu Construction and Draying Co., which had leased the land for many years for excavating



On November 17, 1969, a pedestrian access-stairway from the Quarry to Dole Street was started by S. Iwane. The stairway, located below the diamondhead end of Johnson Hall, was completed on March 18, 1970.

The 5-level parking structure was constructed by Hirano Brothers between February 19, 1974 and October 17, 1975.

Walker-Moody Construction Company, Limited, was contracted on May 21, 1974 to build six tennis courts next to the parking structure. The job was completed on June 6, 1974. Six more tennis courts were constructed by the Koga Engineering and Construction, Incorporated. These courts were considered as Tennis Courts, Phase II, and were completed on July 22, 1976.

When the baseball stadium was built, approximately 650 parking stalls were displaced. The baseball field was an open parking lot for a majority of the cars driven to campus. On August 5, 1974, Urban Construction, Incorporated, and Hirano Brothers started construction on the Baseball Diamond and Appurtenances, Phase I. The facility included a baseball field with floodlights, scoreboard, and press office. In the sixties, a baseball field was located on the site of the multipurpose fields of today. Just prior to relocation of the baseball field, the softball field which is adjacent to the parking structure and tennis courts was the baseball field. The backstop is the same one and was never removed.

The Swimming Pool Complex, Phase I, the new Duke Kahanamoku Pool, was built by the Okada Trucking Company, Limited, between March 8, 1976 and October 31, 1977. The two-million-dollar facility is a statewide complex, jointly used by the State, University of Hawaii and the Hawaiian Association AAU. The facility includes: 50-meter pool, 25-yard pool/diving well, diving platform, two 3-meter springboards, two 1-meter springboards, *mauka* bleachers, and limited shower and toilet facilities.

Koga Engineering and Construction, Incorporated, was contracted to build the multipurpose playing fields for Physical Education, Intramural and Athletic Programs. They began on May 20, 1976 and on

January 17, 1977, the University of Hawaii had a soccer field, football field and informal recreational areas. An addition was made to the original contract and a concrete walkway was laid down between the softball field and the multipurpose fields.

Prior to the start of the construction of the new Physical Education/Athletic Complex, the existing portable buildings had to be relocated. The AFROTC and AROTC buildings were moved to an area *makai* of the baseball field. A few physical education buildings were also relocated to that area. One portable building used by the Health, Physical Education, and Recreation Department was relocated to an area that once housed six tennis courts. This area is *mauka* of Klum Gym and diamondhead of the Varsity Building. Also relocated to this area was the old Martial Arts Building and the "Pagoda." The relocation of the portables started on May 15, 1978 by Harry T. Yanagihara and completed by November 1, 1978.

In the area between the Swimming Pool Complex and Cooke Field, a mall area and four basketball/volleyball outdoor courts were constructed. In addition, a restroom/pavilion was also erected. Koga Engineering and Construction Company started the project on September 8, 1980 and completed the facility on March 3, 1981.

The newest addition to the Quarry-*Makai* Campus was the Physical Education/Athletic Complex, Phase I. The complex includes: two gymnasiums, three studios, one mat room, two weight rooms, one lecture hall, two classrooms, locker-shower facilities, men's and women's varsity locker rooms and office complexes. The twelve-million-dollar facility was started on October 30, 1978 by E. E. Black, Limited, and completed on July 23, 1981. It was just one phase of several phases of development planned for the Quarry-*Makai* Campus.

The Law School was also temporarily located in the Quarry.

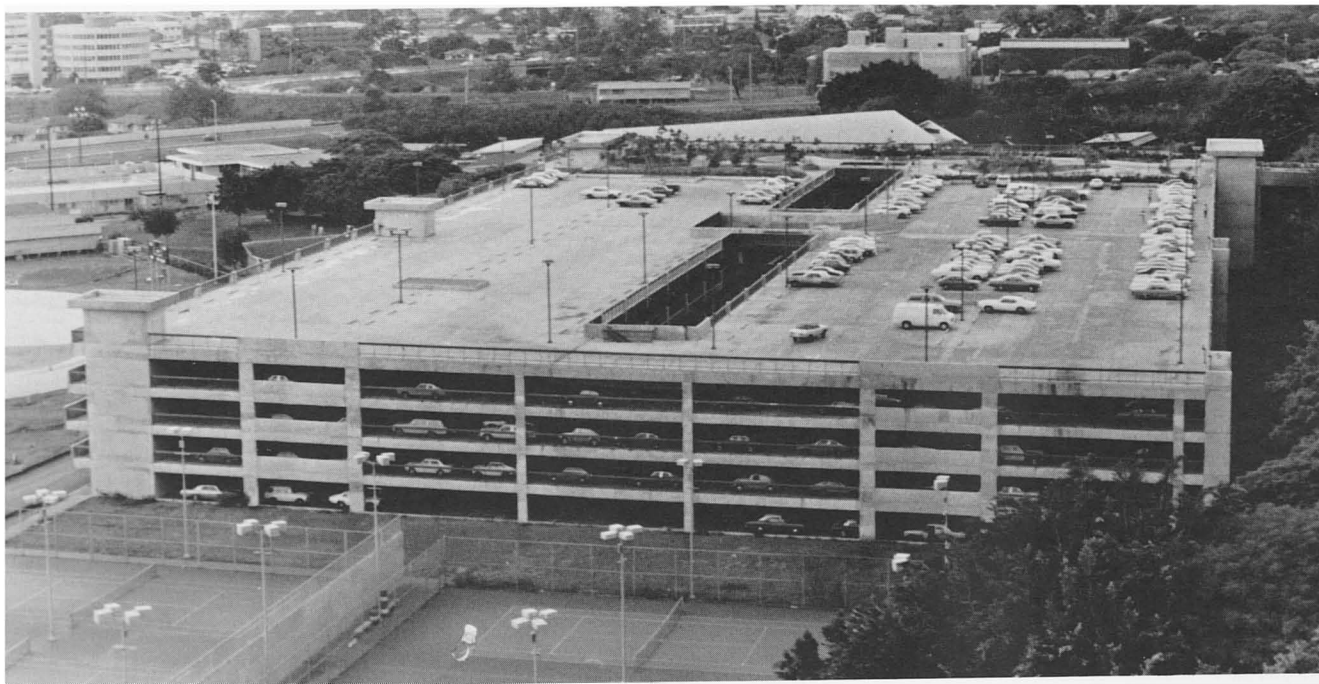
The former Men's Athletic offices were in the portable buildings between the baseball field and the AFROTC and the AROTC buildings.

