

Addendum to the  
Revised Environmental Impact Statement  
Proposed Waikane Golf Course  
Waikane, Koolaupoko District. Oahu, Hawaii

Prepared for  
Waikane Development Company

March 1989



COMMENTS AND RESPONSES TO THE  
ENVIRONMENTAL ASSESSMENT FOR  
THE WAIKANE GOLF COURSE

L11 8/88 -5792



DEPARTMENT OF THE ARMY  
U. S. ARMY ENGINEER DISTRICT, HONOLULU  
FT. SHAFTER, HAWAII 96858-5440

REPLY TO  
ATTENTION OF

August 4, 1988

Planning Branch

Mr. John P. Whalen, Director  
Department of Land Utilization  
City and County of Honolulu  
650 South King Street  
Honolulu, Hawaii 96813

Dear Mr. Whalen:

Thank you for the opportunity to review the Environmental Assessment (EA) for the Proposed Waikane Golf Course, Waikane, Koolaupoko District, Oahu, Hawaii. The following comments are offered:

a. The applicant's consultants have coordinated with Operations Branch regarding wetland boundaries, and the project will generally avoid wetland fill. The project may involve minor stream crossings which are likely to be authorized under the Nationwide permit program (33 CFR 330.5(a)(14)). When plans for these crossings are available, the applicant should consult with Operations Branch (telephone 438-9258) to verify Nationwide authorization.

b. The discussion of flood zone designations on page 15 of the EA is accurate. Reference to "the Flood Insurance Study by the Corps of Engineers" should be changed to indicate that the study was conducted under contract by the Corps for the Federal Emergency Management Agency.

Sincerely,

Kisuk Cheung  
Chief, Engineering Division

RECEIVED  
HONOLULU  
AUG 9 1988

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F-11

14 October 1988

Department of the Army  
U.S. Army Engineer District, Honolulu  
Ft. Shafter, HI 96858-5440

Attn: Planning Branch

Gentlemen:

Subject: Waikane Golf Course EA/87762.14

The following responses are to specific comments contained in your 4 August 1988 letter to the City and County Director of Land Utilization.

1. The project will involve minor stream crossings and, once plans are prepared, we will consult with the Operations Branch of your Division to verify Nationwide authorization.
2. A correction will be made in reference to the Flood Insurance Study to reflect that the study was conducted under contract by the Corps for the Federal Emergency Management Agency.

Thank you for your suggestions and comments.

Sincerely,

GROUP 70



Ralph Portmore, AICP  
Associate

02971/jmb

cc: Mr. Norman Y. Quon, AIA

- Francis S Oda AIA, Inc
- Robert KL Wong AIA, Inc
- Norman GY Hong AIA, Inc
- Sheryl B Seaman AIA, Inc
- Hitoshi Hida AIA, Inc
- Roy H Nihei AIA
- Linda M Aniya
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- Derrick T Seiki
- Ralph E Portmore AICP
- Edward T Green
- Paul P Chorney AIA
- Stephen H Yuen AIA
- Susano P Pabo



United States Department of the Interior

FISH AND WILDLIFE SERVICE  
PACIFIC ISLANDS OFFICE

P.O. BOX 50167  
HONOLULU, HAWAII 96850

ES  
Room 6307

AUG 8 1988

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CITY & COUNTY OF HONOLULU

John P. Whalen  
Director of Land Utilization  
City and County of Honolulu  
650 South King Street  
Honolulu, Hawaii 96813

Re: Environmental Assessment for Waikane Golf Course,  
Koolaupoko, Oahu (TMK 4-8-04: por. 4; 4-8-06: por. 8).

Dear Mr. Whalen:

This letter is provided in response to your correspondence (88/SMA-67(BWM)), dated July 20, 1988, requesting the Service's review of and comments regarding the subject document. Our Senior Staff Biologist, Mr. John Ford, has reviewed the assessment and has prepared the following response for your consideration.

General Comments

It appears that the proposed golf course may involve construction in a portion of Waikane Stream and its adjacent wetlands. This work may be subject to compliance with the Section 404(b)(1) Guidelines of the Clean Water Act (33 U.S.C. 1344), and Section 10 of the Rivers and Harbors Act (33 U.S.C. 403). We therefore suggest that the applicant contact the Operations Branch, U.S. Army Engineer District, Honolulu (438-9258) regarding the need to obtain a Department of the Army Permit for the proposed golf course construction. A Stream Channel Alteration Permit may also be required by the State of Hawaii Commission on Water Resource Management under Section 13-169-50, Administrative Rules of the State Water Code (Chapter 174C, Hawaii Revised Statutes).

To the best of our knowledge, no species which are listed or eligible for listing as threatened or endangered by the Federal government current inhabit with proposed project area. However, suitable habitat for the endangered Hawaiian Moorhen (Gallinula chloropus) is known to exist within the project area.

Specific Comments

1. Paragraph II.A.1., page 2. The description of the proposed golf course does not contain sufficient detail regarding proposed physical modifications to Waikane Stream and adjacent wetlands. Specifically, the assessment should address the amount and location of fill which may be placed in these wetlands, and should include detailed design drawings which clearly illustrate all proposed work within the stream and wetlands.

2. Paragraph II.B.2., pages 27-29. We note that the report prepared for Group 70 by Mr. Kelly Archer in February 1988 on the biological resources of Waikane Stream was not appended to the subject assessment. The information in the assessment that was excerpted from Archer's report suggests that Waikane Stream is not unique among windward Oahu streams, and that the native species which inhabit the stream are tolerant of environmental degradation. This is contradicted by an earlier report prepared by Archer in August 1984 (Biological Survey and Quality Rating of Windward Oahu Streams, submitted to VTN Pacific, Inc.). In the 1984 report, Archer concluded:

"In terms of native stream fauna, Koloa, Kaluanui, Punaluu, Kahana, Waikane and Waiahole Streams are of significantly higher environmental quality than other Windward Oahu streams...Two native crustacean and three native fish species maintain populations in the lower reaches of Waikane Stream..."

"In the face of the growing water needs of the entire island, concentrating efforts on effectively protecting Waiahole, Waikane, Kahana, Punaluu, Kaluanui and Koloa Streams may provide the most reasonable method of maintaining optimal use of this resource by the community."

We concur with Archer's statement. In accordance with the goals of the Clean Water Act, the Service believes that no further degradation of Waikane Stream and the receiving waters of Kaneohe Bay should be tolerated; and, that efforts should be taken to restore and protect the water quality of the stream and its small, terminal estuary.

#### Summary Comments

The Service recommends that the applicant investigate and address a broad range of alternative actions and project alignments that would completely avoid any dredging, filling, dewaterment or other modification of Waikane Stream and its adjacent wetlands. We ask that the applicant meet with representatives of the Fish and Wildlife Service and U.S. Army Engineer District, Honolulu, as soon as possible in order to explore mutually beneficial means to avoid adverse impacts to aquatic resources and wetland habitats.

Please ask the applicant to contact Mr. John Ford at 541-2749 to arrange for a meeting. Thank you for providing this opportunity to comment.

Sincerely,

  
for Ernest Kosaka  
Field Supervisor  
Environmental Services

cc: NMFS-WPPO  
PODCO-O  
CWRM  
DLNR Planning  
DAR

6A  
142

14 October 1988

- Francis S Oda AIA, Inc
- Robert KL Wong AIA, Inc
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United States Department of Interior  
 Fish and Wildlife Service - Pacific Islands Office  
 P.O. Box 50167  
 Honolulu, HI 96850

Attn: Mr. Ernest Kosaka, Field Supervisor  
 Environmental Services

Gentlemen:

Subject: Waikane Golf Course EA/87762.14

The following responses are to specific comments and questions contained in your 8 August 1988 letter to the City and County Director of Land Utilization.

