

Report on S. R. 209 (SLH 1981)
Relating to the:

WAIKIKI WAR MEMORIAL NATATORIUM

To the Legislature, 1982 Regular Session

By

Department of Land and Natural Resources

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STATE OF HAWAII

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Preface

In 1981 the Senate of the State of Hawaii asked the Department of Land and Natural Resources to prepare a report concerning the disposition of the Waikiki War Memorial Natatorium. The report was to include jurisdiction of the land and the facility. It was also to include future plans for the facility and possible use of the facility. The request was made in the form of a resolution: Senate Resolution 209, Draft 1 (appended).

BACKGROUND

History

In 1921, the Legislature authorized issuance of bonds for \$250,000 for the construction, on the former Irwin property, of a memorial to men and women of Hawaii who served in World War I. The Legislature provided for appointment of a Territorial War Memorial Commission to decide upon the form the memorial was to take. The Legislature stipulated that a swimming pool of at least 100 meter length be included and that a competition be held on the design. The competition was held under the general rules of the American Institute of Architects. Three architects, Bernard Maybeck of San Francisco, Ellis F. Lawrence of Portland, and W.R.B. Willcox of Seattle, were selected to judge the competition, and Louis P. Hobart of San Francisco won the first prize. Hobart's plans, however, were twice modified before they could be implemented in accordance with budgetary limits. New plans by Hobart omitted permanent seats on the Diamond Head, Ewa, and makai sides and provided for knock-down bleachers. The permanent bleachers on the mauka side had a capacity for 2,500 persons.

Mr. T. L. Cliff was awarded the Natatorium construction contract for the sum of \$119,518 for the swimming pool and \$58,536 for the bleachers and bathhouse section. H. S. Crocker Company was awarded the contract of \$5,818 for furnishing the knock-down bleachers. The Natatorium was completed and opened to the public on August 24, 1927.

The natatorium became a recreational center for local people. Many important international and national swimming meets were held there. Over the years it was also used for training long distance swimmers.

In 1929, a contract was awarded to Mr. T. L. Cliff for \$2,693 for dredging and enlarging the deep section of the pool in front of the diving tower to make it safe for the high dives.

From 1941 to 1943, the Natatorium was used by the Army for training purposes.

In 1949, the Natatorium was repaired and refurbished for \$81,886 and subsequently transferred to the Parks and Recreation Department for operation and maintenance under Act No. 6, S.B. No. 66, SL 1949, effective July 1, 1949.

Description

The natatorium is situated on the ocean in Kapiolani Park. It is surrounded by expansive lawns with a large number of tall coconut trees, a few banyans and other varieties of vegetation.

The natatorium is a reinforced concrete structure resting on piles which contains an open air, 100 meter by 50 foot swimming pool fed by ocean water through a series of coffered locks.

The pool is surrounded on four sides by a twentyfoot wide deck which is enclosed on the three ocean sides by a three-foot high wall. On the fourth, mauka side, concrete bleachers rise thirteen levels and provide seating for approximately 2,500 people. The bleachers are divided into two parts, each with four sections, with a central entry space separating the two parts.

The main entry, with its triumphal arch flanked by two lesser round arches, is the major architectural feature. A pair of Ionic pilasters support the triumphal arch's entablature which has the words "The War Memorial" inscribed in its frieze. An elaborate sculpture rises from the entablature. It consists of a garlanded base with an American eagle perched at each corner and the Hawaiian motto and seal in the center. The ocean and mountain sides of the entry are similar.

To either side of the main entrance, the bleacher's rear walls extend approximately 100 feet. Locker rooms are below the bleachers and behind two arched arcades of seven bays each. Round arched windows aligned the arcade openings, provide the locker rooms with ventilation and illumination. A pair of simple pilasters flank the arcade and support large concrete urns, which project above the bleacher walls and demarcate the end sections of each bleacher. A flagpole with a ball finial is located above the second and sixth openings of each arcade. The bays on either side of the arcade contain office and restroom spaces and are distinguished by rectangular windows with grills.

A ramp leads down to the main entry. On either side of this ramp are courts for volleyball and basketball. A concrete wall with an incised diamond pattern, enclosed each of these courts.

Present Condition

In 1965 a report was prepared for the City and County of Honolulu on the physical condition of the natatorium:

"On August 24, 1964, the bottom of the concrete decking, sea walls, and aprons were inspected and photographed. The findings are as follows:

- "1. The outside sea wall around the pool is in fair condition. However, the concrete pool decking and concrete apron are in very poor condition. The concrete decking has many cracks, and the top and bottom surfaces have spalled off ---. Two large sections of the concrete apron which extend below the water line have broken off and have dropped to the bottom ---.
- "2. The bottom of the concrete decking, as shown in the photographs, is in very poor condition, in contrast to the concrete piles which are in excellent shape. The difference in condition between the concrete decking and the piles must be due to factors other than sea water. It is believed that salt water seepage through the concrete decking caused rusting of the reinforcing bars and the resulting expansion caused the concrete surfaces to spall off. Seepage of salt water through the decking is revealed by the presence of many stalactite-like formations on the bottom of the decking ---. Another contributing factor was the lack of proper concrete cover over the reinforcing bars. Examination of the spalled areas showed that the cover over the reinforcing bars, in many cases, was only about one-half inch thick. The 1940 Report of the Joint Committee on Standard Specifications for Concrete and Reinforced Concrete of the American Concrete Institute recommends a minimum of three inches of protective covering over the reinforcing bars for concrete exposed to sea water. It also recommended a maximum water content of five gallons of water per sack of cement for the concrete. In other words, the amount of protective covering over the reinforcing bars and the quality of concrete must be better than for normal use.
- "3. The cement mortar surfacing placed in 1949 on top of the existing sea wall and on the bleacher seats has peeled off in many places ---. Exposed surfaces indicate that the original surface was not chipped and roughened as called for in the plans before applying the mortar surfacing. The result is a lack of bond between the original concrete and the new concrete surfacing."

On April 11, 1966 the Star Bulletin reported that the "Natatorium is crumbling away." Deterioration of the facility was verified by the City's Building Department in July 1971 and again in May 1976.

Chronology

On June 9, 1965 the Advertiser reported that the City Council agreed to go along with Mayor Blaisdell's proposal to demolish the natatorium to make way for a beach. On April 11, 1966 the Star Bulletin reported that funds for the beach project had been cut by Congress.

By 1972 the project was back on track and a public meeting was held on plans to demolish the natatorium and build 132,000 square feet of beach. The meeting was held on October 13, 1972.

In 1977 the Legislature appropriated \$323,000 for demolition. The City decided instead to return the natatorium to the State. Return, however, was deferred until the life guard service could be relocated. The Water Safety Division was relocated in April 1978.

On April 25, 1979 the City Council (Resolution No. 79-89) sought to return the natatorium to the State through cancellation of Executive Order No. 1446). It further asked the State to determine the ultimate use and disposition of the natatorium. On December 2, 1980 the natatorium was fenced off.

On October 14, 1981 the Star Bulletin reported that the City Council has asked the State to take back the natatorium "because of the costs and problems involved in maintaining it" and that the State's land board hasn't done so "for the same reasons".

On February 5, 1973 the natatorium is placed on the Hawaii Register of Historic Places.

In April 1973 the U. S. Army Corps of Engineers (USCE) contracts with Healy-Tibbits Construction Co. to demolish the structure and build the beach at a cost of \$1.452 million.

In July 1973 the Board of Land and Natural Resources recommends cancellation of Executive Order No. 1446 which set aside a War Memorial Park and Natatorium at Waikiki to the City.

On October 31, 1973 the Hawaii Supreme Court decides it will enjoin Col. Edelstein of the USCE and E. Alvey Wright of the State's Department of Transportation "from in any way tearing down or demolishing the Natatorium". The contract with Healy-Tibbits was terminated in November 1973.

Conclusions

There is no disagreement that the natatorium has deteriorated. There has been disagreement as to whether it should be demolished to make way for a beach or whether it should be restored. If restored, how should it be done and what impacts would it have?

There is also substantial support for another point: "...something's got to be done, whether it is in the hands of the city or the state."

On October 19, 1981 a public meeting was held to consult with interested persons. The record of the meeting is appended. The record constitutes a summary of the sentiments of elements in the community interested in this matter.

ALTERNATIVES

Problem

The unresolved elements surrounding the future of the natatorium have to do with whether the natatorium is to be demolished or restored and if restored, how should it be done and what would the impacts be?

Restoration with Public Funds

The most obvious approach to the problem is public funding. The City and County of Honolulu has shown no interest in restoration. Even the National Park Service (NPS) is unlikely to fund restoration.

NPS employs criteria which require that an historic site be associated with an historic turn in events or be representative of antiquity. It views the natatorium as part of Kapiolani Park. Finally, at present federal budgeting is austere.

It is fairly certain that neither City nor Federal funding for restoration is forthcoming. Any public funding is likely to come from the State because of the natatorium's historic values and community sentiments. But here again the State's fiscal picture, including a new Constitutional debt limit and cutbacks in federal aid, poses a serious constraint. .

If restoration is undertaken by the State, the cost is estimated to be \$5.5 million (as of September 15, 1981). Because of exposure to waves, weather and wet bathers, there is some risk that future maintenance measures will be needed. This cost is in addition to the \$5.5 million. In addition the State must be prepared to assume or find someone willing to assume the cost of the operation and maintenance as well as any liabilities arising from the facility.

This alternative will commit a large sum of public funds not only for initial restoration but also for future operation and maintenance of the facility.