According to Ted Livingston of the Athletic

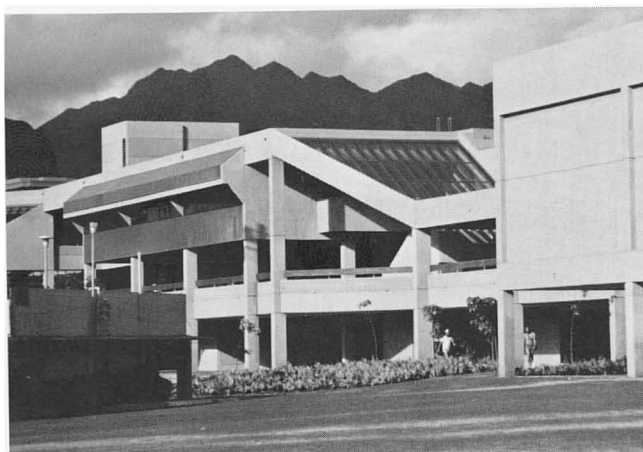


Kahanomoku Pool (3). The newest Kahanomoku Pool was completed in February 1978, at a cost of \$2.6 million. Funds came directly from the State, with Shoso Kagawa as architect and Okada Trucking Company as builders. There were many problems associated with the new pool: one was dust from nearby construction blowing into the pool, while another was winds interfering with precision dives into the pool. Both problems were solved when windbreaks were installed along the fence. —Laura J. Pence. Photo by Paul S. K. Yuen (1982)





Parking Building. As the former Moiliili stone quarry area began to be developed by the University, parking spaces began to disappear and the number of frustrated students increased. The multi-level (four stories, five-level) parking building was constructed by Hirano Brothers from February 19, 1974 to October 17, 1975. The total cost of the facility, which accommodates 1,727 vehicles, was \$9,002,000, making it one of the most costly structures erected on campus up to that point in Manoa Campus history (\$5,200 per stall.) Three basketball courts and several golfing cages once stood where the parking structure rises. Klum Annex I, built in 1949, also was located on the site, but it was destroyed by fire on September 26, 1971 and not replaced because the parking structure was to be built. University Photo by Masao Miyamoto (December 21, 1976)



Athletic/HPER Complex. The Koolau Mountains form a backdrop for the first phase of the Athletic/Department of Health, Physical Education, and Recreation Complex which opened in October 1981. Designed by Herbert Y. Matsumura and Associates, the final cost of Phase I was \$13.8 million. The completion of a Dole Street drainage system, built in 1982-83, located on the *mauka* side of Dole Street from Andrews Outdoor Theatre to the Manoa Stream, will help the problem of flooding in the Quarry. 1900 feet of reinforced concrete pipe, 60 to 96 inches in diameter, will be laid by the Oahu Construction Company at a cost of about \$2.2 million. —Bruce Oliveira. Photo by Gordon Miyamoto (1982)

Department, the Swimming Pool Complex will be completed in 1982-83. The facilities planned for the complex are: a two-story flat roof building with locker rooms on the first floor and classrooms with windows overlooking the pool. There will also be kinesiology laboratories. A baseball stadium with covered seating was also planned for the near future. In Phase II, the main feature is a gymnasium with seating to replace Klum Gym. Also in Phase II are classrooms and

laboratories. In Phase III, the final phase, three more gyms with classrooms, handball/racquetball courts and the extension of the parking structure are planned to be constructed. Livingston also expressed the growing sentiment by many people to have a multi-purpose arena with seating for as many as 15,000-20,000 spectators in replacement of future facilities in the planning stage.