1. Since we do not plan to make any alterations to Waikane Stream or the designated wetlands, no part of the project should be subject to compliance with the Clean Water Act or the River and Harbors Act.
2. Concerning Mr. Archer's 1984 and 1988 reports and your question of contradiction, the sampling technique differed in the two studies producing incongruent results. The 1984 results that claimed Waikane Stream as a "high quality" stream was based on a single sample taken at one location. The 1988 survey studied the entire reach of the stream at different points. It concluded that the biology of the Waikane Stream is not unique, rare, or considered endangered, and that the native species can tolerate a range of environmental degradation.

We do not expect a significant impact on Waikane Stream or the terminal estuary (Kaneohe Bay). In fact a water quality improvement to the lowland waters is expected due to the increased vegetation on the property, reducing the sediment content in runoff.

MR. ERNEST KOSAKA  
WAIKANE GOLF COURSE EA/87762.14  
14 OCTOBER 1988  
PAGE 2

3. There is no suitable habitat for any of Hawaii's endangered waterbirds at the project site. The entire Waiahole/Waikane Valley vegetation ecosystem has been drastically disturbed prohibiting suitable habitats for endangered birds.
4. We have meet with staff of both the Corps of Engineers and the Fish and Wildlife Service, and will continue to do so for further consultation as the project progresses through the review process.

Thank you for your comments and suggestions.

Sincerely,

GROUP 70



Ralph Portmore, AICP  
Associate

02961/jmb

cc: Mr. Norman Y. Quon, AIA

LU 8/88-6137



JOHN WAIHEE  
GOVERNOR OF HAWAII

'88 AUG 23 AM 10 03

JOHN C. LEWIN, M.D.  
DIRECTOR OF HEALTH

CITY & COUNTY OF HONOLULU  
STATE OF HAWAII  
DEPARTMENT OF HEALTH  
P. O. BOX 3378  
HONOLULU, HAWAII 96801

In reply, please refer to:  
EPHSD

August 17, 1988

MEMORANDUM

To: Mr. John P. Whalen, Director  
Department of Land Utilization, City & County of Honolulu

From: Deputy Director for Environmental Health

Subject: Environmental Assessment, Chapter 33, ROH (Special Management Area)  
Project Name: Waikane Golf Course  
Location: Waikane Valley, Koolaupoko  
Tax Map Key: 4-8-04: Por. 4; 4-8-06: Por. 8

Thank you for the opportunity to comment on the proposed Waikane Golf Course.

Contamination of groundwater by the application of pesticides and fertilizers is a concern to the Drinking Water Program. Groundwater in the area appears to emerge at the surface and move towards the ocean in stream beds which intersect the groundwater table.

In addition to requiring the contractor to comply with Title 11, Administrative Rules Chapter 43, Community Noise Control for Oahu, the contractor must also comply with the requirements specified in the conditions issued with the permit. Also, should there be a baseyard located adjacent to residences, precautions to reduce the noise in these areas, such as barriers or berms, must be implemented. Contingency plans must be developed in the event that complaints are received regarding noise emanating from these areas.

The proposed wastewater treatment works must meet the applicable requirements of Act 282, Section 7. In particular, the proposed effluent irrigation system will be required to meet the total coliform limitations, and the golf course pond will have to provide adequate storage to prevent overflows when effluent quantities exceed irrigation requirements. Also, our approval of the proposed treatment works would be contingent upon the City and County of Honolulu's acceptance of the waste activated sludge.

  
BRUCE S. ANDERSON, Ph.D.

14 October 1988

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Stephen H Yuen AIA  
Susano P Pabo

Department of Health  
State of Hawaii  
P.O. Box 3378  
Honolulu, HI 96801

Attn: Dr. Bruce Anderson, Ph.D.  
Deputy Director

Gentlemen:

Subject: Waikane Golf Course EA/87762.14  
Your Reference EPHSD

Thank you for your comments in your 17 August 1988 letter to the City and County Director of Land Utilization concerning the proposed Waikane Golf Course Environmental Assessment.

1. Pesticide and fertilizer use is not anticipated to impact the groundwater supply. Absorption of residuals on soil organic matter will retard movement of most pesticides. In addition, residuals rapidly breakdown and degrade readily in the soil. A more complete discussion will be presented in the Draft EIS.
2. The baseyard location will be sited far enough from the homes to preclude unnecessary noise disturbance. All conditions under Chapter 43 will be complied with.
3. The wastewater treatment system will meet State effluent standards for the irrigation system and the golf course pond will have excess storage capacity to accommodate storm water runoffs during high precipitation periods. The City's acceptance of the waste activated sludge is being pursued.

MR. BRUCE ANDERSON  
WAIKANE GOLF COURSE EA/87762.14  
14 OCTOBER 1988  
PAGE 2

Thank you for your comments and concerns.

Sincerely,

GROUP 70



Ralph Portmore, AICP  
Associate

03001/jmb

cc: Mr. Norman Y. Quon, AIA

JOHN WAIHEE  
GOVERNOR OF HAWAII



WILLIAM W. PATY, CHAIRPERSON  
BOARD OF LAND AND NATURAL RESOURCES

DEPUTIES

LIBERT K. LANDGRAF  
MANABU TAGOMORI  
RUSSELL N. FUKUMOTO

'88 AUG 12 AM 10 04

STATE OF HAWAII  
DEPARTMENT OF LAND AND NATURAL RESOURCES

P. O. BOX 621  
HONOLULU, HAWAII 96809

AQUACULTURE DEVELOPMENT  
PROGRAM  
AQUATIC RESOURCES  
CONSERVATION AND  
ENVIRONMENTAL AFFAIRS  
CONSERVATION AND  
RESOURCES ENFORCEMENT  
CONVEYANCES  
FORESTRY AND WILDLIFE  
LAND MANAGEMENT  
STATE PARKS  
WATER AND LAND DEVELOPMENT

AUG 11 1988

FILE NO.: 89-043  
DOC. NO.: 4001E

The Honorable John P. Whalen, Director  
Department of Land Utilization  
City and County of Honolulu  
650 South King Street  
Honolulu, Hawaii 96813

SUBJECT: Environmental Assessment, Chapter 33, ROH (SMA),  
Waikane golf Course DLU No: 88/SMA-67 (BWM)

Dear Mr. Whalen:

Thank you for giving our Department the opportunity to comment on the Environmental Assessment prepared for the above described project. We have reviewed the materials you submitted and have the following comments.

Information provided in the Environmental Assessment indicates that the project will not dredge, fill or otherwise alter Waikane Stream or wetlands area. However, it is not clear as to whether or not the streamflow would be diverted for the ponds, irrigation, etc. Since the stream surveys conducted indicated that the native o'opu nakea was "abundant" in certain reaches (including above the project area) of the Stream, additional diversion of the existing streamflow could affect the upstream and downstream migrations of this diadromous species. Also, pumping of the proposed wells could reduce streamflow. Although a streamflow monitoring program is to be implemented during pump tests, it would be desirable if such monitoring is continued during the operational period (post golf course construction), and a provision included to stop pumping should there be any significant reduction in streamflow to maintain the aquatic ecosystem.

If the project is approved, we expect that the appropriate mitigation measures proposed in the EA will be complied with. Further, to minimize additional impact to the aquatic ecosystem of the Stream and nearby Kaneohe Bay, we suggest that consideration be given to limiting the golf course construction activities (clearing, grading, leveling, etc.), especially the clearing of riparian vegetation, to the dryer periods to reduce erosion and excessive silt-laden runoff.