Private Development

The State's Department of Land and Natural Resources has received inquiries from three different sources interested in leasing the natatorium site and in undertaking rehabilitation and restoration of the natatorium under existing State laws (Sections 171-59, 171-60, Hawaii Revised Statutes). Of the three, one has prepared a substantial proposal.

The essential elements of the (January 1980) proposal are:

- 1) Joint venture with the Board of Land and Natural Resources.
- 2) Rehabilitation of the natatorium.
- 3) Developing a public water-related recreation facility.
- 4) Long term lease.
- 5) Private development loan with possible federal matching grants.
- 6) Use of operating revenues to cover operating expenses and amortization of the loan.
- 7) Possible revenue sources including:
 - a) water shows
 - b) water slides
 - c) swimming and diving meets
 - d) food and beverage

In June 1980 the developer modified the proposal to include:

- 8) Expansion of the public aquarium.
- 9) Expansion of the development site to about 8.7 acres.
- 10) Subletting the aquarium portion to a corporation in return for rental to the State or its designee of half the net profit realized from various revenue facilities.

An earlier (July 16, 1979) proposal by another developer put forth a shorter plan with the following elements:

- 1) Restoration
- 2) Lease

- 3) Time-sharing
 - a) Public use, daytime
 - b) Pageants, nighttime
- 4) \$7.5 million budget

A third proposal (July 22, 1981) is shorter yet with the following aspects:

- 1) Restoration
- 2) Lease
- 3) Water Show

The strengths of the private proposals are twofold: private funding and flexible management. In each case details need to be developed although the first described proposal is more complete. Of the three proposals, the one involving night pageants risks objections from nearby residents because of night noise. No revenue projections have been submitted to the State.

Demolition

Prior to 1973 demolition of the natatorium was concurred in by agencies of the City, State and Federal governments.

Demolition was stopped because Executive Order No. 1446 had not been cancelled.

The strength of this proposal is that demolition would clear the way for construction of a beach. The cost of demolition is estimated to be \$867,000 (as of September 15, 1981). Construction costs for the groins and beach depend on the specifics of design, the scope of the work and changes in the price of sand and stone. The total estimated cost of demolition and beach restoration is \$3.3 million. Demolition without follow-up to build a beach would still be useful since it would result in removal of a hazard. The bleachers, which constitute the most serious hazard, could be removed for \$578,000. Additional expenses to rehabilitate the pool would then be required. The cost would depend on how much work would be desired.

The weaknesses in the demolition option are the loss of a unique architectural landmark and a memorial to war heroes. Also, State funds are restricted by expenditure ceiling and private funds are not available for demolition. The natatorium as a saltwater swimming facility is already lost to the public but could be regained by demolishing the bleachers and rehabilitating the pool. It has not been altogether lost as a fishing pier although not many care to scale the fence keeping people out.

The pool presently functions like a groin. It arrests the alongshore movement of sand. Its removal would result in the loss of San Souci beach. If the pool is removed, a groin would have to be built to save the beach. This is additional expense.

Some sentiment has been expressed that whatever else may be demolished, the memorial archway should be retained. Natatorium plans should be reviewed carefully to see if this is feasible without relocating the archway.

Inland Memorial Pool

Another alternative is to build a saltwater pool inland or at another site. In this way, demolition could proceed, and the need for a war memorial and a saltwater pool met. No cost estimate has been made for this option. However, the cost of 50 meter freshwater pools has been \$2 million (as of about 1980) with operating expenses of \$65,000 a year.

The site need not be at Waikiki. One suggestion is that the site be on Sand Island. Keehi Lagoon Park is another possibility, but it is located farther away from open water. Ala Moana Park already has an offshore swimming area (an old boat channel) ten times longer than the natatorium stretching from Magic Island to Kewalo Basin.

An inland pool is not susceptible to wave damage and does not intrude into surfing areas. It will, however, require a saltwater source such as a well or offshore intake, and this will entail expense.

The weakness in this alternative is the need for a funding source. The alternative also does not meet the need for architectural and historic preservation.

CONCLUSIONS

Problem Restated

The City Council and the Senate are agreed that the disposition, future plans and use of the natatorium need to be resolved.

This question first surfaced 16 years ago -- back in 1965. It is still unresolved owing to a disagreement within the community. The community's diverse interests include: beachgoers, saltwater swimmers, war memorials, architectural preservation, preservation of local history, and fishermen. The satisfaction of these interests with means available to the City and the State is the central question.

The natatorium had deteriorated because the original cover over the reinforcing bars were too thin. Water had seeped through into the reinforcing bars which then corroded, expanded and broke off concrete. Repairs made in 1949 also were improperly carried out. Surfaces were not roughened before mortar cover was applied. In addition to all this, repairs were not carried out on a continuing basis.

RECOMMENDATIONS

It is recommended that:

1. The natatorium be restored for recreation-commercial use;
2. The natatorium be designed, restored, operated and maintained by private enterprise under tight control of the State government; and
3. The restoration of the natatorium be tied closely to the rebuilding of the aquarium as a joint development project.