Honorable John P. Whalen

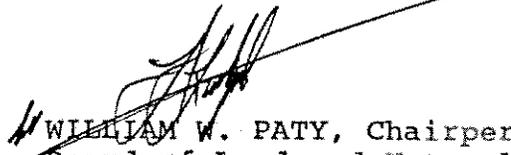
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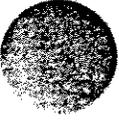
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As a final point, a permit for well construction will be required from the Commission on Water Resources Management.

Thank you again for your cooperation in this matter. Please feel free to call me or Roy Schaefer of our Office of Conservation and Environmental Affairs, at 548-7837, if you have any questions.

Very truly yours,

  
WILLIAM W. PATY, Chairperson  
Board of Land and Natural Resources



14 October 1988

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Edward T Green  
Paul P Chorney AIA  
Stephen H Yuen AIA  
Susano P Pabo

Department of Land and Natural Resources  
State of Hawaii  
P.O. Box 621  
Honolulu, HI 96809

Attn: Mr. William W. Paty, Chairperson

Gentlemen:

Subject: Waikane Golf Course EA/87762.14  
Your File No. 89-043; Doc. No. 4001E

The following responses are to specific comments and inquiries contained in your 11 August 1988 letter to the City and County Director of Land Utilization.

1. There will be no alteration of Waikane Stream or diversion of streamflow, hence we feel there will be no adverse impact on the fauna within the stream.
2. Due to the alignment of the dike system in the area we do not anticipate that pumping from on-site irrigation wells will have any impact on the stream. However, a streamflow monitoring program has been implemented and will continue during the testing and operation of the wells. In the event that monitoring of Waikane Stream indicates a significant reduced flow due to pumpage from the wells, pumping will be reduced or halted, as appropriate.
3. The applicant intends to undertake all measures needed to minimize the potential impacts of soil erosion and runoff to the aquatic ecosystem during the construction phase, such as:

\* Limiting the amount of area cleared at any one time.

MR. WILLIAM W. PATY  
WAIKANE GOLF COURSE EA/87762.14  
14 OCTOBER 1988  
PAGE 2

- \* Installing sedimentation basins to prevent erosion and manage storm runoff.
  - \* Retaining existing ground cover until the latest date before construction
  - \* Controlled clearing of the existing riparian species and necessary replanting.
  - \* Diversion ditches and mulching to prevent excessive runoff.
4. Well drilling permits have been obtained from the Commission on Water Resources Management for such action.

Thank you for your suggestions and comments.

Sincerely,

GROUP 70



Ralph Portmore, AICP  
Associate

02951/jmb

cc: Mr. Norman Y. Quon, AIA



# OFFICE OF STATE PLANNING

Office of the Governor

STATE CAPITOL, HONOLULU, HAWAII 96813 TELEPHONE: (808) 548-5893

CO 808 15 PM 10 29 JOHN WAIHEE, Governor

CITY & COUNTY OF HONOLULU

Ref. No. P-8622

August 9, 1988

The Honorable John P. Whalen  
Director  
Department of Land Utilization  
City and County of Honolulu  
650 South King Street  
Honolulu, Hawaii 96813

Dear Mr. Whalen:

Subject: Environmental Assessment (EA)  
Waikane Golf Course

We have reviewed the subject assessment and offer the following comments.

The EA indicates that 214.8 acres of the approximately 505-acre site will not be included in the development. Of the remaining 290.2 acres, 157.8 acres will be used for a 27-hole golf course and ancillary uses including roadways and service roads. It estimates that construction will generate about a 59 percent increase in run-off from the site, but some of the siltation and run-off will be reduced by partially diverting the run-off to three siltation ponds. In addition, the EA also indicates that "tons" of soil run-off from the site will be reduced by the proposed golf course ground cover. However, the document does not provide a comparative analysis from which net increases or decreases in these impacts can be determined.

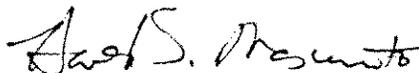
With respect to impacts from the fertilizers, pesticides and herbicides, the EA indicates that they will be absorbed or diluted. However, due to reduced turbidity in the lower reaches of Waikane Stream and the wetland, and the weak tidal exchange and poor circulation in the adjacent bay, concentrations of phosphorus, nitrates, and other chemicals will likely increase. Given the potential seriousness of this impact, specific mitigating measures are warranted. As an example, periodic monitoring programs might be established to control or limit increases of various chemicals. A similar streamflow monitoring approach should be considered to avoid overpumping from the proposed wells to avoid dewatering impacts on native stream species and wetland ecosystems.

It appears that the project will require extensive grading. The EA suggests specific measures to mitigate impacts during the construction, including limiting site grading to 15 acres at a time which would extend the total construction period. Other schedules, such as construction only during drier seasons of the year, should also be considered.

The Honorable John P. Whalen  
Page 2  
August 9, 1988

In view of the potential impacts described above and the need to address them more thoroughly, we believe that an EIS should be required. Thank you for the opportunity to comment.

Sincerely,



Harold S. Masumoto  
Director

14 October 1988

Office of State Planning  
State of Hawaii  
Office of the Governor, State Capitol  
Honolulu, HI 96813

Attn: Mr. Harold S. Masumoto, Director

Gentlemen:

Subject: Waikane Golf Course EIS/87762.14  
Your Reference No. P-8622

Thank you for your 9 August 1988 letter to the City and County Director of Land Utilization on the proposed Waikane Golf Course Environmental Assessment. The following are responses to your comments.

1. The Draft EIS will contain technical reports providing comparative analyses on both the quantitative (drainage) and qualitative (environmental) aspects of storm water runoff. Included in the latter report is a table comparing the net changes in estimated storm water runoff constituents; namely, nitrogen, phosphorus, and suspended solids. Although a 59 percent potential increase in the rate of runoff is estimated by project engineers for the project site during a ten-year storm, this increase represents only two percent of the total runoff of the drainage basin. In any event, drainage improvements such as detention and retention basins will be incorporated into the golf course design to mitigate the potential runoff increase. The amount of runoff entering Waikane Stream, and the unnamed stream on the Waiahole side of the project site, will remain at or below the levels experienced under existing conditions.
2. We disagree that the reduced turbidity in lower Waikane Stream and poor circulation in Kaneohe Bay will increase concentrations of nitrates, phosphorus and other chemicals. Studies done by

MR. HAROLD S. MASUMOTO  
WAIKANE GOLF COURSE EIS/87762.14  
14 OCTOBER 1988  
PAGE 2

Marine Research Consultants indicate that under existing conditions nitrate and phosphorus diffusion and dispersal is adequate. Samples taken shortly after the 1988 New Years Day flood show that the Bay is capable of handling increased loads. The New Years flood represents a worst case scenario. Additionally, there will be only an insignificant increase in nitrogen and phosphorus runoff, and a reduction in suspended solids. If anything, on a regular basis Kaneohe Bay water quality will probably improve.

The following mitigative measures will be undertaken to ensure water quality:

- a. Fertilizer application schedules will be timed so that heavy applications of soluble fertilizers are not made during the rainy months.
- b. During the rainy season, slow-release fertilizers can be applied, which will release nitrogen at a rate comparable to the rate at which it is used by the turf.
- c. A "buffer zone" of vegetation along the Waikane Stream banks will be maintained where spraying would not occur.

Given the technical studies that have been done, we feel that a monitoring program is not necessary under the present circumstances. These studies will be included in the Draft EIS.

3. Construction of the golf course will involve land disturbing activities that result in soil erosion. Mitigation measures will be implemented to minimize these short-term erosion impacts. Limiting grading to not more than 15 contiguous acres at a time will not necessarily extend the construction period. The method to be used will leave a strip of land between two or more graded areas, making simultaneous grading of more than one 15 acre portion possible. Sedimentation basins will be used during construction to minimize the potential for adverse impacts on Waikane Stream and Kaneohe Bay.
4. Studies by John Mink have projected that due to the tightness and alignment of the dike system, it is probable that pumping from the on-site wells will have no significant impact on the stream flow. Consequently, detrimental impact on the stream and wetland biota is not anticipated. However, a stream flow monitoring program has been implemented and will continue during testing and operation of the wells. In the event that monitoring of Waikane Stream indicates a significant reduced flow due to pumpage from the wells, pumping will be reduced or halted, as appropriate.

MR. HAROLD S. MASUMOTO  
WAIKANE GOLF COURSE EIS/87762.14  
14 OCTOBER 1988  
PAGE 3

5. The Director of Land Utilization has required the preparation of an EIS. An expanded discussion of all major concerns raised, and the necessary technical reports, will be included in the EIS.

Thank you for your comments and suggestions.

Sincerely,

GROUP 70



Ralph Portmore, AICP  
Associate

02911/jmb



# University of Hawaii at Manoa

Environmental Center  
Crawford 317 • 2550 Campus Road  
Honolulu, Hawaii 96822  
Telephone (808) 948-7381

August 10, 1988  
RN:0196

Mr. John P. Whalen, Director  
Department of Land Utilization  
City and County of Honolulu  
650 King Street  
Honolulu, Hawaii 96813

Dear Mr. Whalen:

Environmental Assessment/Special Management Area  
Waikane Golf Course  
Waikane, Oahu

In response to your request (88/SMA-67(BWM)), we have reviewed the Environmental Assessment (EA) prepared for the Waikane Golf Course. This project will involve some 505 acres of land in Waikane Valley including approximately 39 acres in the Special Management Area (SMA). Furthermore, a portion of the property (72 acres) is located within the State Land Use Conservation District and 25.8 acres have been designated "wetlands" by the Corps of Engineers. The Environmental Center has reviewed the EA with the assistance of Edwin Murabayashi, Water Resources Research Center; and Nancy Kanyuk, Environmental Center.

The present EA is quite complete and appears to cover most of the key issues and concerns relevant to the proposed project. However, although the concerns relevant to potential pollution of the wetlands from herbicides or pesticides applied to the golf course, potential siltation within the wetlands and Kaneohe Bay during construction, and the cultural significance of Waikane Valley are all noted in the EA, it seems quite clear that there may be significant impacts to the wetlands and conservation areas within the project area. Therefore our reviewers strongly recommend that an Environmental Impact Statement (EIS) be prepared pursuant to the Revised Ordinances of Honolulu, Section 33.3.3 and Section 33.4.1. Furthermore, because Conservation Land is involved in this project, an Environmental Assessment should be required under HRS Chapter 343-5 (2) and because of the potential impact of the action on the environmentally sensitive wetland areas, an EIS under HRS 343 and EIS Rules 11-200-12(11) should be required.

We offer the following few suggestions for your consideration:

A Unit of Water Resources Research Center

AN EQUAL OPPORTUNITY EMPLOYER

August 10, 1988

The discussion (p. 11) of "44 full time equivalent person years" is ambiguous when referring to the construction related employment. It could mean 44 people employed full time for 1 year or any combination of persons and years. Similarly confusing is the reference to "26 person years" for the club house construction. The actual number of people employed and the duration of the construction should be provided in the EA/EIS.

The Waikane Valley has been noted for its cultural significance in historic time. Given the presence of the wetland and proximity of the Waikane stream and Kaneohe Bay a strong probability exists for a substantial prehistoric population. We suggest that considerable care be taken in excavating for the golf course so that archaeological materials are not inadvertently destroyed in the process.

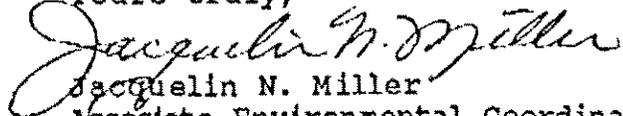
The EA cites (in several areas) a discussion of potential impacts associated with pesticide runoff from the golf course and the potential effects of such runoff on the adjacent wetlands and Waikane stream. The importance of wetlands has been recognized in both state and federal statutory actions. The sensitivity of wetland fauna to toxic chemicals is similarly well documented in the literature. Hence, it would seem essential to provide substantive data relevant to pesticide residues in golf course runoff if the conclusions of no significant impact are to be supported.

Perhaps one of the most significant impacts to the wetlands and stream will be the potential for sediment transport during clearing for the golf course. Strict grading controls must be enforced to minimize destructive siltation within the wetlands.

In conclusion, we suggest that the present EA, with modest additions, be filed as a Draft EIS with the Office of Environmental Quality Control and circulated for public review. At such time as the EIS is finalized, the SMA permit application can be processed. We believe that the EIS review process will assure public input into this project and that issues important both to the natural and social environment will be better addressed in this sensitive area.

We appreciate the opportunity to review this EA and hope you will find our comments useful in determining subsequent permit actions on this project.

Yours truly,

  
Jacquelin N. Miller

Associate Environmental Coordinator

cc: OEQC

L. Stephen Lau  
Edwin Murabayashi  
Nancy Kanyuk



14 October 1988

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Ralph E Portmore AICP  
Edward T Green  
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Stephen H Yuen AIA  
Susano P Pabo

Environmental Center, University of Hawaii at Manoa  
2550 Campus Road, Crawford 317  
Honolulu, HI 96822

Attn: Ms. Jacquelin Miller, Associate Environmental Coordinator

Gentlemen:

Subject: Waikane Golf Course EA/87762.14

Thank you for your 10 August 1988 letter (RN 0196) to the City and County Director of Land Utilization on the Waikane Golf Course Environmental Assessment. The following responses are to your particular comments and suggestions:

1. The Director of Land Utilization has required the preparation of an Environmental Impact Statement.
2. There are no conservation areas within the golf course boundaries and the State Conservation lands to the north will be completely avoided.
3. A more thorough explanation will be included in the Draft EIS to show construction employee numbers and duration of employment. The purpose of using person years was to standardize presentation of information for two different lengths of construction time.
4. Paul H. Rosendahl, Ph.D., Inc. conducted a surface archaeological reconnaissance survey (100% ground coverage) and limited subsurface testing in the non-wetlands parts of the Special Management Area (SMA). Dr. Joyce Bath, staff archaeologist in the Department of Land and Natural Resources-Historic Sites Section, has formally reviewed the findings and conclusions presented in Dr. Rosendahl's report.

MS. JACQUELIN MILLER  
WAIKANE GOLF COURSE EA/87762.14  
14 OCTOBER 1988  
PAGE 2

In the event of encountering unexpected archaeological materials during construction, work in the area will be suspended until the monitoring archaeologist can inspect and evaluate the new materials.

5. Storm water runoff for specific storm events have been calculated for nitrogen, phosphorus, and suspended solids. The net increases and decreases for these constituents presented in the analysis will be in the technical report attached to the Draft EIS. It is not likely that significant quantities of pesticides will move below the soil profile considering the high organic matter content of the soils which will retard the movement of the pesticides.
6. The expected decrease in sedimentation as a result of the proposed project should tend to enhance the preservation of the wetlands. The Draft EIS will present a more detailed discussion of this beneficial impact.
7. Measures to minimize the potential runoff impacts generated by construction activities will be taken. There will be full compliance with City and County of Honolulu ordinances relating to grading, grubbing, and stockpiling.

Thank you for your suggestions and comments.

Sincerely,

Group 70



Ralph Portmore, AICP  
Associate

02941/jmb

cc: Mr. Norman Y. Quon, AIA

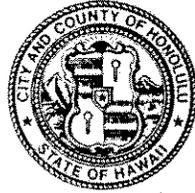
DEPARTMENT OF PARKS AND RECREATION  
**CITY AND COUNTY OF HONOLULU**

650 SOUTH KING STREET  
HONOLULU, HAWAII 96813

'88 AUG 16 PM 2 27

FRANK F. FASI  
MAYOR

CITY AND COUNTY OF HONOLULU



HIRAM K. KAMAKA  
DIRECTOR

WALTER M. OZAWA  
DEPUTY DIRECTOR

August 11, 1988

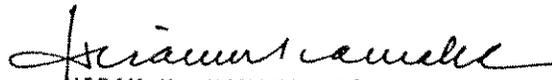
TO: JOHN P. WHALEN, DIRECTOR  
DEPARTMENT OF LAND UTILIZATION

FROM: HIRAM K. KAMAKA, DIRECTOR

SUBJECT: ENVIRONMENTAL ASSESSMENT FOR WAIKANE GOLF COURSE  
WAIKANE VALLEY, KOOLAUPOKO  
TAX MAP KEY: 4-8-04: Por. 4; 4-8-06: Por. 8

The Department of Parks and Recreation has reviewed the above referenced Environmental Assessment (EA). We find that the assessment does not indicate the type of user groups served by the proposed golf course nor is there discussion concerning recreational impacts. The applicant should provide this additional information prior to the Department of Land Utilization's acceptance of the EA.

The Department of Parks and Recreation recommends that the proposed golf course be open to the general public and that the green fees be affordable to the maximum number of Oahu residents.

  
HIRAM K. KAMAKA, Director

HKK:ei

14 October 1988

Francis S Oda AIA, Inc  
Robert KL Wong AIA, Inc  
Norman G Y Hong AIA, Inc  
Sheryl B Seaman AIA, Inc  
Hitoshi Hida AIA, Inc  
Roy H Nihei AIA  
Linda M Aniya  
Vincent R Shigekuni  
Derrick T Seiki  
Ralph E Portmore AICP  
Edward T Green  
Paul P Chorney AIA  
Stephen H Yuen AIA  
Susano P Pabo

Department of Parks and Recreation  
650 So. King Street  
Honolulu, HI 96813

Attn: Mr. Hiram Kamaka, Director

Gentlemen:

Subject: Waikane Golf Course EA/87762.14

We have received your 11 August 1988 letter to the City and County Director of Land Utilization concerning the Environmental Assessment for the proposed Waikane Golf Course. We understand your concern on the question of green fees affordability and are reviewing various options for affordable rates. These, as well as the anticipated golf course user groups and other recreational impacts, will be covered in the Draft EIS.

Thank you for your comments and suggestions.

Sincerely,

GROUP 70



Ralph Portmore, AICP  
Associate

02991/jmb

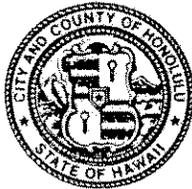
cc: Mr. Norman Y. Quon, AIA

DEPARTMENT OF PUBLIC WORKS  
CITY AND COUNTY OF HONOLULU

650 SOUTH KING STREET  
HONOLULU, HAWAII 96813

'88 AUG 5 PM 1 15

CITY AND COUNTY OF HONOLULU  
FRANK F. FASI  
MAYOR



ALFRED J. THIEDE  
DIRECTOR AND CHIEF ENGINEER

In reply refer to:  
PRO 88-252(448)

August 5, 1988

MEMORANDUM

TO: JOHN P. WHALEN, DIRECTOR  
DEPARTMENT OF LAND UTILIZATION

ATTENTION: ROBIN FOSTER

FROM: ALFRED J. THIEDE, DIRECTOR AND CHIEF ENGINEER

SUBJECT: ENVIRONMENTAL ASSESSMENT (SPECIAL MANAGEMENT AREA)  
WAIKANE GOLF COURSE (TMK: 4-8-04: POR. OF 4 AND  
4-8-06: POR. OF 8)

We have reviewed the subject EA and have the following comments:

1. A drainage report should be submitted to our Division of Engineering, Drainage Section, for review and approval prior to grading.
2. How long can the golf course pond hold effluent without overflowing during heavy rains and during periods when irrigation with effluent is not required?
3. Will overflows be allowed?
4. If effluent is not acceptable for irrigation, what will be done to the effluent?
5. Application for a Private Sewage Treatment Plant Sludge Disposal System Permit should be submitted before sludge can be accepted by a City facility.

*Frank P. Doyle*  
for ALFRED J. THIEDE  
Director and Chief Engineer



14 October 1988

Francis S Oda AIA, Inc  
Robert KL Wong AIA, Inc  
Norman GY Hong AIA, Inc  
Sheryl B Seaman AIA, Inc  
Hitoshi Hida AIA, Inc  
Roy H Nihei AIA  
Linda M Anya  
Vincent R Shigekuni  
Derrick T Seiki  
Ralph E Portmore AICP  
Edward T Green  
Paul P Chorney AIA  
Stephen H Yuen AIA  
Susano P Pabo

Department of Public Works  
City and County of Honolulu  
650 South King Street  
Honolulu, Hawaii 96813

Attn: Mr. Alfred J. Thiede, Director and Chief Engineer

Gentlemen:

Subject: Waikane Golf Course EA/87762.14

We have received your 5 August 1988 letter to the City and County Director of Land Utilization concerning the Environmental Assessment prepared for the proposed Waikane Golf Course. The following responses are to your specific comments and questions.

1. A drainage report will be submitted to your Division of Engineering, Drainage Section for review and approval prior to site preparation.
2. The golf course ponds will have sufficient storage capacity to accommodate rainfall and treated sewage effluent for a minimum of 14 days during high precipitation periods, when irrigation is not needed. The ponds will be designed with sufficient freeboard to prevent overtopping.
3. As noted, the ponds will be designed with sufficient excess capacity to preclude overflows.
4. Effluent will be used to irrigate only portions of the golf course below the Board of Water Supply's no-pass line, (see attached Figure 3). Effluent use for irrigation is acceptable below this line. Effluent quality will meet the Department of Health's regulations for irrigation use.

MR. ALFRED J. THIEDE  
WAIKANE GOLF COURSE EA/87762.14  
14 OCTOBER 1988  
PAGE 2

5. We will be submitting an application for a Private Sewage Treatment Plant Sludge Disposal System Permit to your Department.

Thank you for your suggestions and comments.

Sincerely,

GROUP 70

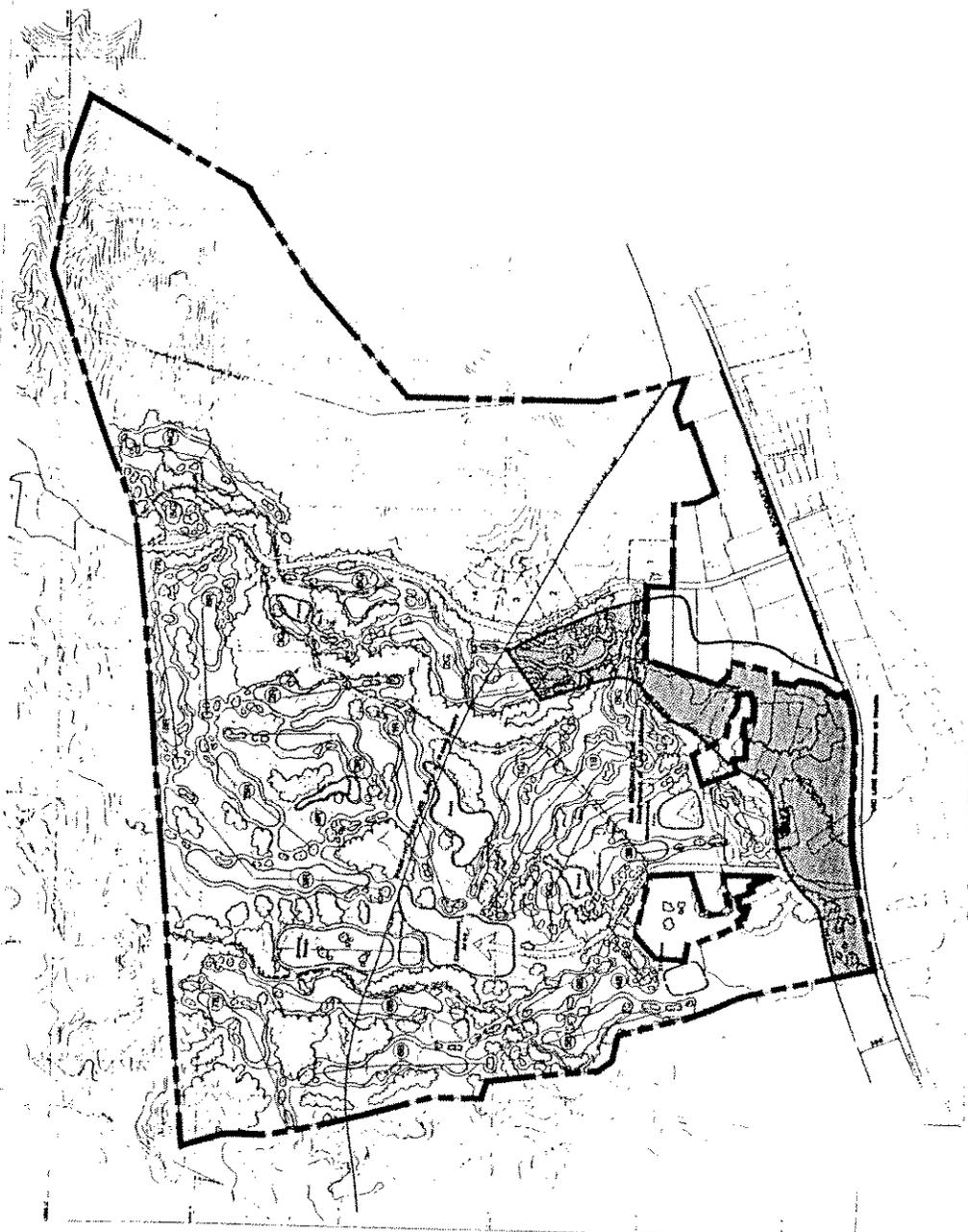
*Ralph Portmore*

Ralph Portmore, AICP

02931/jmb

Attachment

cc: Mr. Norman Y. Quon, AIA



LEGEND  
 [Shaded Box] SPECIAL MANAGEMENT AREA  
 [Dashed Line Box] WITHIN PROJECT

PROPOSED GOLF COURSE DEVELOPMENT  
 WAIKANE GOLF COURSE

SOURCE: BELT, COLLINS & ASS'CS, INC. & ENGINEERING CONCEPTS, INC.

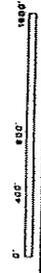


FIGURE 3

BOARD OF WATER SUPPLY

CITY AND COUNTY OF HONOLULU

630 SOUTH BERETANIA STREET

HONOLULU, HAWAII 96843



FRANK F. FASI, Mayor

DONNA B. GOTH, Chairman  
ERNEST A. WATARI  
MILTON J. AGADER  
SISTER M. DAVILYN AH CHICK, O.S.F.  
EDWARD Y. HIRATA  
ALFRED J. THIEDE  
JOHN K. TSUI, Vice Chairman

KAZU HAYASHIDA  
Manager and Chief Engineer

August 3, 1988

TO: JOHN P. WHALEN, DIRECTOR  
DEPARTMENT OF LAND UTILIZATION

FROM: KAZU HAYASHIDA, MANAGER AND CHIEF ENGINEER *KJH*  
BOARD OF WATER SUPPLY

SUBJECT: ENVIRONMENTAL ASSESSMENT FOR THE PROPOSED WAIKANE  
GOLF COURSE

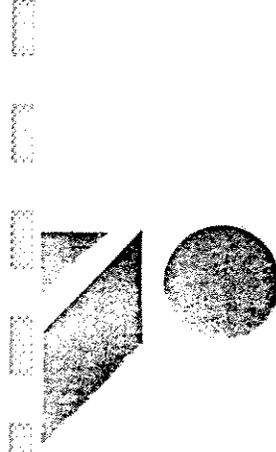
Thank you for the opportunity to review the Environmental Assessment for the proposed Waikane golf course.

We offer the following comments:

1. A water master plan including calculations should be submitted for the pipelines and fire hydrants that will be turned over to the Board of Water Supply.
2. The location of the proposed three wells should be shown on the maps.
3. The golf course pond, which will be used to contain the treated effluent, should be located in the Board of Water Supply's "Pass Zone."

If you have any questions, please contact Lawrence Whang at 527-6138.

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1988  
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HONOLULU



14 October 1988

Board of Water Supply  
630 So. Beretania Street  
Honolulu, HI 96813

Attn: Mr. Kazu Hayashida, Manager and Chief Engineer

Gentlemen:

Subject: Waikane Golf Course EA/87762.14

We have received your 3 August 1988 letter to the City and County Director of Land Utilization concerning the Environmental Assessment prepared for the proposed Waikane Golf Course. The following responses are to your specific comments.

1. A water master plan will be submitted which includes calculations and the location and specifications of the pipelines and fire hydrants that will be turned over to the Board of Water Supply.
2. The proposed on-site irrigation water wells will be located on maps included in the draft EIS.
3. The golf course effluent storage pond will be located in the Board of Water Supply's "Pass Zone" (see attached Figure 3). We will meet the Department of Health's regulations on the use of sewage effluent for irrigation.

Thank you for your suggestions and comments.

Sincerely,

GROUP 70

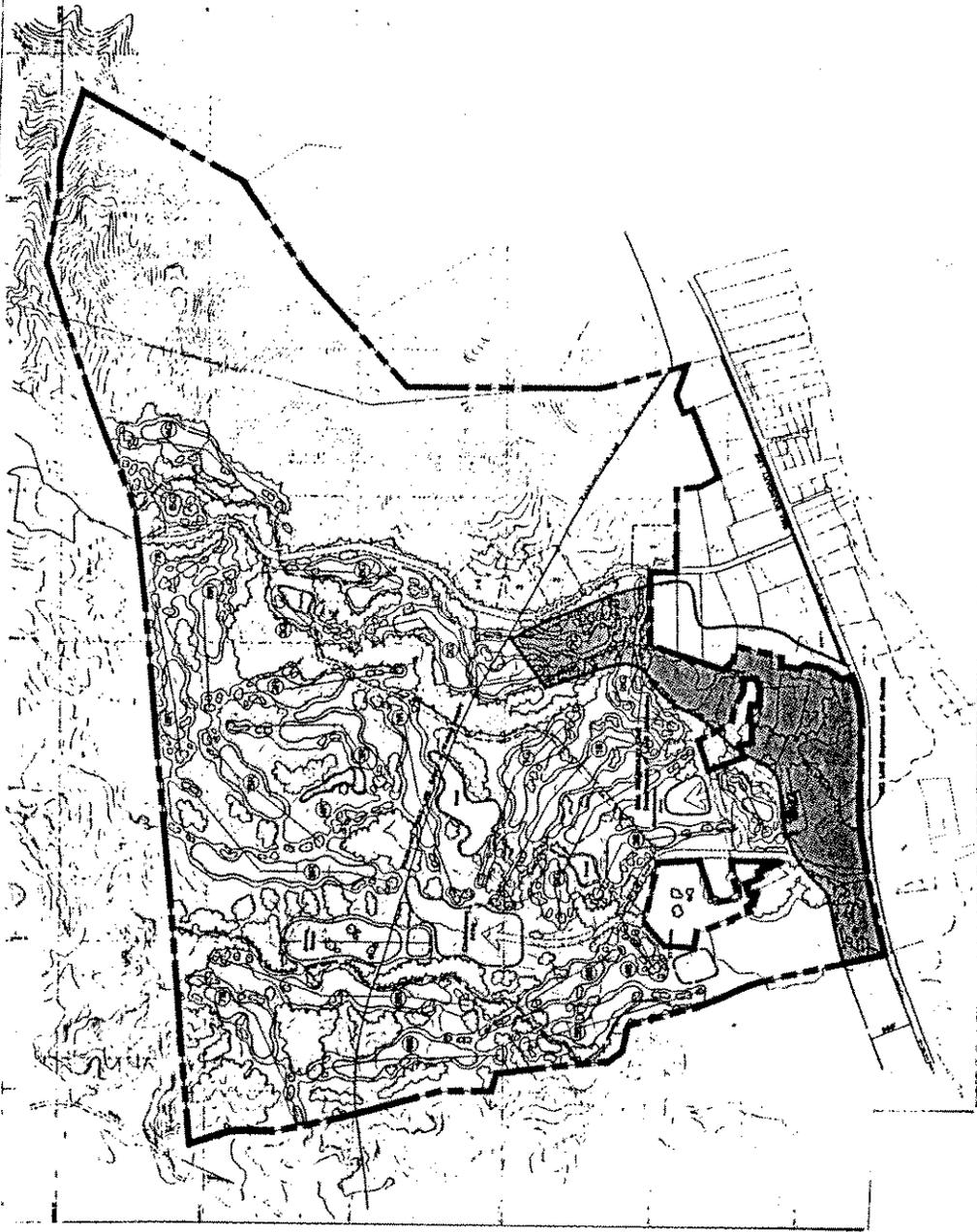


Ralph Portmore, AICP  
Associate

02881/jmb

Attachment

cc: Mr. Norman Y. Quon, AIA



LEGEND  
 [Shaded Box] SPECIAL MANAGEMENT AREA  
 [Dashed Line Box] WITHIN PROJECT

PROPOSED GOLF COURSE DEVELOPMENT  
 WAIKANE GOLF COURSE



1" = 400' 800'

SOURCE: BELT, COLLINS & ASSOC., INC. & ENGINEERING CONCEPTS, INC.

FIGURE 3

**KAHALU'U NEIGHBORHOOD BOARD NO. 29**

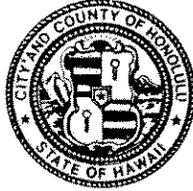
c/o KAHALU'U COMMUNITY CENTER  
47-232 WAIHE'E ROAD

KANE'OHE P.O., HAWAII 96744

(He'eia Kaa/Ahulimenu, Kahalu'u, Waihe'e, Ka'alaea, Waiahole, Waikane, Hakipu'u, Kualoa)

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CITY & COUNTY OF HONOLULU



*"Let us not ever have  
an unhappy minority  
rather, let us build  
a community consensus"*

August 11, 1988

John Whalen, Director  
Dept. of Land Utilization  
City & County of Honolulu  
650 South King Street  
Honolulu, Hawaii 96813

rk  
**RECEIVED**

SEP 2 1988

GROUP 70

Re: Environmental Assessment for Waikane Golf Course proposal.

Dear Mr. Whalen:

At its regular meeting of August 10th, 1988, the Kahaluu Neighborhood Board voted to request that your department require the developers of Waikane Golf Course to prepare a full Environmental Impact Statement prior to application for a SMA permit.

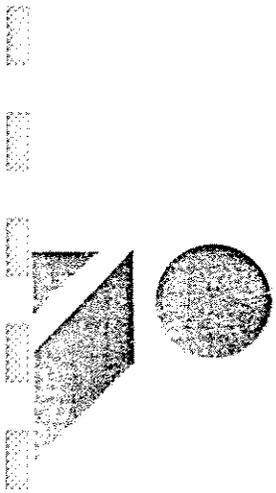
Our Board communicated its position, by telephone conversation, to Mr. Bennett Mark of your staff and learned that DLU will be requiring an EIS for this project. We support this position because of the magnitude of the project and the potential effect on the surrounding environment. In particular, the effect of herbicides, pesticides and other chemicals on both the stream and the Kaneohe Bay estuary are of particular concern and deserve a more detailed impact analysis. An analysis of the impact of this project on the job market and the ways in which this project will directly benefit this community should be described thoroughly. Some concern was expressed that the "Wetlands" area, although left untouched, would not even be allowed an opportunity for suitable (compatible) agriculture or aquaculture or even "enhancement" as a wetland. Much land of this type in our community has either lain idle or become overgrown in recent decades, negating a potentially valuable economic role or an effective environmental function. A future scenario for such areas should be addressed in an EIS.

As a final comment - a comparative analysis of the use of Ag lands for golf courses as opposed to traditional agri or aquaculture should be a major part of any impact statement for this project.

Again, we applaud DLU's position with regard to the assessment of this project. More detailed information will make for a more informed reaction from the community.

for Kahaluu N.B. #29,

*John Lewis Reppner*  
Land Use & Planning Committee



14 October 1988

Francis S Oda AIA, Inc  
Robert K L Wong AIA, Inc  
Norman G Y Hong AIA, Inc  
Sheryl B Seaman AIA, Inc  
Hitoshi Hida AIA, Inc  
Roy H Nihei AIA  
Linda M Aniya  
Vincent R Shigekuni  
Derrick T Seiki  
Ralph E Portmore AICP  
Edward T Green  
Paul P Chorney AIA  
Stephen H Yuen AIA  
Susano P Pabo

Kahalu'u Neighborhood Board No. 29  
Kahalu'u Community Center  
47-232 Waihe'e Road  
Kaneohe, HI 96744

Attn: Mr. John Reppun

Gentlemen:

Subject: Waikane Golf Course EA/87762.14

Thank you for your 1 August 1988 letter to the City and County Director of Land Utilization on the proposed Waikane Golf Course Environmental Assessment. The following responses are to the concerns raised in the letter.

1. Several technical studies were done concerning project impacts on Waikane Stream and Kaneohe Bay. They concluded that there will be no significant impact to the marine environment. The Draft EIS will provide a fuller explanation of these concerns. The technical reports will also be attached.
2. A detailed analysis about the impact of the project on employment and the benefits to the community will be provided in the Draft EIS.
3. At this time, there is no planned development for the wetlands area. The topic will be addressed in the Draft EIS and alternative uses for the wetlands will be considered.
4. A study of the agricultural feasibility for the area has been done. It will be attached to the Draft EIS.

MR. JOHN REPPUN  
WAIKANE GOLF COURSE EA/87762.14  
14 OCTOBER 1988  
PAGE 2

Thank you for your comments.

Sincerely,

GROUP 70



Ralph Portmore, AICP  
Associate

03011/jmb

cc: Mr. Norman Y. Quon, AIA



# LIFE OF THE LAND

'88 AUG 15 AM 8 25

CITY & COUNTY OF HONOLULU

August 11, 1988

John P. Whalen, Director  
Department of Land Utilization  
City & County of Honolulu  
650 South King Street  
Honolulu, Hawai'i 96813

Request for Environmental Impact Statement  
Waikane Valley Golf Course  
Waikane, Ko'olaupoko, O'ahu, Hawai'i

Dear Mr. Whalen:

At its regular monthly meeting held on August 11, 1988 the Board of Directors for Life of the Land voted unanimously to request that the preparation of a full Environmental Impact Statement be required for the proposed Waikane Valley Golf Course Project.

We are familiar with the Environmental Assessment that has been forwarded to the Kahalu'u Neighborhood Board, and perhaps to others, for review and comments, and do not agree with your statement in the covering letter that "Based on the information currently available, the department anticipates issuing a Negative Declaration for this project (no EIS required).".

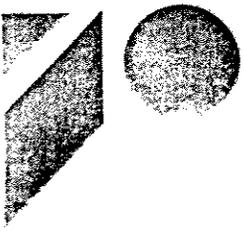
This proposal is a major project and, although actual development is restricted to Agricultural lands and is outside the Special Management Area proper, there may be significant impacts on surrounding Conservation & Preservation lands, impacts on Waikane Stream, adjacent Wetlands and the Class AA waters of Kane'ohu Bay due to siltation from extensive grading and run-off contamination from the use of fertilizers, pesticides and herbicides, impacts on Kamahameha Highway from increased vehicular traffic and various other probable impacts not described herein.

Life of the Land has taken no position on the merits of the proposed golf course development but, because it is such a major project that may have significant impacts on Waikane Ahupua'a and Kane'ohu Bay, we find that a full Environmental Impact Statement is imperative to provide for full disclosure and proper public input.

We hope that you will find our comments helpful and that you will give our request your serious consideration.

Thank you,

Ed Stevens, Member  
Board of Directors for Life of the Land



14 September 1988

Francis S Oda AIA, Inc  
Robert KL Wong AIA, Inc  
Norman G Y Hong AIA, Inc  
Sheryl B Seaman AIA, Inc  
Hitoshi Hida AIA, Inc  
Roy H Nihei AIA  
Linda M Aniya  
Vincent R Shigekuni  
Derrick T Seiki  
Ralph E Portmore AICP  
Edward T Green  
Paul P Chorney AIA  
Stephen H Yuen AIA  
Susano P Pabo

Life Of The Land  
19 Niolapa Place  
Honolulu, Hawaii 96817

Attn: Mr. Ed Stevens, Member  
Board of Directors

Gentlemen:

Subject: Waikane Golf Course EA/87762.14

Thank you for your 11 August 1988 letter to the City and County Director of Land Utilization concerning the Environmental Assessment for the proposed Waikane Golf Course. The following responses are to your specific comments.

1. The impact of construction activities on the surrounding area will be minimized by adhering to strict erosion control measures as outlined in City and County of Honolulu ordinance relating to grading, grubbing, and stockpiling.
2. Runoff contamination to the waters of Waikane Stream and Kaneohe Bay from the use of fertilizers, pesticides and herbicides are not expected to be significant for the following reasons:
  - a. The total land area to receive chemical treatment is small compared to the total watershed basin.
  - b. Absorption of pesticides by soil organic matter in these soils will retard the movement of most pesticides.
  - c. The few pesticides which are not highly absorbed are readily degraded in the soil and thus are not expected to constitute a source of down-stream contamination.

The Draft EIS will contain further information along with the consultant reports.

MR. ED STEVENS  
WAIKANE GOLF COURSE EA/87762.14  
14 OCTOBER 1988  
PAGE 2

3. According to our traffic consultants, traffic impacts to Kamehameha Highway from the proposed project will be mitigated with the construction of a left turn storage lane at the project entry road. This change will preclude long delays for north-bound vehicles slowing down or stopping to turn left at the proposed entry road. Traffic is not expected to exceed highway capacity in the foreseeable future.

Thank you again for your suggestions and comments.

Sincerely,

GROUP 70



Ralph Portmore, AICP  
Associate

02921/jmb

cc: Mr. Norman Y. Quon, AIA

'88 SEP 8 PM

OFFICE OF LAND UTILIZATION

Charles Reppun  
Hui Malama Aina o Koelau  
42-410 Lulani St.  
Hawaie 96744

LU 9/88-6469  
RECEIVED

SEP 15 1988

GROUP 70

John Whalen, Director  
Dept. of Land Utilization  
City & County of Honolulu

7 September 1988

Re: Environmental Assessment for Waikane Golf Course Proposal.

Dear Mr. Whalen,

I hope it is not too late to add to the list of concerns which a full EIS on this proposal should address.

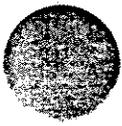
1. The link between estuary life and ocean life is critical, and a study of the possible effects on these ecosystems and their interrelationship is important.

2. If use of the land for "small scale" subsistence farming" is possible, as the EIS says, then the long term value of that alternative should seriously be compared to the value of a private golf course.

3. While a golf course fulfills rural requirements for maintaining open space, the impact of a golf course on the use of surrounding and nearby open space must also be taken into account. Open space is more than just under-utilized agriculture land. Open space is also productive farm land, and large residential lots (many of which are used for supplementary subsistence farming). Presumably a golf course will cause land values in all of N.B. 29 to rise. How will this rise affect the lives of residents in the area? What will the increase in taxes be? What difficulties will parents have trying to pass on land to their children? What pressures or temptations will there be for landowners to keep land out of agricultural use? An adequate EIS would answer these questions in detail. The assessment concludes on p. 67 that "golf courses would provide a higher use value than agriculture..." What is meant by a higher use value ( I presume they mean economic return to the owner), and is such a higher use appropriate in a rural area? While golf courses are a permitted use on ag land, that does not mean they should automatically be allowed on any ag land,

Respectfully,

Charles Reppun  
Hui Malama Aina o Koelau



14 October 1988

Hui Malama Aina o Koolau  
47-410 Lulani Street  
Kaneohe, HI 97644

Attn: Mr. Charles Reppun

Gentlemen:

Subject: Waikane Golf Course EA/87762.14

Thank you for your 7 September 1988 letter to the City and County Director of Land Utilization on the Environmental Assessment for the proposed Waikane Golf Course. The following are responses to your comments and questions.

1. According to Marine Research Consultants, there will not be any significant alteration of the Kaneohe Bay marine environment from the impacts of the development. A fuller explanation will be provided in the Draft EIS along with the technical studies related to the environmental impacts.
2. In the Draft EIS there will be an Alternatives Section which will look at small-scale and subsistence farming as an alternative land use.
3. It is incorrect to consider the entire project site as "productive" agricultural lands. While it is true that selected areas are capable of small-scale farming, large-scale farming is infeasible due to the lack of infrastructure, cost of irrigation and the scattered nature of the land area ecologically adaptable to crop production. A golf course is an appropriate land use for the rural area because of its open space character.

The reference made to the "higher use" value of the land refers to the economic return the landowner would receive for one land use over another.

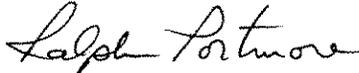
MR. CHARLES REPPUN  
WAIKANE GOLF COURSE EIS/87762.14  
14 OCTOBER 1988  
PAGE 2

4. The question of whether and how much land values and property taxes will be raised, and the extent of the area which will be impacted, cannot be answered at this time. This will be re-searched and discussed in the Draft EIS.
5. Concerns such as pressures or temptations for landowners to keep land out of agricultural use will be discussed in the Draft EIS.
6. Golf courses are not "automatically" allowed. A Conditional Use Permit is required.

Thank you for your concern and comments.

Sincerely,

GROUP 70



Ralph Portmore, AICP  
Associate

02901/jmb